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Topic: Miscellaneous

'Coal-eating' bugs may solve energy crisis

Craig Venter, the controversial American scientist who helped decode the human genome, has announced the discovery of ancient bacteria that can turn coal into methane, suggesting they may help to solve the world's energy crisis.

The bugs, discovered a mile underground by one of Venter's microbial prospecting teams, are said to have unique enzymes that can break down coal. Venter said he was already working with BP on how to exploit the find.

Venter even suggested the discovery could open up the world's coalfields to an entirely new form of mining, where coal is infected with the bacteria, allowing methane to be harvested "without even digging up the coal".

Dmitry Orlov: The slope of dysfunction

Perhaps you have heard of the Peak Oil theory? Most people have by now, even the people whose job used to involve denying the possibility that global crude oil production would peak any time soon. Now that everybody seems a bit more comfortable with the idea, perhaps it is time to reexamine it. Is the scenario Peak Oil theoreticians paint indeed realistic, or is it firmly grounded in wishful thinking?

The scramble for Iraq's 'sweet oil'

With proven oil reserves of around 112 billion barrels and up to another 150 billion barrels of probable reserves, Iraq is the greatest untapped prize for international oil companies.

To put that in context, if Iraq does turn out to have around 300 billion barrels of oil, it will rival the world's biggest producer Saudi Arabia - which has around 160 billion barrels of proven reserves.

FULL capacity has been restored at the Varanus Island natural gas plant a year after an explosion cut 30 per cent of Western Australia's gas supply.

Apache, the second-largest independent US oil producer by market value, confirmed that full capacity had been restored at its plant.

Qatargas: South Hook LNG Terminal a stepping stone for UK operations

(MENAFN - The Peninsula) "The South Hook LNG Terminal is a key stepping stone for Qatargas operations in the UK," said Mohammad Al Naimi, General Manager, South Hook LNG terminal, world's largest LNG terminal. The \$2bn project will be supplying 20 percent of UK's energy requirements.

Nigeria: At Last, China Makes Dramatic Entry Into Nigerian Oil Sector

But under the latest deal, Sinopec, a refiner formally known as China Petroleum & Chemical, would gain access to substantial reserves in Nigeria, some other parts of West Africa and the Middle East if the takeover of Addax is approved.

Analysts are, however, divided over the implications of the acquisition, which industry sources said is raising the fear of a possible staff rationalisation in the petroleum company.

China, Iran, Nigeria, and Oil

Demand from China may be up, however, according to the International Energy Agency, global demand for crude is off 2.9 percent year over year; US demand is down 4.9%. Although it might be popular and trendy to talk about China being the "next big thing" the reality is that the tail cannot wag the dog no matter how much it tries. The United States is still the world's largest consumer of oil by far and should hold this position for the foreseeable future. Unfortunately for China, at least for now, the laws of nature will not be rewritten.

Positioning for When Water Runs Out: Part II

These folks are well-meaning but disappointingly misguided, given that the authors are mostly civil engineers. I am 110% in favor of using sun, wind, or tides, but our water problems are pressing now, not in 20 years. Couldn't we just once plan ahead of a known catastrophe?!! What is available now is nuclear and natural gas, and dirty old coal and oil. You want water? Fess up to the reality that it takes energy, and the energy sources we hope to replace are still the energy sources which we have in abundance -- with a transportation and distribution infrastructure already in place.

In the Andes, a Toxic Site Also Provides a Livelihood

La Oroya has been called one of the world's 10 most polluted places by the Blacksmith Institute, a nonprofit group that studies toxic sites. But for several months, the Peruvian smelting company in Mr. Rennert's empire has claimed that low metals prices prevented it from completing a timely cleanup to lower the emissions that have given this town such an ignoble distinction.

The tensions here over the lead emissions and the smelter's financial meltdown is precisely the kind of dire mix of foreign investment and environmental contamination feared by indigenous groups elsewhere in Peru, particularly in the country's Amazon basin, where protests over similar issues left dozens dead this month.

Oklahoma accused BP of gasoline price-fixing

HOUSTON -- Oklahoma Atty. Gen. Drew Edmondson accused BP America Inc. and two subsidiaries of illegally manipulating gasoline prices and other refined products in a scheme said to have started in 2002.

In a lawsuit filed in Cleveland County District Court, Edmondson accused BP of deceptive trade practices, saying BP acquired and hoarded short-term supplies of gasoline from the New York Harbor gasoline hub and light, sweet crude oil from Cushing, Okla.

Climate Change Bill May Be Election-Year Issue

WASHINGTON — As Democrats strained to win over crucial holdouts on the way to narrow, party-line approval of global warming legislation, they were dogged by a critical question: Has the political climate changed since 1993?

Veteran members of both parties vividly remember when many House Democrats, in the early months of the Clinton administration, reluctantly backed a proposed B.T.U. tax — a new levy on each unit of energy consumed — only to see it ignored by the Senate and seized as a campaign issue by Republicans, who took control of the House the next year.

Wind, Solar Could Play Bigger Roles in Future US Energy Mix

U.S. climate change legislation now before Congress would mandate that by 2020, 15 to 20 percent of the nation's electricity supply would come from renewable sources like wind and solar.

Currently wind and solar contribute only about 2 percent, with hydropower providing an additional 6 percent.

UAE: Finding a solar solution before the dust settles

With little rain and an abundance of sun, this desert country is just about as good as it gets for solar power. Not surprisingly, therefore, solar stands at the forefront of efforts to develop renewable energy and reduce the UAE's emissions of greenhouse gases while providing an alternative to dwindling supplies of oil.

Unfortunately, there is also no shortage of dust. As anyone who lives here knows, dust is the nation's sentinel against inertia: anything immobile is quickly covered, whether hanging laundry, parked cars or solar panels.

Beetles Add New Dynamic to Forest Fire Control Efforts

DENVER — Summer fire seasons in the great forests of the West have always hinged on elements of chance: a heat wave in August, a random lightning strike, a passing storm front that whips a small fire into an inferno or dampens it with cooling rain.

But tiny bark beetles, munching and killing pine trees by the millions from Colorado to Canada, are now increasingly adding their own new dynamic. As the height of summer fire season approaches, more than seven million acres of forest in the United States have been declared all but dead, throwing a swath of land bigger than Massachusetts into a kind of fire-cycle purgatory that forestry officials admit they do not yet have a good handle on for fire prediction or assessment.

China's Big Sway Over U.S.'s Climate Change Fight

China and the United States have been playing a game of chicken: Who's going to cave first to set tough emissions reduction rules?

The outcome could be influenced by who owes whom money, said David Gergen, former advisor to several U.S. presidents and a senior political analyst at CNN.

Richard Heinberg - Blackout: Coal, Climate and the Last Energy Crisis

Richard Heinberg has released his latest book, *BLACKOUT: Coal, Climate and the Last Energy Crisis*.

David Fridley, a scientist at the Lawrence Berkeley National Labs says, "Blackout

reviews the most recent analyses of global coal reserves and concludes that peak coal production is likely much nearer than is commonly assumed. Heinberg argues cogently that the most rational strategy is to reduce consumption and to rethink our growth imperative."

Reactive oil markets won't wait

An equally important factor is that easily accessible oil is getting harder to find. OPEC estimates that \$75 a barrel oil is needed for oil exploration and production to become profitable. Iran cites a \$50 price as the minimum. Whether the much disputed point of "peak oil" has been reached or not, new demand is growing just as the cost of finding new oil becomes more expensive.

Perhaps the most gloomy aspect is the inability of politicians and bankers to plan ahead. With prices low, now would be a good time to put in place taxes and other measures to encourage energy efficiency, given that it takes years to decades for energy investments to bear fruit and that medium-term energy demand is rising.

But President Barack Obama's energy secretary Steven Chu said it would be "politically impossible" for the U.S. to impose the sort of energy taxes that Europeans and Japanese have done to help create more efficient energy use and a motor industry that doesn't depend on gas-guzzling vehicles.

Haynesville Shale Creates Opportunities in the Energy Sector

Last month investment advisor Marc Faber in a Bloomberg interview noted that "natural gas is the most undervalued commodity in the world right now." He also said he was a believer in 'peak oil' to the extent we have developed most of the cheap and easily recoverable high quality reserves globally, but that the world would move onto other sources of energy as economics dictates. Faber sees energy prices rising over time and also much higher inflation in the U.S. — which will be good for commodities and for small cap stocks.

China oil demand's good news, but can it be oil's savior?

TOKYO (MarketWatch) -- China's oil demand has grown even as its production declines but analysts question whether the nation's healthy appetite for crude will last, and cast doubt on whether its demand can single-handedly offset an expected global drop-off in consumption this year.

PetroCaribe: Yes, we can

What if Jamaica does not find oil of its own? Could it invest in exploring for oil in another

country and own a part of that investing company? Could it own a part of that oil and ensure its own supply in the future at a cheaper rate? Could it, in other words, own extra-territorial oil?

Oman oil output, exports reverse years of decline

Muscat: Oman last Friday reported a sharp increase in crude oil exports during the first four months of this year, reinforcing a trend in rising production after years of declining output.

Gazprom Neft Buys Half of Sibir's Largest Shareholder

Gaining control of London-listed Sibir, which is 18 percent owned by Moscow city government, will help Gazprom Neft battle falling output from its aging fields. Sibir has rights to half of the 160,000 barrels a day produced by Salym Petroleum Development it jointly runs in Siberia with Royal Dutch Shell Plc.

Oil firms steel for worst, hope for best, in Iraq

BAGHDAD (Reuters) - Pipelines shattered by bombs. Oil terminals crippled by suicide attacks. Officials blown up in roadside blasts or kidnapped from their office at gunpoint.

Calamities like that are not just the worst fear of an oil executive in a hostile environment; they are the reality of the last six years of chaos, bloodshed and war in Iraq.

Sandstorm delays start to Iraq oil tenders

BAGHDAD (Reuters) - Iraq has postponed the first day of highly anticipated tenders for eight major oil and gas fields due to a thick sandstorm that engulfed Baghdad on Sunday, the Oil Ministry said.

Gas drillers say use of chemicals not an environmental threat

Gas well drilling is increasing in prevalence in the Northeast Pennsylvania area, and as this is happening, many people express their concerns about the environmental impact.

Questions are raised, and one that gets attention involves the use of chemicals in fracturing fluid. Natural gas-drilling companies use the fluid, which is composed of a solution containing 99 percent water and sand, to break apart shale formations. The process, also known as "hydraulic fracturing," or "fracing," involves the pumping into the ground of the fracturing fluid under high pressure, thus opening up cracks and

bedding planes in the shale. The use of sand prevents the openings created in the rock from closing. Less than 1 percent of the fluid used in this process contains the combination of several chemicals, and it is the use of these chemicals that has led many to wonder just how safe the use of fracturing fluid really is.

Facing competition, West Coast ports lobby for improved rail links

"We need a well-thought-out, strategic freight policy," said Tim Farrell, executive director of the Port of Tacoma. "We need to focus on corridors from Shanghai to Chicago or Tokyo to Houston. We are just getting started, but the West Coast ports generate more jobs than the Big Three automakers."

The looming clash over Asian shipping routes is part geography lesson, part the dreams of naval architects as they design ultra-large cargo ships, and part a short course in shipping economics — all of it overlaid with concerns about greenhouse gas emissions and climate change.

Researchers predict rise in sea level

Almost 80 percent of Galveston County households could be displaced by 2109 if water levels in the Gulf of Mexico and Galveston Bay rise as quickly as they have during the past 100 years.

Gauges at the Port of Galveston's Pier 21 show the water is 2.3 feet higher today than it was in 1909.

If that trend continues, the rising water would chase thousands of homeowners away from the coast and cause billions of dollars in damage to the area's water, sewer and utility systems, according to a study of sea level rise released earlier this month by three researchers from the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University at Corpus Christi.

A personal response to climate change

While many Americans are feeling the pinch as the recession deepens, and reducing their consumption accordingly, others of us have already been voluntarily simplifying our lives and our consumption patterns in order to reach a more sustainable level of usage of the planet's resources (forests, minerals, fossil fuels, agriculture, water, etc.).

The Information Age is over...

For the next century or so, mankind is going to be increasingly focused on two simple

tasks: preventing additional climate change, and dealing with the damage to our society caused by climate change. Those tasks will dominate our lives, and the lives of our children.

We are going to essentially rebuild *everything*, and it's not going to be just shinier and more expensive.

Climate bill could spur energy revolution

WASHINGTON – Congress has taken its first step toward an energy revolution, with the prospect of profound change for every household, business, industry and farm in the decades ahead.

Winners and losers emerge in climate bill

Everyone from small farmers to nuclear energy companies would be forced to reevaluate their place in the new order. Power plants, factories and refineries would feel the first impact if the federal government moves ahead with plans to cut greenhouse gas emissions by 17 percent from 2005 levels by 2020 and by about 80 percent near the end of the century.

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