



Drumbeat: October 12, 2009

Posted by Leanan on October 12, 2009 - 9:08am Topic: <u>Miscellaneous</u>

ANALYSIS - Rising US population makes 2050 climate cut harder

OSLO (Reuters) - A rising population will make it harder for the United States to make 2050 cuts in greenhouse gas emissions than for Russia and some other rich nations with shrinking populations, a Reuters survey showed.

Leaders of the Group of Eight agreed in July to cut developed nations' emissions by 80 percent on average by 2050 in a costly shift to renewable energies. They said the target could aid a U.N. climate pact due to be agreed in December.

But the goal -- if implemented by each nation -- would allow Russian citizens to emit almost twice as much as Americans in 2050, according to Reuters comparisons of emissions and U.N. Population Division projections

cold weather across the United States boosted fuel demand.

"Stunning records for cold were set across the nation, increasing the demand for heating fuels over the weekend," said Phil Flynn, analyst for PFGBest Research in Chicago.

Russian Stocks Extend Longest Rally in 11 Months on Oil, China

(Bloomberg) -- Russian stocks extended the longest rally in 11 months as higher oil and metals prices boosted earnings prospects for commodity producers and Prime Minister Vladimir Putin traveled to China to strengthen exports.

Interior Dept Mulls Risks of Drilling in Chukchi Sea

The Department of the Interior is in the final stages of its review looking into the risks of offshore drilling along the nation's outer continental shelf.

Interior officials in Washington, D.C., said the agency is in the final review of a revised environmental risk assessment of offshore drilling in outer continental shelf areas leased under the agency's current five-year leasing plan.

Oil/Dollar Link Is Pretty Slippery

For oil prices, subject to such oblique influences as Chinese economic growth, Nigerian politics and Atlantic winds, rules of thumb are alluring.

One currently in vogue is that oil prices increase as the dollar weakens. As oil is priced in dollars, intuitively this makes sense. Working the other way, expensive oil widens the U.S. trade deficit, which should weaken the dollar.

Middle East and Africa bear untold riches for exporters

With the confluence of "peak oil", scarce metals, and constrained food, the best endowed of these regions will see a steady climb in their terms of trade. The OECD says Africa has the potential to become an agricultural superbloc, if it can unlock the wealth of the savannahs by allowing farmers to use their land as collateral for credit.

Mexico needs bigger oil reforms

When the U.S. economy sneezed last year, Mexico didn't just catch a cold. It got the economic equivalent of swine flu and now faces its worst decline in 77 years. Mexico's two biggest sources of hard currency – oil exports and remittances from migrants in the United States – are drying up at an alarming pace.

Pemex Says It's Evaluating, Not Reconsidering, Chicontepec

Mexico's state oil monopoly Petroleos Mexicanos, or Pemex, said it's evaluating performance in the Chicontepec oil region but isn't planning to suspend work there.

Saudi keeps Nov supply cuts steady to Asia buyers

SINGAPORE (Reuters) - Saudi Arabia, the world's top oil exporter, will keep steady in November its curbs on the contracted volumes of crude it supplies to Asian term buyers, industry sources said on Monday.

Saudi Arabia has notified three term buyers in Asia it would keep curbs on crude oil supply in November at 5 to 15 percent, steady versus October.

.....

Mexico power firm closing may ease tax hike plans

The Oil Drum | Drumbeat: October 12, 2009

MEXICO CITY (Reuters) - The closure of an inefficient state-owned power utility, expected to bring in big savings, could open the way for the Mexican government to scale back its tax hike proposals, Finance Minister Agustin Carstens said on Monday.

Iran's gas deal crucial for Switzerland: report

TEHRAN (Xinhua) -- A Swiss official said here on Monday that Iran's gas deal is crucial for Switzerland and his country attaches much importance to the deal with Iran.

Swiss Deputy Foreign Minister Michael Ambole said in a meeting with his Iranian counterpart Mehdi Safari that the two countries' relations are deeply influenced by the contract and the prospects of the two countries' relations will be more brilliant by the materialization of Iran's gas exports to Switzerland, the semi-official Fars news agency reported.

Natural Gas Hydrate Development Has a Long Way to Travel

It is estimated that natural gas hydrate reserves in the world are almost twice reserves of traditional natural gas, oil and coal in terms of oil-equivalent tonnage, or 50 times traditional natural gas reserves.

However, natural gas hydrate has a long way to go before it can be developed on an industrial scale because geographic and environmental protection issues have to be overcome.

The hybrid wars heat up

Oil prices are going up. As I sit here writing about Honda's new hybrid, the 2010 Insight, on the desk next to me is the front page of The New York Times declaring that major oil and gas projects now being delayed are setting the stage for "another surge in oil prices once the global economy recovers."

So a spike in the price of oil is really just a matter of time. For Honda right now, the price of oil is not so much an issue of time, but of timing.

That is, will pump prices go back up to the levels of last May/June that looked like they would make the launch of the gas-stingy 2010 Insight hybrid a smashing success?

Oil producers help tackle climate change

At the 2006 Arab Energy Conference in Amman, Jordan, I suggested that oil producers are part and parcel of the human race and that they will not be immune from the impact

of climate change. I suggested that Arab oil and gas producers should embrace a CCS project and share its experience with the rest of the world. The Arab oil and gas producers may even be able to use CO₂ injection to enhance oil recovery from mature fields and therefore the expensive CCS projects may become a very attractive and profitable undertaking.

Obama's Climate - Change Hopes Get A Boost

UNITED NATIONS/LONDON (Reuters) - Official Washington sounded more upbeat on Monday than it has for weeks in sizing up U.S. President Barack Obama's chances of progress on a climate-change bill in Congress this year.

U.S. Senator Barbara Boxer predicted the committee she leads would approve a bill before a U.N. climate summit in Copenhagen in December while Obama's Energy Secretary Steven Chu said he hoped all of Congress would pass a law by then.

Future to sustainability lies in peaceful transition

By now, the concept of sustainability is one that most people are familiar with. Though there are many ways to define a sustainable society, there is really only one alternative to it. Basically, you're either on or off the bus. By definition, being unsustainable only lasts for so long. It's the ultimate dead end.

What does that mean in the current context of our lives, our homes and communities, and life as we know it? There are many examples of human and nonhuman populations that have lived in relative balance with the world for tens of thousands of years. However, they were not multiplying and consuming resources at the enormous rate we've become accustomed to. Can we envision what our community will look like in 5,000 years? How about 100?

The Economic Revolution Is Already Happening -- It's Just Not on Wall St.

Thousands of alternatives to the punishing corporate model have sprouted up across the US, building up an alternative economy as Wall St. crumbles.

Save Kids. Take 250,000 Cars Off US Roads: Wend Magazine Tells How

To help readers get in the right mood, the Wendex gathers together scary statistics, which seem to equally reflect another world.

For example, we're informed that 50% of US school kids are dropped off in the family car. But if just 20% of those kids living within two miles of school either biked or walked, the the US would avoid 43 million miles of driving. Or put another way, if the number of

kids who walked/biked to school returned to 1969 levels, the USA would reduce its emissions equivalent to taking 250,000 cars of the road. It's well established that kids aren't exercising like they use to and that childhood obesity if a growing health care issue. But did you know that 20 billion extra pounds of carbon dioxide are released annually due to overweight and obese US citizens?

ANALYSIS - Rising US population makes 2050 climate cut harder

OSLO (Reuters) - A rising population will make it harder for the United States to make 2050 cuts in greenhouse gas emissions than for Russia and some other rich nations with shrinking populations, a Reuters survey showed.

Leaders of the Group of Eight agreed in July to cut developed nations' emissions by 80 percent on average by 2050 in a costly shift to renewable energies. They said the target could aid a U.N. climate pact due to be agreed in December.

But the goal -- if implemented by each nation -- would allow Russian citizens to emit almost twice as much as Americans in 2050, according to Reuters comparisons of emissions and U.N. Population Division projections

Carbon capture coal tech must be ready by 2019: U.S.

LONDON (Reuters) - A technology to bury underground the greenhouse gas emissions produced from burning coal must be ready for global deployment by 2017-2019, U.S. energy secretary Steven Chu said on Monday.

Coal is the world's single biggest source of carbon emissions, at 40 percent. Other sources included burning oil and natural gas, and deforestation and the production of cement.

Max Keiser: Oil Trade's U.S. Dollar Dump Rumors Are True

Max Keiser, international journalist, provocateur and ex-stockbroker, was interviewed on Tuesday by the Russia Today television network on the oil trade's so-called "U.S. dollar dump" (courtesy of GATA). He reported that he was hearing from his sources in Paris and the Middle East that there was substance to the widely publicized article by Robert Fisk (The Independent) about worldwide collaboration to replace the U.S. dollar as the medium of exchange for oil trading.

UK: Shadow energy minister warns of West Midland power crisis

The West Midland economy could be among the hardest hit by any potential shortfall in

the UK power supply because of its energy-intensive manufacturing sector, according to shadow energy minister Greg Clark.

Speaking during a visit to Birmingham, Mr Clark warned of interruptions in supply and price spikes which could damage the region's businesses if investment was not made in the UK's energy capacity.

'Aramco eyes South Ghawar job'

Saudi Aramco plans to award an integrated drilling contract in South Ghawar worth \$500 million in a bid to cut costs, according to reports.

"They want one company to provide the rigs, directional services. The objective is to cut costs," an oil services company sources close to the bidding process told Reuters.

Kunstler: Booby Prize

The combination of extreme resource dependency and religious fanaticism is a fatal equation for the Middle East. They are angry, crazy and often savage people who own something we can't live without, and we are overfed buffoons, often savage ourselves, who think we can make them like us -- whether they like it or not. Again, personally, I don't believe the status quo will persist a whole lot longer. The US economy is radically de-complexifying (i.e. crashing). Part of this will be expressed in the bankruptcy of US military capacity -- at least where supporting troops-on-the-ground in foreign lands is concerned, and probably overseas bases, too.

The US could get in trouble with other sources of foreign oil (think: Mexico) before anything chokes off the Middle East. But in one way or another, the US will soon become both capital-and-energy-resource-challenged to an extreme, perhaps to the extreme where we can't feed ourselves. Our problems in running the nation as it has been set up to run -- as a colossal demolition derby with sideshows of bargain shopping and infotainment -- are insurmountable if one accepts the majority view that it is "nonnegotiable."

Going fission

Is nuclear power the only way to meet Australia's future energy needs and cut carbon emissions?

Australians warm to nuclear power

Australians are warming to the idea of nuclear power, with almost one in two saying it

The Oil Drum | Drumbeat: October 12, 2009

should be considered as an alternative source of energy to help combat global warming.

An Age/Nielson poll found 49 per cent of Australians believed nuclear should be on the nation's list of potential power options, while 43 per cent were opposed outright.

Canada should follow Europe's lead on climate change, minister says

It's time politicians in North America began taking the type of politically risky measures to cut carbon-dioxide emissions that their counterparts in Europe have already initiated, says the Danish minister playing host to the coming United Nations conference on climate change.

And Connie Hedegaard, Denmark's minister for climate and energy, said the inaction of some is making life difficult for politicians in jurisdictions taking the threat of global warming seriously.

Interview with Sadad al Husseini: Part 2—"A lot of Money = a Little Oil"

Question: In the past you've mentioned that world oil reserves are overstated by as much as 300 billion barrels.

Sadad: It's very important to adhere to proper reserve definitions when we're talking about oil. Oil is money in the bank. If you are very loose in terms of how you define it, you can go off and make assumptions that are unsustainable. The current numbers published—I call them "declared reserves"—are something like 1,200 billion barrels. On top of that there are another 150 billion of extra-heavy crudes and 150 billion Canadian type of bitumens. So that would lead you to believe that we have roughly 1,500 billion barrels of proven oil reserves. In fact, those are hardly proven. There is a lot of speculation. If we go back to the SEC type of definitions, that number drops way back, maybe down to 900 billion. I think it's important to be precise about the definitions if not the actual estimates, because that's the only way we can decide how much can be delivered on a timely basis. So yes, I think I would say 900 billion proven, perhaps 1,200 billion probable and potential. But that's about the limit.

Sunoco, Valero Shut Refineries as Winter No Match for Fuel Glut

(Bloomberg) -- Oil refiners from Valero Energy Corp. to Sunoco Inc. are cutting the most capacity since the early 1980s, anticipating the coldest U.S. winter in a decade won't be enough to soak up a glut of fuel.

The returns from processing crude into heating oil for delivery in February are the lowest in six years after the recession cut demand by the greatest amount since Jimmy Carter was president. The margins for making heating oil and diesel may decline 33 percent by January because of the increasing supply, according to Energy Security

Jim Rogers Claims 20 Year Commodities Boom to Replace Financial Crash

Jim Rogers and others commodity boomers may also be mistaken in thinking that oil price recovery automatically translates to sustained price recovery for non-oil commodities. In the short-run, yes, but without sustained real economy recovery, no. The special case of oil, summarized by Peak Oil, is itself becoming less special and more complex, as multiple transitions gather pace. The long-announced 'decoupling' not of China and India from OECD economic trends, but of the global economy from oil is itself more possible, today, than previous.

One very near-term lever for this partial and transient change, within global energy transition, is the coming but only short term natural gas supply bulge. We can place this bulge at about 2010-2014. This can be compared with the previous bulge in oil capacity additions, taking place on a longer timeframe, in a context of low but regular growth of the global economy through about 1985-1995. Short-term impacts on oil prices through 1995-2000 were dramatic, in the sense of setting very low ceilings for each oil price recovery.

China May Seek Oil Investment in Ghana, Guinea to Meet Demand

(Bloomberg) -- China, the world's second-largest oil consumer, may be seeking to invest in oil in the Western African states of Ghana and Guinea to help fuel its economy and bolster energy security.

Putin Travels to China to Expand \$100-Billion Energy Relations

(Bloomberg) -- Prime Minister Vladimir Putin arrives in China today bidding to strengthen a relationship forged by Russian oil exports to Asia's largest energy consumer.

Russia, which this year sealed Chinese oil contracts valued at \$100 billion, is now negotiating an agreement that would make China OAO Gazprom's biggest customer for natural gas. Its communist neighbor currently buys no Russian gas.

Russia Needs 15 Years to Reduce Reliance on Energy

(Bloomberg) -- Russia will need as long as 15 years to free itself of its reliance on raw materials and become a modern economy, President Dmitry Medvedev said.

"That is a perfectly plausible time frame in which to create a new economy, an economy

that will be competitive with other major world economies," Medvedev said in a television interview last night. "Once a significant portion of our revenue is generated by something other than energy exports, let's say at least 30 or 40 percent of it, then we would already be living in a different economy and a different country."

Iraqi oil impasse seen deterring smaller firms

BAGHDAD (Reuters) - Iraq's failure to pass delayed energy legislation is unlikely to deter oil majors from doing business in a country already saddled with risk, but it may halt investment in smaller fields, a top U.S. official said.

"The oil and gas law certainly matters, but it is not critical to the big energy companies," Patricia Haslach, the official who oversees U.S. efforts to help Iraq resurrect its economy, said in a recent interview.

Shell Expects Output at Prelude off Australia in 2016

(Bloomberg) -- Royal Dutch Shell Plc, Europe's largest oil company, said first liquefied natural gas from its Prelude project off northwestern Australia is expected in 2016.

A final investment decision is scheduled for early 2011 and Prelude is projected to have an operational life of 25 years, Shell said in a draft environmental impact statement posted on its Australian unit's Web site. Shell plans to use the world's first floating LNG plant to develop the field.

Five risks to watch for in the Middle East

BEIRUT (Reuters) - From Iran's nuclear ambitions to the fallout from the financial crisis in the Gulf, the Middle East offers several risks that could affect wider world markets.

BHP Says Olympic Dam's Mine Haulage System Damaged

(Bloomberg) -- BHP Billiton Ltd., the world's largest mining company, said a mechanical failure damaged the main haulage system at its Olympic Dam copper, uranium and gold mine in South Australia.

An investigation is under way and the system won't be restarted until it is safe, BHP spokeswoman Kelly Quirke said in an e-mailed statement. A secondary haulage system is operating, she said. Quirke wouldn't say what effect the incident would have on production or whether the company would be forced to miss deliveries to customers.

U-turn urged on UK energy policy

The liberalisation of the UK's energy market should be reversed, with ministers taking more control of decisions such as building renewable energy generation, the government's Committee on Climate Change will say today.

The call for a U-turn on two decades of government policy that has created one of the most liberal energy markets came as the committee, chaired by Lord Turner, concluded that deregulated markets did not produce the needed investment in low-carbon energy and a diversity of supply.

EU Boosts Builders With Green Renovation Plan

BRUSSELS - Fifteen million European buildings should have eco-friendly renovations over the next decade to cut energy use, with builders and architects re-educated to do the lucrative job, a draft EU report says.

The European Union should also make mandatory its goal of cutting energy use by a fifth over the next decade, creating about 2 million new jobs, says a draft of the EU's "energy efficiency action plan" obtained by Reuters.

The proposal for a binding energy efficiency target is expected to spark a fierce political battle.

New German government won't slash solar power rates: source

BERLIN (Reuters) - Germany's conservatives and their Free Democrat allies will reform the Renewable Energy Act (EEG) but cuts for solar power rates will be modest to prevent harming the fast-growing industry, a coalition source said on Sunday.

"We're not going to take an axe to the EEG and we obviously won't agree to any changes that would damage such an important sector," a source told Reuters. "Any cut in feed-in tariffs will be modest -- not anywhere near as high (as) some are suggesting."

Iceland looks to serve the world

Since the financial crisis, Iceland has been forced to retreat back from high octane bubble living to nature.

Fortunately, there is a lot of that nature to retreat to.

It is a breathtaking world of volcanoes, endless prairies and ethereal winter landscapes.

Not, you might think, the most obvious place to stick millions of the world's computer servers which are, for all their uses, rather less attractive.

But the country now wants exactly that - to become home to the world's computing power.

Debate Follows Bills to Remove Clotheslines Bans

CANTON, Ohio — After taking a class that covered global warming last year, Jill Saylor decided to save energy by drying her laundry on a clothesline at her mobile home.

"I figured trailer parks were the one place left where hanging your laundry was actually still allowed," she said, standing in front of her tidy yellow mobile home on an impeccably manicured lawn.

A world awaits you in the 'Whole Green Catalog'

It's about time. Modeled on the "Whole Earth Catalog," this compendium of products, easy on the Earth, ranges from kitchenware to cars to pet food.

Lush and stylish, the book lists everything you need to make you want to go off-grid: sustainable skateboards, products to help you recycle, appliances, biofuel and cashmere.

A world awaits you in the 'Whole Green Catalog'

It's about time. Modeled on the "Whole Earth Catalog," this compendium of products, easy on the Earth, ranges from kitchenware to cars to pet food.

Lush and stylish, the book lists everything you need to make you want to go off-grid: sustainable skateboards, products to help you recycle, appliances, biofuel and cashmere.

California's Food Banks Go Locavore

Traditionally food banks have gathered mostly leftover or damaged boxes and cans from supermarkets, food processors and other mass distributors and then passed along the food to soup kitchens and food pantries like the one in East San Jose. Food banks have always found some fresh produce to give away; a few have managed to give away a lot. But for the most part, they have trafficked in processed foods — widely available free, simple to transport and warehouse and quick to fill empty stomachs.

Increasingly, though, food banks have been looking to agriculture. California is at the forefront of this change. Since 2005, the California Association of Food Banks has struck

The Oil Drum | Drumbeat: October 12, 2009

deals with farms and packers across the state, where, on behalf of its members, it collects truckloads of fruits and vegetables that are too small, ripe or misshapen for supermarkets to sell.

A Second Manhattan Project?

The conventional view is that it would take a long time to develop Generation IV nuclear technology. This is mistaken because the Indians expect to complete a commercial Generation IV Fast Breeder Prototype Reactor in 2011, and then begin to build standaed production reactors immediately after, They currently expect to complete at least 4 commercial fast breeders by 2020, and more later.

Kurt Cobb: The purpose of it all

More recently, some scientists have come to believe that human activities are bringing about an entirely new geologic age. And, therein seems to lie our purpose, to alter the landscape and the atmosphere to such a degree that we bring about wholly new conditions on Earth.

How do I know this? Simple logic. First, economist Herman Daly has very compellingly explained why growth in developed nations has become "uneconomic." The short version is this: Marginal costs are exceeding marginal benefits. Yes, growth produces more of what we call wealth; but it also degrades the air, water, soil and climate, all of which are necessary for us to produce and enjoy wealth, but more important, essential to our survival. The costs to the environment and the social costs associated with high inequality are greater than the benefits of economic growth. The rather touching concern by the rich for the plight of the poor in a hypothetical no-growth or steady-state economy can easily be explained. In a steady-state economy we would have to be much more concerned about the distribution of wealth, not its mere accumulation. As Daly puts it, "We are addicted to growth because we are addicted to large inequalities in income and wealth. What about the poor? Let them eat growth! Better yet, let them feed on the hope of eating growth in the future!"

Carbon-neutral Transport Systems: Are We Doing Enough?

The sense of urgency evident in this question emanates from two scenarios: peak oil and global warming. I am using the word "scenarios" judiciously as the first is bogus and the second relies heavily on computer models. Moreover, it is not clear that our scarce resources are put to the best use in designing and implementing a carbon-neutral transport system "this century". They may be far better deployed in encouraging and researching carbon sequestration or other cleanup technologies, for instance.

Whither Resilience and Transition? Why 'Peak Oil' Has Yet to Outlive its Usefulness

It's been a fascinating few days. Early in the week, Nate Hagens and Sharon Astyk were suggesting that perhaps the term 'peak oil' has outlived its usefulness, given that we have almost certainly peaked, and that the peak oil movement needs to shift its focus. It echoed something I wrote a while ago, likening ASPO and the wider peak oil movement to a Loch Ness Monster Society, dedicated to establishing the existence of this fabled creature. They organise conferences, scientific searches of the loch, write papers and journals, and then one day, an entire, intact Loch Ness Monster washes up on the shore. Then what? They have no reason to exist any longer, their whole raison d'etre vanishes overnight.

However, I don't think it is that straightforward. For me, what we are seeing, taking a step back and looking in the longer time context, is a series of pulses. Peak oil won't go away as an issue, it pulses in and out of the collective consciousness and hopefully will increasingly come to underpin Government policy-making. In July 2008, peak oil was pulsing as the oil price hit record highs, and issues around economics were in the background. Now, economics has been the key pulse for the last year or so, and peak oil has been pushed off the side of the stage until the last few days. If Colin Campbell's original analysis, elaborated by David Strahan in his talk at the 2009 Transition Network conference, is correct, what looks likely is that the two will pulse alternately, as any kind of economic recovery increases demand, which raises the oil prices, which increases demand, and so on and so on. Until the connection between the two becomes clear, they will continue to pulse alternately.

Lufthansa, Air France May Limit First Carbon Charges

(Bloomberg) -- Deutsche Lufthansa AG and Air France-KLM Group, Europe's largest airlines, are seeking to limit costs they will be required to pay for buying greenhouse-gas permits.

The companies say they are trying to lock in prices for allowances to emit carbon dioxide needed under a European Union climate-change program taking effect in 2012. The German airline Air Berlin Plc said last month the new EU rules governing jet exhaust may add about 1.5 billion euros (\$2.2 billion) a year to the industry's expenses, spending that may reduce profits or be passed along as higher ticket prices.

Will Congress chicken out on climate change?

Once close-quarters combat over health care is ended, will Washington, D.C., have the stomach to move on climate change legislation? Deploying front groups and Gucci-wearing lobbyists, Big oil and big coal are already manning the barricades to stop it.

Climate Bill: Economy Killer or Job Maker?

(AP) Nestled in Ohio's Amish country, Bill Belden's 124-year-old family owned brick company has thrived on the region's rich red clay and shale, and cheap energy from abundant coal.

Which he's convinced that a climate bill being considered in Congress will end.

Recession Cut U.K. Emissions By 2 Percent, Climate Panel Says

(Bloomberg) -- The economic crisis probably cut Britain's output of greenhouse gases blamed for global warming by 2 percent in 2008, the Climate Change Committee, which advises the U.K. government, said today.

Recession could trim polluting emissions by 40 million to 75 million tons over the five years through 2012, the committee report said. Even so, output of heat-trapping gases isn't declining fast enough for the U.K. to meet self-imposed legally binding budgets laid out in April by the government, it said.

Flood victims in Burkina Faso illustrate the effects of climate change

OUAGADOUGOU (AFP) – A world away from the heated negotiations for a critical deal on stopping climate change at the UN summit in Copenhagen, Burkina Faso inhabitants are suffering the direct consequences of global warming.

Jacqueline, Noroudine and Guy-Prosper are among the 150,000 made homeless by floods after the heaviest rainfall in decades hit Burkina's capital Ouagadougou last month. On September 1 some 30 centimetres (one foot) of rain fell in the space of 10 hours, the heaviest rainfall in the west African country since 1919.

Melting Permafrost May Help Explain Why Many Denali National Park Wetlands Are Drying Up

Scientists working in Denali National Park suspect that permafrost melting that's caused by climate warming might be an important reason why many of Alaska's shallow lakes and wetlands have shrunk or disappeared. If the trend continues, wetland-dependent wildlife might be severely impacted.

Russian climate goal weak as "methane bomb" ticks

MARRESALE, Russia (Reuters) - The snows are late in coming on the Arctic Yamal peninsula where moist, dark permafrost entombed for 10,000 years crumbles into the sea at the top of the world.

Western scientists and environmentalists say collapsed river banks, rising tide waters

and warmer winters in northwest Russia are clear signs of climate change, but they add Russia is in denial, ignoring a potentially disastrous "methane bomb".

SUMERIGHTS RESERVED This work is licensed under a Creative Commons Attribution-Share Alike 3.0 United States License.