



Energy News

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Special auction of coal to distressed power producers to liquidate accumulating stocks!

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Low PLF of power companies till 2017 is the result of supply oriented policies for energy security!

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[INTERNATIONAL: POWER].....

[UGLY]

16 million households could not access available power because they were not given purchasing power!

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**ANALYSIS /
ISSUES**

**DATA
INSIGHT**

**Volume XII
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[OIL PRICE: CERTAINTY OF UNCERTAINTY? (PART II)]

“It is too early to conclude that the petroleum era is about to end. However it is possible to conclude that the petrodollar age may be about to end. Very soon we may treat oil as just another energy source and not the ultimate currency of geo-political and geo-economic wars...”

**[RENEWABLE
ENERGY /
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[NATIONAL: POWER]

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- Essar Power to expand Hazira power generation capacity by 135 MW

- Tata Power's generation capacity reaches 9 GW
- Tamil Nadu's KNPP to touch 1 GW within 2 days
- Tata Power's JV commissions 120 MW Itezhi Tezhi hydro Power Project in Zambia

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- Central Railway saves ₹ 260 mn after switch from MSDCEL to Dabhol
- Power for 16.8 mn households remained unsold in January
- Tata Power Delhi Distribution launches Smart Grid Lab
- Power Grid, Sterlite in fray for ₹ 90 bn Waranagal project
- Revised PPAC due, but DERC unlikely to hike it immediately
- India's coal imports fall for seventh straight month in January
- PLFs of power companies may fail to pick up in FY17
- South India's transmission capacity to be 18 GW by FY20: Goyal

Policy / Performance.....

- India likely to spend \$1 tn on power by 2030: Goyal
- AAP's popularity peaks on power policy
- CIL to conduct special auction for power producers
- Karnataka govt lifts staggering industrial holidays as power situation improves
- Work in 1/3rd of unelectrified 18K villages over: Goyal
- Govt to auction Cheyyur, 2 other UMPPs by March
- India submits nuclear instrument of ratification

[INTERNATIONAL: OIL & GAS]

Upstream.....

- France's Total starts new gas production in North Sea fields
- Oil drillers must slash another \$24 bn this year: IHS
- Sound Energy confirms clean-up operations at Nervesa
- Shale bust not busting as fast as US govt thought
- Australian energy group AGL will exit gas E&P
- Petsec Energy acquires 100 percent stake in Damis production license
- Faroe to drill 3 exploration wells in 2016 despite oil price
- Oil, gas discovered at Nashpa X-5 well in Pakistan
- Saudi Aramco to keep same number of oil, gas rigs in 2016

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- US independent refiners see cheap gasoline demand growing
- Fairway Energy finds an extra 1 mn barrels of crude storage at Houston facility
- Japan's two biggest oil refiners warn of second year of losses

Transportation / Trade.....

- Sabine Pass LNG terminal ramps up after gas supply jump
- Shell will buy 1 mt per year of LNG from Venture Global's LNG project
- Venezuelan crude sales to the US declined 14 percent in Jan
- Norway to surpass Russia as Lithuania's top gas supplier in 2016
- Total will supply LNG to ENN Energy in China
- Iran starts sending crude to Europe in bid to regain lost market
- ABB wins contract to support \$12 bn Energy East pipeline project in Canada
- Russia's fuel oil exports down amid higher home demand
- Anadarko, Mozambique put foot on gas exports as Iran looms
- Phillips 66 says California rail project critical to crude supply

Policy / Performance.....

- US approves ConocoPhillips LNG exports from Alaska
- Japan January average LNG spot price falls to \$7.1 per mmBtu
- Russian govt approves excise tax hike on fuel from April 1
- Pakistan to sign 15 year deal for 3.5 mt Qatari LNG per year
- Iran's crude oil sales to Europe have reached above 300k bpd after sanctions
- Oil, gas loans not likely to choke big US banks: Moody's
- UAE plans floating LNG import terminal later this year
- Canada to decide on Trans Mountain oil pipeline by end of 2016
- Obama to seek new tax on oil in budget proposal
- Shell pushes back investment decision on Canadian LNG project
- BP plans additional job cuts due to lower profits

[INTERNATIONAL: POWER]

Generation.....

- Saudi Arabia will need to invest \$133 bn in its power sector by 2025
- Slight increase in Statkraft's power generation in 2015

Transmission / Distribution / Trade.....

- China giants in the waiting for next power assets
- Pakistan cancels plans to privatise power supply companies
- Great River Energy selects ABB to upgrade HVDC transmission link in US

- Arizona regulators OK SunZia power lines

Policy / Performance.....

- Nigerian Power Minister says new electricity tariff will drive more investors
- South African Mines Minister says Anglo sales to happen soon
- China puts coal production capacity on chopping block

[RENEWABLE ENERGY / CLIMATE CHANGE TRENDS]

NATIONAL.....

- Adani eyes solar plant in Australia
- Govt may soon come out with tenders for 2-4 GW solar power
- Govt thinking of maintenance of Ganga by contractors: Javadekar
- Link cost of solar equipment to efficiency: MNRE
- US, India in talks to settle solar power trade dispute
- Hero Future raises ₹ 3 bn through climate bond sale
- SunEdison commissions 146 MW solar projects
- Gamesa bags 50 MW wind project from Atria Power
- Inox Wind commissions 170 MW wind project for Continuum in MP

GLOBAL.....

- EU installs record wind power as technology leapfrogs hydro
- Aircraft carbon emission rules proposed by United Nations
- China installed more than 15 GW of solar power capacity in 2015
- BHP boosts carbon-capture study with \$14 mn Canadian center
- Boost renewable energy to get rid of fossil fuel
- Solar power plant to be built in northern Argentina: President
- Obama seeks \$12.8 bn to expand clean-energy research
- Beijing Enterprises to buy German waste management firm EEW for €1.4 bn
- Morocco launches first solar power plant
- Yahoo Japan to host online auction of solar power plant
- USC researches develop new process to directly convert CO₂ into methanol

COMMENTS.....

Oil Price: Certainty of Uncertainty? (Part II)

Lydia Powell and Akhilesh Sati, Observer Research Foundation

[Continued from Volume XII, Issue 32](#)

The first part of this article ended with the observation that between 2004 and 2008 high inventories implied high perceived risk and consequently high prices for crude oil which broke the historic trend of high inventories indicating low prices. The concluding part of the article looks at oil prices from 2008 to 2015.

Between 2008 and 2009 a period during which a liquidity crisis in the global financial sector was unravelling, crude prices recorded a 'shock' which according to some experts was among the biggest on record. In 2001 the spot average price of crude oil was about \$32/bbl (Brent dated in 2014 dollars). By 2008 the average price of crude oil was about \$106/bbl which fell to about \$68/bbl in 2009.

The cause of the spike in oil prices in 2008 and its subsequent fall in 2009 have been widely analysed. The dominant view is that of strong demand for oil led by developing countries confronting stagnating world production constituting what is generally called a 'demand shock'. Oil production had begun to plateau in rich producing regions such as the United States, Saudi Arabia and the North Sea. Many experts thought that the time had come for the world to come to terms with peak oil. Best-selling books were written on the impending oil crunch. Financial speculation as the cause of volatility in oil prices was also suspected but this view did not receive widespread endorsement from academic studies. In the early stages of the financial crisis, money leaving other asset classes did go into what many believed to be a one way bet on oil price but when the real world of supply and demand caught up with the financial world, oil prices began to fall rapidly. The uncertainty over the impact of collapsing financial markets reduced expectations of growth and consequently expectations on high demand for oil. On 23 December 2008, the price of crude went down to about \$30/bbl.

As the global economy started recovering from the financial crisis, oil prices began increasing. The average price of oil was about \$110/bbl in 2013, the highest price achieved since 2010. From the middle of 2013, oil prices started falling and continue to fall. As of February 2016 the price of oil fell below \$30/bbl. In general the reasons for this 'death spiral' of decline in oil prices are thought to be more specific to the oil market than to the general state of the global economy. During the financial crisis, aggregate demand for all commodities fell which meant that oil price was reflecting the global business cycle. Analysis of the current decline in oil prices shows that it is likely to be the result of changes in the 'precautionary demand' for oil associated with shifts in expectations about future oil supply relative to future demand which are specific to the oil sector.

If there are expectations of an economic slow-down in the future, the need to hold inventories reduces which results in a fall in oil prices. The need for inventories can also decline when there are expectations of quick mobilisation of supply in the future (such as US shale production) which could make concerns over oil price spikes and oil supply interruptions irrelevant. The decline in oil prices in the period 2008 and 2009 as well as the decline since 2012 are attributed to oil specific demand shocks. According to one study, if unexpected changes in oil production were the only cause of change in oil prices, crude oil prices should have been in the range of \$74/bbl in June 2015. If only changes in aggregate demand (for all commodities and products) affected crude prices, oil prices should have been in the range of \$70/bbl in June 2015. If oil specific demand shocks affected prices then oil prices should have been about \$65/bbl. The actual price of oil in June 2015 was about \$61/bbl.

In general, studies of oil shocks of the past and the present using vector auto regression models have concluded that oil demand shocks rather than oil supply shocks or aggregate demand shocks have made larger contribution to oil shocks. This is an important conclusion that questions the disproportionate attention paid to oil supply shocks by those who look at the oil price problem primarily as a geo-political problem.

Low oil prices may be the result of reasons specific to the oil industry but this does not eliminate the intrinsic link between oil price and broader global economic phenomena. As pointed out by Citibank recently, the value of the US dollar, low commodity prices, weak trade, low capital flows and declining emerging market growth are driving a negative feed-back loop that cannot be intercepted and corrected easily. A very brief summary of Citibank’s argument is that the \$6 trillion that was once flowing into the bank accounts of oil exporters is shrinking and consequently what was flowing back to the rest of the world as trade and investment through their \$4 trillion sovereign wealth fund (SWF) is collapsing. Oil exporters are experiencing a current account deficit for the first time since 1998 which is limiting the extent to which their SWF can underwrite emerging market liquidity. Citibank says that a 4% strengthening of the trade-weighted US dollar and oil price at \$50/bbl could partially slow down the negative feed-back loop. According to Citibank, moves in the opposite direction could lead to what it calls ‘oilageddon’.

Crude Oil Prices (\$/bbl)



Source: Bloomberg

Many oil industry experts have argued that at \$30/bbl oil production from most of non-OPEC regions is unprofitable. However the business reality on the ground is that production cannot be stopped the moment it becomes unprofitable. There is a cost to moth-balling oil production facilities; debt has to be paid off from oil revenues; man-power has to be kept busy and they have to be paid. This means that oil will continue to be produced even when it loses money.

According to Wood Mackenzie (quoted in the Economist) less than 6% of current production fails to recover costs at \$30/bbl. This means that 94% of production will continue to produce even when this means making a loss eventually. Around 3.5 mbp of production is said to be losing about \$35 per barrel and yet they continue to produce. According to Wood Mackenzie which tracks production and cost from over 2000 oil fields world-wide, only 0.1% or 100,000 bpd of production has been halted despite a year of low prices.

In the last 18 months, oil prices have fallen by 75% from over \$110/bbl to less than \$30/bbl. If all else in the economy was going well, this should have resulted in a 0.7 to 3.5% boost to growth on the basis of the rule of thumb that a 10% fall in oil prices boosts growth by 0.1 to 0.5 % is valid. The Economist attributes India’s

emergence as the fastest growing economy in the world to low oil prices but India was also among countries that the IMF downgraded in terms of GDP growth forecasts. Surprisingly all countries that were downgraded by IMF were oil importers. There are indications of consumer benefit in the form of increased consumption of transportation fuels in the United States and elsewhere but its positive impact on growth may be cancelled out by job losses. Other impacts of ultra-low oil prices include (a) political and social turmoil in oil revenue dependent fragile nations and (b) much lower incentive to reduce the use of fossil fuels. Coal and natural gas are now 'dirt' cheap which means that renewables have to compete harder to beat them as sources of power generation.

It is too early to conclude that the petroleum era is about to end. However it is possible to conclude that the petrodollar age may be about to end. Very soon we may treat oil as just another energy source and not the ultimate currency of geo-political and geo-economic wars.

Concluded

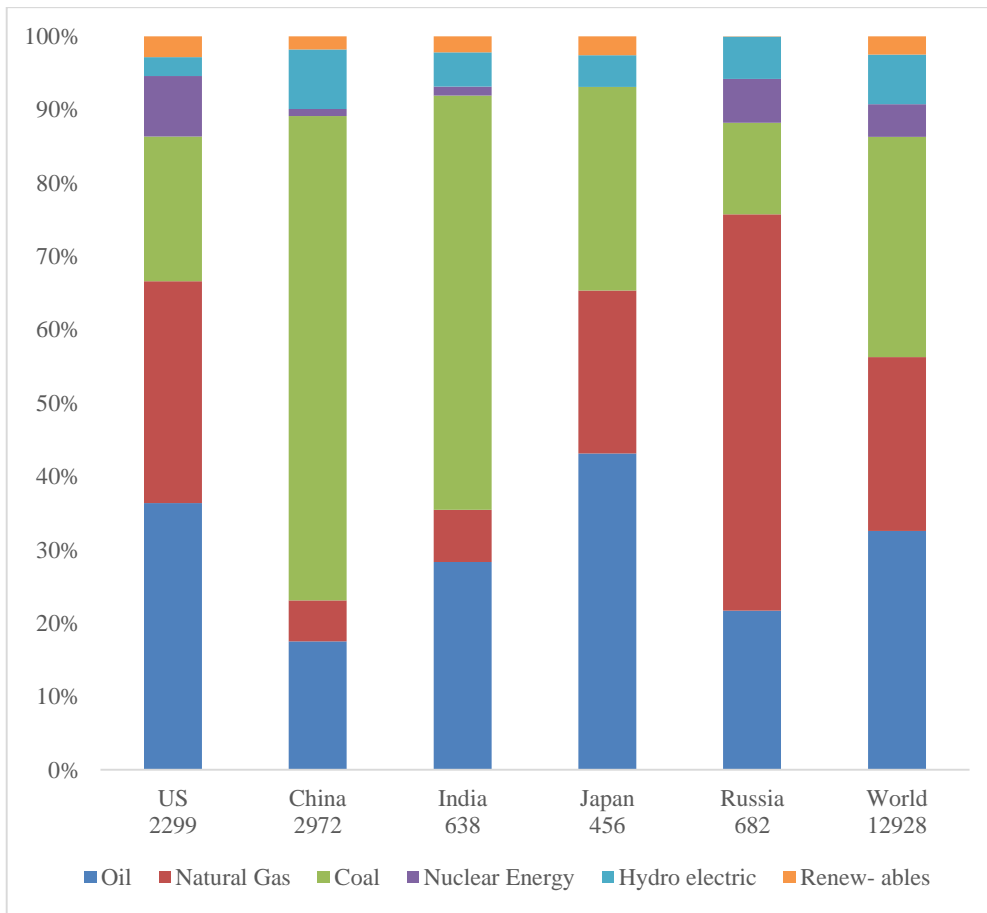
Views are those of the authors

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Primary Energy Scenario in Select Countries

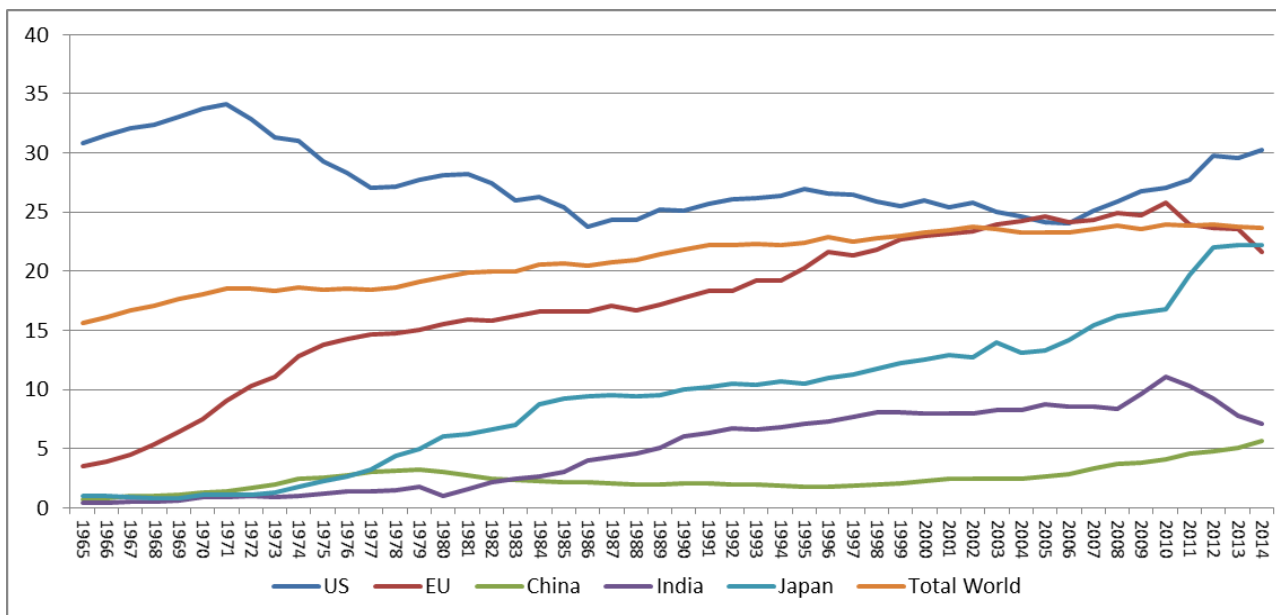
Akhilesh Sati, Observer Research Foundation

Share of Fuels in Primary Commercial Energy Mix in Select Countries



Note: Figures below each country are in Million Tonnes of Oil Equivalent (MTOE)

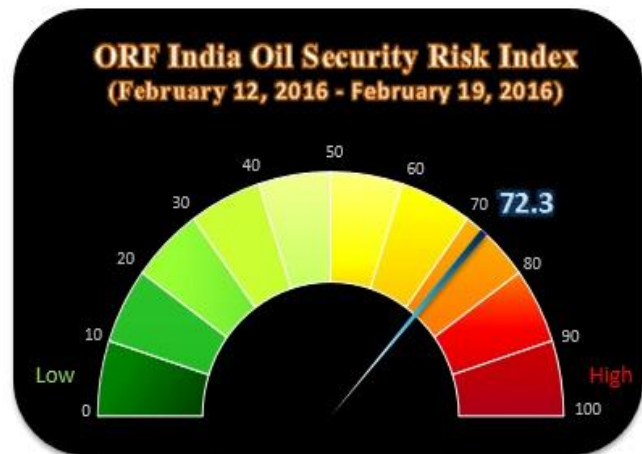
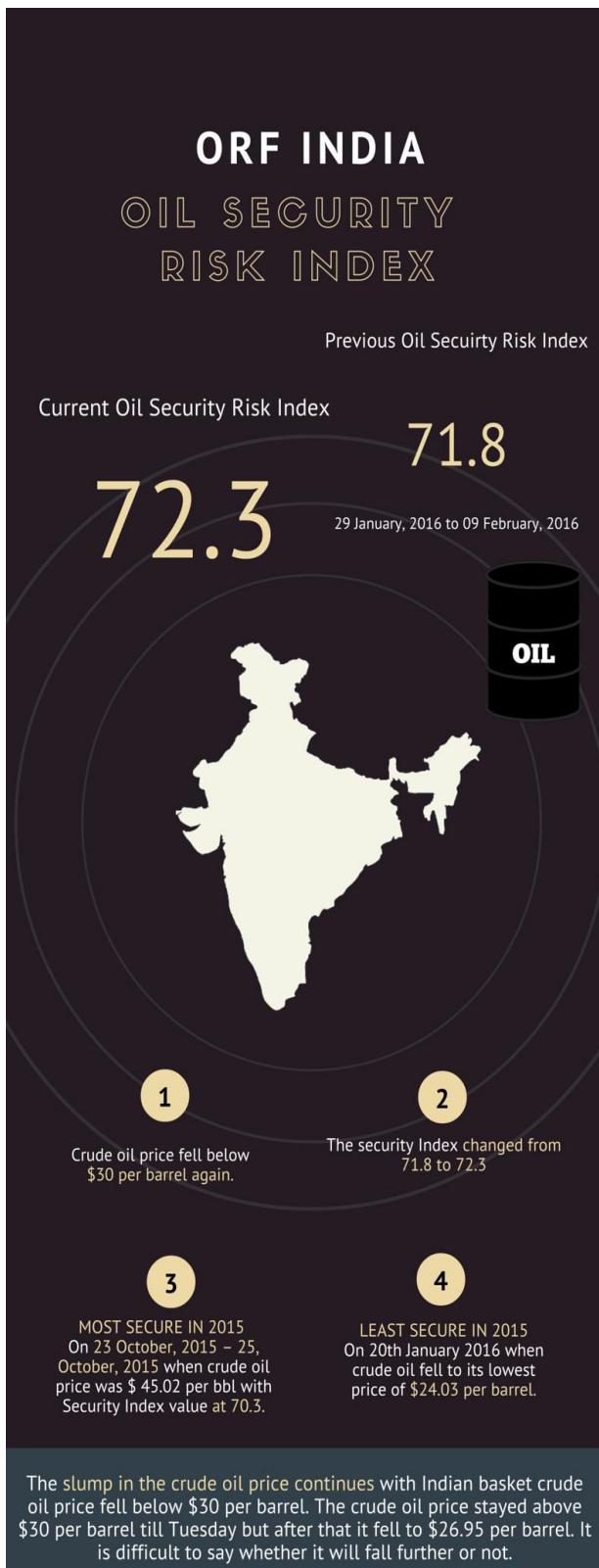
Trends in Share of Natural Gas (in%) in the Primary Energy Mix in Select Countries



Source: BP Statistical Review of World Energy 2015

Indian basket oil price fell below \$30 per barrel again

Neeraj Tiwari, Observer Research Foundation



What is Oil Supply Security Risk Index?

The Oil Supply Security Index aims to capture oil security of India using a simple quantitative methodology and represent the outcome (oil security index) in the form of a single number.

The index aims to offer a simple gauge of India’s access to oil measured in terms of physical, financial, environmental, political and other parameters.

The index used here can take values from 0 to 100. Higher the score higher is the risk.

The quantitative risk index does not claim high degree of accuracy. As qualitative factors such as geopolitical risk are captured in quantitative form there is an element of simplification and generalisation that compromises on accuracy. The fact that only secondary sources of data are used also compromises on the level of accuracy. The simplified quantitative index is designed to serve only as a reference to judge shifts or changes in risk.

NEWS BRIEF

[NATIONAL: OIL & GAS]

Upstream.....

ONGC mulls \$500 mn investment in Venezuelan field

February 9, 2016. Oil & Natural Gas Corp (ONGC), India's biggest explorer, may invest as much as a half billion dollars to revive a faltering Venezuelan field. The company's overseas unit ONGC Videsh Ltd (OVL) is seeking to boost output with partner Petroleos de Venezuela SA. OVL invested about \$190 million for its stake in 2008. The field produces about 28,000 barrels a day, down from a peak of 38,000 barrels, OVL said. Strapped for cash, oil-rich Venezuela has struggled as its revenue and currency have declined with crude prices. The nation with the world's largest reserves produced about 2.7 million barrels of oil a day in 2014, down from around 3.5 million in 1998, according to the latest data available from the BP Statistical Review of Energy. An agreement between the two companies may mirror similar deals in recent years reached with service providers and foreign partners to increase output. Chevron Corp and PDVSA signed a low-interest, \$2 billion loan agreement in 2013 to boost production in western Venezuela. India surpassed the U.S. to become the largest destination for Venezuelan crude exports shipped from the country's main export port for the first time in seven months in January with about 566,000 barrels a day, according to vessel tracking and U.S. Customs data. (www.bloomberg.com)

India offers to invest in Bangladesh, Sri Lanka oil sectors

February 8, 2016. India has offered to invest in Bangladesh and Sri Lanka for oil exploration and extraction. During a meeting with the Bangladesh, the Indian government said that with the commissioning of the Paradip refinery, it would once again be in a position to export petroleum products to the neighbouring country. India has also expressed interest in setting up of marketing infrastructure in Bangladesh. India said that its PSUs were interested in participating in petroleum sector of Bangladesh, including in exploration, refinery expansion and related PMC works. (www.asianage.com)

Govt's gas pricing formula not viable to develop KG gas: ONGC

February 4, 2016. Oil and Natural Gas Corp (ONGC) has sent an urgent message to Petroleum Ministry, saying the natural gas prices according to a formula approved by the BJP-led government was not viable to develop its KG basin discoveries. ONGC plans to invest multi-billion dollars in bringing to production its Krishna Godavari (KG) basin oil and gas discoveries by 2018-19. The BJP-led government had in October 2014 approved a new pricing formula based on average rate prevailing in gas surplus countries like the US, Russia and Canada for domestically produced natural gas. The rate, according to this formula, comes to \$4.24 per million British thermal unit currently. This price, ONGC said, is not enough to support multi-billion dollar investment for developing the gas finds, most of which are in deepsea and difficult areas. ONGC has submitted to oil regulator DGH a field development plan (FDP) for beginning oil and gas production from its KG-D5 block by 2018-19 but the plan does not include any investment number. The FDP is for one set of oil and gas discoveries made in the eastern offshore Block KG-DWN-98/2 or KG-D5, which sits next to Reliance Industries' flagging KG-D6 area. ONGC has divided 12 oil and gas discoveries in KG-D5 and gas discovery in an adjacent G-4 block in the Bay of Bengal into three clusters to quickly bring them to production. (economictimes.indiatimes.com)

Downstream.....

PM Modi inaugurates IOC's ₹ 345.5 bn Paradip refinery

February 7, 2016. Prime Minister (PM) Narendra Modi dedicated to the nation Indian Oil Corp's (IOC) ₹ 34,555 crore refinery, that has helped the state-owned firm overtake Reliance Industries Ltd (RIL) to again become country's top refiner. The 15 million tons per annum Paradip refinery was built over nearly 16 years. The then PM Atal Bihari Vajpayee had on May 24, 2000 laid foundation stone of the ninth plant of IOC. Prior to Paradip, its eight refineries had a cumulative capacity of 54.2 million tons of crude oil. Paradip helped IOC overtake RIL, which has twin refineries at Jamnagar in Gujarat with a capacity of 62 million tons. IOC has a subsidiary Chennai Petroleum Corp Ltd (CPCL) which operates refineries with total capacity of 11.50 million tons. Paradip refinery is one of the most modern refineries in the world which can process cheaper high sulphur heavy crude oils. It as a complexity factor of 12.2. It will produce 5.6 million tons per annum of diesel, 3.79 million tons of petrol and 1.96 million tons of kerosene/ATF. Besides, 790,000 tons of LPG and 1.21 million tons of petcoke would also be produced. Presently, Paradip Refinery will produce petrol and diesel of BS-IV quality and later will switch to

BS-VI quality to comply with the Auto Fuel Policy. The refinery is also designed to produce Euro-V premium quality Motor Spirit and other green auto fuel variants for export to advanced countries. The refinery has plans to set an Ethylene Recovery Unit /Mono-Ethylene Glycol at an estimated cost of ₹ 3,800 crore. These units are expected to be completed by 2020-21. (zeenews.india.com)

Transportation / Trade.....

India's fading oil product exports contrast with China's boom

February 8, 2016. One of the dominant themes in Asia's oil products markets is the rise of Chinese fuel exports, so much so that the decline in shipments from India barely gets mentioned. India has in recent years been a fairly major player in Asia's market for refined products, given the presence of plants designed to take advantage of the country's location between producers in the Middle East and consumers in the rest of Asia. Reliance Industries Ltd (RIL) operates the 1.2 million barrels per day (bpd) Jamnagar refining complex, while Essar Oil has a 400,000 bpd plant at Vadinar, both of which are focused on supplying overseas markets. But changing dynamics of the local fuel market mean selling fuel at home has become as profitable as shipping it out. India has largely deregulated its fuel market, ending the subsidies on gasoline and diesel that made it difficult for private refiners like Reliance and Essar to compete with state-owned companies, which were often forced to run at losses. Domestic sales of all oil products in India were at 15.84 million tonnes in December, equivalent to about 4.09 million bpd, and up 8.2 percent from the same month a year earlier, according to data. India's fuel demand is about 500,000 bpd higher now that it was two years ago, has doubled in the past 16 years and shows little sign of slowing down, given the rapid expansion of the middle class in the world's second-most populous nation. In the second half of 2015, exports of all oil products were at 30.96 million tonnes, or about 1.35 million bpd, versus 1.49 million bpd shipped out in the second half of 2014. Diesel is still the major fuel export from India, and in the last six months of 2015, exports were about 515,000 bpd, around 8.5 percent, or 48,000 bpd, lower than a year ago. The loss of about 140,000 bpd in exports of refined products from India in the second half of 2015 does not sound like enough to make a huge difference in Asia's oil product markets. This is especially the case given the rapid rise in refined fuel exports from China and new refineries in the Middle East. China's annual oil product exports rose 22 percent in 2015 to the equivalent of about 792,000 bpd, with diesel shipments jumping 77.7 percent, or 65,000 bpd, to about 147,000 bpd. (www.reuters.com)

Nepal urges India to restore O&G supply

February 8, 2016. Nepal is pushing India to restore oil and gas (O&G) supply to the country that was disrupted five months ago due to local protests along the border in southern Nepal. For the last 40 years, Indian Oil Corp (IOC) has been supplying petroleum products, diesel and kerosene to Nepal at Indian rates. The supply was disrupted when the Madhesi people inhabiting southern Nepal agitated against the country's new constitution. India has allowed 26 trading point for supply of fuel from IOC to Nepal Oil Corp (NOC) but the Madhesi blockade at many of these checkpoints — including the Birgunj-Raxaul trading point through which about 60% of the total bilateral trade passes — disrupted supplies. Indian trucks stopped carrying fuel to Nepal, which led to shortage of fuel and stirred anti-India sentiments in the country. India has expressed its displeasure on Nepal not involving its people in its decision to adopt the new constitution. But India has denied any role in the protests in the country as alleged by the Nepal government. The Madhesi blockade ended. Nepal's ambassador to India Deep Kumar Upadhyay said the Birgunj-Raxaul border would become fully operational soon. At the time when India snapped the supplies and the tension between the two countries were rising, Nepal signed an agreement with China in October for fuel supply. (dailycapital.pk)

TN CM asks PM Modi to 'rescind' notification on GAIL gas pipeline

February 8, 2016. Asking the Centre to rescind notification on GAIL (India) Ltd gas pipeline passing through Tamil Nadu (TN), Chief Minister (CM) J Jayalithaa has written to Prime Minister (PM) Narendra Modi seeking changes in the central law to provide for social impact assessment for the project. In a letter to Modi she said the proposed alignment would cause "irreparable damage" to Erode, Tirupur, Coimbatore, Namakkal, Dharmapuri, Krishnagiri and Salem districts through which the Kochi-Koottanad-Mangaluru- Bengaluru gas pipeline would traverse. Referring to the Supreme Court ruling against the state government's 2013 order asking GAIL to stop the project on its present alignment, she said the apex bank had also made it clear that Centre was the "competent government" on this matter. The court had held that once the right of use of land was notified, the state government had no power to direct on the issue of alignment. Further, as per Proviso (a) to Section 7 (i) of the Petroleum and Minerals Act, 1962, it was "mandated" that no pipeline shall be laid under lands which were used for residential purposes or near such houses or with permanent structures, she said. Referring to

Petroleum and Minerals Act, 1962, she said it was one of the 13 Central Acts, which had been exempted from the requirement of carrying out Social Impact Assessment under the UPA's 2013 Land Acquisition Act. The Petroleum and Minerals Act was "technically" not a Land Acquisition Act "but only provides for right to use the land for laying pipelines for petroleum products," she said. (www.deccanherald.co)

Piped gas for 35k houses in 2017

February 4, 2016. By early next year, nearly 35,000 households in the city will have access to piped gas supply, GAIL (India) Ltd said. GAIL said the target of laying 105 km of pipelines was almost met in the past one year. The project will see the IT City join Delhi, Mumbai, Lucknow, Surat, Ahmedabad, Indore, Kanpur and others in having CNG piped to their homes. The plan for Bengaluru – for which GAIL is the only supplier – is to lay more than 2,000 km of pipelines criss-crossing the city within five years. However, until the network is established, people in some areas can still get access to CNG through a 'Mega Station' being set up at Summanahalli Beggar's Colony. The gas will be transported through 'cascades' – a series of inter-connected cylinders. Two years ago, when the Dabhol-to-Bengaluru pipeline was commissioned, the State government had drawn up plans to use the gas for the proposed 350 MW Bidadi power plant. The Gas Transportation Agreement with GAIL had stated that the State was to pay ₹ 226 crore a year as transmission charges since October 2015. However, Karnataka Power Corporation Limited sought to renegotiate the contract. GAIL received no response from the State for a request to 'retrofit' the shuttered Yelahanka diesel power plant to use CNG. Currently, the piped gas consumption in the city is 'negligible'. The BEL Colony of 1,200 households will become the first layout to be reliant on Compressed Natural Gas pumped from Dabhol in Maharashtra. Apart from the pipeline network, GAIL is seeking land in the city to establish CNG stations, primarily to cater to automobiles. While Delhi has more than 300 stations catering to 7 lakh vehicles, Bengaluru can expect 35 stations in the next three years, GAIL said. (www.thehindu.com)

Policy / Performance.....

Govt exempts ONGC, OIL from fuel subsidy payment in Q3

February 9, 2016. Government has exempted state-owned Oil and Natural Gas Corp (ONGC) and Oil India Ltd (OIL) from payment of fuel subsidy in the third quarter (Q3) ended December 31, as slump in oil prices dented their revenues. As per a new fuel subsidy sharing formula approved last year, upstream firms ONGC and OIL have to make good any revenue loss incurred by fuel retailers on selling kerosene through PDS and domestic LPG after taking into account the fixed subsidy provided by the government. For the October-December period, retailers Indian Oil Corp (IOC), Hindustan Petroleum Corp Ltd (HPCL) and Bharat Petroleum Corp Ltd (BPCL) lost ₹ 6,149 crore in revenue on selling kerosene and LPG at government fixed retail price. Of this, the government as per the agreed formula was to pay a subsidy of ₹ 12 per litre on kerosene and ₹ 18 per kg on LPG. The unmet revenue loss after accounting for this subsidy was coming to close to ₹ 300 crore. The government has decided to bear this loss as well and pay all of the ₹ 3,279 crore subsidy on LPG and ₹ 2,870 crore on kerosene for the quarter. Kerosene through public distribution system (PDS) is sold at ₹ 14.96 per litre while a 14.2 kg LPG cylinder costs ₹ 419.22 in Delhi, both of which are way below their cost. At present the state-run fuel retailers incur under-recoveries or revenue loss on sale of PDS kerosene and subsidised domestic LPG only as petrol and diesel have been deregulated (market-linked) with effect from June 2010 and October 2014, respectively. (www.business-standard.com)

India, Australia form panel for LNG supply to power plants

February 8, 2016. India and Australia decided to form a sub-group, comprising senior officials of government and industry from both sides, to prepare a roadmap to help provide cheap liquefied natural gas (LNG) for Indian power plants. The sub-group will submit a detailed report in about two months on what needs to be done and the requirements to get cheap LNG from Australia, Power Minister Piyush Goyal said. It will include officials from India's ministries of petroleum and external affairs as well as representatives from National Thermal Power Corp Ltd, GAIL (India) Ltd, Petronet LNG and shipping companies, he said. The move will lead to an assured supply to LNG gas-based power plants in India otherwise operating below capacity owing to lack of gas. He assured Australian investors a corruption-free environment and quick approvals for their investment proposals, asking those present to be candid in their views on investing in India. (www.newkerala.com)

Cairn India wants oil cess cut before Budget

February 7, 2016. Cairn India wants the government to not wait till the Budget to reduce cess on crude oil so as to give relief to domestic oil producers hit by a slump in prices. Cairn India said the government should convert the ₹ 4,500 per

tonne Oil Industry Development (OID) Cess, which takes away a third of the current oil price of about \$30 per barrel, into ad valorem. Cairn India had recorded a 99 percent drop in its October-December quarter net profit to ₹ 8.7 crore as it paid \$9.6 per barrel in oil cess alone out of a gross realisation of \$34.5 per barrel on oil it produces from its flagship Rajasthan fields. If implemented, it will be a win-win for all stakeholders, protecting government revenues by way of direct correlation with prevailing oil price. Also, it will send a positive signal to investors, Cairn India said. The Oil Industry (Development) Act, 1974 provides for collection of cess as a duty of excise on indigenous crude oil. Cess incurred by producers is not recoverable from refineries and thus, forms part of cost of production of crude oil. The cess was levied at ₹ 60 per tonne in July 1974 and subsequently revised from time to time. In 2005-06, when the crude oil prices had increased from an average of \$40 per barrel to \$60, the OID cess was raised from ₹ 1,800 to ₹ 2,500 per tonne from March 1, 2006. Again, when the crude prices climbed to over \$100, the rate of cess went up to ₹ 4,500 (\$12 per barrel) with effect from March 17, 2012. While the government had effectively linked the cess rate to prevailing crude oil prices in the past, there has been no reduction when the oil prices have declined, oil producers said. While New Exploration Licensing Policy (NELP) blocks like Reliance Industries' KG-D6 are exempt from payment of cess, pre-NELP discovered blocks like Panna/Mukta and Tapti and Ravva pay a fixed rate of cess of ₹ 900 per tonne. (profit.ndtv.com)

Plan to ship petrol from Paradip to Bangladesh: Oil Minister

February 6, 2016. India is planning to ship petrol and diesel to Bangladesh from the Paradip refinery of Indian Oil Corp (IOC), Oil Minister Dharmendra Pradhan said. The minister said the quantum and timing would be decided soon. The minister said diesel would be exported to Bangladesh from Numaligarh refinery by rail route soon. At a later stage, a 200-km pipeline would be built connecting Numaligarh with north Bangladesh for transporting diesel, he said. The minister said discussions were also held for oil exploration in Bangladesh, which is likely to commence in October this year. The government said the oil minister also expressed keenness of India in setting up of marketing infrastructure in Bangladesh. He also sought favourable consideration for transit of LPG to India's north eastern region through territory of Bangladesh. He said that Indian PSUs were interested in participating in petroleum sector of Bangladesh, including in exploration, refinery expansion. The minister had bilateral talks on energy cooperation with Anoma Gamage, deputy minister for petroleum resources development, Sri Lanka. (timesofindia.indiatimes.com)

Oil Ministry seeks ₹ 150 bn to build second phase of strategic reserves

February 4, 2016. Oil Ministry has sought ₹ 15,000 crore from the Ministry of Finance to build the second phase of the country's strategic petroleum reserves, Oil Minister Dharmendra Pradhan said. India is planning to build a 12.5 million tonnes of storage capacity under phase-two at four locations-- Bikaner in Rajasthan, Rajkot in Gujarat and Chandikhol in Orissa and Padur. While India currently imports about 80 percent of its oil requirements, the International Energy Agency predicts that by 2020, India could become the world's largest oil importer. The government wishes to take advantage of the slump in crude oil prices which has hit a 12 year low trading around \$35 a barrel. The government had decided to set up 5 million metric tons of strategic crude oil storages at three locations-- Visakhapatnam, Mangalore and Padur. However, only the facility at Visakhapatnam is commissioned with a capacity to store 1.33 million tonnes of crude oil. The Mangalore and Padur projects, both on the western coast of Karnataka, are nearly complete, awaiting pipeline connections from the nearest ports. These three underground storages were to store about 5.33 million tonnes of crude oil. The ministry plans to extend financial partnerships to start-ups engaged in the oil and gas sector boost the 'Startup India' initiative. Pradhan said the Government is working on a policy to give 10 percent purchase preference to local entrepreneurs to give a boost to the entrepreneurship ecosystem in the petrochemical industry. Indian Oil Corp (IOC) plans to invest ₹ 7,650 crore in setting up a petrochemical complex at its Paradip refinery in Odisha in the next three to four years. The complex will have a 700,000 tonnes per annum polypropylene plant and ethylene derivatives complex to manufacture around 350,000 tonnes of mono-ethylene glycols. (www.business-standard.com)

Tremendous potential for India, Brunei in hydrocarbon sector: Vice President

February 3, 2016. India's growing economy and increasing energy needs offer the oil and gas-rich country, Brunei, an opportunity to enhance export of hydrocarbons, Vice President Hamid Ansari said underlining that there is "tremendous potential" for collaboration in the sector. Energy trade is an area where India and Brunei have strong complementarities. At present, India imports crude oil worth USD 1 billion from Brunei. Though India is the third-largest importer for Brunei, the total import from Brunei is only a fraction of India's global crude imports of over USD 112.748 billion in 2014-15, Ansari said. (timesofindia.indiatimes.com)

Generation.....

Essar Power to expand Hazira power generation capacity by 135 MW

February 8, 2016. Essar Power, which runs a greenfield 135 MW multi-fuel power plant at Hazira in Gujarat under Essar Power Hazira Ltd (EPHL), is set to expand the capacity to 270 MW by adding second unit of 135 MW by July this year. According to Essar Power, the additional 135 MW capacity at Hazira is part of the company's plans to consolidate its capacities across the country. The operating plants in India are at Mahan, Hazira, Salaya and Vadinar. A 1,200 MW plant at Tori in Jharkhand state is under commissioning. Recently, EPHL recorded a Plant Load Factor of 98.22% in the quarter ended December 31, 2015, compared to 78.44% in the previous quarter-an improvement of over 25%. The net power generated during the period under review was 263.5 million units. (www.business-standard.com)

Tata Power's generation capacity reaches 9 GW

February 8, 2016. Tata Power, an integrated power company, has reached the power generation of 35093 million units, collectively from all its power plants in the year 2015-2016 and 11934 million units in third quarter (Q3) FY16, the company has announced. The company has also reported significant increase in generation, with the total power generation capacity of Tata Power in India standing at 9036 MW from various fuel sources such as thermal, hydroelectric power, renewable energy (wind and solar PV) and waste heat recovery. Surpassing the set benchmark of the previous fiscal, Coastal Gujarat Power Ltd (CGPL) and Maithon Power Ltd (MPL) have contributed 18761 million units and 5377 million units in Q3 FY16. By 2022, Tata Power aims to boost the generation capacity to 18000 MW, and its distribution to 4000 MW. In the clean energy space too, the company also has a significant presence with a gross installed capacity of 1383 MW. Tata Power has a total operating capacity of 511 MW from wind farms and 60 MW in solar generation. In addition, the company has 573 MW of hydro and 240 MW from waste gas-based generation. Tata Power recently announced that the company has commissioned two units of 60 MW each of its 120 MW Itezhi Tezhi hydro Power Project in Zambia, in which Tata Power has a 50 percent stake. The synchronization of both the units was completed in January, 2016. (timesofindia.indiatimes.com)

Tamil Nadu's KNPP to touch 1 GW within 2 days

February 4, 2016. Power generation at the first unit of the Tamil Nadu's Kudankulam Nuclear Power Plant (KNPP), which resumed operation after a break of seven months, will reach its full capacity of 1000 MW within two days. Power generation is being stepped up in a phased manner since the plant resumed operation on January 30, producing 300 MW power. The first plant at KNPP, an Indo-Russian collaborative venture, was shut down on June 24, 2015, for maintenance after being in commercial operation since December 31, 2014. Work is underway on the second 1000 MW reactor, which is expected to be commissioned later this year. (www.ndtv.com)

Tata Power's JV commissions 120 MW Itezhi Tezhi hydro Power Project in Zambia

February 4, 2016. Tata Power announced that the Company has commissioned two units of 60 MW each of its 120 MW Itezhi Tezhi hydro Power Project in Zambia, in which Tata Power has a 50 percent stake. The synchronisation of both the units was completed in January, 2016. The Joint Venture (JV) partner ZESCO wishes to celebrate commissioning of the Itezhi Tezhi Power Project by inviting Edgar Lungu, the President of Zambia, to dedicate it to the nation. The 120 MW Itezhi Tezhi Power Project is situated on the Itezhi Tezhi Dam. The initial purpose of the Itezhi Tezhi Dam, constructed in the 1970s, was to serve as a reservoir for the Kafue Gorge power station. However, due to an acute power deficit in the late 2000s, the Government of Zambia revived its plans to construct a hydro power plant in close proximity to the dam site. The 120 MW project was, therefore, selected as a viable brownfield solution to address the power shortage in Zambia, and the Itezhi Tezhi Power Corporation (ITPC) was incorporated in 2007. (www.newkerala.com)

Transmission / Distribution / Trade...

Central Railway saves ₹ 260 mn after switch from MSDCEL to Dabhol

February 8, 2016. The Central Railway (CR) has saved ₹ 26 crore in power bills in November from the Mumbai suburban alone and a total of ₹ 40 crore in the network within its jurisdiction in the country after it has made the switch to drawing electricity from the Dabhol power plant, instead of the Maharashtra State Electricity Distribution Corporation Limited

(MSEDCL). The CR, which had been purchasing power from MSDCEL at the rate of ₹ 9 per unit is now paying the more affordable rate of Ratnagiri Gas and Power Private Limited's (RGPPL) Dabhol at ₹ 7 per unit. CR had been negotiating with the Gujarat government for the same but because of the delay the CR applied to Dabhol as well and received approval in October. The CR's network that extends up to states in the North like Madhya Pradesh and Uttar Pradesh also saw the trains being run with the new source of electricity because of which ₹ 14 crore was saved. The Indian Railways has recently announced that they expect a further reduction in expenditure in power to as low as ₹ 5 per unit. (dc.asianage.com)

Power for 16.8 mn households remained unsold in January

February 8, 2016. Some 2,457 million units of power remained unsold at the India Energy Exchange in January due to lack of demand. Had it been bought by utilities it could have powered at least 1.68 crore households. According to the exchange, in January generators offered to supply some 5,368 million units of power and utilities offered to buy about 3,449 million units. Buyers and sellers agreed to buy power for about 2,929 million units, leaving 2,457 units unsold. This unsold volume of power is a waste to the nation which could otherwise have been supplied to users. Generators offer the power they can generate the next day. If they manage to sell the power, they generate it, else they don't. The average price at which power was sold during January was ₹ 2.52 per unit, about 2% less than that in the previous month. (economictimes.indiatimes.com)

Tata Power Delhi Distribution launches Smart Grid Lab

February 7, 2016. Tata Power Delhi Distribution launched a Smart Grid Lab to demonstrate various new advanced operational technologies and products. The focus of the lab will be towards demonstration of new technologies, products and operations for different organisations and institutions, including utilities, the company said. The lab was inaugurated by US Trade and Development Agency (USTDA) Director Leocadia I Zak. India is at the threshold of dynamic growth in the deployment of smart grid technology and integration of renewable energy projects, Zak said. (www.business-standard.com)

Power Grid, Sterlite in fray for ₹ 90 bn Warangal project

February 7, 2016. State-run Power Grid, Sterlite, Adani, Essel and Reliance Power Transmission are in the fray for Warangal transmission project with an estimated cost of around ₹ 9,000 crore, the largest so far on the block. Power Grid Corp, Sterlite, Adani, Essel and Reliance Power Transmission have qualified to submit the financial bids. Power Finance Corporation's arm PFC Consulting has invited request for proposals (financial bids) for the project, which were to be submitted by January 29 earlier. According to the previous schedule, the financial bids for the project were to open on February 5. Based on the lowest annual tariff, successful bidder was to be announced after a week on February 12. To develop the country's power transmission capacity, the government is in the process of auctioning projects worth ₹ 1 lakh crore in the current fiscal. The project involves setting up of 765/400 kv sub-stations at Warangal in Andhra Pradesh and includes a series of 765 kv double-circuit lines including Warora (Pool) to Warangal (New), Warangal (New) to Hyderabad, Hyderabad-Kurnool, and Warangal (New) to Chilakaluripeta. There are two 400-kv double-circuit lines which will also be part of this transmission project. The main aim is to augment power supply to the southern grid. (wap.business-standard.com)

Revised PPAC due, but DERC unlikely to hike it immediately

February 6, 2016. Delhi Electricity Regulatory Commission (DERC) is due to revise power purchase adjustment charges (PPAC) for the city's three power companies, BYPL, BRPL and Tata Power Delhi from April 1. However, sources reported that according to the early indications, there may not be any need to increase the current PPAC of 5% to 7%, as bills submitted by discoms show they have not incurred additional costs so far. The situation, however, could change by March as discoms continue submitting bills for costs incurred in fuel expenses. The current PPACs given to the three discoms were part of the 2015-16 tariff order, which were supposed to be in effect till March 31. According to experts, on an average, the surcharge will add ₹ 50 crore to ₹ 70 crore to electricity bills depending on power consumed. DERC is mandated to give PPAC surcharge to discoms following an APTEL order. (timesofindia.indiatimes.com)

India's coal imports fall for seventh straight month in January

February 5, 2016. India's coal imports fell for a seven straight month in January, the government said, as the world's third-biggest buyer of the fuel expands domestic mines to improve output and boost power generation. India shipped in 16.11 million tonnes of coal last month, a 28.6 percent decline from the same month a year ago. Increased production by Coal India Ltd (CIL) results in decrease in import of coal, Coal Secretary Anil Swarup said. (in.reuters.com)

PLFs of power companies may fail to pick up in FY17

February 4, 2016. Plant load factors (PLFs) of companies in the power sector are unlikely to improve in the next fiscal in spite of improved fuel supply as demand growth of electricity is likely to stay muted, India Ratings & Research (Ind-Ra) said. PLF is the ratio of the actual output of a power plant over a period of time and its output in case it operates at full capacity. All-India thermal plant PLFs have been consistently declining and have fallen 21.5 percent since the peak of 78.6 percent in 2007-08, it said. Ind-Ra expects electricity demand to grow by 4-5 percent and power generation growth of 5-6 percent in 2016-17, with deficit remaining low at 3-4 percent. India has added 80 GW of coal-based generation capacity over FY11-FY15, which creates room for higher generation, given the improvement in domestic coal supply and low international coal prices. However, industrial demand, which accounts for 40 percent of the total pie, has so far witnessed a sluggish growth. Moreover, the current focus on use of efficient devices (LEDs and agricultural pumps) is also leading to lower demand. Ind-Ra has also kept stable outlook on most of its rated power sector entities for 2016-17 as the agency expects that its rated entities will continue to manage fuel and state power utilities risks due to a favourable tariff mechanism, their comfortable liquidity and support from the central and state governments, it said. A significant chunk of electricity sales goes to commercial or industrial consumers, and a pick-up in demand in industrial activity is necessary for higher electricity demand. Ind-Ra expects industrial demand growth to stay muted at 4-5 percent in 2016-17. The residential segment is likely to see a healthy demand clip of 7-8 percent. Agricultural demand is likely to grow 2-3 percent since it would depend more closely on the monsoon and the switchover to energy-efficient pumps. The government's initiative for rural electrification would serve a social objective, but the real demand pick-up is unlikely in the short term as these would be low-consumption centres, it said. (profit.ndtv.com)

South India's transmission capacity to be 18 GW by FY20: Goyal

February 3, 2016. In a bid to achieve 'One Grid One Nation' objective, the transmission capacity across south Indian states would be enhanced to 18,000 MW by 2019-20 from 3,400 MW when NDA government took charge at the Centre, Power Minister Piyush Goyal has said. The minister expressed hope that with this massive flow of power to south India, government will be able to make the country "One Grid One Nation" which will keep the power cost under control. Under the 'One Grid One Nation' policy, power is available on demand to all consumer states at almost same prices. This can be achieved after integrating power transmission grids in the country. (www.business-standard.com)

Policy / Performance.....

India likely to spend \$1 tn on power by 2030: Goyal

February 9, 2016. India is expected to spend a whopping \$1 trillion (₹ 65 lakh crore) by 2030 on ramping up its power infrastructure as one of the world's largest energy consumers aims to provide 24/7 electricity to its citizens. The power sector in the country is at an inflection point and the focus is on developing an integrated outlook with transparent policies on tariffs and fuel pricing which enhance the ease of doing business, Power Minister Piyush Goyal said. India and Australia should come together and invest in several fields, with energy being an important dimension. India's focus is on LNG for power plants, coal mining, clean coal technologies, renewable energy, R&D as well as tie-ups with premier research institutes, he said. Goyal is leading a high-level government delegation to deliberate with Australian government and businesses on ways to increase their participation in India's power sector. An industry delegation, led by business chamber CII, is also accompanying the minister. India has set an ambitious plan to add 175 GW of renewable energy generation capacity by 2022. The country aims to have 100 GW of solar power by 2022 along with 260 GW of thermal and nuclear generation and 62 GW of hydro generation capacity. As per International Energy Agency (IEA) estimates, India would invest about \$845 billion in transmission and distribution (T&D) networks between 2015 and 2040 to ensure universal access to power for customers. (www.business-standard.com)

AAP's popularity peaks on power policy

February 8, 2016. When it comes to electricity, the people of Delhi —for once — seem satisfied with the present state of affairs. Thanks to the Aam Aadmi Party (AAP) government for offering 'tangible' benefits to them with its 50 percent subsidy on power bills, Delhiites aren't complaining, even as its other poll promises in this sector are yet to take off. A year after AAP took charge of the Delhi government, a glance at its five-point 'Action-Plan' in the power sector reveals that it has taken small steps in four of its promises. The party's manifesto promised reduction of electricity bills by half, CAG audit of power discoms, Delhi's own power plant, introduction of competition among discoms and Delhi as a "Solar City". While

the first one was fulfilled within 11 days of the party coming to power, the CAG audit of power discoms is stuck in the Supreme Court even as everyone had a peak at the report, which suggests irregularities worth ₹ 8,000 crore on the part of the discoms. However, there are two promises that AAP seems to have had clarity only after it assumed power. Power Minister Satyendar Jain said the party had assumed Delhi was a power deficit city until it assumed office, with its meteorite rise by winning 67 of the 70 Assembly seats in the elections. But, he maintained that the government has no plans to scrap the idea of Delhi's own power plant as it is a long-term proposal, which would take about five years to get ready. The party seems positive about winning the 2020 Assembly elections as well. The manifesto also mentions bringing more efficiency in the Rajghat and Bawana power plants. While the former is shut due to environment issues, the latter continues to remain defunct for want of gas. The other promise, the complexity of which the AAP again realised after forming the government, is that of bringing competition among discoms. (www.thehindu.com)

CIL to conduct special auction for power producers

February 7, 2016. Coal India Ltd (CIL) will this month conduct special auction to offer coal to distressed power producers as the government gears up to provide round-the-clock electricity to all. CIL, which accounts for over 80 percent of domestic coal production, will put on offer three million tonne in the third round for those distressed power plants which have neither linkages nor power purchase agreements, the company said. The PSU had already put on offer seven million tonne of coal under the two phases of special auction held so far this fiscal. The two auctions were conducted on September 30 and October 1 last year. The third phase will be held from February 16-18 it said. The government has set a target to provide 24x7 affordable power to all by 2019. CIL, a major supplier of coal to the power sector, is also eyeing one billion tonne of production target by 2020. It aims to achieve 550 million tonne of output target in the current fiscal. (www.orissapost.com)

Karnataka govt lifts staggering industrial holidays as power situation improves

February 6, 2016. Industrialists and entrepreneurs can heave a sigh of relief. With improved availability of power in the Bengaluru Electricity Supply Company (BESCOM) region, the State Government lifted staggering industrial holidays in the BESCOM jurisdiction. The government has lifted the staggering holidays from February 6 consequent to relaxing of restriction on hydro generation, improvement in state and central thermal power generation and revival of 1000 MW at Kudankulam nuclear power plant in Tirunelveli district of Tamil Nadu. Now there was no demand-supply gap in power. The availability of power in the State was 9,000 MW, he said. Staggered industrial holidays were declared in October last owing severe shortage of power supply. Energy Minister D K Shivakumar said that further improvement in generation is expected as power plants at Yeramaras, and Ballari would start generation in the next 2-3 months. Till now, the hydro generation was restricted to conserve water in the Lingamakki, Supa and Mani dams which are major hydro reservoirs in the State. He said Unit- 1 (1000 MW) of Kudankulam nuclear power plant has started generation. Hence there would be an increase of 220 MW in compression generation services (CGS) in the State. Hence, it was possible to meet the loan which was reduced to an extent of 100-150 MW on account of staggering of industrial holidays in BESCOM area. He said Yaramarus thermal power plant with an installed capacity of 1600 MW would start generation in the next one or two months. A 700 MW unit III of Ballari thermal plant would start generation in the first week of March, he said. He said the department has received 38 proposals worth ₹ 78,553 crore during GIM Invest Karnataka 2016. (www.thehindu.com)

Work in 1/3rd of unelectrified 18K villages over: Goyal

February 5, 2016. The Centre has completed the electrification work in nearly one-third of 18,452 unelectrified villages, Power Minister Piyush Goyal said. Prime Minister Narendra Modi had announced in his Independence Day speech last year that all 18,452 unelectrified villages will get electricity within 1,000 days. The Centre has decided to provide power to 18,452 villages by May 1, 2018. Goyal said that electrification works in these villages faced several challenges as most of the areas were naxal-hit, and also consist of hilly terrain and dense forestation. The minister explained that out of the 2,21,424 milestones set for electrification of these villages, 72,799 are achieved which is roughly 33 percent indicating that one third of task undertaken has been completed. (www.business-standard.com)

Govt to auction Cheyyur, 2 other UMPPs by March

February 4, 2016. The government will auction three ultra mega power projects (UMPPs), to be set up in three states of Bihar, Odisha and Tamil Nadu with an investment of over ₹ 80,000 crore, by March this year. Power secretary P.K. Pujari said that there will be auction of "three UMPPs by March definitely". The secretary said that the Cheyyur UMPP is based on imported coal but there is a possibility of putting the project on the block. As per the standard procedure, the bid document has to be in place for auctioning a project. The document for imported coal is also being finalised by the ministry

which will be sent for Cabinet approval. The investment for an UMPP of 4,000 MW has been revised from ₹ 20,000 crore to about ₹ 27,000 crore recently on basis of rise in the price of coal and land. Thus the three projects entails an investment of over ₹ 80,000 crore. Government had aborted bidding for Cheyyur (Tamil Nadu) and Bedabahal (Odisha) in January last year due to tepid response from private sector. Private firms, which had participated in the first round of bidding for both the projects, withdrew their bids citing difficulties in securing finances for these projects. (www.livemint.com)

India submits nuclear instrument of ratification

February 4, 2016. In a significant development in terms of its nuclear liability, India submitted the Instrument of Ratification of the Convention on Supplementary Compensation for Nuclear Damage, 1997, to the International Atomic Energy Agency (IAEA) in Vienna. The submission of the instrument of ratification is the conclusive step in the addressing of issues related to civil nuclear liability in India, marked earlier by the release of frequently asked questions (FAQs) on civil nuclear liability in February 2015 and the launch of the India Nuclear Insurance Pool (INIP) in June 2015, the external affairs ministry said. (www.newkerala.com)

[INTERNATIONAL: OIL & GAS]

Upstream.....

France's Total starts new gas production in North Sea fields

February 9, 2016. French energy giant Total said it had started production at its Laggan and Tormore gas fields near the Shetland Islands in the North Sea. The installation is to produce 90,000 barrels of oil equivalent per day (boepd), the company said. Total called the site a "key component" in its plans to boost its British production to 260,000 boepd this year from 107,000 in 2015. Total is Laggan-Tormore's operator, owning 60 percent in the installation, with Denmark's Dong Energy and Britain's Scottish and Southern Energy holding 20 percent each. (uk.finance.yahoo.com)

Oil drillers must slash another \$24 bn this year: IHS

February 9, 2016. North American oil and natural gas drillers will need to cut an additional 30 percent from their capital budgets to balance their spending with the cash coming in their doors even if crude rises to \$40 a barrel, according to an analysis by IHS Inc. A group of 44 North American exploration and production companies are planning to spend \$78 billion on capital projects this year, down from \$101 billion last year. Those companies need to cut another \$24 billion this year to get their spending in line with a historical 130 percent ratio of spending to cash flow, IHS said. The analysis is based on IHS's low-case price scenario of \$40-a-barrel oil and \$2.50 per million cubic feet natural gas prices. (www.bloomberg.com)

Sound Energy confirms clean-up operations at Nervesa

February 9, 2016. Junior oil and gas firm Sound Energy confirmed that clean-up operations are continuing at its onshore Nervesa gas discovery in northern Italy after first gas was achieved on February 3. Early production at Nervesa has been limited to an initial rate of one million cubic feet per day during daytime hours and 0.7 million cubic feet per day overnight. The company said it will begin ramping up production levels over the coming months to the planned production rate of 1.8 million cubic feet per day. (www.rigzone.com)

Shale bust not busting as fast as US govt thought

February 9, 2016. Shale patches in the U.S. are pumping out more oil and gas than the government previously thought. A total 184,000 barrels a day of shale oil output were added to the Energy Information Administration's (EIA) estimate for February in its monthly Drilling Productivity Report released. The agency raised its estimate for natural gas production from the Marcellus region by 4.2 percent. While American drillers have idled more than two-thirds of their oil and gas rigs since October 2014, production has been resilient thanks to techniques that allow them to pump more from each well, and a much-anticipated decline in stockpiles is yet to be seen. U.S. crude inventories climbed above 500 million barrels to the highest level since 1930 in the week ended Jan. 29, according to EIA data. The EIA said it was revising the models it uses to estimate output in the report. The EIA said it expected the seven major shale formations in the U.S. to produce 4.83 million barrels of oil a day in February. The report raised that estimate to 5.02 million. The agency last month expected the Marcellus to pump out 15.2 billion cubic feet of natural gas this month. That was revised to 15.9 billion. Even with the revisions, the agency sees oil output from shale on a long downward trajectory as companies cut spending and drill fewer

wells. In March, the EIA expects oil output to decline 92,000 barrels a day to 4.9 million, which would be the lowest level since August 2014. (www.bloomberg.com)

Australian energy group AGL will exit gas E&P

February 5, 2016. Australian energy group AGL has taken a strategic decision that exploration and production (E&P) of natural gas assets will no longer be a core business for the company due to the volatility of commodity prices and long development lead times. AGL has impaired its Queensland natural gas assets at Moranbah, Silver Springs and Spring Gully. Apart from gas storage and related plant at Silver Springs, AGL expects to sell these assets. In New South Wales, AGL will not proceed with the Gloucester Gas Project and will cease production at the Camden Gas Project in South West Sydney in 2023, twelve years earlier than previously proposed. AGL is confident that it has sufficient gas for its residential and small business customers following the recent contract with the Gippsland Basin Joint Venture and the planned expansion of the Eastern Gas Pipeline. Incremental future gas requirements are likely to be sourced from the southern markets. (www.enerdata.net)

Petsec Energy acquires 100 percent stake in Damis production license

February 5, 2016. Australia's Petsec Energy Ltd announced that it has acquired a 100 percent participating interest in, and operatorship of, the Damis Production License in the Republic of Yemen's Block S-1. The Damis PL holds five oil and gas discoveries and a further four undeveloped oil and gas fields. Prior to its suspension in 2014, the An Nagyah oil field within the block produced 25 million barrels of oil since 2004 from 25 wells, reaching a peak oil rate of 12,716 barrels of oil per day in March 2006. (www.rigzone.com)

Faroe to drill 3 exploration wells in 2016 despite oil price

February 5, 2016. Northwest Europe-focused junior explorer Faroe Petroleum confirmed that it will be involved in three exploration wells offshore Norway in spite of the low oil price. The firm also expects to see progress with a number of North Sea field development projects this year. Faroe said that the Barents Sea-located Kvalross well, where drilling started, is progressing according to plan. In the Norwegian North Sea, an exploration well on the Brasse prospect is planned for the summer of 2016. Faroe has secured the Transocean Arctic rig for this operation. Faroe said that the Njord partnership, led by operator Statoil, is planning to drill a new prospect on the North Flank of the Njord field during the second half of 2016. In terms of development projects, Faroe said the Njord Future Project is progressing to plan, with a final investment decision expected during the fourth quarter of this year. If the decision is made to go ahead, the project will start production in 2019. Faroe said that its exploration and appraisal capital spending in 2016 is expected to be approximately \$84 million, which was lower than analysts at London-based investment bank First Energy was anticipating. Production during 2015 was at the upper end of the firm's guidance at approximately 10,530 barrels of oil equivalent per day (boepd), of which approximately 58 percent was liquids. Faroe's guidance for its production in 2016 is for between 7,000 and 9,000 boepd. (www.rigzone.com)

Oil, gas discovered at Nashpa X-5 well in Pakistan

February 4, 2016. Oil and Gas Development Company Limited (OGDCL) announced that oil and gas has been discovered at the Nashpa X-5 exploration well, located in Pakistan's Karak District. The well was drilled to a depth of 16,587 feet and targeted the hydrocarbon potential of the Shinawari, Lumshiwal, Samanasuk and Lokhart formations. The Lokhart formation successfully produced 1,032 barrels of crude oil per day and 0.78 million cubic feet of gas per day through a 32/64" choke at a well head flowing pressure of 600psi. The discovery is expected to add significant hydrocarbon reserves to the joint venture companies working on the well, as well as Pakistan itself. (www.rigzone.com)

Saudi Aramco to keep same number of oil, gas rigs in 2016

February 3, 2016. State oil giant Saudi Aramco is expected to keep the same number of its oil and gas drilling rigs this year despite weak oil prices. Saudi Aramco has asked oilfield service companies and suppliers again this year for discounts due to a slump in global oil prices. Aramco managed to make big savings last year on drilling costs. Saudi Aramco is operating around 212 oil and gas rigs; which is a level it has kept steady since 2015. That number does not include water rigs. Saudi Arabia has maintained a high level of oil production at above 10 million barrels per day (bpd) for most of 2015. A survey showed that the world's biggest oil exporter pumped 10.25 million bpd in January. Aramco is continuing to invest in oil and gas production capacity despite cost-cutting due to low oil prices, the company said. Aramco's plans starkly contrast with governments and oil firms outside the Gulf region, which have been reducing capital spending sharply in response to financial pressures. U.S. energy firms cut oil rigs for the sixth straight week, data showed, and were expected

to shed more with major U.S. shale oil companies slashing spending plans after crude prices hit 12-year lows. Last year, Aramco may raise the number of its oil and gas drilling rigs to as high as 250 in 2016 but that plan depended on oil prices which last month fell below \$30 a barrel for the first time since April 2004. (af.reuters.com)

Downstream.....

US independent refiners see cheap gasoline demand growing

February 8, 2016. The largest U.S. independent refiners are bullish on domestic gasoline demand as super-cheap fuel and the lure of bigger vehicles entice more consumers. Valero Energy Corp and Phillips 66 both say they are in "max gasoline mode," pumping out as much as they can as a mild winter, economic uncertainty and a stinging slump in oil drilling squeezed U.S. diesel demand. They still see export demand growth for both gasoline and diesel, but at home expectations are for rising gasoline demand, despite concerns the U.S. economy could soften in 2016. As U.S. crude prices nosedived more than 70 percent from mid-2014 highs, average gasoline pump prices fell 52 percent to \$1.76 per gallon, according to AAA Fuel Gauge Report. The U.S. Energy Information Administration (EIA) said gasoline consumption rose 2.6 percent to an average of 9.2 million barrels per day last year. The EIA sees more muted gasoline consumption growth of 0.8 in 2016 and 0.2 percent in 2017. (www.reuters.com)

Fairway Energy finds an extra 1 mn barrels of crude storage at Houston facility

February 5, 2016. Early construction of Fairway Energy Partners' Pierce Junction underground crude storage caverns in south Houston has yielded something of an unexpected geologic surprise: an additional 1 million barrels of capacity. The added space, which will bring storage capabilities at the site to 11 million barrels, is a windfall at a time when oil traders around the world are scrambling to secure a place to hold crude and wait for higher prices as a global supply glut fills available tanks to the brim. (af.reuters.com)

Japan's two biggest oil refiners warn of second year of losses

February 3, 2016. Japan's two largest oil refiners warned they will lose money for a second consecutive year, saddled by inventory losses as oil prices slump and the general decline in global commodity prices. Top refiner by sales, JX Holdings, and second-ranked Idemitsu Kosan both said they will incur losses in the year ending March 31. Globally, top oil companies have struggled to cope with a roughly 70 percent decline in oil prices since their 2014 peak, triggering a wave of spending cuts on new wells and projects to conserve cash. (af.reuters.com)

Transportation / Trade.....

Sabine Pass LNG terminal ramps up after gas supply jump

February 9, 2016. Cheniere Energy Inc.'s Sabine Pass terminal is ramping up operations of its compressors after a jump in natural gas supplies, a signal that the plant is getting closer to liquefying the fuel for export, according to Genscape Inc. Cheniere is in the process of starting to produce liquefied natural gas to become the first exporter of the fuel from U.S. shale formations. The initial shipment was delayed to later this month or March from the third week of January because of faulty wiring that had to be replaced. Two LNG tankers -- the Energy Atlantic and Asia Vision -- are waiting in the Gulf of Mexico to take the first cargoes, according to Genscape data. (www.bloomberg.com)

Shell will buy 1 mt per year of LNG from Venture Global's LNG project

February 9, 2016. Shell has entered into a sales and purchase agreement (SPA) with Venture Global LNG under the terms of which Shell will purchase 1 million tonnes (mt) per year of LNG from Venture Global Calcasieu Pass's LNG export facility under development in Cameron Parish, Louisiana. The 20-year agreement will start upon commencement of commercial operations at the 10 mt per year project, expected in 2019-2020. Under the SPA, Shell will purchase LNG on a free on board basis for a purchase price indexed to the monthly Henry Hub price plus a facility fee indexed to inflation. (www.enerdata.net)

Venezuelan crude sales to the US declined 14 percent in Jan

February 8, 2016. Venezuela's crude exports to the United States (US) fell 14.3 percent in January versus the previous month to 643,935 barrels per day (bpd) due to lower sales of diluted crude oil (DCO) to regular customers, according to trade flows data. State-run oil company PDVSA and its joint ventures sent a total of 43 crude cargoes to the United States. PDVSA's refining unit Citgo Petroleum was the main receiver. Other importers included Phillips66, Valero Energy and Chevron Corp, which was one of few customers receiving a larger volume of Venezuelan oil. Sales of DCO made with

Venezuelan extra heavy crude and naphtha decreased 39 percent, but shipments of Merey blend made with different types of crude rose 13.4 percent to 138,680 bpd, according to the data. PDVSA has been buying at least one monthly cargo of African oil crude since last year for refining and blending. This year it has received three cargoes of Nigerian and U.S. crudes at its terminal in Curacao from firms Total, Lukoil and Citgo. Lured by cheap prices and discounts, U.S. refining and trading firms are expected to import a record volume of African crudes in February, but Latin America's limited production capacity has not allowed it to see any benefit from the purchase increase. Venezuela exported 772,880 bpd of crude to the United States last year, an increase versus record lows of 2013 and 2014. (www.reuters.com)

Norway to surpass Russia as Lithuania's top gas supplier in 2016

February 8, 2016. Lithuania will import more gas from Norway than from former sole supplier Russia in 2016 after developing infrastructure to support liquefied natural gas (LNG) imports, the country's energy ministry said. Russia's Gazprom had enjoyed a supply monopoly until the end of 2014, when Lithuania opened a floating LNG import terminal to reduce energy dependence on its former Soviet master. That allowed it to import gas from Norwegian tankers, as well as via pipeline from Russia. Lithuanian gas supplier Lietuvos Dujų Tiekimas and privately owned nitrogen fertilizers producer Achema have agreed to buy LNG from Norway under short-term deals. New deals mean that supplies via the LNG terminal will increase to more than 1 billion cubic metres (bcm) in 2016, while total Lithuanian demand is expected to be around 2 bcm. (www.reuters.com)

Total will supply LNG to ENN Energy in China

February 5, 2016. ENN LNG Trading has signed a binding Heads of Agreement (HoA) with Total for the delivery of 0.5 million tonnes (mt) per year of LNG over a 10 year period starting in 2018. LNG will be sourced from Total's international LNG portfolio and will be delivered to the 3 mt per year LNG import terminal that ENN is currently building in Zhoushan in Zhejiang (China) and that should be commissioned in 2018. ENN LNG is a subsidiary of Chinese gas distribution company ENN Energy Holdings, which operates in 146 cities across 17 provinces and autonomous regions, with over 11 million residential and 52,000 industrial and commercial customers. (www.enerdata.net)

Iran starts sending crude to Europe in bid to regain lost market

February 5, 2016. Refiners have chartered tankers this month that will deliver about 136,000 barrels a day of Iranian crude to Europe, equivalent to almost a quarter of the Middle Eastern nations shipments to the region before sanctions were imposed. Spanish refiner Compania Espanola de Petroleos, France's Total SA and Russia's Lukoil PJSC have all provisionally booked cargoes of Iranian crude to sail from Kharg Island to European ports, according to shipping reports. While some of those bookings may not be completed, more cargoes could also be chartered before the end of the month. The cargoes show that Iran is following through on its pledge to quickly re-establish its relationship with European customers, who halted purchases in 2012 after the European Union imposed an embargo on imports. The ban was lifted last month upon completion of the Middle Eastern nation's nuclear deal with world powers and flows are likely to increase further as Italian and Greek refiners prepare to resume imports, according to t Petromatrix GmbH. Europe excluding Turkey imported 550,000 barrels a day of Iranian crude before the sanctions were imposed, according to Petromatrix data. (www.bloomberg.com)

ABB wins contract to support \$12 bn Energy East pipeline project in Canada

February 5, 2016. ABB has received a contract from TransCanada to manufacture 22 electrical houses for the proposed \$12 bn Energy East pipeline project in Canada. The 4,600 km Energy East pipeline is designed to transport 1.1 million barrels of crude oil per day from Alberta and Saskatchewan to refineries in Eastern Canada. ABB will manufacture the electrical houses at a new production facility in the greater Montreal region. In 2015, TransCanada filed an amended route application with the National Energy Board (NEB). The application involved nearly 700 changes to the route pipeline project in order to address environmental concerns. Upon commissioning, the pipeline is expected to generate total tax revenues of \$1.2 bn for Québec for the first 20 years of its operation. (transportationandstorage.energy-business-review.com)

Russia's fuel oil exports down amid higher home demand

February 4, 2016. Russia exported less fuel oil in January as domestic utilities snapped up fuel oil cargoes, which were cheaper than natural gas. Russia's fuel oil exports dropped more than 20 percent on the month in January due in part to a higher export duty and lower global prices. Prices in January were almost 45 percent lower than a year ago, according to data. That made fuel oil more attractive for utilities than natural gas, which they receive predominantly under long-term contracts at a fixed price. (www.reuters.com)

Anadarko, Mozambique put foot on gas exports as Iran looms

February 4, 2016. Mozambique and Anadarko Petroleum Corp. are racing to tap gas from one of the biggest discoveries in decades as a global glut looms. After making its initial discovery six years ago in the Rovuma basin off Mozambique's northern coast, Anadarko has yet to make a final investment decision on a \$15 billion liquefied natural gas project. That decision may come this year as competition from U.S. and Iranian supplies intensifies in export markets, state-owned partner Empresa Nacional de Hidrocarbonetos said. With the International Monetary Fund projecting total LNG investment of more than \$100 billion in Mozambique and the possibility of supplying gas to the domestic market, the discoveries have the potential to help transform one of the world's poorest nations. While Woodlands, Texas-based Anadarko has joined oil majors in curbing investment as crude slumps, the company said that it hopes to conclude negotiations with the Mozambique government this year. Anadarko said that it plans to cut spending by almost half as it moves to recover from its worst year since spinning off from Panhandle Eastern Pipe Line Co. in 1986. The third-largest U.S. natural gas producer reduced its 2016 capital budget to about \$2.8 billion, after reporting a net loss of \$1.25 billion for the fourth quarter. Anadarko and Eni SpA in December agreed on a plan to develop adjoining areas in the northern Rovuma basin, targeting a combined 24 trillion cubic feet of gas. Mozambique has attracted international energy companies to exploit huge gas finds that could help turn the country into the third-biggest LNG exporter in a decade. (www.bloomberg.com)

Phillips 66 says California rail project critical to crude supply

February 4, 2016. Phillips 66 says a long-proposed crude-by-rail project at one of its California refineries is more critical to supply because of the extended shutdown of an oil pipeline that ruptured last year. Jim Anderson, manager of the project proposed at its Santa Maria refinery in Arroyo Grande, California, said that last May's shutdown of a Plains All American Pipeline LP line has made the rail facility "more urgent." Plains' Line 901 moved oil produced in Exxon Mobil Corp's Santa Ynez offshore oilfield, and production ceased when the pipeline burst. Phillips 66 proposed the project in 2013 to widen supply options as California heavy crude output shrinks. The facility would handle just heavy crude because the Santa Maria plant is not built to run light oil. Anderson said Phillips 66 aims to bring in three trains per week rather than five. That would reduce incoming crude to about 25,000 barrels per day (bpd) from more than 41,000 bpd. (www.reuters.com)

Policy / Performance.....

US approves ConocoPhillips LNG exports from Alaska

February 9, 2016. The U.S. Department of Energy approved ConocoPhillips' application to export about 40 billion cubic feet of natural gas from its Kenai liquefied natural gas export terminal in Alaska over the next two years starting Feb. 19. The Kenai facility was the first LNG export facility in the United States. Most of the gas exports from Kenai have gone to Japan since the plant entered service in 1969. The first LNG export terminal in the lower 48 states is expected to enter service at Cheniere Energy Inc's Sabine Pass facility in Louisiana. The federal approval will allow ConocoPhillips to export gas to any country the United States has a free-trade agreement with or any other country with which trade is not prohibited by U.S. law. With growth in pipeline exports to Mexico and LNG exports to the world, the United States is expected to transition from a net importer of gas to a net exporter by 2017 as the nation's shale gas production continues to grow, according to federal energy forecasts. The United States was last a net exporter of gas in 1957. (www.reuters.com)

Japan January average LNG spot price falls to \$7.1 per mmBtu

February 9, 2016. Liquefied natural gas (LNG) spot prices for delivery in January to Japan, the world's biggest buyer, fell to its lowest since the trade ministry started publishing figures about two years ago, data showed. The average price for cargoes contracted during the month was \$7.10 per million British thermal units (mmBtu), down 30 cents from the previous month and marking the lowest in data going back to March 2014, the trade ministry said. The average price for cargoes arriving in Japan during January edged up to a three-month high of \$7.90 per mmBtu, up 40 cents from the previous month. The ministry surveys spot LNG cargoes bought by Japanese utilities and other importers, while excluding cargo-by-cargo deals linked to benchmark prices such as the U.S. natural gas Henry Hub index. (uk.reuters.com)

Russian govt approves excise tax hike on fuel from April 1

February 8, 2016. A Russian governmental commission approved an excise tax rise on gasoline and diesel starting April 1 as a way to help replenish the state budget. Excise tax on high-quality gasoline of Euro V grade would be increased by 2,600 roubles (\$33.15) per tonne to 10,130 roubles, while tax on diesel and middle distillates will rise by 1,143 roubles to

5,293 roubles per tonne. Excise taxes on other types of gasoline will be raised by 2,600 roubles to 13,100 roubles. The changes to the Tax Code are subject to approval by the parliament. (uk.reuters.com)

Pakistan to sign 15 year deal for 3.5 mt Qatari LNG per year

February 8, 2016. Pakistan is set to sign a 15 year import deal for 3.5 million tonnes (mt) of liquefied natural gas (LNG) per year from Qatar, Pakistan government said. Previously the two governments had discussed a 15-year deal for 1.5 million tonnes per year with scope for the volume to increase over time. Pakistan, along with Egypt and Jordan, were newcomers to the LNG import market in 2015, helping drive up demand and absorb growing world supplies from a wave of new projects. Pakistan's first floating import terminal (FSRU) received its initial spot imports in April last year and has import capacity for around 4.4 mt of LNG per year. The country has also tendered for a second FSRU planned to be operational by mid 2017. The nation of 190 million people can only supply about two-thirds of its gas needs. The ruling party, which campaigned on promises of solving the energy crisis, wants to ease shortages by expanding LNG shipments before a 2018 general election. Pakistan State Oil backed out of a nearly \$1 billion deal to buy LNG from Royal Dutch Shell after receiving a lower price from Qatar. (af.reuters.com)

Iran's crude oil sales to Europe have reached above 300k bpd after sanctions

February 6, 2016. Iranian Oil Minister Bijan Zanganeh said that Iran's crude oil sales to Europe after the lifting of international sanctions on Tehran had already reached above 300,000 barrels per day (bpd). Iran's oil exports, which had peaked at more than 3 million barrels per day (bpd) in 2011, fell to a little more than 1 million bpd after tougher sanctions were imposed in 2012 because of its nuclear program. After the rubber-stamping of the nuclear deal with world powers last year, however, Tehran has ordered a 500,000 bpd increase in oil output. Zanganeh also said Italy's Eni was interested in buying 100,000 bpd of crude oil from Iran and its representatives would visit Tehran in near future to discuss the contract. Zanganeh said Italian refiner Saras was interested in buying 60,000 to 70,000 bpd of crude oil from Iran. (www.reuters.com)

Oil, gas loans not likely to choke big US banks: Moody's

February 5, 2016. Losses from souring oil and gas loans at the largest U.S. banks are probably manageable, even if fuel prices remain low, according to Moody's Investors Service. At the six biggest banks, funded exposures to the industry amount to 2.3 percent of total loans, Moody's said in a report. Morgan Stanley is at the high end, with about 5 percent of its funded loans to the sector, and JPMorgan Chase & Co. is at the low end, with 1.5 percent, the analysts said. Trading exposures are smaller and likely to have cash or securities as collateral, or they've been hedged, according to the report. Still, the firms may have to add to reserves for loan losses if the price of oil stays low, Moody's said. While much of the banks' capital isn't threatened by energy losses, Citigroup Inc.'s total funded and unfunded commitments account for about 40 percent of its common equity tier 1 capital, the most of the group, the analysts said. Wells Fargo & Co., which doesn't disclose unfunded commitments by industry, wasn't included in that calculation, Moody's said. (www.bloomberg.com)

UAE plans floating LNG import terminal later this year

February 5, 2016. Abu Dhabi National Oil Company (ADNOC) plans to start a new liquefied natural gas floating import terminal (FSRU) in the second half of this year. The floating import terminal is being supplied by U.S. gas shipping company Excelerate Energy. The terminal's import capacity will be about 1 million tonnes per annum. The United Arab Emirates (UAE) already imports LNG via a floating terminal supplied by Excelerate Energy off the coast of Dubai. (www.reuters.com)

Canada to decide on Trans Mountain oil pipeline by end of 2016

February 5, 2016. Canada's federal government will make a decision on Kinder Morgan Inc.'s Trans Mountain oil pipeline expansion by the end of the year after additional consultations and considering the country's national interest, Natural Resources Minister Jim Carr said. The government has added an additional four months to the regulatory process under the National Energy Board in order to provide more assessment of the Trans Mountain project, Carr said. TransCanada Corp.'s Energy East will also face a longer review period, while Enbridge Inc.'s Northern Gateway has been approved by the previous government, but the company hasn't made a final investment decision amid local opposition. Carr and Environment Minister Catherine McKenna unveiled an overhaul of the country's review process that will include more consultation with stakeholders in a bid to overcome mounting opposition to oil exports. Opposition to pipelines has stymied Alberta oil producers, already smarting from weak crude prices, as they struggle to expand access to new markets for their growing output. (www.bloomberg.com)

Obama to seek new tax on oil in budget proposal

February 4, 2016. U.S. President Barack Obama will launch a long-shot bid next week to impose a \$10 a barrel tax on crude oil that would fund the overhaul of the nation's aging transportation infrastructure, the White House said. The proposed fee, which would be paid by oil companies and phased in over five years, was quickly met with scorn by lawmakers in the Republican-controlled Congress. Obama has said the country must stop subsidizing the "dirty" fossil fuels of the past and focus on clean, renewable fuels that do not exacerbate climate change. Set to be officially announced in Obama's fiscal 2017 budget plan, the fee would provide nearly \$20 billion a year to help expand transit systems across the country and more than \$2 billion a year to support the research and development of self-driving vehicles and other low-carbon technologies. (www.reuters.com)

Shell pushes back investment decision on Canadian LNG project

February 4, 2016. British Columbia's ambitions to become North America's next major liquefied natural gas (LNG) exporter took another hit, as Royal Dutch Shell pushed back a final investment decision (FID) on its LNG Canada project to late 2016. The delay came as Europe's largest oil company reported its lowest annual income in over a decade and said it would take further steps to cut costs to cope with weak oil prices if needed. LNG Canada, located on British Columbia's rugged northern coastline, is one of the frontrunners in a now slowing race to build Canada's first LNG export terminal. It has already been granted its key environmental permits. British Columbia's ruling Liberals, meanwhile, had been banking on having three LNG export terminals in operation by 2020, delivering new jobs in the near-term and bolstering government coffers in coming years. Shell has in the last year scrapped numerous multi-billion dollar projects, including a controversial exploration project in the Alaskan Arctic Sea, the Bab sour gas field in Abu Dhabi and Carmon Creek oil sands project in Canada. The LNG Canada partners - Shell, along with PetroChina Co Ltd, Korea Gas Corp and Mitsubishi Corp - had planned to take FID in the first half of 2016. (www.reuters.com)

BP plans additional job cuts due to lower profits

February 3, 2016. UK oil major BP has announced plans to cut 3,000 more jobs as a result of reduced earnings in 2015 due to slump in oil price. The firm said that the profits have been dropped by 51% to \$5.9 bn (£4.1 bn), compared with \$12.1 bn reported in 2014, representing its biggest loss for more than two decades. The latest job cuts plan by 2017 is expected to affect staff and contractors in its downstream segment. The plan is in addition to the firm's recently announced decision to axe 4,000 jobs globally in exploration and drilling business this year in order to reduce costs. BP said it will maintain annual organic capital expenditure between \$17 and \$19 billion in 2016 and 2017. (explorationanddevelopment.energy-business-review.com)

[INTERNATIONAL: POWER]

Generation.....

Saudi Arabia will need to invest \$133 bn in its power sector by 2025

February 9, 2016. The Ministry of Electricity and Water of Saudi Arabia estimates that the country will need to invest SR500 bn (US\$133 bn) in power projects over the next ten years to meet rising energy demand. Peak demand is expected to reach 90 GW in 2022, while the installed capacity is less than 80 GW (77 GW in 2014). In September 2015, peak demand soared by 10% (compared to 2014 peak level) to 62.3 GW, from 56.5 GW. Saudi Arabia plans to sign contracts to connect Saudi Arabia to Egypt by mid-2016, to have the interconnection project operational before mid-2019. (www.enerdata.net)

Slight increase in Statkraft's power generation in 2015

February 5, 2016. Statkraft, the main power utility in Norway, generated a total of 56.3 TWh in 2015 (+0.5% compared to 2014). This slight increase is linked to a 0.5% decline in hydropower generation (to 53.1 TWh). The group sold 43.5 TWh on the Nordic markets (-3.1%) and 1.1 TWh on the continental energy and trading market (stable from 2014). In 2015, the company invested a total of NOK 3.79 bn (€397 mn), nearly three times the 2014 investment level, due to soaring investments in international hydropower. The company has confirmed that it would not invest further in offshore wind and that some international hydropower projects would be postponed, such as the 517 MW Cetin hydropower project in Turkey. (www.enerdata.net)

Transmission / Distribution / Trade...

China giants in the waiting for next power assets

February 9, 2016. Following the bumper sale of its TransGrid electricity transmission network, the New South Wales Government, led by Mike Baird, is looking to partly privatise its distribution business, Ausgrid. Ausgrid supplies power to around 1.6 million customers in Sydney, the central coast and Hunter regions – the state's most heavily populated areas. The bid date is set for Feb 29, and the 99-year lease is for a 50.4 percent stake thought to be worth at least \$12 billion including debt. Two Chinese state companies controlled by the Chinese Communist Party are through to the indicative bidding phase – State Grid Corporation of China and China Southern Power Grid. (www.theepochtimes.com)

Pakistan cancels plans to privatise power supply companies

February 5, 2016. The government of Pakistan has cancelled its plans to privatise power supply companies, that it had agreed to sell in 2013 under a US\$6.7 bn bailout agreement with the International Monetary Fund. However, the privatisation of nine power distribution companies has been cancelled and the sale of 68 loss-making state-owned companies will be delayed. (www.enerdata.net)

Great River Energy selects ABB to upgrade HVDC transmission link in US

February 4, 2016. Great River Energy has awarded a \$130 mn contract to power and automation technology group ABB to upgrade an existing high-voltage direct current (HVDC) connection. The firm said that the upgrade work will help improve grid reliability and facilitate efficient power transmission. The ± 400kV HVDC transmission system, which is 700 km long, is capable of transferring 1,000 MW of electricity between Underwood, North Dakota and Buffalo, Minnesota. Commissioned by ABB in 1978, the current HVDC system has provided over 99% availability during its operational lifetime. (utilitiesnetwork.energy-business-review.com)

Arizona regulators OK SunZia power lines

February 3, 2016. The \$2 billion, 515-mile-long SunZia power line project got a big boost from the Arizona Corporation Commission, which voted 3-2 to approve its construction in this state. The project involves two power lines, with transmission towers standing an average of 135 feet tall, that would go from central New Mexico into Southern Arizona near Bowie and Willcox before climbing north through the lower San Pedro River Valley, about two to five miles west of the river itself. The vote by the all-Republican commission grants the power line project a certificate that essentially says it will be economically beneficial while balancing those benefits with environmental impacts — a subject that brought a huge amount of discussion and dissent. (tucson.com)

Policy / Performance.....

Nigerian Power Minister says new electricity tariff will drive more investors

February 9, 2016. Nigeria's Minister of Works, Power and Housing, Babatunde Raji Fashola, has disclosed that the new electricity tariff is designed to benefit Nigerians as it will drive more investors and boost power generation. Fashola said Nigerians will benefit at the long run from the new tariff. But the former Lagos State governor suggested an alternative way of reducing electricity bill. Fashola advised Nigerians to be more conservative with power consumption. He said electricity consumers can actually reduce their cost of electricity by being conservative with power. It would be recalled that the new electricity tariff recently announced by the Nigerian Electricity Regulatory Commission (NERC) became effective on 1st February. (tvcnews.tv)

South African Mines Minister says Anglo sales to happen soon

February 8, 2016. South African Mineral Resources Minister Mosebenzi Zwane said Anglo American Plc will probably announce sales of its coal assets in the country in the next two weeks. Anglo is selling its South African coal mines in a bid to cut debt as some of the biggest mining companies have suffered from a drop in commodity prices. He wished Anglo had communicated with the government on the sales earlier. In December 2014, the company said it was considering exiting its South African thermal-coal operations. (www.bloomberg.com)

China puts coal production capacity on chopping block

February 5, 2016. China plans to chop coal production capacity as part of efforts by President Xi Jinping's government to cut industrial overcapacity and use cleaner energy sources amid sliding demand for the fuel. The world's largest coal consumer aims to eliminate as much as 500 million metric tons of annual output in three to five years, the State Council said. The country also plans to consolidate an additional 500 million tons a year of capacity among fewer miners, ramp up financial support for some coal companies and encourage mergers, according to the guidelines. All coal companies should be able to produce least 3 million tons a year, it said. Coal demand has slid as China's economy slows and the government seeks to curb pollution in the world's biggest producer of carbon emissions. China will also suspend approvals of new coal mines for the next three years, according to the State Council. (www.bloomberg.com)

[RENEWABLE ENERGY / CLIMATE CHANGE TRENDS]

National.....

Adani eyes solar plant in Australia

February 9, 2016. India's edible oil-to-infrastructure and energy conglomerate Adani Group is looking at constructing a utility-size solar power project in Australia's Queensland province, where green litigations and delay in mining lease have pushed back the timetable for its \$16.5 billion composite project for developing the Carmichael coal mine, an associated railway line and port. The Adani group's foray in the Australian solar power sector coincides with Canberra shifting its thrust from rooftop solar projects to large plants, much like the Narendra Modi government that has set a target of building 100 GW solar capacity by 2022. Though the Adani group's presence in India's power sector is built on coal-fired plants aggregating 10,480 MW capacity, it has recently emerged as a key player in the solar arena. (timesofindia.indiatimes.com)

Govt may soon come out with tenders for 2-4 GW solar power

February 8, 2016. The government is planning to bring out large tenders for producing 2-4 GW of solar power, Power, Coal and Renewable Energy Minister Piyush Goyal said. The country's grid-connected solar power generation capacity has crossed the 5,000 MW mark. The government has set an ambitious target of generating 100 GW of solar power by 2021-22 under the National Solar Mission. It is envisaged to generate 60 GW ground mounted grid-connected solar power and 40 GW roof-top grid interactive solar power to meet the target. The Power ministry has also fixed year-wise targets to monitor the solar power generation in the country. The target for the current year is 2,000 MW and 12,000 MW for the next year. The ministry is putting all efforts through various Central and State governments schemes to achieve the target. It has also initiated several schemes for development of solar parks and ultra mega solar power projects. Tenders for around 18,000 MW of solar projects are expected to be issued by March 31, 2016. The minister said the tariffs for solar power can come down by another 10 percent from the record low of ₹ 4.34 per unit last month. In November last year, the solar power tariff had touched an all-time low of ₹ 4.63 per unit following aggressive bidding by the US-based SunEdison, the world's biggest developer of renewable energy power plants. Also, the government will encourage roof top solar projects as well as come out with ways to encourage farmers to start small solar power projects, he said. (indiatoday.intoday.in)

Govt thinking of maintenance of Ganga by contractors: Javadekar

February 7, 2016. The government is considering a policy whereby the contractors assigned to clean the Ganga river will maintain it as well, union Environment Minister Prakash Javadekar said. The policy would be in line with the Golden Quadrilateral - a 5,846-km network of highways connecting important industrial, agricultural and cultural centres across the country - where the contractors who built it now maintain it as well. Javadekar, the minister of state for environment, forest and climate change, was also upbeat about the progress of the 'clean Ganga' campaign. The level of pollution in the river is now one third of what it was one year ago, he said. Javadekar said the discharge of industrial pollutants into the river had been significantly reduced. He said the installation of Online Continuous Effluent Monitoring Systems has been a success. The minister said out of the 764 polluting industries, 514 units have already installed the monitoring system and they are now able to keep a tab on the units' daily activities via an SMS. Some 150 units that did not respond to the plans have been shut down, he said. The Central Pollution Control Board (CPCB) had formulated an action plan for reduction of industrial pollution in the Ganga. The key culprits are five industrial sectors - sugar, paper and pulp, distilleries, textiles and tannery. (www.business-standard.com)

Link cost of solar equipment to efficiency: MNRE

February 7, 2016. The Ministry of New and Renewable Energy (MNRE) has proposed an upward revision in the benchmark cost of the Concentrating Solar Thermal (CST) Technologies Programme to promote energy efficiency. According to the changes, the benchmark cost will be related to performance efficiency in design and manufacturing of solar thermal power systems so that more energy is delivered in a cost-effective manner. The ministry has invited public suggestions on the issue by February 15. The proposed revision in the benchmark cost on the basis of instantaneous heat output/ heat delivery from CST systems will also accommodate the increase in the cost of various components of such systems. (www.thehindubusinessline.com)

US, India in talks to settle solar power trade dispute

February 6, 2016. The United States (US) and India are in talks that could settle a long-running solar power trade dispute, delaying the announcement of a ruling by the World Trade Organization (WTO). The U.S. complaint in 2013 alleged that the Jawaharlal Nehru National Solar Mission subsidies were available only if developers used equipment produced in India, violating a key global trade rule. The programme is aimed at easing chronic energy shortages in India, Asia's third-largest economy. The Obama administration argued that the rules are a barrier to solar products made in America and elsewhere but also effectively raised the cost of generating solar power in India and were extending the country's dependence on fossil fuels. (www.reuters.com)

Hero Future raises ₹ 3 bn through climate bond sale

February 5, 2016. Hero Future Energies, a Hero Group firm that focuses on solar and wind projects, has raised about ₹ 300 crore by issuing certified climate bonds for expanding its wind power business. Hero Future Energies said it was the first Indian company to issue climate bond certified by the Climate Bonds Initiative Standards Board, an international, investor-focused not-for-profit organisation. (www.thehindu.com)

SunEdison commissions 146 MW solar projects

February 5, 2016. SunEdison has commissioned 146 MW of solar power projects in Tamil Nadu, Andhra Pradesh and Telangana. The energy from the solar power plants would be sold to local distribution channels and private companies, city-based SunEdison said. SunEdison plans to develop more than 1,500 MW solar and wind energy plants over the next 18 months, it said. (www.business-standard.com)

Gamesa bags 50 MW wind project from Atria Power

February 3, 2016. Gamesa India said that it has bagged an order from Atria Power for setting up a 50 MW wind power project in Madhya Pradesh. As per the order, Gamesa will handle the supply, erection and commissioning of 25 units of G97-2.0 MW T104 wind turbines specially designed for low wind sites in India, it said. (www.thehindubusinessline.com)

Inox Wind commissions 170 MW wind project for Continuum in MP

February 3, 2016. Inox Wind said it has commissioned a 170 MW project for Continuum Wind Energy in Madhya Pradesh (MP). The company has additionally signed an agreement for 24 MW with Continuum Wind Energy and is in advanced discussions for further orders from the company at the same site, it said. Post commissioning, Inox Wind will also provide long term operations and maintenance services to the project. The wind energy project will provide power to 89,000 households and curtail 25 lakh tonnes of carbon dioxide emissions annually. (www.business-standard.com)

Global.....

EU installs record wind power as technology leapfrogs hydro

February 9, 2016. The European Union (EU) installed record wind-power capacity in 2015 as the technology leapfrogged hydropower to become the third-biggest source of electricity in the 28-nation bloc. Germany's market led the growth, installing 47 percent of the 12.8 GW of new wind power capacity across the region, the European Wind Energy Association said. Record offshore installations canceled out a dip in new onshore machines. That pushed the total for 2015 above the 12.1 GW registered in 2014. Wind energy is booming in Europe as member states strive to lower emissions by 40 percent in the four decades through 2030 to fight climate change. As costs come down, onshore wind is becoming more competitive with traditional forms of power generation, enabling developers and policymakers to glimpse a subsidy-free future. Renewables were given a fillip in December when 195 nations agreed for the first time to a climate treaty that is binding on all countries. The EU target for renewables to account for 27 percent of energy consumption by 2030 is binding

only at a bloc-wide level, without objectives for individual member states. Last year, wind accounted for 44 percent of new generating capacity across the EU. The bloc's 141.6 GW of wind turbines now account for 15.6 percent of its power capacity, compared to 15.5 percent for hydro power, according to the report. Gas leads on 21.1 percent, followed by coal on 17.5 percent. After Germany, the biggest markets in 2015 were Poland, with 9.9 percent of EU installations, France on 8.4 percent and the U.K. on 7.6 percent. One-time European leader Spain installed no new wind capacity last year. (www.bloomberg.com)

Aircraft carbon emission rules proposed by United Nations

February 9, 2016. A United Nations panel endorsed limits on carbon pollution from commercial jetliners, a move aimed at slowing one of the fastest-growing sources of emissions from transportation. The proposed standards, which target carbon dioxide emissions, still need to be approved by the International Civil Aviation Organization's (ICAO) 36-State Governing Council. The standards would apply to new aircraft type designs as of 2020, and to new deliveries of current in-production aircraft types starting in 2023, the Montreal-based organization said. Recommendations of the 170-person panel also include a cutoff date of 2028 for production of models that don't meet the standards, ICAO said. When fully implemented, the agreement would reduce carbon emissions equivalent to those released by 140 million cars, the White House said. (www.bloomberg.com)

China installed more than 15 GW of solar power capacity in 2015

February 8, 2016. According to preliminary statistics released by the National Energy Administration (NEA) of China, China installed 15.1 GW of solar capacity in 2015, raising its installed solar capacity from 28 GW in 2014 to more than 43 GW in 2015 (+54%); PV capacity reached 37.1 GW, while distributed installations reached 6.1 GW. Several Chinese provinces exceed 3 GW, namely Gansu (6.1 GW), Qinghai (5.6 GW), Inner Mongolia (4.9 GW), Jiangsu (4.2 GW), and Ningxia (3.1 GW). With this 15 GW capacity increase, China overtook Germany has the largest solar capacity worldwide. (www.enerdata.net)

BHP boosts carbon-capture study with \$14 mn Canadian center

February 8, 2016. BHP Billiton Ltd. will invest C\$20 million (\$14.4 million) in a carbon capture and storage (CCS) research center in central Canada, in a bid to clean up fossil-fuel pollution from power plants. The world's largest miner will fund a research center that gathers data from the world's first large-scale CCS project, a 110 MW coal plant operated by Saskatchewan-based energy company SaskPower, according to BHP Billiton. CCS is a three-stage process which takes emissions blamed for global warming and transports then stores them underground. It is expected to play a key role in meeting growing demand for power without contributing to climate change, according to the International Energy Agency. BHP Billiton has previously said it expects to lose almost 2 percent of the value of its assets by 2030 because of the growing number of measures around the world that put a price on pollution, so CCS could provide a solution. (www.bloomberg.com)

Boost renewable energy to get rid of fossil fuel

February 8, 2016. Bangladesh's renewable energy sector will thrive if investors are encouraged through right incentives, analysts said. If investors come up with more funds, the country will be able to reduce its dependence on fossil fuel for power generation, they said. The market should be motivated so the producers of renewable energy get better prices than those in the traditional energy sector, Bangladesh Bank Governor Atiur Rahman said. National Board of Revenue can reduce tariff on renewable energy products and equipment to encourage producers, suppliers and distributors, Rahman said. The government has a target to produce 10 percent of the electricity from renewable sources by 2020, to bring down the country's reliance on gas and oil. Bangladesh Energy Regulatory Commission should form a "carbon reduction fund" with the profits from the sales of oil to incentivise the renewable energy sector, the governor said. (www.thedailystar.net)

Solar power plant to be built in northern Argentina: President

February 7, 2016. A solar power plant will be built in Jujuy, bringing renewable energy to this province in northern Argentina, President Mauricio Macri said. A solar power plant is also planned in the western province of Mendoza, Macri said. Projects like these will allow Argentines to have their energy needs met, ending the outages that now occur "if there are peaks of heat or cold," the president said. (latino.foxnews.com)

Obama seeks \$12.8 bn to expand clean-energy research

February 6, 2016. President Barack Obama wants to double U.S. investment in clean-energy research and development, to \$12.8 billion by 2021, as part of a broader commitment to curb the effects of climate change. The administration is seeking \$7.7 billion in discretionary funding in fiscal 2017 to boost funding for the research at 12 federal agencies, according to a White House fact sheet released. The funding would increase by 15 percent a year through fiscal 2021.

Republican leaders in Congress have already said they don't plan to help enact Obama's budget plan. Obama is using his final budget request, to be unveiled Feb. 9, to showcase his efforts to curb greenhouse-gas emissions -- a push criticized by lawmakers in coal- and oil-rich states. The investment in clean-energy research stems from a commitment reached with other nations at international climate talks in Paris in December. About 80 percent of the funding would support Department of Energy efforts including development of clean-vehicle technologies, energy storage and nuclear-reactor research. Other agencies that would receive funding include the National Aeronautics and Space Administration and the Department of Agriculture. The White House said it will propose a \$10 per barrel tax on oil as a way to pay for improvements to the U.S. transportation network. (www.bloomberg.com)

Beijing Enterprises to buy German waste management firm EEW for €1.4 bn

February 5, 2016. Beijing Enterprises has agreed to acquire German waste management firm EEW Energy from Waste from EQT Infrastructure II for €1.4 bn. Expected to be completed during first quarter of this year, the deal is subject to securing an approval under German Foreign Trade and Payments Ordinance. The acquisition is part of Beijing Enterprises' long-term strategic focus and overseas expansion plan. The acquisition could play a key role for China, with government researchers predicting that about seven billion tonnes of waste is buried across the country's major cities, and its capital Beijing is currently surrounded by a belt of landfill sites. China is planning to convert 30% of its waste to electricity by 2030, up from less than 5% at present. (biofuelsandbiomass.energy-business-review.com)

Morocco launches first solar power plant

February 5, 2016. King Mohammed VI inaugurated Morocco's first solar power plant, a massive project that the country sees as part of its goal of boosting its clean energy output. Prime Minister Abdelilah Benkirane and French Environment Minister Segolene Royal were among local and foreign officials who attended the opening on the edge of the Sahara desert, around 20 kilometers (12 miles) outside Ouarzazate. Royal said the project gave "great hope to all countries with a lot of sun and desert" who could also use solar panels to produce electricity. With an electricity production capacity of 160 MW, Noor 1 is supposed to allow Morocco to significantly reduce emissions of greenhouse gases. The project's next phases - Noor 2 and Noor 3 - are to follow this year and next, and a call for tenders is open for Noor 4. Once all phases are complete, it is to be "the largest concentrated solar power plant in the world" and produce 500 MW of electricity, providing power to more than one million Moroccans by 2018, its developers said. It is to reduce Morocco's carbon emissions by 760,000 tonnes per year. That would be equivalent to about one percent of Morocco's CO₂ emissions of around 56.5 million tonnes in 2011, according to World Bank figures. The solar plant's launch comes as Morocco seeks to raise its renewable energy production to move beyond this heavy dependency and face growing electricity consumption set to quadruple by 2030. Morocco, to host next year's world climate change conference COP22, aims to reduce its greenhouse gas emissions by 32 percent by 2030. (english.alarabiya.net)

Yahoo Japan to host online auction of solar power plant

February 3, 2016. Yahoo Japan is set to host the country's first online auction of an unfinished solar power station. Bidding on the 500 KW plant, which is to be built in Hiroshima, will start on February 12 at ¥161 mn and close on February 19, or when an unspecified target price is reached. Industry experts said dozens of similar auctions may follow this year as wealthy Japanese trade in an asset that confers generous tax benefits to their owners and is already the focus of a brisk secondary market. West Energy Solution said that previous processes for finding potential buyers for solar stations had been laborious as they involved local banks and personal introductions. The auction follows a three-year frenzy of solar plant construction in Japan, as entrepreneurs look to exploit generous tax and price incentive programmes before they are reduced. Analysts said the major driver in building small-scale solar plants was that it offered the chance for accelerated tax depreciation — a significant incentive for individuals and companies wanting to lower their tax bills. The solar boom has transformed large chunks of Japan as disused industrial zones, former landfill sites and efforts to secure cheap, sun-facing strips of land have seen hundreds of loss-making golf courses repurposed. (www.ft.com)

USC researches develop new process to directly convert CO₂ into methanol

February 3, 2016. Researchers from the USC University of Southern California found a way to directly convert carbon dioxide (CO₂) from air into methanol fuel. The work is intended to stabilize the carbon dioxide amount in the atmosphere using renewable energy to transform the greenhouse gas into its useful fuel. Methanol is used as clean-burning fuel for internal combustion engines and for fuel cells. It is also used as a raw material to produce many petrochemical products. (refiningandpetrochemicals.energy-business-review.com)

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