

MONTHLY

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ENERGY UPDATE

Exclusive Interview

Allard Nooy, CEO, InfraCo Asia

Special Report:

**1st Int'l LNG
Conference 2020**

**Inept rulers even
unable to continue with
ongoing projects**

**Action required not an
energy emergency**

**Our messed-up
power sector**

**Train service to Thar,
a dream or reality?**





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CONTENTS



25

Improved access to clean and renewable sources of energy will unlock greater potential for economic development in Pakistan

Exclusive interview of Allard Nooy, InfraCo Asia CEO



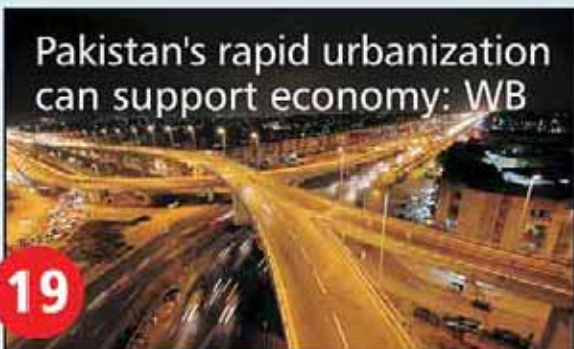
09

Train service to Thar a dream or reality?



11

Actions required not an energy emergency

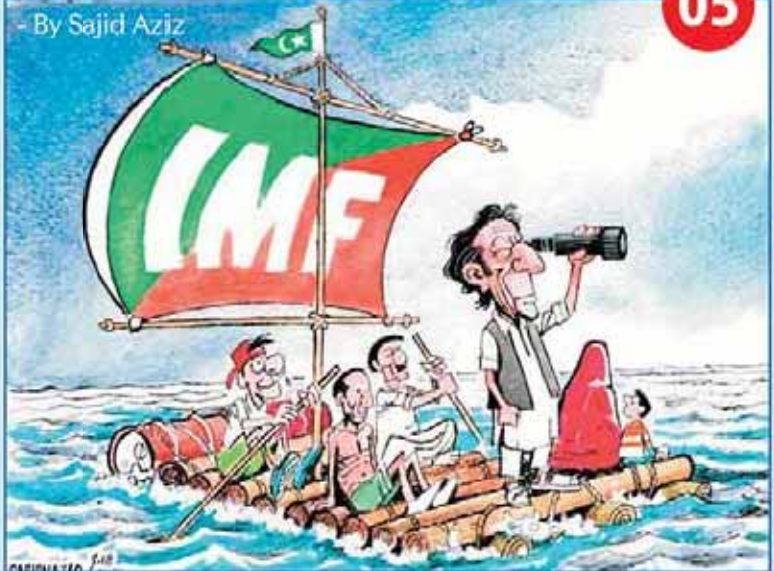


19

Pakistan's rapid urbanization can support economy: WB

Inept rulers even unable to continue with ongoing projects

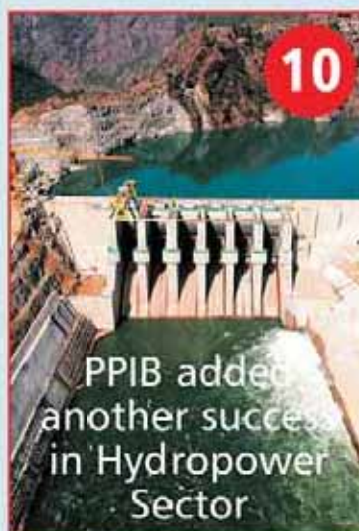
By Sajid Aziz



05

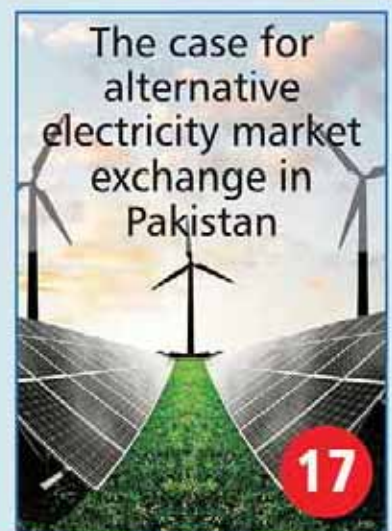


28



10

PPIB added another success in Hydropower Sector



17

The case for alternative electricity market exchange in Pakistan

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From the editor's desk...

Inflation goes to an unacceptable level

The present rulers of Pakistan have given almost a brutal blow to the country's economy and led it to a near-collapse in such a short period of 18 months. According to country's prominent economic and financial analyst and Chairman, FPCCI's Standing Committee on Budget and Audit, Ashfaq Tola said that CPI inflation has increased by 12.40% in Feb 2020 a sharp increase of 6.80% over a year ago. Tola said that the retail prices of essential food items are too high for the common man, badly affecting their spending capacity.

He quoted Pakistan Bureau of Statistics (PBS) that the prices of the following items have increased; Onions by over 100%, pulse moong by 84%, potatoes by 83%, fresh vegetables by 62%, pulse mash by 51%, sugar by 37%, vegetable ghee by 33%, wheat by 30%, cooking oil by 27% and chicken by 14%. Supply-side shocks, poor price control mechanism, and lack of federal and provincial coordination have led to unprecedented levels of inflating food prices in rural and urban areas. Inflation was recorded two years ago at a manageable and acceptable rate of 5 to 6%. This has unfortunately reached unprecedented levels of 12.4% thereby severely denting and restricting Pakistan's potential growth.

He urged that State Bank of Pakistan should target core-inflation instead of chasing down 'headline inflation' which provides reasonable space to cut the policy rate. The outbreak of coronavirus spreading across the globe has affected global oil prices, financial markets and weakened global demand. However, the Federal government of Pakistan has passed on a 'negligible' impact to consumers which will further reduce inflation in March going forward.

Despite continuing hue and cry and experts advice, the government is adamant to give any kind of relief to the exporter, freezing of the electricity tariff of 7.5 cents(kWh), and gas at \$6.5 per unit (million British thermal unit) for zero rated industries to restore confidence of the private sector, and stimulate exports of the country. This extremely alarming situation is feared to result in a biggest economic chaos deliberately created by the present govt.



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Inept rulers even unable to continue with ongoing projects

World Bank expresses dissatisfaction with the PTI's performance

By Sajid Aziz

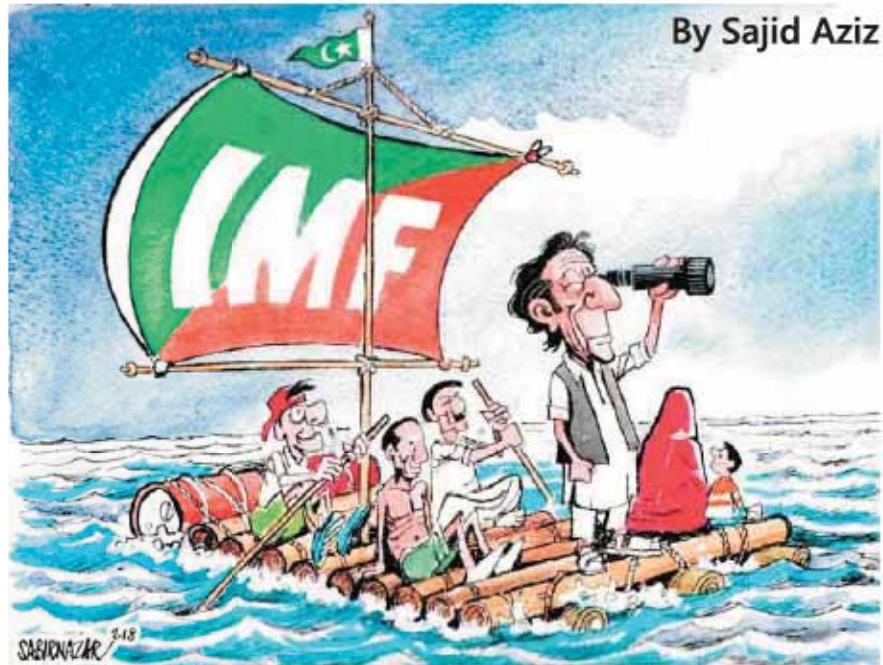
PTI now sailing in the same boat along with PPP and PML-N, has fully proved itself incapable for doing any good to the country or extending any relief to the people of Pakistan, could not execute or implement any development project during its almost two-year rule. The previous two regimes though diving in the sea of corruption but still maintaining some governance and were running the country sans hurting or abandoning any such project but the PTI has a track of ruining a number of development projects and consuming their already allocated funds into their uncalled for non-developmental expenses.

It we look towards the outer world the PTI has become a laughing-stock globally due its childish way of running the government affairs. Except IMF, several foreign donor agencies and NGOs have declared the PTI government most inept government in the history of 7 years.

The Prime Minister Imran Khan, has not only held back all the development funds meant for Karachi, but even did not release Karachi's funds already allocated in the federal budget during previous regime.

How the ruling group is incompetent to continue with ongoing projects or even foreign-funded projects, the Water Sector Capacity Building and Advisory Services project, WCAP is the worst example of its so-called governance as like the previous regimes PTI has failed to keep a small project of \$73 million on track, which was conceived 12 years ago to ensure better management of water resources in the Indus River basin.

The Water Sector Capacity Building and Advisory Services (WCAP) project can be a classical case study, which the World Bank has finally declared as "unsatisfactory" after losing its last hope to revive the scheme. The project had been approved by the Washington-based lender in June 2008. The original completion



date of the project was February 2014, which had been extended to June 2021. In its latest report on the Water Sector Capacity Building and Advisory Services project, known as WCAP, the World Bank has described progress on the project as "unsatisfactory", a notch below the previous rating of moderately satisfactory. The report has been made public this week by WB.

The project implementation following the additional financing approved in 2015 continues to be slow and well behind agreed work plans, stated the report. "The project targets cannot now be met in the time remaining for project implementation," noted the report. A joint midterm review by the bank and implementing agencies in June 2019 agreed, in principle, on project restructuring and a correction to the amount of IDA credit, it added.

Since 2008 the country has been run

by three mainstream political parties - the Pakistan People's Party (2008-13), Pakistan Muslim League-Nawaz (2013-18) and now the Pakistan Tehreek-e-Insaf. Since 2008, the project had been overseen by the Ministry of Water and Power till 2018. Now, the project has been given to the Ministry of Water Resources after the PTI government separated the water division from the power division. During the 12-year period, there was one common factor in all these governments - the bureaucracy. In its previous reports, the World Bank had also blamed the bureaucracy for the delay in execution of the scheme.

Without achieving any targets, Pakistan spent \$40.7 million out of the total loan of \$73 million, showed the World Bank report. The stated project objective was to improve the management and investment planning of water resources in the Indus River basin. With Pakistan

being a water-deficient country, the interventions planned under the loan were aimed at enhancing the economic usage of the scarce resource, improving governance and enhancing technical efficiency. During the PML-N government's tenure, the Ministry of Water and Power's desire to keep control over the project through its grade-21 officer stalled progress on the scheme.

The proposed actions on the institutional capacity building were aimed at timely completion of the current World Bank-funded projects. Project documents showed that due to delay in the construction of ongoing hydroelectric power projects the country's gross domestic product (GDP) would be 1.36% lesser.

In November 2015, the World Bank approved an additional credit of \$35 million to scale up project activities and consolidate the gains made under the

initial phase. The board had also extended the project implementation period by five years and five months to allow time for the implementation of new and scaled-up activities.

In June 2008, the World Bank initially approved a \$38-million loan to improve management and investment planning of water resources in the Indus River system. However, project implementation was slow in the first three years. There was a plan to increase the number of modern tools operational and used for decision-making from two in 2008 to 13 in 2021.

No progress could be made on this indicator until today, according to the World Bank report. The loan had also been secured to upgrade 90 telemetry stations but not even a single station could be upgraded, said the report. The project design included establishing seven decision support tools for water re-

source management but there was no progress on this target too, stated the report. Water balance and flow data could not be made accessible to the public, said the World Bank.

The three successive governments could not carry out one assessment for improved operations of the hydraulic infrastructure in the past 12 years. Due to bureaucratic tussles, work on important studies like upgrading capacity of the Federal Flood Commission in managing floods and upgrading of the Master Plan of Flood Management of Hill Torrents of Pakistan was also delayed.

Like the Karachiites who are moaning due to step-motherly treatment with the most important megacity - Karachi and bread-earner for the country, the entire Pakistan is now totally fed up with these rulers who taking anything into consideration are continuing befooling the common-man. ■

Oil prices set for biggest weekly drop since 2008

Oil prices were set for their biggest weekly slide since the 2008 financial crisis despite a 5% bounce, as the coronavirus outbreak threatened demand and crude producers promised more supply.

Brent crude was up \$1.83, or 5.5% on the day, at \$35.05 per barrel by 1100 GMT but were still 23% lower on the week – the biggest weekly drop since December 2008.

US West Texas Intermediate (WTI) crude was up \$1.54, or 4.9%, at \$33.05 per barrel but was also on track to lose a fifth of its value over the week.

"It's been a very rough week and so it's not impossible people are locking in ahead of the weekend," said Michael McCarthy, chief market strategist at CMC Markets in Sydney.

World stocks were also set for their worst week since 2008, with the coronavirus sparking panic selling across markets.

Adding to pressure on oil prices, already knocked by the virus as fewer people travel and business events are scrapped, major oil producers were



pumping more crude into the market.

Saudi Arabia, the world's largest exporter, and the United Arab Emirates offered more to customers after OPEC's talks with Russia and others on supply restraint collapsed last week.

Russia, the world's second-largest producer, has shown no interest in agreeing to further output curbs with the Organisation of the Petroleum Exporting Countries (OPEC).

Russian oil producers met Energy Minister Alexander Novak on Thursday but did not discuss a return to the deal. The head of Gazprom Neft said it

planned to hike production in April, following the talks.

"It's a problem of an oil price war in the middle of a constricting market when the walls are closing in," US energy historian Daniel Yergin said.

Goldman Sachs said it now expected a record high oil surplus of 6 million barrels per day (bpd) by April, in a global market that usually consumes about 100 million bpd.

A Reuters survey showed analysts slashed their forecasts of Brent crude prices to \$42 a barrel

on average in 2020, compared to the \$60.63 consensus in a February poll.

"The avenues for a quick off-ramp to the Saudi/Russia price war appear to be closing," RBC Capital Markets analyst Helima Croft said.

But the price slump may reduce some supply, by forcing out more costly producers.

Energy companies in the United States, which has surged to become the world's biggest crude producer because of a boom in pricier shale oil, are preparing to cut investment and drilling plans due to plunging prices. ■

Our messed-up power sector

By Khaleeq Kiani

The energy sector poses one of the biggest challenges the country faces today. It stands out as the biggest drain on both the national exchequer and the public purse. The inability of successive governments to turn around the power sector on a sustainable basis has, in fact, become a source of national disgrace.

The circular debt continues to build on. Its root cause continues to be high and stubborn system losses. No effort will ever succeed unless this black hole of an aggregate 25 per cent loss is plugged. That roughly translates into a Rs450 billion revenue loss per annum at the current rate.

Repeated tariff increases have only had an add-on impact so far, resulting into a vicious cycle. Imagine a situation where average electricity sale rates increased from Rs12.50 per unit in 2017-18 to Rs17.60 per unit in December 2019 – the latest applicable rate – showing an increase of Rs5.10 per unit or 41pc.

Despite this, the overall circular debt increased from Rs1.13 trillion in June 2018 to Rs1.93tr at the end of 2019. This is a whopping Rs800bn or 71pc jump, according to the power-sector regulator.

Average transmission and distribution (T&D) losses of about 18.5pc were contributing Rs185bn to the circular debt per annum about two years ago. The losses have since come down by about two percentage points. However, the overall contribution of 16.5pc T&D losses to the circular debt now works out to be about Rs280bn, up Rs95bn, as the power rates have increased.

Net receivables of energy companies increased by 27pc in 18 months

An even bigger problem lies in unreliable data in the official domain. As opposed to the data released by the National Electric Power Regulatory Authority (Nepra) – which cannot be brushed aside as it approves the accounts of all power companies – the government officially confirms that the overall circular debt was Rs1.78tr at the end of 2019, reflecting a 34pc increase from Rs1.33tr since September 2018 when the PTI government came to power. The difference between the debt figures being claimed by the Power Division and Nepra works out to be



Rs144bn. Such a massive discrepancy brings the authenticity of power-sector data into question. Nepra publicly confirms that about Rs500bn-Rs600bn additional allowances have been built into the consumer tariff over the past 18 months or so.

The Power Division claims that the total circular debt (by the end of 2019) included Rs978bn owed to both public and private power generators besides the liabilities of Power Holding Private Ltd (PHL) – payable to banks for loans taken in the past to pay generators – amounting to Rs804bn.

Nepra puts the circular debt amount (as per the Power Division's definition) at Rs1.12tr, which is owed to both public and private power producers, and confirms the PHL debt at Rs804bn. The Power Division also claims credit for tariff rationalisation, recovery drives, anti-theft campaigns and system modernisation.

"Due to these measures, the addition is expected to be reduced to Rs130bn in 2019-20 as per the circular debt capping plan," the Power Division said two weeks before Prime Minister Imran Khan announced that energy rates would remain frozen until June. That acts as a brake on the debt capping plan at least for now.

In a report finalised at the end of 2019, the Power Division found the net power sector receivables had increased by about 27pc in 18 months. Net receivables of all distribution companies (Discos) increased to almost Rs1.04tr from Rs817.5bn at the end of June 2018, show-

ing an increase of 27pc or Rs220bn. Total private-sector receivables during the period also increased 24pc to Rs830bn from Rs670bn, a rise of Rs160bn.

Data showed that receivables increased 137pc from the federal government that was driving the power-sector efficiency and recovery drive. As such, receivables from the entire public-sector consumers increased almost 41pc to Rs206.2bn at the end of 2019 as opposed to Rs146.84bn in June 2018. As if that was not enough, receivables on account of government subsidies also increased 25pc to Rs121.5bn from Rs 98bn.

On the other hand, total recoveries against total billing in July-December 2019 declined by almost 1pc to 92.5pc from a year ago. The recovery against the billing of seven out of 10 Discos dropped during the first half of the current fiscal year. About Rs76bn against the total billing of Rs923bn could not be recovered during the six-month period.

Also, the total billing for July-December 2019 increased almost 24pc to Rs923bn against Rs744bn a year ago, which indicates a higher tariff impact. Total collection in July-December 2019 amounted to Rs847bn against Rs677bn in the same period of the last fiscal year, an increase of 25pc.

Data also revealed a continuous increase in the amount of receivables from habitual defaulters. The amount stood at Rs477bn at the end of June 2019, but went up by about Rs48bn to Rs525bn at the end of December 2019. The amount was Rs405bn at the end of June 2018. ■

Train service to Thar, a dream or reality?

Though it's a heartening news for the general public in interior Sindh, that federal government is planning to install railway track from Chhor to Islamkot in Thar in order to transport Thar coal to Port Qasim. For this purpose 145 kilometer long rail track would be laid down that will not only transport Thar coal for export and for other coal-powered power plants including 600 megawatt Port Qasim Coal power plant and Sahiwal coal power plant but also creating a hope among the people of Thar to have a passenger train as well.

The 145-kilometer rail track will be laid from Chhor, the district of Thar to Islamkot to transport coal from Thar Coal field to Port Qasim in Karachi and up-country. The rail project is in addition to the installation of 1,320-Megawatt mine mouth power plant in Thar Coal Block-VI could be included in CPEC-funded project. Feasibility study of the track and the rolling stock on Build Operate Transfer (BOT) basis could easily be conducted.

A railway line to transport coal from Thar to Ketī Bandar is also under study. Ketī Bandar is located about 107 km from Thatta city and 150 km from Karachi via Gharo. According to an energy professional who worked on Thar coal mining and power plants projects, coal from Thar can only be used at the mouth of the mine to produce power. It is brown coal, has high moisture and ash content. Shahid Malik, an energy entrepreneur whose firm is installing a project at Thar to gasify lignite says "key is how much coal needs to get to Sahiwal for the 1320MW imported coal fired plant.

But should we rely on a regime that is befooling Pakistan's poor masses for the last one and a half years and during the tenure of most non-serious member of Imran Khan's cabinet? Yes, Shaikh Rasheed has already written his name in railways' history, having most number of fatal accidents during his tenure, whose just 18-month long tenure as minister for



By Sajid Aziz

railway dozens of train accidents that have claimed lives of hundreds of passengers. Despite the fact too many fatal accidents and loss of billions of rupees, Shaikh Rasheed has not taken any action or step to avert such tragic incidents nor he resigned from this sensitive post.

Sh. Rasheed instead of resigning from minister ship, has remained in non-serious activities including intermingling with models and actresses. His moral duties too have restricted to make false statements and tall claims. So, we can only hope to have this project realized and commissioned. Coal is costing as much as LNG to these plants in Punjab". Can Thar coal be shipped north to coal-fired power plants in Punjab? "This is possible as long as you have railway connection. Else it's very difficult", says energy professional. According to some observers, Thar coal cannot be transported due to long-distance transport [from Karachi to Sahiwal].

"Thar coal shelf life is 10-15 days. So, it can be utilized in nearby areas, for example Karachi", says the energy professional. The US\$1.8bln plant - part of the China-Pakistan Economic Corridor (CPEC) early harvest project, is at the

load center with three major power consuming cities in its vicinity i.e. Lahore, Faisalabad and Multan, and meets the electricity demand of more than 4 million typical households. The government buys electricity from the power plant at 8.3601 US cents/kilowatt hour.

But should we rely on a regime that is befooling Pakistan's poor masses for the last one and a half years and during the tenure most non-serious member of Imran Khan's cabinet? Yes, Shaikh Rasheed has already written his name in railways' history whose just 18-month long tenure as Minister for Railway over three dozen train accidents that have claims lives of hundreds of passengers. Despite the fact too many fatal accidents and loss of billions of rupees, Shaikh Rasheed has not taken any action or step to avert such tragic incidents.

If realized, the train project in Thar could bring prosperity in a neglected Thar area and besides giving a boost to the Thar economy it can bring a significant relief to our ailing economy. However, Imran Khan has given a lesson to the nation that one should never rely on him and his cronies. ■

PPIB added another success in Hydropower Sector

The Private Power and Infrastructure Board (PPIB)'s initiated 102 MW Gulpur hydropower project has been commissioned on 10th March 2020

Gulpur Hydropower Project located on Pooch River in District Kotli, AJ&K was conceived as a Raw-Site by Private Power and Infrastructure Board (PPIB), Ministry of Energy Power Division for development in private sector under Policy for Power Generation Projects, 2002. In accordance with the terms of Letter of Support (LOS) issued by PPIB to Mira Power Private Limited; the Korean Sponsors namely KOEN, DAELIM and LOTTE along with lenders Asian Development Bank (ADB), IFC, K-EXIM achieved Financial Closing in October 2015.

With the dedication of Project Sponsors' team and active support and facilitation from government departments, particularly PPIB and AJ&K Private Power Cell, the Project has been completed in around four and a quarter years' time. The power plant is equipped with 3 number vertical Francis Turbine units having capacity of 34 MW each. The construction and installation of electro-mechanical equipment of Project costing US\$ 317 Million has been completed and commissioned on 10th March 2020. The Project will be operated as run of river



scheme with few hours daily peaking operation. It has a small dam structure cross the River having width of 80.5 m, Length 205 m and Height 66 m.

The Power Plant with head of about 58 m and design discharge of 201 cumec, has the capability to generate 475 million

units of clean & affordable electricity. It is connected with the National Grid through 132 KV Transmission line of Islamabad Electric Supply Company (IESCO). During the term period the Government of AJ&K will receive Rs. 71 Million annually on account of water use charges.

The Power Plant, under the terms of the Power Purchase Agreement (PPA) signed between Central Power Purchasing Agency (CPPAG) and Mira Power Limited, will be operated and maintained by Mira Power Limited for 30 years. After completion of 30 years term, the Plant will be transferred to AJ&K Government at a notional cost of Re. 1 only.

Gulpur Plant is the third success in the hydropower development history of PPIB after 84 MW New Bong Escape and 147 MW Patrind hydropower projects which were commissioned in year 2013 and 2017 respectively. PPIB anticipates enhancement of investors' confidence on Power Policies of the Government of Pakistan and determined to add more landmarks in hydropower sector of Pakistan in years to come. ■



The Next Decade Requires Disruption Inspiration

Actions required not an energy emergency

By Imran Shaikh

Pakistan needs to adopt most favourable energy scenario by evaluating past data and taking action on the root cause rather than a sensational declaration of Energy Emergency or panic of circular time bomb and of LNG supply chain facing collapse or finger pointing.

Fact 1 In its flagship State of the Industry Report 2017-18:

OGRA noted that domestic gas production would continue to decline from about 3.3bcfd in 2017-18 to less than 1.6bcfd by 2028 while the gas demand would keep going up to reach 8.3bcfd by that year with shortfall increasing to 6.6bcfd by FY2028."

Natural gas share in our primary energy mix is around 48pc and share of re-gasified LNG in the overall gas supply increased to 23pc in FY 2017-18. That made up the shortfall due to steps undertaken by MoE.

The power sector was the main consumer of natural gas during FY 2017-18, consuming 37pc, followed by domestic sector 20pc, fertiliser 17pc, captive power 10pc, industrial sector 9pc, transport 5pc, and commercial sector having 2pc share.

OGRA estimates that despite the induction of all the import options, including LNG, TAPI and IP pipelines, the total supplies would decline to 3.7bcfd by 2028, creating a net shortfall of about 4.6bcfd.

Fact 2 Steps to Improve Supply in Parallel to E&P Measures:

Starting with the bundled approach in 2006-11: Mashal Integrated LNG project (terminal + LNG supply) was awarded to a Consortium of GDF Suez and 4Gas, for 2.75 mtpa 3.95% of Brent + 0.75 (Max of HH/NBP) + 1.58, for 0.75 mtpa 15% of Brent + 0.50. Supreme Court rolled back the Mashal project in 2011. Then in 2011/2012: 4Gas submitted its bid for the SSGC/LPG Retrofit project. This 165 Mn USD Project required 22 months to complete with tolling price of 80 Cents/MMBTU ; daily capacity payment of USD 320,000 on take or pay basis. The project was shelved. The PPP Government subsequently issued integrated LNG Project tender which was scrapped by SSGC as bid submittal by PGPL was 19 minutes later than the time

stipulated in the tender and GEI's bid bond was not of the desired amount. 13.82% of Brent + Shipping cost \$0.50 + \$ 0.30 on account of import expenses. 2013: PPP government announced fresh bidding (attempt 4) for the same integrated LNG import project; term was 15 years on take or pay basis for 400 MMSCFD. Three were declared as qualified bidders. At Brent of USD 113/barrel; ETPL's LNG Price: USD 15.856/MMBTU, Terminal Tolling: USD 1.761/MMBTU, Total Bid: USD 17.618 /MMBTU

PGPL's LNG Price:

USD 15.936/MMBTU, Terminal Tolling: USD 1.77/MMBTU, Total Bid: USD 17.704/MMBTU

GEI's LNG Price:

USD 16.344/MMBTU, Terminal Tolling: USD 1.816/MMBTU, Total Bid: USD 18.16/MMBTU

ETPL's lowest bid was declared non-compliant as an alternate price, quoted per PPRA rules of ~ \$16.56 per mmbtu, based on Henry Hub formula was not acceptable to SSGC. SC again intervened.



Fact 3 Unbundled approach per LNG Policy prepared by PPP Government resulted in success:

For LNG in March 2013, QG had offered GOP a price proposal of 14.9% of Brent + 0.60. In 30th Jan 2015, price proposal received by, PNC was at 14.4% and on 7th May 2015, Qatar made a counter offer of 14.1% to Consultant (FGE) recommended offer of 14-14.25%. PNC countered with 13.7%, slope and Qatar final offer was of 13.9% with statement of no further negotiations. Take it or leave it! Subsequent to the out of box 5 year Term Tender and its results, the PNC decided to further negotiate price with Qatargas and on 6th Jan 2015, Qatargas agreed to request by Minister for P&NR to match the slope of 13.37%, the lowest price achieved in the 5 year term tender- a saving of USD 700m. Higher if taking into account MoE the first offer. For terminal awarded against tender, in 2015 and 2017, EETL terminal became operational at \$272,000/\$228,000 per day (200 mmscf throughput volume in year1 and 400 mmscf in the year2) and PGPL at \$240,000 per day (600 mmscf). The fixed terminal capacity payment included payment of interest, lease and O&M cost of FSRU, custom duty etc and no escalation. Net profit results in about USD 150m profit over 15 years and not \$1.5b suggested at various forums by Klasra, Mateen, Sheikh Rashid, Malick, Saleem, Sattar. Further more, June 2019 determination states terminal tariffs as 0.4012 (not 0.66) and 0.3922 USD/mmbtu for Engro and PGPL terminals, respectively. Also Bangladesh is paying USD 90m per year to its terminal operator vs USD 88m for PGPL and USD 83.2m for EETL per the LSA.

Fact 4 At Brent of \$40, LNG is cheapest of imported gas:

IP Gas at Border : \$5.70 per MMBtu, TAPI at Border: \$5.9 per MMBtu, DES LNG: Mashal \$6.94/MMBtu Integrated : \$6.01/MMBtu, Qatar first Offer: \$6.56 /MMBtu, Qatar and Gunvor @13.37%, \$ 5.35/MMBtu. LNG has saved USD 5b over last 5 years after it substituted the expensive furnace oil over 19 mt LNG imported since 2015 (The News Jan8, 2020) and GDP saving of 2%.

Fact 5 Opportunity Now Due Over Supply:

Goldman Sachs, says bearish cycle might end in 2021 due to lower production in Europe and in the U.S., along with higher LNG purchases, would help tighten up the market and forecasts

JKM prices in the winter of 2020/2021 at \$5.80/MMBtu, and summer 2021 prices at \$5.50/MMBtu.

Misrepresentation of tender results of GSPC India for spot cargoes to be delivered for Apr, May and June (not Jan/Feb/Mar) heard awarded at \$2.50-\$2.60/MMBtu, \$2.70-\$2.75/MMBtu and \$2.85-\$2.90/MMBtu, respectively, continues as Pakistan cargoes purchased in Jan 2020 (not Apr) were between USD 6.5-8.5/mmbtu and Feb (not May) were of USD 7.1-8.2/mmbtu. Pakistan April/ May/ June prices should be similar or better to India at Brent avg. of USD 30. India per its Qatar contract should have gas price slightly higher than Pakistan today.

So why is Pakistan not positioned and lagging in taking advantage of the global gas glut when gas is selling in the future at \$2.50/MMBtu and price

over-supply period will not last as world GDP improves, Corona virus impact on economy of China reduces and the Russia/Saudi Arabia oil turmoil ends but potential investigation of decisions are restrictive.

Fact 6 Options to Reduce Energy Cost

Force Majeure: PetroChina has issued FM, the second Chinese buyer to refuse shipments. The combination of falling economic activities, a Northern hemisphere warm winter and now the coronavirus effect, is making the LNG supply situation and the pricing of LNG under LT SPAs more critical.

SPA Discussions:

The purpose of a long term LNG SPA is to share risk and rewards incl. economic rent between buyer and seller



conscious buyers are already taking advantage of record low prices and soaking up some of the excess supply. We have ability to buy 4 cargoes on spot.

Fact 6 Why Inaction?

Partly its already been done due to the 8 cargoes procured from Gunvor, QGas and ENI. Further measures by ordering additional 4 cargoes per terminal capacity availability and ensuring its utilization despite lack of demand due to the economy by enforcement of utilization of LNG in the power sector in March 1st week of under 140mmscf vs demand of 240 mmscf, SNGPL securing additional customers, providing to export industry and CNG, MoE reviewing indigenous gas production (average price proposed by OGRA at Rs 707/785 per mmbtu), export industry to create space for lower priced LNG, deferring cargoes of LT contracts if beneficial, reviewing PPRA rules for gallop international tender or reopening signed SPAs if deemed prudent; all of which would result in actions undertaken with utmost professionalism and good faith as the

on an equitable basis over the life of the SPA. The tsunami of new LNG production now hitting the market mainly from the US, Australia and Russia is unprecedented. LNG sellers and buyers need to sit down together to analyse the SPA having supply problem and/or the oil indexed price and work out a solution. If the parties to the LT LNG SPA are unable to find a solution then they should seek independent professional help. European gas industry went through a similar problem period some 10 years ago.

Depending upon the governing law and upon the specific terms used, there are potentially good arguments for both the Covid-19 event being effective as a reason to excuse or suspend performance [based on force majeure] and, also, for it not being a strong claim.

However, both buyer and seller need to tread very carefully. If a buyer is allowed to claim hardship under a SPA and is also able to demonstrate to a court of suffering hardship as a result of the Covid19 event (and/or price indexation based on oil prices and/or the fact it had

been a very warm winter with low gas demand), then a judge acting under English law has in court the power to annul the SPA.

Defer SPA cargoes and issue Gallup tenders:

Analysis by MoE of LNG contracts would result in better decision making to cancel, renegotiate SPAs and procure on spot cargoes or tender for another term. It is to be noted that the two 5 year contracts expire in 2020 and 2021/22, respectively. Utilize knowledgeable resources to assist in using hedge/derivative to reduce cost over coming years and take advantage of this life time opportunity

Terminal Capacity:

Be allocated on "use it or loose it" basis and not monopolized by traders as is happening presently; EETL and PGPL are allocating capacity to only Shell and Trafigura. This is anti competitive and will not develop imports by private sector.

Gas Pricing:

Only 25% gas is imported out of the total demand of 4 bcfd. Basket of gas (local and imported) needs to be established for price determination (like HH, NBP, JKLM) with one price for gas in the country with subsidy given through BISP and other budgetary provisions. This, combined with above and tendering for 4 cargo slots available at PGPL, will further reduce the average gas basket price.

Port Charges:

Port Qasim ship handling charges need reduction first to 500K\$ till 2021 and then to 250K\$. Also, \$100K charges per vessel for port maintenance be stopped with immediate effect and over USD 35m collected to date under this head be used to settle circular debt of gas.

GOP Revenue and Investment in Liquefaction Capacity:

For MoF and MoE consideration

Pakistan First:

Use knowledgeable persons and talent available to move forward in achieving our collective goals by coming together and undertaking dialogue. ■

The writer is former MD, PSO and CEO Engro Elengy

PPL supports SIUT and the Kidney Centre



Pakistan Petroleum Limited (PPL) donated Rs. 10 million to Sindh Institute of Urology and Transplantation (SIUT) and Rs. 5 million to The Kidney Centre (TKC) for provision of quality healthcare to deserving populations as part of its long-term and

diverse Corporate Social Responsibility Programme.

MD and CEO PPL Moin Raza Khan presented the cheque to Professor and Director SIUT Dr. Syed Adibul Hasan Rizvi at SIUT's main premises on February 26. The donation will be utilized for purchase of a Lithoclast surgical machine used in removal of kidney stones.

DMD (AO) PPL Khalid Raza handed over the other cheque to Chairman, Board of Governors TKC Marriana Karim and CEO Abida W. Ahmed at PPL head office on February 27. The funding to TKC is for the purchase of three dialysis machines for treatment of deserving patients suffering from renal diseases.

Speaking on the occasion, Khan reiterated PPL's commitment for the wellbeing of underprivileged communities through its CSR programme implemented in partnership with creditable development organizations.

Over the years, PPL has been supporting SIUT and TKC for treatment of patients, expansion of facilities and provision of equipment. These include a grant of Rs. 12.72 million to SIUT in 2017 for a dialysis unit at its Mehrunnisa Hospital at Korangi, Karachi.

SIUT is considered one of the premier healthcare institutions in Pakistan which extends free-of-cost treatment, involving complex surgeries such as kidney transplants and cancer surgeries, to thousands of patients coming from all over Pakistan.

Similarly, TKC is also a not-for-profit 100-bed medical facility providing complete quality care for nephro-urological diseases, including urological, nephrological and transplant services. ■

PPL holds eye camps in Sindh

In pursuit of the provision of quality healthcare to local communities, free-of-cost surgical eye camps were organized recently in districts Kambar-Shahdadkot and Sanghar, Sindh, home to Pakistan Petroleum Limited (PPL)'s Mazarani Gas Field, Gambat South and Hala blocks. Al-Shifa Trust Eye Hospital was the implementing partner. Annual surgical eye camps are an ongoing feature of the company's Corporate Social Responsibility Programme.

Eye camps at District Kambar-Shahdadkot were held at District Headquarters (DHQ) Hospital, Kambar between March 4 and 6 while a one-day camp was organized at Government Primary School Ghabi Dero (GPSGD), near Mazarani Gas Field on March 5. Earlier, a similar three-day eye camp was held at Shahdadpur Institute of Medical Sciences between February 26 and 28, catering to local communities residing around Shahdadpur, Shahdadpur East and Shahdadpur West gas fields of Gambat South Block as well as Adam and Adam West fields of Hala Block. Additional Deputy Commissioner (ADC), District Kambar-Shahdadkot Amir Hussain inaugurated the camp at DHQ Hospital Kambar, whereas Chairman, Union Council, Ghabi Dero Nawab Shah Nawaz Khan Chandio inaugurated the one at GPSGD.

Over 3800 locals were provided consultation, treatment and medicines at these camps. Among these, more than 2700 patients were provided glasses for near and distant vision and 300 on-site cataract surgeries were carried out. ■

Assets and Tax Amnesty Scheme meant for squeezing more revenue

By Sajid Aziz

Majority of the people think that tax amnesty scheme in the offing is more designed to squeeze revenue while the newly appointed expat adviser on finance has desired that the tax amnesty scheme should be people-friendly, help document the informal economy and bring more non-filers into the tax net instead of just generating funds.

Until now, the general perception which had developed about such an amnesty was by and large inhibitive in tone and substance. Many who should have and could have benefited, particularly traders, small and home-based businesses and those squatting on huge undeclared wealth gained through tax evasion, money laundering, etc. have continued to sit on the fence. What are the features, advantages and benefits (FABs) to them of such an exercise remains a million dollar question. The general narrative is that only the government would benefit from it, not them.

This needs to be addressed. Dr. Abdul Hafeez Shaikh seems to have realized this gap and has attempted to clarify that the idea is people-friendly. But more is needed through articulation from Finance Ministry, FBR, etc. and perception management by other units in tandem.

The inability to do so appears to be government's and the bureaucracy's Achilles heel compounded by media skepticism and negativism—agony, sadness, crime, punishment, etc. sell and facilitate viewership rating rat race. Shaikh has directed the FBR to fine-tune

the scheme to make it simple to understand and easy to implement, an official statement has said, adding that the objective of the scheme should be to make the economy more tax-compliant and documented. That is in our opinion second objective. The first objective to make it people-friendly could attract wider participation. For that to happen, potential gainers should be made aware of the immediate benefits first and advantages in months and years ahead.

Identify and present the low hanging fruits (add some more) to this community, such as 2.5 times or more automatic home equity credit facility or business startup loan if assets are declared and one-time tax paid.

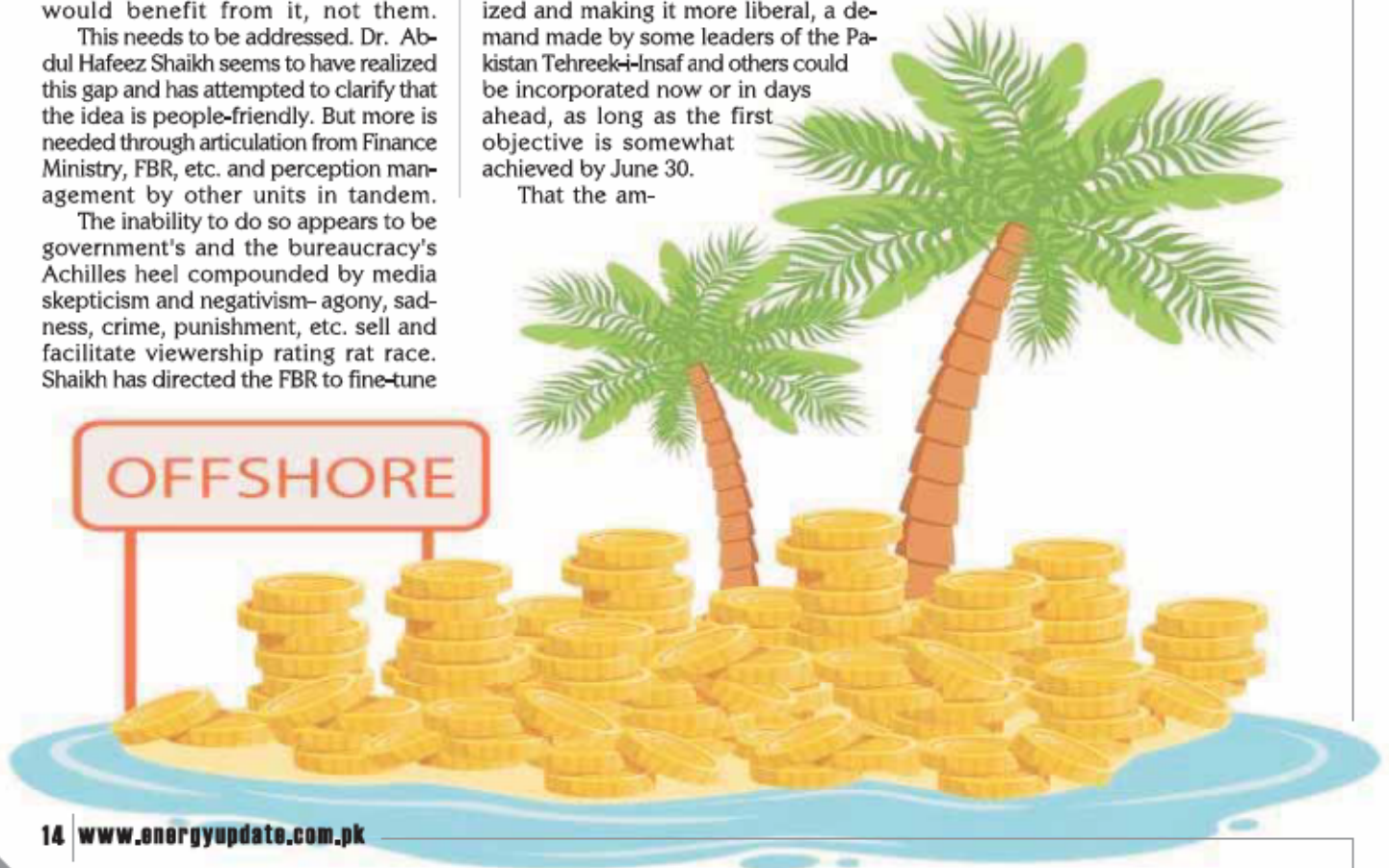
Again, it's all about perception management at the end of the day. The government has the political capital to utilize for this venture.

The business community's demand for a longer period should be incentivized and making it more liberal, a demand made by some leaders of the Pakistan Tehreek-i-Insaf and others could be incorporated now or in days ahead, as long as the first objective is somewhat achieved by June 30.

That the am-

nesty scheme would come into force immediately to enable people to declare assets and pay taxes on them by June 30 may be a herculean task though, but if it is people-friendly, driven by affirmative action for inclusiveness, and not focused on drawing blood, it would definitely be a good start.

Also, re-announcing former PM Khaqan Abbasi's idea—sans political narrowness—of converting CNIC's as NTN would be an added plus. Imagine overnight Pakistan's tax base (theoretically) would quantum jump from 3 million to millions. After all nearly 100 million is part of the informal economy and deserve to be recognized and enabled if the benefits are told. Paying tax or not paying tax or not even filing tax return is another matter that can be addressed incrementally. There's no short-cut except FAB-driven. ■



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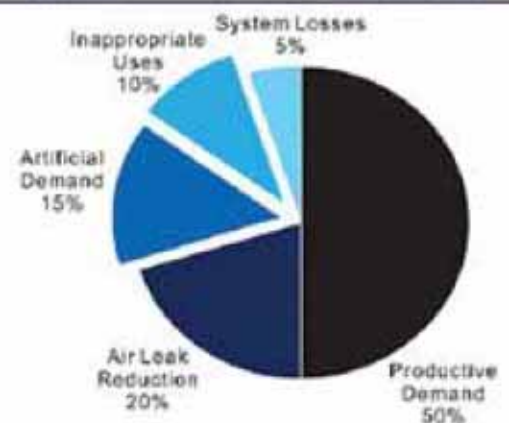


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The case for alternative electricity market exchange in Pakistan

The Competitive Trading Bilateral Contract Model (CTBCM) is a highly intimidating, if not misleading, title.

A new electricity governance regime is being introduced. The name is so intimidating that most people tend to stay away from it.

All that CTBCM is offering is facilitation and institutionalising large consumer choice, wheeling and competitive tariff-based bidding for new investments. One would like to do more to be able to have a functioning and truly competitive market based on tools and systems as applied in many regions and countries.

The system, proposed by the Central Power Purchasing Agency-Guarantee (CPPA-G) and approved by Nepra, does not seem to offer even a beginning in that respect. We would make a case for an alternative market exchange system as per standard practice in international markets.

Proposed CTBCM

The CTBCM system has essentially the following roles or functions. Simply speaking, existing power purchase agreements (PPAs) are transferred from a single buyer - CPPA-G - to several buyers, essentially distribution companies (DISCOs) and possibly large buyers.

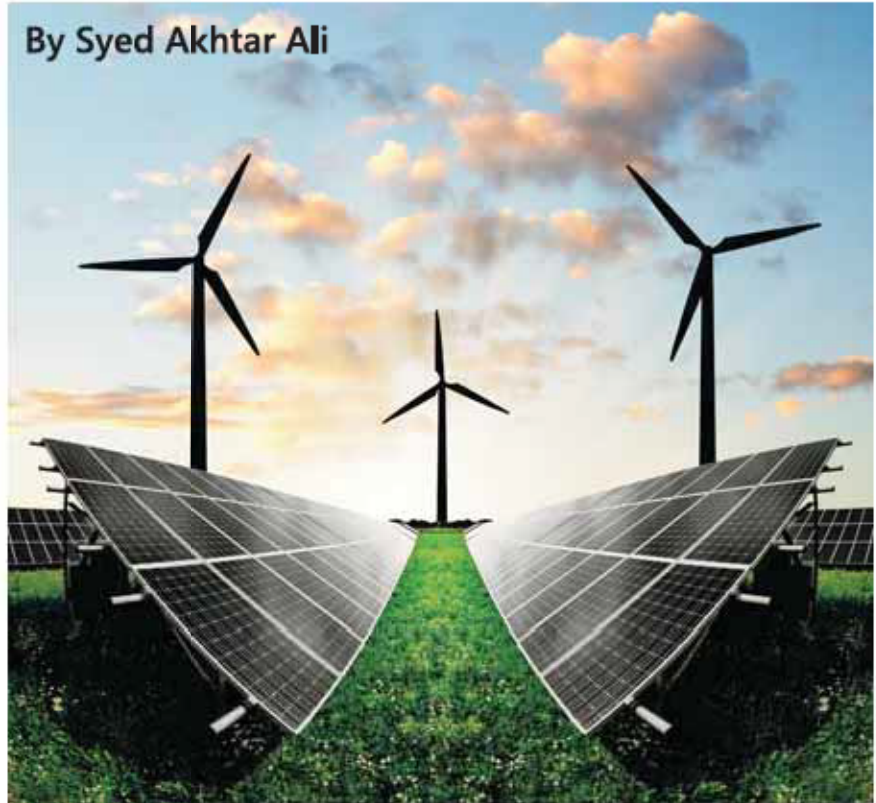
Capacity auction for new investments would be introduced based on competitive tariff bidding instead of regulatory pricing for new electricity investments. Roles of organisations would remain almost the same in the intervening period, which may be quite long as the life of existing PPAs is quite long.

Only recently more than 10,000 megawatts have been added. The Private Power and Infrastructure Board (PPIB) will continue to promote and facilitate investments but as an auctioneer.

CPPA-G will continue to do what it is doing now. It will have a new section. It will be facilitating the conversion of current PPAs into bilateral mode.

Nepra will stop issuing tariffs and will oversee tariff-based competitive bidding undertaken by the PPIB. NTDC will continue to be a transmission company with possibilities of competition in

By Syed Akhtar Ali



transmission. National Power Control Centre (NPCC) would be an independent system operator with more independence. New market players would be introduced like wholesale traders? Wheeling would be promoted. Direct buying by large consumers would be promoted.

Taking govt out of market

The purported objective is to do away with "take or pay" liabilities, sovereign guarantees and government role in the electricity sector.

However, the proposed mechanism may not be able to lead to this destination in the foreseeable future. If nothing else, competitive bidding would be introduced, but in the meantime Nepra is issuing tariffs at a rather fast pace.

From single buyers to multi-buyers need not be such a compelling regime. It is working in India where electricity boards are buying and provisions for

trading among large buyers and sellers are already there under wheeling arrangements in both the countries.

If there are government-controlled DISCOs, what difference does it make, whether it is CPPA-G or a distribution company. Establishment of market exchanges has a much greater potential than CTBCM.

End of uniform pricing?

The most important aspect or consequence of CTBCM will be differentiated tariffs of DISCOs as opposed to the uniform pricing to which Pakistan's economic system is largely wedded.

In federations or even otherwise, electricity prices do vary across states, provinces and regions. The question is are we ready for such transformation and are we preparing for it.

I am not sure if people understand the implications of IPP-DISCO bilateral contracting as proposed in CTBCM. The



issue should have been discussed by high-level policymakers than simply limited to the electricity or energy sector.

Contracts without spot market exchange?

In a country having a history of corruption and collusion, bilateral contracts without market exchange would be a recipe for catastrophe. CTBCM can be amended to have a hybrid configuration.

It is said that a major obstacle to having a market exchange is the longer-term PPAs. The solution may be a virtual market exchange with the following mechanism: PPA prices are taken as hedged prices and market players, as proposed in CTBCM, remain as these are.

The difference is, however, that market players buy and sell in a day-ahead market. Daily market clearing prices are obtained and billed to buyers. Money is credited into the IPPs and wholesalers' account. Reconciliation is done monthly between PPA dues and market clearing prices. CPPA-G either receives or pays the residual.

There may be 25 DISCO buyer units and about 70 generators and 10 wholesalers. Derivative products such as forward prices and capacity auctions can also be introduced to guide new investments and capacity. IPPs may be encouraged under an accounting settlement mechanism to convert to market exchange.

A secondary market may be introduced for the underutilised capacity. It is a transition instrument, converts PPAs into market exchange and inducts new investments through market products like capacity or forward prices.

Alternatively, a small market exchange may be established wherein underutilised capacity and energy may be traded, like India's IEX. Roughly, the same may be done for the gas market.

There are some 56 power plants of 35,000MW, some PPAs are to expire shortly, some have entered into PPA in the last few years, some have and some have not retired their debt.

It may be possible to develop and negotiate mechanism and financial arrangements for transferring PPAs into market domain. A policy would be required. It should be possible to

acquire some liquidity for the market exchange for a period of two years or so.

Central Electricity Regulatory Commission (CERC) in India has announced similar proposals to bring all the electricity generated under one pooled market.

There is an intimidating misnomer that the market has to be very big in order to have market exchanges. Most large and small countries in Europe are members of one exchange or the other. There is an EU directive that most countries should have their own hubs and exchanges.

Will market deliver?

Will the market be able to function transparently? Will it be able to attract investment? Will it be captured by the elite or mafia? Will it be able to facilitate poorer segments' access to energy?

The alternative is government and bureaucracy. Demo models can be run and there may be a phased approach, starting with a market of 10,000MW.

Expertise can be hired. There are exchange-operating companies in Europe,

which have the software, knowhow and experience to run energy exchanges. They would be happy to have a business opportunity. Training activities can be initiated remotely even now on their software.

Concluding, market exchange is too important an institution to be ignored outright. Pakistan's market is no small as the capacity of 35,000MW will double in less than two decades.

Bilateral DISCO contracting is a move in reverse direction when the world has long moved into pooled markets. Bilateral DISCO-IPP contracts would be shifting sector management from a larger stronger system to weaker DISCO organisations involving many risks.

Competitive pooled markets are the order of the day. One is not sure if Nepra has given sufficient thought to its determinations in his respect. Adequate consultation has not been made on all the available options and a prescription is being implemented as a fait accompli without considering and evaluating options.

Higher national bodies such as the Senate Standing Committee on Power and others should be consulted on the larger social and economic impacts. The issue is too big to be left to technicians alone. ■

The writer is former member energy of the Planning Commission

Medico Legal joke of the day



A recent article in the Times reported that a woman, Anita Patel, has sued a reputed Hospital, saying that after her husband had surgery there, he lost all interest in me. A hospital spokesman replied in court : Mr. Patel was admitted for cataract surgery. All we did was corrected his eyesight.

Pakistan's rapid urbanization can support economy: WB

■ By Nawaz Khuhro

A new World Bank report says Pakistan's rapid urbanization can support efforts to transform the economy as the country is the most urbanized large country in South Asia, with 36 percent of the population living in urban areas and urban centers account for over half of Pakistan's GDP.

According to the report, the pronounced youth bulge, coupled with continuing rural-urban migration, provides a large labor pool. While until the late 1990s much migration was destined for Karachi, the past 20 years have seen significant migration from smaller cities to larger cities in Sindh, Khyber Pakhtunkhwa (KP) and Punjab. Some urban centers are showing emerging signs of functional specialization. For instance, manufacturing, finance and high-tech sectors are mainly concentrated in larger cities whereas construction, mining and agriculture-related sectors are more prevalent in smaller cities.

However, Pakistan is not leveraging its cities optimally and transformation seems significantly slower than in other countries with similar urbanization and spatial agglomerations. While the concentration of economic activities in urban areas brings considerable benefits, it can also create congestion costs (traffic, pollution, price increases and crime) that can at times outweigh the benefits of agglomeration, negatively affecting productivity and growth. Whether the agglomeration benefits outweigh the congestion costs will depend on interventions to maximize the benefits, and to manage and mitigate the costs. Digital development holds great promise as a driver of structural transformation.

Increasing digitization, and particularly the proliferation of the internet, supports structural transformation through two channels. First, the internet is creating new types of jobs, work arrangements and



opportunities for entrepreneurship, as it cuts search costs and market entry barriers, and makes it easier for workers, employers and customers to find each other, irrespective of their locations.

Digitally enabled work can be inclusive, as services including delivery, ride-sharing, or housework tend to employ informal workers in urban and suburban areas of the country, and flexible work arrangements can encourage greater female labor force participation. Second, modern technology can enhance productivity in traditional sectors, and thus trigger structural transformation. In agriculture, for instance, digital technologies can overcome information barriers and open market access for many smallholder farmers, increase technical capacity through new ways of providing extension services, and improve agriculture supply chain management.

Pakistan has already derived some of the benefits from digitization, but scope for further growth remains. Demand for

access to the internet has increased rapidly, from 6 million internet subscribers in 2013 to an estimated 48 million in 2017 (Pakistan Telecommunication Authority).

Pakistan today is already the third-largest country providing workers to global online freelancing platforms, generating an estimated US\$1 billion in export revenue in 2016 (Oxford Internet Institute). Pakistan is also an increasingly attractive "knowledge process outsourcing/business process outsourcing" destination, and the federal and provincial governments in Punjab and KP are actively supporting entrepreneurship through incubation programs. However, broadband and mobile penetration (basic and data/internet-enabled mobile phones) in Pakistan remains relatively low.

Relative to its neighbors, the country also ranks low on most of the key enablers of a digital economy: infrastructure, affordability, consumer readiness and content. ■

Future of Thar Coal

By Asif Ali Abro

The inauguration of Thar coal mine and its power project in Islamkot recently was really an occasion to celebrate. It is time for celebration by all those stakeholders of the project, which untiringly worked for last several years to turn this distant dream into a reality.

'Coal' has always been treated as a dirty fuel though much of developed world's progress owe to it. When in 1991 reserves of Thar coal were found, the then government announced its finding as a game changer for the future of Pakistan's energy requirements. The fanfare of Thar finding was followed by yet another celebrated project at Ketu Bandar by Gordon Wu that promised to use Thar coal once Ketu Bandar project takes off initially with imported coal. However, not only the Ketu Bandar project of Gordon Wu could not took off, Thar coal mining project also ended up riding a roller coaster of hopes and despairs. Sometimes it was hostile desert environment of more than 50°C in summers, and at other times it was the poor lignite quality of coal that tried sealing the fate of Thar once for all. Sometimes it was the heavy overburden that had to be removed before reaching



coal and sometimes the absence of attractive policy posed threats to the future of Thar coal development.

But in the face of threats, there were people whose resolve always kept the hopes kindled for Thar coal development. Such people never despaired even when the Chinese company Shenhua rolled back because of imprudent handling of tariff by Pakistani negotiators. Rolling back of Shenhua project was a serious setback

because not only it itself did not do the promised project, it also impaired the confidence of other investors by declaring Thar as only a marginally feasible project and that too based on social considerations. Numerous other reports including a famous study by RWE also pointed out certain difficulties in Thar development, such as unavailability of cooling water in sufficient quantities for power generation. Yet another setback for Thar was rolling back by World Bank from a proposed Thar coal Technical Assistance programme. However, fortunately the cause of Thar coal development found its biggest champion in the person of Mr. Younus Dhagha who steered Thar to success against all odds by paving way for development of open-pit mine at block II of Thar coalfields through public-private partnership.

Corresponding to mine development, work on independent power producers (IPPs) was also started. The IPPs with a total of 1320 MW based on Thar block II have achieved financial close, and the first unit of 330 MW has also started injecting electricity in the national grid. However Thar is not a potential to be wasted after developing a prototype of 1320 MW. The negativity which had been haunting Thar for long time has again started to eclipse Thar's future. First is the unavailability of a champion to the cause of Thar. Those who used to be the





pivot of Thar's current success have moved ahead in their career with new assignments. Though the Government of Sindh still claims love for Thar's cause, but the motherly affection that was available for block II projects is completely missing: no equity injections for new mining projects and no strong support at federal forums. Federal government is also content with restricting its sovereign guarantee for mine project at Thar block II. Following that cue are the federal agencies including NEPRA, NTDC and CPPA who extended all support for Thar block II found themselves bereft of that support for other projects at Thar. NEPRA has already withdrawn the upfront power tariff which the IPPs of block II had obtained. NTDC / CPPA are reported to have found themselves compelled by a so-called surplus capacity to generate electric power resulted by the unplanned induction of RLNG projects that were parachuted onto the grid. The so-called surplus capacity scenario is contradicted by many experts who believe that such controversial outcome is possible with number fudging with depressed demand projections that are possible only because the current consumers' tariff / pricing was originally designed to

discourage expansion of electricity demand. The expensive 'time of day' tariff, reluctance to retire oil based power generation units that have since completed their life, operations of conventional inefficient power complexes of GENCOs, and failure to expand transmission network as per the requirements are the grey clouds hovering on the studies that have concluded having surplus capacity scenario.

Notwithstanding the grey areas in the studies that concluded surplus scenario and that provide a strong excuse to many to resist further development of Thar coal beyond the projects of block II, the majority of thermal projects on supply projections are based on imported fuels. Earlier imported oil was the main stay of Pakistan's electricity production in thermal mode but recently that has given way to imported coal and RLNG. Nevertheless, imported fuels are prone to disruptions in case of hostile activity in Arabian Sea outside Karachi. Such a similar hostile situation was recently experienced by Pakistan when its airspace had to be closed for some time. Not only commuters relying on air travel suffered during that airspace closure but commercial activities also suffered a lot.

So much so that even international courier services came to standstill, disrupting many business transactions. Following the airspace hostility, a submarine from an enemy country had also tried sneaking in Pakistani waters from Karachi side; though its efforts were thwarted and the enemy did not dare try again. However if the enemy war ships or submarines had tried again, or had their presence felt menacingly in international waters outside Pakistan territory, it would have created difficulty in maintaining the supply chain of imported fuels in Pakistan. The least damage that they could have done to the supply chain would have been to let the shipping companies and their insurers to sky-rocket the premium over normal costs to reach Karachi ports. After considering that hostile picture in mind one can easily understand the importance of Thar coal as the basic pillar of Energy Security.

In order to further develop Thar, availability of cooling water is of prime importance. In order to develop Thar block II projects, government of Sindh had not only injected equity, but also developed a capital intensive water supply scheme to utilize the drainage water of Left Bank Outfall Drain (LBOD). Nonetheless, the drainage water of LBOD was meagerly sufficient only for the 1320 MW IPPs based on Thar block II coal. For development of the rest of Thar, availability of water is the biggest challenge. Though a scheme 'Makhi Farash' is an anvil for supplying water to Thar coalfields, but that too would be sufficient only for one or two IPPs depending on the size and the decision to adopt dry cooling technology. Contrary to the general notion, even the dry cooling technology would need reasonably large quantities of water. Therefore if Pakistan wants to get rid of reliance on imported fuels, not only will it have to cut off the red-tapes and to surmount the lobbies working against Thar development, but also earmark cooling water availability for Thar. That earmarking, however, is not possible without re-adjusting the provincial quotas agreed for irrigation. Without this future of Thar may not be considered as bright.■

The author has 28 years' experience working in power sector including WAPDA, PPIB, HUBCO, and CSAIL. He can be accessed for feedback and comments on asifabro@hotmail.com

Biogas should be given priority

By Syed Akhtar Ali

The biogas initiative was launched in Pakistan as early as the 1980s. In the meantime, almost nothing of significance has happened; a few thousand family sized biogas units have been installed, thanks to the RSPN and others' action or lack of it.

By comparison, India has installed 4 million units and China six million household units. This translates to one biogas unit per every 10 households and one out of every 10 households in India.

We need biogas, especially, in our rural areas. Pipeline gas provides gas only to 20 percent of the population, while 80 percent remain and will remain unserved. Our rural areas will remain without gas, despite great potential, if a reasonable initiative is not launched.

Although biogas was initially conceived for households, nowadays it is a significant industrial solution. Today, large plants costing \$20 million are being installed. Germany has 5000 of such units injecting gas into gas networks and producing electricity. In Norway, Sweden and Denmark, Bio-CNG has been fuelling buses for more than a decade now.

To give the readers an idea of biogas potential, only Karachi has equivalent of two gas fields of 30 mmcf each - one

in the Landhi cattle colony and one in solid waste dump. Landhi has 400,000 cattle; the area pollutes both land and sea and spreads disease as well. Municipal Solid Waste (MSW) has been a liability as well - 16,000 tons per day of MSW, containing 50 percent wet food waste. Converting it to biogas may be able to finance the MSW project costs, if not in full then significantly. A Landhi cattle colony biogas-to-electricity project has been talked about for about two decades now. The project has now been changed to fuelling green buses by converting biogas to bio-CNG. Will it happen this time?

There is also talk of generating electricity out of senselessly burning solid waste to produce electricity in Karachi. The threat and risk is air pollution caused by burning solid waste. Poor countries like Pakistan have more wet waste than dry waste culminating into a low heat content. An alternative solution could have been to produce biogas and inject it into the grid (after cleaning and upgrading) or/and fuel public transport buses and even private transport. Incineration is old fashioned and risky. Besides, MSW burnt electricity is expensive 10 USc per kWh as opposed to solar of

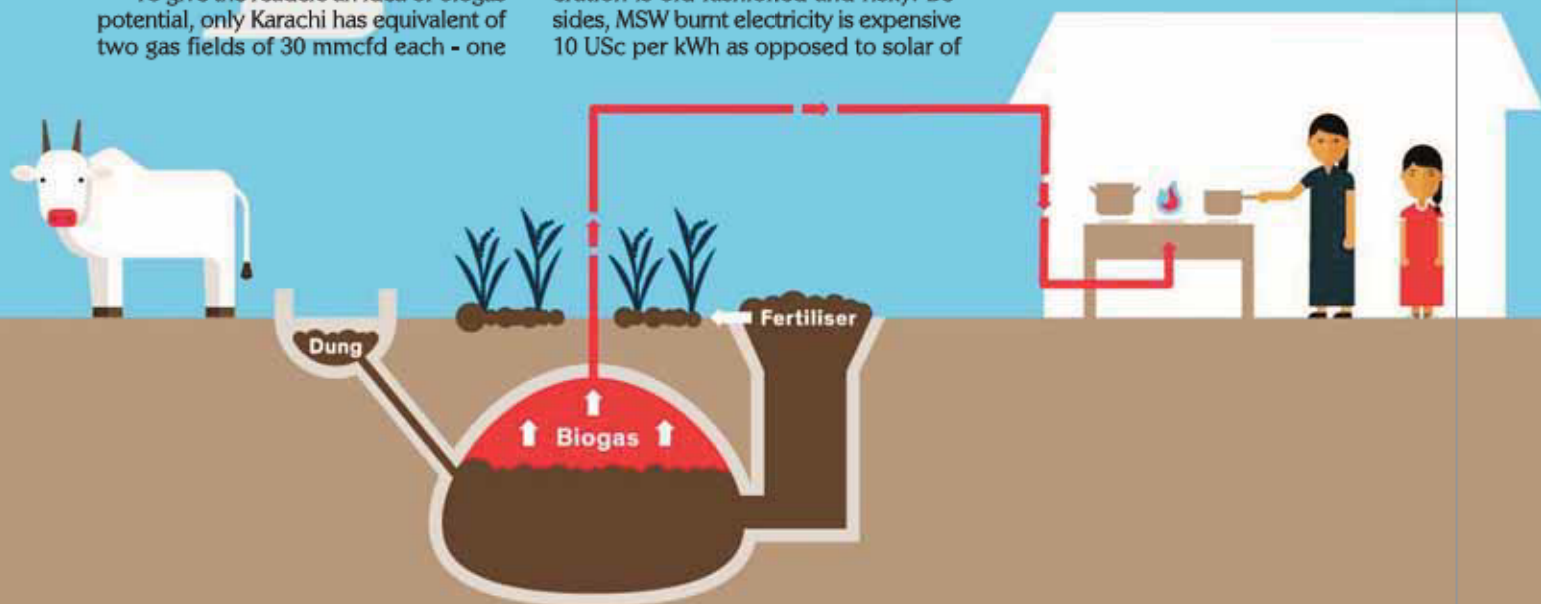
4 USc per unit.

Interestingly, cow dung has traditionally been considered as the only traditional source of biogas. No more; today, biogas can be produced from all kinds of waste: crop waste, animal slaughter, poultry, food and vegetable waste and agro-industrial waste etc. Rice stubble is a menace which is burnt in the winter, on both sides of the border, practically shutting down Lahore, Haryana and Delhi. India has gone ahead with a project producing biogas out of rice stubble; the biogas produced will be injected into the nearby gas grid and supply gas to the adjoining areas. There is no move yet in this respect in Pakistan, although SMEs are having to close their businesses in the winter. That's an easy task if not a complete solution. Can SNGPL rise to the occasion?

Biogas is somewhat more expensive; it costs anywhere between locally produced natural gas and the more expensive LNG. Many CNG stations are being given gas on LNG rates. In India, bio-CNG is cheaper than normal CNG. Both dung and crop wastes are free, costing collection cost only.

Biogas costs in the two countries may not cost very differently. A bio-CNG plant in India costs \$1 million or so in CAPEX but practically very little fuel or operating cost. In India, bio-CNG rates are IRs35 vs IRs42 per kg for conventional CNG. They plan to install 5000 bio-CNG plants in the near future. They have already started doing that and many such CNG pumps are already in operation.

Pakistan has a large sugar industry producing expensive sugar. Being water



intensive, whether it should have been there at all is a controversial question. There are some 94 sugar plants, spread throughout Pakistan in Punjab, Sindh and Khyber Pakhtunkhwa. The sugar industry is a great pollutant, producing raw and dirty effluent and press mud—a solid waste. Despite EPA laws to the contrary, they divert their effluents into the water channel or divert it to agricultural land, purportedly providing fertilizer like material to the lands.

Only if environmental laws are applied, and effluents from sugar plants can be passed in digesters (anaerobic), a lot of biogas can be produced. In fact, effluent and press-mud mixed have very high biogas generation potential—three times higher than gobar. Untreated biogas can be supplied to the adjoining areas at reasonable costs or/and bio-CNG plants can be installed at or nearby sugar plants. One sugar plant can feed at least 10 CNG pumps. Ninety-four sugar plants can provide biogas to 10 nearby NG pumps. Make money and solve the problem as well?

Put together, there is a potential of 1100 mmcf of biogas, compared to the 4000 mmcf of local fossil gas production. And this is renewable; as long as there is life and bio-activity on earth, this

level of biogas and even more would be there. Fossil gas will go away; already our gas resources are dwindling and are projected to be exhausted in almost ten years, causing shortages in the meantime, as is the case already. It is not a fairytale; it is already happening in the region and has happened in Europe and the US.

We have some 50 million cows and buffalos in Pakistan. There are 2 million households that have 4-5 cattle each. Practically, all of them should be able to install biogas plants; one million should be targeted for the next five years. There are more than 20,000 households which have 50 or more cattle. Community scale biogas plants can be installed without the need for biogas cleaning or upgrading. Local isolated gas distribution networks can be installed, using 2-3 inch plastic pipe. People and communities can do it themselves, if the legal framework and bank financing is available. A good-sized community biogas plant with network may not cost more than Rs5 million. It is peanuts compared to the cost of LPG Air Mix Plants.

There is one problem, however, in biogas. It contains 65-70 percent methane only, well enough for firing hearths at home or industry. It remains a stranded resource, unless it is cleaned up, remov-

ing CO₂ and sulfur; then it can be injected into the gas grid or used as CNG or for producing electricity. Significant investment is required to do this; 1 mmcf plants may cost as much as \$20 million. Biogas-based electricity is facing competition from the much cheaper solar, which is much more widely and conveniently used (however, only in the day). As a gas, it may cost anywhere between normal gas and LNG.

What is the way forward; both gas companies. SNGPL and the SSGC may be tasked to install a few biogas-bio-CNG pilot plants. They may eventually find it so good that they may like to block the entry of others. Local communities and governments may be involved for smaller isolated gas grids. Bank and government credit and finance may be arranged by the federal and provincial governments.

Biogas has the potential to initiate a cycle of economic activity without foreign investments. It will mobilize local investors and communities and create employment along with cleaning the environment. One does not see an equivalent competitor to this concept. Biogas should not be rejected or neglected among the list of national priorities. ■

courtesy: Daily Dawn

Engro bags highest number of GDIB Awards 2020



engro fertilizers

Engro Fertilizers Limited and Engro Energy, two subsidiaries of Engro Corporation, have won eight awards at this year's Diversity Hub Pakistan's 2020 GDIB Awards, hosted by HR Metrics.

Engro Fertilizers was recognized with six awards, the highest number for any company, at the event. The company won three awards for Best Practices in diversity and inclusion (D&I) Vision and Strategy, Leadership and Accountability, and Job Design and Compensation. In the Progressive category, it was awarded for practices related to Recruitment and Development, Benefits and Work-life Balance, and Assessment and Measurement of its initiatives.

Further, Engro Energy secured two awards for Best Practices in the catego-

ries of D&I Learning and Education, and Community, Government Relations and Social Responsibility. This recognition demonstrates Engro Energy's best in class efforts and initiatives in using GDIB standards to align diversity and inclusion with organizational policies.

The winners were presented the awards by Guest of Honor Shamshad Akhtar, former State Bank of Pakistan (SBP) Governor, and US Consul General Robert Silberstein, in a ceremony held at a local hotel in Karachi. A five-member jury panel reviewed award submissions and declared 19 organizations as winners.

Ghias Khan, the President and CEO of Engro Corporation, commented that "diversity and inclusion has played a pivotal role in driving our business forward. By creating a culture of inclusion, implementing flexible processes and systems, and forging community partnerships, we continue to deliver on the spirit of Engro. ■

Latest leave application:

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The symptoms of Corona Virus are sweating, weakness, diarrhoea and stomach pains. Basically its the same kind of feeling you get when you see your wife checking your phone.



Govt to allow K Electric to set up 700 MW coal power plant

Amid delays in K-Electric takeover by the Shanghai Electric Limited (SEL) of China, the government has decided in principle to facilitate K Electric to increase its own generation capacity by 1,600 MW and enhance supply from the national grid to 1,400MW on an urgent basis.

gasified LNG through federal government companies (Pakistan LNG Limited and Pakistan LNG Terminal Limited) involved in imports with effect from January 2021 to December 2025 at gas rates notified by the Oil and Gas Regulatory Authority (Ogra).

This comes at a time a team of the KE's top management would be holding

to sell power directly to the KE, without involvement of CPPA-G or any other federal government entities for issuance of Lol or LoS. The power division has, therefore, argued that the June 2016 ban did not cover Datang Power Project under any power policy.

However, its tariff has to be notified by the power division as required under Section 31(7) of the Nepra Act since its power would be provided to KE consumers at basket price. An objection had been raised within the power division that this imported fuel-based power plant would also be governed by the ban on imported fuels.

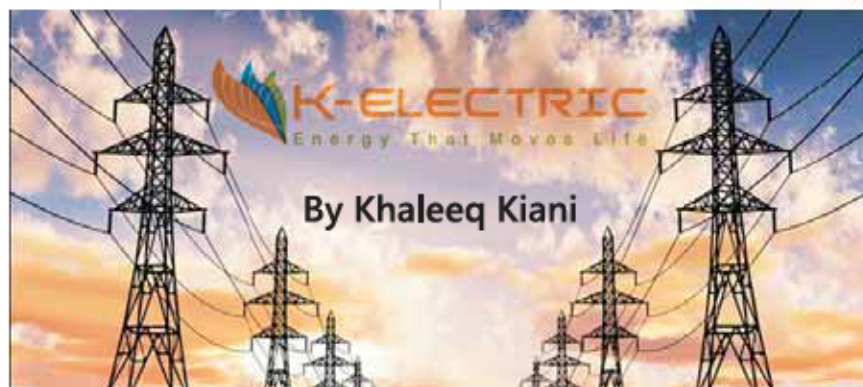
According to the summary moved by the power division, the KE has been insisting that delays in tariff notification for the Datang plant would impact its commercial operation date (COD) and consequently the power demand-supply gap within the KE's service area. The 700MW the Datang plant would also help diversify the KE's fuel mix and phase away from using furnace oil which is significantly more expensive than imported coal. The summary advocated that the project would enable the KE to offer affordable power to the consumers along with sizable fuel cost savings to the national exchequer. The power division has reported that imported coal was approximately 70 per cent cheaper than furnace oil and 33pc cheaper than RLNG on a fuel cost comparison basis.

After meetings with all stakeholders, the power division has recently given an undertaking that the NTDC would supply additional power of 500MW to the KE from K2/K3 projects.

Further, it was agreed that the 700MW Datang coal project was critical for the KE in managing the demand supply gap despite availability of 1,400MW from the national grid. The KE has confirmed that this plant will operate on local coal once local coal is made commercially available. The KE will also develop transmission line and related infrastructure to its Bin Qasim RLNG plants.

The first unit (450MW) of Bin Qasim Power Station (BQPS)-III RLNG plant is expected to come online in April-May 2021, followed by second unit by September-October 2021 ■

courtesy: Daily Dawn



For this to deliver, the government would immediately allow the KE to start construction of a 700 MW coal-based project, provide about 150 million cubic feet of imported liquefied natural gas (LNG) for another 900MW project and enhance power off-take from the national grid to 1,400MW through diversion of upcoming nuclear power projects in Karachi.

The power division has moved a case to the Cabinet Committee on Energy (CCoE) for allowing the issuance of tariff notification for Datang Coal Power Limited (2x350MW) at Port Qasim. The CCoE has also been requested to exempt the plant from a 2016 ban on imported fuel-based projects until the local coal from Thar becomes available.

The KE will ensure that in case of unavailability of coal from Thar Block II (Phase-III), it may for the purposes of commissioning and operations enter into one or more commercially reasonable coal supply agreements and generate electricity using any local or imported coal.

The CCoE's approval has also been sought for supply of 500MW to the KE from K2-K3 nuclear power projects. The power division has also advocated allocation and firm supply of 150mmcf re-

talks with the Privatisation Commission on Monday to push for resolution of matters relating to transfer of the KE's majority shareholding to the SEL pending for more than two years now. The KE has been facing a peak shortfall of 600-1000MW in summers.

Following decisions of the CCoE and Private Power and Infrastructure Board, the power division had issued directives in June 2016 that no letter of interest (Lol) or letter of support (LoS) would be issued nor extended to any power plant on imported fuel except those agreed bilaterally by the governments of Pakistan and China under prioritised list of the China-Pakistan Economic Corridor projects.

In August 2011, the power regulator had approved the tariff petition of the Datang Pakistan for determination of its reference/upfront generation tariff for 700MW (2 x 350) coal plant at Port Qasim. The regulator updated the upfront tariff decision in November 2018.

Interestingly, on the insistence of then Punjab government led by Shahbaz Sharif, the CCoE allowed a 1,200MW project on LNG at Trimmu (Punjab) in June 2017 by relaxing the ban on imported fuel based power project.

Conversely, the Datang project has

Improved access to clean and renewable sources of energy will unlock greater potential for economic development in Pakistan

Exclusive interview of Allard Nooy, InfraCo Asia CEO

■ By Halima Khan

Improved access to clean and renewable sources of energy will unlock greater potential for economic development in Pakistan," said Allard Nooy, Chief Executive Officer of InfraCo Asia. Mr. Nooy gave an exclusive interview to Energy Update, during InfraCo Asia's February 2020 visit to Pakistan.

In the interview, Mr. Nooy discussed InfraCo Asia's current and future plans to develop and invest in infrastructure projects in Pakistan's renewable energy, water and waste-water, solid waste management and waste-to-energy sectors. Mr. Nooy also shared his views on the landscape for investors in Pakistan and gave an update on InfraCo Asia's joint ventures which are developing energy projects in Pakistan. InfraCo Asia is a commercially managed infrastructure development and investment company of the Private Infrastructure Development Group (PIDG). Pakistan is one of the twelve countries in South and Southeast Asia, in which InfraCo Asia is mandated to invest in and develop infrastructure projects, across a range of sectors. Here are a few key excerpts from Mr. Nooy's interview, for our readers:



Energy Update (EU): Could you give our readers an overview of InfraCo Asia's portfolio of infrastructure projects in Pakistan?

Alard Nooy (Mr. Nooy): InfraCo Asia operates as a principal investor and we work with our joint venture partners to co-develop projects in a range of sectors. We are currently mandated for nine different sectors and are active in infrastructure investment and development in twelve countries across South and Southeast Asia.

InfraCo Asia's current portfolio comprises over 40 projects in various stages of development, and two-thirds of this is in the renewable energy sector. Our portfolio in Pakistan is no exception.

In 2017, we divested our stake in the Metro and Gul Ahmed wind power projects in Sindh province which were co-developed jointly with local sponsors, the Alimohamed Family and Gul Ahmed Energy Limited. The two projects generate an additional 155.5GWh of clean energy per year, which feeds into the public grid. We are currently developing a portfolio of hydroelectric projects in the Swat area of Khyber Pakhtunkhwa province, through a joint venture with Markhor Energy. Feasibility studies, which include a number of geological, ground, water survey and environmental impact assessments, are currently ongoing and we aim to finalise the results later in this year. The portfolio currently comprises four run-of-river hydroelectric projects and the progress we have made has been encouraging. The total power generation capacity of these projects is projected to be around 150 MW.

InfraCo Asia also recently entered into a joint venture with Albario Engineering Pvt Ltd under the project company Prism Energy. Prism aims to develop, construct, own, and operate rooftop solar systems in order to provide cost-effective renewable energy supply for the commercial and industrial (C&I) sectors. This will involve signing corporate Power Purchase Agreements (PPAs) with C&I energy users. The project is expected to reduce the tariffs for grid-connected industries and replace the diesel and gas engines that are currently providing energy to the industries. Overall, Prism is expecting to develop a pipeline of distributed rooftop solar systems, of up to 40MW in aggregate capacity, in Pakistan.

EU: Is InfraCo Asia exploring any new sectors in Pakistan?

Mr. Nooy: We are proactively looking to invest and develop projects in Pakistan's waste-to-energy sector. This is a

sector that has not yet taken off in Pakistan and, given the relevant experience and portfolio background of InfraCo Asia's team members, we could potentially contribute our expertise towards the development of this sector.

As part of our investment and development process, we believe that InfraCo Asia will also be able to act as an enabler for the Pakistani government, agencies, and municipal governments to assist them in finding solutions to address the current waste management problem, while developing a reliable source of renewable energy that feeds into the national grid.

EU: What role would InfraCo Asia play in addressing the issues of municipal water and waste-water management in Pakistan?

Mr. Nooy: It is typically challenging to get the private sector involved in water and waste-water management, as these sectors often lack the necessary regulatory frameworks that give the private sector confidence. Furthermore, these sectors are not covered by sovereign guarantees and bankability is a key challenge. Through our early stage project development and financing expertise, InfraCo Asia aims to serve as a catalyst



About InfraCo Asia:

1. InfraCo Asia Development Pte Ltd (InfraCo Asia) is a commercially managed infrastructure development and investment company of the Private Infrastructure Development Group (PIDG).
2. Headquartered in Singapore, InfraCo Asia stimulates greater private sector investment in infrastructure in south and south-east Asia. InfraCo Asia funds high-risk infrastructure development activities by taking an equity stake with a focus on socially responsible and commercially viable infrastructure projects that contribute to economic growth, social development and poverty reduction. At the appropriate time, either as close as possible to financial close and/or commercial operation, InfraCo Asia aims to (partially or fully, as appropriate) exit each project. It does this through the sale of its stake to the private sector in order to catalyse private sector investment and participation into the projects and countries it is engaged with.
3. InfraCo Asia is currently funded by four members of PIDG - the UK Department for International Development (DFID), the Ministry of Foreign Affairs of the Netherlands (DGIS), the Swiss State Secretariat for Economic Affairs (SECO), and the Australian Department of Foreign Affairs and Trade (DFAT). For more information, please visit <http://www.infracoasia.com>.

Exclusive Interview

for the private sector to invest in sustainable infrastructure projects, in sectors such as these where the infrastructure gap cannot be met by the government on its own.

InfraCo Asia funds early stage, high-risk infrastructure development activities by taking an equity stake in socially responsible and commercially viable infrastructure projects. Our aim is to provide the responsible leadership that is required to develop these projects to international standards, with a focus on managing and mitigating risks throughout the development process, so as to facilitate private sector participation in the successful implementation of the project.

EU: In your view, what needs to be done in order to bridge Pakistan's energy shortfall?

Mr. Nooy: Pakistan is not alone in experiencing quite a phenomenal gap in demand and supply in the energy sector. Pakistan and its neighbouring countries have been grappling with issues related to energy transmission and distribution systems for a number of years.

What is really needed in Pakistan is the enabling of a wheeling system in the energy transmission sector, so that you would be able to generate clean and renewable energy in one area and find its consumers in another area. New regulations have to be put in place in

order to allow that to happen.

While these new regulations would be challenging to implement it is, in my view, important for regulations to facilitate open access to electricity and to introduce the wheeling system, in order to create a more conducive environment for private sector players to get involved in the development of Pakistan's energy infrastructure. The other bottleneck in the energy sector is the power distribution companies in the country, which are currently lacking in creditworthiness.

EU: How does InfraCo Asia view Pakistan, from an investor's perspective?

Mr. Nooy: Pakistan is one of the twelve countries in South and Southeast Asia, in which InfraCo Asia has been mandated to invest in and develop infrastructure projects, and a significant amount of InfraCo Asia's financial commitments currently sit with projects in Pakistan.

Pakistan's openness to foreign direct investments (FDI) has encouraged the expansion of InfraCo Asia's portfolio in the country. Our view is that more improvements could be made to create friendlier approval and permission regimes related to FDIs. For example, there could be clearer guidelines and timelines related to the approval process for FDIs.

We also believe that improved access to clean and renewable sources of energy will unlock greater potential for economic development in Pakistan. The country's economic development is currently held back by an overall lack of access to energy, a problem which stems from a combination of energy generation and transmission issues. Pakistan could overcome these challenges if the government is able to encourage the development of more power generation capacity, puts the right regulatory regimes in place allowing open access to electricity, and introduces a wheeling system - especially in rural areas of the country where currently there is no access to electricity.

In order to put in place a more effective regulatory regime, it would also be worth consulting private sector participants and prospective investors in the process of developing these new regulations. This would open up a productive feedback channel, lead to more investor-friendly policies, and establish a clearer, more transparent policy-making process.

Our sense is that the high interest rates for local debt financing is also holding back more infrastructure investment in the country.

That is on the financing side. In the arena of energy, the renewable energy sector will grow further if there is no limitation in implementing the concept of net metering in the country. ■



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One-Day Int'l Conference on LNG for Pakistan

Integrated energy plan for next 25-year needs being worked out: SAPM



Pictures of speakers at "LNG for Pakistan" conference shows special assistant to PM Nadeem Babar, Chairman SSGC Shamshad Akhtar, Chief Executive Tabeer Energy Kosuke Makino, Energy Expert Sohail Butt, Former MD PSO Sheikh Imran ul Haq, Chairman Organizing Committee M. Naeem Qureshi, Senior VP Upstream LNG Hanas Christophe Malet, CEO Pakistan Gasport Fasih Ahmed, CEO Granada USA Mohsin Siddiqui, GM Engro Energy Ammar Shah, Director BD PNSC Khuram Mirza, CEO DEA Owais Mir, MD Interstate Gas Company Mubin Saulat, CEO EHS Saquib Ejaz Hussain, CEO IPPA Dr. Fatima Khushnud, Senior VP Golar LNG Suryan Wirya Simunovic, Head of Regulatory Affairs Tabeer Energy Saad Qazi, Mohammad A. Rajpur CEO - General Shipping Agencies, Owais Mir CEO, Dynamic Engineering Automation, Akhtar Ali, Ex member planning Commission, Director Marketing Energy Update Engr. Nadeem Ashraf, Halima Khan and others.

Special Assistant to the Prime Minister (SAPM) on Petroleum Nadeem Babar said the government was working on an integrated energy plan to meet next 25-year needs

of the country.

"We are working on a complete integrated energy plan for next 25 years with an aim to ensure availability of electricity, oil and gas to consumers at

affordable rates and in sufficient quantity," he said while addressing a daylong international conference on LNG here.

The conference, organized Energy Update - a trade magazine, was aimed



Group photo of all participants, sponsors, speakers with organizing committee.



Special Assistant to PM on petroleum Nadeem Babar addressing the audience.

at addressing the issues related to Pakistan's energy requirements and determining the role of Liquefied Natural Gas (LNG) to bridge the energy shortfall in an efficient manner.

He underlined the need for overcoming the energy shortages and providing the commodities at affordable rates besides stopping their wastages, "Make energy cheaper and consumption will double," he said, adding that this strategy would give a substantial boost to industrial sector and economic activities in the country.

Under its ease of doing business plan, the SAPM said the government had removed a number of bureaucratic hurdles to facilitate private sector in the energy sector.

He said the government intended

to shrink its footprint in the energy sector by encouraging private sector to compete government sector entities.

During the last 16 months, Nadeem Babar said the government had taken a number of steps that would have positive impact on the energy sector in the coming years, but "we are not realizing these measures right now. We have been living in the past and denying the present...but we have to move the energy sector where it has to be."

He said the government had decided that it would not continue to increase its footprint in the LNG industry and with that mind "we went ahead with the open access to the pipelines, terminals and there is no bar on setting up LNG terminal by private sector."

The government would support the private sector players if they had buyers, suppliers and financial muscles, he said and asked the participants "We



Panelist include Christophe Malet, Ammar Shah, Khurram Mirza, Fasih Ahmed & others.



create the environment... you do the business and compete the public sector entities."

Commenting on the future energy outlook, he said there would be a drastic increase in the electricity in the overall energy pie in next 10 to 20 years, stressing the need to adopt a holistic approach.

He also highlighted the role of renewable energy to meet the country's electricity and petroleum sector requirements.

He said traditional coal technology had gone out of fashion and "my prediction is that by 20 years oil will be out of fashion completely and gas will

be left."

During next 30 to 40 years, the gas would most depend on fossil fuels, which supplemented the variability of renewable energy and "of course battery technology can change that and will see major developments in battery technology in next 10 years."

Since the Pakistan Tehreek-i-Insaf (PTI) government came into power in 2018, the SAPM said he kept hearing of different sectors capacity shortages, but "I came to conclusion that we do have really capacity constraints in most of our sectors but high level inefficiency and protected structures are the main reasons."

He stressed the need for getting out of this mode, adding "our LNG sector is highly inefficient...we need to make it more efficient to lower the cost...We need to open up oil and gas sector and bring down the commodity rates for



Panelist answering the questions from the audience.

the issues related to Pakistan's energy requirements and determining the role of LNG to bridge the energy shortfall in an efficient manner.

cuss every aspect of LNG sector in Pakistan including its import, storage, transmission, supply, regulation and pricing so that it could become a viable segment of the energy equation of Pakistan.

Speaking on the occasion, Energy Expert Sohail Butt said LNG was fast growing source of energy. China and India were major importers of LNG and this trend was expected to grow, he added.

However, he pointed out cost reduction in Renewable Energy was a big challenge for LNG adding that LNG prices were linked with crude oil.

Owais Mir, CEO DEA while speaking on the occasion, stressed the need of integrated model for harnessing the LNG sector.

Later in second session of the conference titled Investment, Reforms and Sustainability, senior vice president Upstream LNG Hanas Mr Christophe Malet, CEO Pakistan Gasport Ltd Fasih Ahmed, CEO Granada USA Mohsin Siddiqui, GM Engro Elengy Ammar Shah, Director BD PNSC Khurram Mirza presented their presentations and highlighted the importance of this sector. ■



Panel discussion on LNG Industry In Pakistan: Challenges, Solutions & Opportunities.

benefit of the common man."

Earlier, in his welcome address, Naeem Qureshi Managing Director Energy Updates and Chairman of organizing committee of the Conference said that the conference aimed at addressing

He said the conference would be mile stone for promotion of energy sector in Pakistan. It would also help devise a roadmap to address the energy crisis in the country, he added.

He said the conference would dis-

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By Halima Khan

NEPRA celebrates first ever Energy Week



The goal is surely to ensure provision of reliable, sustainable, and most affordable electricity to end-consumers in Pakistan and with that very aim in mind the authorities of National Electric Power Regulatory Authority in the last week of February, 2020 organized the first ever NEPRA Energy Week at its head office in Islamabad.

To thoroughly discuss every dimension related to electric supply in Pakistan, the NEPRA invited representatives of all the concerned stakeholders related to energy sector in Pakistan. One theme that mostly dominated the proceedings of the NEPRA Energy Week was the need to increase reliance on indigenous and renewable resources of energy for more sustainable electricity production and to safeguard the legitimate interests of the end-consumers in the country.

While speaking at the inaugural session of the Energy Week, NEPRA Chairman, Tauseef H. Farooqi hoped that this Energy week would go a long way in addressing the challenges faced by the power sector of Pakistan.

He further stated that NEPRA was taking steps for encouraging investment in the power sector besides protecting the interests of end-consumers.

Minister for Energy, Omer Ayub speaking at the Inaugural session of the Energy Week emphasized on the importance of Energy Sector and said that the incumbent government was striving very hard for ensuring affordable and sustainable electric power for the consumers.

He pointed out that most of the total energy generated was from imported fuel which was causing expenditure of huge foreign reserves. According to the honorable minister, efforts are underway for generation of power through

indigenous and alternative energy resources. He appreciated NEPRA for its efforts in improving the power sector by organizing such events.

H.E. Mr. Yao Jing, Ambassador of China, while speaking on the occasion, lauded the overall structural reforms

taking place in the power sector and assured the continued cooperation of China with Pakistan in energy, agriculture, science and technology sectors. He assured that the CPEC funded energy projects would be completed on time. The Chairman CPEC Authority, Lt. Gen (Rtd) Asim Saleem Bajwa in his address appreciated the role and keen interest of NEPRA in effective handling of the CPEC Energy projects. He informed that the Phase-I of the project was completed, Phase-II is in progress whereas the approval for the Phase-III is in the pipeline.

WAPDA Chairman, Lt. Gen (Rtd) Muzammil Hussain also spoke on this occasion and gave brief overview of various completed and upcoming hydro-electric power projects in the country. He assured that the Mohmand and Dasu

Petroleum SAPM for harnessing clean bio-fuel potential



Special Assistant to the Prime Minister (SAPM) on Petroleum Nadeem Babar said Pakistan was an agrarian country and needed to focus on producing clean bio fuels aimed at meeting its energy requirements indigenously. "Around 41 percent electricity production of the country was based on imported fuels, which was not good for our energy security and affordability," Special Assistant to the Prime Minister (SAPM) on Petroleum Nadeem Babar said while addressing a conference titled "Clean Fuels - Bio Fuels 2020" here. The conference was organised by the Petroleum and Natural Resources Division and attended by experts from leading energy departments and academia. Nadeem Babar said In coming days the national security will not only be limited to military capability but the importance Energy and food security will also increase, he said. Pakistan was an agrarian country and needed to focus on producing clean bio fuels aimed at meeting its energy requirements endogenously. Pakistan is blessed with the bio fuel which is a natural advantage from the Allah Almighty but it has been ignored and wasted so far," he said. "We must stop doing that we need to start harnessing it," he added. Mr Babar stressed the need for taking practical measures to adopt required measures to produce energy through alternative resources including biomass, adding it (bio fuels) had such a potential that it could become a central source of fuel in the country during next 10 years. ■

electric power projects in the country. He assured that the Mohmand and Dasu Hydropower projects would be completed within the specified time.

The second day of NEPRA Energy Week 2020 started with the opening speech of Vice Chairman NEPRA Bahadur Shah. NEPRA Vice Chairman expressed hope that with the active interaction of industry and academia NEPRA would be able to steer the power sector on a path

day of Energy Week mainly focused on the recent trends in Renewable Energy (RE), Integrated energy planning, solar wind hybrid model, virtual generation and grid, emerging prospects of distributed generation and prospects of electric vehicles in Pakistan.

The Innovation Session was attended by various representatives of utilities and industry, academia of NUST & LUMS, International & National Energy Experts



of sustainability where the entire Pakistanis would have access to affordable, reliable and sustainable electricity

The generation session of the day focused on the four major areas which included comparison of power sector of Pakistan with other countries around the globe, investments in renewable energy, modern electricity storage technologies and promotion of indigenous resources for electricity generation.

The generation session was attended by academia which was represented by NUST and LUMS, international experts which included experts on energy from SIEMENS, International Renewable Energy Agency (IRENA), Asian Development Bank (ADB) and Wartsila. Moreover, national and public sector entities also shared their ideas and suggested way forward for Pakistan to achieve the goal of sustainable development.

The third day of the NEPRA Energy Week 2020 was regarding Innovation which started with the opening speech of Member (Tariff) NEPRA, Saif Ullah Chatha.

Member (Tariff) highlighted that the idea of conducting the present day's session was to learn more about the advancements in technology as well as latest approaches in planning, policy making, financing and the required regulatory regime

The Innovation session of the third

including SEIMENS, IRENA, USAID and various project developers.

Meanwhile, Distribution Sector is the last step in the supply chain of electricity and given its terminal nature, the overall financial health of the power sector greatly depends on efficient distribution.

This was stated by Mr. Rafique Ahmed Sheikh, Member NEPRA in his opening speech on the fifth day of NEPRA Energy Week 2020. Sheikh highlighted the issues and challenges of high distribution losses, low recovery, distribution system constraints, inefficient service provision, low outreach to the new clusters of consumers, lackluster expansion of networks and the fact that the financial mismanagement still plagues the distribution sector.

The Distribution session was attended by representatives of various power utilities, industries and organizations/institutions such as DISCOs, WORLD BANK, State Bank of Pakistan (SBP), FPCCI, APTMA, CPPA-G, PPIB, NTDC, Wafaqi Mohtasib, and AEDB etc. Moreover, power sector researchers and academia i.e. NUST, LUMS etc. also shared their ideas on the occasion to achieve the goal of sustainable development through effectiveness and optimization of the distribution sector. The Distribution session focused on the role of DISCOs, introduction of competition through Supplier Regime and CTBCM, wheeling and net metering arrangements, reasons and way forward to eliminate circular debt etc. ■

Pakistan jumps to 8th EDB ranking

Carnegie Endowment for International Peace (CEIP), one of the world's leading international peace and strategic insight think tanks, invited Ambassador Ali Jehangir Siddiqui to speak on Pakistan's investment climate and existing Pakistan-U.S. business ties.

In his opening remarks, Ambassador Siddiqui highlighted the Government of Pakistan's efforts to attract foreign direct investments through incentives, reform, and trade agreements.

"Pakistan has jumped 28 ranks in the latest Ease of Doing Business rankings by the World Bank and given that the report measures comparative performance of countries, Pakistan has made considerable improvement through reform", the Ambassador stated.

Ambassador Siddiqui went on to narrate success stories of foreign investment in Pakistan including the telecom sector which has foreign ownership and management. He further identified sectors such as tourism, agriculture and manufacturing which offer vast potential for successful investment.

Opening remarks were followed by a fireside chat-styled conversation to discuss Pakistan-U.S. business ties, the outlook for improving Pakistan's anti-money laundering and countering financing of terrorism (AML-CFT) enforcement, Pakistan's experience of doing business with China under CPEC, and the role that Pakistani and American businesses and entrepreneurs should play in U.S.- Pakistan relations.

During the discussion, Ambassador Siddiqui underscored the exponential improvement made by the current administration in order to comply with FATF's requirements. "To date, Pakistan has largely addressed 14 of 27 action items, with varying levels of progress made on the rest of the action plan. However, just one year ago Pakistan had made close to no progress on compliance and even by October 2019 Pakistan had only addressed 5 of the 27 action items on the FATF action."

The event was hosted by James Schwemlein, a nonresident scholar in the South Asia Program at the Carnegie Endowment for International Peace. Schwemlein is a former U.S. diplomat experienced in South Asia and U.S. foreign economic policy. ■

By Aafia Sarosh



Pakistan needs a paradigm shift in electrification of road transportation

A significant moment in road transportation was perhaps the year 2017, when the policies for electric vehicles (EVs) were announced by many countries around the globe. Some countries showed determination to completely cut-off Fossil Fuel Vehicles (FFVs). Although EVs have existed for a considerable time 2017 policies are held responsible for a trigger for mass adoption of EVs.

Automotive manufacturers also imitated and announced plans to increase their EV line up shortly. Hence, surely, governments and manufacturers confess that EVs are the future mode of road transportation. Of course, electricity is the basic component of EV. Therefore, every time EV adoption is discussed in the context of Pakistan, the first thought is the shortfall of electricity in Pakistan and whether there is enough electricity to even introduce a few such vehicles? Though astonishing, the answer is, yes!

In 2017 Pakistan used 107000 GWh of electricity with around 33 GW of installed capacity, which is a well-known number available in power sector reports. However, what is not reported often is that 42000 GWh of spare electricity generation capacity that remains utilize but still people paid capacity payments amounting to 35000 crores in the year 2017. Cable transmission loss is behind this unutilised electricity but most of it is due to variations in electricity demand during the day and between seasons. The demand in Pakistan varied between 8 GW to around 26.5 GW in 2017. This spare 42000 GWh is plenty enough to switch much of the transportation fleet of the country on electricity. Obviously, electricity is not the only requirement in introducing EVs on a mass

scale.

Additionally, Pakistan is going to touch a peak generation capacity growth of 62 GW by 2025 while it is anticipated that the peak demand may just touch 40 GW. This means that excess capacity will remain at all times of the year, sparing the outages and seasonal variation. If spare capacity is not utilised and new loads are not introduced for the grid, then the capacity payments of unutilized electricity will amount to approximately 1.5 trillion by 2025.

Other than capital expenditure, the cost of running EVs is considerably attractive. We have calculated that, while FFVs runs one kilometre for ten rupees with the present fuel cost, an equivalent EV can cover the same distance using only three rupees at the current domestic

electricity rates. The capital cost of purchasing EVs is high at this time but is expected to reach parity with FFVs in the next few years. Until that time, to encourage EV penetration, many countries in their EV policies have slashed the taxes and duties to zero and have provided further tax rebates to encourage large scale adoption of EVs.

The Government of Pakistan has reduced duties and taxes on EVs and charging stations in the FY 18-19 budget. However, such incentives are only part of the equation. EVs are a whole new industry and requires a paradigm shift in how we think about electrification of road transportation.

However, there is no clear understanding of energy security, as there is a dilemma whether we will simply affect the transition from oil imports to lithium imports if we are to replace our ICE vehicles with EVs. One thing, however, is clear that if EVs are powered from renewable sources, most of these questions would be addressed and would easily justify our move towards electric technology. Our approach to enhancing EV penetration in the country should hence imbibe powering EVs from clean electricity. ■

WLPGA has been awarded the GREEN4SEA Initiative Award

WLPGA has been awarded the GREEN4SEA Initiative Award for adding value to the maritime industry by addressing the benefits of using LPG as a marine fuel. The GREEN4SEA annual awards recognise serious contributions to greener shipping and are given during the awards ceremony during the GREEN4SEA annual conference in Athens. The award is in recognition of WLPGA's activities in promoting LPG as a marine fuel and for its report: "LPG Bunkering, Guide for LPG Marine Fuel Supply". The report offers guidance for LPG marine fuel supply, concluding that sufficient potential infrastructure for distribution of LPG is available to serve potential marine market demand. The report aims to improve understanding within the maritime industry, of issues related to bunkering ships with LPG. The report highlights that LPG is becoming the preferred fueling solution for LPG carriers. Currently, 26 VLGCs are being newly built or retrofitted to use LPG as a fuel. The first vessels will be operational in 2020. Other key areas addressed are design issues, current thinking on possible solutions to regulations requirements, safeguards and safe practices, as well as important areas of operational processes and training. ■



Sindh's high stakes in Oil & Gas

■ By Nadeem Hussain and Ahmed Yusuf



In the midst of a gas supply crisis across Sindh in December last year, Chief Minister (CM) Murad Ali Shah lambasted the federal government in a pmss conference outside the Sindh Assembly. 'How is it possible in a welfare state ... that the people of Sindh are first deprived of water and now being denied

gas supply,' he boomed.

Ministers accompanying the CM added the federal government was committing a 'flagrant violation' of Article 158 of the Constitution, arguing that it was either incompetent or it was wittingly deviating from the Constitution.

The crisis rumbled into this year. In

January, Shah would go on to call for revisiting the criteria of the National Finance Commission (NFC) Award the instrument used to distribute taxes collected among the provinces. The CM argued that more weight age ought to be given to the quantum of revenue generation rather than the provinces' population.

Till now, no formula has been agreed upon on a revision of the NFC Award and the status quo persists.

But the matter of oil and gas exploration and production in Sindh has come to the fore once again after Prime Minister Imran Khan (perhaps prematurely) made the claim that Asia's largest gas and oil reserves might soon be discovered near Karachi.

The claim of better days ahead ought to have provided a silver lining in the distance, but it also set alarm bells ringing: will Sindh even get its due share if these reserves were successfully explored? Will the NFC Award still enjoy constitutional protection? And is the idea of rolling back the 18th Amendment linked to potential discovery of new oil and gas reserves? Will the balance of power between the centre and provinces once again be altered? NFC AWARD, OIL AND GAS The Pakistani constitution stipulates that whatever grows or exists above ground level is an asset of the province, and what is found beneath the core of the earth is considered to be the asset of the federal government. In the



Source: Khan, Nasim A., *Energy Resources and their Utilisation in Pakistan* (Karachi: Hamdard University Press, 2010)

same manner, whatever exists within 30 nautical miles of the coast is under the jurisdiction of the provincial government but the centre stakes claim to whatever lies beyond that.

This creates a substantial dichotomy, particularly with regards to the 18th Amendment to the constitution.

The 18th Amendment stipulates that the collective provincial shares in the divisible pool may not be reduced from 57.5 percent. The amendment, of course, provided unprecedented protection for the provinces but it also put pressure on the centre's finances how will it foot the substantial wage bill of the bureaucracy, the armed services as well as federal debt servicing? Of late, the government in Islamabad has been broadcasting the financial crunch it finds itself in.

One way out of the mess and arguably what the government is banking on is if large oil and gas reserves are successfully found off the Karachi shore. And while there is great prosperity to look forward to if this situation turns into reality, there are finer matters also at play.

Potential oil and gas discovery in Sindh directly impacts the power relationship between the centre and the provinces. The 18th Amendment left in its wake some unresolved political questions for example, in the event of successful oil and gas exploration, what would be the respective mandates of the centre and the provinces? At present, things are shrouded in confusion. At the centre, matters pertaining to oil and gas are dealt with by the Ministry of Petroleum and Natural Resources. Sindh, however, has no dedicated mechanism. It currently has an energy department that deals with these matters which is dealt with by the CM.

With Karachi's population and internal migration towards the city increasing at a great pace, the matter of who can and who cannot benefit from oil and gas resources will surely come into sharp focus.

Central to that is power: who wields what and how much. Fears in Sindh about the rollback of the 18th Amendment are premised on the assumption that power and finances may once again be stolen from provincial and local administrations. Then there are issues of how the NFC Award is calculated. Consider, for example, the fact that taxation falls in the realm of the NFC Award but profits do not.

So, taxes collected from the sales of oil and gas shall be distributed among provinces. While Sindh would ultimately be managing and operating oil and gas operations, it has no legal claim over resources found beyond 30 nautical miles and therefore, no claim to a share in the profits.

It is for this reason that CM Shah, after the last meeting of the Council of Common Interests (CCI), has been emphasising more on the fate of oil and gas than the NFC Award itself. The province's position now is that more refineries need to be built

in Sindh's cities other than Karachi. This reflects the province's direct interest in the matter of exploration, production and consumption of oil and gas. If large oil and gas reserves do become a reality, then Pakistan needs to attempt to harmonise the distribution of power, resources and jurisdiction between the centre and the provinces.

DISCOVERING OIL OFF-SHORE Off-shore Pakistan is divided into two basins: the Indus Basin and the Makran Basin, separated by the Murray Ridge. Mainly driven by its similar geology with other deltas rich in hydrocarbons, off-shore areas of the Indus Delta have indicated a tremendous potential of oil and gas in seismic surveys. The interest in the Indus Delta is more recent only since 1961 but the poor success rate off-shore in this delta has been a cause of discouragement.

Moreover, the cost of such projects is enormously high a single exploration well off-shore can cost in the range of 60 million to 200 million dollars.

(The high costs and low yield resulted in British Petroleum making an exit from Pakistan) A list of major exploratory wells that had been drilled off-shore in Pakistan until 2010 is shown in Table 2 [see overleaf]. The spud dates and completion dates are also mentioned. None of these resulted in any substantial discovery.

As of 2013, the Ministry of Petroleum and Natural Resources has given 16 licenses for gas exploration in the Indus Basin, while no licensees are working in Makran. Private companies are still interested in exploring, but the high risk and cost, and the time required relative to onshore exploration, repels potential investors. If the government wants to exploit off-shore areas, it must encourage public private partnerships and share the risks.

SORTING THE WRANGLES Any potential discovery of oil and gas will inevitably open a can of constitutional worms. And while debates will generate polar responses, the solution perhaps lies somewhere in the middle. What is perhaps non-negotiable and enjoys constitutional protection is the share of province in the divisible pool. But what of the other money earned? What kind of benefits can the province of Sindh, in particular, receive from any potential new discoveries? Many matters are linked to the centralisation of power and the decentralisation of finances.

But problems exist in corporate taxation, for example. Karachi often claims that it enjoys the lion's share in generating finances for the country. But the devil in the detail is that corporate agreements are often signed in Karachi but the corporate entity has a footprint across the country. Taxes generated, therefore, might technically not be from Karachi.

Then there is the question of staff and labour hired. In places such as Dadu and Khairpur, locals are often excluded from employment in oil and gas projects. Such complex details have often evoked sentiments of disenfranchisement, be it in Sindh, Khyber Pakhtunkhwa or Balochistan will the locals be considered part and parcel of the bounty we are being promised exists? Sindh is already making moves to secure a favourable outcome. CM Shah has been insisting, for example, that the NFC Award should also include a stipulation for yet-to-be-discovered resources. But the answer to many of these queries is bedded in sorting out the respective mandates of the centre and provinces. A harmonious outcome to the question of power might be a necessary precondition for the exploration of oil and gas because that is what will ultimately breed trust among the centre and the provinces. ■

The writer is a research fellow at the IBA, Karachi





Group photo of 12th CSR Award Winners with Deputy Speaker National Assembly Qasim Suri and Federal Minister Maritime Affairs Syed Ali Haider Zaidi.

12TH CSR SUMMIT & AWARDS 2020



Malik Amin Aslam
Advisor to PM
on Climate
Change



Abrar ul Haq
Chairman
Pakistan Red
Crescent
Society



Dr. Sania Nishtar
Special Assistant to
PM on Social
Protection & Poverty
Alleviation



Federal Minister Maritime Affairs Syed Ali Haider Zaidi with Deputy Speaker National Assembly Qasim Suri

List of CSR Award Winners 2020

1. Archroma Pakistan Ltd.
2. Atlas Honda Ltd.
3. Albario Engineering Pvt Ltd.
4. Bankislami Pakistan Ltd.
5. Bestway Cement Ltd.
6. Bolts Pvt Ltd.
7. Byco Petroleum Pakistan Limited
8. Century Paper & Board Mills Limited
9. CCL Pharmaceuticals
10. China Power Hub Generation Company (Pvt.) Limited
11. Crown Group Of Companies
12. Dewan Cement Ltd.
13. DP World Karachi
14. Engro Fertilizers Ltd.
15. Engro Polymer & Chemicals Limited
16. Engro Powergen Qadirpur Limited
17. EFU General Insurance Ltd.
18. Envirograf UK
19. Fatima Fertilizer Company Limited
20. Huaneng Shandong Ruyi (Pakistan) Energy Private Limited
21. Indus Motor Company Ltd.
22. International Textile Ltd.
23. Javedan Corporation Ltd.
24. Kay & Emms (Pvt) Ltd.
25. K-electric
26. Kohat Cement Company Ltd.
27. Kohinoor Maple Leaf Group
28. Lucky Tex Pakistan (Pvt.) Limited
29. Madinah Foundation
30. Madinah Teaching Hospital

31. Mari Petroleum Company Limited
32. Mariam Ali Muhammad Tabba Foundation
33. Martin Dow Ltd.
34. Mekotex (Private) Ltd.
35. Minhas Pipes & Fittings
36. Mughal Iron & Steel Industries
37. National Bank Of Pakistan
38. National Institute Of Cardiovascular Diseases
39. National University Of Sciences & Technology
40. Naveena Exports Ltd.
41. Nestle Pakistan Ltd.
42. NICVD Chest Pain Units & Satellite Centers
43. Novo Nordisk Pharma (Pvt) Limited
44. Oil & Gas Development Company Ltd.
45. Pak-Arab Refinery Ltd.
46. Pakistan Telecommunication Company Ltd.
47. Pharmevo Pvt Ltd.
48. Philip Morris (Pakistan) Ltd.
49. Premier Cables (Pvt) Ltd.
50. Roots School System
51. Sui Northern Gas Pipelines Ltd.
52. Sui Southern Gas Company Ltd.
53. The Hub Power Company Ltd.
54. The Searle Company Ltd.
55. The University Of Faisalabad
56. Total Parco Pakistan
57. Uch Power (Pvt) Ltd.
58. United Marine Agencies (Pvt.) Ltd.
59. Unity Exploration
60. Wing Group
61. Dr. Zahid Lab Xray Ultrasound
62. Special Communications Organisation

Shahid Salim Khan, joins OGDCL as MD, CEO

Mr. Shahid Salim Khan is a Petroleum Engineer by profession having MS in Petroleum Engineering from University of Southern California, USA. He has more than 36 years of diversified hands on experience in various disciplines of E&P sector including HSE, petroleum engineering, drilling, production operations, community relations & community development. Mr. Khan has worked in different capacities with Kuwait Foreign Petroleum Exploration Company (KUFPEC), Mari Petroleum Company Limited (MPCL), Eni Pakistan Limited (An Italian Company), LASMO Oil Pakistan (London & Scottish Oil Company) & Oil & Gas Development Company Ltd.



Besides having engineering & managerial skills, he had also contributed in other oil & gas industry forums like Pakistan Petroleum Exploration and Production Companies Association (PPEPCA) in capacity of Senior Vice Chairman, Society of Petroleum Engineers (SPE) in various capacities including Chairman Pakistan Chapter (2014-16 and 2020-22) and Director SPE. He has also been Chairman Annual Technical Conference that is jointly organized by SPE and PAPG annually.

He is currently serving on the board of Pakistan State Oil Company Limited (PSOCL) and Mari Petroleum Company Limited (MPCL).■

Syed Muhammad Taha appointed as MD, PSO

Mr. Taha has been appointed as the Managing Director & Chief Executive Officer of Pakistan State Oil Company Limited (PSOCL) with effect from February 26, 2020. Having over two decades of experience in the industry, he is known and respected for his transformational skills in the energy sector.

With 19 years of Executive level management experience under his belt, Mr. Taha has been a key member of the change management team with specific reference to K-Electric and PSO, where he was an integral part of the leadership team that turned around these struggling enterprises into highly profitable concerns.

Working as an Executive Director in Oasis Energy, he headed the Program Management Office of Port Harcourt Electricity Distribution Company, Nigeria, where he led a global team of subject matter experts to provide strategic and operational support to the leadership team of the distressed utility, while successfully spearheading and executing multidisciplinary and multimillion dollar projects.

Earlier, Mr. Taha worked at K-Electric Limited as Chief Operating Officer - Distribution and a vital member of the Senior Leadership Team.

Mr. Taha has also worked for over 9 years at Pakistan State Oil Company Limited (PSO), where he held several senior positions. For around 6 years starting from 1993 to 1999, Mr. Taha worked for Shell Pakistan, Caltex Pakistan and Pakistan Steel Mills at various key positions.

Mr. Taha holds an Engineering degree with an MBA in Finance from the Institute of Business Administration Karachi.■



Valvoline celebrates its anniversary

Valvoline 300 Gas Engines Celebration was held at PAF Museum chaired by OES shareholders Mr Azhar Iqbal, Mr. Nasim Ahmed, Mr Muhammad Saeed and Mr Jawaid Iqbal. Valvoline Business Manager Middle East, Africa & Pakistan - Mr Christos Metsios and Marketing Manager MENAP, Abid Ali Mawjee also presented and graced the occasion. Around 400 customers from various cities participated in the event and appreciated Valvoline premium products as well as their value-added services of Orient Energy systems (Pvt.) Ltd. for over two decades. It may be noted that OES was the first company to introduce a 24X7 service concept in Pakistan Power sector and contributed heavily across Pakistan. Valvoline® is the world's first and most enduring lubricant brand for the last 153 Years and this fact alone makes Valvoline special. It has a unique slogan, "World's first & World's finest" and it operates in over 140 countries. Since 1866, Valvoline launched many groundbreaking innovations that changed the industry. The end users trust Valvoline because it offers a better formula for businesses and consumers through innovative products and services, help extending engine life, save fuel, increase performance, reduce environmental impact and enhance reliability. In 1866, Dr. John Ellis established the industry's first brand when he poured his lubricant into the stuck valves of a large V-shaped steam engine, freeing the valves to move easily. He went to register the name VALV-O-LINE as the world's very first trademarked oil brand. Today, Valvoline is a leading lubricant specialist globally with 153 years of experience under the belt. It is amongst the top five oil brands in countries like USA, Australia, India etc. Valvoline is the official Lubricants Partner for Manchester City football club and has had brand ambassadors like Virat Kohli and Ricky Ponting in cricket.■



Crown Group unveils electric vehicles

Crown Group organised the market testing and sales display of its exclusive range of CROWNE Electric Vehicles, which includes two, three and four-wheelers that users would be able to drive 1km in only Re0.80 to Rs1.25.

Crown Group Chairman M Farhan Hanif said some mafias in the country were not allowing low price vehicles on road, but Crown Group had decided to make low priced vehicles come on roads. These vehicles would have 25 percent electricity expenses compared with petrol charges. "All vehicles are designed to work on electric and petrol for longer rides."

The electric vehicles include a vast range of a four and three-wheeler car, two and three-wheeler scooty's, cargo loaders, three-wheeler two-in-one, three-wheeler nine-seater, garbage trucks and ambulance, he added.

The electric vehicles would be locally manufactured at the groups 26 acre Port Qasim facility. Having an initial production capacity of 120,000 units per annum, the group has already invested Rs2 billion on the plant in the first phase.

Based on the yet to be announced Electric Vehicle (EV) Policy which claims one percent customs duty on CKD parts and five percent sales tax, the company has set the display and testing price of



the four-wheeler electric car for Rs400,000 whereas the display and testing prices for electric three-wheeler car and two-wheeler scooty for Rs300,000 and Rs55,000 respectively. "The automobile and oil industry are currently facing numerous issues which are reflecting on the citizens of Pakistan. With this range of electronic vehicles, we plan to overcome those challenges and present the industry with variety of innovative, convenient and affordable vehicles for their

everyday use," the chairman said.

Crown is a leading brand in the two and three wheeler industries of Pakistan and the only local consumer brand that exports to international markets while offering solutions for all segments of the industry within Pakistan.

It has the largest network of spare parts and service in Pakistan with 62,000 retailers, wholesalers and workshops on board, he added. ■



Mian Anjum Nisar, President FPCCI presenting FPCCI crest to Mr. Hashim Raza, CEO SMEDA. Mr. Sultan Rehman, Mr. Kurram Ijaz, Vice Presidents FPCCI, Mr. Zakria Usman and Mr. Saqib Fayaz Magoo and other also seen in the picture.

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After a Morning walk, a Group of Doctors were standing at a road-side Restaurant enjoying a Cup of Tea.

They saw a Man limping towards them..

One Doctor said, "he has Arthritis in his Left Knee.."

The second said, "he has Plantar Faciitis.."

The third said, "just an Ankle Sprain.."

The fourth said, "see that Man cannot lift his Knee, he looks to have Lower Motor Neurons.."

"But to me he seems a Hemiplegia Scissors Gait," said the fifth..

Before the sixth could proclaim his Diagnosis, the Man reached the Group and asked,

"Is there a Cobbler nearby who can repair my Slipper.?"

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PERS 2020, a big investment opportunity for foreigners



Report by Halima Khan

Over 400 delegates have attended the first Pakistan Energy Reform Summit at Serena Hotel, Islamabad. The PERS 2020 aims to develop and foster the collaboration of Pakistan energy for both power and energy sector, it specifically discusses the major matters on renewable power, gas and LNG, and downstream investment of refining and petrochemicals. Seven keynote speakers have addressed the speaking in the summit plenary session.

Minister of Energy (power & petroleum) Omar addressed the growing national energy demand would benefit the overseas energy investors to Pakistan as Pakistan has more than 220 million population. Chairman of Board of Investment Mr Zubair Gilani also commented on the positive business environment in Pakistan has started to rise, especially for the energy sector, he pointed the investment plan is feasible for foreign companies. Special Adviser to Prime Minister H.E. Nadeem Babar evaluated the energy reformation and energy transition in Pakistan has been the challenge which brought the new opportunities to the diverse energy mix. Pakistan would like to welcome all the energy companies of conventional and unconventional energy experts to tap the energy industry.

Sindh as the prominent energy development province in Pakistan, which has natural gas, coal, Pakistan's largest wind

corridor and more than 12 hours sunshine for solar generation according to Energy Minister Sindh, the diverse energy mix and increasing power development certainly can't be implemented without international support. Ambassador of Denmark to Pakistan Rolf has addressed the renewable energy opportunity for Pakistan in comparison with Denmark energy transformation since 1973 of oil crisis to today the leading renewable energy country by a fundamental solid energy policy change. Rolf has pointed three possibilities to conquer transition challenges: invest in a flexible power system for variance, maximising renewables & minimising electricity costs for cost-effective, full implementation & stable clear framework on ARE policy for realising the policy. President of ExxonMobil's Global LNG Market Development Mr Irtiza Sayyed has expressed the confidence of return to Pakistan LNG market since 2018, Irtiza believes Pakistan will play an important role in the global LNG market, and their plan in executing the stable energy supply in Pakistan would lead a better future for national energy demand and better energy future. Mr Bernard Dagher has represented GE to deliver the integrated grid solution in Pakistan in more than 35 years, and their ongoing contribution to Pakistan local business varied from power the Pakistani commercial airplanes, to provide complete eBop solution for 250MW of wind power and 450MW onshore wind installed. ■

Mahreen Aziz Khan joined as K-Electric's First Female CxO

Mahreen Aziz Khan has joined K-Electric (KE) as the first female CxO since the company's transformation began in 2009. Ms. Khan is part



of the KE Leadership as Chief Marketing & Communications Officer (CMCO) and this also makes her the first female CMCO at the company. After studying law from Cambridge University, Ms. Khan qualified as a Barrister and has also studied Public Policy from Harvard University's Kennedy School of Government. She has more than 19 years of experience in strategic communications, media, and public policy. As KE continues its mission of powering Karachi, the economic hub of Pakistan, Ms. Khan will lead KE's strategic communications for the utility which caters to more than 2.8 million consumers.

In 2015, Pakistan committed to various UN Sustainable Development Goals (SDG) of which UN SDG 5 aims to achieve gender equality and empower all women and girls by 2030. To date, Pakistan's Energy Sector remains one of the least gender diverse sectors and women face structural and cultural challenges in professional growth and success. There's a paucity of female CxOs in the Energy Sector, making Ms. Khan's appointment at KE a significant one. Having female leadership at KE is a Diversity & Inclusion milestone for the organization as well, resonating the #EachForEqual International Women's Day (IWD) agenda for 2020 which is about collective individualism to create a more gender equal world and workforce.

Ms. Khan commented, "Harnessing the energy and creativity of women in the workforce is a huge advantage not only for KE, but for Pakistan as a whole. We are committed to creating value and contributing to Pakistan's economy and growth." ■

Dasu Hydropower Project to start generation in 2024



Construction work on Dasu Hydropower Project is gaining momentum, as the issue pertaining to rates of land needed for the project has been resolved due to support by the Federal and Khyber Pakhtunkhwa governments. The project progressing at an increased pace, will start electricity generation in second half of the year 2024, while all six units of the Stage-I, with cumulative generation capacity of 2160 MW, will be completed by early 2025.

This was stated by WAPDA Chairman Lt Gen Muzammil Hussain (Retd) during his visit to the project. General Manager (Land Acquisition and Resettlement), General Manager and Project Director (Dasu Hydropower Project) and representatives of the consultants and contractors were also there during the visit.

WAPDA Chairman, during the visit, reviewed construction activities at main access tunnel leading to the power house, the two diversion tunnels, project offices and colony.

The project management briefed the Chairman of the progress on main civil and preparatory works in the project area. He was also informed that Khyber Pakhtunkhwa government and the district administration have assured to complete the process of land acquisition by June this year. WAPDA Chairman, appreciating spirit of the locals, said that their cooperation is vital to expedite the land acquisition process. WAPDA is cognizant of its responsibilities for betterment of the project affectees and has been taking all possible measures for progress and prosperity of the people residing in the project area, he further said.

The 4320-MW Dasu is a vital hydropower project not only for the country but also for Khyber Pakhtunkhwa province. The project will stabilize the economy of Pakistan by generating low-cost hydel electricity besides ushering in a new era of socio-economic development in the backward and far-flung areas of the province.

Dasu Hydropower Project is being constructed on River Indus upstream of Dasu town. WAPDA is implementing the project in two stages - each stage having a generation capacity of 2160 MW. On completion, Stage-I of the project will contribute more than 12 billion units of electricity per annum to the National Grid. The Stage-II, after its completion, will also provide another 9 billion units to the system every year.

Besides main civil works of Stage-I, the construction work on seven different contracts relating to infrastructure development in the area is also underway. These include construction of right bank access roads, relocation of Karakoram Highway, construction of 132 KV transmission line and grid station to provide electricity from Duber Khwar Hydel Power Station to the site for implementing the project and adjacent areas, project colony and resettlement works ■

Power sector liabilities stand at Rs1.78 trillion

Despite measures taken by the Power Division to bring down circular debt, the power sector still continues to bleed as it is facing total liabilities of Rs1.78 trillion.

After coming to power, the Pakistan Tehreek-e-Insaf (PTI) government had launched a drive to reduce the circular debt by improving the recovery of bills and reducing electricity theft. These measures failed to bring the desired results as liabilities of the sector stood high, including bank loans and circular debt.

Total circular debt at the end of December 2019 was Rs978 billion - owed to both public and private-sector power generators - while the liabilities of Power Holding Private Limited (PHPL) payable to banks due to loans taken in the past stood at Rs804 billion, which resulted in total liabilities of Rs1.78 trillion, according to a statement issued by the Power Division.

Commenting on the status of power sector's circular debt, a Power Division spokesperson said at the beginning of September 2018 the circular debt was Rs1.3 trillion, when the PTI government took office. It was increasing by Rs38 billion per month, he added.

"With the measures taken by the government, encapsulated in the circular debt capping plan, the power sector has considerably reduced the rate of increase to approximately Rs12-15 billion per month."

He said that various measures including tariff rationalisation, recovery drives, an anti-theft campaign and system modernisation were initiated. Due to these measures, the addition to the circular debt is expected to be reduced to Rs130 billion in 2019-20, he added.

Circular debt has been a chronic issue for all governments. In order to ensure effective implementation of the National Energy Policy (NEP) 2019, the Circular Debt Management Plan 2019 has already been approved by the PTI government that intends to reduce the flow of circular debt to less than Rs75 billion per annum while maintaining the annual subsidy target of 0.4% of GDP. courtesy ET ■

Doctor: do you play any dangerous sports?

Me: sometimes I disagree with my wife.



Gas exchange may be set up

By Syed Akhtar Ali

The government wants to reduce its exposure and liabilities, if not responsibilities, from the energy sector. Up till now, the government has been heavily involved giving sovereign guarantees, underwriting power purchase agreements (PPAs), buying at higher prices all what producers could offer and practically selling at a loss. The result is circular debt, unaffordable high prices hurting people, industries and exports.

The Petroleum Division has announced its intention, if not a declared or written policy, that it would welcome investments in the liquefied natural gas (LNG) sector with least government involvement. It would not give guarantees and would not stop or delay investment proposals. If investors think there is a market, they should go ahead and import or produce and sell to willing customers. If you are able to sell, well and good, and if not, our sympathies only - no financial support and no guarantees. This appears to be too good to be true.

This may not be a fairytale. After all, the entire oil sector, refineries and oil marketing companies (OMCs) are working without guarantees. There is a policy that oil will be sold at international prices plus the local selling costs. The government adds some levy plus GST. This is enough to attract investments in this sector. The existence of sufficient demand and market are possibly the only yardstick for making investment decisions.

Unfortunately, there is no international price in case of electricity and gas. There are too many variants. Where simplified parameters have been set, competition has come almost everywhere. Look at solar and wind.

LNG and extension of gas pipeline networks have made it possible that one may start thinking about markets (and not government) start working even in developing countries like Pakistan. Markets and prices are converging.

There used to be wide price difference among regional markets, which is no more. Thus, the government

has made it open, install as many terminals as you wish, if you think, you can sell. And investors are coming.

The question is what prices? Would it be feasible to leave the LNG suppliers free to charge as much as they may wish? Is the market large enough to enable forces of competition to work? It has not happened in case of 94 sugar plants and an equal number of cement plants. Many



people complain that there is some kind of price collusion?

In Western countries, there are stock exchanges like gas market hubs, where prices are determined through howling or computer input. There are 11 gas hubs already in the European Union and more are coming under EU directives to every country to have its own hub.

India and Turkey are mulling to have one. In Pakistan, in case of liquefied petroleum gas (LPG), there are sufficient conditions for quite a while to have a functioning market. It has not happened. There are certain prerequisites for a market exchange that are to be met. These include an independent system operator(s) with an approved grid code, independent transmission companies, gas producers, importers and suppliers, distribution companies, and large and small buyers.

Almost all ingredients are there in the power sector, but the market is still not there. The gas sector has not any of

the aforementioned prerequisites. It can be done and should be done without any further delay. Initially, it may be done without privatisation, the latter being the sole reason for the opposition by gas companies.

There is another, although, less efficient market mechanism that has often been practised here in Pakistan with questionable and varying levels of success. That is, setting the upper price limit, for example in the LPG sector and to some extent in LNG. It appears that

same kind of price fixing is in the mind of decision-makers, when they talk of the market. But then what is that upper limit and who sets it and what are the rules. Many people are suffering due to NAB investigations and inquiries in relation to LNG terminals.

Can we have a pricing formula for setting a ceiling price for LNG. A possible formula could be based on one of the gas hub prices - averaging some of the spot prices like Jera and JKM.

JKM is fast emerging as a credible index, although it is still not a gas hub, it is an assessment only.

However, JKM spot could be the simplest linkage for the LNG ceiling price in Pakistan market.

Mixing oil and gas linkage could also be an approach. It is a difficult and controversial task for which credible external consultancy would be required and must be commissioned without further loss of time.

It would be a mistake, however, to keep Ogra out of it, although they may be requested to work under a time-bound framework.

The writer is former member energy of the Planning Commission.

Courtesy: The Express Tribune. ■

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PTI govt squeezing Rs10 billion additional per month from POL levies

Facing a revenue shortfall of over Rs480 billion in the first eight months of the current financial year, the government has increased revenue by up to 106 per cent the rate of petroleum levy on various oil products to raise an additional revenue of Rs10 bn per month, or at least Rs40 bn by June 30. Documents seen by suggest the ministry of finance increased the petroleum levy on high speed diesel (HSD) by Rs7.03 to Rs25.05 per litre for March, from Rs18 per litre in February. This is estimated to generate an additional revenue of Rs4.6 bn per month.

Sources said that based on existing tax rates, the Oil and Gas Regulatory Authority (Ogra) had worked out a reduction of Rs12.04 per litre (9.5pc) in the ex-depot price of HSD, but the finance ministry persuaded the prime minister to reduce its price by Rs5, or just 3.9pc. With a 9.5pc cut, the HSD price would have gone up to Rs115.2 from Rs122.25 per litre fixed by the government. Likewise, the government raised the rate of levy on petrol by Rs4.75 to Rs19.75 from Rs15 per litre, showing an increase of almost 32pc. The higher levy on petrol is estimated to fetch an additional revenue of about Rs3.6bn a month. Here too, Ogra had calculated a price cut of Rs9.76 per litre (8.4pc), but the finance ministry passed on only Rs5 (4.29pc) reduction to consumers. The petrol rate should have been Rs106.84 per litre instead of Rs111.60 fixed by the government. The total tax on HSD now works out at Rs45 per litre. Similarly, the levy on kerosene was increased from Rs6 to Rs12.33 per litre, showing an increase of 105.5pc. This would roughly create an additional revenue stream of about Rs65 million. The petroleum levy on kerosene is now the highest since April 2009. Ogra had worked out a reduction of Rs13.33 (13.4pc) to Rs86.12 per litre, but the finance ministry brought it down by Rs7 per litre. The total tax on petrol now stands at Rs39 per litre. The petroleum levy on light diesel oil (LDO) was increased from Rs3 to Rs4.94 per litre, showing an increase of 65pc or Rs1.94 per litre. This will have an additional impact of about Rs30m per month. The regulator had suggested a reduction of Rs8.94 per litre in LDO rates,

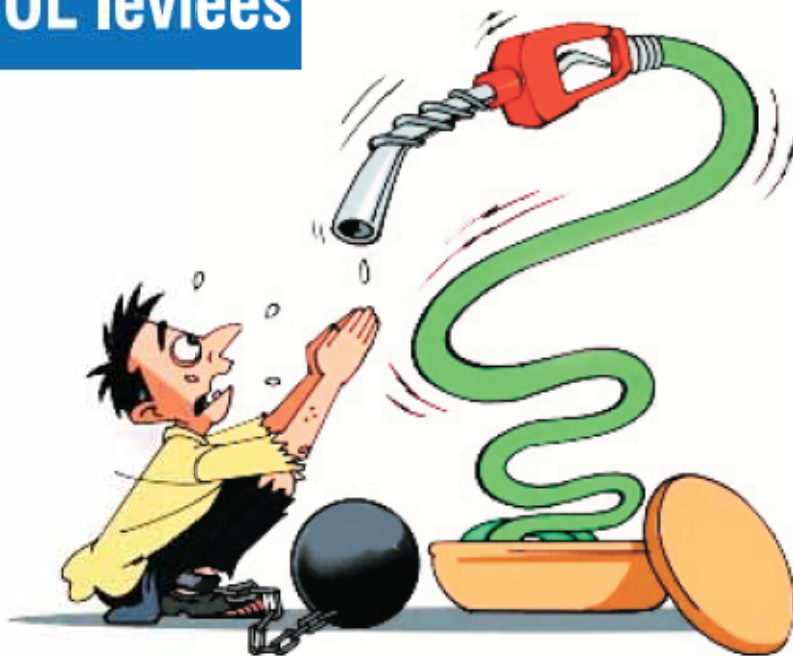
but the finance ministry did not allow a reduction of more than Rs7. This is despite the fact Dubai crude rate had come down from \$62 per barrel on January 31 to \$50 a barrel on February 28, down 19.35pc. On the other hand, the benchmark Brent fell from \$60 a barrel to \$51 a barrel, down 18.33pc. In comparison, the prices of diesel and petrol in the local market were reduced by about 4pc. The sources said that with no hopes of a substantial increase in the rate of tax collection by the Federal Board of Revenue in the remaining four months of the current fiscal year and additional financial requirements arising out of subsidies to export industries, the adviser to the PM on finance had no other option but to go for increasing petroleum levy.

The government has already increased general sales tax on all petroleum products to a standard rate of 17pc across the board to generate additional revenues. Until January last year, the government was charging 0.5pc GST on LDO, 2pc on kerosene, 8pc on petrol and 13pc on HSD. As a result, the government is already estimated to have collected almost 44pc higher revenue on key oil and gas products in the first half of the current financial year despite a 10pc reduction in domestic production and 20pc fall in imports. As such, the oil

and gas sector is emerging as the single largest contributor to the country's revenue stream. Three major factors are estimated to have contributed to the surge in petroleum revenues, including a substantial increase in various tax rates, removal of legal challenges and higher international prices. Besides the 17pc GST, the government has more than doubled the rate of petroleum levy on HSD in recent months to Rs25.05 from Rs8 per litre, while levy on petrol had also been increased to Rs19.75 instead of Rs10 per litre. The petroleum levy on kerosene and LDO has been increased to Rs12.33 and Rs4.94 per litre instead of Rs6 and Rs3, respectively. Over the past many months, the government has increased petroleum levy rates to partially recoup a major revenue shortfall.

The levy remains in the federal kitty unlike GST, which goes to the divisible pool taxes and thus about 57pc share is grabbed by the provinces. The petrol and HSD are the two major revenue earning products for the government because of their massive and still growing consumption in the country.

Total HSD sales are touching 600,000 tonnes per month against a monthly consumption of around 750,000 tonnes of petrol. The sales of kerosene and LDO are generally less than 10,000 tonnes per month. ■



LNG supply chain facing collapse?

Pakistan needs to adopt most favourable energy route by evaluating data and taking action on the root cause rather than declaring Energy Emergency or creating panic of circular time bomb and of LNG supply chain facing collapse.

In its flagship "State of the Industry Report 2017-18", OGRA noted that domestic gas production would continue to decline from about 3.3bcfd in 2017-18 to less than 1.6bcfd by 2028 while the gas demand would keep going up to reach 8.3bcfd by that year with shortfall increasing to 6.6bcfd by FY2028.

Natural gas share in the primary energy mix is around 48pc. The share of re-gasified LNG in the overall gas supply increased to 23pc in FY 2017-18. The power sector was the main consumer of natural gas during FY 2017-18, consuming 37pc, followed by domestic sector 20pc, fertiliser 17pc, captive power 10pc, industrial sector 9pc, transport 5pc, and commercial sector having 2pc share. OGRA estimates that despite the induction of all the import options, including LNG, TAPI and IP pipelines, the total supplies would decline to 3.7bcfd by 2028, creating a net shortfall of about 4.6bcfd.

2006-11: Mashal Integrated LNG project (terminal + LNG supply) was awarded to a Consortium of GDF Suez and 4Gas. For 2.75 mtpa 3.95% of Brent + 0.75 (Max of HH/NBP) + 1.58. For 0.75 mtpa 15% of Brent + 0.50. Supreme Court rolled back the Mashal project in 2011. In 2012: 4Gas submitted its bid for the SSGC/LPG Retrofit project. This 165 Mn USD Project required 22 months to complete with tolling price of 80 Cents / MMBTU; daily capacity payment of USD 320,000 on take or pay basis. The project was shelved. The PPP Government subsequently issued integrated LNG Project tender in 01, the tender was scrapped by SSGC as bid submittal by PGPL was 19 minutes later than the time stipulated in the tender and GEI's bid bond was not of the desired amount. PPP government announced fresh bidding for the same integrated LNG import project in 013; term was 15 years on take or pay basis for 400 MMSCFD. Three were declared as qualified bidders. ETPL's bid was lowest but the evaluators declared it non-compliant as an alternate price quoted per PPRA rules of ~ \$16.56 per mmbtu, based on Henry Hub formula



was not acceptable to SSGC.. March 2013, QG had offered GOP a price proposal of 14.9% of Brent + 0.60. 30th Jan 2015, price proposal received by PNC was at 14.4%. 7th May 2015, Qatar made a counter offer of 14.1% to Consultant (FGE) recommended offer of 14-14.25%. PNC countered with 13.7% slope and Qatar final offer was of 13.9%.

Subsequent to the 5 year Term Tender results, the PNC decided to further negotiate price with Qatargas. 6th Jan 2015, QatarGas agreed to request by Minister for P&NR to match the slope of 13.37%, the lowest price achieved in the 5 year term tender to which. In 2015 and 2017, respectively, EETL terminal became operational at \$272,000/\$228,000 per day (200 mmscfd throughput volume in the first year and 400 mmscfd in the second year) and PGPL at \$240,000 per day (600 mmscfd). The terminal capacity payment includes payment of interest, lease and O&M cost of FSRU, custom duty etc. Bangladesh is paying USD 90m per year to its terminal operator vs USD 88m for PGPL and USD 83.2m for EETL. The net profit results in about USD 150m profit for the operator in 15 years and not the billions repeatedly stated by likes of Klasra, Mateen, Sheikh Rashid, Malick, Farrukh Saleem and Shahid Sattar.

OGRA June 2019 determination states terminal tariff as 0.4012 and 0.3922 USD /mmbtu for EngrTender results of GSPC India for cargoes to be delivered for April 3-5, May 9-11 and June 7-9 were heard awarded at \$2.50-\$2.60/MMBtu, \$2.70-\$2.75/MMBtu and \$2.85-\$2.90/MMBtu, respectively.

Pakistan cargoes purchased by tender in January are between USD 5.95-

5.98/mmbtu. Brent was \$62.43. In February 2019, not spot buying took place. Brent was \$63.76.

Goldman Sachs, says that the bearish cycle might end in 2021 due to lower production in Europe and in the U.S., along with higher LNG purchases, would help tighten up the market and forecasts JKM prices in the winter of 2020/2021 at \$5.80/MMBtu, and summer 2021 prices at \$5.50/MMBtu.

So why is Pakistan not positioned and lagging in taking advantage of the global gas glut in which gas selling at \$2.50/MMBtu whereas price conscious buyers in Southeast Asia and the Caribbean are taking advantage of record low prices and soaking up some of the excess supply. ■

OICCI calls for Integrated Planning for Energy Value Chain

The Overseas Investors Chamber of Commerce and Industry (OICCI) has launched its 'OICCI Energy Report 2019'. The report is based on the recommendations of the 31 leading international energy sector companies operating in Pakistan, who are members of the chamber.

Pakistan's energy sector has witnessed significant transformation over the past five years, with the power generation capacity increasing rapidly to over 39000 MW by mid-2019, with the inclusion of two large RLNG based power plants, Thar coal project and imported coal-based power plants leading to a major shift in the energy mix. Despite the relative fast paced increase in the generation and transmission capacity, over 60 million Pakistanis do not have access to electricity from the grid, which not only impacts the economic growth of the country, but the economic exclusion has a social impact also. On top of this, the mounting circular debt, in excess of Rs 1.9 Trillion, and the inability of distribution companies to arrest the ever increasing technical and non-technical losses, continue to burden the national exchequer by an additional Rs 40-50 Billion annually. ■

World is losing battle to control carbon emissions



The world is losing the battle to control carbon emissions, United Nations Secretary General Antonio Guterres said, adding that people should invest in green energy because of the high dividends.

Green economy is good economy. I have personally invested in the Green Fund and it is growing more as compared to my other investments. So green economy is growing faster than others as it is future of the world," he said at a session on sustainable development and climate change in Islamabad.

Mr Guterres suggested focusing on solar energy as it is cost effective when compared to the production of energy through fossil fuel and also because the continued production of fossil fuel energy in the future would be a mistake.

"We are still losing the battle regarding controlling carbon emissions but I hope that we will win it in the near future. Currently the melting of glaciers is a huge problem but we can not address it unless we stop the global warming. Can you

imagine that recently temperature in Antarctica reached 25°C," he asked rhetorically? Replying to a question regarding possible tension between Indian and Pakistan due to water issues, Mr Guterres said that both countries can agree to use water collectively.

"It can help both countries to build confidence. Moreover there is an agreement between two countries regarding water and the World Bank is ensuring it," he said. He said like all developing countries, Pakistan has contributed little to the problem yet faces disproportionate vulnerability because of it. In the past decade, Pakistan has lost some 10,000 lives to climate-related disasters, including 1,200 due to a heatwave in Karachi in 2015, he said. Referring to the risk of locusts emergency in the country, he said that global warming is leading to global swarming.

Mr Guterres said he believes the biggest problem for Pakistanis water. Talking about the water situation in the country, he said that Pakistanis one of the 15 most water-stressed countries in the world. He also congratulated Pakistan on becoming co-chair of the Green Climate Fund and said he welcomes initiatives like the Billion-Tree Tsunami and the government's Clean and Green Pakistan movement, adding that he was "extremely well-impressed" when he heard that the country had decided to abolish plastic bags in the capital.

Giving a stark warning about the climate emergency, he said: "We are in a battle for our lives. Our sustainable future is at stake." Mr Guterres also talked about sustainable development, saying he was pleased to note that "Pakistan has embraced the sustainable development goals (SDGs) from the start."

"Back in 2016, Pakistan was among the first nations to integrate the SDGs into its national development agenda, and recognise them. In 2018, Pakistan launched the national SDG framework to prioritise and localise the goals throughout the country."■

Sukuk-II for Rs200 billion being launched

The Power Division is in the process of gearing up to launch the Sukuk-II for raising Rs200 billion after getting competitive interest rate of the loans from a consortium of banks and will soon submit a summary to the ECC (Economic Coordination Committee) for approval. The amount will be used to reduce the circular debt that, according to the government, reached Rs1.8 trillion by offloading the liabilities of various entities in the power sector. The existing volume of loans and liabilities parked in the PHPL (Power Holding Private Limited) currently stand at Rs804 billion. The consortium of local banks, mostly Islamic ones, will pledge the assets of DISCOs and GENCOs against the loan and more importantly servicing of new financing facility will be done by electricity consumers through imposition of surcharge in tariff. For six months or tariff determination whichever is earlier, mark-up servicing will be made by government and the same will be treated as government equity in DISCOs. The Ministry of Finance will provide government guarantee for repayment of loan as well as profit or interest for the facility amounting to Rs200 billion.

"Yes, we have got competitive interest rates if compared with the rates of Rs200 billion earlier arranged loan of the same amount under Sukuk-I at Karachi Interbank Offered Rate (Kibor) plus a margin of 80 basis points. Now we will pay less interest rate on the financing of another Rs200 billion under Sukuk-II

but the difference is not so big," a top official said.

However, spokesman of Power Division when contacted said: "The competitive bids on Rs200 billion loan with mark-up rates from various local banks are still under evaluation and these cannot be disclosed at the moment since the competitive bidding requires secrecy." The official said that while pursuing the decisions of the Economic Coordination Committee (ECC) held on January 29, 2019, Sukuk-I of Rs200 billion was issued through the Power Holding Limited on March 1, 2019 and disbursement proceeds were utilized by paying the outstanding liabilities of various sectoral entities through the Central Power Purchasing Agency (Guarantee) Limited (CPPA-G).

And to further ease out the liquidity crunch of power sector, the Power Division submitted a summary on June 25, 2019, for issuance of second tranche i.e Pakistan Energy Sukuk-II, amounting Rs200 billion for power sector liquidity through Power Holding Limited. The ECC of the Cabinet considered the proposal of the Power Division on June 26, 2019, constituted a committee to review the proposal in holistic manner and submit recommendations thereon to the ECC for consideration.

The matter of issuance of second tranche such as Sukuk-II for Rs200 billion was deliberated by the committee in a holistic manner and Adviser to the Prime Minister on Institutional Reforms and Austerity submitted his report. In the light of

Micro-pollution ravaging China, South Asia, Lahore second most polluted megacity

Nearly 90 per cent of the 200 cities beset by the world's highest levels of deadly micro-pollution are in China and India, with most of the rest in Pakistan and Indonesia, researchers say.

agriculture, industry, wildfires and especially the burning of fossil fuels. "Air pollution is the world's leading environmental health threat," said IQAir CEO Frank Hammes. "Ninety percent of the global population is breathing unsafe

Among the club of 36 rich OECD nations, South Korea was the most polluted for PM2.5, counting 105 of the worst 1,000 cities on the index. In Europe, Poland and Italy count 39 and 31 cities, respectively, in this tranche.

Other parts of the world such as Africa and the Middle East lacked data. "What cannot be measured cannot be managed," Hammes said. "Africa, a continent of 1.3 billion people, currently has less than 100 monitoring stations that make PM2.5 data available to the public in realtime." As of 2018, China alone had more than 1,000 such stations in 200 cities. Climate change has begun to amplify the health risk of PM2.5 pollution, especially through more intense forest fires and sandstorms made worse by spreading desertification, the report found.

Global warming and PM2.5 also have the same primary driver: the burning of coal, oil and gas. While the link with lung cancer was well established, a recent study showed that most excess deaths from air pollution are caused by heart attacks, strokes and other types of cardiovascular disease.

Small and larger particulate matter, nitrogen dioxide (NO₂), sulphur dioxide (SO₂) and ozone (O₃) have likewise been linked to drops in cognitive performance, labour productivity and educational outcomes.

Of cities with more than one million people, the least affected by PM2.5 are Adelaide, Helsinki, Stockholm, and San Jose in central California, followed by Perth and Melbourne in Australia, and Calgary in Canada, and New York

courtesy: Daily Dawn



Taking population into account, Bangladesh emerged as the country with the worst so-called PM2.5 pollution, followed by Pakistan, Mongolia, Afghanistan and India, according to the 2019 World Air Quality Report, jointly released by IQAir Group and Greenpeace. China ranks 11th.

Particulate matter of 2.5 microns or less in diameter - roughly 1/30 the width of a human hair - is the most dangerous type of airborne pollution. Microscopic flecks are small enough to enter the bloodstream via the respiratory system, leading to asthma, lung cancer and heart disease. Among the world's megacities of 10 million or more people, the most PM2.5-toxic in 2019 was the Indian capital New Delhi, followed by Lahore in Pakistan, Dhaka in Bangladesh, Kolkata in India, Linyi and Tianjin in China, and Jakarta, Indonesia.

Next on the list were Wuhan - epicentre of the new coronavirus outbreak - along with Chengdu and Beijing. The IQAir report is based on data from nearly 5,000 cities worldwide. Most of the seven million premature deaths attributed by the World Health Organization (WHO) to air pollution are caused by PM2.5 particles, which originate in sandstorms,

air." China's average urban PM2.5 concentration dropped 20 per cent in 2018 and 2019, but last year it still counted 117 of the 200 most polluted cities in the world. All but two per cent of China's cities exceeded WHO guidelines for PM2.5 levels, while 53 percent exceeded less stringent national safety limits.

Less data from Africa: The UN says PM2.5 density should not top 25 microgrammes per cubic metre (25 mcg/m³) of air in any 24-hour period. China has set the bar at 35 mcg/m³.

More than a million premature deaths in China each year are caused by air pollution, according to the WHO. Recent calculations put the toll at up to twice that figure.

Across a large swathe of northern India and north-central China, meeting WHO standards year-round for PM2.5 pollution would increase life expectancy up to six or seven years, according to the Air Quality Life Index, developed by researchers at the Energy Policy Institute of Chicago.

In India, small particle pollution exceeds WHO limits by 500 per cent, even if air pollution in general declined significantly last year, with 98 per cent of cities monitored showing improvements.

My wife is singing in the house



I'm sitting outside so the neighbors don't think I'm hitting her

Govt halts sale of OGDCL stakes

The government on deferred decision on a proposal that sought a halt to the privatisation of Oil and Gas Development Company (OGDC) amid concern whether authorities could achieve the revised Rs1.5 trillion non-tax revenue target. The Petroleum Division had proposed the Cabinet Committee on Privatisation (CCOP) to stop the OGDC divestment process due to a steep fall in share price of the blue-chip company. OGDC's share price dropped nearly 2% to Rs124.7 per share at the close of Tuesday's trading session, which was 42.2% below the 2014 level of Rs216 when the Pakistan Muslim League-Nawaz (PML-N) government also attempted to sell stake in the company. The CCOP discussed the proposal of halting the ongoing process of divesting 7% shares in OGDC and, if necessary, instead sell a 10% stake to a strategic investor with a seat on the company's board. Adviser on Finance and Revenue Dr Abdul Hafeez Shaikh chaired the meeting of the CCOP - a cabinet body responsible for making decision on the sale of government assets. The Privatisation Commission had sent a summary for the CCOP's consideration after the Petroleum Division - the administrative ministry of OGDC - advised on February 14 "not to pursue" the divestment transaction, showed official documents. The Petroleum Division stated that it was incumbent upon it to advise the government to halt the divestment process due to a continued drop in the share price of OGDC. It noted that the current share price was far lower than the 2014 offered price of Rs216 per share. For divesting shareholding in OGDC, the CCOP directed that the matter requires further deliberation. The CCOP directed that all the relevant stakeholders, including the Ministry of Energy, should come up with a presentation on the proposal in the next meeting, it added.

Offloading 7% stake of OGDC at the Pakistan Stock Exchange is part of the government's privatisation programme undertaken to raise money for containing the budget deficit in the current fiscal year.

The government had set the non-tax revenue target at Rs895 billion in the budget, which the adviser to PM on finance has increased to Rs1.5 trillion in the hope of completing major privatisation transactions.

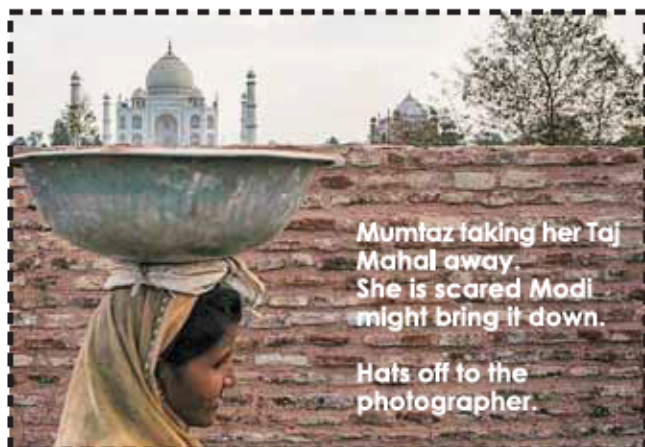
The government expects to earn a minimum of Rs45 billion from the OGDC transaction and another Rs300 billion from the privatisation of two liquefied natural gas (LNG)-fired power plants. Privatisation proceeds are crucial for the finance ministry to keep the International Monetary Fund (IMF) programme on



track after it has faced serious setbacks due to a massive shortfall in tax collection.

"The Privatisation Commission has not halted the divestment process and it is the proposal of the Petroleum Division not to pursue the transaction due to a reduction in the share price," said Samreen Zehra, spokesperson for the commission. She said the Petroleum Division instead proposed that the shares should be sold to a strategic the privatisation mode will take a longer time, which will make it difficult to conclude the transaction in the current fiscal year, according to privatisation experts.

It is for the third time in the past almost eight years that the federal government is trying to offload stake in OGDC either at the PSX or in the global capital market. OGDC is a profitable and well-managed company and there are different opinions about the need for selling a stake in the firm, which is a constant source of dividend income for the federal government. In 2014, the CCOP had offered 7.5% or 311 million shares in the company at Rs216 per share for a total value of \$696 million, which at the current exchange rate and prices has come down to \$250 million.■



Mumtaz taking her Taj Mahal away. She is scared Modi might bring it down.

Hats off to the photographer.

New Year.
New Look

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Petroleum Div opposes offloading of OGDCL shares

In a major blow to the government plan, the Petroleum Division has opposed offloading the OGDCL shares, arguing that the share's value has gone down over the years and the ongoing divestment of government's 7 percent shares in the entity should not be processed at this stage, as it will not help the government mop up a substantial monetary benefit out of it. The division has further asked the Privatization Commission to consider that the transaction is structured in a manner that instead of government's seven percent shareholding in the OGDCL, its 10 percent shares may be offered to a strategic investor company preferably to a well-versed oil and gas sector Exploration & Development (E&P) company, which may bring the best industry practices and knowledge, state of the art exploration and production techniques in the larger interests of OGDCL and E&P sector in Pakistan.

It has been revealed in a February 13 letter of Petroleum Division to the Privatization Commission with the subject: 'Hiring of financial adviser for up to 7 percent shares divestment in OGDCL'. However, a top official of the Petroleum Division also confirms the development saying that in the last meeting of Cabinet Committee on Privatization the issue was figured out and the Petroleum Division asked to come up with more analysis on

its proposal in the next meeting.

The official said since 2014, the value of the OGDCL shares was declining and divestment of 7 percent of government holding will not bring monetary solace to the government as the current value stood at Rs137.47 which was equal to the dollar value of 0.84.

The government shares in the OGDCL stand at 74.98 percent. "We want the government to offload shares of 10 percent to a strategic oil and gas company such as the MOL, UEP, KUPPEC and give them a seat in the Board of Directors so that the new company with 10 percent shares stake in the OGDCL brings modern technology and introduce innovation which may help the entity to reap more dividends.

The letter, a copy of which is also exclusively available, says the Privatization Commission is in the process of finalizing the Financial Adversary Service Agreement (FASA) for divestment up to 7 percent GoP's shares in the OGDCL.

The Financial Advisory Consortium Appointed by Privatization Commission will be mandated to structure the transaction of GoP's share in OGDCL for divestment in a conventional manner meaning that through selling or offering shares to high net worth value Individual or High Net Worth Value Institutions in the capital market. ■

DIVORCE vs MURDER



A nice, calm and respectable lady went into the pharmacy, walked up to the pharmacist, looked straight into his eyes, and said, "I'd like to buy some cyanide. The pharmacist asked, "Why in the world do you need cyanide? The lady replied, "I need it to poison my husband."

The pharmacist's eyes got big and he explained, "Lord have mercy! I can't give you cyanide to kill your husband, that's against the law. I'll lose my license! They'll throw both of us in jail! All kinds of bad things will happen. Absolutely not! You CANNOT have any cyanide. Just get a divorce!"

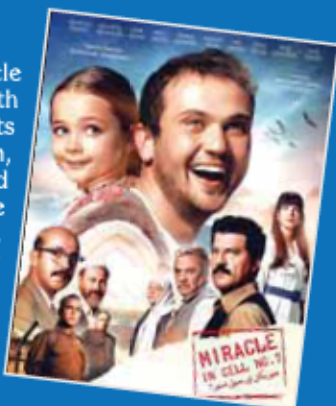
The lady reached into her purse and pulled out a picture of her husband in bed with the pharmacist's wife. The pharmacist looked at the picture and said, "You didn't tell me you had a prescription."

Heartwarming Turkish movie 'Miracle in Cell No.7' scheduled

The special show of Turkish movie "Miracle in Cell No.7" was held at Atrium Cinemas with attendance from media and film enthusiasts including socialites and celebrities. The film, brought by HKC Entertainment, was received with accolades and practically everyone in the audience emerged teary-eyed and visibly moved.

'Miracle in Cell No. 7' is a heartrending story about the love between a mentally-ill father (Mehmet) who is wrongly accused of murder, and his young daughter. Mehmet's life is turned upside down when he is sentenced to the death penalty for a crime he didn't commit. Only a miracle can reunite him with his daughter so that they can return to the life they love so dearly.

The film is beautifully acted and also boasts slick cinematography and editing. HKC Entertainment is very hopeful that they have brought in one of the finest films of Turkey and audiences here will support to see the film and make it a success in Pakistan too. ■



People who wonder if the glass is half empty or half full, miss the point. The glass is refillable.



President opens Institute of Risk Management's Regional Group in Pakistan



The Irm Pakistan Regional Group is the first formal risk management group at a national level in Pakistan. The group aims to encourage adoption of structured risk management processes and practices within Pakistani organizations, with Irm supporting the group in providing knowledge and professional development to its members via training and qualifications, events and networking. The President said that ensuring good governance standards is the cornerstone of the success of states, and is at the heart of our government's fight against corruption and the aim of social uplift. Governance is concerned with the need for openness, integrity, transparency and accountability in actions and decision making, and it is relevant to all organizations regardless of size or whether they operate in the public or private sector. The President further said that It is also important to understand that good governance and effective risk management is not only essential and beneficial for the private sector entities, it is equally important for the public sector as well. The government and all the public office holders have the responsibility and obligation of always upholding compliance T with all rules, regulations and

governance standard at all times, and following best risk management practices. We have always supported and encouraged the adoption of best governance, risk management and compliance practices in all government offices to ensure a corruption-free Pakistan. The President congratulated Mari Petroleum on this great initiative and commend them for recognizing the vacuum that was present in Pakistan when it came to proponents of formal risk management and risk based thought leadership, and for stepping up and taking the lead on this matter. Lt Gen

Ishfaq Nadeem Ahmed (Rtd), MD/CEO Mari Petroleum Company Limited in his speech said Mari Petroleum has always strived to uphold best corporate practices and adopt the finest governance standards while operating in the exploration and production sector of Pakistan.■

M. Naeem Qureshi appointed convener FPCCI standing committee on environment



President of National Forum for Environment and Health (NFEH) Naeem Qureshi has been appointed as the Convener of the Central Standing Committee of FPCCI on Environment for the year 2020.

The appointment was made by President of Federation of Pakistan Chambers of Commerce & Industry (FPCCI) Mian Anjum Nisar. The appointment was made in view of the outstanding services of Mr. Naeem Qureshi to further the cause of environmental protection in the country.

The committee will comprise of environmental experts, researchers, scientists, and practitioners from all over the country to get their learned input on environmental issues of Pakistan. Naeem Qureshi also Chairman CSR Club Pakistan, Managing Editor of Energy update & Trustee The Help line Trust.■



Mian Anjum Nisar, President FPCCI presenting FPCCI crest to Syed Nasir Hussain Shah, Sindh Minister for Information and Local Government. Mr. Khurram Ijaz, Vice President FPCCI, Mian Zahid Hussain, Convener FPCCI SC Public Utilities, Mr. Zakaria Usman, Mr. Saqib Fayyaz Magoo and Shaukat Ahmed also seen in the picture.



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