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ENERGY UPDATE

Pakistan struggles to sustain LNG demand as economy falters

Circular debt mounting alarmingly

Govt. preparing to drop another price bomb

PTI regime leading towards economic disaster

Major Pakistani cities becoming unlivable

Exclusive Interviews

Saad Iqbal
Director
Metro Power

Massimo Gallizioli
CEO GE Steam Power
in Menat & Pakistan

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From the editor's desk...

Govt preparing to drop another price bomb?

The PTI government is contemplating to drop another price bomb on the poor consumers as Oil and Gas Regulatory Authority (OGRA) has asked the government to increase prices for gas consumers by up to 221 per cent with effect from January 1, 2020 to generate about Rs40 billion in additional funds by the two gas utilities.

The cruel regulators determined about 13pc (Rs82 per unit) increase in average prescribed price to Rs707 per unit for Sui Northern Gas Pipelines Ltd (SNGPL) to generate more than Rs30bn addition revenue to the company over the next six months while an increase of 8pc or Rs57per unit in prescribed price for Sui Southern Gas Company (SSGC) to Rs795 per million British thermal unit (mmBtu). The Karachi-based gas utility is estimated to get about Rs8bn additional revenue between January 1 and June 30, 2020. Under the current practice, the prescribed price of SNGPL is applicable at a uniform rate across the country including for SSGC. The effective average rate thus works out at Rs707 per unit instead of the existing Rs629.

The regulator said its revenue determinations for the two companies did not involve previous year adjustments but the government could add those amounts to revenue requirements and hence the need for average prescribed price fixation at Rs785 per mmBtu, instead of Rs707 per unit. In that case, the average would have to be increased by 25pc (Rs156 per unit) instead of 13pc.

The government has already hiked gas prices by up to 143pc in September 2018 and up to 191pc this July.

The regulator proposed more than 192pc increase in the price of domestic consumers using 50 cubic meters per month to Rs353.46 per mmBtu from existing Rs121 per unit. Likewise, an increase of about 18pc has been worked out for such consumers using up to 100 cubic metres per month. The rates for high-end domestic consumers has been determined to rise 15pc to Rs1,273 per unit for consumption up to 400 cubic metres per month and to Rs1,680 for over 400 cubic meters.

Likewise, Ogra has proposed more than 221pc increase in gas rates for all categories of special commercial consumers (roti tandoors except 32pc increase for those using more than 300 cubic metres per month). Similarly, a flat increase of 32pc has been proposed for commercial consumers, ice factories, general industrial, registered manufacturers of export products, captive power, cement factories and CNG.

Meanwhile, the regulator proposed 214pc increase in the rates for domestic consumers using less than 50 cubic metres and 27pc for up to 100 cubic metres for SSGC network. The rise for those consuming between 100-300 cubic metres has been proposed at 3pc while a reduction of 1.35pc has been proposed for high-end consumers. On the other hand, the regulator has proposed 245pc increase in gas rates for special commercial (roti tandoors) for up to 100 cubic metres and 159pc for up to 200 units.

Ogra reminded that under the law, the federal government was required to advise within 40 days about the revision of prescribed prices, the minimum charge and the sale price for each category of retail consumers for notification. The regulator asked the government that sales prices effective January 1, 2020 be adjusted in a manner that the revenue requirement determined, be fully met. It said that "as a matter of principle under legal domain, all consumer classes should at least pay the average cost of service or the average prescribed price."

The PTI government has already increased gas prices to over 220% since the day it came into power making the lives of the consumers miserble. If the new increase by over 200% gets approved whch is more likely, the history would be created as never in the past any government had dared to incraese any kind of prices to the level of over 400%. It is more likely that the present government is all out to fulfill each and every commitments with the IMF that had made by the PPP and PML-N regimes during their tenures.

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Major Pakistani cities becoming unlivable

By Sajid Aziz

Like all spheres of life in Pakistan the environment is also deteorating at a fast pace. Each and every major city in the country is becoming a non-livebale city due to dirty atmosphere, polluted air and ever-increasing noise pollution. As per a survey by the US Air Quality Index (AQI) readings of the following cities have become unhealthy rather hazardous for human beings and as of now:

Islamabad	111 (Unhealthy)
Peshawar	188 (Unhealthy)
Karachi	172 (Unhealthy)
Quetta	200 (Unhealthy)
Lahore	373 (Hazadrous)*
New Delhi	259 (Very Unhealthy)
Berlin	31 (good)
Addis ababa	25 (good)
New York	27 (good)
Vancouver	18 (good)
Stockholm	8 (good)

Just 20 years ago Islamabad had a reading of 30 and was quite better for living. Every househld should have greater pressure on the power corridors so that they wakw up from deep slumber. Each category corresponds to a different level of health concern. The six levels of health concern and what they mean are:

"Good" AQI is 0 to 50. Air quality is considered satisfactory, and air pollution poses little or no risk.

"Moderate" AQI is 51 to 100. Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive to ozone may experience respiratory symptoms.

"Unhealthy for Sensitive Groups" AQI is 101 to 150. Although general public is not likely to be affected at this AQI range, people with lung disease, older adults and children are at a greater risk from exposure to ozone, whereas persons with heart and lung disease, older adults and children are at greater risk from the presence of particles in the air.

"Unhealthy" AQI is 151 to 200. Everyone may begin to experience some adverse health effects, and members of the sensitive groups may experience more serious effects."Very Unhealthy" AQI is 201 to 300. This would trigger a health alert signifying that everyone may experience more serious health effects. "Hazardous" AQI greater than 300 would trigger a health warnings of emergency conditions. The entire population is more likely to be affected due to this grim situation in the country.■

PTI regime leading towards economic disaster

By Sajid Aziz

The present regime led by Imran Khan is heading towards economic disaster and total destruction of social sector as well, this was the common feeling of every patriotic Pakistani. Failure - is the one word every Pakistani has for IK that precisely explains the outcome of almost one and a half years economic and energy policies of Imran Khan's government.

The entire regime so far, is not only remained hopeless but getting bad to worse as not a single economic indicator gives positive signal. Not the economy alone, it's in every sector, the government's performance is worst ever in Pakistan's 7 years history.

Almost everything that the PTI has been resisting before coming into power, it is doing now. Anything that it had promised to do, it has failed to deliver. The irony is that despite all this the government's economic policies are far from producing expected results. Instead, almost every economic indicator is ringing alarm bells.

The PTI had committed to double the tax revenue, explaining that the people will pay tax when they will find those sitting in the government "honest". Imran Khan's government also launched austerity drive soon after coming into power to show the people that the tax payers money will not be wasted. Yet, the revenue collection figures show record shortfall of over Rs400 billion and it is feared that the figure will reach anywhere between Rs500 billion to Rs600 billion by end of this fiscal year.

Imran Khan has been repeatedly quoting Rs30,000 billion figure of Pakistan's total debts and liabilities to assert that due to the corruption of PML-N and PPP government, the country has been put under such a heavy debt burden. After coming into power, he also announced to do the forensic audit of the huge borrowing of almost Rs24,000 billion during the last ten years of PPP and PML-N tenures, to ascertain in whose pockets this money had gone.

However, during the last nine months of the present fiscal year, the government borrowed Rs3,300 billion only from the State Bank of Pakistan, which is far more than before. If the foreign loans that the PTI government has received from Pakistan's friends like Saudi Arabia, UAE and China are added to the figure of Rs3,300 billion, it will cross Rs4,000 billion figure. It means that borrowing of PTI government has been more than double of what was the situation during the last PML-N government.

PTI had committed that it would address the issue of circular debt through good governance and other administrative initiatives. But, instead of checking the circular debt, it started rising enormously during the PTI government. The circular debt figure was around Rs700 billion when the PML-N left the government but now the figure has reached close to Rs1.7 trillion. It is said that each day almost Rs2 billion is adding to the circular debt.

PTI promised to give 10 million jobs and construct 5 million houses during its tenure, which is only possible by phenomenally increasing country's growth rate from the previous years. But, after coming into power, the PTI government's economic policies drastically slowed down the country's economic growth, which as per the latest report of the Asian Development Bank will decelerate to 3.9 percent in the fiscal year 2019. The growth rate during the PML-N government last few years was 5.8 percent.

On March 31, 2019, the Imran Khan government announced a major raise in petrol prices with effect from April 1, 2019.

The PTI has always been saying that its economic policies will be poor friendly. In practical, after coming into power the inflation rate continues to rise and has reached 9.4 percent from what was below 4 percent during the last PML-N Government. It means that the life for every Pakistani including the poor, has become almost double the expensive than what it was one year back.

The PTI government devalued the Pak rupee against US dollar over 32 percent as it crossed beyond Rs162 against one dollar. This unprecedented devaluation of Pak currency was done with the government expectations that it will boost country's exports, which though showed only 1.8 percent improvement.

The PTI had promised that it would bring back $200 billion of Pakistanis stashed in foreign accounts. The PTI had also opposed amnesty scheme launched by the PML-N government and termed it beneficial for tax evaders, looters and plunderers. It however, miserably failed to bring even a single penny or extracted anything from biggest looters of the country. IK has instead of doing anything for the nation and country he bailed them out and even allowed to go out of country.

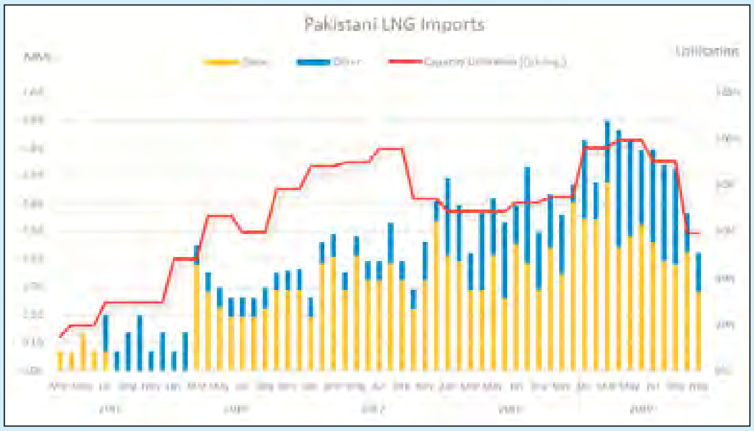
The totally de-tracked Imran Khan's policies on social sector and religious front also show, he is working on the whims of enemies.■

Pakistan Struggles to Sustain LNG Demand as Economy Falters

BY LNGUNLIM

The price hike for electricity recently announced by the government was neither surprising nor unexpected. However, there are some key questions related to this decision that need to be addressed. Why was this done? What does it mean for ordinary citizens? And, what can we expect in the future?

Pakistan likely to curtail LNG imports in the short-term but efforts are underway to maintain foreign direct investment in the local energy sector by opening up domestic gas distribution channels. Since 2015, Pakistan has become one of the fastest growing LNG markets as the country has pushed to ramp up its LNG import capacity to alleviate chronic energy shortages that have led to a decade of electricity blackouts. Regulatory challenges did not deter investors and the country now boasts two LNG import terminals (FSRUs) near Karachi.

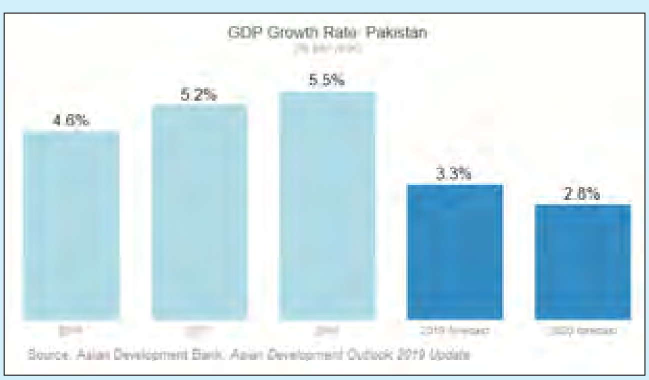


However, slowing economic growth and structual market impediments are placing Pakistan's LNG economy under considerable strain. Delays in the formulation of domestic gas regulations to allow third party access to gas infrastructure, limited domestic pipeline capacity as well as effectively reserving LNG for exporters and fertiliser producers through subsidies leave a substantial gap between imported and local gas prices whilst domestic gas reserves are dwindling. Estimates by the Asian Development Bank peg the country's GDP growth at just 3.3% this year and 2.8% in 2020, compared to 5.5% in 2018.

Consequently, Pakistan has been trying hard to reduce its LNG imports. Our LNG Market Tracker shows the coutnry's LNG offtakes on a protracted downards trend since March this year, with November's imports at their lowest since 2016.

In October, state-owned Pakistan LNG cancelled a tender for 240 cargoes intended over a 10-year period (roughly equivalent to 14.5mmt) it had issued earlier in June, for which Qatar was rumoured to be the frontrunner, and instead opted to turn to the spot market when required.

Pakistan is already receiving the lion share (3.75mmt) of its LNG imports under a 15-year 'take or pay' supply contract with QatarGas II, constituting more than 63% of Pakistan's LNG imports in 2019 to date. Under the terms of the deal, LNG arriving in any particular month will fetch 13.37% of the preceding three-month average price of a barrel of Brent. At the time, LNG spot prices in Asia were reported as low as \$5.75/mmBtu whilst the Qatar deal equivalent would supply gas at around \$7/mmBtu F.O.B.



Beyond this contract, Qatar has been supplying roughly 0.38, 0.83 and 1.4mmt under short-term contracts (and at presumably higher prices) in 2017, 2018 and 2019, respectively, our LNG Market Tracker shows. Pakistan's remaining LNG imports derive from a wide roster of sources, ranging from Equatorial Guinea and Nigeria to portfolio trades out of the United States and European re-exports.

Pakistan LNG currently has only one open tender for one cargo of c. 140,00m3 D.E.S. with a delivery window of 16-17 February 2020. A recent Pakistan LNG tender for 5 cargoes closed last week, with Gunvor and DXT Commodities emerging as winners to supply roughly 1.5mmt in total at around \$6/mmBtu ex ship (depending on Brent price developments, the media have been reporting Qatar refused Pakistan's requests for price adjustments earlier this year to prevent other offtakers to do the same. LNG imports are covering almost 25% of Pakistan's gas demand, so that a protracted curtailment of imports raises the spectre of crippling electricity and gas shortages in 2020.

This forced Pakistan to quickly adjust legislation to explore other avenues to offset the costs of relatively expensive Qatari LNG at times of slower economic growth. As such, ExxonMobil signed a gas-for-transport agreement with with Pakistan's Universal Gas Distribution Company (UGDC) to become the first importer of LNG that is not subject to control by state-owned assets. Singapore-based commodity trader Trafigura also signed an agreement with UGDC to use surplus LNG capacity at the country's second chartered FSRU (the BW Integrity) to supply the domestic transport sector. The companies aim to convert a share of Pakistan's petrol market into a compressed natural gas market, arguing that they would be able to provide cost savings of up to 30% to private motorists if they convert their vehicles.■

Exclusive Interview

Pakistan still has a very low percentage of thermal power generation - Massimo Gallizilio

Exclusive interview of CEO GE Steam Power in MENAT & Pakistan

"Our mission here in the country is to help Pakistan to maximize use of its local resources for self-reliance in the energy sector and make power generation more affordable for its consumers", says Massimo Gallizilio, the Chief Executive Officer of GE Steam Power in MENAT & Pakistan. He stated this as a panel of Energy Update exclusively interviewed him during his recent visit to Pakistan. Following are the excerpts of his interview.

By Naeem Qureshi

Energy Update: Please state the reason of your current visit to Pakistan?

Mr. Massimo Gallizioli: I am here to attend the inauguration ceremony of power plant of CPHGC (China Power Hub Generation Company) in Hub, Balochistan. This is one of the most advanced coal-powered generation plant in the region. GE contributed towards the most advanced technology for the power plant. We are extremely happy and proud to be partners of this development in the energy sector.

EU: Please share with us your point of view on the energy sector in Pakistan?

Mr. Gallizioli: You know power generation is the backbone of the development of any country especially for a highly populated country like Pakistan. We need to add more energy in the most affordable, sustainable, and reliable way to develop the country. I think you are today clearly in a situation where priority of the country is to enhance its energy security by increasing power generation. But one needs to understand that your country's power generation is primarily relying on imported fuel. So our mission is to help your country in its drive to maximize the use of local resources for self-reliance in the energy sector and make power generation more affordable for its consumers.

EU: In what particular manner you are supporting Pakistan so that it could maximally exploit its own natural resources for power generation?

Mr. Gallizioli: As you are well aware that GE is a technology provider, our mission is to provide the best technology to our customers and partners that are willing to invest in the best equipment for power generation. We are supplying the best technology like to every area of power generation be it the nuclear, coal, gas, renewable or hydel. Whenever such an opportunity arises, we off course try our best to provide the right solution in terms of cost, investment, execution and capability of a power generation project. CPHGC whose power project was inaugurated here recently, is a similar case of very effective partnership where we were able to synchronize the power plant with support and cooperation of our partner in just 27 months (after construction of the project started) that is three months ahead of the schedule. This is an exceptional achievement and clearly demonstrates a case of effective partnership with a local partner, which is all willing and instrumental in getting all the necessary approvals to get the project's infrastructure connected as this makes CPHGC a very successful generation venture.

EU: Whether Pakistan is on the right path to achieve self-reliance in energy sector by generating cheaper electricity or not?

Mr. Gallizioli: I think the need here is to have the right strategy to use the right energy mix in Pakistan to make it independent in its energy needs. Today, Pakistan still has a very low percentage of thermal power generation based on coal. Here, the coal-based power generation is around three per cent. I think there is a plan made to bring this percentage to around 20 to 25 per cent. So it is clear that mix of different fuel and increase in power generation based on renewables is the right strategy. We are convinced that our technology is focused on improving the efficiency of a power plant. We can help Pakistan in its drive to enhance its power generation based on renewables.

EU: What are the GE's future plans to invest in Pakistan?

Mr. Gallizioli: For last 50 years we are here in Pakistan. We have already been providing the best gas technology i.e. the combined cycle power plant. The inauguration of the power plant presently also shows that we have been able to provide most advanced coal technology to Pakistan. Up to 40 per cent of wind power plants in Pakistan use GE's technology. We are here obviously for the Long-term. We are here to support the country by making its power generation more reliable, affordable, and sustainable for the people of Pakistan.

EU: What is your viewpoint on environmental issues concerning coal-based power plants keeping in view the reports that Germany in a few years will stop generating coal-based electricity?

Mr. Gallizioli: Germany is still relying on coal for generating electricity. Clearly coal is helping them to increase their renewable portion of energy generation. Coal fleet in Germany is one of the most advanced and flexible. Pakistan till today has very limited ratio of its power generation based on coal. You have abundant natural energy resources in the form of lignite coal in Thar, which can be used for most affordable power generation. We are able to demonstrate how to consume the coal in the most efficient and reliable way for power generation. The right strategy is to have a balance between the use of conventional resources of energy and the renewable resources. Thermal based power generation through consumption of coal will help the country in its growth at a fast pace. Transmission and distribution network should also be expanded at the same time.

EU: Is it feasible for Pakistan to seek regional cooperation in the energy sector?

Mr. Gallizioli: I can't comment on the political strategy of the country but I would like to say that technology support and integration should take place at the regional level. I have come from the Asia Pacific region where many countries have started interconnecting their grids. They are now working together to lower the cost of energy generation and increase reliability of their systems. The GE is willing to provide its help to Pakistan in this regard.

EU: How the use of modern technology in power generation could prevent damage to the environment?

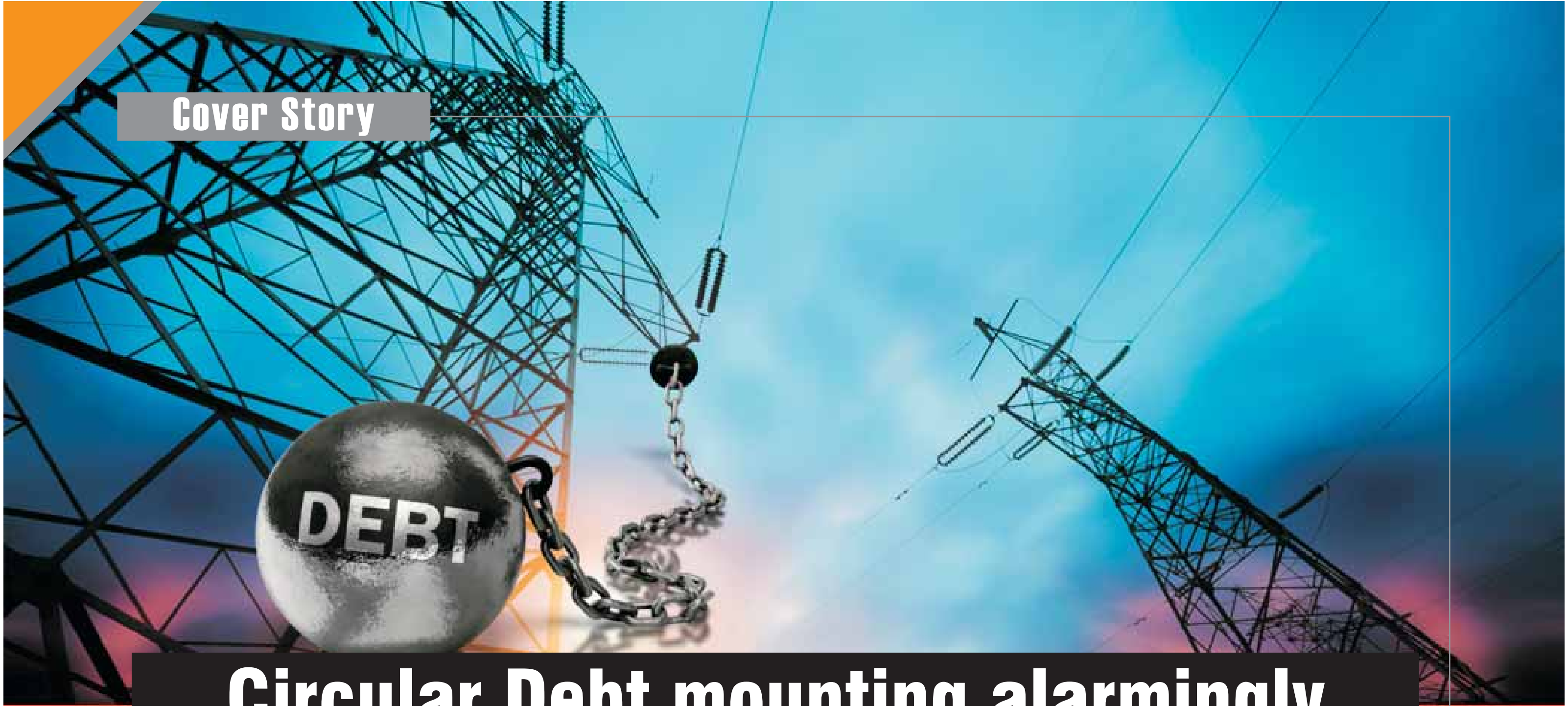
Mr. Gallizioli: An extremely sizable portion of revenue generated by us is spent on development and improvement of our technology. I think in the case of coal-based power plants, the use of supercritical or ultra- super critical technology could achieve 45 per cent to 47 per cent efficiency. On the other hand, the subcritical technology has an efficiency level of 34 per cent at the global level. So use of technology makes a big difference in terms of efficiency. The use of most advanced technology could produce 20 per cent less carbon emissions. The GE is also leading the cause of use of environmental control technology. I think we are number one in many of the applications related to a power plant. Today the most advanced coal-based power plants are comparable with the gas technology in terms of carbon emissions produced by them.

EU: What is your viewpoint on privatization of the power sector of Pakistan?

Mr.Gallizioli: I cannot comment on the political strategy of Pakistan with the regard to its energy sector but I can assure that whatever regime is available in the country, the GE is fully willing to work in complete conformity of its rules and regulation as what we have been doing presently.

EU: Tell us about the commitment of the GE's in doing CSR in Pakistan and in the region.

Mr.Gallizioli: GE has a strong commitment not only for providing technology but also for improving the well-being of the population of a country where we are present. GE has more than 50 years' presence in Pakistan. We have done several initiatives in arena of CSR. It is the commitment of the company to provide support to the population of an area where we have been operating. ■



Circular Debt mounting alarmingly

Govt ministers and advisers misleading the nation

By Sajid Aziz

It seems that PTI government's ministers and advisers live in a fool's paradise as they keep saying that circular debt would be eliminated by December next. As a matter of fact this statement is another misleading one. If the government would be able to eliminate the huge circular debt in just one year's time, why it has accumulated it to a dangerous level by not paying anything in its entire tenure so far?

Nadeem Babar, Special Assistant to the Prime Minister on Petroleum and Chairman of the Energy Task Force, gave a briefing on the government's power sector privatisation policy at a meeting of the National Assembly's Standing Committee on Privatisation chaired by PPP's Syed Mustafa Mahmud.

He said in the meeting that the circular debt that had amounted to Rs1.28 trillion in August 2018 will increase to Rs1.7 trillion by December next year at which point, it would stop rising. His statement suggests that the circular debt would grow by over 45% during the first nearly two and a half years of PTI's rule.

Babar once again claimed that compared to the previous monthly addition in the circular debt of Rs38 billion, the increase had slowed to under Rs10 billion a month, a claim disputed by the World Bank and the IMF during recent talks.

Babar further said that the projected Rs1.7 trillion circular debt was then planned to be retired by booking part of it as public debt, settling a part of it against privatisation proceeds and by improving systemic efficiency. He said the circular debt growth would be cut to zero by December 2020 and, if the distribution companies were to be privatised before that, the government would have to give heavy discounts to buyers.

Before August 2018, the unpaid power subsidies stood at Rs825 billion, the previous government had announced the subsidies, including the Industrial Support Package, but had never budgeted the amount. Giving a timeline for the privatisation of the loss-incurring power sector, Babar said the entities could not be privatised for another two years, the key reasons being the weak writ of the government, large territorial jurisdictions of some power distribution companies and uniformed tariff systems under which good and bad discos were treated equally. He said the actual privatisation of power distribution could only begin by December 2021, adding that the Economic Coordination Committee (ECC) wanted only a few distribution companies to be offered for sale before December 2021 and, for that reason, the Lahore Electric Supply Company (LESCO) and the Islamabad Electric Supply Company (IESCO) had been put on the privatisation list.

To a question, Babar said K-Electric's performance had deteriorated during the past three years and, if the federal government were to withdraw its support, there would be 12 hours of load-shedding a day in two years' time, adding that the utility would receive 1,000MW of additional electricity from the federal government due to the closure of some old plants by then.

Now the government is contemplating to shift about Rs800bn of the circular debt to the public debt in three years. power sector losses rising by four per cent since the financial year 2016 to 41pc, the Asian Development Bank (ADB) and the government have agreed to raise about Rs469 billion revenues through consumer tariff during the current fiscal year and shift.

This is part of the Energy Sector Reforms and Financial Sustainability Programme under which the Manila-based lending agency disbursed $300 million loan to Pakistan last week for 25 years including five years of grace period at 2pc interest rate.

"The plan will include (i) using the sales proceeds of some generation assets (ii) divesting power subsector transmission and distribution of SOEs (iii) rolling tariff subsidies preferably into a social assistance programme targeting the poorest households and (iv) converting portions of Power Holding Private Limited (PHPL) debt stock into public debt," Adviser to the PM on Finance and Revenue Dr Abdul Hafeez Shaikh wrote this to the ADB president.

The government has, in consultation with the lenders, updated the circular debt reduction plan to curtail accumulated payables and loans on PHPL. The new accumulation of circular debt has to be kept below Rs124bn for FY2020 and PHPL debt will be reduced and assumed as public debt. This accumulation would further be reduced to Rs74bn in FY2021.

The government has also committed to ensure that the Nepra amendment act that includes automatic quarterly tariff adjustment and institution of surcharges as is the current practice for automatic fuel price adjustment is submitted to parliament for approval. The two sides have estimated that successful implementation of the plan would lead to the circular debt coming down to Rs50bn by 2024 instead of Rs450bn in FY2019 and weighted average cost of power generation to about Rs11 (about $0.070) from Rs15 ($0.097) per unit.

The government has also given an undertaking to have at least one female board member in all the distribution, generation and transmission companies and privatisation of two LNG power plants. The ADB said distribution companies (Discos) estimated 18.3pc transmission and distribution loss and 10pc of non-recovery of the billed amount, leading to almost 29pc of revenue loss that was 4pc higher than FY2016 levels. According to ADB this puts discos in a negative spiral of limited investments and increasingly poor efficiency, making system losses a recurring cause of circular debt. As per government's claim to new circular debt reduction plan based on the tariff mechanisms, a historic level of system efficiency improvements and an antitheft programme that has recovered Rs89bn since November 2018, among others, was developed to monitor quarterly targets and progress.

Contrary to the claim by he present regime, the evnts so far show that new rulers of the country seem not to do anything in future as well like they did in their initial months in power corridors and the public woud have to bear the brunt of this huge debt.■

Circular debt goes down by Rs10 billion a month

The government is working hard on eliminating circular debt in the power production and supply sector as the pace of increase in the debt has gone down to only Rs10-11 billion a month from the previous Rs39 billion per month, the Power Division minister said.

"By December 2020, the country's circular debt will drop to zero," said Omar Ayub Khan.He announced that the government was planning to install floating solar panels on the country's big water reservoirs and along canals in a bid to generate thousands of megawatts of clean energy.This is part of the government's plan to give priority to an increase in the share of renewable energy in the total energy mix. He revealed that floating solar panels would be installed on Tarbela, Mangla, Ghazi Barotha and Khanpur reservoirs besides canals. "It will not only help to reduce evaporation of water but will also generate electricity," the minister emphasised.■

During a robbery in America, the bank robber shouted to everyone in the bank: "Don't move. The money belongs to the State. Your life belongs to you." Everyone in the bank laid down quietly. This is called "Mind Changing Concept" Changing the conventional way of thinking.

When a lady lay on the table provocatively, the robber shouted at her: "Please be civilized! This is a robbery and not a rape!" This is called "Being Professional" Focus only on what you are trained to do!

When the bank robbers returned home, the younger robber (MBA-trained) told the older robber (who has only completed Year 6 in primary school): "Big brother, let's count how much we got." The older robber rebutted and said: "You are very stupid. There is so much money it will take us a long time to count. Tonight, the TV news will tell us how much we robbed from the bank!" This is called "Experience." Nowadays, experience is more important than paper qualifications!

After the robbers had left, the bank manager told the bank supervisor to call the police quickly. But the supervisor said to him: "Wait! Let us take out $10 million from the bank for ourselves and add it to the $70 million that we have previously embezzled from the bank". This is called "Swim with the tide." Converting an unfavorable situation to your advantage!

The supervisor says: "It will be good if there is a robbery every month." This is called "Killing Boredom." Personal Happiness is more important than your job.

The next day, the TV news reported that $100 million was taken from the bank. The robbers counted and counted and counted, but they could only count $20 million. The robbers were very angry and complained: "We risked our lives and only took $20 million. The bank manager took $80 million with a snap of his fingers. It looks like it is better to be educated than to be a thief!" This is called "Knowledge is worth as much as gold!"

The bank manager was smiling and happy because his losses in the share market are now covered by this robbery. This is called "Seizing the opportunity." Daring to take risks! So who are the real robbers here?

LNG in the limelight

By Khaleeq Kiani

The addition of Liquefied Natural Gas (LNG) to the country's energy mix was described as a game changer when electricity shortages were costing the economy two to three per cent of GDP growth. Successful LNG imports signified a big contribution in economic terms when seen in the backdrop of previous botched attempts.

More than 5,200 megawatts of baseload generation capacity was then added on LNG, although one-fourth of this capacity was contracted under controversial circumstances when system operators flagged up a capacity trap. The GDP growth rate, meanwhile, rose to 5.8% while the debate about the LNG import, processing and transportation prices subsided even though these were hotly contested at the time.

The capacity trap emerged and high prices started to bite a slowing economy. Spot prices tumbled to historic lows meanwhile. The power sector, which provided the basic reason for LNG imports as furnace oil replacement, started to turn down gas supplies despite commitments. The LNG infrastructure reached the verge of collapse and the supply chain set alarm bells ringing for a default and financial meltdown.

The government is privatising at least two of its LNG-based power plants for around Rs300 billion. No change in gas supplies in their power purchase agreements is estimated to entail a cumulative loss of Rs471 billion until 2025 when the first term of LNG imports ends. Conversely, an annual subsidy of Rs117 billion is required if these plants are freed from the condition of guaranteed gas intake.

In both cases, the one-time sale proceeds of Rs300 billion appear economically unreasonable. In a recent meeting, the Economic Coordination Committee (ECC) exempted the power plants on the privatisation list from the guaranteed 66pc LNG intake on a take-or-pay basis. But it was overruled by the federal cabinet when Sui Southern Gas Company (SSGC), Sui Northern Gas Pipelines (SNGP) and Pakistan State Oil (PSO) prevailed on the top leadership claiming the ECC decision would make them go bankrupt.

With the LNG-related infrastructure investment of about $7bn and no buyer to consume the commodity, the chickens have come home to roost. The National Accountability Bureau (NAB) has filed a reference against 10 leading personalities, including former premier Shahid Khaqan Abbasi, in government and the private sector. At least two main characters, including the mastermind of the process, have since become approvers.

Although described by the accused as a politically motivated reference, NAB has so far focused on the allegedly high import price, tolling charges, procedural and legal deviations in the terminal contract and so on. It has told the accountability court that a supplementary reference on charges of money laundering will follow.

Meanwhile, in the 2015-16 audit report placed before the National Assembly last week, the auditor general of Pakistan (AGP) pointed out irregularities worth Rs108bn in the LNG supply chain besides other unquantifiable losses. Normally, such audit objections are settled or regularised at the level of the Public Accounts Committee of the National Assembly on the basis of economic justifications rather than procedural, technical and legal deviations pointed out by the audit.

The AGP pointed out that LNG was purchased at high rates and the Ministry of Petroleum and Natural Resources was responsible for it. It said SSGC overpaid over Rs5.37bn in 2015-16 on account of higher re-gasification rates while Rs33.6bn worth of higher tolling charges were accepted by Interstate Gas Company and SSGC.

Also, the AGP pointed out that about Rs4.5bn was unduly charged to natural gas consumers as the cost of service for RLNG during the said year and the Port Qasim Authority (PQA) had not secured additional dredging of the channel as required under the implementation agreement.

The audit has also highlighted the unjustified payment of about Rs1.5bn on account of fixed capacity charges to the terminal operators by SSGC.

SNGP has been accused of causing a Rs3.1bn loss to consumers and its own accounts through the sale of RLNG to consumers other than independent power producers (IPPs) and the non-recovery of transportation charges from Pak-Arab Fertilisers.

The audit questioned the selection of consultant for LNG transactions and noted that the LNG licence was awarded despite deficiencies under the 2011 LNG Policy.

In another major irregularity, the audit highlighted that SNGP did not obtain standby letters of credit (SBLCs) from IPPs worth Rs55bn for LNG supplies as a security even though similar SBLCs were provided to PSO and SSGC under tripartite agreements.

SNGP kept on reminding the petroleum ministry that a back-to-back guarantee was required for 400 million cubic feet per day (mmcfd) of gas from IPPs. But no such SBLCs were ensured, exposing SNGP to a serious financial risk.

While the audit objections and NAB reference will be contested at relevant forums, the government needs to find a way out through pricing reforms and focusing on the revival of economic activities for affordable consumption of contracted LNG supplies.

The weighted average cost of domestic and imported gas may be a solution to represent the actual economic price of every molecule provided theft and inefficiencies are controlled. Free or subsidised gas is no more an option when such luxuries are unavailable to consumers of competing fuels.■

courtesy: Daily Dawn

Pakistan must have 30% renewable energy in system by 2030 - Saad Iqbal

Exclusive Interview of Director, Metro Power

By Mustafa Tahir

T "The Alternative and Renewble Energy Policy 2019 is targeted at increasing the share of renewable energy in the energy mix in order to achieve the strategic objectives of energy security, cheaper power generation and environmental protection", says Director Metro Power, Saad Iqbal while talking to Energy Update in an exclusive interview. he continues to state that..............

EU: What is your viewpoint regarding proposed new renewable energy policy of the country?

Saad Iqbal: Donors and private sector representatives pointed out several shortcomings in the New Draft Alternative & Renewable Energy Policy 2019 and said that it will be unwise decision to get rid of the existing investors working under the Renewable Energy policy 2006 on 8000 MW renewable energy projects by introducing new policy.

EU: In your viewpoint to what extent the present government is serious to achieve the target of renewable energy production in the country?

SI: The Alternative Renewable Energy Policy 2019, approved by the federal cabinet, will help the government to have 30 percent renewable energy in system by 2030 and combined with hydro power it will be 60 to 65 percent of the mix energy, Federal Minister for Energy Omar Ayub said while unveiling the renewable energy policy. The policy is targeted at increasing the share of renewable energy in the energy mix in order to achieve the strategic objectives of energy security, cheaper power generation and environmental protection.

EU: What is the significance of the 12 upcoming wind power projects whose agreements were recently signed, regarding production of clean, sustainable, and cheap electricity in the country?

SI: The government has signed agreements with 12 wind power companies for the generation of 600MW electricity which will bring $ 700 million investment, Omer Ayub (Federal Minister for Energy). these projects would provide more than 1.8 billion units of clean energy annually. The increased share of RE in the overall generation mix will not only bring down the overall basket tariff but will also help in reducing the import bills of Pakistan. Further, the huge investment coming in the field of RE will also help in achieving the economic growth of Pakistan.

EU: To what extent the financing is being provided by the international funding agencies, has been helpful in the growth of the renewable energy sector in the country?

SI: There are no major nationwide energy access efforts. Donors and the Government of Pakistan focus on large energy generation and distribution projects or on policy advisory. Main supporters of the Pakistan energy sector are Germany, ADB, JICA, WB Group, USAID and IFC.

Germany: KfW (Hydropower), GIZ (Renewable energy and energy efficiency), Integrate German support to renewables in Pakistan in the "Pakistan-German Renewable Energy Forum" (PGREF), which will promote the dissemination of technologies in Pakistan such as wind, solar, hydro, biomass/biogas.

ADB has launched in 2016 a programme on Access to Clean Energy in Pakistan: The programme aims at increasing access to energy to off-grid communities in selected districts of Khyber Pakhtunkhwa (KPK) and Punjab in Pakistan by exploiting the available clean energy resources. The Integrated Energy Development Programme is one of the central pillars of Pakistan Poverty Reduction Strategy (PRSP) - II, which underscores the importance of maximizing access to affordable and clean energy to all. Energy is one of the key focused areas of Pakistan's Vision 2025 which aims at ensuring uninterrupted access to affordable and clean energy to all sections of the population by 2025. The objectives of the project therefore will directly contribute to PRSP-II and Vision 2025.

USAID has supported

infrastructure and operational improvements, and promoted policy reforms to help the energy sector function more efficiently and sustainably. Since 2011, USAID has added "more than 2,400 megawatts of electricity to the national grid". This total includes 1,013 megawatts from new or rehabilitated dams and thermal power plants, and 1,447 megawatts from improvements in the transmission and distribution system. Customers are receiving more accurate energy bills as a result of USAID's efforts to install or repair over 250,000 meters.

EU: What is the present status of renewable sector of the country and also inform our readers about the status of support being given by the different state and government agencies for growth of this sector?

SI: The present status of renewable energy is that from Wind Corridors energy is over of 1500 MW which is being given to the grid and many projects are still in pipeline and awaiting grid. Furthermore, the government has started focusing of solar energy which is also a very big asset of Pakistan as solar output covers more than 10 months of continuous energy as per geographical location of Pakistan and with scorching sun all round. The government ambitions to bring cheap and clean energy to Pakistan is growing at a fast pace over the last 5 to 10 years. The initiative provided to the investors are in the form of Land and return on their investments is linked to USD which makes it attractable for any investor and provide safe financing due to USD tagged returns. The most important aspect of this development is to move from furnace oil which creates balance of payment problem for developing country like Pakistan.

EU: Which kind of support is being given by Sindh government in establishing new wind power projects in the Ghro-Jhimpir wind corridor?

SI: According to Energy Minister Sindh, Imtiaz Ahmad Shaikh the provincial government had sought NOC from the federal government to set up around 35 solar and wind power projects, to be set up across Sindh long ago. However, the centre has recently issued NOC for the 12 wind projects in Jhimpir Wind Corridor. He said that there are several corridors in the province which could provide cheap power■

PM Imran Khan presents PSX Top Companies Award to Arif Habib

Arif Habib Limited (AHL), one of Pakistan's leading and largest Brokerage and Investment Banking Firms has been recognised amongst the Top 25 Companies by the Pakistan Stock Exchange (PSX). AHL is one of the six companies that have been recognised as a Top Company for all of the last three years (2016, 2017 & 2018). The PSX Top 25 Companies award is evaluated based on capital efficiency, profitability, free float of shares, transparency, corporate governance & investor relations, compliance with listing of companies & securities regulations and dividend pay-outs. Prime Minister Imran Khan, graced the occasion as Chief Guest and presented the Awards to the winners. Mr. Arif Habib, Chairman, Arif Habib Group received the award on behalf of the company. Mr. Habib appreciated the team of AHL, praising their hard work and dedication which has led to this recognition for the fifth consecutive year. He also said that PSX's recognition of AHL is a testament of the Company's excellent financial and managerial performance.■

PPL discovers gas in Balochistan

Pakistan Petroleum Limited (PPL) the operator of Margand Block (2866-4) with 100 percent working interest has made a hydrocarbons discovery from its 1st exploratory well Margand X-1 in the block. It is located in District Kalat, Balochistan Province.

Margand X-1 was spud on 30 June 2019 and reached a depth of 4,500 meters (Measured Depth) inside Chiltan Limestone. On the basis of wireline logs, Modular Dynamics Testing (MDT) was carried out, which proved the presence of hydrocarbons. Based on wireline and MDT results, Drill Stem Test (DST) was conducted in the Chiltan Limestone.

During DST, the well flowed 10.7 million cubic feet per day gas at 64/ 64 inches choke size with flowing well head pressure of ~ 516 pounds per square inch (Psi) with 132 barrels per day liquid. The nature of liquid is being investigated. The well has potential to flow at higher rates after acid stimulation job.

It is highlighted that this is the first gas discovery on Kalat Plateau and it has opened a new sub-basin for further hydrocarbon exploration. The discovery of Margand X-1 well is the result of an aggressive strategy in the exploration of frontier basins adopted by PPL, to open new avenues for hydrocarbon exploration and production in Balochistan Province. This discovery will add to PPL's hydrocarbon reserves and will contribute in reducing the gap between supply and demand of oil and gas in the country through the exploitation of indigenous resources.■

NICE THOUGHT

Tolerance is the highest degree of our stregth..
and
Desire to take revenge is the first sign of weakness...!!!

Neelam-Jhelum projects runs into snags

By Sajid Aziz

On the intervention by the Prime Minister Office, the power division has resolved a dispute over the signing of a formal power purchase agreement (PPA) to save Neelum-Jhelum Hydropower Company (NJHPC) from default.

The Rs510 billion power project attained 969MW generation capacity in August last year and has since been providing electricity to the national grid without any payment. The non-signing of the PPA between the Central Power Purchasing Agency (CPPA) and NJHPC had resulted in a circular debt build-up of about Rs75bn.

In recent meetings with various top functionaries, NJHPC chief executive officer Brig Mohammad Zareen had warned that non-payment of dues would have serious political, financial and reputation risks to the government. This was because the delayed payments would require the government to increase consumer tariff to clear its backlog of over Rs75bn and avoid exposing the guarantees of the government and Water and Power Development Authority (Wapda) to default.

A senior official told Dawn that the PM Office had intervened and asked the power division to resolve the matter at the earliest. Power division secretary Irfan Ali heard viewpoints of the CPPA and NJHPC. This was followed by a meeting of the CPPA board of directors, which approved the signing of the PPA between the two entities.

The official said the two sides had now agreed to sign the PPA this week subject to its vetting by legal experts. The NJHPC had earlier reported that Wapda, the government and the company would go into default if its energy payments did not begin within a month as the power sector was using its unaccounted units for showing reduction in line losses.

"If revenue from the CPPA does not commence by December 2019, NJHPC/Wapda/GoP shall go into default due to back-to-back guarantee, apart from NJHPC not meeting the routine maintenance expense," the NJHPC CEO reported on Nov 27.

He also reported that the Chinese contractor had left the project when it attained 99.6 per cent completion and some minor works were outstanding after shelling by the Indian army on the dam's site on July 30 and Oct 19-20 and 24 this year and was not willing to return. The NJHPC approached the foreign ministry, prompting it to take up the matter with Beijing and hopefully the contractor would soon resume the job as required under the warranties, he added.

According to the CEO, the company's annual debt service liability amounted to Rs50bn and it was getting letters from the economic affairs division every month for servicing debt to external lenders. "I will not have the funds to even pay for the salaries after December," he said, adding that Rs100bn raised from local banks was currently being utilised for debt servicing, payment of salaries and other expenses.

Brig Zareen said the National Electric Power Regulatory Authority (Nepra) had given the NJHPC an interim tariff at a rate of Rs5.9180 per kWh for one year that was notified on March 8, but the company had not so far been paid a single penny by the CPPA against more than six billion units (kWh) it had supplied to the national grid.

The NJHPC recently testified before a parliamentary committee that the CPPA was not signing the PPA that had been lying with it since July this year. Resultantly, it said, the NJHPC had not been paid for energy delivered to date. Nepra had also revised interim tariff to Rs9.1184 per unit at NJHPC's request in August, but it was not being notified. The final tariff application is currently under process.

The NJHPC had supplied over 6bn units electricity to the power sector that had remained unaccounted for so far.

The NJHPC had told the Senate Standing Committee on Planning that the CPPA was hampering the signing of PPA and invoicing mechanism by taking a stand that the company's tariff be clubbed with that of Wapda despite the fact that the NJHPC was an independent company registered with the Securities and Exchange Commission of Pakistan and the power regulator had approved its separate tariff.

According to Brig Zareen, clubbing the NJHPC tariff with that of Wapda was not only impractical but also involved serious legal and taxation ramifications as unlike Wapda, the company had some tax exemptions and there were legal issues relating to export of electricity from Azad Jammu and Kashmir. Separately, Wapda already had payables of over Rs200bn with the CPPA.

Because of these issues, payments of Rs1.10 per unit to AJK as water use charge were not being made, affecting their budget estimates. About Rs60bn as Neelum-Jhelum surcharge being charged to consumers has so far been collected and is being utilised by the company, but another Rs60bn on account of energy sold to the CPPA has remained unpaid. The 969MW project had an approved cost of Rs506bn, but was completed at a cost of Rs420bn.■

Massive water crisis brings a new economic burden to Karachiites

Defence and Clifton residents pay Rs70 bn per month on tanker water supply

■ By M. Nawaz Khuhro

Massive water crisis has gripped Karachi's areas of Gulistan-e-Johar, Baldia, Lyari, Orangi, Keamari, Gul Bai, Shershah, Korangi Industrial Area, Sheerin Jinnah Colony, Site Industrial Area, Korangi residential areas, Defence, Clifton, Qayumabad, Quaidabad, Landhi and Burns Road, where on average, per family in different segments of the society has been compelled to spend approximately Rs4000 extra on drinking water monthly amid skyrocketing price hike while the residents of highly developed areas -Defence and Clifton - have pay to Rs70 billion per month on tanker water supply, according to an investigative report made by this journalist under a fellowship organized by Pakistan Press Foundation (PPF).

The investigative report said that the reason behind crippling water crisis in the city is climate change and rising population. Due to climate change, water level in Indus, which is major source of Karachi water, has declined. The water crisis has affected 14.91 million people in the city, including owners of industries, cattle pens, hotels, schools, colleges, and other business places, in the lieu of rising tanker, can and bottled water expenses, according to the investigative report made by journalist M Nawaz Khuhro under a fellowship organized by PPF.

In an interview during field visit, Mohammad Naeem Qureshi, President of National Forum for Environment and Health (NFEH), said that the climate change had emerged as the biggest environmental challenge in Karachi, reducing water resource of Hub Dam since two decades. "During the last century, the average temperature over Pakistan has increased by 0.6°C, which is in conformity with the increase of average global temperature, but in Karachi, the average temperature in 25 years has risen by 6 t0 8 °C, which is an alarming hike," he said.

Qureshi, who is a renowned environmentalist of Pakistan based in Karachi, said: "The mean annual temperature has increased over Pakistan in the recent past with greater increase in Sindh and Balochistan. Due to climate change, the average rains over Balochistan has also declined to a much extent in last 20 years, causing low water supply to Hub Dam during this time. However, recent rains have raised water supply in the Hub Dam, but in future, there will be more low rains, as a result, Hub will face acute water shortage." He said there was need to ensure effective water management and conservation in Karachi which loses 35% water due to leakages from damaged and outdated pipelines; therefore, those pipelines should be immediately replaced with new ones.

NFEH president said that the total daily water demand of Karachi is 1188 Million Gallons Daily (MGD) while it gets only 638 MGD. Thus, the city is short of 550 MDG. "If solid and effective conservation steps are not taken, the water demand for Karachi will rise to 1700 MGD by next 30 years. It is time to save 35% water leakages in Karachi besides raising its share from Indus River through Keenjhar Lake so that citizens could take a sigh of relief from crippling water crisis, he said.

To tackle water crisis, Sindh government authorities has approved $1.6 billion Karachi Water & Sewerage Improvement Programme (KWSSIP) with the sport of the World Bank and the Asian Infrastructure Investment Bank to provide citizens safe and reliable water service on sustainable and predictable basis. The World Bank and Asian Infrastructure Investment Bank will provide each 40 percent funds share while the provincial regime will pay 20 percent.

Pakistan is a signatory to the Sustainable Development Goals (SDGs) and the SDG 6 aims to provide safe drinking water to 95 percent of the population by the year 2030. In view of this, Qureshi said that there was no proper planning with the government for raising Karachi water resources. According to the investigative report, Karachi is the most populous city of Pakistan with population of over 14.91 millions. The population in the city has shown an increase of 59.8% in 19 years, but the water share of the city is almost same. The population influx from the cities, towns and villages of all four provinces has put heavy burden on Karachi water sources and that is why that the Sindh government has asked the federal government to raise water share from Indus River for Karachi as it houses people from whole Pakistan. Ironically, no response in this regard has yet been given by the federal government. Anyways, there is dire need to raise Karachi's water share to a significant level so that people could take a sigh of relief from contaminated water and extra expenses in lieu of tanker, can and bottled water.

A case study of Gulistan-e-Johar and other areas

Gulistan-e-Johar, which has highest number of high rise apartment buildings in the city, has become a new water-thirsty area of the metropolis. Other worst-hit water-scarcity areas are Baldia, Lyari, Orangi, Keamari, Gul Bai, Shershah, Korangi Industrial Area, Sheerin Jinnah Colony, Site Industrial Area, Korangi where people have to pay Rs4000 extra on drinking water as KWSB has failed to provide due safe drinking water at many places, particularly in apartments. The worst affected people of this city area are living in apartments.

In an interview during field visit, Nazeer Ahmed, a resident of Sunny Pride, Block-20, Gulistan-e-Johar, said: "The people in apartments in this area had been compelled to purchase tanker, can and bottled water for drinking which is costly. He said: "In flats, the citizens are purchasing a 13-liter drinking water can for Rs25-30 and a 19-liter bottle for Rs70-80. Furthermore, additional Rs1000 to 15000 per month is paid in the head of tanker water which is contaminated and is only used for washing purposes."

This type of water causes allergy, he said. Nazeer said that families with five to 10 members thus spend Rs4000 and Rs5000 per month, respectively, on water for which the government is responsible to provide it. He said that KWSB provides only 30% water to flats while other need is met by spending own money. Irony is that this 30% KWSB water is mixed with salty tanker water by union staff ruling in the apartments. Poor people in many areas are drinking this brackish water and fall ill after being hit by water-borne diseases, he said.

In Bhittaiabad, Pahlwan Goth and other slum areas of Gulistan-e-Johar, water charges are more as the families of above sizes have to pay Rs5000 to Rs6000 per month in lieu of salty tanker and can water, Nazeer concluded.

A KWSB report said that upcoming water projects of Karachi are K-III Textile City and CETP, Greater Karachi Water Supply Project K-IV, Rehabilitation of Dhabeji Pump House Phase-I, and Rehabilitation of Clifton Pumping Station (CPS).

The investigation further said 260 MGD water was approved for Phase-I of K-IV Project which could still not be completed despite lapse of several years. Remaining phases of K-IV Project comprising 260 and 130 MGD are also without any approved water quota. When the K-IV project was announced, its cost was Rs15255 million and its first phase was due to be completed in 2018, but now the project deadline has been extended by 2021. This will certainly increase the project cost by big margin as dollar value has hit record high.

A Water Commission Report says a total of 19 RO plants in Karachi have been installed through KWSB. Of them, six were installed in Lyari and 13 in Keamari town. Of them, two are non-functional. These RO plants are non-functional due to negligence of authorities, the report said. The commission report further said that in District Malir in all 140 schemes were initiated in the past seven years for supply of drinking water and sanitation. The money spent on these schemes collectively was Rs1,663.931 million. Out of 140 schemes, 126 are functional and 14 non-functional. In District Karachi West, in all 19 schemes were initiated in the past seven years for supply of drinking water and sanitation. The money spent on these schemes collectively was Rs.215.97 million. Out of 19 schemes, 16 are functional and three are nonfunctional.

In District Karachi East, no any scheme of water supply and sanitation has been initiated for last five years however since 2001 in all 27 schemes were initiated for supply of drinking water and sanitation. The money spent on these schemes collectively was Rs.364.163 million. Out of 27 schemes, five are non-functional and 22 are functional. The report said that the negligence is behind the non-functional schemes. In an interview, Shabina Faraz, a leader of Green Media Initiatives organization which works on environment and water issues, said that a big quantity of water was being lost during supply in Karachi due to outdated pipelines which were 60 years old. "Another big issue is water theft as tanker mafia, backed by influential elements, is stealing citizens' water from pipelines and selling the same to them, which is a great injustice. Hence, there is need to replace old pipelines to conserve water in better manner besides stopping water theft," she said. She said that salty water is being made potable in many coastal cities of the world, so the government should also do it with the help of private sector. "The rainwater harvesting system should be established at administrative level in the city and people should be made aware of it as recently, heavy rains occurred in Karachi and such a heavy rain water could have been conserved if we had such system," Shabina urged. Access to safe drinking water is the constitutional right of every citizen of Pakistan, but every government has failed to provide it to the citizens, Shabina concluded.

Conclusion: There is the need to take Karachi water issue on top most priority as it is lifeline of human beings. Karachi houses people from all provinces of the country; therefore, the Sindh and federal governments must make larger investment to double the water resources of the city as its population has risen manyfold within 30 years.■

Govt collects 18% higher taxes on POL despite fast decline in consumption

By Khaliq Kayani

Despite around 13 per cent decline in consumption, the federal government collected about 18pc higher taxes on oil and gas products during first quarter (July-September) of this fiscal year mainly because of higher rates.

Total revenue collection from oil and gas sector in the first quarter amounted to about Rs186 billion, compared to about Rs158 bn in same period last year.

The quarterly data released by the Ministry of Finance reported proceeds of about Rs99.5bn this year on account of Gas Infrastructure Development Cess (GIDC), Gas Development Surcharge (GDS), petroleum levy, discount retained on crude oil, royalties on oil and gas and windfall levy against crude oil.

When compared with same quarter of last fiscal year, all these revenue heads had generated about Rs83bn. As such, the collection from these six categories increased by 20.2pc year-on-year during the period.

In addition, the government also collected about Rs87bn on petroleum products like diesel and petrol in 1QFY20 on account of general sales tax, versus Rs75bn in corresponding quarter last year, according to official sources.

Petroleum ministry officials said the consumption of petroleum products had declined by well over 13pc in the first quarter and major reduction was caused by 30pc slump in furnace oil and about 16pc in high speed diesel (HSD).

They explained that furnace oil consumption dropped primarily because of cheaper alternate fuels but diesel demand had plummeted mainly due to higher prices and relative economic slowdown.

The finance ministry reported that major increase in revenue collection came about on account of petroleum levy that amounted to Rs65bn in the first quarter, as compared to Rs45bn in same period last year - showing a rise of 45pc. This was mainly attributed to the changed strategy of federal government to raise more taxes through petroleum levy for being purely a federal tax.

Over the last year, the government has started increasing petroleum levy rates because it remains in the federal kitty unlike GST that goes to the divisible pool taxes and thus about a 57pc share is grabbed by provinces.

Conversely, the GIDC plummeted by almost 55pc to Rs2.72bn in 1QFY20 while the GDS declined by about 33pc to Rs1.7bn, from Rs2.54bn in same period last year.

On the other hand, discount retained on crude oil amounted to Rs3.7bn during the period, versus Rs3.144bn in same months last year, showing an increase of 19.35pc. The royalties on oil and gas and windfall levy against crude oil moved in a close range.

The royalties this year amounted to Rs23.77bn, compared to Rs23.64bn and windfall on crude dropped Rs1.965bn in 1QFY20, from Rs2.08bn.

These figures do not include provincial tax collections through oil and gas and taxes arising out of the value addition to oil products, such as power generation that is almost 70pc dependant on furnace oil, liquefied natural gas and natural gas.

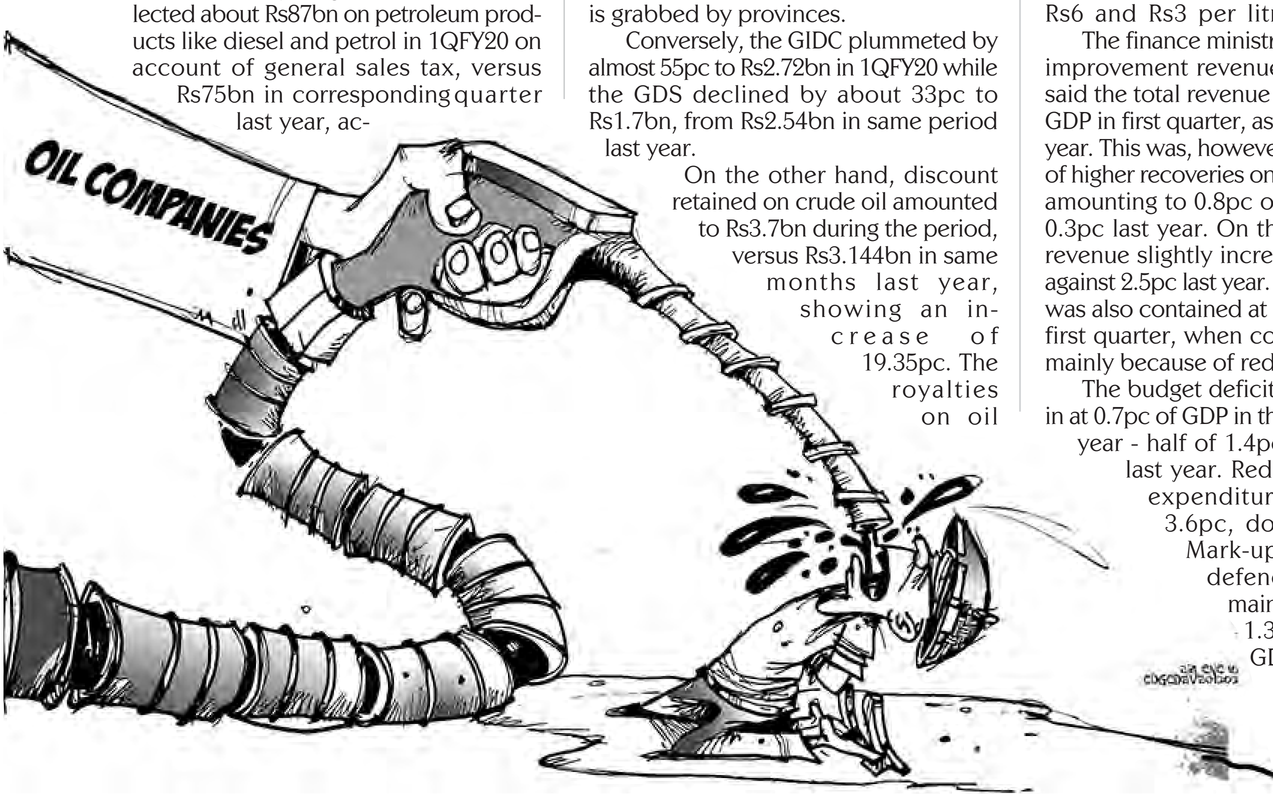
The government has already increased general sales tax on all petroleum products to standard rate of 17pc across the board to generate additional revenues. Until January, it was charging 0.5pc GST on light diesel oil (LDO), 2pc on kerosene, 8pc on petrol and 13pc on HSD.

Besides the 17pc GST, the government has more than doubled the rate of petroleum levy on HSD in recent months to Rs18 per litre, instead of Rs8, while levy on petrol had also been increased by 50pc to Rs15per litre, from Rs10.

Meanwhile, petroleum levy on kerosene oil and LDO remains unchanged at Rs6 and Rs3 per litre, respectively.

The finance ministry's data recorded improvement revenue to GDP ratio. It said the total revenue stood at 3.4pc of GDP in first quarter, as against 2.9pc last year. This was, however, mainly because of higher recoveries on non-tax revenues amounting to 0.8pc of GDP, as against 0.3pc last year. On the other side, tax revenue slightly increased to 2.6pc, as against 2.5pc last year. Total expenditure was also contained at 4pc of GDP in the first quarter, when compared to 4.3pc mainly because of red

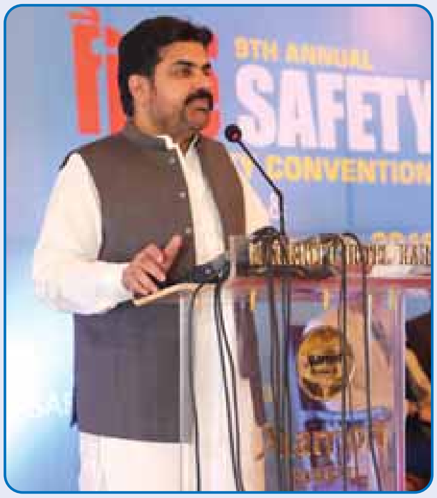
The budget deficit, therefore, came in at 0.7pc of GDP in the first quarter this year - half of 1.4pc in same period last year. Reduction in current expenditure that stood at 3.6pc, down from 3.9pc. Mark-up payments and defence expenses remained unchanged at 1.3pc and 0.3pc of GDP.■



courtesy: Daily Dawn

9th Fire Safety & Security Convention & Awards 2019

Sindh Govt to provide support to industries, commercial centres in Karachi to beef up fire safety measures



Syed Nasir Hussain Shah, Minister Local Bodies Sindh addressing at 9th Fire Safety & Security Convention. M. Naeem Qureshi, President NFEH; Imran Taj, President FPAP; Capt. Fahim uz Zaman, former Administrator Karachi and Engr. Nadeem Ashraf, Project Head also seen in the picture

The Sindh government apart from providing support to Karachi Metropolitan Corporation to beef up its firefighting system is also ready to work with industrial zones and commercial centres in the city to enhance their safety systems so to tackle any fire or similar disaster.

Sindh Local Government Minister Syed Nasir Hussain Shah stated this while

By Mustafa Tahir

speaking as the chief guest at the "9th Fire Safety & Security Convention-2019" jointly organized by the National Forum for Environment and Health (NFEH) and Fire Protection Association of Pakistan (FPAP).

The Local Government minister said on the occasion that the fire safety measures should be fully up to the mark at industrial zones, commercial centres, and multi-storied buildings as people in large number were present at any given time at these places in the city whose safety should be duly ensured in case of a fire incident.

He said that keeping in view large number of high-rise buildings in Karachi, the Sindh government had purchased a

Group photo of 9th Fire Safety Award Winners 2019 with Syed Nasir Hussain Shah, Minister Local Bodies Sindh

Glimpses of Panel Discussion shows Chairman ABAD Mohsin Sheikhani; MPA Sindh Dr. Imran Ali Shah; MD Haseeb Habib Fawad Barry; Country Head Fire & Security Wasif Laeeq & Fire Chief NRL Shahid Rasheed

snorkel of international standards for the KMC so to beef up its firefighting capabilities. He said that similar more snorkels and other firefighting equipment for the KMC and other municipal agencies in rest of the province would also be purchased.

He said that it was the responsibility of the government and its relevant agencies that fire safety measures should be

adopted in industrial zones, commercial centres, and high-rise buildings but at times slackness was observed by the government authorities in fulfilling such obligations.

He said that Sindh government had been doing its best to upgrade, repair, and improve civic and municipal infrastructure in the city including provision of road network, water supply, and sewerage system.

The provincial minister said that assistance of World Bank was being sought in upgrading civic infrastructure of the city.

He said that garbage disposal campaign launched by the Sindh government for Karachi was not just for one month as it would continue till complete resolution of this issue.

Earlier speaking at the convention, former administrator Karachi Captain Fahim uz Zaman Khan said that Karachi had seen massive increase in its population since creation of Pakistan- up to 60 times-while it was highly lamentable that its firefighting capabilities had consistently decreased all along

Picture shows Panelists including Masood Raza, Anchor Geo News; Sabahat Ali Khan, Aman Foundation; Former Deputy Fire Chief Naeem Yousuf & Khalid Nadeem

this period.

He said that industrial units in the city had not learnt any lesson from the Baldia town factory fire tragedy of 2012 as they had not undertaken required improvement in fire safety measures for their workers

He said that the industrial units not adopting required safety measures showed sheer failure of governance in the city.

He said that fire safety and disaster control systems of Karachi had seen massive deterioration with passage of time instead of seeing any improvement.

Naeem Yousuf, former deputy chief fire officer of KMC, said that recent massive Tezgam train fire tragedy in Rahim Yar Khan had showed that railway system of the country had serious shortcomings to tackle such fire incidents and similar disasters that massively endangered lives of the train passengers.

He said that every train carriage should have its separate fire extinguishers while railway staff boarding a train should

Group photo of Panelists with President NFEH M. Naeem Qureshi; President FPAP Imran Taj & Project Head Engr. Nadeem Ashraf

Glimpses of Stalls

also be trained to tackle such fire incidents.

He said that railway should develop strong communication system so to do emergency messaging between the trains and also to alert the authorities at railway stations about any disaster during a moving train service.

He said that big railway stations should have their own fire station as one such facility had been present at City Railway Station in Karachi but later on it became non-existent due to official neglect.

Member of Sindh Assembly belonging to PTI Dr Imran Ali Shah said that hospitals generally lacked proper safety measures for their visitors and patients so to secure them in case of any disaster.

President FPAP Imran Taj shed light on the methods and technologies being used the world over to secure residential, commercial, and industrial buildings so to protect them against any fire incident.

President NFEH Muhammad Naeem Qureshi said that his association would continue to provide utmost support to the provincial government to adopt strict fire protection measures by the industries and commercial centres.

Also on the occasions, Fire Safety Awards-2019 were given to representative s of some 45 companies.

Engr. Nadeem Ashraf, Project Head – Fire Safety & Security Convention, Wajahat, Joint Sec, FPAP, Shahid Rasheed, Fire Chief NRL, Wasif Laeeq, Country Head Fire & Security, Orient Energy, Fawad Barry, CEO – Haseen Habib Trading, Anis Alam, CHS Healthcare, Khalid Nadeem – Fire Expert, Col R Rizwan Ahmed, Mohsin Sheikhani, Chairman – ABAD, Sabahat Ali Khan, Senior Manager Administration, Aman Foundation, Masood Raza, Anchorperson, Dunya News & others also spoke on the occasion.■

Group photo of Team NFEH

ORGANIZED BY

NFEH National Forum for Environment & Health www.nfeh.org.pk

Fire Protection Association of Pakistan

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ARCHROMA PAKISTAN LIMITED


AT LAS BATTERY LIMITED


AVM CHEMICAL INDUSTRIES


BARRETT HODGSON PAKISTAN (PVT.) LIMITED


BELTEXCO LIMITED


CENTURY PAPER AND BOARD MILLS LIMITED


CORONET FOODS (PVT.) LIMITED


DR. ESSA LABORATORY & DAIGNOSTIC CENTRE


ENGRO FERTILIZERS LIMITED DAHARKI


FATIMAFERT LIMITED


FAUJI FERTILIZER BIN QASIM LIMITED


FAUJI FERTILIZER COMPANY LIMITED GOTH MACHHI SADIQABAD


FAUJI FERTILIZER COMPANY LIMITED PLANT SITE MIRPUR MATHELO


GSK CONSUMER HEALTHCARE PAKISTAN


HABIB BANK LIMITED


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IFFCO PAKISTAN (PVT) LIMITED


KARACHI MARRIOTT HOTEL


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LIBERTY MILLS LIMITED


LUCKY CEMENT LIMITED


MONDELEZ PAKISTAN LIMITED


MY TECH ENGINEERING COMPANY (PVT.) LIMITED


NATIONAL REFINERY LIMITED


PAK ARAB REFINERY LIMITED


PAKISTAN ACCUMULATORS (PVT.) LIMITED


PAKISTAN OILFIELDS LIMITED


PATEL HOSPITAL


PHARMEVO (PVT.) LIMITED

PREMIER CABLES (PVT.) LIMITED

SCILIFE PHARMA

SHAN FOODS (PVT.) LIMITED

SUI SOUTHERN GAS COMPANY

SYNGENTA PAKISTAN LIMITED

THAL ENGINEERING

THE AGA KHAN UNIVERSITY HOSPITAL

SHIFA INTERNATIONAL HOSPITALS ISLAMABAD

UCH POWER PRIVATE LIMITED

WAVES SINGER PAKISTAN LIMITED

YUNUS TEXTILE MILLS LIMITED

Congratulations to Winners of
9th Fire Safety Awards 2019

AWARD WINNERS PROFILES

Archroma Pakistan Ltd.

Archroma is a global, diversified provider of dyes and specialty chemicals serving the branded and performance textiles, packaging and paper, and coatings, adhesives and sealants markets.

Headquartered in Reinach, Switzerland, the company operates a highly integrated, customer-focused platform that delivers specialized performance and color solutions in over 100 countries.

Archroma works with 3,000 employees over 35 countries and with 26 production sites.

Archroma's heritage traces back to when Kern & Sandoz was established in 1886 in Basel to produce textile dyes. In 1995 Clariant was formed, as a spin-off from Sandoz, and in 1997 acquired the specialty chemicals business of Hoechst.

SK Capital acquired the then Textile Chemicals, Paper Specialties, and Emulsions businesses from Clariant Corporation in September 2013. The three divisions were combined into an integrated, market-focused, and collaborative company and renamed Archroma upon becoming an independent entity.

Through this direct lineage, Archroma has knowledge and experience of chemistry and industry spanning more than 120 years.

We deliver specialized performance and color solutions to meet customers' needs in their local markets, touching and coloring people's lives every day, everywhere.

We know the key drivers and requirements for the whole supply chain. Our R&D, technical experts and product managers worldwide help companies to optimize production processes and enhance products.■

Atlas Battery Limited

The Company is cognizant of the high demand for batteries in the country due to prevailing energy crisis and increasing number of vehicles on the road. mHence your company is dedicated to providing the Power that Moves you.

Ensuring customer satisfaction through the highest degree of quality and service with innovation and dynamic management while meeting stakeholders' expectations and serving as a model corporate citizen.

"A" stands for Atlas and "GS" stands for Genzo Shmadzu (the founder of Japan Storage battery Co.,Japan).

The Company manufactures a wide range of polypropylene batteries suitable for passenger cars, trucks, tractors, heavy vehicles, motor cycles, construction and road-building equipment.as well as stationary and industrial applications.■

Alcon Alumimum

ALCON Aluminium Profile is built upon a foundation of commitment and dedication espoused by a staff with over 12 years of experience in the Aluminum Extrusion industry. From basic angles to complex architectural and engineering profiles, we are adept at providing quality Aluminum products. Through our continuous efforts and vision for growth, we have garnered for ourselves a reputation of quality and reliability in the Pakistani Aluminum extrusion.

Our Lead times are fastest in the industry, our tooling cost are low and we don't require huge minimum orders, so you get what you need, when you need it, whether It is prototype or a high volume run.

Specializing in close tolerance, precision aluminium extrusion, we offer a range of other services, including aluminium fabrication aluminium part assembly and a variety of finished options including a full in-house anodizing and powder coating line.

Undertaking the design, Detail engineering, Supplying & fabrication, Erection and commissioning for Aluminium, Glass, S.S, M.S and Fiberglass■

AVM Chemical Industries

The group of technical people from populous; formed a partnership firm, "Pakistan Chemical Corporation (PCC)" in Karachi. The objective of founding the firm was to become a leading manufacturers and exporter of sodium silicate. PCC works till 1979 and the business shattered due to sad demise. Haji Abdul Ghaffar (late) was one of the partner of Pakistan Chemical Corporation (PCC) with a super technical excels. Afterward, Haji Abdul Ghaffar (late), started his new own business work with his technical capabilities by the name of "Abbo Vali Mohammad - (AVM Enterprise)" in the field of business. From the establishment, 1979, AVM Enterprise is working in the field of chemical trading. It has major dealings in Sodium Silicate and other Textile Auxiliaries, Dyes and Chemicals.

AVM Enterprises' people start its new industry with mingled their visionary ideas and concrete working experience and formed a platform with the name of "AVM Chemical Industries".

Established in 1996, AVM CHEMICAL INDUSTRIES, by virtue of the fact that she is the oldest, the most diverse and most prolific of the group. Conceived out of a vision to provide maximum customer satisfaction through innovative products that are AVM CHEMICAL INDUSTRIES provide dynamic range of international quality, CHEMICALS AND TEXTILE AUXILIARIES manufacturer in Pakistan since 1947.■

AWARD WINNERS PROFILES

Barrett Hodgson Pakistan (Pvt.) Limited

With the mission to maintain its entrepreneurial posture while remaining sympathetic to the ailing humanity, Barrett Hodgson Pakistan (owned by The Salim Habib Education Foundation) is striving persistently in the fields of pharmaceutical, education and philanthropy.

Being one of the fastest growing pharmaceutical companies in Pakistan, we exist in the healthcare sector with more than 100 brands and over 240 formulations. With 24 brand being leaders in the respective molecules, it is impossible for a doctor or a patient to not have come across products like Cefspan, Febrol, Cipotic-D, Inocef or Alphagan. Our brands are an entity themselves!

We boast a field force of more than 1200 and overall employees stand at 2300. We are increasing the production area by 40%, doubled the warehouse, created a new state-of-the-art liquid production area and added new hi-tech machines. Currently, a new Sterile Building and Tablet Area are under construction.

While BHP is catering to many medicinal specialties with quality products at affordable prices; The Salim Habib Education Foundation is adamant in ensuring provision of quality education and health facilities for the deprived nation. While Barrett Hodgson University, The Salim Habib Campus in Karachi is the first step to an enlightened Pakistan, another project running smoothly in Toba Tek Singh is the Barrett Hodgson College, Chaudhry Wali Muhammad Campus with around 600 students.

With six business partners including AstraZeneca, Astellas and Allergan that has proven their mettle globally, one can easily understand the quality and the level that is being ensured to meet the international standards.

With turnover exceeding Rs.11 Billion, we are not ready to stop, wait or celebrate our accomplishments. We are here to grow, expand and continue serving the mankind with the best of our abilities. We are here to create a difference in the life of every Pakistani.■

BELTEXCO LIMITED

Midas Safety was founded 1979 with a sales office in Toronto, Canada and manufacturing facilities in South Asia. Over a period exceeding 40 years, the organization has invested heavily in research and innovation to pioneer technological breakthroughs in safety and industrial hand-protection. The organization today is a leading private label supplier of hand-protection to more than 50 countries in the world. Beltexco Ltd is Midas Safety's leading glove manufacturing facility, which established its operation in 1990 in Dubai Jebel Ali export processing Zone Dubai and then shifted and registered with Karachi Export processing Zone Landhi, Karachi (KEPZ) in 2002. Beltexco is one of the leading manufacturers in KEPZ.

MISSION: To be a customer-centric organization providing high-quality products while operating in the best interest of all stakeholders.

VISION: To be one of the leading, innovative and high-quality glove manufacturers in the world.

PRODUCTS: We offer a diversified range of products which includes Plied Yarns, Knitted Products, Latex and Nitrile Dipping, PU dipping, Dotting Gloves etc. with multiple variants.

LAB: Beltexco's in-house Mechanical Lab is equipped with state-of-the-art equipment where our qualified technical team tests all products against all applicable EN and ASTM standards.

R&D: Our R&D team is dedicated to research to meet customer demands by closely observing market trends.

Build trust with our strategic partners by offering products and services that match their needs.

Exceed expectations of our strategic partners by offering innovative quality products.Comply with all internal and external safety, regulatory and quality requirements for manufacturing and product testing. Follow a zero-defect, no-waste attitude by everyone in our company. ■

Century Paper & Board Mills Ltd.

Century Paper & Board Mills Limited (CPBM) is part of Lakson Group of Companies Pakistan. The Lakson Group of Companies is one the leading groups of the country with diversified interests in industries such as Paper & Paperboard, Printing & Packaging, Soaps & Detergents, Instant Fruit Drinks, Fast Food Restaurant , Textiles, Surgical Goods, Information Technology, Insurance, Travel & Tours, Print & Electronic media, Investments and Software Development.

Lakson Group of Companies has built up Strategic Business Relationships and Business Alliances with Multi-National Corporations which includes Tetley Tea, Colgate-Palmolive, McDonalds and Kraft Foods.

Vision: To be the market leader and an enduring force in the paper, board and packaging industry, positively influencing and providing value to our stakeholders, society and our nation.

Mission: To strive incessantly for excellence and sustain our position as a preferred supplier of quality paper, board and packaging material within a team environment and with a customer focused strategy.■

Karachi Marriott Hotel

Karachi Marriott Hotel offers an array of services, including an executive level and a private lounge, 24-hour business center, round-the-clock room service, health clubs with outdoor and indoor swimming pool and spa. "MARRIOTT KARACHI" features 9 floors of luxurious guest rooms, shopping mall, a gym equipped with the latest fitness and exercise machines, indoor swimming pool for ladies and an Olympic size temperature controlled swimming pool.■

AWARD WINNERS PROFILES

Engro Fertilizers Ltd., Daharki

Engro Fertilizers Limited is a subsidiary of Engro Corporation and a renowned name in Pakistan's fertilizer industry. It is traded on the stock market under the symbol 'EFERT. Engro holds a vast, nationwide production and marketing infrastructure and produces leading fertilizer brands optimized for local cultivation needs and demand. Engro is also a leading importer and seller of Phosphate products, which are marketed extensively across Pakistan as phospatic fertilizers.

Our extensive market development activities have ensured a sustained pull for our primary and secondary fertilizer products and sellout productions since launch. Engro Fertilizers Limited enjoys loyal customer base across Pakistan owing to its trusted fertilizer brands and continual farmer assistance in training and education.

Engro Fertilizers Limited was incorporated in June 2009, following a decision to demerge fertilizer concern from its parent company Engro Chemical Pakistan Limited. The continual expansions and diversifications in its enterprises necessitated a broad restructuring in Engro Chemical operations and management. To facilitate better oversight, Engro Chemical Pakistan was converted into a holding company named Engro Corporation, and its fertilizer business was subsequently demerged to a newly formed Engro subsidiary -Engro Fertilizers Limited.

Engro's fertilizer manufacturing facility at Daharki has been experiencing ongoing expansion. This, coupled with distinct dynamics of highly nuanced fertilizer industry warranted an independent and dedicated business entity and approach. The demerger of fertilizer concern was approved by High Court of Sind on December 9th, 2009, making it effective as of January 1st 2010.

Engro Fertilizers is poised to become the leading urea manufacturer in the country following major upgrading of its manufacturing capabilities. ENVEN 1.3-a tremendous expansion in Engro's urea manufacturing facility went into production in November 2010 and looks set to end Pakistan's near-term urea imports, leading to benefits of an expanded local urea base and savings in national exchequer.

Engro is a dynamic company driven by a vision to improve productivity and lifestyle for thousands of farmers across Pakistan. Engro Fertilizers Limited has earned itself a distinguished name by continually striving to uphold its tradition and trust of its loyal consumer base.■

EFU General Insurance Limited

Today, with over 85 years of winning the customers' trust EFU stands as Pakistan's largest and the oldest general insurer, always ready to go the extra mile to serve better.

EFU has always provided a full range of insurance service to fulfill all of its customers' needs whether they are commercial or individual clients. It provides Fire, Engineering, Marine, Aviation, Motor, Miscellaneous services and Takaful Covers.

Ever since EFU's establishment in 1932, it has met the challenges of changing times. It has built a diversified customer base, covered more types of risks than any other, enhanced the expertise and delivered on the promises.

In the year 2017 EFU General Insurance Limited including its Takaful Operations have crossed the Premium/Contribution figure of Rs.20 billion. It is the first general insurance company in the history of Pakistan to achieve this milestone.

One of the important aspects of EFU's operation is that it has created a separate engineering group which works closely with clients to identify various risk exposures and then provide specific insurance coverage. This helps in loss prevention and reducing the cost of premium. EFU's market-driven team of inspired and technically qualified insurance personnel, specializing in civil, mechanical, metallurgy, electronics and having overseas linkages, is on-call for necessary professional advice at all times. It is EFU's policy not only to provide protection and risk reduction but help clients to develop preventive capabilities to avert major perils and calamities.

EFU General is protected by the strongest and top rated reinsurers around the globe which gives it a competitive edge over other Insurers.

EFU General is rated by JCR-VIS, PACRA and AM Best. JCR-VIS, PACRA have assigned rating of AA+ with stable outlook and AM Best have assigned rating of B+ with Outlook Positive. EFU is ISO 9001:2015 certified company. Regarding the recognition of EFU's services to the industry and the economy of Pakistan, it has also received various awards including Corporate Excellence Award of Management Association of Pakistan, Best Corporate Report Award of Institute of Chartered Accountant of Pakistan (ICAP) and Institute of Cost and Management Accountants of Pakistan (ICMAP), Achievement Award & Gold Medal of the Federation of Pakistan Chamber of Commerce and Industry (FPCCI), SAFA Best Presented Annual Report (Certificate of Merit) of South Asian Federation of Accountants (An apex body of SAARC), Brands of the year Award of Brands Foundation, Consumers Choice Award of Consumers Association of Pakistan, and Top 25 Companies Award of Karachi Stock Exchange etc., etc.

EFU General is the most powerful trusted brand and pioneer in the insurance industry as well as in China-Pakistan Economic Corridor (CPEC). It has always played a role of institution giving the emerging Pakistan insurance industry the leadership, manpower and drive needed to grow and face challenges.■

AWARD WINNERS PROFILES

Fauji Fertilizer Bin Qasim Ltd.

Fauji Fertilizer Bin Qasim Limited (FFBL) is mainly involved in manufacturing and distribution of chemical fertilizers for the farmers and agriculture sector of Pakistan. FFBL is the only manufacturer of DAP and Granular Urea in Pakistan. Its fertilizer manufacturing complex is located at Bin Qasim, Karachi, whereas, its registered office (Head Office) is in DHA Phase-2, Islamabad. Company is listed on Pakistan Stock Exchange (PSX) since May 14, 1996. Major shareholders of the company are Fauji Foundation and Fauji Fertilizer Company. This makes the company part of The Fauji Group which is one of the largest conglomerates of Pakistan and has stakes in fertilizer, cement, power, oil & gas sectors of Pakistan. Fauji Group is also involved in foods, oil and grain terminal operations and financial services by owning Askari Bank Limited.

Company was incorporated in 1993 and commenced its commercial operations in year 2000. It had an installed capacity 1,670 MT /day of Urea and 1,350 MT / day of DAP. Through consistent in-house expansion and upgrading, the company has successfully attained highest levels of 1,920 MT/day of Urea and 2,523 MT/day of DAP. In 2005, Fauji Group started a Joint Venture with Office Cherifien des Phosphates Group (OCP) and formed a new entity with the name of Pakistan Maroc Phosphore S. A (PMP). FFBL has ensured its continuous supply of Phosphoric Acid, which is a raw material for production of DAP Fertilizer. Company as part of its diversification strategy acquired shares in Askari Bank and in Fauji Foods Limited (FFL) formerly Noon Pakistan Limited. FFBL also has diversified in energy sector and has stakes each in Foundation Wind Energy-I & Foundation Wind Energy-II. FFBL has majority stakes in its two unlisted subsidiaries, FFBL Power Company Limited and Fauji Meat Limited, besides its 100% ownership in FFBL Foods Limited.■

Fatimafert Ltd.

Fatimafert Limited markets urea under the brand Bubber Sher®. Bubber Sher® has consistently delivered quality and value for more than 40 years and continues to enjoy a high brand share of preference in the markets Fatimafert Limited serves.

Fatimafert Limited is the wholly owned subsidiary of Fatima Fertilizer Company Limited, and a renowned name in Pakistan's fertilizers Industry selling Urea under the leading brand name of "Bubber Sher" for local cultivation. Fatimafert Limited is also the leading importer of DAP, marketed extensively across Pakistan.

Fatimafert Limited enjoys a large customer base across Pakistan owing to its trusted brand name and upholding the trust of its loyal customers. Fatimafert Limited was incorporated on August 2, 2010 following a decision to demerge fertilizer business from its parent Company Dawood Hercules Chemicals Limited, named DH Fertilizers Limited. The demerger was approved by Lahore High Court on July 25, 2010 making it effective as of July 1, 2010.

Fatima Group took the control of DH Fertilizers Limited on July 1, 2015 and changed its name to Fatimafert Limited on December 2, 2015. The brand "Bubber Sher" was also acquired by Fatima Group by purchasing the Company Bubber Sher (Private) Ltd, as a wholly owned subsidiary of Fatima Fertilizer Company Limited.

The manufacturing facility located at Chichoki Mallian, 28-KM Lahore Road, Sheikhupura started its commercial production on October 13, 1971. The original design capacities of Ammonia and Urea plants were 625 MT per day and 1100 MT per day respectively. The plant revamp was carried out from 1989 - 1991 and the design capacity was increased to 815 MT per day Ammonia and 1350 MT per day Urea. However, at present the plant is producing 1,500 MTPD of Urea, 890 MTPD of Ammonia due to Essential Equipment Replacement and higher capacity utilization.■

Fauji Fertilizer Co. Ltd. Goth Machhi Sadiqabad

Fauji Fertilizer Company Limited (FFC) is Pakistan's leading enterprise with multiple businesses across the country. FFC is the largest urea manufacturer of Pakistan. Its product is marketed under the brand name of Sona Urea. Besides Urea production, the company is also involved in energy generation, food processing, banking and chemicals production. With a diversified profile, FFC is pursuing multiple growth opportunities both inside and outside Pakistan, providing value for its employees, stakeholders and customers. The company pioneered wind power generation in Pakistan by establishing a 49.5 MW wind power plant which is in operation since May 2013. In food sector, FFC is operating the only IQF food preservation plant in Pakistan. FFC also holds equity stake in Fauji Fertilizer Bin Qasim (FFBL), Askari Bank, Fauji Cement, Thar Energy Ltd and Pakistan Maroc Phospore of Morocco. Fauji Fertilizer Company is operating three urea plants, two of which are situated at Goth Machhi, Rahim Yar Khan. The plants at Goth Machhi have a total design capacity of 1.33 million tons of urea per annum. The company is ISO-9001, ISO-14001 & OHSAS-18001 certified. It is also associated with National Safety Council, USA and International Fertilizer Association, IFA. It is also certified under IFA's Protect & Sustain Stewardship Program. FFC gives paramount importance to Occupational Health, Safety and Environmental Protection. The company boasts a comprehensive safety program undertaken to foster a safe and healthy work environment. The program focuses on both the permanent and contract employees of the company. FFC-GM achieved 8th position out of 328 fertilizer production units worldwide in the 2018 IFA fertilizer benchmarking survey. Since its inception, FFC has received 51 awards from National Safety Council, USA. Cognizant of its responsibilities, FFC has an unwavering commitment to Occupational Health & Safety of its Employees and to the environment.■

AWARD WINNERS PROFILES

GSK Consumer Healthcare

Our Consumer Healthcare business develops and markets consumer preferred and expert recommended brands in the Oral health, Pain relief, Respiratory, Nutrition/gastro-intestinal and Skin health categories.

We are one of the world's leading over-the-counter healthcare companies. We hold number one positions in Wellness across 36 markets, and are market leaders in specialist oral care.

We have a portfolio of loved and trusted brands that are underpinned by science including: Sensodyne, Parodontax, Poligrip, Voltaren, Panadol, Otrivin and Theraflu. The business generated sales of £7.8 billion in 2017, representing 26% of the total turnover of the Group.

Today, people are taking an increasingly active role in managing their own health. This is being fuelled by an emerging global middle class, rising healthcare costs and ageing populations. Demand for consumer healthcare products is growing, particularly in emerging markets where consumers are seeking more affordable and accessible products.Consumer healthcare products are dependent on brand loyalty and trademark protection. Some of our heritage brands such as Horlicks and ENO are more than 140 years old but continue to be popular today.

Our strategy is to meet the everyday healthcare needs of our consumers through building consumer preferred and expert recommended brands.

To do this we focus on excellence in innovation to develop world class brands, and on building our reputation through best in class interactions with retailers, healthcare professionals and shoppers.

Our business is built on science and this research heritage contributes to the development of our Consumer Healthcare products, giving us a unique advantage over our competition.

At the same time, we continue to ensure we meet all regulatory requirements for testing, approval, manufacturing, labelling and marketing of our products.■

Engro Energy Services Ltd.

Improving Energy Efficiency for Brighter Living. Incorporated in 2008 as a fully owned subsidiary to develop power projects in Pakistan, Engro Energy is Engro Corp's first initiative into the country's power sector.

Our aim is to ease the burden on the nation's energy sector by developing projects exploring cleaner, more efficient and economically viable sources of power generation including wind, hydro and solar energy. Our first Independent Power Project (IPP) - the Engro Energy Qadirpur plant, is widely recognized for being Pakistan's first 'green' power plant and the only facility of its kind to reduce carbon emissions via the utilization of permeate gas.

We have also entered into a strategic long-term partnership with the Sindh Government by establishing The Sindh Engro Coal Mining Company Limited as a joint venture launched to mine coal from Thar. As we forge ahead, Engro Energy will continue to pave the way for brighter living with investments aimed at boosting the nation's energy sector, preserving the environment, inspiring new innovations and forming lasting changes within the communities that we engage with.■

Habib Bank Ltd.

HBL, Pakistan's largest bank, was the first commercial bank to be established in Pakistan in 1947. Over the years, HBL has grown its branch network to over 1,700 branches and +2,100 ATMs globally, serving 14 million customers and clients.

The Government of Pakistan (GoP) privatized HBL in 2004 through which Aga Khan Fund for Economic Development (AKFED) acquired 51% of the Bank's shareholding and the management control. The remaining 41.5% shareholding by the GoP was divested in April 2015. AKFED continues to retain 51% shareholding in HBL while the remaining shareholding is held by individuals, local and foreign institutions and funds including CDC Group Plc which holds 5% and International Finance Corporation which holds 3%.

The Bank is a leading full-service commercial bank. The key areas of operation are Branch Banking, Corporate & Investment Banking, Treasury, SME & Rural Banking, Financial Institutions & Global Trade Services, Transaction Banking and Islamic Banking.

The Branch Banking business is the mainstay of the Bank, positioning HBL as the largest retail bank in Pakistan catering to all market segments. HBL Corporate & Investment Banking Group is a leading provider of financial services to multinational and local corporate clients across the country. The Bank also has the largest Treasury operations in Pakistan and plays a key role in Pakistan's domestic markets.

With a global presence in over 15 countries spanning across four continents, HBL is also the largest domestic multinational. The Bank's international footprint is important as it provides opportunities to effectively serve its core customers across its network. HBL is the largest executor of CPEC related financing in Pakistan and coupled with being the first Pakistani bank to start Renminbi (RMB) operations makes the Bank a key player in this economic initiative.

HBL is shaping the future through a paradigm shift as a 'Technology company with a banking license'. The Bank's multiple digital channels are helping it get closer to its customers through innovative and frictionless ways. The bank will continue to use technology to deliver service to its customers in a faster, cheaper and more efficient way.

As the leading financial intuition of Pakistan, HBL is at the forefront of all development initiatives which includes growth of priority sectors and targeting the unbanked population in the country. The Bank remains committed to its objective of financial inclusion for all sectors of society, across Pakistan. The Bank is already playing a leading role in enhancing gender diversity through ensuring the access of women to the financial sector. ■

AWARD WINNERS PROFILES

Hascol Terminals Ltd.

("HTL') is part of VTTI headquartered in Rotterdam, The Netherlands, operating bulk oil terminals across continents worldwide. HTL has built a brand new state of the art bulk oil terminal in Port Qasim, Pakistan, which commenced operations in March 2019. With its strategic location at Port Qasim, being a significant import hub for oil products into Pakistan and being the starting point of the White Oil Pipeline (WOP) delivering oil products upcountry, the terminal assumes a strategic role to facilitate the safe and efficient logistics of oil products into Pakistan and thus contributing to the energy needs of the country.

The terminal comprises of 22 tanks with a total capacity of 236 000 m3, designed for the receipt, storage, and dispatch of gasoline, diesel, and fuel oil and built according to latest international standards. The terminal has access to a third-party jetty which can handle oil tankers up to 65,000 dwt, operates the largest truck-loading gantry in Pakistan, comprising of (21) individual loading bays, and is connected to the strategically White Oil Pipeline (WOP), assuring product deliveries to satisfy up country demand in Pakistan.

The terminal is built and operated according to the highest international safety standards in the global terminal industry and safety is deeply embedded in its organizational culture. We assure not only the safety of our operation and the people, whether own or third party, that work with us according to highest international standards and practices and in alignment with all regulatory rules within Pakistan, we equally understand the role of our business to contribute to a future sustainable environment and the development of communities we are part of.■

IFFCO Pakistan (Pvt) Ltd.

IFFCO Pakistan is a group company of one of the largest Multinational Conglomerate IFFCO Group. IFFCO Pakistan has a distinctive edge of being the only Multinational Company in Edible Oils & Fats Industry. It has the largest edible oil refinery, processing and packaging lines for Cooking Oil, Canola Oil, Ghee, Fats and Margarine.

IFFCO is undisputed leader in Industrial and Bakery segment having long list of satisfied multinationals as well as local customers in Pakistan.

It takes pride in formulating and developing consumer, industrial products and customized product solutions. In retail segment IFFCO Pakistan has loyal consumer base for its brands .

IFFCO Pakistan has established one of the largest Seed Crushing unit to produce high protein soya bean meal and oil under stringent quality assurance system. This consistency in our high protein meal quality has made IFFCO Pakistan as most preferred choice of feed mills customers.

In addition, IFFCO Pakistan has its own Bulk Oil Terminal where we provide storage facility to the importers of palm oil by adopting highest degree of honesty and impeccable integrity.

IFFCO Pakistan is the only company in Pakistan which holds Halal Certification from IHCP - one of the world's most esteemed, unbiased and renowned international Sharia certification bodies.

ISO 9001 Certification: Gaining competitive advantage through quality, our organization is committed to constantly improving the quality of our products.

ISO 14001 Certification: Proves our responsibility to the environment; any harm will be minimum to the environment by our organization.

OHSAS 18001 Certification: Demonstrates our ability to manage hazards and ensures the health & safety of our employees.

FSSC 22000 Certification: Proves our commitment to food safety, and ensures that the food prepared is safe for consumption.■

Harbin Electric Int'l Company Ltd.

Harbin Electric International Co., Ltd. (HEI), an important member of HE Group, is China's leading large-scale enterprise in power project contracting and export of power equipment. Established in 1983, HEI is primarily engaged in the supply of complete sets of equipment, the undertaking of EPC projects, and the construction of relative substation, transmission lines, and other utilities in the area of thermal power plants, hydropower station projects, combined-cycle power plants and wind power projects. HEI also provides comprehensive professional after-sale service for the power plant. HEI offers a combination of excellence in power plant construction and professional after-sale services. Internationally-recognized engineering management software and HEI-PMS project management system are being adopted for its project management. HEI was the first professional power engineering company passing the ISO9001 International Quality Assurance system certification. In 2009, it again took the lead by passing certification on OHSAS 18001-2007 Occupational Health and Safety system and GB/T24001-2004 idt ISO 14001-2004 Environmental Management System.

During the past 30 years, HEI with advanced technology, exemplary management and outstanding service, has provided complete sets of power equipment or built large power stations on turnkey basis in more than 20 countries such as Pakistan, the Philippines, Vietnam, Bangladesh, Cambodia, Iran, Sudan, India, Indonesia, Turkey, Ecuador and The United Arab Emirates with total installed capacity of nearly 30000MW. It has grown into the backbone enterprise in China for the export of large power generation equipment and power plant contracting on EPC basis and has become one of the most important international contractors in the world. It has been recognized in the list of ENR as one of the world's top 250 international contractors for many years. Its corporate performance continues to set new records both in the HE Group and among China's domestic enterprises.■

AWARD WINNERS PROFILES

K-electric Company Limited (KE)

K-Electric (KE) formerly known as the Karachi Electric Supply Corporation, was established in 1913 to meet the power needs of Karachi. When new management took the reins in 2009, it proved to be the advent of a new age for the organisation and Karachi. Value creation was introduced at every level of operations, including environment, social, and governance policies. The organisation was rebranded under its current name of K-Electric in 2014. As of today, over 70% of Karachi is load-shed free and Transmission and Distribution losses have decreased by 15.5% points from 2009 to 2018.

Like the city it serves, KE has come a long way in the past one hundred years. Through a network spanning across 6,500 square kilometres, KE supplies power to residential, commercial, industrial and agricultural areas, serving over 2.5 million customers and is the only vertically-integrated power utility in Pakistan, managing all three key areas - Generation, Transmission and Distribution - of producing and delivering energy to consumers. With KE's five power plants and 30 Customer Care Centres spread throughout the city and its surrounding areas, the organisation has taken steps over the years to bring itself closer to its customers.

As a power utility, KE recognizes the importance of environmental safety. As part of its commitment to ensure best practices in this regard, KE's flagship 560 MW, Bin Qasim Power Station-II (BQPS-II) is the first-ever Pakistani power plant to be declared a WWF-Green Office for its Environmental Management System which prioritises energy efficiency, focuses on waste reduction across the entire value chain and ensures an environmentally-friendly workplace.

The power utility is recognized as one of the industry leaders in energy management best practices and this certification is yet another testament to KE's longstanding commitment to sustainability through resource and energy conservation. The BQPS-II power plant also holds the unique distinction of being Pakistan's first and only ISO 50001 certified power plant for its Energy Management System which improves energy productivity and cuts CO_2 emissions.■

Liberty Mills Limited

Liberty Mills Limited, located in the industrial heart of Karachi, was founded in 1964. From humble beginning it is today one of the largest textile processing unit in Pakistan with a production capacity of 500,000 square meters of fabric per day. The whole production is exported directly and indirectly to customers which include vendors of internationally recognized brands, departmental stores and mail order firms. We are an ISO 9001-2008, OCS 100/OCS Blended Standards, Oeko-Tex Standard 100 and SA 8000:2008 Certified company. Upgrading the quality of our products and services, personnel, equipment and infrastructure is an ongoing feature of our operation.

PRODUCT RANGE:

We are specialized in the processing of Woven & Knit fabic, Starting from T-120 thread count to T-400 thread count, 100% Cotton Satins, Cotton and Poly Cotton Percales, 100% Cotton Twill (Stretch / Non-Stretch), Drill, Canvas, BFC, Oxford, Herringbone, Dobby etc. etc..

Sheet Set, Crib Sheet, Birthing Sheet, Stretcher Sheet, Bed in a Bag, Comforter Sets, Duvet Cover Set, Curtains

Thermal Blankets, Twill Thermal, Baby Blanket, Herring Bone Blanket, Robe, Gown, Mother Gown, Lab Coat, Doctor's Coat, Furnishing Fabrics, Apparel Fabrics: 100% Cotton Twill (Stretch / non-stretch), Drill, Canvas, BFC, Oxford, Herringbone, Dobby, Wash Cloth etc. etc.■

MyTech Engineering Co. (Pvt.) Ltd.

MyTech Engineering Company (Pvt.) Ltd provides systems and solutions for life and business safety protecting lives, process machinery/equipment, valuable assets, data centers and facilities all over the world.

MyTech understands the necessity of minimizing business interruption in the manufacturing process, the customer service center etc. due to a fire or an explosion.

MyTech have MEP expertise with trained workers. This is need of market at this time. A multi-discipline system integration firm having experienced professionals.

MyTech provides high quality engineering services which include compete fire protection system. Heating ventilating and air condition (HVAC) system. It deals in passive product of Data centers and services provider of complete HVAC system.

The product lines are primarily commercial protection systems, industrial protection systems, pressure relief and oil field products.

MyTech has a history of innovative solutions, which makes MY Tech the Market leader in most of the chosen market segments in Pakistan. MyTech is located in Karachi

What We Offer

My Tech Engineering Provides the best & dynamic Engineering solution provider organization for process safety and facilities protection recognized by our customers as the industry leader consistently meeting or exceeding their requirements and expectations. ■

National Refinery Ltd.

National Refinery Limited (NRL) was incorporated on August 19, 1963 as a public limited company. Government of Pakistan took over the management of NRL under the Economic Reforms Order, 1972 under the Ministry of Production, which was exercising control through its shareholding in State Petroleum Refining and Petrochemical Corporation (PERAC).

The Government of Pakistan had decided to place the National Refinery Limited under the administrative control of Ministry of Petroleum & Natural Resources in November 1998.

In June 2003 the Government of Pakistan decided to include NRL in its privatisation programme. The selling of 51% equity and transfer of management control to a strategic investor had been proposed accordingly, the due diligence process for the privatisation was initiated. After competitive bidding NRL was acquired by Attock Group in July 2005. The Company has been privatised and the management control handed over to the new owner Attock Group on July 7, 2005.

Business activities and refinery's overview

NRL is engaged in the manufacturing, production and sale of large range of petroleum products. The refinery complex of the Company comprises of three refineries, consisting of two lube refineries and one fuel refinery. First Lube Refinery commissioned in 1966 with designed capacity of 3,970,500 barrels per annum of Crude Processing and 533,400 barrels per annum of Lube Base Oils.

Second Lube Refinery was commissioned in 1985 with designed capacity of 700,000 barrels per annum of Lube Base Oils, which came to 805,000 barrels per annum after re-vamp in June 2008.

The Fuel Refinery was commissioned in 1977 with designed capacity of 11,385,000 barrels per annum of Crude processing; after first revamp the designed capacity came to 16,500,000 barrels per annum of Crude processing in 1990 whereas after its second revamp the capacity has been further enhanced to 17,490,000 barrels per annum of Crude processing, commissioned in March 2017.

The BTX unit was commissioned in 1979 with design capacity of 180,000 barrels per annum of BTX.

In June 2017, NRL also commissioned UOP licensed Diesel Hydrotreater Unit having capability to produce 29,765 BPSD of EURO II specification HSD as directed by Ministry of Petroleum Government of Pakistan. The plant has a capacity to reduce Sulphur content to as low as 10 PPM. In October 2017, the Company has successfully commissioned Isomerization Unit having capacity to process 6,793 BPSD of light Naphtha into Isomerate. The plant will meet increasing demand of Motor Spirit in the country.■

HUBCO Power Narowal Energy Ltd.

"The Hub Power Company Limited (HUBCO) is the first and largest Independent Power Producer (IPP) in the country with a combined installed power generation capacity of 2920 MW. Our Hub Plant, situated at Mouza Kund, Hub in Balochistan, is one of the most efficient RFO fired thermal power plant in Pakistan, which supplies reliable and uninterrupted electricity to the national grid. Our Narowal Plant is also an RFO-fired, engine based, combined cycle power station, located at Mouza Poong, Narowal in Punjab. The Company also holds 75% controlling interest in Laraib Energy Limited, which is a run off the river hydel power plant near the New Bong Escape, 8 km downstream of Mangla Dam in Azad Jammu and Kashmir.

Our joint-venture with China Power International Holdings (CPIH), a 1320MW imported coal-based power plant, China Power Hub Generation Company Limited (CPHGC) with its integrated coal jetty, has started its commercial operations providing affordable and uninterrupted energy to over 4 million households.

The Hub Power Holdings Limited (HPHL) has been incorporated to invest in the future growth projects. The Hub Power Services Limited (HPSL), manages O&M of our existing power assets, preparing to undertake O&M of our imported and indigenous coal based growth projects, in addition to exploring other onshore and offshore business opportunities. HPSL is currently operating the Hub, Narowal & Laraib Plants. The Company's wholly owned subsidiary, Narowal Energy Limited (NEL) owns the 225MW Narowal Power Plant.

The Company has established Thar Energy Limited (TEL), to set up a 330MW mine-mouth lignite-fired power Plant at Thar Coal Block II Sindh. The Company has signed a Shareholders' agreement with Fauji Fertilizer Company Limited (FFCL) and CMEC TEL Power Investments Limited (CMEC Dubai) for equity investment of 30% and 10% respectively in the Project, while Hubco holds 60% shares of TEL. The Company has acquired majority shares in 330MW ThalNova Power Thar Pvt. Ltd (TNPTL) mine-mouth lignite fired power plant which is a similar project like TEL and provides huge opportunities for synergy.

The Company also holds 8% shareholding in Sindh Engro Coal Mining Company Limited (SECMC), a joint venture between the Company, Engro, Thal Limited, HBL, CMEC and Government of Sindh, which has developed a coal mine at Thar which has the seventh largest reserves of coal in the World. SECMC achieved Commercial Operations for Phase I on July 10, 2019 and will be embarking to double its coal mining capacity from current 3.8 MTPA to 7.6 MTPA for supplying fuel to HUBCO's Thar Energy Limited and ThalNova projects which are under construction."■

AWARD WINNERS PROFILES

Pakistan Oilfields Limited

Pakistan Oilfields Limited (POL) is a leading oil and gas exploration and production company listed on Pakistan Stock Exchange. The Company's prime focus is to deliver performance through excellence in the field of exploration, drilling and production of crude oil and gas.

Pakistan Oilfields Limited (POL), a subsidiary of The Attock Oil Company Limited (AOC), was incorporated on November 25, 1950. AOC was founded in 1913 and made its first oil discovery in 1915 at Khaur, District Attock. AOC has, therefore, pioneered exploration and production of oil and gas in this region nearly a century ago. In 1978, POL took over the exploration and production business of AOC. Since then, POL has been investing independently and in joint venture with various exploration and production companies for the search of oil and gas in the country.

In addition to exploration and production of oil and gas, POL also manufactures LPG, Solvent Oil and Sulphur. POL markets LPG under its own brand named POLGAS as well as through its subsidiary CAPGAS (Private) Limited. POL also operates a network of pipelines for transportation of its own as well as other companies' crude oil to Attock Refinery Limited.

POL primary objective is to ensure the safety of our people to ensure safe use of hazardous materials used during operations.

Recently POL has certified its Production facilities/SCR Rig in compliance to ISO 45001:2018. We are thankful to Allah Almighty that we are pioneers among the Oil & Gas Sector in Pakistan for achieving ISO 45001:2018 certification.

We are committed to providing a safe and healthy work environment and preventing accidents. Employees are accountable for observing the safety and health rules and practices that apply to their jobs. Emergency drills for different scenarios, training sessions and tool box talks are carried out regularly to ensure the state of preparedness is well maintained.■

Patel Hospital

Patel Hospital is one of the prominent not-for-profit tertiary healthcare hospital comprising 250 beds established to provide quality healthcare amenities to all at an affordable cost and Welfare Support to the under-privileged. The hospital is located in densely populated area of Karachi which provides services to millions of patients arriving from not only Karachi but also from interior Sindh. At Patel Hospital, our Doctors and Paramedical staff work devotedly to provide best care to patients. Our objective is to create a variance with revolutionary practices in the healthcare sector with our recognized staff and satisfaction-oriented service tactic. Patel Hospital's vision and mission is to carry comprehensive healthcare of international criterions within extent of every individual of the society.■

PharmEvo (Pvt.) Ltd.

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AWARD WINNERS PROFILES

Pak- Arab Refinery Limited

PAK-ARAB REFINERY LTD. (PARCO), a Joint Venture between the Government of Pakistan (60%) and the Emirate of Abu Dhabi (40%), was incorporated as a public limited company in 1974. As an integrated energy company, PARCO is a leading player in Pakistan`s petroleum industry with major operations in oil refining, transportation, storage, and marketing.

PARCO has the most modern and largest operating refinery in Pakistan having a capacity of 100,000 BPD (representing about 25% of the country`s refining capacity), strategic storage of over one million tons, over 2000 kms of cross country pipeline network (including its JV subsidiary Pak-Arab Pipeline Company Limited (PAPCO), and a rapidly expanding retail network of TOTAL PARCO (TPPL) - a joint venture with TOTAL of France. With the acquisition of Chevron's fuel operations, TPPL is now the second largest Oil Marketing Company in Pakistan. PARCO is also marketing nationwide LPG under the brand name of Pearl Gas. High quality asphalt is being marketed as Biturox.

PARCO`s performance is reflected not only in its technical and financial results, but can also be judged by its other achievements and awards e.g. it has maintained its AAA and A1+ long and short term credit rating by Pakistan Credit Rating Agency (PACRA) for the twentieth year running. The company set another first in Pakistan when it obtained three simultaneous international certifications: ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Health and Safety Management System). PARCO has also received Environment Excellence Awards for the last several years and is rated among the top 10 organizations in Pakistan for outstanding achievement in Environment Management. From producing environment friendly products to efficient, world class engineering facilities and infrastructure, building a competent team, and major social initiatives, PARCO is doing its utmost in Providing Energy with Responsibility.■

Pakistan Accumulators (Pvt.) Limited

By The grace of Almighty ALLAH, Pakistan Accumulators (Pvt) Ltd. has been accredited with ISO 9001, ISO 14001 and ISO 45001 certifications for our quality, environmental management systems and occupational health & safety. Pakistan Accumulators (Pvt) Ltd. is a Pakistan Standard Quality Control Board Authority certified company.

Pakistan Accumulators (Pvt) Ltd's. "Vision 2020" states that we aim to become a "CUSTOMER TRUST WINING" company, ensuring that all the stakeholders including the company, trade network and the end user should get the best returns on their investments. With its two brands VOLTA & OSAKA, Pakistan Accumulators (Pvt) Ltd. is one of the largest manufacturers of batteries for automotive, industrial and residential markets in Pakistan.

Pakistan Accumulators (Pvt) Ltd. is one of the largest battery manufacturing facility in Pakistan. Lift the hood of any second automobile in the country and you will see OSAKA or VOLTA battery at its heart.

The remarkable success of our products is rooted in our unshakable commitment to quality, widest range of products and a firm commitment to attain maximum customer satisfaction. These values have not only made us the most trusted battery manufacturer in Pakistan but also distinguished us as the leading exporter of batteries in Pakistan. We are proud to be one of the few Pakistani manufacturing concerns that use state-of-the-art enterprise resource planning software (SAP) as the backbone of our operations, which enables us to attain optimum efficiency.■

Premier Cables (Pvt.) Ltd.

Established in 1964 by Mr. M. Ismail Kasim, Premier Cables (Pvt) Limited is located at Federal "B" Industrial Area, Karachi, Pakistan with a working area measuring 13012 Sq. meters.

Initially the Premier Cables (Pvt) Limited started manufacturing Electrical Wires & Cables, Telephone Cables, PVC Garden Pipes, PVC Compounding, Artificial Leather and supplying the same in to local and international markets as well.

The year 1987 brought a revolutionary change in the Premier Cables (Pvt) Limited when the Company got specialization in manufacturing of high quality Telecom cables including Jelly Filled Cables, Drop Wire and cables, S.S. Aerial Cables, special insulated cables for the telecommunication industry to serve. Considerable expertise has since been developed in the manufacturing of Aircore and Filled Cables.

Premier Cables (Pvt) Limited is equipped with the latest state-of-art machineries and test equipment to manufacture Optical Fiber Cables, viz. Direct Buried Cable, Non-Metallic Duct Cable, High Fiber Count Non-Metallic Duct Cable, Central Loose Tube (Uni-Tube), Dielectric Self Supporting Cable (Adss Cable), Indoor Premise Cable, Armoured Duct and Armoured Aerial Optical Cables. Company's unit has one of the most modern and high-tech plant to manufacture Optical Fiber Cables in Pakistan.

In addition to above products, Premier Cables (Pvt) Limited is also able to produce special cables to meet customers' specifications using different conductors, alternative insulation media, varying construction of sheath materials, different standard color coding and with special packaging, etc. It also maintains an appreciable stock of finished cable and quotes competitive delivery on non-stock items. We at Premier Cables (Pvt) Limited always look forward to discuss any other new development/special requirements with our valuable customers.■

AWARD WINNERS PROFILES

Shan Foods (Pvt.) Ltd.

Shan Foods innovates with delicacies of the sub-continent to give you a bite of happiness every day.

As the pioneer in spice mixes, we ensure that our products are not just convenient and easy to prepare but also deliver on the flavor, traditional taste and aroma that our consumers love and cherish.

We work tirelessly to bring the best food solutions to our valued consumers - looking internally and externally for new ideas, trends and improvements to deliver a superior product experience.

VISION AND MISSION

Establish Shan as the leading culinary brand, offering authentic traditional recipes & home food solutions, with relentless focus on excellence in all we do, ensuring a wholesome experience for our consumers around the world.

COMPANY PROFILE

The journey of Shan's remarkable success starts from 1981 when the dream of one man became a reality! A visionary entrepreneur, an avowed humanist and a committed philanthropist, Mr. Sikander Sultan, Chairman, Shan Foods (Pvt.) Ltd, helped pave the way to success by pioneering in the spice business with a single room operation. Initially, recipe mixes were only shared within the broader family but in a very short span of time they gained popularity and orders started pouring in from friends, acquaintances and general consumers. Overtime, the company prospered and Mr. Sultan decided to launch his very own brand, "SHAN" and since then there has been no turning back!

Today, Shan is a powerful global brand that has presence in over 65 countries across 5 continents.

QUALITY OPERATIONS

At Shan Foods, quality is our religion. We strive to set our Quality Operations as a benchmark for the industry at large.

Our mission is to provide our consumers with supreme standards of product quality, safety and consistency. Our Quality Control department regularly monitors the different phases of production from research & development to packaging and distribution while conforming to national and international regulation and legislation. This ensures highest quality at each stage of production for our consumers to safely enjoy our food products.■

Scilife Pharma

Scilife Pharma (Pvt) Limited is a Pharmaceutical Marketing and Manufacturing Company. The Company was incorporated in the year 2006 and started its operations in 2008.

Scilife Pharma's recently commissioned, state-of-the-art Manufacturing Facility, following the cGMP (Current Good Manufacturing Process) and incorporating the guidelines of WHO & other International Regulatory protocols, has started its operation in 2017 at the prestigious Korangi Creek Industrial Park manufacturing specialized Pharmaceuticals. This manufacturing plant covers an area of more than 12,000 sq. Yards.

Scilife started its operation with Four (4) Brands and a small field force is 2008 but has since grown into the 50th ranking position in the Pakistan Pharma Industry, currently marketing approximately 50 Brands.

Scilife commitment to Environmental, Health & Safety is a foundation we affirm to all of our internal and external stakeholders, we strive to continually improve our practices, aided by science and technology advances, to drive improvements in Environmental, Health & Safety performance.

Scilife Pharma currently employs more than 880 specialized personnel in Marketing, Manufacturing and Management. The marketing personnel are based all over Pakistan and the

Specialized Pharmaceutical products are distributed through a distribution network of 70 distributors.

Scilife Pharma is a corporate entity having membership of KCCI, PPMA, KATI and Employers Federation of Pakistan

Scilife is registered with the Security & Exchange Commission, Federal Board of Revenue, Income Tax and sales Tax Authorities and all Regulatory authorities.■

AWARD WINNERS PROFILES

Sui Southern Gas Company (SSGC)

K-Electric (KE) formerly known as the Karachi Electric Supply Corporation, was established in 1913 to meet the power needs of Karachi. When new management took the reins in 2009, it proved to be the advent of a new age for the organisation and Karachi. Value creation was introduced at every level of operations, including environment, social, and governance policies. The organisation was rebranded under its current name of K-Electric in 2014. As of today, over 70% of Karachi is load-shed free and Transmission and Distribution losses have decreased by 15.5% points from 2009 to 2018.

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Syngenta Pakistan Ltd.

Syngenta globally is one of the world's leading companies with more than 26,000 employees in over 90 countries dedicated to our purpose: Bringing plant potential to life. Through world-class science, global reach and commitment to our customers we help to increase crop productivity, protect the environment and improve health and quality of life. Syngenta means "bringing people together."

The principal activities of the Company in Pakistan comprises of formulation, repacking and sale of agricultural products including Seeds. Syngenta Pakistan Ltd. is a market leader in Crop Protection business.

Our products & brands are: Crop Protection, Selective Herbicides, Non-Selective Herbicides, Fungicides, Insecticides, Seed Care, Seeds, Corn, Vegetables, Flowers etc.

Ever since its formation in 2000, Syngenta has been committed to assisting its customers, farmers in their daily needs. It has done so by developing and offering a broad range of innovative products. We partner with growers to improve their livelihoods in Pakistan in sustainable ways. We promote innovative methods and technologies to help farmers increase their food production and make the best possible profit.

Corporate Responsibility

Syngenta is guided by the conviction that value creation depends on the successful integration of business, social and environmental performance. We are committed locally to promote and maintain high standards of corporate responsibility in an industry that is essential to agriculture and food production. The company acts locally in accordance with its Code of Conduct and its Health, Safety and Environmental Policy, which embrace internationally accepted regulations and the highest scientific standards.■

Shifa Int'l Hospitals Islamabad

(Accredited by the Joint Commission International (JCI), U.S.A.), with vision "To be the region's leader by providing quality healthcare services

Mission of Shifa International Hospital is Health Care with Compassion for all.

Shifa International Hospital Islamabad is a 550-bed quaternary care hospital offering comprehensive diagnostic, outpatient, and inpatient services in 35+ medical & surgical specialties.

SHIFA Transplant Center is a pioneer in transplant services in Pakistan in Liver, Kidney, Bone Marrow and Cornea.

As part of its CSR, SHIFA treats 500+ deserving patients everyday through Shifa Foundation since 1994.

National footprint with a network of lab collection points, pharmacies & medical centers includig a 40+ bed hospital in Faisalabad.■

AWARD WINNERS PROFILES

Thal Engineering

Thal Engineering is the leading automotive parts manufacturer bringing the latest technology to its customers.

Thermal System Business

Thal Engineering Thermal Systems was established in 1996 with the signing of TAA (Technical Assistance Agreement) with DENSO Corporation, Japan (the second largest auto parts maker in the world)

It manufactures quality Thermal Automotive products including Automotive Air-Conditioners, HVAC, Aluminum Radiators, Cooling Sub-Modules, Heat Exchangers, Reserve tanks and Car A/C Controls .■

Yunus Textile Mills Ltd.

Yunus Textile Mills is part of the Yunus Brothers Group which has renowned set ups in different industries like hospitals, textiles, real estate, energy, cement, commodity trading business, construction, FMCG, automobile and more. In this short time frame, the company has transformed itself from a supplier of basic bedding products to a world-renowned supplier of Home Textile Products.

Yunus Textile Mills Ltd. prides itself on possessing top-of-the-line vertical integrated processes of spinning, weaving, dyeing, printing and finishing. The stitching unit has the capacity to produce 10 million meters of fabric every month. Our automated Texpa and manual machines ensure quality stitching in different fabric blends for a variety of purposes.

We are: Efficient, Innovative, Determined, Competitive

We have: In-House Design Studio, State-Of-The-Art Machines, Enormous Production Facility, Global Warehousing Facility

We provide: High Quality Standards, Value Addition, Customer Satisfaction,End-to-End Services■

The Aga Khan University Hospital

The hospital was established in 1985 as one of our principal teaching sites for nurses and doctors from our School of Nursing and Midwifery and the School of Medicine. The hospital is an architectural marvel, built with long lasting, rich warm red materials, sits on an oasis of 83 acres, landscaped with 3 lakes, numerous water pools, luscious greenery and wide-open courtyard spaces, all conducive for patient healing. AKUH K is a tertiary care hospital with consultant doctors specialized to provide compassionate care and treatment to patients with a full range and severity of specialty diseases and conditions. Our fully equipped emergency rooms, high tech operating rooms, well equipped critical and intensive care units, comfortable general hospital wards and premium private wing wards have all been designed to ensure a high standard of quality care for all our admitted patients (inpatients) irrespective of race, religion or background. Our multi-specialty clinics (outpatients) are designed to meet the needs and demands of patients based on their health status and lifestyle. The Executive Clinics are for patients who lead very busy lives, Consulting Clinics are for patients who need to see a doctor with specialized training for a specific disease or illness and our CHC (Community Health Centre) are for patients who have a general illness and need quality care at a subsidized cost. Our state of the art facilities and robust panel of clinical imaging and laboratory services offer fast and accurate results to facilitate early patient diagnosis and treatment. Our pharmacies supply quality medicines to admitted hospital patients, as well as patients visiting our clinics. All our medicines are stored in a controlled temperature environment to maintain the therapeutic effect that patient's rely on. AKUH, K offers World Class Quality Services, demonstrated by our gold seal accreditation from the prestigious Joint Commission International, which focuses on patient safety. ■

AWARD WINNERS PROFILES

Uch Power Private Ltd.

Uch Power (Private) Ltd. (UPL) owns and operates a 586 MW (ISO gross capacity) gas fired combined cycle power plant in the Baluchistan province of Pakistan, which is one of the largest Independent Power Project (IPP) undertaken under the Government of Pakistan (GoP) power policy of 1994. The Uch Power Station began operation in October 2000 and is unique as it is based solely on field specific, indigenous low and medium BTU gas.

We in UPL are fully committed to providing a safe and healthy workplace to protect all those affected by our activities and to avoid or minimize any adverse environmental impact of our business.

While the Plant Manager holds ultimate responsibility for the implementation of this policy at all levels of the organization, every UPL employee including contractors shall accept individual responsibility and be accountable for managing Quality, Health -Safety and Environmental matters.

The objective of this policy is to promote a strong and effective culture resulting in the highest level of Quality, Health, Safety and Environmental performance. We believe that Health, Safety and Environment are core values of our business and its management and continual improvement is an integral part of our activity.

UPL personnel, contractors and visitors are required to comply with all Uch Power Station Site Quality, Health, Safety & Environmental obligations for themselves and others.

In order to achieve these objectives, UPL management shall:

.:. Annually review and document the Quality, Health -Safety and Environment (QHSE) risks associated with the business and implement action plans to minimize these risks .

o . Respect the global, national and local environmental laws .

o . Monitor health and safety performance through the use of self-audits independent audits and external 3rd party audits .

o . Comply with all applicable regulations, legislation and where applicable best industry practices to drive standards

o . Comply with all Engie -BEI applicable Health Safety & Environmental commitments and adopt procedures into local procedures.■

Waves Singer Pakistan Ltd.

Waves Singer Pakistan Ltd. has become a merged company with the acquisition of Cool Industries (Pvt) Ltd. by Singer Pakistan during 2017.After the approval of the Scheme of Merger by Sindh High Court, the combined company has acquired the name of Waves Singer Pakistan Ltd.

Singer's history dates back to 1850, when Isaac Merritt Singer manufactured the first ever sewing machine in Boston, USA. I. M Singer & Company was duly incorporated during the same year. The name of the company was changed to Singer Manufacturing Company during 1853 when the factory of the Company was also relocated to New York, USA. Singer established its presence in the Indian sub-continent during 1877. Over the years, and after the independence of Pakistan, Singer continued its business of sewing machines in the country, but also started dealing in domestic consumer appliances, besides manufacturing and assembling light engineering products. In 1985, the Company became a public listed company. Singer Pakistan's retail network has 140 shops in Pakistan alone, and covers every small town and metropolitan city of the country. Under the Singer brand, the Company produces a variety of consumer appliances-including refrigerators, air conditioners, LED TVs, washing machines, microwave ovens in addition to its more traditional offerings of sewing machines, water heaters and gas ovens etc.

Cool Industries (Pvt) Ltd., the owner of the WAVES brand of consumer appliances, was established in 1971 by a family of entrepreneurs from Lahore. Within a span of four decades, the Company became a household brand in the country. The Company's history is filled with many milestones. Back in 1976, it started the production of refrigerators. By 2002, the Company had become the sole producer of Split Air Conditioners in Pakistan. The Company started producing Microwaves in 2003, under an agreement with GALANZ, a Chinese company. The product take-off was impressive, thanks to product durability. The production of Washing Machines started in 2004, when Waves pioneered single tub and double-tub washing machines in this market. The Company continued its growth path until 2015, when a tough competitive landscape and succession issues within the sponsors family created many bottlenecks in the smooth operations of the Company. Subsequently, the Company was acquired by the sponsors of Singer Pakistan Ltd..

Upon approval of the regulatory and legal formalities, both Companies have been merged into a single company, with the surviving Company being named as Waves Singer Pakistan Ltd..■

Pakistan 5th most vulnerable country to climate change

By Syed M. Abubakar

The Global Climate Risk Index has placed Pakistan on the fifth spot on the list of countries most vulnerable to climate change in its annual report for 2020 released by the think-tank, Germanwatch.

According to the report, Pakistan lost 9,989 lives, suffered economic losses worth $3.8 billion and witnessed 152 extreme weather events from 1999 to 2018 and based on this data, the think-tank has concluded that Pakistan's vulnerability to climate change is increasing.

The data also indicates that the government, as well as the world, is not taking enough measures to cope with the challenges and risks that climate change poses to Pakistan, experts say.

According to the report, Pakistan is among the countries that are "recurrently affected by catastrophes [and] continuously rank among the most affected countries both in the long-term index and in the index for the respective year".

Apart from Pakistan, the countries on the list of the 10 countries most affected by climate change include Puerto Rico (1), Myanmar (2), Haiti (3), Philippines (4), Vietnam (6), Bangladesh (7), Thailand (8), Nepal (9) and Dominica (10).

Out of ten countries on the long-term index, seven are developing countries in the low income or lower-middle income category, two are classified as upper-middle-income countries (Thailand and Dominica) and one is an advanced economy (Puerto Rico).

One of the reasons for Pakistan to be continuously ranked high in the long-term index of the report is mainly due to its geographical location. According to David Eckstein, one of the co-authors of this report, "the entire region where Pakistan is located is prone to extreme weather events, in particular, heavy rainfalls e.g. during monsoon season, and floodings as a result."

Advisor to the Prime Minister on Climate Change Malik Amin Aslam Khan, while commenting on Pakistan's ranking in the 2020 report, said: "Our ranking over the long-term index went up from eight to fifth because the period used amplifies our most climate catastrophic events in 2010/2011 when the super floods hit."

"In terms of economic costs at $3.8 million, we are number three over a 20-year period. What this means is that our economy is constantly at risk from climate catastrophes and this is not just an environmental challenge but an issue impacting our economy, human health, agriculture and ecosystem," he explained.

Dr Adil Najam, the dean of Pardee School of Global Studies, Boston University blames the lack of action taken to combat climate change risks.

"The report clearly indicates that the world hasn't acted, so the vulnerability of the whole world is increasing, and since Pakistan hasn't acted, things are worsening for us too," he said.

Talking about the threat of rapidly melting glaciers that resulted into Glacial Lake Outburst Floods (GLOFs) in Paki-

CRI 1999-2018 (1998-2017)	Country	CRI score	Death toll	Deaths per 100 000 inhabitants	Total losses in million US$ PPP	Losses per unit GDP in %	Number of events (total 1999-2018)
1 (1)	Puerto Rico	6.67	149.90	4.09	4 567.06	3.76	25
2 (3)	Myanmar	10.33	7 052.40	14.29	1 630.06	0.83	55
3 (4)	Haiti	13.83	274.15	2.81	388.93	2.38	78
4 (5)	Philippines	17.67	869.80	0.96	3 118.68	0.57	317
5 (8)	Pakistan	28.83	499.45	0.30	3 792.52	0.53	152
6 (9)	Vietnam	29.83	285.80	0.33	2 018.77	0.47	226
7 (7)	Bangladesh	30.00	577.45	0.39	1 686.33	0.41	191
8 (13)	Thailand	31.00	140.00	0.21	7 764.06	0.87	147
9 (11)	Nepal	31.50	228.00	0.87	225.86	0.40	180
10 (10)	Dominica	32.33	3.35	4.72	133.02	20.80	8

stan, Dr Najam said, "The glaciers won't stop melting because there was a beautiful speech."

He was referring to a recent speech by Prime Minister Imran Khan at the seventh International Union for Conservation of Nature Asia Regional Conservation Forum, where the premier had highlighted the dangers Pakistan faced by climate change, while pointing at measures his government had taken to curb the impact.

For Dr Najam, however, the speech is not good enough. "If we don't do anything, we should not expect anything to change or become better."

As Pakistan is situated in a vulnerable geographical location, where the intensity and frequency of extreme weather events are high, Eckstein urges the government to develop appropriate measures like projects, programmes and plans to protect the most vulnerable population. At the same time, he realises that, in order to succeed in its efforts, Pakistan will require assistance.

"It cannot do this with its own means, most likely, therefore, it will require the financial and technical support from the international community through channels, such as the Green Climate Fund (GCF)," he said.

The 2015 Paris Accord required the 196 parties to the agreement to submit their Nationally Determined Contributions (NDCs) - their plans to reduce temperatures and adapt to the impacts of climate change.

Pakistan's NDC revealed that the country needs US$ 40 billion to reduce 20 per cent of its emissions for 2030 and US$ 7-14 billion annually for adaptation. Independent experts state these figures as unrealistic but Malik Amin Aslam believes the "it reflects the amount that the global climate finance infrastructure needs to make available for Pakistan to shift towards a low carbon trajectory growth".

"It would also help to meet the forced adaptation needs that our economy has to face due to climate change," he added.

However, Dr Najam believes the government was not serious when it was drafting the NDC document.

"We knew we won't get the money and let's suppose for a second if we did, we won't spend it properly!" he said.

"The issue is not just of Pakistan but the NDCs of most countries are not worth the paper they are written on, that is why the Paris Agreement has failed.

"The mitigation efforts by all countries worldwide are not enough to avert climate change and keep temperatures below 2°C or 1.5°C. This increases the likelihood of more intense extreme weather events," he said.

Eckstein is the policy advisor related to climate finance and investments at Germanwatch. He warns that global financial support for adaptation to climate change is insufficient to prevent the occurrence of extreme weather events.

"In 2017, only 19pc of (global) climate finance mobilised addressed adaptation. There is also a huge gap regarding financial support for dealing with loss and damage," he said.

Aslam, on the other hand, pointed out that despite emitting less than 1pc of the global emissions, Pakistan consistently remains on the most vulnerable category. This forms the basis for creating a new coalition of climate injustice, with

the prime demand of prioritising action on loss and damage.

"Yet we are a country which on its own financing is investing a large amount for forestry, building upon its global success of a billion trees to now initiate a 10 billion tree tsunami," he says.

He said that the present government is self-financing some of the green initiatives occurring outside the NDC. "We are shifting towards a low carbon economy with a stated goal of shifting 30pc of its energy mix towards renewables and also embarking on an e-mobility transition targeting 30pc shift [to electric vehicles] by 2030."

The Pakistan Tehreek-i-Insaf government's efforts does not change the fact that Pakistan has heavily invested into the dirtiest fossil fuel on earth - coal and that can further exacerbate its vulnerability to climate change. Dr Najam drew attention to this dark side, as Pakistan's NDC confirms that the country plans to increase its emissions to fourfold, with a sizeable share coming from coal-fired power plants.

"I want to see the energy productivity of Pakistan increased but the energy itself doesn't have to be polluting. Coal is a dying technology. Why are we going after outdated technology which is more expensive than solar and wind? Why should we imperil the lives of own people?" he asked.

"It just like someone insisting on buying a cassette player in the age of digital and iPhones. Coal's time is up."

It would be unfair to blame the current government for the coal-fired power plants, though.

"The coal projects are part of the legacy we inherited from the previous government (referring to PML-N's government from 2013-2018) which has, unfortunately, locked us into long-term contracts with sovereign guarantees," Aslam said.

He continued: "We are trying to minimise the impacts by the employment of best available technologies."

The current government has certainly taken more steps to improve the climate of the country and Dr Najam is cognizant of this fact. Referring to Aslam, Dr Najam said: "We now have someone who is very good and actually knows the issues."

At the same time, he expressed his frustration over recent statements by Zartaj Gul, State Minister for Climate Change. "As if we are not interested in the subject of climate change," he remarked. In the short-term index titled 'The 10 Most Affected Countries in 2018', Pakistan is ranked on the 100th position losing US$ 90 million to climate change-induced extreme weather events.

Japan, the Philippines and Germany are the top three countries most affected by climate change and extreme weather events in 2018. Surprisingly, these three countries were not listed in the short-term index last year, highlighting the unpredictability of climate change.

The report flags heatwaves as a major cause of damage in 2018. According to the short-term index, in 2018 a total of 2,928 people died from heat-related impacts, as compared to 3,622 fatalities by catastrophic floods, and 2,463 life losses due to severe storms.

Germany, Japan and India were adversely affected by heatwaves and across the world heat-related impacts resulted in economic losses to the tune of US$ 60.42 billion in 2018. It also informs that urban populations are particularly vulnerable from the impacts of heatwaves. If coupled with unsustainable development, it can lead to temperature increase of up to 12°C in cities, compared to rural environments, particularly at night.■

Thar Potential for new power, fuel, urea projects

By Syed Akhtar Ali

Thar coal has been in the limelight these days. The Sindh government is in negotiations for a large project on Thar coal with 1,320-megawatt power generation capacity and production of associated energy products like gasoline and diesel.

While there is nothing new about electricity from Thar coal as one project is already in production and several others are at various stages of implementation, projects of fuel and fertiliser production are new and a welcome development. Apart from the Oracle project, Chinese companies are on trips to Karachi and Islamabad to explore and discuss such projects.

Fertiliser production with the help of Thar coal and gasification thereof is being debated for a long time in Pakistan. There are, in fact, a variety of products including gasoline, diesel, gas and different chemicals that can be produced out of coal. Syngas is produced by burning coal under high pressure and temperature with low oxygen. There are then two routes - one is Fischer-Tropsch process under which syngas is converted into gasoline and diesel, and the other is a more versatile methanol route in which syngas is converted into methanol and then there are wider possibilities of producing gasoline, diesel and chemicals including plastics base material.

There has been, however, considerable scepticism about the suitability of lignite for gasification. It has been successfully proved in China and the US that lignite (Thar coal type) can be gasified and subsequently converted into various products such as fertiliser, gasoline, diesel and chemical products.

In case of urea, fertiliser plants are located far away from Thar coal fields as the closest are 400 km away on Sindh and Punjab borders. Either syngas has to be transported there, which is not easy, or fertiliser plants may have to be shifted from their present locations to Thar or coal may have to be transported to the fertiliser plants at their existing locations in Sindh. The latter may be a costly operation adding $20 per ton to the coal cost, which is already high under the current production scheme in Thar. However, new urea fertiliser plants can be installed without such problems.

Negotiations are going on for producing diesel from Thar coal. China has been producing diesel from coal since 2008. Financial Times reports production cost of converting coal into diesel in China at $446 per ton as opposed to the spot diesel price of $578 per ton, which shows a 23% cost advantage.

Reportedly, Sasol (South Africa) is producing even at a lower cost. According to a Chinese publication, coal to diesel is feasible at $50 per barrel of crude oil prices. Current Brent crude price is $64 per barrel. About 3.5 tons of coal (sub-bituminous probably) is required to produce one ton of diesel. Thar coal CV is on the average half that of normal coal.

Pakistan's annual diesel demand is 7.2 million tons. There should be good chances for developing a feasible project for producing one to two million tons of diesel per year, meeting 20% of the annual requirement. By comparison, a 200,000-barrel-per-day oil refinery produces five million tons of diesel.

Methanol can also be the initial product at the Thar site, having physical and technical feasibility whereas economic feasibility calculations are awaited. China is the largest consumer of methanol globally, consuming seven million tons annually. China is a net importer despite a considerable local production.

Thus, there is scope for designing an export-based methanol project on Thar coal. Other products such as urea, gasoline and diesel may be added later. Methanol can be converted into gasoline as well under an ExxonMobil MTG process.

Simply speaking, methanol (CH3OH) is a colourless liquid form of methane (natural gas). It is the simplest form of industrial alcohol being used both as fuel and chemical input. Methanol has many applications. It is safer than liquefied petroleum gas (LPG) gasoline and diesel. Its risk rating is 15 vs 36 for LPG. Its (M15) emissions are also lower than RON-95 gasoline. Methanol is non-pressurised unlike LPG.

It can be mixed into LPG with a 20% share to make LPG cheaper. It can replace LPG altogether, or to the extent LPG is imported. More than 500,000 tons of LPG is imported annually. Methanol can also be mixed with gasoline as an octane enhancer in place of injurious metallic compounds based on manganese. Methanol can be added to gasoline in the proportion of 12% to be marketed as M15 gasoline. Methanol can replace diesel in modified truck engines.

Another application is in marine transportation, where methanol can re-

Thar Coal Block-VI to produce 1320MW power, gas, diesel, urea

The Sindh government under CPEC projects is going to launch Thar Coal Block-IV as a national strategic project to develop coal mine, install 1320 MW coal-fired power project and produce gas, urea and diesel. This was disclosed in a meeting held under between Minister Energy Imtiaz Shaikh and CEO of UK-based company, Oracle Ms Naheed Memon in the energy department. Minister Energy Imtiaz Shaikh said that with the efforts of Sindh Chief Minister Syed Murad Ali Shah Thar Block VI has been included as a potential block for coal to gas to urea/fertilizer production in CPEC-related 9th JCC meeting. The meeting had appreciated the concept to include Thar Block VI for coal gasification to Fertilizer projects under CPEC and desired to undertake a feasibility study for evaluation." The Block VI, therefore is the only Block from Thar Coalfield in two working groups under the CPEC framework. Energy working group & Oil and Gas working group, making it a flagship block in Thar Coalfield for coal to gas based agriculture and food security program of the country. Recently, Thar Block VI has been included as a potential block for coal to gas to urea/fertilizer production in CPEC-related 9th JCC meeting held on 5th November 2019. The meeting had appreciated the concept to include Thar Block VI for coal gasification to Fertilizer projects under CPEC and desired to undertake a feasibility study for evaluation."■

place dirty furnace oil. In China, all such applications are being utilised. India and Egypt have launched projects for M15 gasoline and LPG mixing. Methanol is cheaper than LPG and gasoline. The current spot price of methanol is $1.03 per gallon vs $1.65 per gallon for gasoline at the New York Mercantile Exchange. Diesel is priced at $586 per ton vs methanol at $342 per ton.

However, it has to be noted that one litre of methanol is thermally equivalent to 0.65 litre of gasoline. It can be manufactured from a wide variety of raw material like biomass, natural gas, oil, coal and various wastes. In Pakistan's case, it would save foreign exchange, if nothing else - if local methanol production is even equal to gasoline or diesel prices. Comparative cost calculations are to be done. Synthetic natural gas (SNG) appears to be a possible option due to the location and transportation issues. It is, as the name implies, is natural gas but is produced synthetically as opposed to being dug out from gas fields. It is methane (CH_4) as opposed to syngas (a mixture of CO, H_2, CH and others). Chinese are facing similar problems with their coal and lignite resources buried in the Mongolia desert. A number of SNG projects have been implemented and more are in the process.

Following production possibilities may be considered: methanol 1.4 million tons per annum, SNG 600 million cubic feet per day (mmcfd), urea one million tons per annum and diesel one to two million tons per annum.

Individually, these quantities may not be very high but when combined this may become quite a large volume. The integrated power and petroleum/chemical products production may offer many opportunities of cost reduction, especially, through the utilisation of waste heat, improving yield and thermal efficiency.

However, the capital expenditure requirements would be high. Individual coal projects of 1,320MW have a capital expenditure of $2 billion each. These are capital and technology-intensive projects having longer gestation periods. Many companies may not be interested. Such projects may only be financed through Chinese cooperation under CPEC or otherwise.

There is no free lunch. Investors expect good return. It has to make economic sense for the recipient as well. It is hoped that competitive, fair and mutually beneficial project schemes will be worked out eventually.

Fortunately, for traded goods like methanol, gasoline and diesel there are known international prices around which agreements are possible. Even gas has become tradable in the form of LNG.

The weighted average import price of LNG in Pakistan is estimated at $7.5 per mmbtu and local gas at around $6 per mmbtu. Concluding, there is a need for developing some kind of a policy. However, it is good to see interest and activity. Let this does not wane away.■

courtesy: Daily Dawn

Govt decides to shut retiring power plants

Special Assistant to Prime Minister on Petroleum Nadeem Babar said that the circular debt of power sector will be ended in December 2020, whereas, the government has decided to shut old power plants that came to its retirement period. Nadeem Babar made the statement while briefing the National Assembly's Standing Committee on Privatisation during a session held under the chair of Syed Mustafa Mahmud.

Babar apprised NA body that the transmission of 19,000 megawatts electricity was made in July 2018 while more than 4,000 MW power transmitted in previous year. He said that the federal government will include subsidy to the power sector in its budget. The petroleum advisor said Gencos are the most expensive power plants while the government will shut retiring power plants. The license to the Independent Power Producers (IPPS) will not be renewed after the completion of the contract. The move will reduce power prices up to Rs1 to Rs1.5, Babar said.

The committee's chairman said that it is recommended to establish more companies for power generation and supplies.The petroleum advisor said that the government will privatise Lahore Electric Supply Company (LESCO). He added that power companies will be allowed to sell electricity on cooperate basis while the experiment had also conducted in Khyber Pakhtunkhwa (KP) province as well.■

Towards a fossil-fuel free society

By Musa Khan Durrani

The Royal Swedish Academy of Sciences has decided to award the Nobel Prize in Chemistry 2019 to John B Goodenough, M Stanley Whittingham and Akira Yashino for the development of lithiumion batteries,".

These batteries have the potential to create a fossil fuel-free society. A few weeks later, our federal minister for science and technology announced that a major Chinese battery maker would set up a lithium battery manufacturing facility in Pakistan. While further details are awaited, it is indeed a great opportunity that can significantly transform the industrial landscape in Pakistan.

Compared to 'traditional' lead-acid batteries, LIBs have higher energy and power density (size advantage), higher round-trip efficiency (cheaper charging/discharging cost) and significantly longer cycle life. Moreover, their price premium has also been fast depleting. Owing to technological improvements and economies of scale, the volume-weighted average LIB pack price fell 85 per cent from 2010-18, reaching an average of $176 per kilowatt hour (kWh).

Moreover, these prices are projected to fall to $94 per kWh by 2024 and $62 per kWh by 2030. That would reflect a 95pc price decline over 20 years. In comparison, lead-acid battery packs are still around $150 per kWh, and that's 160 years after the lead-acid battery was invented. Lithium ion has, thus, emerged as the go-to technology for storage - first used in the consumer market and now in the transportation and large-scale storage markets. The technology was first developed in the United States, but it is currently manufactured globally, with the majority of cell production located in Asia (mainly China).

LIB demand has grown from a production base of 19 gigawatt hours (GWh) in 2010 (from a capacity of 30GWh), to a production of 160GWh in 2019 (from a capacity of 285GWh). The current pipeline of under-development projects shows a total capacity of 1.45 terawatt hours (TWh) by 2028.

Of the current LIB capacity, China has a dominant 73pc share while the United States comes at a distant second place with a 12pc share. Two of the world's three largest LIB manufacturers are Chinese while three of the five largest LIB factories are in China - Tesla-Panasonic 22GW factory being the world's largest.

Interestingly, China's dominance in battery manufacturing, much like that of solar photovoltaic (PV) panels, has primarily been an outcome of its strategic policy rather than plain production factors. The cheap labour cost, for instance, gives very limited advantage to China owing to its insignificant share in the overall battery costs. Similarly, the cost of capital, while vital for generating high capex technology investments, has been an inconsequential factor in driving LIB manufacturing investment in China.

Instead, China's juggernaut of LIB manufacturing has been a play of two major strategic tools. Firstly, China has been pre-loading the demand for cell manufacturing by driving the electric vehicle (EV) demand through policy measures. It incentivised local EV manufacturing through fiscal measures like credit programmes for existing auto players to shift to EVs, tariffs on imports that also drove international companies for JVs with Chinese entities, higher registration costs for internal combustion engines and outright subsidies for setting up large cell manufacturing plants. Resultantly, cell manufacturing in China grew not only at its own pace but also as a by-product of EV manufacturing.

The second strategic move has been its integration of the end-to-end supply chain by securing control over critical raw materials and creating supply clusters for processed materials. Raw materials make up the biggest part - more than 70pc - of the cost associated with LIBs. Cobalt and lithium are two of the major raw materials that constitute a battery, with the former being the most expensive and high supply-risk element. Presently, global reserves and production of cobalt are heavily concentrated in Congo. China has been able to create a hedge through massive investment in cobalt refinement. Most of the global refining capacity for the metal is now concentrated in China.

Similarly, the bulk of lithium reserves are concentrated in the South American region (lithium triangle of Bolivia, Chile and Argentina). While China too has sizable reserves, it remains a net importer of raw lithium. However, to lock its lithium supply, Chinese companies have been investing in mining companies in Chile and Congo. Therefore, this nearly guaranteed off-take of LIBs (via policy push for EVs) on the one end of the supply chain and locking critical supplies through outright ownerships and refining investments on the other end give China a strategic advantage for furthering its LIB manufacturing base.

Even beyond China, EV value-chains are generating traction in other Asian countries as well. India, for instance, has developed a comprehensive road map under its National Mission on Transformative Mobility and Battery Storage programme. It aims to set up over five years a few large-scale, export-competitive integrated batteries and cell manufacturing plants in India and localise production across the entire EV value chain.

The programme targets LIB manufacturing capacity of 50GWh and expects to generate a $50bn investment through various fiscal measures like duty cuts, tax waivers, subsidised lands etc.Consequently, a number of corporate entities in India have shown interest and are at advanced stages of setting up LIB plants. These include Tata Chemicals (10GW facility scalable to 50GW), Bharat Heavy Electrical Ltd (1-30GW), Suzuki-Denso JV, Mahindra-LG Chem JV and Adani Group.■

courtesy: Daily Dawn

Going all out for renewable power generation

By Dr Shahid Rahim

Media is currently abuzz with reports of rapid inroads that renewable power generation technologies are making into the power sector of many countries around the world. Encouraged by these trends, our government is also set to increase their grid penetration from 4 percent at present to 20 percent by 2025 and 30 percent by 2030. Some enthusiasts are not happy with it and are urging the government to further upscale these to 100 percent citing examples of a couple of countries that have achieved this target already.

We explore below the viability of switching our power generation solely to renewables, identify the major constraints to achieving this ambitious goal, and highlight the enabling role that electricity storage technologies hold in the above transition. Though renewables possess tremendous potential for every sector of our economy, the discussion is restricted to their deployment in the power sector's supply side only.

First of all, no country has so far achieved the target of 100 percent power generation from renewables in its system, though some are aggressively pursuing this goal. Even Denmark, whose example is often cited by avid proponents of renewables, has managed just over 50 percent of penetration in its grid and has set a target to reach 100 percent by 2050. Perhaps, they refer to the singular event that occurred between 2 and 3 am on the morning of 15 September 2019 when Denmark's entire electricity demand was served by its own wind plants.

There are fundamental differences between renewable and non-renewable energy resources which must be kept in mind along with the complexities and constraints of the present power supply systems to realistically assess the scope, viability, and practicability of relying solely on renewables to serve electricity demand. The target is arguably achievable and desirable too, but may not be practicable any time soon unless cost-effective storage technologies become commercially viable and are deployed with renewable power plants to cover their intermittency and variability.

Unlike the limited, and thus exhaustible, stocks of conventional fuels (coal, oil, gas, and nuclear), renewable energy resources (solar, wind, tides, waves, geothermal, biomass, etc.) depend on natural energy flows on a particular location. All of them are replenished by nature, though the times required for it may span from next instant to many years or even decades. Renewable resources are also abundant in nature and some are even ubiquitous, but they are dispersed, diffused, uncertain, and variable in time. Their conversion to electricity, therefore, is constrained not by technology but by the nature itself.

Physical systems in which power generated from renewable sources is to be used, also have unique characteristics. Electricity in the system must be produced and delivered the moment it's demanded as its storage in any significant amount is difficult as well as expensive, if not impossible. Any imbalance between demand and supply must be managed instantly, to avoid serious damages to the system and catastrophic consequences for society. In power system operation, an hour is akin to a century as power systems are designed to deal with imbalances and disturbances within milliseconds.

Electric utilities serve the continuously varying consumer demand through a variety of techniques which make the power system one of the most complex and expensive undertakings in the world. Two of their salient features are worth mentioning. To serve consumer demand at all times, utilities ensure that they always maintain adequate generation, transmission, and distribution capacities in their systems (called "adequacy"). The second, and equally important, feature is to ensure that power systems are configured, designed, and laid out carefully and with sufficient redundancies to deal with any normal or abnormal disturbance in the system (called "security").

When the share of renewables (solar and wind) in the grid rises beyond a system-specific limit (normally 5 to 10 percent), it starts to impact negatively on both the adequacy and security of that system owing to their intermittent and variable nature. Power production from a solar or wind plant can drop within moments from its full rating to almost zero due to a cloud moving over the solar plant or a sudden stopping of wind on the wind plant site. Even when available, power produced from these plants could fluctuate widely. Both these aspects make renewable plants non-dependable for serving consumer demand unless supported with suitable backup generation or storage.

As the electricity produced from

renewable power plants is virtually free and eco-friendly, it's tempting for electric utilities to increase their share in the grid as much as is practicable. However, their high investment costs and intermittent and variable nature have constrained most utilities from adopting them at a wider scale as they are required to maintain both the backup capacity and operational flexibility in their systems to continue to serve consumer demand reliably and economically. Things, however, have started to change lately.

The past couple of decades have seen order of magnitude reduction in the costs of both solar and wind systems and also in the battery-storage technologies. Both these developments are acting to ease the resource adequacy and operational flexibility constraints and are forcing electric utilities to rethink the scope and viability of renewable power technologies for their systems. The above two developments, especially those in the battery storage technologies, are proving "disruptive forces", and are poised to reshape the electric utility business landscape completely in the coming years.

Unlike the other conventional electric storage options such as thermal mass, chemical, compressed air, pumped hydro, and conversion to other gases which require some minimum scales and special locations for cost-effective development, battery storage offers many advantages in terms of its location-independence, modularity, and portability. The only constraints preventing their wider deployment are their still higher costs and availability of raw materials needed for battery manufacturing.

The costs for utility-scale storage batteries have dropped by 90 percent since 2010 to reach USD 176 per kWh for a 4-hour pack in 2018. National Renewable Energy Laboratory (NREL) in the United States estimates the utility-scale battery storage cost to decline to USD 124 per kWh by 2030 and USD 76 per kWh by 2050. The results of a recent study at MIT in the United States (reported in IEEE Spectrum in September 2019), however, estimates that these costs must further decrease to around USD 10 or 20 per kWh to make them competitive for wider-scale deployment in the power grid. In other words, though we are on the right track, we still have a long way to go.

Shifting to a 100-percent renewable powered grid is, therefore, both plausible and achievable, but in the long run only. The key to achieving this highly-desirable goal, however, will be the cost-effective availability of storage technologies. The world is definitely moving towards a total renewable electric system and we in Pakistan should also embrace these trends with open arms but it will be prudent to plan the transition carefully and use the time still available to us to deploy the enabling systems and institutional capacity that is requisite to ease this transition.

Somewhere along this transition, but long before reaching the 100-percent renewable target, we may have to re-evaluate the continued viability of our conventional power supply system also. It may just be the time to castaway the existing model that relies on a centralized grid interconnecting large power plants through long-distance high-and extra-high voltage "ac" transmission lines. We may have to replace it with a more distributed "dc-based" micro and mini-grids linked together through a super grid. We are certainly entering into interesting but challenging times, so bon voyage.■

courtesy: Daily Times

Sindh Govt all set to launch $100m project to solarize all govt buildings in Karachi, Hyderabad

The Sindh Solar Energy Project of the Government of Sindh, which is being executed with assistance of the World Bank, will be helpful in achieving the goal of 100 per cent electrification of the province with most affordable price of electricity for the consumers.

Sindh Energy Minister Imtiaz Ahmed Sheikh stated this while speaking as the chief guest at a consultative session held on the Sindh Solar Energy Project (SEEP) of the provincial Energy Department.

The SEEP is a $100 million World Bank-funded project having three components: installing solar systems on rooftops on all government buildings in Karachi Hyderabad; deploying solar home systems in rural households of the province (200,000 in Phase-I) through off-grid method; installing a utility-scale solar power system in the province of 400 Megawatts.

While speaking on the occasion, the provincial Energy minister said that the upcoming project would benefit every Pakistani in terms of decreased basket price of electricity being available to the electricity consumers.

He said that Solar Energy Project was conceived by the Sindh government to utilize maximum potential of the province to produce electricity through renewable means of energy abundantly available in Sindh.

He said that Sindh government in a coming few days would formally sign the contract agrements with the firms to initiate House hold Energy survey and Roof top building surveys at a ceremony to be held at the Chief Minister House.

Mr. Shaikh expressed gratitude to the President of Pakistan for completing the formation of Executive Committee of National Economic Council so to get the necessary approval at the federal level for the SSEP.

Oliver Knight, Senior Energy Specialist of the World Bank, said that pilot project to solarize homes through off-grid system would initially be implemented in ten districts of the province and later on this initiative would also be introduced in other towns of the province.

He said that the World Bank had accorded approval to the project.

He said that a proper survey would be conducted to carefully select the government buildings in Karachi and Hyderabad to install solar systems on their rooftops.

He said that 20 MWs of renewable electricity would be produced through the distributed generation system by installing solar systems on rooftops of the government buildings in two main cities of the province as these systems would be tied to the national grid.

Mehfooz Qazi, the Project Director SEEP, said that project would be implemented in five years' time for which consultants had been selected for all its three components. All the three components of the project has be initiated simultaneously.■

OGDCL, NAB vow to make Pakistan corruption free

Director General, National Accountability Bureau (NAB) Mr. Husnain Ahmad, has said that each individual will have to pass through process of self-accountability to curb corruption in every sphere of life. Pakistan is bestowed with abundance of resources. Misuse of these resources, bribery and such practices are major hindrances in way of making Pakistan Corruption Free State, while addressing a seminar on "corruption curbs economic growth" jointly held by OGDCL and NAB at OGDCL Headquarters. Husnain Ahmed also termed increasing population one of major causes of slow economic growth. To this effect, he recalled endeavors being undertaken by the NAB for elimination of corruption through awareness campaigns and enforcement of relevant laws.

MD/CEO OGDCL Dr. Nasim Ahmad addressing on the occasion said that we have gathered here to express our resolve in making Pakistan a corruption free society by joining hands with NAB in its endeavors. Dr. Nasim Ahmad said that OGDCL is the only public sector company which is listed at the London Stock Exchange which is reflective of confidence of foreign investors in the company's businesses and operations. ■

FPCCI organizes 43rd Export Award

The Federation of Pakistan Chambers of Commerce and Industry (FPCCI) organized 43rd FPCCI Export Award Ceremony at Governor House Karachi which was graced by the President of Pakistan Dr. Arif Alvi and attended by Mr. Azarakhsh Haifizi President ECO-CCI, Mr. Mustafa Rifat Hisarciklioglu President of TOBB, Sheikh Yoused Khalawi Secretary General Islamic Chamber of Commerce, Industry and Agriculture (ICCIA) and foreign delegates from Qatar, Turkey, Afghanistan, Iran, Jordan, Saudi Arabia, Palestine, Maldives, Kuwait, Egypt, Kazakhstan, Kyrgyz Republic, Turkmenistan, Uzbekistan etc which was significant part of the trophy. During the ceremony, 45 companies received award in exports of pharmaceutical, herbal, textile, leather, construction, petroleum products and other sectors.

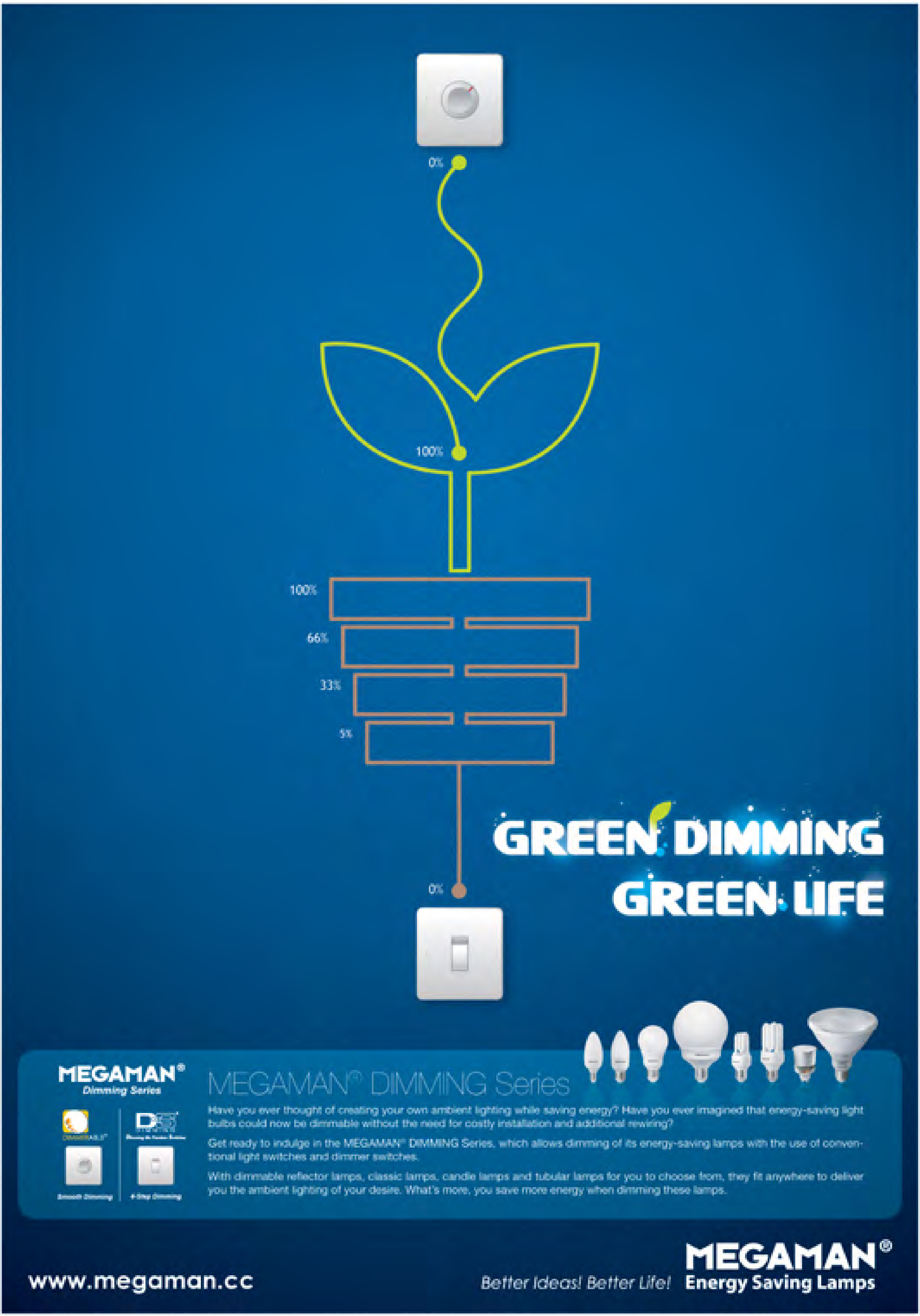
While congratulating the award winners, Dr. Arif Alvi President stated that Pakistan had huge opportunities of investment which need to be explored and exploited for economic development. He indicated that the Ease of Doing Business has been improving in Pakistan which reflects the investment environment of Pakistan and the present government is very much keen to improve its trade and economic relations with Muslim world. He emphasized on enhancing the exports of Pakistan through E-Commerce which will enhance competition and reduce transaction cost and facilitate the large companies as well as Small and Medium Enterprises.

Engr. Daroo Khan Achakzai, President FPCCI welcomed the chief guest and participants and stated that private sector plays a crucial role in the economic development, enhancement of trade and employment generation. He added that the promotion of economic linkage within the Muslim communities by creating opportunities is the need of the time that could help generate greater flow of capital from within and beyond the Islamic world. He congratulated the Award winners and hoped that they will continue their efforts for enhancing exports of Pakistan.■

Oil firms approve funds for uplift projects in Karak

The oil and gas exploration companies have approved funds for carrying out uplift projects under the corporate social responsibility (CSR) initiative and by using the production bonus funds. This was disclosed at a meeting chaired by deputy commissioner Shah Rukh Ali Khan the other day. The meeting was attended by MNA Shahid Khan, MPAs Mian Nisar Gul and Malik Zafar Azam, regional coordinator OGDCL Mushfiq Hameed Paracha and representatives of oil and gas companies and administrative officers. The heads of executing agencies presented their proposals about development work and the meeting earmarked funds for dif ferent projects with a consensus.

The deputy commissioner said the CSR funds of a company working in southern parts of Karak would be spent on provision of basic needs in far-off areas like Kurd Sharif, Showanki and adjoining localities.He said funds had also been approved on need basis for other areas of thedistrict. He said the problems being f aced by the people would be resolved on priority as they were affected by the exploration activities.■



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UNIDO consults stakeholders for development of Renewable Energy & Energy Efficiency Cluster

The United Nations Industrial Development Organization (UNIDO) held a consultative workshop for the development of 1st Renewable Energy and Energy Efficiency (R3E) Cluster in Pakistan under the framework of GEF funded project : Sustainable Energy Initiative for Industries in Pakistan.

The cluster will serve as one window platform for promoting energy partnerships through articulation of the stakeholders and national actors in order to enhance cooperation, knowledge sharing and promote the uptake of Renewable Energy and Energy Efficiency technologies and measures in energy intensive sectors of Pakistan. This in affect will result in reduction of GHG emissions, Job creation in RE and EE Sector and will foster green growth in Pakistan. The workshop aimed at determining role of national actors including federal and provincial energy departments, Industrial associations and chambers, academia and other relevant institutions for development and sustainability of the cluster.

On the occasion, Dr. Sardar Mohazzam, Managing Director, National Energy Efficiency and Conservation Agency (NEECA), on behalf of Ministry of Energy appreciated the efforts and role of UNIDO in promoting energy efficiency and renewable energy in the industrial sector of Pakistan. He briefed the participants on the activities of NEECA and the way forward for the promotion of energy efficiency in Pakistan. He assured NEECA's support and eagerness to collaborate with UNIDO for the formation of the Cluster, in consultation with the provincial energy departments to ensure the success of this cluster.

Mr. Badar ul Islam, Officer in Charge, UNIDO elaborated on the role and activities of UNIDO in the context of industrial development and how cluster based approach of UNIDO could affectively contribute towards inclusive and sustainable industrial development. He highlighted the strategic importance of this R3E cluster initiative and how this is aligned with the national priorities. He further stressed upon that public sector buy-in play an integral for sustainable operation of the cluster. ■

Renewables as a great source of reliable power for refugee settlements

Nations around the world can make breakthroughs in the shift to renewable energy, the United Nations Development Programme (UNDP) and the International Renewable Energy Agency (IRENA) said today, adding that such a move would drastically cut emissions and help the world get on track to meet the Paris climate goals and limit global warming to 1.5 degrees Celsius. Action by countries to stop the continued progression of fossil fuels is possible, UNDP and IRENA said at a joint event held at the UN Climate Summit in Madrid.

Renewable energy deployment would have to accelerate six-fold by 2030 if the world is to achieve the goal of cutting global carbon emissions by 45 per cent and keep temperatures below 1.5 degrees Celsius above pre-industrial levels, IRENA said. In September, UNDP launched a new initiative called the 'Climate Promise', vowing to support as many countries as possible to revise and submit enhanced climate pledges - known as Nationally Determined Contributions - or NDCs, by 2020.■

Pakistan invites Russia to acquire OGDC, PPL shares

Pakistan has offered Russia to participate in the divestment of government's shareholding in the country's largest state-run oil and gas explorers - Oil and Gas Development Company (OGDC) and Pakistan Petroleum Limited (PPL) - and become a strategic partner by acquiring shares.

Pakistan has also asked Russia to become equity partner in Pakistan Refinery Limited (PRL), a subsidiary of Pakistan State Oil. Interested Russian companies may consider equity participation and/or getting engineering, procurement and construction (EPC) contract for the revamp and upgrade of the refinery.

Both sides have welcomed the readiness of Russian firm Zarubezhneft and Pakistan's OGDC, PPL and Mari Petroleum for negotiations on implementing joint investment projects for the development of oil and gas fields.Pakistan's oil and gas companies will come up with proposals for specific projects, which the Russian firm will consider for investment decision.

Pakistan and Russia signed a protocol on December 10, a copy of which is available with The Express Tribune, following the seventh meeting of the Russia-Pakistan Working Group on Energy Cooperation during the visit of a Russian delegation to Islamabad. The Russian side was headed by Talyat Aliev, Deputy Head, International Department of the Ministry of Energy. Pakistan's side was led by Syed Tauqir Hussain, Joint Secretary International and Joint Venture Wing, Ministry of Energy (Petroleum Division). ■

IFC supports Super Six wind projects to spur renewable energy

IFC, a member of the World Bank Group, has led the financing of a first-of-its-kind program to build six wind power projects in Pakistan, named the Super Six, with a total investment of US$450 million, to help deliver cleaner, cheaper power to meet the country's critical demand for energy and reduce reliance on expensive imported fossil fuels. In a tweet Adviser to Prime Minister on Revenue Dr. Abdul Hafeez Abdul Hafeez Shaikh said "Government of Pakistan has signed agreement of Super Six wind power projects which will produce 310MW of clean & low cost power."

Financing agreements for the landmark wind power program were signed by IFC's Senior Manager, Nadeem Siddiqui and private sector power developers at a special ceremony witnessed by Pakistan's Prime Minister, Imran Khan and Federal Minister for Energy, Omar Ayub.

The Super Six plants, with a combined capacity of 310 megawatts, will deliver among the lowest cost power generation in the country to date. They will be built in the Jhimpir wind corridor in Sindh province and will generate more than 1,000 gigawatt hours of electricity annually, enough to power 450,000 homes. The program is also expected to lead to emission reductions of about 650,000 tons of CO2 per year.

All Super Six projects are being developed by domestic companies: ACT Group, Artistic Milliners (Private) Limited, Din Group, Gul Ahmed Group and Younus Brothers Group.■

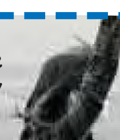
Diamer Basha, Mohmand Dams
WAPDA Chairman discusses Financing with KFD, IDB

Diamer Basha and Mohmand Dams are vital for water, food and energy security of Pakistan and possess excellent investment opportunities for international financial institutions because of their good rate of returns.

Pakistan Water and Power Development Authority (WAPDA) Chairman Lt Gen Muzammil Hussain (Retd) stated this while talking to the delegations of Kuwait Fund for Development (KFD) and Islamic Development Bank (IDB) that called on him at WAPDA House. The delegations are on a 2-day visit to WAPDA House to explore investment opportunities in WAPDA projects, Diamer Basha and Mohmand Dam in particular. WAPDA Member (Finance), Advisor (Finance) and Gneral Manager (Finance) Power were also present on the occasion.

WAPDA Chairman, dilating upon financial strength of the organization, said that WAPDA holds a strong asset base, therefore, enjoys trust of national and international financial institutions to arrange funds for its projects. He apprised the delegations that WAPDA completed three mega hydropower projects - the 969 MW-Neelum Jhelum, the 1410 MW-Tarbela 4th Extension and the 108 MW-Golen Gol -with the support of foreign and local financial institutions last year, which added unprecedented 2487 MW of hydel electricity to the National Grid. Similar to the other WAPDA projects, KFD and IDB will come forward for investment in Diamer Basha and Mohmand Dams as well to become partners in progress with Pakistan, he expressed the hope.■

A strong woman knows she has strength encough for the journey, but a woman of strength knows it is in the journey where she will become strong.



Economic slowdown, govt requests Qatar to reduce LNG supplies

Pakistan is expected to request Qatar to reduce its liquefied natural gas (LNG) supplies under a 'take or pay' long-term contract as its energy demand tumbles amid an economic slowdown.

Informed sources said that the proposal for fresh talks with Qatar had come up for discussion at a meeting of the Economic Coordination Committee (ECC) of the cabinet on Nov 28 as part of risk mitigation on account of privatisation of two LNG-based 2,650 MW power plants of National Power Parks Management Company (NPPMC) - Haveli Bahadur Shah and Balloki in Punjab.

The proposal to take up the challenge with Qatar was floated by Dr Abdul Hafeez Shaikh, Adviser to the Prime Minister on Finance, according to sources in the petroleum ministry.

Nadeem babar, Special Adviser to the PM on Petroleum, informed the ECC that an earlier attempt at the highest level for reduction in LNG price was not acceptable to Qatar. He recalled that during a visit of Prime Minister Imran Khan to Doha earlier this year, Qatar was requested by then finance minister Asad Umar to reduce the price of LNG being supplied to Pakistan (at 13.37pc of Brent) under a 15-year contract. Two options were thus considered, including Qatar's foreign exchange deposits in Pakistan's banks and supply of additional LNG quantities at cheaper rates. One of the options - additional LNG supply - was struck down by then petroleum minister Ghulam Sarwar Khan.■

Employers Federation of Pakistan organized 7 Employer of the Year Award 2018 ceremony. During the occasion, EFP announced the winners of the 7th Employers of the Year Award 2018 to companies demonstrating good practices in the area of corporate and general management, employment practices, labor laws and ILC compliance, CSR, health and safety, social protection floors, strategic alliance with SDGs, training and skill development, and women empowerment. Group Picture showing Award Winners with the Chief Guest Saeed Ghani, Minister Labour & HR Sindh, Majyd Aziz President, and Zaki Ahmed Khan Vice President, EFP.■

Divorce after 35 years !!- Very nice story

An elderly man in Mumbai calls his son in New York and says .....'I hate to ruin your day son, but I have to tell you that your mother and I are getting a divorce; 35 years of marriage... and that much misery is enough !'

'Dad, what are you talking about?' the son screams.

'We can't stand the sight of each other any longer,' the old man says. 'We're sick of each other, and I'm sick of talking about this, so you call your sister in Hong Kong and tell her !'

Frantic, the son calls his sister, who explodes on the phone. 'Like heck they're getting divorced,' she shouts, 'I'll take care of this.' She calls Mumbai immediately, and screams at the old man,

'You are not getting divorced. Don't do a single thing until I get there. I'm calling my brother back, and we'll both be there tomorrow. Until then , don't do a thing, DO YOU HEAR ??' and she hangs up.

The old man hangs up his phone and turns to his wife. 'Okay', he says, 'It's all set. They're both coming for our anniversary and paying their own airfare.

MORAL: OFFICE WORK or MONEY MAKING is not everything in life !!!!

NFEH delegation meets Turkish Consul General; discusses issues of mutual interest

A delegation of National Forum for Environment and Health (NFEH) led by its President Naeem Qureshi met the Consul General of Turkey in Karachi Tolga Ucak.

The meeting held at the Turkish Consulate General was also attended by Eyyup Yildirim who is the Turkey's Commercial Attache in Karachi.

The meeting discussed various aspects of the Pakistan-Turkey relations and prospects for the Turkish companies to invest in various Pakistani trade, commercial and industrial sectors.

The meeting was informed on the occasion that Turkey like Pakistan had been aiming to increase its reliance on renewable energy resources for clean electricity production, which is harmless for the environment.

The NFEH delegation was informed that owing to Turkey's active strive to use clean energy resources, the renewable energy production there had lately been increased from two per cent to eight to nine per cent. ■

Pakistan considering establishing carbon emission market

Pakistan is aiming to set up a carbon emission market and partner itself with China, the world's biggest polluter.

"We are looking at a credit-based market initially, which means you can offset in Pakistan and you can sell to bilateral countries," said Malik Amin Aslam, quoted Bloomberg.

The advisor informed the establishment of market would allow Pakistan expand their global trade in pollution credits and also help Chinese companies offset the emissions they produce.

"The benefit that we will get is that our environmental compliance will be met, and they will benefit by cheaper credits than their own market," the official said. Pakistan has hired consultants to examine whether "that data reliability is there and how we can improve that," he added.

The advisor informed that the process depends upon the reliability of data, "if there's no reliability then it doesn't work," he said.

Earlier, Amin said that Pakistan was placed at 5th by German Watch in its Climate Risk Index 2020 due to huge economic losses borne by the country.

The shift in Pakistan's position from 7th to 5th in the long term index, based on the 20 years data from 1999 to 2018, including the 2010 super floods causing massive life and financial losses, showed that the country was most vulnerable to climate change, he told newsmen at a debriefing on the United Nations 25th Conference of Parties (COP-25) on Climate Change here at the Sustainable Development Institute.

The adviser said the economic cost ($3.2billion) of climate change for Pakistan was the second highest in the world. The German Watch report had included Pakistan, Philippines and

Haiti in its lists of both long and short term climate change affected countries, he added.■

Italy to make learning about climate change compulsory

From next year, Italian school students in every grade will be required to study climate change and sustainability, in an attempt to position the country as a world leader in environmental education.

Education Minister Lorenzo Fioramonti, of the anti-establishment Five Star Movement, said all public schools will include about 33 hours a year in their curricula to study issues linked to climate change.

The lessons will be built into existing civics classes, which will have an "environmentalist footprint" from September 2020, Vincenzo Cramarossa, Fioramonti's spokesman, told CNN.

"The idea is that the citizens of the future need to be ready for the climate emergency," Cramarossa said.■

Sepa approves LPG project at PIBT

The Sindh Environmental Protection Agency (Sepa) recently allowed M/s Pakistan International Bulk Terminal (PIBT) Limited to build a liquefied petroleum gas (LPG) terminal project at its existing facility.The approval to the project which involves transfer of LPG from carrier vessels to the pipelines that would carry it to the customer storage facility has come more than five months after the department had shared the project`s environmental impact assessment (EIA) report at a public hearing.

Sources said that the department had granted a no-objection certificate (NOC) to the project currently lacking a comprehensive risk assessment, though one of Sepa`s top officials had committed at the project`s public hearing held in June that a presentation on project`s (quantitative) risk assessment would be organised later. The public hearing had seen strong opposition to the venture proposed at the PIBT a facility meant exclusively to handle coal, clinker and cement under an agreement it had with Port Qasim Authority (PQA).

Agreeing with concerns related to public and environmental safety, Waqar Hussain Phulpoto, additional director general at Sepa, had committed at the June 25 public hearing that a presentation on the project`s quantitative risk assessment would be organised later. Pakistan International Bulk Terminal Limited shall conduct a risk assessment study before the operation of the project for handling, transportation and storage of LPG. The report should include all the possible scenarios including worst case scenario in which any incident may occur during the process and same will be submitted to Sindh EPA, The certificate is subject to a number of conditions, such as the proponent would comply with the environmental act, its rules and regulations, all the mitigation measures recommended in the Environmental Impact Assessment (EIA) report and engage an independent environmental monitoring consultant.■

In a British bar, a short discussion on arranged marriage took place as follows:
English man: How could you marry a woman before knowing her?
Indian man: How could you marry a woman AFTER knowing her?
End of discussion!

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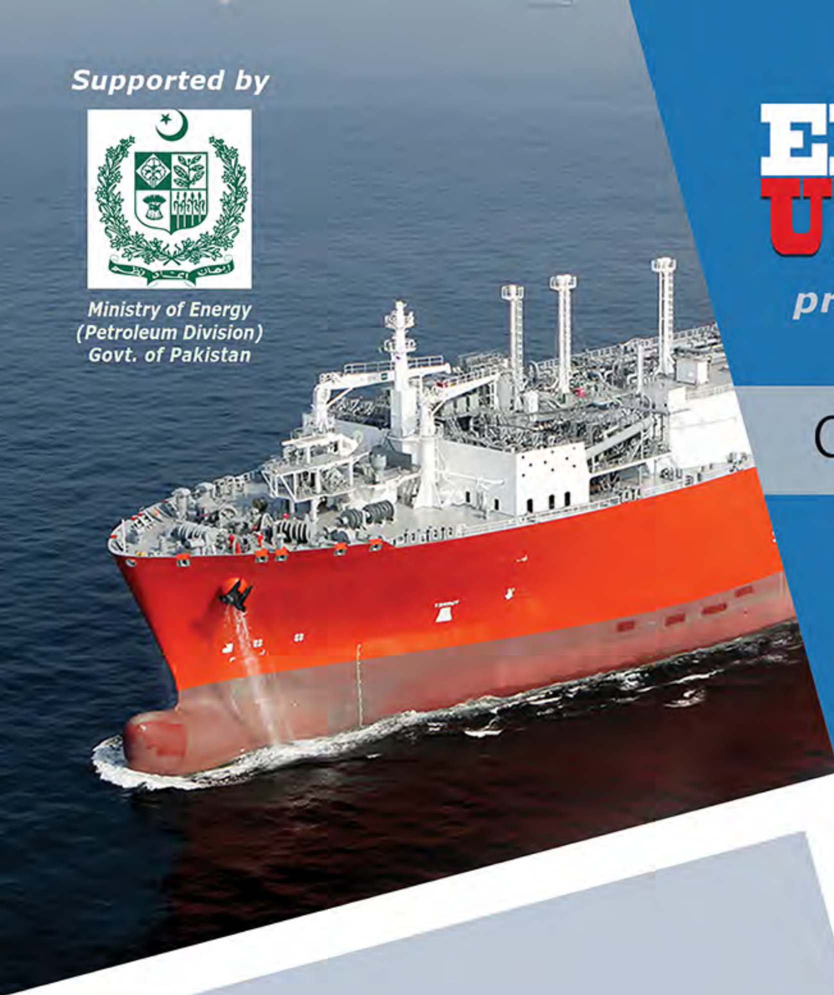

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