

# **Drumbeat: February 8, 2010**

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Topic: Miscellaneous

Branson warns that oil crunch is coming within five years

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"The next five years will see us face another crunch – the oil crunch. This time, we do have the chance to prepare. The challenge is to use that time well," Branson will say.

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1.2 million b/d—as much as the US imports from Saudi Arabia.

"There is a shocking difference between the 'big oil' companies and the little guys, who are Rotary Club and PTA members in their respective hometowns," Cothran emphasized. "There should absolutely be a structural and financial difference in relation to tax subsidies between the large-scale, international oil companies and small, independent operators. This is the only way to ensure the survival of our industry's small businesses."

Characterizing the incalculable (Kurt Cobb)

A rule of thumb then might be that the more complex the system, the less likely it is we will be able to model its actions with precision. And, the greater the number of humans involved in affecting that system and the deeper that involvement, the more difficult it becomes to design precise models of the system. In general, the reliability of a model decreases as the complexity of the system it is modeling increases.

What are we left with then? Shall we simply give up and say that much of what we would like to model cannot be modeled? I would counsel against this view.

CNG and battery-powered vehicles are often presented as competing alternatives for the future of transportation, and in some sense, that's true. However, based on today's economics, they have far different potentials and address quite different market needs and niches. For those who believe in peak oil, at least in the sense of a limit on the volume of affordable oil, CNG represents potential as a critical alternative fuel which can permit the global economy to grow again.

On the other hand, CNG is unlikely to reduce carbon dioxide emissions. . .

CNG and electric vehicles, therefore, should be understood to target different market segments and solve different social problems. Both are potentially important alternatives for society in the coming years.

# **Entropy** revisited

You can't win, you can't break even, and you can't get out of the game. Those kernels are my favorite descriptors of the Three Laws of Thermodynamics. Respectively, the clauses mean (1) energy is conserved (First Law), (2) entropy never decreases, thus precluding perpetual motion machines (Second Law), and (3) it is impossible to cool a system to absolute zero (Third Law). The Second Law in particular puts insurmountable, irreversible constraints on everything we do. Without the Second Law, there would be no heat losses in energy systems, and electricity would be far too cheap to meter and commodify.

One way of looking at our current set of predicaments is that we've been on a binge, consuming energy considerably faster than it can be captured and stored by Earth's ecosystems. While fossil fuels once appeared limitless (and still do to deniers of peak oil), and though we're literally bathed in energy (in the form of sunlight), the disappearance of the fossil-fuel storehouse accumulated over millions of years isn't something that can be replaced with anything nearly as convenient as fossil fuels. Solar, wind, wave, geothermal, nuclear, and hydropower simply don't pack the same punch as fossil fuels, either singly or in combination. In short, we're falling off the net-energy cliff, and there's no lifeline to grab onto, no known technology to break the fall.

### Permits Drag on U.S. Mining Projects

Obtaining the permits and approvals needed to build a mine in the U.S. takes an average of seven years, among the longest wait time in the world. So despite having vast underground stores of raw materials, the U.S. is one of the last places miners go to start a project.

At the proposed Kennecott Eagle nickel mine in Michigan's sparsely populated Upper Peninsula, the wait is at seven years and growing. Global miner Rio Tinto says the project would fill a raw-material gap in the U.S. economy, but the company has yet to produce an ounce of nickel there.

Survey Says Americans Support Carbon Tax More Than Cap-and-Trade - But Nobody Really Knows Much About Either...

One aspect of this survey which is backed up by others: Not too many people have even heard of either approach. 35% of people responded saying they had never even heard the term cap-and-trade before, with 26% saying they know only a very little about it. Carbon tax had 31% of people being entirely unaware of the term, with a further 26% knowing little about it.

### The Biggest Thing is That Few Even Think About Pricing Carbon

More than espousing either cap-and-trade or a carbon tax by presenting this survey-and I admit that the results happen to correspond well with the US Climate Task Force's avowed mission of singing the praises of a carbon tax over cap-and-trade--I think the real take away from this is the average American really hasn't been made aware of either approach. (Still less cap-and-dividend...)

### Shell Denies Plans to Sell Major Nigerian Assets

Royal Dutch Shell PLC has denied it plans to sell major Nigerian assets in the coming months, a Nigerian minister said Friday.

"Shell hasn't come to us and when I inquired they denied it, that they were selling major assets," Odein Ajumogobia, State Minister for Petroleum Resources, told Dow Jones Newswires.

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Freezing temperatures in the UK this week are expected to tighten the gas supplydemand balance but gas prices will be capped by partially replenished mid-range storage and demand ceilings of around 420 million cubic meters/day, UK gas trading sources said Monday.

The Rough storage facility is down to 40% of capacity, and short-term storage capacity is also below 50%. The comparative levels held in storage now are far below levels seen even four weeks ago following prolonged heavy draws as the country dealt with the last spell of severe winter weather.

So far the gas market has absorbed the impact of the relatively cold winter without any significant impact on the curve, with summer 10 gas trading roughly stable at 33 pence/therm and winter 10 gas at 45.5 p/therm.

# UK prompt power edges up on cold-induced hike in gas prices

UK power for delivery on the next working day inched higher Monday on a coldweather induced increase in the price for natural gas, the fuel for over two-fifths of the country's power generation, although gains were limited on expectations that healthy margins could soak up any demand increase, traders said.

Working day-ahead baseload power rose 15 pence to GBP36.40/MWh (\$56.67/MWh, Eur41.52/MWh) by 12:00 GMT, while day-ahead peak was flat around GBP40.25/MWh...

"There's so much plant out there right now that you could double demand and power would still trade off fuels," one trader said.

"We really need to see a chunk of cheap plant to come offline to see some action," the trader added.

# Roundtable discussion of the top oil stories of the week (Podcast)

Peter Zipf, Beth Evans and Jeff Mower discuss the three top oil news stories of the week, including earnings results and how this relates to market developments, the new renewable fuels standard and biofuels approach, and the fiscal 2011 US budget, which may include a repeal of tax breaks for the oil and gas industry.

# At least 5 dead in Connecticut power plant blast

Fire officials said a natural gas leak caused the blast during testing at the Kleen Energy Systems LLC facility, which was 95 percent complete and due to come online this

summer as the largest electricity generating plant in New England.

As many as 200 workers were at the site on any given day and the exact number of dead and injured would not be known until each contractor provided a list of employees, Middletown Mayor Sebastian Giuliano told a press conference.

### Credit Suisse survey finds bearish sentiment on US gas prices

Energy investors surveyed by Credit Suisse are bearish on US natural gas prices in 2010, but bullish on natural gas stocks, Credit Suisse analyst Jonathan Wolf said Friday.

Financial and energy professionals believe gas prices will average between \$5 and \$5.50/MMBtu this year, slightly below pricing suggested by the NYMEX futures curve. Credit Suisse surveyed attendees at the bank's Energy Summit in Vail, Colorado earlier this week.

The reason for the gloominess? Liquified natural gas, respondents indicated.

# Cape Wind fight goes on

Interior Secretary Ken Salazar journeyed out into Nantucket Sound on a Coast Guard vessel last week to signal the Obama administration's readiness to put some muscle behind wind energy. To do that, Salazar has to resolve a battle over building a wind farm on 25 square miles of open water that has driven a rift between environmentalists, infuriated local Native Americans and threatened one of the administration's cherished priorities.

## Iran's President Moves Ahead on Uranium Processing

Iran's president ordered his atomic scientists on Sunday to begin enriching their stockpile of uranium in order to power a medical reactor, a move that accelerated Iran's brinkmanship over its nuclear program by moving the country closer to producing weapons-grade fuel.

## Earth, wind and wire: Going beyond solar panels

Not long ago, people who wanted to generate their own green energy at home had to content themselves with rooftop solar panels. But new technologies -- and hefty government subsidies -- are now allowing homeowners to tap the wind, the Earth and other renewable sources in their own backyards. Call it the green evolution.

The cost of heating and cooling with fossil fuels has nowhere to go but up, thanks to rising global demand and increased regulation of carbon emissions. Turning one's home into a clean mini-power plant is getting cheaper and easier all the time.

# CTA's Doomsday service faces its first rush hour

Predictable as it was that the threat of previous CTA service cuts would not be carried out, it was even more obvious there was no stopping them Thris quinstions now ar will it take to forge successful negotiations between CTA management and the transit agency's labor unions (since neither the city of Chicago nor the state of Illinois is willing to put skin in thew galong)? will it take? Is Henry Kissinger help move things along? How soon could full service be restored?

# Canal expansion may spur switch to shipping

Chinese toys and sneakers headed to Wal-Mart Stores Inc. and Target Corp. on the U.S. East Coast may bypass Warren Buffett's \$33.8 billion railway as the expansion of the Panama Canal slashes the cost of shipping them by sea. The deeper, wider canal will allow A.P. Moeller-Maersk A/S, China Ocean Shipping Group Co. and other lines to ship more cargo directly to New York and Boston instead of unloading it on the West Coast for trains and trucks to finish the journey east. That could save exporters 30 percent, the canal operator said.

## Wind industry picks up, but jobs decline

America's wind energy industry enjoyed a banner year in 2009, thanks largely to tax credits and other incentives packed into the \$787 billion economic stimulus bill. But even though a record 10,000 megawatts of new generating capacity was created, few jobs were created overall and wind power manufacturing employment fell — a setback for President Obama's pledge to create millions of new "green jobs." Obama has long pitched green jobs, especially in the energy, transportation and manufacturing fields, as a prescription for long-term, stable employment and a prosperous middle class. But those jobs have been slow to materialize, especially skilled, good-paying blue-collar jobs such as assembling wind turbines, retrofitting homes to use less energy and working on solar panels in the desert.

### Gas price slump stings BG

UK-based integrated gas giant BG Group saw profits from continuing operations slip 15% year on year to £592 million in the fourth quarter of 2009 amid a sharp decline in natural gas prices.

# Blizzard bumps oil prices

Oil prices reversed some of last week's losses today and rose from a seven-week low to near \$72 a barrel, spurred by bargain hunting and hopes that a blizzard in the US mid-Atlantic region would boost fuel demand.

# Santos unveils reserves bonanza

Australian independent Santos said it had boosted total proved and probable reserve at the end of last year by 42%, or 427 million barrels of oil equivalent, year-on-year to a total 1.44 million boe.

The company said reserves were plumped by a 60% year-on-year increase in proved and probable coalbed methane reserves to 3748 petajoules (about 100 billion cubic metres), which included its first booked reserves after entering the Gunnedah basin in 2007.

#### EPA lowers cellulosic ethanol standard for 2010

The US Environmental Protection Agency published guidance for the second phase of the renewable fuels standard (RFS2) Feb. 3, directing refiners to ensure that the 8.25% The ethationergy Independence gasoline pool contains Security (EISA) required sales of 12.95 billion gal of renewable fuel in 2010. EISA created a expanded version of the RFS, knownTheas RR\$\$2. rules **EPA** were scheduled for release Jan. 1, 2009, but EPA delayed the release until this year. For the first time, EPA announced volume standards for specific categories of renewable fuels. The 2010 cellulosic ethanol standard is 6.5 million gal, down from the 100 million gal that Congress established in 2007.

# Cellulosic shortfalls of two companies led to RFS target cut: EPA

Two companies expected to produce the bulk of the earlier estimate, Cello Energy and Range Fuels, "have delayed or reduced their production plans for 2010," according to the EPA documents.

Cello and Range could not be reached for comment on Friday...

Uncertainties about Cello surfaced during a trial last summer where evidence was submitted that showed production from Cello's biodiesel plant did not contain any biobased carbon. The company claimed it could turn cellulosic material, used tires and plastics into fuel, according to court documents.

# US renewable, efficiency standard could save \$113 billion: UCS

A federal renewable energy standard of 25% by 2025 combined with an energy

efficiency standard of 10% by 2020 could save US electricity consumers \$113 billion by 2030, the Union of Concerned Scientists said Friday in a new analysis.

The two standards also would boost renewable energy generation by 23%, the group said.

# While job numbers proliferate, is 196,000 a good one?

The consulting firm Navigant said Thursday that by its estimates there are 196,000 people in the US currently employed in the renewable electricity industry.

Job numbers are often carelessly tossed around. Nonetheless, Navigant said in its study that if there is a 12% national RES established for 2014, there could be 67,000 more jobs in the sector by then. A 20% RES target in 2020 would add 191,000 jobs, and a 25% RES target for 2025 would add 274,000 jobs.

For 2025, with a 25% national RES, Navigant broke down the new jobs this way: 116,000 in the wind industry, 60,000 in biomass-related jobs, 50,000 in the solar sector, 34,000 in the hydro sector and 15,000 in the waste-to-energy area.

### IADC/SPE: Project is devising autopilot drilling standards

A Research Council of Norway joint industrial project, AutoConRig, aims to develop standard communications for the drilling process, build a framework for autonomous machine control, and create and maintain explicit specifications of shared concepts among drilling centers, reservoir and production centers, operations and maintenance centers, environment centers, and field operationRig, started in 2008, project, Integrated Operations in the High North, that plans to develop an advanced infrastructural framework of integrated operations off Norway.

#### Intervention boosts Beatrice field oil flow

he Ensco 80 jack up has moved off the field, which is in the Inner Moray Firth area, after refurbishing and restarting three wells tied into the Beatrice Bravo platform. Ithaca, operator of Beatrice field under a lease from Talisman Energy Inc., had expected the production boost to be about he 5000mplant. attributed about incremental production to the B11 well, in which intervention included perforation across a previously untapped section of the Middle Jurassic Beatrice reservoir to access an undrained part of the field.

1,000

is

#### French refining industry situation 'critical'

The French refining industry faces a "critical" situation as part of a European system in which "between 10 to 15% of the 114 refineries should be shut down to restore a

leader the of demand-supply balance," says a JeadeLouisoupSchilansky, presid Union Française des Industries Petrolieres (UFIP), gave that assessment at a press Raris. industry conference Feb. 4 In outlook, Schilansky products in France last year dropped by 2.8% in a change he called "structuraRefinery run all of last year fell to 72 million tonnes from 84 million tonnes in 2008 as margins diminished.

## Valero buys Wisconsin ethanol plant

Valero Renewable Fuels Co. LLC has completed the purchase of a 110 million gal/year ethanol plant near Jefferson, Wis., from privately held Renew **Ehergy**urchase \$72 million. Renew Energy filed for bankruptcy early last year after 6 years of operation.

price

### Gas pipeline blown up in Quetta

Unknown miscreants have blown up a gas pipeline with explosives located on western bypass here in Quetta on Sunday, Geo news reported. According to police sources, the gas pipeline was under construction when unidentified men blew it up with explosives, but however, the explosion did not result in suspension of gas supply to area.

# Nigerian militants say disabled Shell oil pipeline

A Nigerian militant group said on Sunday it had attacked a Royal Dutch Shell oil pipeline in the Niger Delta but the Anglo-Dutch company said it had no reports of any such sabotage.

The Joint Revolutionary Council (JRC), a coalition of ex-militants and community leaders, said in a statement it had disabled a trunk line in the Obunoma area of Rivers state connecting several flow stations to the Bonny export terminal.

# Production in Dubai's new oil field to begin in a year

The Media Office of the Dubai Government said today that the commercial production of oil from the newly discovered 'Al-Jalilah' oilfield will start in an year.

Research and initial exploration in the new deposit off the coast of Dubai located east of the existing Rashid oil field predicted the possibility of full scale commercial production within an year, said a statement from the Media office. Once operational the Jalilah Oilfield will be the fifth producing fields in the emirate since the oil was discovered in the sixties of the last century.

Some state governments are preparing a legal action against the Federal Government for fuel subsidy deductions from the Federation Account which they claim are illegal and unconstitutional.

The past administration of President Olusegun Obasanjo had initiated the Petroleum Support Fund bill in 2006 to legitimise the deductions to fund the huge subsidy bill, but it is yet to be passed by the NAtional becausembly of the deregulation programme of the government, the bill is not likely to be pursued any longer as government will no longer be involved in the pricing of petroleum products.

The 36 states of the federation, 774 local councils and the Federal Capital Territory contributed over N1.3 trillion to the subsidy fund between 2006 and last year, although only Lagos, Rivers and Abuja enjoyed the benefit of paying N65 per litre of petrol before the current fuel crisis crept in.

## Addressing the food versus fuel debate in Ghana

The lines between energy and agriculture are becoming more blurred. As science advances, the use of biofuels in most parts of the world has continued to increase. One thing that has gradually come to stay and is in recently times attracting significant foreign investment in Ghana is energy crops. The last four years has seen Norwegian, Brazilian, Dutch, Swedish, German and British firms all competing for farmland to grow energy crops in different parts of the country.

### The Iraqi oil conundrum

Speculation that Iraq's production could - in the not too distant future - exceed that of Saudi Arabia may still represent Washington's main strategy for postponing future severe global energy shortages.

### Shareholder group calls on BP to rethink oil sands project

OIL giant BP is facing calls by a shareholder group to review its plans to invest in major oil sands projects in Canada. FairPensions, which lobbies for companies to adopt "responsible investment practices", has filed a resolution it hopes will be voted on at BP's general meeting in April.

The resolution calls for the risk and audit committees at Europe's second largest oil explorer to review factors such as future carbon prices, potential regulation of greenhouse gas emissions and possible risks to its reputation it might face from investing in oil sands projects.

China's economy set to grow 10%

AN OFFICIAL Chinese economic think tank has predicted the country's economy will grow by around 10 per cent this year. The Centre for Forecasting Science predicted that first quarter growth equivalent to 11 per cent in the first three months of the year would slow slightly during the rest of 2010.

# Falklands oil prospects stir Anglo-Argentinian tensions

It does not look like much: a jumble of pipes, containers and drilling equipment sitting on a windswept jetty at Port Stanley. The hardware, however, signals an imminent search for oil and gas that could turn the Falkland Islanders into south Atlantic oil barons, a prospect that has already triggered a dispute between Britain and Argentina.

#### Is diesel dead?

Diesel. Nasty oily stuff or thrifty saviour? Until fairly recently, you might have said that UK buyers were coming around to the second view.

In Europe, diesel's share of the new passenger car market has grown from 25 per cent to more than 50 per cent during the past decade, but in Britain, from a lower base, growth has been even faster during the same period (from 15 per cent to 43 and a bit). In recent months, though, Britain's love affair with diesel has lost its ardour.

### China approves Gansu coal mining plan

Ningzheng mining region is located in eastern Gansu, covering an area of 1,100 square kilometers. The mining region was designed to produce 20 million tons of coal annually after construction, which will become one of the largest energy bases in Northwest China.

#### \$60b Aussie coal deal inked

Australian coal and iron ore company Resourcehouse said over the weekend it had signed a record \$60 billion coal supply deal with Chinese power stations, a move analysts said underscored Chinese companies' growing demand for energy to fuel the country's economic development.

Resourcehouse will supply 30 million tons of coal annually over 20 years to China Power International Development Ltd, a unit of major power producer China Power Investment Corp (CPI), Clive Palmer, chairman of the Australian company, said on Saturday.

# China's railways send 5m passengers by Feb 6

China's railway network has transported 5.03 million passengers as of February 6, the eighth day of the country's annual Spring Festival transport peak lasting from January 30 to March 10 this year, said the Ministry of Railways (MOR) Sunday. The figure was 105,000 more than that in the same time last year, up 2.1 percent year on year, according to the MOR.

# Coal exporters face low prices costly transport

Coal exporters face a tough year without the cushion of forward selling at higher prices that helped get them through 2009, and with their familiar problem of high rail transport costs persisting. Exporters may have to cut production as they did in 2008-09 if prices slump and they cannot shift coal to Asia.

Russia, one of the world's top five coal exporters to Europe and Asia, will ship about 8 percent more thermal coal in 2010 than last year but will battle for more than a slim profit margin, analysts and exporters said.

### The Role of Oil in the Iraq War

In truth, the oil production level in Iraq has deteriorated during that period compared to its levels under the former regime. Also, Iraq's recent openness to the international oil companies in 2009 was not matched by a noticeable openness to American companies. It was the Asian state-owned companies (especially from Malaysia and China) that had the lion's share, and only two American companies, ExxonMobil and Occidental Petroleum, were awarded contracts. More importantly, the American companies did not broadly participate in two other Iraqi tenders. Their refrainment from competing with other companies was thus notable and remarkable, especially Chevron which withdrew in the last minute.

## Government's switched on energy move

ALL Australian homes will soon have to undergo a mandatory energy-efficiency assessment costing up to \$1500 per property. The assessment has to be done before any property can be sold or rented under new laws to tackle carbon emissions.

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