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ASPO USA PEAK OIL REVIEW

Association for the Study of Peak Oil & Gas USA

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1. Oil and the Global Economy

New York oil prices have drifted down about $10 a barrel since the end of August due to the reduction in tensions in the Middle East, the three-week US government shutdown. and fears of what a default on the US debt would do to the global economy. The temporary budget settlement in Washington last week which moved the dispute down the road another three months brought a burst of euphoria to the equity markets but did little for oil which is still considered to be overpriced by many analysts at Friday's close of $101.81 a barrel. Oil prices in London, where traders are less concerned about disputes in Washington and more concerned about slowing North Sea and Middle Eastern production and increasing demand from China, have climbed slowly by nearly $4 a barrel since early October to close at $109.94 on Friday.

The government shutdown halted the Department of Energy's weekly stocks report last week, leaving us with the less-accurate phone survey conducted by the American Petroleum Institute. The API reported that US oil stocks grew by an unexpected 6 million barrels last week and that stocks at Cushing, Okla. rose by nearly 300,000 barrels. The Cushing increase, however, is reported to be caused by temporary factors which should go away shortly. The substantial jump in crude inventories also contributed to the weekly decline in prices last week.

South Dakota oil production increased by 35,000 b/d in August to 910,000 b/d, raising hopes that production will break 1 million b/d by the end of the year. There has been a lot of bad weather in the Dakotas of late, however, which is likely to slow production.

The API also reported that US consumption of oil products in September was up 2.7 percent over 2012, but it is unclear how much of this is going to export markets rather than US fuel tanks. The API also reported that US exports of refined products rose by 15.5 percent in September and 16.5 percent in the third quarter over last year. The EIA reported that gasoline prices which are now down to a national average of $3.35 a gallon are now the lowest since last January, which may have contributed to the increase in consumption during September.

There was much fuss last week about the US now being the largest "oil" producer in the world, having supposedly surpassed Russia and Saudi Arabia. US production of conventional oil, however, is still only 7.3 million barrels a day, but increases to 12.1 million when 2.5 million barrels of natural gas liquids, 1 million barrels of biofuels, and 1.3 million barrels of "refinery processing gains" are thrown in. This hype about the US being #1 is rather misleading for the general public as NGLs are not nearly as versatile as crude, bio-fuels have considerably less energy than gasoline and diesel, and processing gains are much like whipped cream in that they contain no more energy than before processing – just take up more barrels.

A cold snap in the Mid-West sent natural gas prices higher at mid-week, but fell again after government forecasters predicted milder weather through January.

2. The Middle East & North Africa

Iran: It has only been two years since we were on the threshold of war over Iran's nuclear enrichment program. Israel was urging Washington to join in on air strikes against Iran's nuclear enrichment facilities, and Tehran was vowing to block the Straits of Hormuz in retaliation, halting much of the Middle East's oil exports. This in turn would have sent oil prices into the stratosphere and created an instant economic depression in every corner of the world. Blocking the Straits would likely have led to a wider war with desperate oil importers taking whatever military action was necessary to resume the flow.

Despite skepticism from observers and much braggadocio from Tehran, the ever tightening sanctions clearly had some effect, for last summer the Iranian people voted for a change in the country's policies of confrontation with much of the world. The new President, with the blessings of Supreme Leader Khamenei, has clearly changed the tone of discussions with the outside world over Iran's nuclear program. While adhering to Iran's right to enrich, and its refusal to take the humiliating step of sending its enriched uranium out of the country, initial indications suggest that Tehran may be willing to accept more onerous UN inspections to ensure that it is not surreptitiously enriching to weapons grade and designing nuclear weapons.

Although few details have been released about the new Iranian administration's first negotiations with the six world powers, what is known suggests that progress is being made and that some sort of agreement may be possible, despite opposition to a rapprochement with Tehran by Israel, the Gulf Arabs, and some hardliners in the US.

The new openness, however, is not without opposition in Tehran which has had "Death to America" as the centerpiece of its political ideology since the overthrow of the Shah 30 years ago. The question got down to how much more economic pain can the Iranian people bear if the sanctions continue indefinitely. The answer seems to be they have had enough and are willing to negotiate away whatever prestige they gain from the uncertainty over a possible nuclear weapons program. Many, however, remain concerned that the new Iranian openness is a ploy to get relief from the sanctions while efforts to build nuclear weapons and foster terrorism against Western interests continue

An agreement on nuclear enrichment and the end to the sanctions on Tehran would not only ease tensions in the region, but bring another million or so barrels of oil to market which could offset faltering Libyan production and supply the ever-increasing Chinese demand for a while. Tehran seems bent on reaching an agreement quickly so we should know by spring whether we are seeing a new era in some aspects of Middle Eastern relations.

Iraq: The bombings seem to go on endlessly as al Qaeda gains strength and the Shiite dominated government seems powerless to stop the attacks which have claimed 6,000 lives this year. The government is also unwilling to share power and jobs with the Sunni minority which is one of the key reasons for the continuing unrest.

While most projects to develop Iraq's oil continue, the Angolan state oil company Sonangol whose development projects have been plagued by security issues is considering abandoning the two oil field projects it was awarded in the 2009 round of biddings and pulling out of the country.

Baghdad announced last week that China is seeking to import 850,000 b/d from Iraq next year, a 70 percent increase in its purchases. Exports from Iraq's southern oil terminal are currently constricted by construction. When complete, possibly as early as the spring of 2014, Iraq should have the capacity to export 4 million b/d, provided security conditions permit.

Libya: The political and security situation continues to deteriorate with a new fighting between government forces and militias currently raging in Benghazi. Federalists in in the Eastern province of Cyrenaica which holds most of the country's oil plan to open their own parliament this week which could be a major step towards breakup of the country. Militias on the eastern frontier are holding hostage 200 Egyptian truck drives while demanding the return of 13 Libyans being held by the Egyptians who were either arms smugglers or harmless fishermen who strayed across the border. Large quantities of arms from the large stocks acquired by the Gaddafi government are reported to be making their way into Egypt which will only add to the turmoil there.

The prospects for Libya's oil production in the immediate future are uncertain. If the fighting between the central government and the militias continues, the current exports of 500,000-600,000 b/d could decline. On the other hand if Benghazi succeeds in breaking away from Tripoli, much as the Kurds in Iraq have done, it could open up the flow from Eastern Libya and exports would increase again.

Syria: Peace talks are scheduled for Nov 23rd in Geneva, but few believe the opposition can form a delegation with enough authority to negotiate for the fractious groups opposing the government. The disposal of Syria's chemical weapons continues with Inspectors obtaining access to 11 of Syria's 20 CW sites, verifying inventories, and destroying some equipment.

Scattered fighting continues between government forces and rebel groups and among the rebel groups themselves. The Turks are becoming concerned about radical insurgent militias allied with al Qaeda taking control of the territory along the Turkish border. A large suicide truck bomb went off in a Damascus suburb over the weekend killing 30 people including 16 Syrian soldiers.

There is no end to the Syrian uprising in sight. Civilians fleeing the country are turning up all over the region and are some are trying to make their way into the EU. Food is running short in areas with heavy fighting and relief agencies are begging the Syrian government to give them access to those in need. Amnesty International is urging Egypt to end its new policy of arresting Syrian refugees in Egypt and forcibly returning them to Syria including children without their parents.

The scale and impact of this uprising continues to grow and will undoubtedly affect the region for years to come.

3. China

The third quarter GDP report, an increase in the rate of inflation, and efforts to control pollution dominated the news from China this week. Beijing announced last week that its economy expanded by 7.8 percent in the 3rd quarter, an increase from the 7.5 percent it grew in the 2nd. The increase came from a mini-stimulus in which the government accelerated spending on infrastructure projects – roads, railroads, shopping malls to offset the drop in exports to the EU and US. The debate continues as to whether this policy of building debt-financed infrastructure will be sustainable or whether it will lead to vast amounts of underutilized investments that produce no return. Many observers are noting that building more infrastructure is not a substitute for replacing exports with domestic consumption and that the current policies which amount to building factories without a market for their products are not sustainable.

Beijing also reported that electricity consumption in September was up by 10.4 percent year over year and that January-September consumption was up by 7.2 percent. This is in line with the economic growth numbers reported by the government. China's consumer inflation rate rose to a seven-month high of 3.1 percent in September largely because bad weather drove up food prices. This will make it more difficult for the government to continue expansionist policies.

Chinese officials have been busy developing new programs and issuing new regulations to fight the growing instances of life-threatening pollution. On Thursday, amidst another bout of "heavily polluted" air, the Beijing government promulgated a series of complex regulations to deal with the problem entitled "six stops and one wash." The most notable of the regulations was one that would limit privately-owned vehicles to driving only on alternate days based on their license plate numbers during periods of bad air quality. The government is planning to forecast air pollution ahead of its actual occurrence which would allow individuals and business sufficient time to cut polluting activities before the bad air develops.

Growing pollution is one of the most serious problems the Chinese are facing. Failure to contain air, water, and soil pollution will eventually have dire consequences including many premature deaths and falling growth rates.

4 . Quote of the Week

- "The global nature of oil prices, the need to stand by our oil-importing allies, the danger of international economic instability and the threat of climate change should force us not to dwell on independence, but to accept and manage our interdependence."

  -- *Steve Mufson, Washington Post (October 14)*

5 . The Briefs

- **New peak oil report**: Researchers from the University of Maryland and a leading university in Spain report that peak oil is imminent, if not already here - and is a real threat to national and global economies. This multi-disciplinary team recommends immediate action by government, private and commercial sectors to reduce vulnerabilities. While critics of Peak Oil studies declare that the world has more than enough oil to maintain current national and global standards, these UMD-led researchers disagree (10/17 #32)
- **October 17, 1973:** 40 years ago the Arab Organization of Petroleum Exporting Countries, the precursor to OPEC as we know it, cut off oil shipments to those countries that backed Israel in the Yom Kippur war. With that, the energy map changed forever. (10/17 #5)
- The **US** is in some respects worse off than it was four decades ago**.** Adjusted for inflation, oil prices are about five times higher than they were in 1973 and nearly as high as they have ever been, despite increased production. US reliance on imports, though falling in recent years, was still higher at the end of last year at 40 percent, compared with 35 percent in 1973. The U.S. imported more than four million barrels a day of oil in 2012 from nations belonging to OPEC, compared with three million in 1973. (10/17 #24)
- Because the US economy has grown dramatically, **oil imports** are 2.6 times higher than they were in 1973. Moreover, it pays dearly for it, which was one of OPEC's objectives. (10/14 #23)
- The **Persian Gulf states** are producing more oil than ever before—16.4 million b/d, more than $150 billion in sales. This defies expectations that the US shale revolution would break their 40-year grip on the global oil market and diminish their importance to the world's consuming nations. Saudi Arabia has increased output more than 10 percent since January to a record 10.2m b/d in August. The UAE produced a record 2.77m b/d in September, up 7 percent this year. Kuwait has also hit record production this year. (10/14 #3)

- **Saudi Aramco** is increasing output at two fields to allow the company to slow output at older deposits [Ghawar?] and extend their lifespan. The company aims to add 550,000 barrels a day of additional capacity from the Shaybah and Khurais fields by 2017. (10/14 #11)
- High oil prices are pushing energy companies to seek untapped reserves in deeper waters, sparking demand fo**r drilling vessels** that can drill deeper--farther down than 30,000 ft. Drillship operators who place orders for $525 million drill ships are making a bet that an increase in shale-oil production isn't likely to change the global oil-price level. (10/17 #4)
- **In Nigeria,** Royal Dutch Shell is selling off four of its onshore oil blocks because of the constant theft of large volumes oil from its pipelines. Because of the oil theft, Nigerian production is running 400,000 b/d below its capacity of 2.5 million bpd. (10/19 #10)
- **Angola** is imposing a consumption tax on petroleum companies that will raise some costs by as much as 10 percent. This will impact BP, ConocoPhillips and Statoil which are among oil explorers investing at least $3 billion in wells off Angola. (10/14 #13)
- **Asian** countries will face big challenges in securing enough oil over the next two decades as their additional demand will be equivalent to the current oil output of the Middle East, the Asian Development Bank said last week. (10/14 #15)
- **In Kurdistan in northern Iraq**, a well at DNO International ASA and Genel Energy's Tawke oilfield flowed at a record rate—32,500 b/d—bolstering prospects for higher output from the region as it completes an export pipeline to Turkey. (10/14 #8)
- **Somalia** is talking to oil majors like Exxon Mobil, Royal Dutch Shell and BP about resuming exploration programs abandoned when the country collapsed into anarchy in 1991. That could be an extraordinarily hard sell since Somalia remains highly volatile. (10/17 #18)
- **In India,** a swelling oil-import bill that is hurting the economy and the currency may become less painful thanks to policy shifts aimed at stimulating a long-neglected program to use biofuels. The country is on track to meet a 5% ethanol target in its gasoline sales for the first time since the law requiring it passed eight years ago. (10/17 #21)
- **Scotland's** only oil refinery became the latest casualty in the decline of Europe's refining industry as its operator said it would close it until further notice, a move that could obstruct the flow of North Sea crude oil to global markets. Financial problems and a threatened strike at the 200,000-b/d Grangemouth site have put the refinery's future into question. (10/17 #30)
- The Canadian government put into effect new rules Thursday that require stricter labeling of crude oil **transported by rail**, in a move to bolster safety following a deadly rail derailment in Quebec earlier this year. (10/18 #19)
- **Shell** CEO Peter Voser said it will take a longer time than expected for the company to earn profits from its shale projects due to poor short-term results. In contrast to more optimistic outlooks from Saudi Aramco's chief executive and Algeria's energy minister on shale gas development in their countries, Voser said it will take decades before the large scale shale gas production in the US can be replicated elsewhere in the world. (10/17 #23)
- **The US drilling rig count** lost 4 units to 1,739 rigs working during the week ended Oct. 18, Baker Hughes Inc. reported. Oil rigs (1,361) fell by 6 units while gas rigs (372) picked up 3 units. Meanwhile, Canada was up 31 units compared with a week ago, totaling 388 rigs (235 for oil, 153 for gas). (10/19 #14)

- Proposed US rules by the **Bureau of Land Management** might cause oil and natural gas companies to spend more money on development but are unlikely to slow the rapid growth of production, a former US regulatory official said Thursday. (10/18 #17)
- An oil pipeline beneath a **North Dakota** farm leaked 20,600 barrels, the largest spill on US soil in the country's history. (10/17 #26)
- TransCanada Corp. was working to restore gas deliveries to customers in Alberta after a natural gas **pipeline rupture** that caused at least four oil-sands producers to curb output, triggering a spike in Canadian oil prices. (10/19 #17)
- **South Korea's** plan to almost halve its planned use of atomic power will encourage the world's second-largest buyer of liquefied natural gas to sign new supply deals. (10/16 #13)
- The prospect of the impoverished Palestinian Authority finally being able to develop a natural gas field 20 miles off the **Gaza Strip**'s Mediterranean coast, 13 years after it was discovered, is looking increasingly good amid US-led efforts to bolster the Palestinian economy. (10/18 #9)
- Within the EU, Britain - struggling to confront its energy future as its North Sea oil reserves are depleted, dirty **coal** is demonized, and nuclear power remains expensive and geopolitically fraught - stands out as the country in which the government has officially encouraged the development of shale gas. Shale gas deposits appear to be widely distributed around the world. Political, economic and social factors will likely determine which countries actually exploit these resources. (10/19 #19)
- Expanding the use of **natural gas** to fuel US motor vehicles**,** even partially, is the most sensible strategy for reducing petroleum's dominant fuel position and the nation's reliance on oil imports from politically unstable parts of the world, according to panelists at a conference examining lessons learned in the 40 years since the start of the Arab oil embargo. (10/17 #26)
- OSLO-Norwegian fertilizer producer Yara International said it and German chemical company BASF would decide next summer whether to **build a world-scale ammonia plant** in Louisiana or Texas, a potential $1 billion investment to take advantage of cheap U.S. natural gas. (10/9 #16)
- The US **Supreme Court** said Tuesday it would let stand the Environmental Protection Agency's authority to regulate climate change. It decided, however, to hear challenges to the way in which the EPA regulated greenhouse gas emissions. (10/17 #25)
- The British government will allow Chinese nuclear companies to take stakes in new reactors to be built in the **UK**. (10/17 #31)
- **Pakistan** is acquiring two large nuclear power reactors from China in a $9.1 billion deal that has raised concern in Washington that Beijing is overstepping international rules on transferring nuclear technology. (10/16 #9)
- Mississippi Power's Kemper County plant, meant to showcase technology for generating **"clean coal" electricity** from low-quality coal, ranks as one of the most-expensive US fossil-fuel projects ever—at $4.7 billion and rising. The company's 186,000 customers, who live in one of the country's poorest regions, are reeling from double-digit rate increases. (10/14 #21)
- **Chinese automakers** are starting to ask Western auto parts companies to supply parts that meet American and European regulatory standards. The requests are the clearest sign yet that Chinese manufacturers are starting to feel the confidence to begin high-volume auto exports to the West. (10/18 #16)