

# ENERGY BULLETIN

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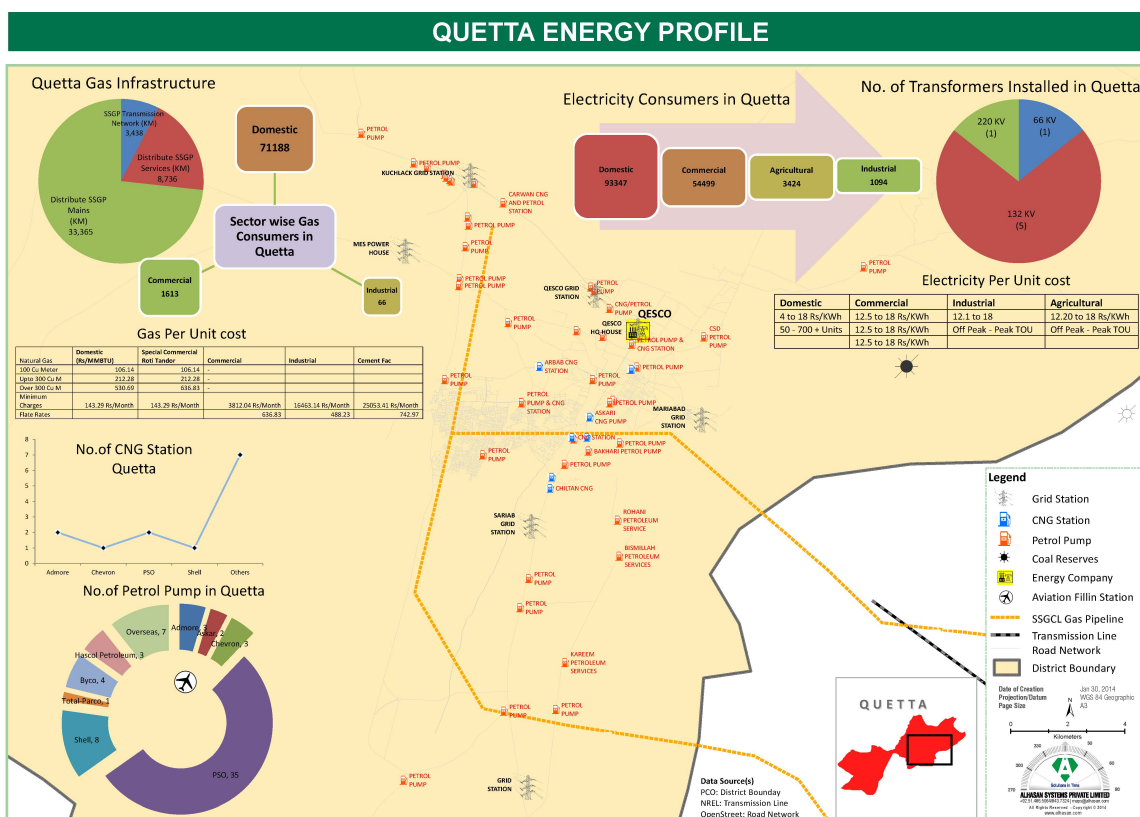
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## NEWS HEADLINES

### Government solar energy initiative in limbo yet

*Business Recorder*

January 31, 2014

### Pattern of oil imports : Dar urges OMCs to advise govt

*Daily Times*

January 30, 2014

### Jura start drilling Guddu block well in Pakistan

*Energy Business Review*

January 28, 2014

## DETAILS

The solar energy initiative of the government is yet in limbo due to the absence of a number of factors including relevant legislation, financial support, technical workforce and import of quality products. The Punjab government has announced setting up of 1,000MW Quaid-e-Azam Solar Park project in the South Punjab out of which the government would complete 100MW project with a cost of \$200 million. The private sector, in particular the Punjab-based textile industry, is also serious in switching over its lighting requirements on solar power but the studies are not very encouraging in terms of production cost and infrastructural set ups. Nepra has also announced solar tariff recently, fixing it at 20 cent for first 10 years. However, Pakistan is yet facing hardships in a situation when India has installed 22,000MW solar power capacity and the Indian Gujrat is generally known as Solar Park of Asia.

Waseem Malik, a UK-based Pakistani solar energy expert and member of a recent British Solar Trade Mission to Riyadh, said a snail-pace acceptance of solar energy is due to the fact that the general mindset in Pakistan is against it. "Dr Samar Mubarikmand called it inappropriate for poor nation like Pakistan, Dr Salman Shah termed it a gimmick and Ahsan Iqbal dubbed it as a fantasy," he said, adding: "I ask them how the Hindu banya has agreed to install 22,000MW solar power project if it is all about a gimmick and fantasy." He lamented that majority of economists and experts are trying to understand the solar technology and issuing premature statements. In addition, he said, the banks are not ready to finance the solar projects. He said it is quite amazing that countries like Nepal, Bhutan, Ghana, Sri Lanka, Saudi Arabia and China are going for solar energy, number of anti-solar voices are on the rise in Pakistan. According to him, the government has not yet set up training centre to prepare solar energy technicians and all reliance has been put on Chinese installers. He said Saudi Arabia is all set to install 54,000MW solar power project and it would be requiring 500,000 solar energy technicians in next five years, which would be provided by the countries like Pakistan and India. Therefore, he said, there is an urgent need of setting up a training facility to grab the upcoming opportunity. Waseem said advancement in solar energy projects may ensure poverty reduction, skill development and job creation in Pakistan. However, it is a dilemma that no one knows that who should be contacted for to meet such objectives in Pakistan, he added. According to him, Pakistan is one of the best countries with ideal solar radiation, as the temperature remains stick to 42 to 43 degree centigrade. It is an excellent radiation level against the countries where it crosses 50 degree centigrade, he added.

When asked about the Punjab government's initiative of replacing street lights with solar panels at the G T Road, he said only the bad workmanship would be a challenge, which needs capacity building to the international standards. He said these solar panels would be exposed to dust that would affect performance, as dusty panel will have low efficiency within two years. We need specially-designed polls instead of fixing the panels at such a height that it becomes difficult to keep them clean, he added. Similarly, he said about 8,000 controlled poultry sheds in Pakistan can also be converted to solar energy besides putting solar tube wells in the agriculture sector.

**ISLAMABAD:** Finance Minister Ishaq Dar urged the representatives of oil marketing companies and refineries to advise the government on the present pattern of oil imports and its marketing and suggest measures to further improve them. Dar stated this during a meeting with representatives of oil marketing companies and oil refineries held at the Finance Ministry on Wednesday. In his opening remarks, the finance minister said that oil constitutes a major portion of our imports and plays a critical role in the economy of the country. The present government, the finance minister said was engaging with oil companies as part of its policy to ensure that essential items like oil are available to the industry as well as for common use without any interruption.

The minister was briefed that Pakistan imports crude oil and oil products to the tune of \$15 billion and informed that the present stock of oil in the country was enough for 30 days. The finance minister said that it is important that we have a comprehensive data about the products and source of their imports for proper planning so that informed decision can be made about them. The meeting was attended by OCAC/CEO TPPL Chairman Marc Soissong, OCAC Secretary Aamir Butt, Byco Asia CEO M Wasi Khan, Byco Petroleum CFO Asad Khan, SPL Resident Manager Col Shuja Khan, BTCPL MD M Shakil Baig, PRL CFO Imran Mirza, PARCO GM (M&C) Syed Zavar Haider, PARCO Manager Finance Moazzam Mubarak, HPL Chairman Mumtaz Hassan Khan, APL GM (F&A) Rehmatullah Bardaei, APL Sr Manager (F&A) Mufaddal Shabbir, NRL Sr Manger Commercial S Qasim Ali Rizvi, PSO MD Amjad Parvez Janjua, PSO DMD Sohail Butt, PRL MD/CEO Aftab Husasin, PSO DGM Supply Akhtar Zamir, PSO DGM Zeeshan Haider, Byco Refinery GM Kamran Lari, Adviser Petroleum Zahid Muzaffar and Secretary Petroleum Abid Saeed.

Jura Energy announced that it has started drilling at Maru East-1 site in the Guddu block, situated in Central Indus basin, Pakistan. The exploratory well, which will target the hydrocarbon potential of the Pirkoh Limestone formation of Eocene age, is expected to have a depth of around 770m. Jura said that the Maru East-1 is located around 2km from the existing pipeline infrastructure of the Reti, Maru and Maru South development and production leases ( Reti-Maru fields) in the Guddu block. The company has started commercial production at the Reti-Maru fields on 26 December, 2013. The Guddu Block has an area of about 2093.4 km<sup>2</sup>, while Jura holds a 10.66% working interest in the block,

## Coal power: Pakistan lags way behind India, China

*The Express Tribune*

January 26, 2014

which is operated by Oil and Gas Development. Jura, which is based in Calgary, Alberta of Canada, is engaged in the exploration, development and production of petroleum and natural gas properties in Pakistan.

**LAHORE** - Coal is the only available indigenous and inexpensive alternate energy resource, which has the potential to not only ensure self-sufficiency in energy sector but also turn Pakistan into a power exporting country. Globally, the coal component contributes 41 per cent in electricity generation.

This was the upshot of the presentation given at a seminar on 'Coal-the future fuel of Pakistan industry'. The speakers said that it was very unfortunate that at a time when the coal is extensively being used for power generation all over the world, in Pakistan it is under utilized despite the fact that the worth of Thar coal reserves is more than oil reserves in Saudi Arabia and Iran having a collective quantity of approximately 375 billion barrels. They also appreciated the Punjab government for giving incentives for the establishment of coal-fired plants and expressed the optimism that the government would ensure one-window operations for the successful completion of Punjab government initiative. They said that the policy incentives like coal logistics through Pakistan Railways, power evacuation by National Transmission and Dispatch Company and land acquisition by Punjab government would help attract private sector investment.

LCCI President Sohail Lashari, addressing the seminar organized by the Lahore Chamber of Commerce and Industry in collaboration Petrocoal Synergies, said that the Lahore Chamber of Commerce and Industry was paring no efforts for the promotion of alternate energy resources while it had already arranged two seminars of Kalabagh Dam as it understands that country's future lies in cheaper energy. He said that the LCCI study for the establishment of a self-financed power project was well on way that definitely would pave way for other such projects in private sector. He said that the Lahore Chamber of Commerce and Industry would continue to supplement all government efforts aimed at improving energy situation in the country.

Coal expert Asad Wasi said that Pakistan was producing a very little portion of the total electricity being consumed when only two per cent of the Thar Coal can generate 20,000 MW of electricity for next 40 years without a single second of load-shedding, and one can well measure that how much energy Pakistan would have on utilization of the entire coal reserve. He said that more than 32 countries including America, China, Australia and Russia are presently producing power through coal while the UK generates 16 per cent share of electricity through coal, China 67 per cent, Canada 24 per cent and India 64.6 per cent. Coal gasification is a proven technology for small scale production and there is no technical reason as to why it cannot succeed on a medium to large scale. We should support those companies which are spending money and time to find a cost-effective way to generate electricity. He said that a number of industries including cement, steel, paper, textile, glass, ceramic and brick had already started utilizing coal for power generation but still there was a room for creating awareness about this great resource.

## Punjab's initiative to overcome energy crisis

*Pakistan Today*

January 25, 2014

In its bid to fulfill another electoral promise for serving the masses by reducing load-shedding of electricity, Punjab Chief Minister Muhammad Shahbaz Sharif has reserved six appropriate sites for establishing coal power generation plants in the province. Thus Government of Punjab has once again taken the lead in devising the strategy to overcome the acute energy crisis in the country by adopting practical measures and encouraging production of electricity in the province along with efforts to lower its cost of production. It is very unfortunate that during the past few decades, no concrete steps had been taken. Even any sound planning had also not been made to meet the future energy requirements of 180 million population of the country. Lack of vision at the part of our planners and deficiency of commitment among the executors has been the major reason of this situation that we are facing today.

The prevailing energy crisis in Pakistan has not only decelerated our development but has also generated a number of socio-economic problems like closure of industries, unemployment, disruption in supply of basic amenities of life and other such issues. The situation is so critical that shortfall of electricity rises up to 5000 Mega Watts in the summer season, thus aggravating the already miserable situation.

More than 65 per cent of our total electricity is being produced through thermal generation. As a result of use of expansive furnace oil, the prices of electricity are always on the rise. This phenomenon, along with subsidies, inefficiencies and leakages in the power sector has resulted in inter-corporate circular debt. Punjab is the major load center of country and consumes about 68% of entire national grid fed electricity. Protracted load-shedding has crippled civic life, agricultural production, industrial output and commercial activities in Punjab. In addition to law and order problem, it has also led to shut-down of cottage industry and shifting of enterprises leading to further unemployment. It is sad to note that power deficit has hampered economic growth leading to poverty and obscuring economic opportunities. High cost of power generation results in consumer-end tariff which is not affordable for the majority of consumers. This has also adverse implications for competitiveness, as Pakistani producers cannot compete in the international market due to higher input costs. Government of Punjab has decided to earmark the sites for the establishment of coal based power generation plants. These sites would be offered to

## 50 licences awarded for exploration of gas, oil

Pak Tribune

January 24, 2014

private sector through open, competitive and transparent process. The intention is to help private sector quickly install power plants thereby minimizing the power deficit. Private Sector would also be eligible to suggest other feasible sites, which would also be earmarked for the purpose, if found to be according to criteria.

Given the prohibitive cost of oil, meeting energy needs, has become a challenge for both developed and developing countries. Every country is obliged to keep this subject on the top of its agenda. Pakistan is endowed with enormous reserves of coal in Thar, Lakhra and other places, but no serious effort had been made in the past to exploit these coal reserves and establish the coal-based power plants. At the current growth rate, Pakistan will require 26,000MW by 2020 out of which around 10,000MW could be produced from coal. Primary objective of coal development projects is to provide affordable, reliable and sustainable electricity to consumers using indigenous resources. Reliance on indigenous fuel and even imported coal-fired power plants will help save billions of dollars in foreign exchange, which are currently being spent on import of expensive RFO (Refined Furnace Oil). Pakistan is endowed with natural resources and minerals; if explored and utilized properly, it can become a self-reliant country and get rid of dependency syndrome. Weak economy, technical resource constraints coupled with flawed decisions of the inept governments in the past have brought the country to the present scenario.

Pakistan's power sector is at a development stage and needs massive investment; opportunities exist for foreign direct investment in energy sector. In the past, many a time it was suggested by experts to prepare a plan for gainful exploitation of the huge coal reserves but some 'vested interests' were reported to have obstructed the plan.

Government of Pakistan promulgated National Power Policy, 2013 to foster fast track development of electricity generation. The policy also provides guidelines for generating electricity from affordable energy resources. Power generation through coal has also been emphasized in the policy as this would re-balance the energy mix. All the federating units are expected to fast track energy projects in line with this Policy. Punjab has coal reserves which can potentially be used for power generation. Due to high sulphur and ash contents in Punjab's coal, the choice of technology is limited; however, efforts are being made to harness the potential of these reserves. The coal available in Balochistan is quite suitable for power generation but its regularity and reliability of supply is not assured. The development of Thar coal is also likely to take some time. It is thus obvious that Punjab has to rely on imported coal to meet its growing power requirement.

The energy economics of imported coal has to be viewed in comparison to RFO/LNG. Inland transportation of coal is an additional cost, which more or less is offset by cost of transmission of electricity, if power generation facility is installed at coast. In world's electricity generation, more than 40% percent comes from coal, whereas in Pakistan, less than 1% existing power is produced from coal. Coal is and will remain, a necessity, a key component in world electricity generating portfolio for the foreseeable future. Its price has remained generally stable as compared to those of oil and gas. Imported coal based power generation initiative provides a framework for establishment of sizeable power plants in Punjab. This initiative is essential for rapid and sustainable economic & social development in Punjab. Growing supply-demand gap where the demand for electricity outstrips the current generation capacity leading to a shortage of more than 4000 MW and 12-20 hours load-shedding in Punjab Province.

Most critical component of imported coal fired power plant is the reliable and regular supply of the specified coal in an uninterrupted manner. This requires long term contracts with the international coal suppliers, infrastructure at the port for handling coal and rail based transportation to the stockyard of the power plant. Pakistan Railways has made commitment for transportation of coal from coast to the project site. The project developing company must ensure sustainable supply of coal through Coal Supply Agreement(s) "CSA" with coal supplier and Coal Transportation Agreement (CTA), with Pakistan Railways or other transportation companies of their choice. The companies shall be pre-qualified and ranked on basis of widely publicized evaluation criteria in an open, competitive and transparent manner. It is hoped that other provinces would also emulate Punjab Chief Minister Shahbaz Sharif and initiate power projects to solve the energy crisis.

**ISLAMABAD:** After a rather long gap, the government on Thursday issued 50 provisional licences for exploration of oil and gas to eight local and two foreign firms having minimum investment commitment of \$371 million.

Speaking at a press conference, Minister for Petroleum and Natural Resources Shahid Khaqan Abbasi said the government could not award licences for about four years because of teething problems vis-à-vis model concession agreement and petroleum rules formulated under the 18th Amendment which allowed greater say of provinces in matters involving their resources. He said that 21 of the new exploration blocks were in Balochistan, 15 in Punjab, eight in Khyber Pakhtunkhwa and six in Sindh. The agreements were awarded after resolution of all issues between the provincial governments. The minister said that 29 exploration blocks were awarded to the Oil and Gas Development Company Limited (OGDCL), 10 to the Pakistan Petroleum Limited (PPL), three to the Pakistan Oilfields Limited (POL), two to the Al-Haj Group, and the remaining ones to Mari gas, OMV of Austria, Ocean Petroleum, Oil and Gas Investment and Tallahassee of Canada. Mr Abbasi said the exploration and production companies were well-prepared to go into Balochistan

## Energy crisis: 'New coal power initiative to generate 6,000MW'

*The Express Tribune*

January 23, 2014

as they had undertaken the required research work and risk analyses before committing to the works. The minister said the OGDCL secured the highest number of new blocks in Balochistan (14), followed by PPL (four). Three other companies, including two foreign firms, were awarded the other blocks in the province. He expressed the hope that entry of these firms into Balochistan's relatively safe areas would encourage other companies to go into the province's difficult areas like Kohlu. Mr Abbasi said the government was scrutinising the cases of the companies which had earlier secured exploration blocks but failed to complete their works. He said the licences awarded to a few such companies might be cancelled and offered to new bidders. This exercise would allow re-tendering for at least seven blocks. Answering a query, the minister said the government had sought opinion from independent legal experts about two divergent decisions of two high courts over the same question for the same region. He said one high court had given the verdict that natural gas should be provided to CNG stations but the other had handed down an entirely different judgment. He said the experts were also asked to explain whether the Potohar region fell under the jurisdiction of the Lahore High Court or that of Islamabad High Court (IHC). Mr Abbasi said he would appear before the IHC on Friday (today) because he had received a contempt of court notice.

**LAHORE:** Chief Minister Shahbaz Sharif said on Wednesday 6,000 megawatts of electricity will be generated through a new coal power initiative in the Punjab. Addressing a press conference at 180-H Model Town, he said the volume of investment for the project was around \$10 billion. He said coal-based power plants would be established at Qadirabad in Sahiwal district, at Bhiki in Sheikhupura district, at Haveli Bahadur Shah in Jhang district, at Balloki in Kasur district, at Tarinda Sawe Wala in Rahim Yar Khan district and at village Karamdad Qureshi in Muzaffargarh district. Shahbaz Sharif said these places had been chosen on account of their geographical location. "They are close to big cities or energy consumption hubs... electricity generated there can be easily connected to the national grid... there is also abundance of subsoil water in these areas." He said the provincial government would initiate and set up its two plants at Qadirabad with a capacity of 1,320 MW. He said the government would start the bidding process in mid February and contracts would be awarded by March, 2014. He hoped that these plants would become functional within two and half years. Shahbaz Sharif said investors from across the globe, including India, would be invited to bid for the other plants. "All bidding processes, advertisements and contracts will be finalised by March 2014... all plants will be operational in three to five years." The chief minister said \$7 billion would be spent on generating electricity. "The remaining three billion will be used for other expenditures... the investment will create thousands of jobs."

### Why Punjab

He said the provincial government had earlier decided to set up coal-based power plants in coastal areas. Shahbaz Sharif said the plan was dropped because electricity losses during transmission from coastal areas to the national grid equalled the cost of transferring imported coal from coastal areas to the Punjab. He said during his visit to the Indian Punjab, he had discovered that coal-based power plants at Jhaghar and Achar Khand were using coal imported from thousands of miles away.

### Why coal

The chief minister said, "India's share of energy from coal amounts to 70,000 MW... Europe generates 60 per cent of its energy using coal, and 65 per cent electricity generated in the world is generated from coal." He said 65 per cent energy generated in Pakistan was thermal-based and 35 percent was hydropower. He said coal-based energy in Pakistan amounted to less than 1 per cent. Shahbaz Sharif said the country imported fuel worth \$10 billion including coal worth US \$5 billion. He said the National Electric Power Regulatory Authority (NEPRA) had decided the electricity tariff – Rs19 for oil-based electricity and Rs9 for coal-based. "Super critical boiler power points will be used at the plants to lessen toxic emissions... the provincial government will follow all laws of federal and provincial environmental agencies."

### Imported coal

The chief minister said there were 500 million tonnes of coal in the Punjab but its mechanical machining was not feasible. He said coal-based power plants needed thousands of tonnes of coal every day. "It is not feasible for manual mining... in the short-term coal will be imported," he said.

**ISLAMABAD:** Qatar has offered to revise the price down for export of liquefied natural gas (LNG) to Pakistan in a proposed government-to-government arrangement that will help ease acute energy shortages. "Qatari government has agreed to slash the LNG price further compared to its earlier offer during talks in Islamabad early this month," a source told The Express Tribune. The price will be negotiated and finalised in talks between ministers of the two countries in Doha on February 8. The volume of LNG imports would also come up for discussion. Petroleum Minister Shahid Khaqan Abbasi will lead the Pakistani delegation during the deliberations.

Earlier, during meetings with officials of the previous PPP-led government, Qatar had offered to export LNG at a price equivalent to 14.7% of Brent crude oil rate when it was

## Moving closer: Qatar agrees to slash price for LNG export

*The Express Tribune*

January 21, 2014

## India plans new dam on Chenab violating Indus water treaty

*The News*

January 21, 2014

hovering around \$110 per barrel in the international market. Later, Doha pushed the price down to \$17.437 per million British thermal units (mmbtu), a 0.5% discount over the previous rate of \$18.002 per mmbtu for the 20-year lifetime of the project. The price did not cover capital cost of LNG terminal and its charges, import expenses, re-gasification, wastage and shipping costs. The additional costs would add about \$2.084 per mmbtu to the quoted price. Though the cabinet gave the go-ahead to Sui Southern Gas Company (SSGC) to purchase LNG from Qatar, but it did not approve the offered price. Sources said Pakistan and Qatar would also discuss, during talks early next month, the possibilities of forming joint ventures between state-owned companies of the two countries like Oil and Gas Development Company (OGDC) and Pakistan Petroleum Limited (PPL). According to a senior government official, the Qatari government is willing to make first delivery of LNG by November this year but it has stopped short of giving firm assurances. However, Qatari officials were flexible in finalising supply arrangements, he said.

### Preliminary talks

On January 2, a delegation of Qatar Gas Company comprising Abdullah Ahmad Al Hussaini and Hamad Abdul Aziz Al Mahanadi held preliminary talks with senior officials of the Ministry of Petroleum and Natural Resources, Inter-State Gas Systems, Sui Southern Gas Company and Pakistan State Oil. Pakistan said it was eager to buy 200 million cubic feet of LNG per day (mmcf), which would be re-gasified at the terminal being set up by Engro Vopak Terminal Limited (EVTL) at the Port Qasim and later injected into the system. By 2015, the volume will be increased up to 400 mmcf. Pakistan is interested in importing two billion cubic feet per day in the next two-and-a-half years. According to the official, the Qatari delegation assured the Pakistani side that they had enough gas, but they did not commit any volume. They were just flexible and assessed Pakistan's requirement and progress on setting up the LNG import handling facility. Voicing satisfaction over the financial health of Pakistan State Oil – the oil marketing giant with extensive experience in importing and meeting oil needs of the country – the Qatari delegation believed that the company would encounter no difficulty in opening letters of credit for LNG import. Pakistani side said it would purchase some quantity of LNG from Qatar on a government-to-government basis and more would be imported through spot purchases from global markets.

**ISLAMABAD:** In an alarming development, India plans to build another dam on the Chenab River with the name of 1,380 MW Kirthai hydropower project in Held Kashmir, breaching the 1960 Indus Waters Treaty (IWT). The new project will not only damage water interests of Pakistan but will also inflict a huge blow to the environment of the lower riparian country. In a small stretch of the Chenab river basin, India is building numerous mega hydropower projects and dams to meet its energy demands. However, in doing so, it is aggravating environmental issues in Pakistan and threatening water security. The most disturbing fact is that Pakistan's authorities cleared the said project during the caretaker regime which hit the water interests of the country which has already been declared water stressed by international initiatives. India completed the Kirthai Project Design Document on September 4, 2013, and applied the carbon credits from UN for clean energy to be produced from the said project. The upper riparian country can apply for carbon credit from UN only when the lower riparian country clears the design of the project and gets satisfied that the said project will not harm its environment.

According to Arshad H Abbasi, eminent water expert associated with the SDPI, the Kirthai Dam, is a blatant violation of the Indus Water Treaty and would submerge the beautiful Paddar Valley and its agricultural land of 900 hectares and thick conifer forest land of 160 hectares. Massive deforestation would have a serious local and trans-boundary environmental impact, while the construction activities would further accelerate the melting process of the glaciers in the Chenab Basin. The application of India in UN seeking carbon credit on Kirthai project shows that some unscrupulous officials during the caretaker regime cleared the project. But the sources said that the environment ministry had cleared the controversial project enabling India to claim the carbon credit. A source in the ministry of environment insisted that India is close to get the first installment of carbon credits from UN. India has claimed Carbon Credits against 1,335,828 ton of carbon at initial level. Later, another claim for 3,390,948 ton of carbon will be claimed to make the project more economically viable.

When contacted, Commissioner of Pakistan Commission of Indus Water (PCIW), Mirza Asif Beg said he is rendering services as PCIW commissioner for the last one and half years, this project has never been in discussion with his counterpart in India.

Under the Treaty, India is bound to share its design with us 6 months before the construction of the project on Pakistan's rivers. However, he admitted that India can apply for carbon credits from UN agencies after the completion of the Kirthai Project Design Document. Mr Beg said that Ministry of Environment is the ministry concerned which clears such projects after assessing the said project is not detrimental for Pakistan's environment. When contacted, Environment DG Asif Shuja said that his ministry has not cleared the Kirthai project. However, India can apply for carbon credits from UN, but the validators in UN are bound to seek the clearance from Pakistan as lower riparian country as to whether the said project is harmful for the trans-boundary environment or not. "So far, the validators did not approach the CDM (clean development mechanism) cell in the

## China reveals its cards for investing \$20 billion in Pakistan

*The News*

*January 20, 2014*

ministry." The 1380MW Kirthai Dam (Kirthai I of 390MW and Kirthai II of 990MW) stands as a stark reminder of how Pakistan failed to defend its water and energy rights. Documents available with The News show that the government of Jammu and Kashmir tried to conduct the Environmental Assessment Report in 2009, but without consulting people of the Paddar Valley. Although the project has serious trans-boundary environmental issues that have yet to be addressed by the Indian Authorities, the project even got cleared by the authorities of the lower riparian country — Pakistan.

According to the design document of the controversial project, the dam and powerhouse site are located in the village Gulabgarh in Paddar Tehsil of Kishtwar District of Jammu and Kashmir, about 315km away from Jammu. It is approachable through a highway up till Batote, and beyond Batote up to Kishtwar. The 80km road from Kishtwar to Gulabgarh is mostly blacktopped. The elevation of the site is around 6,000 feet. The drainage area of the Chenab River up to dam site of Kirthai – I H E Project is 8530sq km, out of which 4608 Sq km are snow-fed and the rest 3922sq km are rain-fed. The basin receives precipitation round the year. During December till May, precipitation is mostly in the form of snow except in May when snowfall is confined to higher altitudes. During July to October, the precipitation is due to monsoon activity. June and November are the months of least precipitation. The mean annual precipitation over the Basin up to Kirthai dam is 750mm. The Kirthai Dam was perceived in 1986 and detailed geological and other site investigations started in 1989 and completed in March 2005. A detailed project design and drawings were completed in December 2008. "The government of Jammu and Kashmir tried to conduct the Environmental Assessment Report in 2009, but without consulting people of the Paddar Valley. And on top of it project has serious trans-boundary environmental issues," the sources said. As per glacier inventory, almost 359 glaciers spread over 1,414 square kilometres (km<sup>2</sup>) in 1962 in the Chenab basin, but they reduced to 1,110km in 2004, with a 21 percent reduction in the area.

According to a rough estimate, glacier areas have been reduced by 29 percent in 2010. Melting of Glaciers in the Chenab River and a decrease in snow cover area, coupled with massive deforestation would severely impact river yield. As a consequence, Pakistan would suffer.

**ISLAMABAD:** China is demanding that all mega power projects, including the Bhasha Dam, Gaddani and Lakhra coal plants, the Tarbela Extension project and many transmission lines, be handed over to China without any international bidding process, and Beijing will directly invest \$22 billion in Pakistan.

The Nawaz Sharif government is eager to accept this huge Chinese offer, and a loophole in the PPRA rules is being used to hand over all these mega projects to China. "Beijing will extend the preferential and medium term soft loans of \$22 billion to Pakistan against the guarantees of the government of Pakistan", a senior official who was part of the recent meeting of the Pak-China Joint Working Group (JWG) held on January 7-8 in Beijing told The News.

"We have carved out a plan to capitalise on the opportunity that Beijing has extended to Pakistan. Under the plan, Chinese companies will be offered the coal and hydropower and huge transmission line projects under a direct contracting regime which is not against the PPRA rules," the official said. The Ministry of Water and Power has already sent a summary to the Law Division for vetting. The vetted summary allowing the mechanism of adopting the direct contracting regime will then be sent to the Ministry of Finance for a final nod. In case of no objection, the projects will be given to the Chinese companies. The Chinese companies have, the official said, refused to take part in international competitive bidding (ICB) to get the contracts in Pakistan's power sector arguing if Pakistan wants funding from Beijing for various projects, then it will also have to hand over the projects.

Top officials in the power ministry have found a way out of introducing a direct contracting regime, which is permissible in the PPRA rules, to accommodate the desire of Chinese companies. In the Joint Working Group meeting held in Beijing an 18-member Pakistan delegation took part. The meeting was co-chaired by Wu Xinxiang, of the Energy Administration (NEA) of China and Khawaja Muhammad Asif, Federal Minister for Water and Power. Beijing offered the huge credit line based on insurance to promote and sustain the development of Chinese energy projects in Pakistan.

During the recent visit to China, the Three Gorges Corporation extended an offer for 100 percent funding for Pakistan's most strategic project, the Diamer-Bhasha Dam, worth \$11.8 billion that will have a capacity to store 8 million acre feet of water and generate 4,500 MW of electricity. The Chinese company said it will provide the whole funding but the project should be handed over to it without holding any International Competitive Bidding (ICB). The said company showed its willingness to immediately release \$5 billion to Pakistan for the Diamer-Bhasha Dam so that it could start constructing the dam. China has also offered to install the coal power project of 660 MW in Gaddani and 2x600 MW coal based projects in Thar and 2x600 MW coal based project in Lakhra. Pakistan needs almost \$16 billion investment to develop the Power Park of 600 MW in Gaddani with jetting and a transmission line. China has also offered to provide \$4 billion for evacuation of 6,600 MW through the transmission line, but it demanded the handing over of the project of transmission lines. China also offered \$700 million for the Tarbela extension V project which if completed will provide 1,400 MW electricity at cheaper rates. The Tarbela

## Privatisation of energy transmission opposed

The News

January 19, 2014

## Energy, mining sectors Australia can provide professional expertise to Pakistan: HC

Business Recorder

January 19, 2014

## Denmark offers assistance to Pakistan in green energy

Pakistan Observer

January 18, 2014

Extension IV project of 1,400 MW is already under way and will be completed by 2017.

**KARACHI:** Dr Asim Hussain, former petroleum minister and chairman of the Petroleum Institute of Pakistan (PIP), has opposed the privatisation of the energy transmission in the country. "The transmission and distribution system should not be privatised, as it is not in the best interest of the country," he said on the sidelines of the launching of the Pakistan Energy Outlook document. With an extensive power transmission and distribution grid connected to 23 million consumers, Pakistan has a sound basis for building up its power delivery sector with significant upgradation and strengthening of the grid required to minimise losses. Hussain disclosed the future role of PIP to establish as a think tank and advisory body in the energy sector, adding that efforts are underway to develop a high-level roadmap with the energy solutions to develop the domestic energy sector of Pakistan. "We will be holding consultative meetings and seminars to develop the roadmap with consensus. It will be segmented into short-term (five-year), medium-term (10-year) and long-term (15-year) time horizons, which will be the part of PIP's recommendations to the government with an objective that these recommendations should be implemented for a brighter energy future of Pakistan," Asim said. Asim said that PIP has widened its coordinating role, as the country charter member for the global bodies such as International Gas Union (IGU) and World Petroleum Council (WPC). "PIP will be unique in these activities since no other energy sector entity in Pakistan performs these tasks." Academy and Finance, which is a Swiss national committee of WPC, is organising an international conference on Gwadar in April 2014, he said, adding that the focus of the conference is the Gwadar Port and the Gwadar-Kashgar energy corridor, which will open vast investment opportunities in energy transportation, refining and power generation. "We have been requested to become partners for that conference and PIP will contribute in this conference through the inputs of our members," he added. Dr Hussain said that the proposed energy blueprints in the Pakistan Energy Outlook, if implemented, could allow the Pakistan's energy sector to nurture and turn out to be the engine for the social and economic development of the country.

Australia can provide professional expertise to Pakistan in energy and mining sectors to beef up the bilateral ties between the two countries, said Australian High Commissioner to Pakistan Peter Hayward, here on Saturday. He was speaking at a programme titled 'Pakistan-Island of Excellence', organised by the Marketing Association of Pakistan (MAP) at a local hotel.

The event was well-attended by people from different walks of life including businessmen, students and civil society members. The High Commissioner said that Australia and Pakistan enjoyed cordial relations, adding that both countries also shared many commonalities in different economic sectors. He said that economy size of the Australia is very big but its population is very thin in size as compared to Pakistan. "Geographically, we are massive country but our population size is very thin as most of the population live around coastal belt," Hayward informed the participants. He said that trade volume between the two countries is around 800 million dollars. "There is imbalance in trade between Australia and Pakistan, out of \$800 million, Australia's exports to Pakistan is \$600 million," he added. He said that some 10,000 Pakistani students are studying in Australian universities and other institutes that has created strong bond between these countries. He said that Australian top universities are also collaborating with Pakistani institutes. He said that Australia is the biggest producer of dairy products, adding that now Pakistani farmers have also started breeding Australian cows. He said Australia could help Pakistan in energy and mining sectors. "Australia exercises best practices in energy and mining fields, its engineers and other technical experts have been recognised all over the world," he said. He said that Balochistan is the mineral rich province of Pakistan and Australia could help Pakistan in exploring minerals from the province. He said that Pakistan needs to correct its image on international level, adding that awareness of opportunities in different sectors could be made in both countries. Earlier, Talib Karim of Marketing Association of Pakistan (MAP) welcomed the chief guest and other participants. Ali Hassan of MAP also spoke on the occasion.

**ISLAMABAD** - Denmark has offered assistance to Pakistan in adopting the technology of green energy. The Danish Ambassador made the offer to Pakistan Jesper Sorensen at a meeting with Minister of State for Water and Power Abid Sher Ali here on Friday. According to the Ambassador, a new world record was set in Denmark last month.

In December 2013, 57 per cent of all electricity produced in Denmark was generated by wind power. On one single day, December 21, windmills produced more electricity than the total Danish consumption.

Denmark has a goal of becoming the world's first completely fossil fuel free country by 2050. Ambassador Sorensen informed Minister of State for Water and Power, Mr. Abid Sher Ali that he would be going to Denmark next week to meet Danish businesses, including green energy companies to discuss the potential of the Pakistani market. As some Danish companies have concerns about the security situation in Pakistan, the Embassy is offering to help identify relevant Pakistani partners. As the Minister of State for Water and Power expressed gratitude to the Embassy of Denmark for increasing its focus on expanding investment and trade ties with Pakistan, Ambassador Sorensen responded: "Investments in Pakistan will surely create more jobs and economic growth - to the benefit

## Steps urged to overcome energy shortage

Dawn

January 18, 2014

## Pakistan's Oil & Gas to Boost Supply as Deficit Hurts Growth

Bloomberg

January 16, 2014

of the people of Pakistan and of Denmark.

**KARACHI:** Pakistan's energy deficit is likely to reach 110.8 million Tonnes of Oil Equivalent (TOEs) in the next 15 years if average gross domestic product remains around 4.5 per cent, according to a document issued by the Petroleum Institute of Pakistan (PIP) on Friday. The document, Pakistan Energy Outlook (PEO) 2013-2028, predicts that country's energy demand would grow to 147.78m TOEs by 2027-28 against the domestic resources of 36.90m TOEs in the same year.

Addressing a media briefing at the launch of PEO, PIP's chairman and former adviser to the prime minister on petroleum and natural resources Asim Hussain said that Pakistan Energy Outlook is a flagship document of the institute, and has been prepared with the help of independent consultants taking into account energy demand-supply models based on the economic realities of the country. "Recommendations identified in this document provide long-term energy solutions for Pakistan to secure higher GDP growth and economic development on sustainable basis," Mr Hussain said. He maintained that mobilising and generating affordable and environment-friendly energy resources are one of the key challenges. He urged the government to work together with the petroleum industry in framing the policies. To a question why there is so much stress on import of LNG these days when Pakistan itself has vast gas reserves and other indigenous options, Mr Asim Hussain said, "Expensive fire is better than no fire at all." He said that even gas producing countries, like Qatar, are now diversifying their energy mix by considering other possibilities. He said that besides utilising indigenous resources, Pakistan should also look for import options, too.

Presenting the outline of the PEO, Mr Akhtar Raza of Enar Petrotech said that the energy deficit will have to be met through the import if coal, oil and gas as domestic production is likely to be insufficient.

### Recommendations

The document recommends the government and other stakeholders to efficiently utilise natural gas; strengthen regulatory institutions to facilitate partnership between public and private sectors; make policy for aggressive exploration and production (E&P) to incentivise exploration of on-shore and on-shore oil, gas, tight gas and shale gas; fast-track indigenous coal projects, import of LNG and cross-border gas pipeline projects to improve the country's energy mix, exploit renewable energy resources; cut transmission and distribution losses in the power sector; and develop a competitive market to root out pricing distortions in the energy sector. The PIP is a non-government body established in 1963 by the oil and gas industry with a vision to establish itself as an energy advisory body.

Oil & Gas Development Co., Pakistan's biggest energy explorer, will boost gas output from existing fields by a third in the next 12 to 18 months as energy shortages hamper growth and shut factories. "We are working on six projects and expect to increase gas supplies by about 350 million cubic feet a day," Chief Executive Officer Muhammad Riaz Khan said in an interview yesterday. "The major portion of gas would come in this financial year" which ends June 30, he said. New supply is needed to ease gas shortages that widened to about 2 billion cubic feet a day during peak hours this winter causing social unrest and shutting factories in the nation of over 196 million people. Pakistan's production of natural gas has plateaued since 2008, the country's central bank said in a report yesterday.

Gas from existing reservoirs of Kunnar Pasakhi Deep, or KPD-Tay project, Uch, Sinjhor, and Jhal Magsi fields in southern Sindh and southwestern Baluchistan province, and from two fields in northwestern Khyber-Pakhtunkhwa province will add to the company's existing production of about 1,100 mmcf, Khan said at the company's headquarters in Islamabad. Gas shortages have forced power plants run by companies such as Hub Power Co. and billionaire Mian Mohammad Mansha's Lalpir Power Ltd. to expedite plans to switch to coal. Pakistan's power sector is heavily dependent on gas and supply constraints have led to a cut in electricity production.

### 'Depleting Discoveries'

"Previous major discoveries like Sui in Baluchistan from where we get major supplies are old and depleting and there haven't been any new discoveries," said Nauman Khan, an analyst with Karachi-based Shajar Capital Pakistan Pvt., who has a buy rating on OGDC. "The security situation in Baluchistan is definitely hurting the exploration program," Baluchistan, which shares a border with Iran and Afghanistan, has been facing an insurgency by separatists. OGDC has gained 55 percent in the past year, compared with a 65 percent increase in the benchmark KSE100 index. The shares, with the highest weightage in the benchmark index, fell 0.5 percent to 286.46 rupees as of 12:45 p.m. in Karachi. The company plans record spending of 90 billion rupees (\$853 million) on drilling 34 wells this financial year, including 15 development wells and 19 exploratory and appraisal wells, Khan said in August. OGDC, which delivers a quarter of Pakistan's gas output, would also add about 7,000 barrels of oil a day to its existing production of 45,000 barrels a day, in the next 12 to 18 months, Khan said. The increase in production will help the company post better results and "net profit this year would be far better than the last year," Khan said, without giving specific numbers. OGDC's net income declined for the first time in five years to 90.8 billion rupees in the year ended June 30, according to data

## China helping Pakistan meet its energy needs

*Daily Times*

January 16, 2014

compiled by Bloomberg. The explorer is also in the process of hiring consultants to carry out studies on shale gas, shale oil and tight gas in five different basins in the South Asian nation, Khan said.

China continues to bolster its relationship with Pakistan by playing host to a three- day Energy Working Group in Beijing. Concluded on January 9, it was hailed as a success by representatives from both countries. In a statement, Water and Power Minister Khwaja Asif said the meeting had been productive and beneficial to both the countries, and hoped that it would continue to strengthen Pak-China relationship. "It would also help start new projects in the energy sector," he said. China has agreed to grant a loan of \$6.5 billion to Pakistan to construct twin nuclear power stations in Karachi. It is envisioned, this will add 15 percent to the energy capacity of the country. Pakistan desperately needs investment in its energy sector, as prolonged outages of both gas and electricity are wreaking havoc on the country's economy. Construction of the power plants, Kanupp II and Kanupp III (K-2 and K-3), began last year. China has also pledged to provide two nuclear reactors to Pakistan. Prime Minister Nawaz Sharif has conveyed his appreciation, saying, "It will be a big source of energy supply to Pakistan." This is the largest Chinese financing deal for a single project to date. Pakistani officials recently revealed that loans for the energy projects would be repaid over the next 20 years. The loan was granted despite an international nuclear embargo on Pakistan, which Pakistan's Foreign Ministry believes India and the US is largely responsible for. In a press briefing in December, Foreign Ministry's spokesperson said, "Some countries are engaged in an international campaign against cooperation between Pakistan and China in the field of nuclear energy. The aim of this campaign is to deny nuclear power, material and technology to Pakistan." This effort, the spokesperson implied, is being led by the US and India.

A Chinese scholar, the executive director of the Pakistan Study Center at Sichuan University, Chen Jidong, also defends this nuclear partnership. He writes in China's *The Global Times*, "Pak-China nuclear cooperation would help mitigate Pakistan's energy shortage besides deepening bilateral strategic partnership between the two countries." The chairman of Pakistan Atomic Energy Commission (PAEC) Ansar Parvez also supported the collaboration.

Addressing the media at another nuclear power plant, Chasma, he said, "A number of joint declarations signed by the two countries have shown their plans for civilian nuclear cooperation. This will also allow Chinese nuclear companies to secure more business deals with Pakistan to help meet the demands for civilian use of nuclear power." He also said, "Two new reactors in Karachi should convince everyone that international embargoes and restrictions and Indian lobbying won't stop us." He added that after Karachi, the government has now initiated the process for building nuclear plants at two other sites. However, at a seminar last week on the impact of K-2 and K-3 along the coastal areas, Pakistani experts, Dr Hoodbhoy and Dr AH Nayyar, opposed the construction of these power plants citing issues of safety, design and cost.

## Nandipur power plant: TI Pakistan highlights discrepancies in project

*The Express Tribune*

January 11, 2014

**LAHORE:** Transparency International (TI) Pakistan, while highlighting inconsistencies in the Nandipur power project, has asked the government to fix responsibility on the people behind unsolicited award of contracts and the delay, which has caused a loss of over Rs13.87 billion to the public purse.

The suggestion came in the wake of a letter sent by the Ministry of Water and Power on September 9, 2013, which requested TI Pakistan to "review critically the contents of revised PC-1, contract agreement and Amendments 1 & 2 to highlight discrepancies and make suggestions, if any, to save taxpayers' money."

In its letter addressed to the prime minister and the minister of water and power, TI Pakistan said the Ministry of Water and Power awarded the engineering, procurement and construction (EPC) contract to Dongfang Electric Corporation, without inviting tenders, in violation of Public Procurement Regulatory Authority (PPRA) rules. This was also against the decision of the Economic Coordination Committee (ECC), which said provisions of Public Procurement Rules 2004 should be kept in view in the bidding process, it said. In its report, TI Pakistan has critically reviewed the contents of revised PC-1, contract agreement and Amendments 1 & 2 to the provisions. It has not carried out any cost audit. TI Pakistan, however, reviewed the process adopted by the Ministry of Water and Power in determining cost variation in the revised PC-1 amounting to Rs58.416 billion, which was proposed in January 2013. The process was in line with the terms of the contract agreement reached with the contractors and also complied with government rules. An increase of Rs21.208 billion in the cost in the revised PC-I had to be paid even if the project would have been completed on time.

According to the revised PC-I, additional payments of Rs12.325 billion are being made to the contractors, of which compensation for the delay is Rs6.538 billion and the cost of additional work items is Rs5.787 billion. The exchequer has suffered a loss of Rs13.837 billion because of the delay caused by the Ministry of Law and Justice. Project cost estimated at Rs58.416 billion is based on the rupee-dollar parity of Rs96 and the final cost after completion of works is likely to cross Rs60 billion on the back of currency fluctuation, said TI Pakistan.

According to Amendments 1 & 2, the capacity of the project – a combined cycle power

## Energy demand: Pakistan for expediting LNG import from Yemen

*The Express Tribune*

January 8, 2014

plant – is 425MW, and not 525MW. Enhancement of gross capacity by 25% from 425MW to 525MW with gas fuel is very ambitious. Expert opinion taken by TI Pakistan indicates the capacity increase may not be over 10% due to the use of gas fuel. As the revised PC-I was prepared in December 2012, the gas station was added under the previous government policy. But as the policy has shifted under the present government to “new power plants based on hydel, coal, wind and solar only”, the gas station may be deleted to save public money. Lessons should have been learnt from the case of two gas-based Rental Power Plants’ (RPP) contracts awarded in 2006, TI Pakistan suggested. Both the plants did not operate for a single day and the government ended up paying billions of rupees in rent for five years (about \$8 million per month), as gas was never made available. It also asked the government to exercise strict controls in finalising the cost of tentative provisions amounting to Rs13.336 billion in the revised PC-I of 2013. Amendment 2 does not include handling of fuel and ash, waste water treatment and equipment of Rs1.372 billion, neither any civil work structure enhancement at a cost of Rs1.647 billion. Owing to non-inclusion of foregoing costs, the interest during construction will be substantially reduced. All insurance guarantees and policies should be placed with National Insurance Company of Pakistan to safeguard public money. In order to save taxpayers money sunk in the project, work on it should be completed expeditiously in spite of the faulty award process.

**ISLAMABAD:** President Mamnoon Hussain on Tuesday invited investment from Yemen in the energy, oil and gas sectors, urging the two sides to move for early finalisation of arrangements for import of liquid natural gas (LNG) from Yemen. In a meeting with the visiting Yemeni Minister for Industry and Trade Dr Saadaldin Ali Salim Talib, Hussain said the expeditious finalisation of import of LNG from Yemen would help Pakistan cope with energy issues and bolster trade and commercial ties between the two countries. Both sides discussed bilateral relations and matters of mutual interest.

Welcoming the Yemeni minister and the accompanying delegation on their visit to Pakistan in connection with the meeting of the Joint Ministerial Commission, the president hoped that the visit would prove instrumental in further enhancing existing bilateral relations between the two countries, particularly trade and commercial ties. The president said that Pakistan valued its cordial relations with Yemen and desired to further strengthen bilateral cooperation in diverse fields for the mutual benefit of the people of both countries. He emphasised the need for concerted steps from both sides to boost bilateral trade volume through increased cooperation in various sectors. Highlighting the growing energy requirements of Pakistan, Hussain said that the government was offering incentive packages for investment in power and energy sectors to meet growing challenges of energy in the country. Dr Talib said that Yemen attached importance to its relations with Pakistan and was keen to explore ways and means to further enhance bilateral trade and commercial ties.

## Pakistan, China to set up energy planning group

*Gulf Times*

January 8, 2014

**ISLAMABAD** - In a major development, Islamabad and Beijing have agreed to set up an energy planning working group to help Pakistan wriggle out of its energy crisis. This was announced during a meeting of the third Sino-Pak energy working group and first energy working group of China-Pakistan Economic Corridor meeting held in Beijing, an official statement said here yesterday. The meeting was co-chaired by Administrator of Energy Administration (NEA) of China Wu Xinxiang and Federal Minister of Water and Power Khawaja Asif of Pakistan. Islamabad will also take advantage of export credit insurance from Beijing to promote and sustain the development of a Chinese energy project in Pakistan. The working group, however, expressed concern on the \$448mn financing process for Neelum-Jhelum Hydropower project, which is to be jointly developed by EXIM Bank of China (EIBC) and the Ministry of Economic Affairs Division of Pakistan.

According to the minutes of the meeting, EIBC would now pay close attention to the Chinese government's approval on the project's insurance-free status and accelerate the relevant procedure so as to release the first batch of loan in the shortest time. Further, according to the minutes of the meeting released to the media, the International Cooperation Department of China's National Energy Administration and Ministry of Water and Power, Pakistan would take the lead on the respective sides to take charge of the specific work of the energy planning working group and establish a working plan and timetable before the end of February 2014. China will play pivotal role in completing the feasibility study of the 6600MW Gadani Power Park and development of its power transmission and transformation circuit and power distribution and distribution grids.

In the meeting, the two parties agreed to make nuclear cooperation as one of the priorities for energy cooperation between the two countries. Both parties agreed that China-Pakistan nuclear co-operation would continue to move forward in a sound and steady manner and the all-weather strategic partnership between Pakistan and China would be consolidated and developed. The two sides also noticed that fruitful achievement has been established in the cooperative construction of nuclear power between China and Pakistan. Two in-service 300,000KW generator units of Chashma nuclear power plant have operated in good condition and the construction of the other two 300,000KW generator units has been smooth. In the meeting both sides were satisfied with previous projects and were willing to continue cooperation on new projects such as Chashma 5 and Muzaffargarh 1-2 units.

## Energy woos: PM seeks

Prime Minister Muhammad Nawaz Sharif, Tuesday, said that Pakistan and Saudi Arabia had always stood by each other in testing times and the people of Pakistan deeply value

## Saudi Arabia help

*The Nation*

January 7, 2014

relations with the Kingdom.

While speaking at a meeting Saudi Foreign Minister Prince Saud Al-Faisal bin Abdul Aziz Al-Saud, here at PM House, Prime Minister said that "there was a need to start a new era of Strategic Relationship between our two fraternal countries in order to further broaden and deepen the existing cordial bilateral relations". Pakistan and Saudi Arabia need to enhance bilateral trade to reflect the strong fraternal bonds that exist between our two countries by regular meetings between the Commerce Ministers to explore ways of enhancing bilateral trade, said the Prime Minister. Both the leaders discussed Issues of bilateral and regional importance.

While discussing the energy situation of Pakistan, the Prime Minister said Pakistan would welcome investment by the Kingdom in Energy Sector especially, and other sectors like Infrastructure, Agriculture and Livestock. Prime Minister stressed that his government wishes to enhance economic and business ties with the Kingdom. Pakistan is ready to grant privileges to businessmen, he added. Discussing the Afghan situation, Prime Minister re-affirmed that Pakistan remains committed to facilitating Afghan-led and Afghan-owned peace and reconciliation process adding that a peaceful and stable Afghanistan is in Pakistan's interest. Pakistan supports all efforts aimed at strengthening unity among the Islamic countries, said the Prime Minister.

Prime Minister thanked the Saudi Government for extending help to Pakistani workers who were affected by the recent labour laws enacted in the Kingdom. Prime Minister said that the large Pakistani community in Saudi Arabia is a human bridge between our two brotherly countries who would continue to play a vital role in the development of KSA and added that the skilled manpower can meet the future human resource needs of Saudi Arabia. Prime Minister also conveyed, on his own behalf as well as on behalf of the people of Pakistan, prayers and good wishes for the good health and long. During the meeting, Saudi side was represented by Khalid bin Ibrahim Al-Jindah, Secretary Ministry of Economics and culture, Yousaf bin Tarrad Al-Sadoon DG office of Prince, Osama Ahmad Naqil, Director Information department and H.E Dr. Abdul Aziz Al-Ghadeer Ambassador of KSA to Pakistan. The Pakistani side was represented by Ishaq Dar Minister for Finance, Ch. Nisar Ali Khan Minister for Interior, Sartaj Aziz Advisor to PM on National Security and Mr. Tariq Fatmi Special Advisor to PM on Foreign Affairs.

## Pakistan producing nuclear energy for economic development: Ahsan Iqbal

*Business Recorder*

January 2, 2014

**CHASHMA:** Federal Minister for Planning and Development, Prof. Ahsan Iqbal said Thursday that Pakistan was a legitimate nuclear power and it has right to produce nuclear electricity for economic development of the country. He said this while addressing on the occasion of dome placement of Chashma-IV nuclear power plant here. The power plant is being constructed with the joint venture of Chinese Company China National Nuclear Cooperation (CNNC) and Pakistan Atomic Energy Commission (PAEC). The C-3 power plant is already under construction and by 2016, both C-3 and C 4 will be adding about 640 MW electricity to national grid. Prof. Iqbal said Pakistan is a responsible country which could produce nuclear power for peaceful purpose. In near future when all the four power plants would be operating and producing nuclear energy simultaneously, the area of Chashma will become hub of nuclear power generation, he added. The Federal Minister informed the gathering that the government is looking for installing more nuclear power plants and in this regard PC-1 of the three sites have been approved by the Central Development Working Party (CDWP) and will be sent to Executive Committee of National Economic Council (ECNEC) soon for final approval.

The PC 1 for site of nuclear power plant at Muzaffargarh has also been approved by the CDWP , he informed. "We live in the age of economic competition where the failure or success of a country is determined by its economic strength", the minister said adding the country needs to learn from China in this regard. He said the year 2013 marked a milestone in the history of relationship between the two countries when the Prime Minister Nawaz Sharif during his visit to China signed agreements to develop economic corridor in the region. Recently, he said the Chinese Prime Minister has reassured Prime Minister Nawaz Sharif that he was supervising the progress of the agreements and with the completion of this, Pakistan will become center of trade and economic activities in the region. Highlighting the current energy crisis in the country, the minister said that currently "we are heavily depending upon oil based power generation which can not be run on sustainable basis". "The government is working on different power projects including Gadani Power Project will produce 6000 MW electricity", he said adding Dasu and Diamer Bhasha hydro power projects, once completed, will produce over 9000 MW electricity. The minister said the government is focusing on three priority areas including security issues, energy and taxation system to enhance GDP to 7-8 percent which would strengthen the national economy. In his welcome address, Chairman PAEC, Dr. Ansar Parvez said that after the dome placement of the C-4 , the project will enter into the installation process, adding the project will start producing electricity by 2016. Enough safety measures are in place for all of our nuclear plants and there is a track record to support the claim, he added. Li Ji Ze, head of Chinese delegation and chief accountant CNNC said on the occasion that Pakistan and China are working for the peaceful utilization of nuclear energy. He said construction of these power plants is reflection of warm and friendly relationship between the two countries.

## HUMANITARIAN INTERVENTIONS

### Rising Electricity Tariffs - from NEPRA's Determination to Consumers' Electricity Bill

[www.ips.org.pk](http://www.ips.org.pk)

January 30, 2014

Experts at a seminar on energy at Institute of Policy Studies, Islamabad were unanimous in the view that the main reasons for the high tariff rates in resource-rich Pakistan were governance related due to the short-sightedness of policy-makers, corruption, mismanagement, and unavailability of the right people at the right places.

The seminar titled, "Rising Electricity Tariffs - from NEPRA's Determination to Consumers' Electricity Bill", held on January 29, 2013, was addressed by Salahuddin Rifai, senior energy expert, Syed Salman Rehman, tariff expert and assistant director at NEPRA, Waheed Akram, IESCO's manager customer services, Ameenah Sohail, IPS associate and coordinator of its Tawanai program. Mirza Hamid Hasan, member IPS-National Academic Council and former secretary water & power chaired the program. It was highlighted that the existing power tariff in the country was Rs14 and with the addition of 17 per cent GST and 3.5 per cent excise duty it becomes Rs16.95, which was the highest in the region. Criticizing the short-sightedness of the Pakistan's energy managers the expert speakers and participants of the seminar viewed the overwhelming share of fossil fuel based power generation as the main cause of the exorbitant per KWH tariff in Pakistan. It was revealed that in India and Bangladesh the tariff for the same unit was Rs7.36 and Rs5.47 respectively. Even in the US it was equal to Rs8.59.

Presenting an overview of the country's energy planning since the beginning, Salahuddin Rifai informed the participants that WAPDA started at 118 MW installed capacity, 700 GWH generation, PKR70 million revenue and 270,000 consumers. The power sector of the country was self-financed at the beginning. Till mid-1980s the power generation of WAPDA increased to about 5700MW through projects build out of its own profits and government loans on 17-18 per cent compound interest. The government stopped providing loans to WAPDA in 1985. He further informed that the load growth during 1960 to 1985 was tremendous: up to 18 per cent annually. The World Bank undertook to finance 60 per cent of development on condition of 40 per cent self-financing by WAPDA out of its own profits. In 1985, the concept of private power generation was introduced and the federal government floated the first tender. He lamented that in 1988 the first MOU was signed for the furnace-oil based 1292MW Hubco plant out of tens of offers and Pakistan became the first country in the Third World to have private power generation, that too on furnace oil and exorbitant costs. He also criticized the financial terms of the Hubco agreement agreed by the government of Pakistan.

Presenting data on achievements of targets against planned targets in installed capacity of power generation from 1955 to 2010, Rifai told that the progress from the first five-year plan (1955-60) to the eighth five-year plan (1993-98) was quite satisfactory. Unfortunately, however, no addition was planned in the ninth five-year plan (1998-2003) and only a deplorable six per cent target was achieved against the planned 7880MW in the Medium Term Development Framework (2005-2010). He said due to this failure, today, the electricity shortfall has reached 3916MW. He blamed the pro-furnace oil government policies for power generation for the current energy crisis and warned that the fuel cost in 1994 policy of Rs0.60/KWH, which increased to Rs15 in 2013 may go to Rs100 in 2025 if the international oil prices continue to increase with the same pace. NEPRA's Syed Salman Rehman apprised the participants of the tariff determination mechanism of the Authority and claimed that despite of regular public hearings for tariff determination there was very little contribution on the part of consumer organizations and representatives in the process.

IESCO's representative Waheed Akram informed that the distribution company was collecting 'more' than 100 per cent bills from private, commercial and industrial customers and around 25 per cent of an average bill also consists of various taxes that the government was collecting through the DISCOs. However, he informed, the recoveries from the government sector were only 53 per cent. Interestingly, the AJK government pays only Rs2.2 per unit to IESCO against the NEPRA determined tariff of Rs12 for government departments, he disclosed. Ameenah Sohail urged NEPRA and other power sector organizations to make meaningful efforts to create awareness among the consumers about tariff determination and billing. DG-IPS Khalid Rahman, in his concluding speech, suggested that building formal linkages with universities and think tanks can help NEPRA in generating creative solutions to the problem, specially by using new innovative technologies. Miza Hamid Hasan, who chaired the session, regarded the seminar as a very fruitful one as it not only gave the opportunity to NEPRA and IESCO to present their side of story but also connected them directly with the consumers to understand the issues and problems at their end.

### IPS Seminar reviews Kishanganga Award

[www.ips.org.pk](http://www.ips.org.pk)

January 17, 2014

Non-availability of national data complying international standards on usages of water resources was the most serious lacking on part of Pakistan while pursuing arbitration on the issues involved. Pakistan could have secured better share of water in the final award in case of Kishanganga hydro-electric project (KHEP) if its plea was duly supported by required data of international standards, particularly vis-à-vis environment, hydro-electric usages and agriculture. In that event, more than the awarded 9 cumecs (cubic meter per second) of flow could have been won by the country in its case in the Permanent Court of Arbitration (PCA). This was a general consensus at a seminar at Institute of Policy Studies, Islamabad, titled "Analyzing Kishanganga Award", which was organized to critically review the recent verdict announced by Permanent Court of Arbitration (PCA) on the Kishanganga Hydroelectric Project and its potential repercussions for Pakistan's water security and interests.

The seminar was chaired by Mirza Hamid Hassan, member IPS-National Academic Council and former Secretary Water & Power. The speakers and panelists included Dr. Gregory L Morris, Pakistan's technical expert in Kishanganga case, Ashfaq Mehmood, Former Federal Secretary, Water and Power, DG-IPS Khalid Rahman, Shamila Mahmood, Senior Consultant, Pakistan Trans-Boundary Water Organization, and Cdr. (R) Azhar Ahmad, Senior IPS Associate. It was attended by a number of experts, researchers, diplomats, journalists and concerned officials. The experts were unanimous that as there was no further legal course available for next seven years – the period set by PCA when it can reconsider the Award on request of either Pakistan or India through Permanent Indus Commission and the mechanisms provided by the Indus Water Treaty (IWT) – the only way forward for the country was to build and plan water storage facilities on war footings and strengthen institutional capabilities, particularly in the field of world-class technical data collection on environment hydro-electric and agriculture usages, to establish its rightful share under the IWT.

Providing an historic overview of Kishenganga Hydro-Electric Project (KHEP) case earlier, Shamila Mahmood, informed the participants that Pakistan acquired evidence of India's plans to divert the Kishenganga/Neelum River for purpose of power generation in late 80s. Pakistan Commissioner for Indus Water (PCIW) requested that India provide information on the project on December 14 1988. Correspondence between the two Commissioners began and on May 12, 1989, the Indian Commissioner requested the Pakistani Commissioner to provide information on Pakistan's agricultural and hydro-electric uses as Annexure E of the Treaty requires such storage works to be designed so as not to adversely affect the then existing agricultural or hydroelectric use. The Indian Commissioner also provided details of KHEP under Paragraph 12 of Annexure E to the Treaty on June 2, 1994. She further told that the correspondence continued between the Commissioners and tours of inspection of the Neelum Valley were conducted in 1991 and 1996 the basis upon which the Indian Commissioner contended that Neelum-Jhelum Hydro-Electric Project was not an existing use as it was a proposed project only and there was little if any agricultural use in the valley. The matter was discussed at meetings of the Commission in 2004 and 2005 without settlement. On February 7, 2006, the PCIW informed the Indian Commissioner that in his view a dispute had arisen and provided a draft report to ICIW on March 26 2006 to be submitted to the respective governments. On April 20, 2006, the Indian Commissioner informed PCIW that KHEP had been re-configured as run-of-river plant falling under Article III(2)(d) and Annexure D and that proposal for reference of dispute would no longer be relevant. The PCIW informed ICIW of his objections to the reconfigured project which were rejected by the Indian Commissioner. Pakistan's objections discussed in four meetings of the Commission from 2007 to June 2009 without agreement. Hence, on July 10, 2009, Pakistan invited India to resolve dispute by agreement. The arbitration proceedings commenced by Pakistan on May 17 2010.

The two main legal questions in the arbitration, according to speakers, were whether India's proposed diversion of the river Kishenganga (Neelum) into another tributary, i.e. the Bonar-Madhmatti Nallah, being one central element of the Kishenganga Plant, breaches India's legal obligations owed to Pakistan under the Treaty, as interpreted and applied in accordance with international law, including India's obligations under Article III(2) (let flow all the waters of the Western Rivers and not permit any interference with those waters) and Article IV(6) (maintenance of natural channels); and whether under the Treaty, India may deplete or bring the reservoir level of a run-of-river plant below dead storage level in any circumstances except in the case of an unforeseen emergency. The court's analysis covered the territorial scope of the Treaty, the first dispute of the permissibility of delivering the waters of Kishanganga or Neelum River into another tributary through KHEP, and the second dispute of the permissibility of reservoir depletion under the Treaty.

Regarding the territorial issue, the seminar participants were informed that India had introduced the question of sovereignty over Jammu and Kashmir contending that Pakistan had no right to invoke the Treaty for adverse impacts to power generation at the NJHEP as the project was not situated in Pakistan. The Court determined that the Treaty extended to uses of waters flowing through either Pakistan-administered or Indian-administered territory and Pakistan was entitled to invoke the Treaty to object to the KHEP. The immediate benefit of this part of the judgment was that that earlier the international donor agencies were denying funding for projects in the disputed territory. This matter was taken up with the World Bank in the light of the Partial Award and the agency was now willing to extend funding for Diamer-Basha dam, which was previously refused.

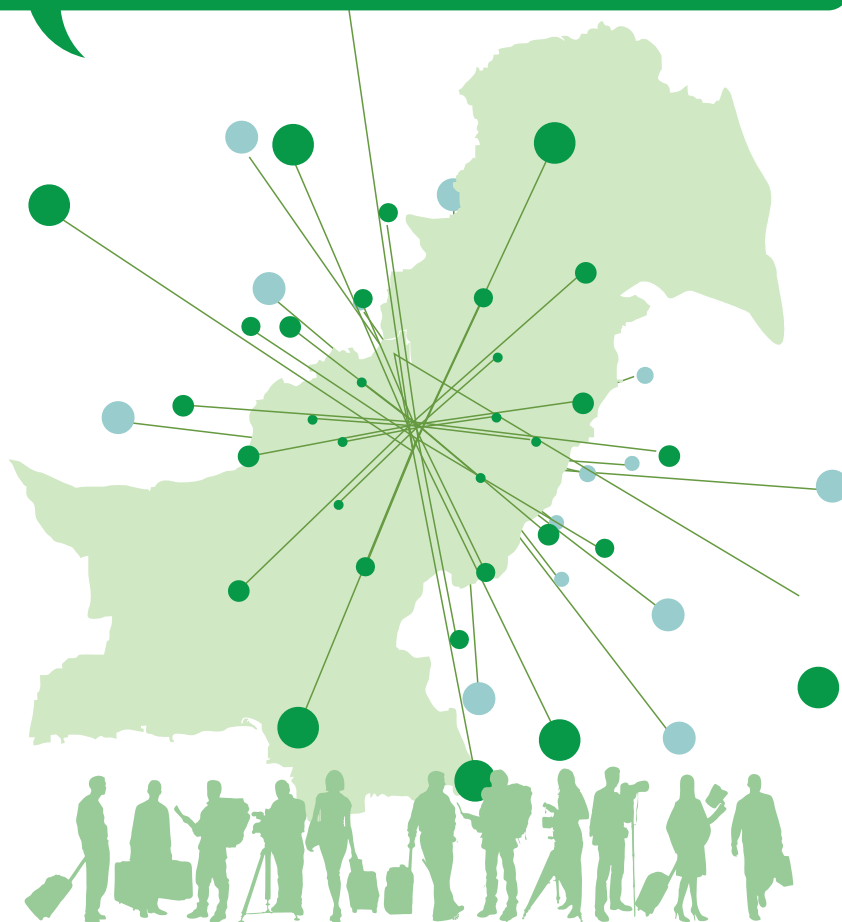
On the first question, i.e. India's planned diversion, the Court determined that "where a Plant is located on a tributary of the Jhelum on which Pakistan has any agricultural use or hydro-electric use, the water released below the Plant may be delivered, if necessary, into another Tributary but only to the extent that the then existing agricultural use or hydro-electric use by Pakistan on the former tributary would not be adversely affected". Having taken into consideration a number of factors such as tenders, financing secured, government approvals, construction underway, etc, the Court found that India's right to construct and operate the KHEP became vested during the period 2004-2006. Unfortunately, at that time Pakistan had no hydroelectric uses on the Neelum River. The Court also noted that India changed the design from a storage work under Annexure E to a run-of-river project under Annexure D on Pakistan's objections.

On the second dispute, the judgment established that except in the case of an unforeseen emergency, the Treaty does not permit reduction below dead storage level of the water level in

the reservoirs of run-of- river plants on the Western Rivers. The accumulation of sediment in the reservoir of a run-of-river plant on the Western Rivers does not constitute an unforeseen emergency that would permit the depletion of the reservoir below Dead Storage Level for drawdown flushing purposes. Accordingly, India may not employ drawdown flushing at the reservoir of the Kishanganga Hydro Electric Plant (KHEP) to an extent that would entail depletion of the reservoir below dead storage level.

Highlighting the significance of the determination of the second dispute, the experts said that it sets aside the Neutral Experts (NE) decision in the Baglihar case which had, in effect, rewritten the Treaty without opening it up for renegotiation between the Parties. It may be mentioned that the NE's decision allowed India control of flows by eliminating the live storage limitation set by the Treaty. The judgment restores a tenet that was fundamental to Pakistan; without which Pakistan would not have agreed to the Treaty, i.e. India does not have control or the ability to manipulate flows that were to be received by Pakistan. Stringent design and operational restrictions were delineated in the Treaty to ensure against the decrease of flow or change in timing of the flow, critical for agriculture uses. The experts appreciated the international arbitration and hoped that both India and Pakistan will continue to solve their bilateral approach through dialogues and mediation in relevant international fora.

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## ENERGY & POWER REGULATORY FRAMEWORKS NEWS

### K-Electric Limited

**KE & InfoTech Pakistan sign agreement to deploy a Smart Grid Technology Platform from Oracle; This along with smart meters will help in monitoring network & reducing energy losses - KE**

KE

January 24, 2014

**KARACHI:** Karachi 24th January, 2014: K-Electric Limited (KE), formerly Karachi Electric Supply Company, has signed an agreement with InfoTech Pakistan Limited (IPL) to implement a Smart Grid Technology Platform. The platform's key components are Oracle Utilities Meter Data Management and Oracle Utilities Network Management System which will be integrated with KE's recently implemented SAP Industry Solution for Utilities (SAP IS-U).

According to a KE press release, this platform will allow the company to maximize its Advance Metering Infrastructure (AMI) capability with proper network management. It is pertinent to mention that this will help in improved monitoring of the overall electrical network which will reduce energy losses further, manage recoveries, proactively address network performance issues, enhance distribution planning capability and improve outage management. This will also have a positive impact as far as customer service is concerned. The initial phase of the project will be to implement Smart Meters for approximately 10,000 customers across a few specific areas of Karachi within a year, and then continuously roll out across a major portion of the city. The agreement was signed by Syed Muhammad Taha, Chief Distribution Officer for KE and Asim Haq, VP Sales InfoTech. Also present at the occasion were Naseer Akhtar CEO InfoTech, Syed Ahmed Bilal VP Software, InfoTech, Rafi Khan Head of PMO and Professional Services InfoTech, Jamil Akbar Director Business Strategy KE, Sardar Naufil Mahmud Chief Information Officer KE, Moin Iqbal Smart Grid Project Manager KE and Shoaib Mulla Manager Smart Grid PMO KE.

Nayyer Hussain, CEO of KE on this occasion said, "This project will be key in enabling the power utility to continue its turnaround and establish itself as a commercially feasible & the best in class utility. This will also serve as a role model and benchmark in not only Pakistan but across other developing markets too. This platform will give us greater visibility over our network, enhance our operations, deliver better customer service and provide the foundation for us to adapt to leading technologies in electrical distribution. IPL provides strong local capability to implement and integrate this platform composed of the top rated Smart Grid products of Oracle along with our existing SAP IS-U system."

Naseer Akhtar, President and CEO of InfoTech Pakistan added, "We are excited to be partnering in this ambitious and ground breaking project which will make both KE and InfoTech pioneers in Pakistan in bringing in a comprehensive Smart Grid product like Oracle Utilities Meter Data Management and Oracle Utilities Network Management System Gateway. KE's decision to work with InfoTech reaffirms our position as one of the leading technology companies in Pakistan."

### Accord for 35MW hydropower project

[www.mowp.gov.pk](http://www.mowp.gov.pk)

January 28, 2014

Pakistan and German governments signed an agreement here on Monday, under which the German Ministry for Economic Cooperation and Development will provide 20 million euros for construction of 35MW Harpo hydropower project in north-west of Skardu.

Germany has already financed feasibility study of the Harpo hydropower project which will be the largest power generation project in Gilgit-Baltistan. The assistance will come through KfW Development Bank. The French development agency, AFD will provide 50m euros for the project.

On behalf of Economic Affairs Division, the agreement was signed by Ali Raza Bhutta, Joint Secretary, while Najib Tariq, GM Finance of Wapda and KfW Director Dr Anna-Christine Janke inked the agreement on behalf of their respective sides.

The Harpo hydropower project, to be constructed on Harpo nullah, a left tributary of the River Indus in Rondou area of Skardu, will include first-ever 132kv transmission line of about 70km, and three grid stations. A bridge will be constructed across River Indus which will ensure better access to Skardu-Gilgit road.

### Specialising in hydropower technology

[www.mowp.gov.pk](http://www.mowp.gov.pk)

January 28, 2014

Wapda has taken an initiative to establish a Hydropower Training Institute at Mangla, at a cost of Rs568 million, with technical and financial assistance from the European Union. The institute will function as an apex body for human resource development for the hydropower sector. The project has been approved by the Central Development Working Party (CDWP), while France has committed a grant of 2.5 million euros. A soft loan of 1.5 million euros was disbursed earlier.

Consultants have been engaged for preparing a 10-year business plan to operate the multi-disciplinary institute (when completed) on a self-financing basis. The proposed institute will be a dedicated institution for advanced training of mechanical, electrical and electronics engineers at the middle- and senior-level management — working in various fields of hydropower — to incorporating state-of-the-art technologies in future projects. The varied courses offered, short-term as well as long-term, will cover overarching concepts related to planning, construction and operation of hydropower projects. They will deal with current international trends, focusing on economic, financial, climate change and environmental and social issues. The institute will thus create a pool of trained and skilled engineers, operators, technicians and other professionals capable of contributing to sustainable and efficient development of hydropower resources. Hydro-rich countries like Switzerland, Norway, India

and Nepal are successfully operating similar institutes that offer bachelor and master's degrees in hydropower engineering.

Initiation of the project dates back to April 2011, when the assessment mission of the French Development Agency (AFD) visited Pakistan to analyse existing training facilities in hydropower, in the context of projecting future needs. The mission recommended upgrading Wapda's existing Hydel Training Centre at Mangla in the first phase to the level of an institute for imparting advanced training and offering postgraduate course in hydropower technology, primarily for Wapda's engineers who are already working in various hydropower plants.

High-tech infrastructure facilities for conducting different courses will be provided at the institute. The main building will consist of an auditorium, lecture halls, laboratory, latest audio/video system, a library, demonstration models and a hydro-training simulator. The hydraulic parts, generator, transformer and auxiliary electrical systems of a plant are taken care of in the simulation. The Mangla hydropower plant, of over 1,000MW installed capacity, will serve as the 'teaching hydropower station'.

Training will encompass all the facets of a hydropower project, including hydraulic structures, hydraulic turbines and governors, generators, auxiliary plant, cables and earthing system, transformers, switchgears, control and protection systems, and software and hardware systems.

Services of European experts will be acquired as instructors and teachers. The institute will later be converted into a centre of excellence in hydropower, and transformed into an independent institute in the next phase, likely to be run in collaboration with an international teaching institute in Europe that specialises in hydropower technology.

A master's degree in hydropower technology will be awarded to graduate engineers having experience in hydropower, on successful completion of one-year theory and practice courses.

Wapda, one of the largest employers of human resource, has developed a skilled workforce over a period of decades, which is indeed a reservoir of knowledge, competence and expertise, successfully developing and operating large, medium and small hydropower stations countrywide. It has focused on ensuring the availability of trained manpower to meet present and future needs, and also runs an Engineering Academy (Water and Power) at Faisalabad for the purpose, which imparts comprehensive training on the geotechnical and rock mechanic aspects of hydropower projects to senior civil engineers.

## QUETTA DISTRICT ENERGY PROFILE

District Quetta is located in the north-west of Balochistan and is the most populous district of Balochistan. It has been famous for its fruits orchards and agriculture produce including dry fruits. Quetta City is the District Headquarter as well as the Provincial Capital of Balochistan. Quetta is the largest city of the Province and acts as a trade and communication center between Pakistan and Afghanistan.

Quetta District area is approximately 2,653 sq kilometers while its population density is 281 persons per square kilometers as per the 1998 Census figures.

The major sources of energy to cater the energy requirements of the District include electricity, natural gas, LPG/LNG, kerosene oil, fire wood, and animal dung. Majority of the energy demand for transport is sector is met by petrol and diesel, while CNG also takes a small share to cater the fuel for transportation sector.

Quetta Electric Supply Company (QESCO) is responsible for providing and distributing electricity to the whole of Balochistan including Quetta District (except District Lasbella). QESCO was incorporated in 1998 and it replaced Quetta Area Electricity Board which was owned by Pakistan Water and Power development Authority (WAPDA).

There are a total of 152,364 electricity consumers in the district. Category wise distribution of these connections among different categories is as follows; 93,347 domestic which constitute 61.27% of the total, 54,499 commercial constituting 35.77%, 3,424 agricultural as 2.25%, and the rest 1,094 are industrial which come to 0.72% of the total electricity consumers.

The peak electricity demand for the district stands at 288 MW during 2012-2013. This demand is met through seven (7) distribution grid stations. These grid stations include one 220 KV, five 132 KV, and one 66 KV. Category-wise peak demand per grid stations and Category-wise projected energy units requirements per grid station are shown in the tables (Info graphs).

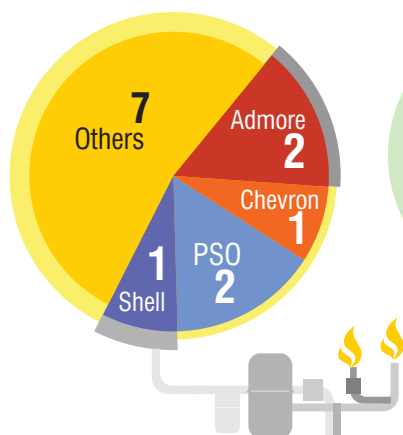
District Quetta is among those districts which has electric power generation plants installed within its boundaries. There are two power generation plants operating in Quetta district namely Thermal Power Station Quetta (TPS Quetta) and Habibullah Power Plant. TPS Quetta is Gas/Coal Fired thermal power station with a net installed capacity of 35 MWs and is operated by WAPDA (GENCO Central). Habibullah Power Plant has a gross generation capacity of 140 MW and is GAS/HSD powered thermal power station, which is owned and operated by Habibullah Coastal Power Company. This plant is in operation since September 1999.

Natural Gas is the dominant source of energy for cooking and heating purposes. Sui Southern Gas Company Limited is responsible for supplying and distributing Natural Gas in Quetta District. Gas consumption for Quetta Regions which covers whole of Balochistan Provinces stands at 19,564 MMCF during 2010-2011, this includes the consumption of District Quetta. SSGC is providing Gas to 72,867 customers out of which the domestic consumers are the largest portion amounting to 97.7% with 71,188 consumers in total. The rest of the consumers include 1,613 as commercial and 66 Industrial consumers which is close to 0.1 % of the total consumers.

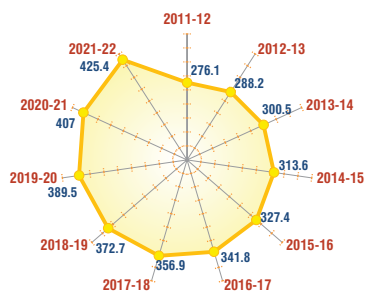
Being the largest urban center of Balochistan, the fuel requirements of transport sector is being met by a diverse network of corporate and private owned Petrol and CNG filling stations. There are 66 Petrol/Diesel Stations where PSO is supplying fuel to 35 stations thus grabbing 53% of the Petrol/ Diesel supply to the District. Shell with 12 %, Byco 6 % and Admore with 5% are some of the major suppliers of fuel to Quetta. Besides petrol and diesel stations there are 13 CNG stations out of which almost 54% of these are owned and operated by private individuals while PSO operates 15.4%, Admore 15.4%, Shell 7.7%, Chevron 7.7% and rest are operated and supplied by other Petroleum product providers.

In addition to the electricity, natural gas, and petroleum products, liquefied natural gas and petroleum gas also contribute to meet the energy requirements. There are more than 30 LPG/LNG marketing companies licensed to import/distribute LPG/LNG in District Quetta.

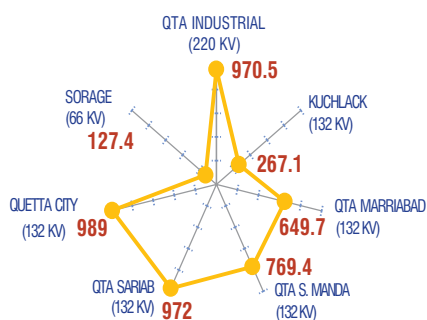
### Number of CNG Stations



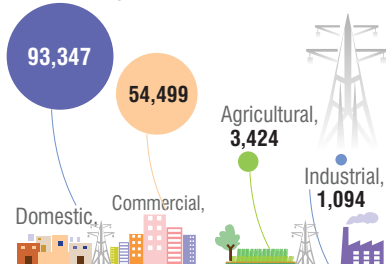
### Year wise Aggregated Electricity Demand from 2011 till 2022



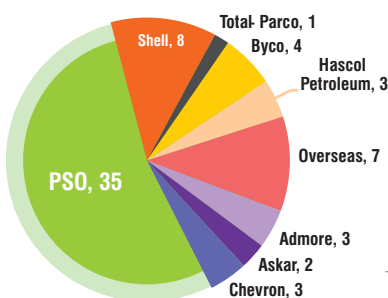
### Substations wise Aggregated Demand of from 2011-22



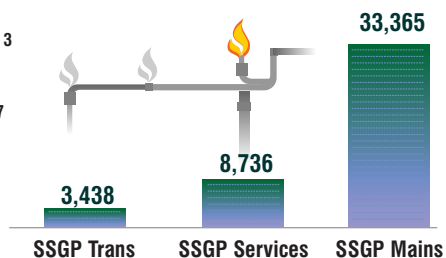
### Electricity Consumers in Quetta



### Number of Petrol Stations



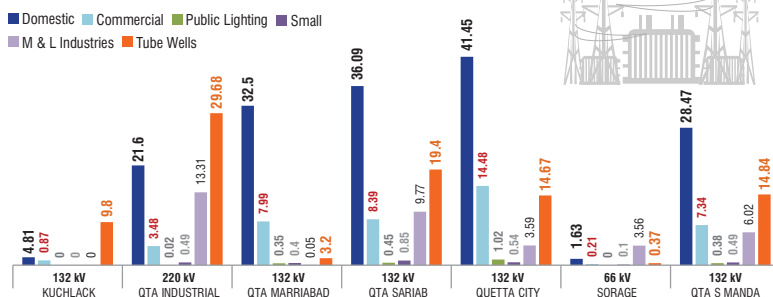
### Gas Infrastructure for Sui Southern Gas Pipelines Company (Km)



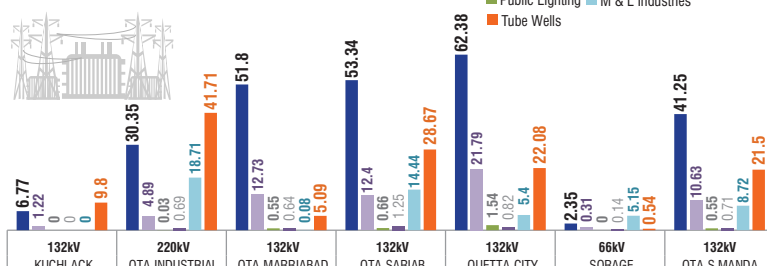
### Gas Consumer in District Quetta



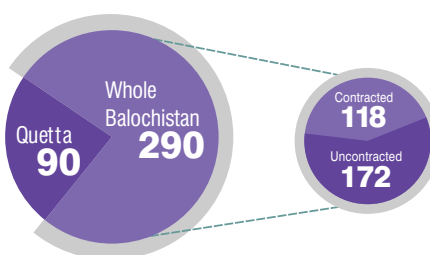
### Category-wise Maximum Demand (MW) of Substations In Quetta District 2012-13



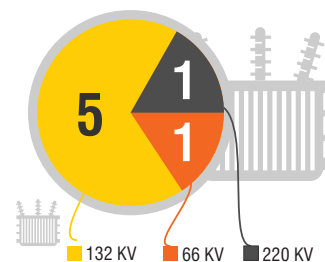
### Category-wise Projected Maximum Demand (MW) of Substations in Quetta 2020-2021

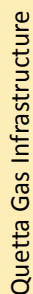


### GAS Demand (MMCFD)



### Number of Grid Stations





## DAM-AGE CONTROL

By Feisal Naqvi

Newsweek January 11, 2014

### In its water war with India, Pakistan wins a battle.

On Dec. 20, the Hague-based Permanent Court of Arbitration rendered its final award in the Indus Waters Kishenganga Arbitration between Pakistan and India. This decision has produced much confusion, nationally and internationally. The confusion is uncalled for. The award is a clear victory for Pakistan: it resolves a potentially explosive dispute in Pakistan's favor, and it ensures that similar disputes do not arise in the future.

Pakistan invoked arbitration for its water dispute with India on May 17, 2010, in accordance with the World Bank-brokered Indus Waters Treaty of 1960. Following site visits to Pakistan's Neelum-Jhelum and India's Kishenganga hydropower projects, the seven-member court began hearings in August 2012 and rendered a partial award the next February. Islamabad had referred two separate questions to the arbitrators. The first question asked whether India could draw down reservoir water below dead-storage level in any event other than an unforeseen emergency. The second asked whether India's diversion of waters was in violation of the 1960 accord. The first, more important matter has been decided conclusively in Pakistan's favor. The second one has thrown up a split verdict, which still marks an improvement in Pakistan's position: contradicting India's stance, the Court of Arbitration says that Kishenganga notwithstanding Pakistan is entitled to a minimum flow of water, i.e., 9 cubic meters per second, into its rivers. The water dispute between Pakistan and India dates back to Partition. The British made no arrangements whatsoever for the equitable distribution of the rivers in the Indus basin, even though the boundary between Pakistan and India cut right across it. The assumption was that the status quo would continue until Pakistan and India worked out an arrangement. This assumption was rudely disturbed on April 1, 1948, when India stopped the flow of certain canals into Pakistan.

Historians still debate the physical impact of the stoppage, but no one doubts that it left Pakistan with a deep sense of unease. From then on, the one consistent aim in Pakistan's water policy has been to minimize India's ability to interfere with flows. Thus, while the initial efforts to negotiate an agreement on water issues envisaged a cooperative, basin-wide mechanism, those efforts were soon abandoned in favor of a more practical approach based on clean, clear lines of demarcation. The end result, in 1960, was the division of rivers. India got the three eastern rivers; and Pakistan got the three western ones. The Indus Waters Treaty of 1960 also laid down strict obligations on the parties: India was to "let flow" the waters of the three western rivers allocated to Pakistan. And while it was allowed to use these western rivers for electricity generation, the design parameters of future hydroelectric plants were also specified in detail. The Treaty gave concrete form to Pakistan's apprehensions regarding India and strikes a balance between Pakistan's security needs and India's energy needs. In other words, India is free to build as many hydroelectric projects as it wants as long as it respects Pakistan's legitimate security concerns through designs that limit its ability to stop water flows to Pakistan. For example, the design parameters for run-of-the-river plants provide that the spillway for a hydroelectric plant shall not be gated unless absolutely necessary. Further, if a gated spillway becomes necessary, then the gates shall

be as high as possible. Similarly, other rules provide that to the extent there is any outlet from the reservoir of a hydroelectric plant, those outlets shall be as small and as high as possible.

What is a spillway? If the reservoir of a hydroelectric plant is a giant tub, then the spillway is the hole through which the tub is emptied. A reservoir without a gated spillway is like a tub with no drain: once it fills up, the excess water simply flows out over the top. On the other hand, a gated spillway allows reservoir water to be drained down. Since Pakistan does not want India to be able to empty reservoirs, it wants the spillways to be high. Between 1960 and 2007, there was little debate on this topic of spillways. This was partly because there was no dispute as to the effect of the relevant provisions, and partly because India built very few projects. All of this changed as a consequence of the Baglihar project. What made Baglihar different from earlier Indian projects was that its design provided for a number of very large spillways well below the surface of the dam's reservoir.

In simple terms, there is a portion of every reservoir that India is allowed to use (live storage) and a portion it is not (dead storage). Because the spillways at Baglihar were well below dead-storage level, this meant that India could control not just the "live storage" but also all the "dead storage" above the spillway. In concrete terms, Pakistan estimated that if India emptied the Baglihar reservoir during the winter, it would be able to stop the flow of the Chenab River for 27 days. So Pakistan challenged the Baglihar design, and the issue was ultimately referred to an independent neutral expert.

India's defense before this expert was that the design was justified because the low-level spillways would keep the reservoir free from sediment. Pakistan's response was that because the Treaty prohibits India from drawing down reservoir water below a certain point, the low-level outlets in the Baglihar design were useless. In return, India argued that even if it could not bring the water level down, the outlets were nonetheless effective. So far as the legality of drawing down the water level was concerned, both parties initially assumed that the Indus Waters Treaty prohibited it. The expert, however, was not to be so restrained. He first agreed with Pakistan that in the absence of drawdown, the low-level outlets were useless. However, instead of deciding in Pakistan's favor, he went ahead and held that because bringing the water level down was permitted in certain cases, the design of Baglihar was legal. The expert's decision placed Pakistan in an awkward position. A frontal challenge was out of the question because the Treaty clearly provides that the decision of an expert on all matters within his or her competence is final and binding. At the same time, the Baglihar decision was unacceptable and entirely outside the boundaries of the Treaty. More importantly, India then announced its plans to build a slew of projects on the western rivers, thereby raising the specter of Pakistan's archival being armed with the legal means to stop the flow of its rivers for months at a time. These announcements were then repeatedly highlighted by the more jingoistic elements of Pakistan's press causing panic among Pakistani pundits.

Pakistan decided to give up Baglihar as a lost cause and concentrate instead on challenging the principle

underlying the expert's decision. The strategy was to raise a general legal dispute regarding the legality of drawing down water for sediment control and have that dispute adjudicated by the Court of Arbitration rather than another neutral expert. This strategy was facilitated by the fact that the Indian design for Kishenganga also featured large low-level outlets.

It is this strategy that has now borne fruit in the Kishenganga arbitration. The Court of Arbitration has rejected the expert's argument and clearly decided that India is not entitled to draw down the water level of a reservoir except in the case of an unforeseen emergency. Since sediment control is not an unforeseen emergency, this means India will now have to change the designs of all its planned projects on the western rivers. In short, India's projects will now have very limited ability to interfere with the flow of the Pakistan-allotted western rivers. The Kishenganga award thus restores the balance contained in the Treaty and safeguards Pakistan's security.

The second question referred by Pakistan to the Court of Arbitration was specific to Kishenganga. In brief, Kishenganga envisages the generation of electricity via the diversion of water from the Neelum River into Wullar Lake, which drains into the Jhelum River, which rejoins the Neelum River at Muzaffarabad (so the diverted water eventually returns to Pakistan). Pakistan challenged this diversion on two grounds: first, that diversion was per se illegal; and second, that India's plans to divert all the water possible would negatively affect Pakistan's planned downstream projects on the Neelum. The Court of Arbitration has rejected Pakistan's first contention that the Treaty prohibits any diversion, but accepted its second one that India does not have an unlimited right to divert waters. This is not a terrible calamity for Pakistan. In practical terms, India's right to divert is limited to the Kishenganga project alone. Critics who fear that India has been handed a blank check to divert waters meant for Pakistan are mistaken. In terms of the amount of permissible diversion, Pakistan presented two arguments.

The first argument was that because the Treaty conditioned India's diversion upon Pakistan's "then existing" usages, India could only divert water to such extent and at such times as would not affect Pakistan's downstream usages, whenever those usages happened to come into effect. The reason for the "whenever" argument was because while Pakistan is also constructing the 969-megawatt Neelum-Jhelum hydroelectric plant near Muzaffarabad, this plant is likely to finish construction several years after Kishenganga. Pakistan's argument was that India can divert the water so long as Pakistan does not need it, but that India will have to stop diverting as and when Pakistan needs that water (i.e., when Neelum-Jhelum comes into operation). Pakistan's second argument was an environmental one. It contended that a river, by itself, has a particular value which must be respected by keeping the river "alive" through the release of certain minimum flows.

In both cases, Pakistan's intent was to preserve as much of the natural water flow of the Neelum River so as to

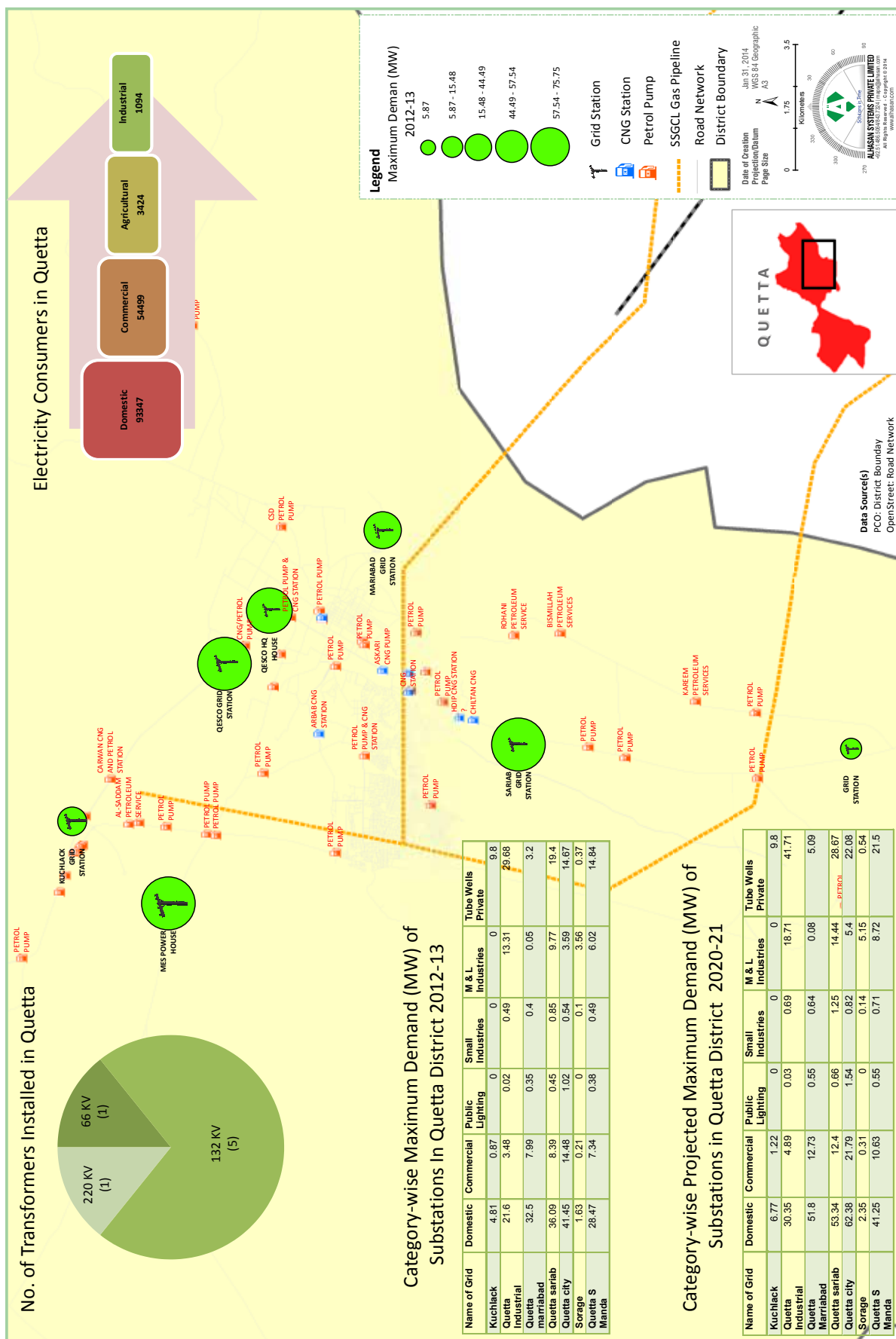
protect the economic value of the Neelum-Jhelum plant. According to Pakistan's estimates, India's planned diversion would result, on average, in a 16 percent reduction of annual flows at the Neelum-Jhelum plant.

India's response to both of these arguments was, in effect, to tell Pakistan to lump it. India argued that since it had committed to the Kishenganga project before Pakistan had committed to Neelum-Jhelum, India had acquired a permanent right of diversion which could never be affected, no matter how many Pakistani hydroelectric plants came online downstream of Kishenganga. Similarly, India argued that the Treaty made no express provision for environmental harm and, consequently, India was not required to release any water whatsoever so long as such water could be diverted for energy-generation purposes. The Court of Arbitration has rejected both of India's arguments. It has held that India's right of diversion is not absolute but must also take into account Pakistan's downstream usages. Similarly, the Court of Arbitration has held that modern environmental norms must be read into the Treaty and that India must ensure a minimum flow of 9 cubic meters per second at all times. As a result, the feared 16 percent reduction in annual flows at Neelum-Jhelum has been shaved down to 10 percent. This is not an optimal result from Pakistan's perspective, but certainly a significant improvement over what India was earlier offering, i.e., nothing.

Notwithstanding the fact that Pakistan has—on balance—scored a victory, the Kishenganga award has met with a storm of criticism in Pakistan. This is largely because the impact of the design issue is difficult to comprehend. The other reason for the criticism is the lingering belief in Pakistan that the Indus Waters Treaty was a sellout by the Ayub Khan regime. This is rubbish. Pakistan's decision to sign the Treaty is regarded by almost all knowledgeable scholars as a smart and pragmatic decision, which protected its extremely vulnerable lower-riparian position. The reason that Pakistan wound up with three rivers is because regimes preceding Ayub Khan's had rejected offers to accept four and even five rivers. The three western rivers assigned to Pakistan account, on average, for 80 percent of available water. Finally, the fact remains that Pakistan was not in a position to insist on a better deal in 1960. It is in an even weaker position now: if the Treaty were to be renegotiated today, it is a cast-iron certainty that Pakistan would receive fewer benefits than it currently enjoys.

Pakistan took two questions to the Court of Arbitration. One has been emphatically decided in Pakistan's favor, while the other represents a partial victory. Pakistan's victory on the drawdown question will affect every future project India designs. And India's ability to divert water at Kishenganga has been limited and won't recur. The Dec. 20 award upholds the Indus Waters Treaty of 1960 and secures Pakistan's energy future. Pakistani critics who claim otherwise are, as usual, missing the forest for the trees.

## MAXIMUM DEMAND (MW) OF SUBSTATIONS - QUETTA



## Sun Kings: Can Solar Power Solve Pakistan's Energy Crisis?

By Palash Ghosh

International Business Times, January 21, 2014

Amid an ever-worsening energy shortage in Pakistan, the country's parliament has chosen an alternative source of power: solar. A 1.8-megawatt (MW) solar power plant funded by the Chinese is being installed in Parliament House in Islamabad, which the Pakistan government hopes will save some \$1 million in its annual energy utility bills and reduce greenhouse gas emissions. AlertNet, part of the Guardian newspaper's Environment Network, reported that construction of the solar panels commenced in the first week of the New Year. The Chinese government is picking up the tab of the initial cost (of about \$60 million) as a gesture of friendship between the two Asian giants. "This is the first project of its kind [in a public building] in Pakistan, and late, more public buildings will be converted to solar power to overcome the energy crisis," said Munawar Abbas Shah, a special secretary at the National Assembly (the lower house of Pakistan's Parliament). Both the National Assembly and the Senate (upper house of parliament) meet in the building. "The consumption of electricity in the parliament even jumps over 2 MW in summers when the house is in session," Shah added. AlertNet noted that while Pakistan does not plan a comprehensive switch to solar power, it has enlisted Chinese help to build a 10,000-acre solar park in Punjab province, which could generate 1,000 MW.

Separately, in a country where millions of people are not even connected to the national electricity grid (and even millions more who are connected suffer periodic power outages that can last for hours), solar energy may offer a form of relief. According to the World Bank report, almost half (44 percent) of all households in Pakistan are not connected to the electricity grid. About four-fifths of these families are located in rural regions, leading many of them to use kerosene as a source of light. Iftikhar Ahmad Qaisrani, founder of the Renewable Energy Society for Education, Awareness Research and Community Help, an Islamabad-based renewable energy advocate, said that Pakistan needs investments from the government and private sectors to build a solar power infrastructure, noting that the county enjoys 320 days of sunshine annually and about eight hours of sun every day.

Qaisrani also noted that Pakistan is far behind India and Bangladesh on these fronts -- these nations have already significantly engaged the use of solar power in rural and farming areas (where people also lack links to the electricity grid). But Pakistan, he added, must make it economical and practical. "Installation of solar power is a one-time expenditure, and people should be encouraged to avail [themselves of] the opportunity," he said. "This is the right time to encourage the public and private sector to focus on solar energy and provide off-grid solutions to people living in far-flung areas of the country. Qaisrani estimated that it would cost between \$3,500 and \$4,000 to convert an individual home to solar power -- a rather large expenditure for the average Pakistani household. But he pointed out that such a system could deliver continual energy for 25 years. "Pakistan can also save millions of dollars [in] foreign reserves per [year] just by switching to solar power," Qaisrani further noted, citing that fossil fuels still account for almost two-thirds (65 percent) of annual power generation in the country. Since half of that fuel has to be imported, Pakistan's power supply can be quite costly. But solar energy is not cheap either -- at least in the short term, since parts necessary for solar panels and

power systems must be manufactured overseas (principally from China, Japan and Germany) and imported. These costs are exacerbated by heavy import duties slapped on solar power units. Abdul Hanan Siddhu, a solar energy consultant, urges the Islamabad government to do away with such taxes. "The government should also encourage local manufacturers to start cell manufacturing to reduce the cost," he said. "On top of this, government subsidies could help boost the solar off-grid lighting sector."

In an op-ed published in the Express Tribune newspaper, Ahsan Ashraf said Pakistan should pursue solar and wind power instead of nuclear energy. "We have ample supplies for wind and solar power, which we can use to tackle our energy crisis," Ashraf wrote. "With Pakistan's incredible potential of untapped renewable resources, why is Pakistan trying an untested nuclear technology when the rest of the world is moving towards greener energy solutions?" Ashraf noted that advocates of nuclear power in Pakistan over-estimate the country's ability to meet economic targets and overcome the failures of its incompetent and corrupt government. "In order for Pakistan to meet its own nuclear development estimates, it would have to emulate and surpass the efforts of countries like the United States and France. This idea seems highly unlikely and unrealistic to me," he declared. "Development of nuclear power requires long-lasting coordination between private and government sectors and a strong government effectiveness and control of corruption, since nuclear projects require large capital expenditures. Compared to countries like the United States, France and South Korea, that have developed nuclear power at impressive rates in the past, Pakistan cannot compare in government effectiveness and control of corruption."

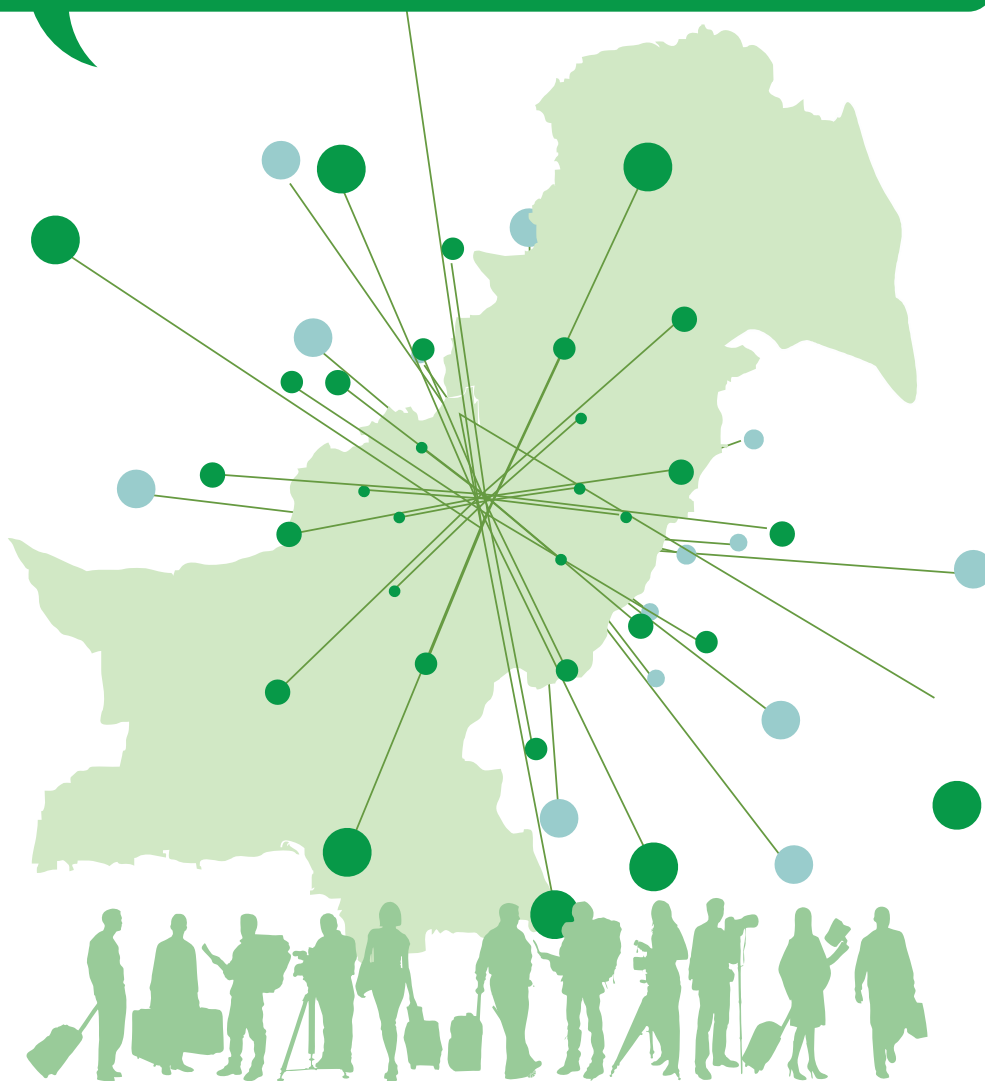
Solar and wind, in contrast, can be developed much more easily and can eventually provide safe, cheap power to a country in need of such blessings. Ashraf cited the example of a Pakistani village called Narian Khorian (near Islamabad), which has installed 100 solar panels with help from a local company. "Today, all houses in the village have sufficient energy to run an electrical fan and two light bulbs," he said. "An average solar panel lasts almost 25 years and has no maintenance costs associated with it. There is no downtime or risk of failures that may cause large-scale evacuations or other threats to life and/or property. This is the solution that Pakistan has been looking for: A change that is driven by the people on fundamental grassroots level."

Meanwhile, Pakistan is likely to endure worsening power surges, especially in its sweltering summers when demand surges beyond the capacity of the existing electrical grid. Power outages lasting 18 to 20 hours a day are not unusual across Pakistan -- all of which hurts an already faltering economy. The extended absence of electrical power leads to wasted food in refrigerators and families unable to cook, clean or wash, and hospital patients in grave danger, not to mention the extreme discomfort of dealing with heat and humidity. There are many reasons why Pakistan undergoes repeated power outages, but it basically all boils down to soaring demand mixed with mismanagement and corruption among virtually all levels of government. The public's discontent has manifested itself in frequent street protests that

frequently turn violent. "Pakistan's dilemma on the electricity front does not have to do with the capacity already installed for generation purposes, noted Farhan Bokhari, writing in the Gulf News newspaper. Instead, the shortages are driven mainly by the inability of the government to pay for electricity produced by privately owned companies, as it tries to overcome a ballooning fiscal deficit -- thanks to the visible squandering of precious budgetary resources. "Tackling such a challenge in part must also be linked to inspiring the broad mainstream public across Pakistan, Bokhari added.

On a daily basis, Pakistan's power demand averages 16,000 MW, but the nation can produce only about 12,000 MW. In the summer months, this gap can be as high as 7,000 MW, Reuters reported. Bilal Mustafa, who sells solar energy kits to households as the owner of Hussain Electronics in Rawalpindi, said demand has jumped in the past few years. "One of the reasons behind the soaring demand for solar energy systems is itself the sale of the systems. People watch others using solar power and they hanker to try it out, too," he said.

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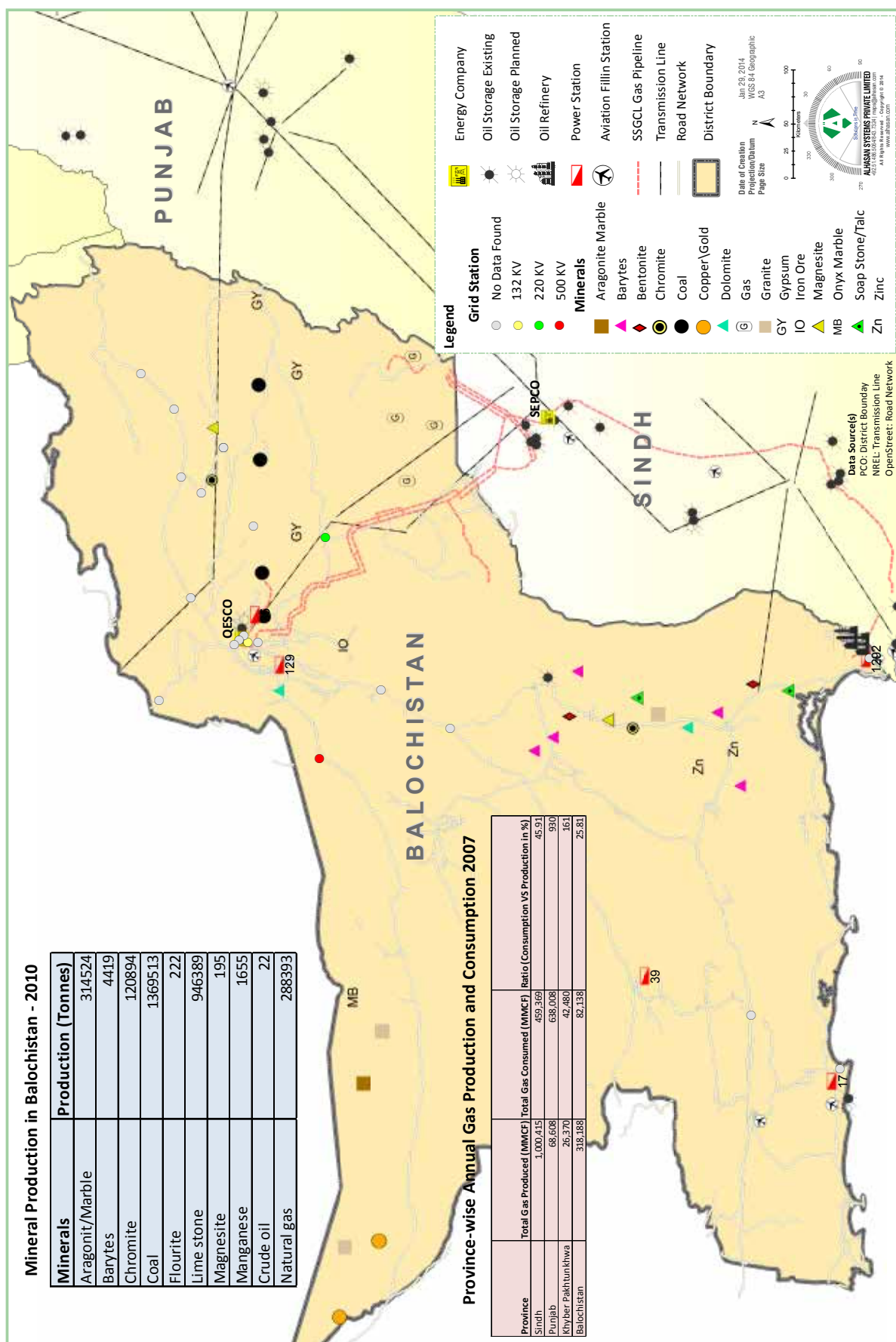
## BALUCHISTAN ENERGY PROFILE

Mineral Production in Balochistan - 2010

Minerals	Production (Tonnes)
Aragonite/Marble	314524
Barytes	4419
Chromite	120894
Coal	1369513
Flourite	222
Lime stone	946389
Magnesite	195
Manganese	1655
Crude oil	22
Natural gas	288393

Province-wise Annual Gas Production and Consumption 2007

Province	Total Gas Produced (MMCF)	Total Gas Consumed (MMCF)	Ratio (Consumption VS Production in %)
Sindh	1,000,415	459,369	45.91
Punjab	68,608	638,008	930
Khyber Pakhtunkhwa	26,370	42,480	161
Balochistan	315,188	82,138	25.81



## سرخیاں

### پٹرول، ہائی اسپیڈ ڈیزل کی قیمتیں برقرار رکھنے کا نوٹیفکیشن جاری

آج ٹی وی

31 جنوری 2014

## تفصیلات

اسلام آباد: اوگر نے پٹرول، ہائی اسپیڈ ڈیزل اور ہائی اوکٹین کی قیمتیں برقرار رکھنے کا نوٹیفکیشن جاری کر دیا، مٹی کا تیل ایک روپے چوبیس پیسے اور لائٹ ڈیزل ایک روپے دو پیسے فی لیٹر سستا کر دیا گیا ہے۔ وزارت خزانہ نے اوگر کی جانب سے بھیجی گئی سری مسٹر دکر تے ہوئے پٹرولیم مصنوعات کی قیمتوں میں معمولی کمی کی منظوری دے دی ہے، اوگر کی جانب سے جاری نوٹیفکیشن کے مطابق پٹرول، ہائی اسپیڈ ڈیزل اور ہائی اوکٹین کی قیمتیں برقرار رکھی گئی ہیں، مٹی کے تیل کی قیمت میں ایک روپے چوبیس پیسے فی لیٹر سستا کرنے کی منظوری دی ہے، جس کے بعد نئی قیمت ایک سو چھ روپے چھتر پیسے فی لیٹر مقرر کر دی گئی ہے، لائٹ ڈیزل کی قیمت میں ایک روپے دو پیسے فی لیٹر کم ہونے سے نئی قیمت سو روپے بائیس پیسے فی لیٹر مقرر کی گئی ہے، اوگر نے پٹرول کی قیمت تین روپے چار پیسے، ہائی اسپیڈ ڈیزل پانچ روپے ستائیس پیسے فی لیٹر سستا کرنے کی سفارش کی تھی جسے وزارت خزانہ نے مسٹر دکر دیا ہے، پٹرول کی قیمت ایک سو بارہ روپے چھتر پیسے اور ڈیزل کی قیمت ایک سو سولہ روپے بھتر پیسے فی لیٹر برقرار رکھی گئی ہے، وزارت خزانہ کا کہنا ہے کہ پٹرول اور ڈیزل مہنگانہ کر کے عوام کو ایک ارب روپے کی سبب دی دیں گے۔

### توانائی اور زراعت کے شعبے میں سرمایہ کاری کی ضرورت ہے، قائم علی شاہ

جنگ نیوز

31 جنوری 2014

کراچی (اسٹاف رپورٹر) وزیر اعلیٰ سندھ سید قائم علی شاہ نے کہا ہے کہ صوبہ سندھ کو نئے، شمسی توانائی و دیگر قدرتی وسائل سے مالا مال ہے اور یہاں توانائی اور زراعت کے شعبے میں سرمایہ کاری کی ضرورت ہے، زراعت کا شعبہ ملکی اقتصادیات کے لئے ریڑھ کی ہڈی کی حیثیت رکھتا ہے جو کہ 70 فیصد لوگوں کا ذریعہ معاش ہے۔ ان خیالات کا اظہار انہوں نے جمعرات کو کینیڈا کے ہائی کمشنر گریگ جیو کاس سے ملاقات کے دوران کیا جنہوں نے آج وزیر اعلیٰ ٹائوس میں ملاقات کی۔ وزیر اعلیٰ سندھ نے کہا کہ دریائے سندھ کے آخری سرے میں ہونے کے باعث ہمیں زراعت کے پانی کی قلت کا سامنا ہے۔ انہوں نے کہا کہ زراعت کے لئے صوبہ سندھ میں زرخیز زمین ہے اور زرعی پیداوار نہ صرف آباد گاروں کو فائدہ دیتی ہے بلکہ غیر ملکی درآمدات بھی کمایا جاسکتا ہے، زراعت کو جدید خطوط پر استوار کرنے کے لئے آباد گاروں کو فنی اور پیشہ ورانہ معاونت کی ضرورت ہے۔ انہوں نے کہا کہ صوبہ سندھ میں دیگر صوبوں بشمول پنجاب کے فی ایکڑ پیداوار نسبتاً زیادہ ہے تاہم اس میں مزید بہتری کی گنجائش موجود ہے۔ کینیڈا کے ہائی کمشنر جیو کاس سے ملاقات کے دوران گفتگو کرتے ہوئے انہوں نے کہا کہ کینیڈا زراعت کے حوالے سے ترقی یافتہ ہے اور کم سے کم پانی سے زیادہ پیداوار اور فنی ایڈیٹ پیداوار میں اضافے کی مہارت رکھتا ہے۔ انہوں نے کہا کہ وہ چاہتے ہیں کہ زراعت کے حوالے سے سندھ میں ایک کانفرنس کا انعقاد کیا جائے جس میں زراعت کے جدید طریقے کار، کاشتکاری اور فصلوں کی بھی ایڈیٹ اضافی پیداوار کے حوالے سے معلومات اور تجربات شیئر کئے جائیں۔ انہوں نے کہا کہ سندھ کے آم دنیا بھر میں مشہور ہیں جن کی بہتر درجہ بندی اور مارکیٹنگ کے ذریعے عالمی منڈی میں بھیجا جاسکتا ہے۔ وزیر اعلیٰ سندھ نے زرعی کانفرنس کے انعقاد کے آئیڈیا کا خیر مقدم کرتے ہوئے کہا کہ حکومت سندھ کی جانب سے سیڈ کارپوریشن، سندھ آباد گار بورڈ اور ایگریکلچرل جیو کاس کانفرنس میں اپنے مسائل اور ان کے حل پیش کرنے کے لئے کہا جائے گا۔

### بجلی اور گیس چوروں کیخلاف بلا امتیاز کارروائی جاری ہے: شہباز شریف

دنیا نیوز

30 جنوری 2014

وزیر اعلیٰ پنجاب محمد شہباز شریف نے کہا ہے کہ پنجاب میں بجلی اور گیس چوروں کے خلاف بلا امتیاز کارروائی جاری ہے۔ لاہور: وزیر اعلیٰ محمد شہباز شریف نے ایوان وزیر اعلیٰ لاہور میں معروف کمپنی ایریکسن کے نائب صدر کی قیادت میں وفد سے ملاقات کی۔ وزیر اعلیٰ محمد شہباز شریف کا کہنا تھا کہ توانائی بحران سے نمٹنے کیلئے موثر اقدامات کئے جارہے ہیں۔ متعدد غیر ملکی کمپنیوں کے ساتھ توانائی سیکٹر میں تعاون کے معاہدے کئے گئے ہیں۔ محمد شہباز شریف کا کہنا تھا کہ پنجاب میں بجلی و گیس چوروں کے خلاف بلا امتیاز کارروائی جاری ہے۔

### توانائی کے شعبے میں پاک چین اشتراک . تحریر: سیف اللہ چٹھہ، سیکرٹری پانی و بجلی

جنگ نیوز

29 جنوری 2014

پاکستان کو اس وقت توانائی کے شعبے میں مجموعی طور پر شدید بحران کا سامنا ہے اور گزشتہ پندرہ برس میں مختلف حکومتوں کی مکمل غفلت اور عدم توجہی سے خصوصاً پاور سیکٹر پاکستان کی تاریخ کے سب سے بڑے بحران سے گزر رہا ہے۔ عوام کو اچھی طرح پتہ ہے کہ بجلی کی طلب اور سمد کے توازن میں تقریباً چھ ہزار میگا واٹ کی کمی کے باعث گزشتہ کئی سالوں سے صنعت و حرفت کا پیہ جام ہو چکا ہے اور اس کے نتیجے میں ہر روز گری کی شرح میں خوفناک حد تک اضافہ ہوا ہے۔ نوبت یہاں تک آن پہنچی تھی کہ گزشتہ حکومت کے خاتمے کے وقت تمام ملک لوڈ شیڈنگ کے عذاب کا شکار تھا اور شہری علاقوں میں دن رات کا بیشتر حصہ جبکہ دیہاتی علاقوں میں کئی کئی روز بجلی کا نہ آنا ایک معمول بن چکا تھا۔ موجودہ حکومت نے عمران اقتدار سنبھالنے ہی جنگی بنیادوں پر اس بحران پر کام شروع کیا اور چھ ماہ میں بجلی کے بحران کی صورتحال میں نمایاں بہتری پیدا کی۔ اس کے ساتھ ساتھ حکومت نے بجلی کی تیزی سے بڑھتی ہوئی قیمتوں کو کم کرنے اور عام آدمی کے لیے قابل استعمال بنانے کے لیے ایک مکمل انرجی پالیسی وضع کی جس کی نہ صرف مقامی بلکہ بین الاقوامی سطح پر پذیرائی ہوئی۔ توانائی کے شعبے میں چینی سرمایہ کاری پر شائع کالم کے حوالے سے یہ بتانا ضروری ہے کہ کوئلہ کے استعمال سے چلنے والے بجلی گھر وں کا قیام پالیسی کا ایک کلیدی حصہ ہے کیونکہ صرف وہی سستی بجلی حاصل کرنے کا فوری ذریعہ بن سکتے ہیں۔ یہ بات بھی سب کے علم میں ہے کہ پاکستان شدید معاشی دباؤ کا شکار ہے اور اگرچہ ورلڈ بینک، ایشیائی ترقیاتی بینک اور اسلامی اقتصادی بینک نے موجودہ حکومت کی معاشی پالیسیوں پر مکمل اعتماد کا اظہار کیا ہے۔ ان کی طرف سے دیے جانے والے وسائل تباہ حال انفراسٹرکچر کی بحالی اور توانائی کے شعبے میں شدید کمی کے مسائل کے لئے بالکل ناکافی

ہیں۔ کالم نگار واقف ہیں کہ چین پاکستان کا وہ قابل اعتماد دوست ہے جس نے حکومت کی مخلصانہ کوششوں کو مد نظر رکھتے ہوئے پاکستان میں چینی کمپنیوں کے ذریعے نہ صرف توانائی بلکہ تمام انفراسٹرکچر کے منصوبوں میں سرمایہ کاری پر آمادگی ظاہر کی ہے۔ پچھلے ماہ کراچی میں شروع کیا جانے والا دو ہزار دو سو بیس میگاواٹ کابلی بجلی گھر، جس پر ساڑھے چھ ارب ڈالر لاگت آ رہی ہے، اس سلسلے کی ایک کڑی ہے۔ اسی طرح حکومت چین نے اپنی سرکاری کارپوریشنز اور اداروں کی حوصلہ افزائی کی ہے کہ وہ پاکستان میں توانائی کے شعبے میں سرمایہ کاری کریں۔ جہاں تک کولے سے چلنے والے بجلی گھروں کے منصوبے کا تعلق ہے حکومت پاکستان اس سلسلے میں مکمل شفافیت کا قابل رشک ریکارڈ قائم رکھے گی۔ گذشتہ پانچ سالوں کے دوران پنجاب میں اور پچھلے سات ماہ سے وفاق میں پاکستان مسلم لیگ (ن) کی حکومت کی کارکردگی اس حوالے سے سب کے سامنے ہے۔ ان تمام منصوبوں پر عملدرآمد نجی شعبے کے ذریعے کیا جا رہا ہے اور اس میں عوام کے پیسے کی ایک پائی بھی استعمال نہیں ہوگی۔ نجی طور پر لگائے جانے والے بجلی گھروں کی قیمت اس لیے بے معنی ہے کہ حکومت نہ تو اس قیمت کی ادائیگی کی ذمہ داری لے گی اور نہ وہ قرض کے طور پر حاصل کرے گی۔ حکومت صرف اور صرف ان بجلی گھروں سے پیدا ہونے والی بجلی کی خریداری کے لیے ضامن ہوگی اور بجلی کی کمپنیوں کی اس سے متعلقہ رقم کی ادائیگی کو یقینی بنائے گی۔ اس کے علاوہ بجلی کی خریداری کے لیے فی کلوواٹ ریٹ کا تعین بھی پہلے سے کر دیا جائے گا اور اس ریٹ پر یہ بجلی تمام لوگوں سے خریدنے پر آمادگی ظاہر کی جائے گی، البتہ یہ ضرور ہے کہ جو کاروباری ادارے، کمپنیاں یا کارپوریشنز ان منصوبوں کے لیے مطلوبہ سرمایہ کاری کا انتظام اپنے طور پر کریں گی اور جن کی ایسی سرمایہ کاری کی صلاحیت مستحکم ہوگی انہیں یقینی طور پر ترجیح دی جائے گی۔ جو بین الاقوامی اصولوں اور مردہ طریقہ کار کے عین مطابق ہے۔ مختلف ممالک کے ایگزم بینک اور ترقیاتی بینک جن میں چین کے ایسے ادارے بھی شامل ہیں۔ بنیادی طور پر اپنی کمپنیوں کو بیرون ملک کاروبار بڑھانے کے لیے مالی وسائل فراہم کرتے ہیں۔ دوست ملک چین اس سلسلہ میں انتہائی پرکشش شرائط پر پاکستان میں سرمایہ کاری کی حوصلہ افزائی کر رہا ہے۔ جس کے لیے حکومت پاکستان نہ صرف ان کی شکر گزار ہے بلکہ ان کے اس اقدام کو انتہائی قدر کی نگاہ سے دیکھتی ہے۔ ہمارے نقطہ نظر سے اس نازک ترین معاشی صورتحال میں عوامی جمہوریہ چین کی جانب سے یہ حوصلہ افزاء اقدامات دونوں ملکوں کے درمیان پائیدار اور لازوال دوستی کے مظہر ہیں۔

اسلام آباد (خالد مصطفیٰ) سوئی سدرن گیس کمپنی لمیٹڈ کے بورڈ آف ڈائریکٹرز نے اینگرو کارپوریشن کی مکمل ملکیت ذیلی کمپنی کے ساتھ 2 ارب ڈالر مالیت کے ایل این جی سرو سز معاہدے کی منظوری دے دی ہے۔ بورڈ آف ڈائریکٹرز کا اجلاس ڈاکٹر مفتاح اسماعیل کی صدارت میں منگل کو یہاں ہوا۔ ڈاکٹر مفتاح اسماعیل نے، جو بورڈ آف انوسٹمنٹ کے چیئرمین بھی ہیں، رابطہ کرنے پر تصدیق کی کہ سوئی سدرن گیس کمپنی کے بورڈ آف ڈائریکٹرز نے اینگرو کے ساتھ ایل این جی سرو سز معاہدے کی مشروط منظوری دے دی ہے۔ ان کا کہنا تھا کہ اینگرو 400 ایم ایم سی ایف ڈی ایل این جی کی درآمد پر 66 سینٹ فی ایم ایم بی پی یو بطور سروس چارجز لے گا جو علاقے میں سب سے کم ہے۔ اینگرو ٹریڈر ٹیل نصب کرے گا، جس کی گنجائش 690 ایم ایم سی ایف ڈی مائع قدرتی گیس ہوگی۔ ایل ایس اے کی منظوری کے بعد وزارت تیل و قدرتی وسائل اس کی سری منظوری کیلئے اقتصادی رابطہ کمیٹی کو بھیجے گی جس کے بعد اینگرو ایل این جی درآمد کرنے سے قبل ٹریڈر کی سہولت تیار کرے گی جو نومبر 2014 تک ٹھوس شکل اختیار کر جائے گی۔ پاکستان اسٹیٹ آئل (پی ایس او) 400 ایم ایم سی ایف ڈی کو یقینی بنانے کیلئے لیٹر آف کمرٹ فراہم کرنے کی پابند ہوگی، بصورت دیگر سوئی سدرن گیس کو 200,000 ڈالر جرمانہ اینگرو کو ادا کرنا ہوگا۔ اسی طرح سوئی سدرن گیس کمپنی، سوئی سدرن کو لیٹر آف کمرٹ دینے کی پابند ہوگی کہ وہ ہر صورت 400 میں سے 250 ایم ایم سی ایف ڈی گیس خریدے گی، ایک اور کمرٹ لیٹر میں یہ یقین دہانی بھی کرائے گی اگر سوئی سدرن اس کو گیس فراہم کرنے میں ناکام رہتی ہے تو وہ کسی بھی چارجز طلب نہیں کرے گی۔

**بن بجلی کی پیداوار بڑھنے کے باوجود بجلی کا شارٹ فال دو ہزار تین سو میگاواٹ تک برقرار ہے۔ لوڈ شیڈنگ کا دورانیہ نو سے بارہ گھنٹے تک ہو گیا۔**

لاہور: این ٹی ڈی سی حکام کے مطابق بجلی کی مجموعی طلب 11 ہزار 200 اور پیداوار آٹھ ہزار 900 میگاواٹ ہے۔ بن بجلی ذرائع ایک ہزار 850 تھرمل پلانٹس ایک ہزار 700 اور آئی پی پیز پانچ ہزار 350 میگاواٹ بجلی فراہم کر رہے ہیں۔ نہروں کی بھل صفائی کا عمل مکمل ہونے کے بعد بڑے ڈیمز سے پانی کا اخراج بڑھانے سے بن بجلی کی پیداوار میں بھی بتدریج اضافہ ہو رہا ہے لیکن شارٹ فال میں کمی نہیں ہو رہی۔ ذرائع کے مطابق شہری علاقوں میں نو اور دیہی علاقوں میں بارہ گھنٹے تک بجلی کی بندش کی جارہی ہے۔

**وزیراعظم نواز شریف نے کہا ہے کہ معاشی ترقی کیلئے وسائل بروئے کار لائے جا رہے ہیں۔ وزیراعظم نے فیصل آباد میں بین الاقوامی معیار کے انیئر پورٹ کی تعمیر کی بھی ہدایت کی۔**

اسلام آباد: فیصل آباد ڈویژن کے ارکان قومی اسمبلی نے وزیراعظم نواز شریف سے اسلام آباد میں ملاقات کی۔ ارکان سے گفتگو کرتے ہوئے وزیراعظم کا کہنا تھا کہ ملک میں امن و امان کے قیام سے معیشت تیزی سے ترقی کرے گی۔ پاکستانی نوجوانوں کی تعریف کرتے ہوئے وزیراعظم نے کہا کہ نوجوانوں کا عزم اور حوصلہ بے مثال ہے۔ موجودہ حکومت ان کی بھرپور مدد کر رہی ہے۔ وزیراعظم نے ایوی ایشن ڈویژن کی ہدایت کی کہ فیصل آباد میں نجی سرکاری شرکاء کی ادارت سے بین الاقوامی معیار کا انیئر پورٹ تعمیر کیا جائے۔ ارکان قومی اسمبلی نے وزیراعظم کو اپنے حلقوں میں ترقیاتی کاموں سے آگاہ

**سوئی سدرن نے دو ارب ڈالر مالیت کے ایل**

**این جی معاہدے کی منظوری دیدی**

جنگ نیوز

29 جنوری 2014

**بجلی کا شارٹ فال برقرار، لوڈ شیڈنگ میں**

اضافہ

دنیا نیوز

28 جنوری 2014

**معاشی ترقی کیلئے وسائل بروئے کار لائے جا**

**رہے ہیں: نواز شریف**

دنیا نیوز

28 جنوری 2014

کیا۔ ارکان نے پارلمانی پارٹی اجلاس میں وزیر خزانہ اور وزیر داخلہ کی بریفنگ کو پرامید قرار دیا۔

کراچی (اسٹاف رپورٹر) حکومت سندھ نے اعلان کیا ہے کہ تھر میں صرف 5000 میگا واٹ کے کولے سے چلنے والے بجلی گھر نصب کیے جائیں گے جبکہ باقی بجلی گھر کیٹی بندر میں نصب کیے جائیں گے۔ یہ اعلان اتوار کو وزیر اعلیٰ سندھ کے مشیر برائے خزانہ و توانائی سید مراد علی شاہ نے مقامی ہوٹل میں تھر کے کولے پر منعقدہ دوروزہ کانفرنس کے اختتامی اجلاس سے خطاب کرتے ہوئے کیا۔ کانفرنس میں ڈاکٹر شرم مبارک مند کے زیر زمین کولہ گیس بنانے کے منصوبے کی مخالفت اور حق میں بھی زوردار مباحثہ ہوا جس کے بعد منصوبے کے حامی اور مخالفین اپنی سفارشات میں اس منصوبے کی آزادانہ فیصلہ سازی کرانے کے مطالبے پر متفق ہو گئے۔ کانفرنس کے متعدد شرکاء نے تھر میں ڈاکٹر شرم مبارک مند کے منصوبے پر زبردست تنقید کی اور کہا کہ یہ منصوبہ قابل عمل نہیں ہے۔ اس پر حکومت سندھ کی خطیر رقم ضائع ہو گئی ہے۔ اس منصوبے کو ختم کرنا چاہئے تاہم منصوبے کے چیف کیسٹ ڈاکٹر اشرف موئن نے اس منصوبے کا دفاع کرتے ہوئے نہ صرف اس کا دفاع کیا اور بتایا کہ منصوبے سے کامیابی کے ساتھ گیس حاصل کی جا رہی ہے بلکہ یہ خوشخبری بھی دی کہ کچھ ہی عرصے میں یہاں سے 20 ہزار کیوبک میٹر گیس فی گھنٹہ نکالنا شروع ہو جائے گی۔ کانفرنس کی سفارشات میں بھی یہ مطالبہ کیا گیا کہ یو سی جی پر وجیکٹ کی دوبارہ آزادانہ فیصلہ سازی کی جائے۔ کانفرنس کا موضوع ”توانائی میں خود کفالت، تھر کول اور پاور پروڈیوٹس کی تیز تر ترقی“ تھا۔ کانفرنس کا اہتمام دائود پوٹی ور سٹی آف انجینئرنگ اینڈ ٹیکنالوجی اور حکومت سندھ کے محکمہ توانائی نے مشترکہ طور پر کیا تھا۔ سید مراد علی شاہ نے اپنے خطاب میں کہا کہ تھر کول فیلڈ ز اسلام کوٹ سے کیٹی بندر تک ریلوے لائن بچھائی جائے گی۔ پاور پلانٹس کے لیے تھر سے کولہ کیٹی بندر لایا جائے گا جبکہ اضافی کولہ برآمد کیا جائے گا۔ انہوں نے کہا کہ تھر کول سے متعلق بنیادی کام حکومت سندھ کے کچھ ہے۔ انفراسٹرکچر کی تعمیر کے لیے 24 ارب روپے مختص کئے گئے تھے، جن میں سے 18 ارب روپے اس سال کے آخر تک خرچ کر لیے جائیں گے۔ انہوں نے کہا کہ تھر کے متاثرہ لوگوں کی دوبارہ آباد کاری (ری سیٹلمنٹ) کا مکمل پلان بنایا جائے گا۔ کوشش کریں گے کہ کم سے کم لوگ متاثر ہوں۔ انہوں نے کہا کہ 31 جنوری کو وزیر اعظم میاں نواز شریف اور سابق صدر آصف علی زرداری کو کولے کی مائننگ اور پاور پروڈیوٹس کے پہلے منصوبے کا سنگ بنیاد رکھیں گے۔ ملک کی دو بڑی پارٹیوں کی قیادت کی موجودگی سے سرمایہ کاروں کی حوصلہ افزائی ہوگی۔ وزیر اعلیٰ سندھ کے کوارڈینیٹر تاج حیدر نے اپنے خطاب میں کہا کہ کولے کی مائننگ زیادہ سے زیادہ ہونی چاہیے۔ اس بحث میں نہیں پڑنا چاہیے کہ کولے کی گیس کلیشن زیر زمین ہو یا زمین کے اوپر ہو، کولے کو بہتر طور پر استعمال کرنا چاہیے۔ اگر دنیا سرمایہ کاری نہیں کر رہی تو توکل ٹینکس اس مقصد کے لیے کنسورٹیم بنایا جائے۔ پاکستان انجینئرنگ کونسل کے چیئرمین سید عبدالقادر شاہ نے کہا کہ تھر کے منصوبے کے لیے ہماری کولہ ہر قسم کی تکنیکی معاونت فراہم کرے گی، پی سی ایس آئی آر کے سابق چیئرمین ڈاکٹر فرید ملک نے یو سی جی پر وجیکٹ کی مخالفت کی اور کہا کہ تھر کا کولہ یو سی جی کے لیے مناسب نہیں ہے۔ اگر کولہ کی مائننگ ہو سکتی ہو تو یو سی جی کی ضرورت ہی نہیں ہے۔ دنیا میں کہیں بھی یو سی جی کمرشل بنیادوں پر نہیں ہوتی، اب اس ڈرامے کو ختم ہونا چاہئے۔ کانفرنس کے شرکاء نے مباحثے کے وقفے کے دوران یو سی جی کی زبردست مخالفت کی تاہم یو سی جی تھر کول پروڈیوٹس کے چیف کیسٹ ڈاکٹر اشرف موئن نے کانفرنس سے شرکاء کو تھر میں انڈر گراؤنڈ کولہ گیس کلیشن (یو سی جی) کے منصوبے سے آگاہ کیا اور کہا کہ یہ منصوبہ قابل عمل ہے اور ہم گیس پیدا کر رہے ہیں۔ کچھ عرصے کے بعد یہاں سے 20 ہزار کیوبک میٹر گیس فی گھنٹہ نکالنا شروع ہو جائے گی۔ سندھ اینڈ کولہ مائننگ کمپنی کے سید ابوالفضل رضوی نے بتایا کہ تھر کے کولے کی ایک جگہ سے دوسری جگہ ٹرانسپورٹیشن میں کوئی مسئلہ نہیں ہے، اصل مسئلہ یہ کہ اس ٹرانسپورٹیشن پر لاگت کیا آتی ہے۔ ڈی ایس ریلوے کراچی مقصود الٹی نے بتایا کہ کولے کی ٹرانسپورٹیشن کے لیے اسلام کوٹ تک ریلوے لائن بچھانے کے لیے مختلف روٹس پر غور کیا جا رہا ہے۔ کانفرنس سے دائود پوٹی ور سٹی آف انجینئرنگ اینڈ ٹیکنالوجی کے وائس چانسلر ڈاکٹر فیض اللہ عباسی سمیت دیگر نے بھی خطاب کیا۔ کانفرنس کے اختتام پر آٹھ نکاتی سفارشات پیش کی گئیں، جن میں کہا کہ حکومت سندھ تھر میں انفراسٹرکچر کی تعمیر میں سرگرمیوں کے حوالے سے ماہانہ رپورٹ جاری کرے۔ یو سی جی کی آزادانہ فیصلہ سازی کی جائے۔ کولے کی اوپن پٹ مائننگ کو ترجیح دی جائے۔ مائن ٹو تھر کے کولے کی قیمت کا تعین کرنے کے لیے فریم ورک دیا جائے۔ ٹرانسمیشن لائنز کی تنصیب کا منصوبہ لازمی طور پر بنایا جائے۔ ماہرین کا مشاورتی بورڈ تشکیل دیا جائے، جو توانائی کے منصوبوں کا وقتاً فوقتاً جائزہ لے۔

کراچی: وزیر اعلیٰ سندھ کا کہنا ہے کہ چین تھر میں کولہ پاور پلانٹ کے قیام میں دلچسپی لے رہا ہے، تھر کول بلاک ٹو میں کام جلد شروع کیا جائے گا۔ وزیر اعلیٰ سندھ سید قائم علی شاہ نے تھر کول انرجی بورڈ کے اجلاس میں کہا کہ چین کی کئی کمپنیاں سندھ کے علاقے تھر میں کولہ پاور پلانٹ میں سرمایہ کاری کے لئے سنجیدہ ہیں۔ انہوں نے کہا کہ سندھ میں تھر کول پاور پلانٹ منصوبے کے حوالے سے کافی کام ہو چکا ہے، حکومت جلد ہی تھر کول بلاک ٹو میں کام کا آغاز کر دے گی۔ پہلے مرحلے میں چھ سو میگا واٹ بجلی پیدا کی جائے گی، دوسرے مرحلے میں اس میں سو فیصد اضافہ ہو گا۔ وزیر اعلیٰ سندھ نے ہدایت کی کہ تھر کول انرجی بورڈ کے آئندہ اجلاس میں کولہ پاور پلانٹ کے حوالے سے حکمت عملی کیلئے قومی اور بین الاقوامی ماہرین سمیت سرمایہ کاروں سے مشاورت کی جائے۔

کراچی: ٹیکسٹائل برآمدات ساڑھے آٹھ فیصد اضافے سے چھ ارب ڈالر سے تجاوز کر گئیں، ٹیکسٹائل سیکٹر سے وابستہ افراد کا کہنا ہے کہ توانائی کے بدترین

تھر میں کولے سے صرف 5 ہزار میگا واٹ

بجلی پیدا کی جائے گی، صوبائی مشیر توانائی

جنگ نیوز

27 جنوری 2014

تھر کول پاور پلانٹ کے قیام میں چین کی

دلچسپی

آج ٹی وی

24 جنوری 2014

توانائی بحران کے باوجود ٹیکسٹائل برآمدات میں 8.5

بحران اور امن کی موجودہ صورتحال کے باوجود ٹیکسٹائل برآمدات میں اضافہ دیکھا جا رہا ہے، رواں مالی سال یہ برآمدات چودہ ارب ڈالر تک متوقع ہیں۔

**اسلام آباد:** وزارت پیٹرولیم نے سوئی سدرن گیس اور سوئی نارٹھ گیس کمپنی کو گیس انفراسٹرکچر ڈیولپمنٹ سیسٹم ٹیکس کی وصولی کی ہدایت کر دی۔ صنعتوں، نجی بجلی گھروں، فریلا نر اور سی این جی سیکٹر کے لئے ٹیکس میں اضافہ کر دیا گیا۔ وزارت پیٹرولیم اور قدرتی وسائل نے ملک کی دونوں گیس کمپنیوں کو نظر ثانی شدہ گیس انفراسٹرکچر ڈیولپمنٹ سیسٹم فوراً وصول کرنے کی ہدایت کر دی ہے۔ حکومت کو جی آئی ڈی ایس سے رواں مالی سال ایک سو بیس ارب روپے آمدنی متوقع ہے، وزارت پیٹرولیم نے کم جنوری سے صنعتوں اور کپیڈ پاور پلانٹس پر جی آئی ڈی ایس کی شرح پچاس روپے سے بڑھا کر سو روپے فی ملین برٹش تھرمل یونٹ کر دی ہے، فریلا نر سیکٹر کے لئے یہ شرح ایک سو ستاون روپے سے بڑھا کر تین سو روپے فی ایم ایم بی ٹی یو کر دی گئی۔ جبکہ سی این جی سیکٹر ریجنوں سے تین سو روپے اور ریجن ٹو سے دو سو روپے فی ایم ایم بی ٹی یو ٹیکس وصول کیا جائے گا۔

**کراچی:** ملک میں جاری توانائی بحران سے منافع خوروں کی چاندی ہو گئی، لکڑی کے بعد گورے سے اوپلے بھی منگنے کر دیئے گئے، اوپلے کی قیمت دو روپے سے بڑھا کر پانچ روپے کر دی، غریب عوام کو سخت پریشانی کا سامنا ہے۔ ان دنوں بجلی اور گیس کی بندش سے توہر کوئی پریشان دکھائی دیتا ہے، پنجاب میں موسم سرما کا شروع ہو حکومت نے سی این جی سیکٹر کو گیس کی فراہمی بند کر دی تاکہ گھریلو صارفین کو گیس فراہم کی جاسکے لیکن حکومت کے اس اقدام سے گھریلو صارفین کو کوئی ریلیف نہیں مل سکا۔ پنجاب کے شہری اور دیہی علاقوں میں سوئی گیس کی لوڈ شیڈنگ اور کم پریشر کے باعث صارفین نے کھانا پکانے اور دیگر ضروریات کو پورا کرنے کے لیے زمانہ قدیم کی یاد تازہ کر دی ہے۔ اب گائیں، بھینسوں کے اوپلوں سے کھانا پکا جانے لگا ہے۔ حافظ آباد کے علاقے حسین پورہ کی رہائشی اسی سالہ حنیف بی بی کا کہنا ہے کہ گیس کی عدم فراہمی کے باعث وہ مجبوراً اوپلوں کا استعمال کرتی ہیں تاہم اوپلوں کی آگ اور نکالنے والے دھوئیں سے ان کی آنکھیں اور جلد خراب ہو گئی ہے۔ شہریوں کا کہنا ہے کہ سردیوں میں اوپلوں کی فروخت میں اضافے کے باعث ان کی قیمتوں میں بھی ہوشربا اضافہ کر دیا جاتا ہے ایک ماہ پہلے تک دو روپے کا ٹلے والا ایک اوپلا ان دنوں پانچ روپے میں فروخت ہو رہا ہے۔

**لاہور:** لاہور سمیت پنجاب بھر میں گیس نے شہریوں کا جینا محال کر دیا۔ لاہور کی زیادہ تر آبادیوں میں پچھلے دس روز سے گیس بالکل نہیں آئی۔ عوام حکومت کو کوسٹے نظر آتے ہیں۔ لاہور میں گیس کا بحران قابو سے باہر سردیوں کے آغاز میں سب کچھ ٹھیک ٹھاک تھا۔ پھر 22 دسمبر کا سورج نکلا۔ لوگ حسب معمول اٹھے، خواتین ناشتہ بنانے بیچیں۔ لیکن یہ کیا چولہوں میں تو گیس ہی نہ تھی۔ گیزر دیکھے تو وہ بھی بند۔ نکالنے کو روٹی نہ نہانے کیلئے پانی وہ دن اور آج کا دن۔ گیس ایسے غائب ہوئی جیسے گدھے کے سر سے سینگ۔ کچھ تو لکڑیاں جلا کر گزارہ کرنے لگے، تو بعض منگنی ایل بی جی لانے پر مجبور ہوئے۔ دھر پورہ، ہرنس پورہ، گارڈن ٹاؤن، ماڈل ٹاؤن، علامہ اقبال ٹاؤن، بند روڈ، گلشن راوی، سمن آباد، اچھرہ اور شادمان میں حالات کچھ زیادہ ہی برے ہیں۔ کچھ دیر کے لئے انتہائی ہلکی گیس جھلک دکھلاتی ہے، پھر غائب۔ اتنے میں کھانا تو دور کی بات۔ چائے بنانا بھی ممکن نہیں۔ غنیمت نما سندرے خاموش تماشا بن گئے۔ کوئی بھی اپنے علاقے میں دکھائی نہیں دیتا۔ سوئی ناردرن حکام سے پوچھیں تو ان کا ایک ہی جواب ہے، گیس اور ہیٹر کا استعمال بڑھ گیا، دو ماہ ایسے ہی گزارنے پڑیں گے۔

**لاہور:** یورپی منڈیوں میں ڈیوٹی فری پاکستانی مصنوعات کی برآمدات کا اہداف حاصل کرنا ناممکن ہو چکا، توانائی بحران جی ایس پی پلس اسٹیٹس کے آڑے آ گیا ہے۔ جی ایس پی پلس اسٹیٹس ملنے سے پہلے یورپی منڈیوں میں پاکستانی مصنوعات کی برآمدات سات بلین ڈالر ڈالر کے قریب تھی، اسٹیٹس ملنے کے بعد مصنوعات ڈیوٹی فری ہونے سے دو بلین ڈالر کا فائدہ ہونے کا امکان ہے۔ صنعتکاروں کا کہنا ہے کہ مصنوعات کی ویلیو ایڈیشن کر کے چودہ بلین ڈالر تک ایکسپورٹ ممکن بنائی جاسکتی ہے جبکہ تاجروں کا کہنا ہے کہ توانائی بحران کے باعث تیس فیصد برآمدات کا اہداف حاصل کرنا بھی ناممکن ہو گیا ہے۔ صنعتکاروں نے جی ایس پی پلس کو صرف ٹیکسٹائل انڈسٹری تک محدود نہ کرنے اور مصنوعات کی ویلیو ایڈیشن کا مطالبہ کر دیا ہے، ان کا کہنا ہے کہ یورپی منڈیوں میں صرف ٹیکسٹائل کی ہی نہیں دیگر مصنوعات کی برآمد بھی ہوتی ہیں۔ اگر اسٹیٹس سے فائدہ اٹھانا ہے تو دیگر صنعتوں کو بھی بجلی اور گیس فراہم کی جانی چاہیے۔ ماہرین کے مطابق ٹیکسٹائل انڈسٹری کی طرح دیگر صنعتوں کو گیس اور بجلی کی فراہمی یقینی بنانے اور مصنوعات کی ویلیو ایڈیشن کرنے سے ہی جی ایس پی پلس اسٹیٹس سے فائدہ اٹھایا جاسکتا ہے۔

**کراچی (اسٹاف رپورٹر):** وفاقی اردو یونیورسٹی شعبہ نباتات کے تحت سیمینار سے خطاب کرتے ہوئے ڈین آف سائنس پروفیسر ڈاکٹر عارف زہیر نے کہا کہ جامعہ اردو میں بائیو ٹیکنالوجی کے شعبے کا آغاز ہو چکا ہے، ہماری جامعہ اس ٹیکنالوجی کی ترقی کے لئے بھرپور کوششیں جاری رکھے گی۔ انہوں نے کہا کہ طلبہ اور اساتذہ کو زیادہ سے زیادہ تحقیق کے شعبے کی طرف آکر حکومتی سطح پر جامعات اور صنعتوں کا رابطہ مضبوط کرنے کی کوششیں کرنا چاہئیں۔ اس موقع پر پروفیسر ڈاکٹر معین الدین نے کہا کہ ہمارے ملک میں توانائی کی کمی بہت بڑا مسئلہ ہے جس کے اسباب اور حل کے لئے ہم سب کو مل کر کوششیں کرنا ہوں گی ورنہ ہم بہت بڑے مسائل کا شکار ہو سکتے ہیں۔ ملک میں 12 سے 16 گھنٹے لوڈ شیڈنگ کی جا رہی ہے جس کی وجہ سے یہاں صنعتیں تیزی سے بند

فیصد اضافہ

آج ٹی وی

22 جنوری 2014

گیس کمپنیز کو انفراسٹرکچر ڈیولپمنٹ سیسٹم

ٹیکس کی وصولی کی ہدایت

آج ٹی وی

21 جنوری 2014

توانائی بحران، منافع خوروں کی چاندی ہو گئی

آج ٹی وی

15 جنوری 2014

گیس بحران شدید، عوام پریشان، منتخب

نمائندے غائب

جنگ نیوز

11 جنوری 2014

توانائی بحران جی ایس پی پلس اسٹیٹس کے

آڑے آ گیا

آج ٹی وی

11 جنوری 2014

توانائی میں کمی کے سنگین مسئلے کو مل کر حل

کرنا ہو گا، اردو یونیورسٹی میں بائیو ٹیکنالوجی کا

آغاز

جنگ نیوز

10 جنوری 2014

ہوتی جارہی ہیں اور ہر وزگاری میں اضافہ ہو رہا ہے۔ ڈی آئی جی اطہر رشید نے کہا کہ پولیس کا کام عوام کا تحفظ کرنا ہے، اگر ہم یہ بھی نہ کر سکتے تو ہمیں کچھ اور کام کرنا چاہیے۔ میں نے اس سینیٹر سے بہت کچھ سیکھا ہے اسے اپنے افسران اور دیگر لوگوں تک یہ معلومات پہنچانوں گا۔ ہم سب کی یہ ذمہ داری ہے کہ عوامی سطح پر ایسے پیغامات پہنچائے جائیں جس سے ملک کے مسائل میں کمی آئے۔ پروفیسر ڈاکٹر نسیم نے بھینسوں کے فضلے سے گیس حاصل کرنے سے متعلق شرکاء کو آگاہی فراہم کی۔ انہوں نے کہا کہ آج کے تعلیم یافتہ نوجوان اس پر کام کریں تو ملک میں توانائی کے بحران پر کافی حد تک قابو پایا جاسکتا ہے۔ اس عمل کے ذریعے آسمان اور سستے طریقے سے گھروں میں گیس اور بجلی کی ضرورت کو پورا کیا جاسکتا ہے۔ پروگرام میں ڈاکٹر دانش فراز، ڈاکٹر شہا حبیب اور دیگر نے بھی خطاب کیا۔

**توانائی ماہرین نے 6.50 ارب ڈالر کا نیوکلئیر**
**پلانٹ مسٹر دکر دی**
**آج ٹی وی**

08 جنوری 2014

کراچی: توانائی ماہرین نے ساڑھے چھ ارب ڈالر مالیت کا نیوکلئیر پاور پلانٹ مسٹر دکر دیہ حکومت توانائی بحران کے خاتمے کیلئے کوئلے، پن بجلی، شمسی توانائی اور چھوٹے ڈیموں سے بجلی پیدا کرنے کو اولین ترجیح دے۔ پاکستان فشر فوک فورم اور پاکستان انسٹی ٹیوٹ آف لبر ایجوکیشن اینڈ ریسرچ کے تحت وزیر اعظم کی جانب سے کراچی میں کیا ٹی وی پر کوئلہ ایریا پر کینپ ٹو اور کینپ تھری کے بائیس سو میگا واٹ نیوکلئیر پاور پلانٹ سے پیدا ہونے والے خطرات پر ایک آگاہی سینیٹر کا انعقاد کیا گیا۔ اس موقع پر ماہر توانائی ڈاکٹر پرویز کا کہنا تھا کہ دنیا کے بیشتر ممالک نے نیوکلئیر ریکٹر سے پیدا ہونے والے خطرات کی وجہ سے ان کو ختم کرنے کا فیصلہ کیا ہے۔ نیوکلئیر پاور پلانٹ میں حادثے کی صورت میں سمندری حیات، مانی گیری، اور شہری آبادی پر منفی اثرات مرتب ہوتے ہیں۔ جاپان میں بھی نیوکلئیر ریکٹر سے ہونے والے نقصان اور تابکاری اثرات سے سب باخوبی واقف ہیں۔ ان کا کہنا ہے کہ کسی بھی حادثے کی صورت میں لاکھوں قیمتی جانوں کا نقصان ہو سکتا ہے۔ انہوں نے کہا کہ ملک میں توانائی کی قلت ہے، لیکن اس کو نیوکلئیر پاور سے پورا کرنے کے بجائے توانائی کے دیگر متبادل ذرائع سے پورا کیا جاسکتا ہے۔ پاکستان فشر فوک فورم کے چیئر مین محمد علی شاہ کہتے ہیں کہ دنیا میں نیوکلئیر ریکٹر آبادی سے اسی کلو میٹر دور ہوتے ہیں لیکن شہری آبادی سے ریہ ہونا بہت بڑا خطرہ ہے۔ سمیانر سے دیگر مقررین کا کہنا تھا کہ ہمارا حق ہے کہ اپنی جان و مال کے حفاظت کے لئے آواز بلند کریں۔

**توانائی منصوبوں میں لمحہ بھر کی تاخیر بھی**
**برداشت نہیں، شہباز شریف**
**جنگ نیوز**

06 جنوری 2014

لاہور (خصوصی نمائندہ): وزیر اعلیٰ پنجاب محمد شہباز شریف نے کہا ہے کہ غیر ملکی سرمایہ کاروں کی توانائی منصوبے میں ایک لمحہ کی تاخیر بھی ناقابل برداشت ہے۔ انہوں نے کہا کہ توانائی کے منصوبوں کو برقی رفتار سے آگے بڑھانا ہماری پالیسی ہے اس سلسلہ میں تاخیر پر کسی قسم کا کوئی سمجھوتہ نہیں کیا جائے گا۔ وزیر اعلیٰ نے سائیو ال میں پاور پلانٹس کی تنصیب کے منصوبے کی نگرانی کے لئے چیف سیکرٹری کی سربراہی میں کمیٹی تشکیل دیتے ہوئے ہدایت کی کہ کمیٹی روزانہ کی بنیاد پر اجلاس منعقد کر کے منصوبے پر پیشرفت کا جائزہ لے گی اور رپورٹ پیش کرے گی۔ وہ گزشتہ روز سائیو ال میں درآمدی کوئلے سے 660،660 میگا واٹ کے 2 پاور پلانٹس لگانے کے منصوبے پر پیشرفت کا جائزہ لینے کے حوالے سے اعلیٰ سطح کے اجلاس سے خطاب کر کے ٹینجنگ ڈائریکٹر رہے تھے۔ چیف سیکرٹری، سینئر ممبر بورڈ آف رونیو، چیئر مین منصوبہ بندی و ترقیات، ایڈیشنل چیف سیکرٹری توانائی، چین کی کمپنی مسٹر لین جیان وئے، ڈائریکٹر ٹیکنیکل مسٹر فین جیان فینگ کمپنی کے دیگر عہدیداران اور متعلقہ حکام نے اجلاس میں شرکت کی۔ ایڈیشنل چیف سیکرٹری جہانزیب خان نے منصوبے پر پیشرفت کے حوالے سے تفصیلی بریفنگ دی۔ وزیر اعلیٰ محمد شہباز شریف نے اجلاس سے خطاب کرتے ہوئے کہا کہ سائیو ال میں درآمدی کوئلے سے پاور پلانٹس کی تنصیب کا منصوبہ ہمارے لئے نہایت اہمیت کا حامل ہے۔ انہوں نے کہا کہ یہ کمیٹی ایڈاپٹ، این ڈی سی، محکمہ توانائی، ماحولیات اور معدنیات کے افسران پر مشتمل ہوگی۔ وزیر اعلیٰ نے ہدایت کی کہ سائیو ال میں پاور پلانٹس کی تنصیب کے منصوبے کے لئے ٹینڈر تک سمیت تمام امور شفاف طریقے سے تیزی سے مکمل کئے جائیں، ہمیں توانائی کے منصوبوں کو کوئی لمحہ ضائع کئے بغیر تیزی سے مکمل کرنا ہے اور اس مقصد کے لئے متعلقہ اداروں کو تندی اور جانفشانی سے کام کرنا ہوگا۔ انہوں نے کہا کہ چائنہ ویسٹرن پاور کمپنی توانائی کے شعبے میں کام کرنے والی ایک بڑی کمپنی ہے، توانائی کے شعبے میں پنجاب حکومت اور چین کی کمپنی کا اشتراک خوش آئند ہے، انہوں نے کہا کہ چین پاکستان کا مخلص دوست ہے اور بلا معاوضہ مختلف شعبوں کی ترقی میں چین کا تعاون لائق تحسین ہے۔ انہوں نے کہا کہ سائیو ال میں پاور پلانٹس کی تنصیب کیلئے چین کی کمپنی سیپکو تھری فیوہیلٹی سٹڈی رپورٹ تیار کر رہی ہے جو چین کا پنجاب کے عوام کے لئے ایک تحفہ ہے، انہوں نے کہا کہ چین کی کمپنیوں نے بھارت میں کوئلے سے 20 ہزار میگا واٹ کے پاور پلانٹس لگائے ہیں جن کا میں نے خود حالیہ دورہ بھارت کے دوران مشاہدہ کیا ہے، انہوں نے کہا کہ میں بھارت میں چین کی کمپنی کے کام کو دیکھ کر بے حد متاثر ہوا ہوں اور ہم بھی چین کی ٹیکنالوجی سے استفادہ کرنا چاہتے ہیں۔ وزیر اعلیٰ نے ہدایت کی کہ فیوہیلٹی سٹڈی رپورٹ کی تیاری میں مصروف چینی کمپنی کے ماہرین کو بہترین سکیورٹی فراہم کی جائے اور ان سے مکمل تعاون کیا جائے۔

**2030 تک اسٹی توانائی سے 8800 میگا واٹ**
**بجلی پیدا کی جائیگی**
**جنگ نیوز**

02 جنوری 2014

چشمہ (طاہر شیرانی): پاکستان اسٹی توانائی کمیشن (پی اے ای سی) کے چیئرمین ڈاکٹر انصر پرویز نے کہا ہے کہ ملکی توانائی کی ضروریات پوری کرنے کے لیے وژن 2030 کے تحت اسٹی توانائی سے آٹھ ہزار آٹھ سو میگا واٹ بجلی جبکہ 2050 تک بیالیس ہزار میگا واٹ بجلی پیدا کرنے کا منصوبہ ہے۔ گیارہ سو میگا واٹ کے ایک نیوکلئیر پاور پلانٹ سے سالانہ ایک ارب ڈالر فرنس آئل کی درآمدی مد میں بچت ہوگی، کراچی میں زیر تعمیر کے ٹو اسٹی توانائی پلانٹ کو حملے سے محفوظ رکھنے کے لیے میزائل شیلڈ لگائی جائے گی، اسٹی فضلے کو ٹھکانے لگانے کا موثر نظام موجود ہے۔ ان خیالات کا اظہار انہوں نے بدھ کے روز چشمہ میں میڈیا کے نمائندوں کو بریفنگ دیتے ہوئے کیا۔ انہوں نے بتایا کہ 2030 تک اسٹی توانائی سے مجموعی طور پر آٹھ ہزار آٹھ سو میگا واٹ بجلی

پیدا کرنے کا منصوبہ ہے گیارہ سو میگا واٹ کے ساتھ ساتھ پاور پلانٹ لگائے جائیں گے جن میں سے کراچی میں لگائے جانے والے دو پاور پلانٹس بھی شامل ہیں، پلانٹس لگانے کے لیے سائنس منتخب کرنے کا کام جلد شروع کیا جا رہا ہے۔ ان کا کہنا تھا کہ 340 میگا واٹ کے سی تھری اور 340 میگا واٹ کے سی فور ایٹمی بجلی گھر پر 170 ارب روپے سے زائد کی لاگت آئیگی جن کو 2016 تک مکمل کر لیا جائے گا، ان دو پلانٹس سے دس روپے فی یونٹ سے کم لاگت بجلی حاصل ہوگی اس وقت ایٹمی توانائی کا ٹیرف سات روپے فی یونٹ سے کم ہے۔ انہوں نے بتایا کہ سی تھری اور سی فور کی لاگت میں سے حکومت کو صرف 30 سے 35 فیصد ادا کرنا پڑے گا باقی ماندہ رقم قرضے سے حاصل ہوگی۔ انہوں نے بتایا کہ سستی ایٹمی بجلی سے گردش قرض کے خاتمے میں بھی مدد ملے گی۔ انہوں نے کہا کہ پاکستان کو پلانٹس کی مشتری کو حاصل کرنے میں مشکلات ہیں، تاہم اب یہ صلاحیت حاصل کر لی گئی ہے۔ پوری دنیا میں ایٹمی توانائی حاصل کرنے کا رجحان ہے اور پاکستان کو بھی توانائی کی ملکی ضروریات پوری کرنے کیلئے ایٹمی توانائی حاصل کرنا ہوگی۔ ان کا کہنا تھا کہ گیارہ سو میگا واٹ کے دو پلانٹس لگنے سے ایک سو ارب کعب فٹ یومیہ گیس کی بچت ہوگی اور دو ارب ڈالر ز سالانہ بچت ہوگی انصر پرویز نے بتایا کہ حکومت کو ابتدائی طور پر ایٹمی توانائی پلانٹس کے لیے سرمایہ فراہم کرنا پڑیگا، تاہم بعد میں ان سے حاصل ہونے والے ریونیو سے مزید پلانٹس لگائے جائیں گے انہوں نے بتایا کہ چشمہ میں لگنے والے پلانٹس سے آئندہ ساٹھ سالوں تک بجلی حاصل ہوگی ایٹمی توانائی کے سلسلے میں چین سے تعاون جاری رہیگا کیوں کہ پلانٹس کی عمر کافی زیادہ ہوتی ہے اور اس کے دوران دونوں ممالک کے درمیان قریبی تعلق رہتا ہے۔ اگر کسی اور ملک کیساتھ مل کر کام کریں تو خدشہ رہتا ہے کہ وہ درمیان نہ چھوڑ جائے۔ پلانٹس کی حفاظتی اقدامات پر بات کرتے ہوئے انہوں نے کہا کہ یہ جدید ترین ٹیکنالوجی پر مبنی ہے۔ انہوں نے کہا کہ پاکستان ذمہ دار ایٹمی توانائی والا ملک ہے جو آئندہ بھی ذمہ داری کا مظاہرہ کریگا۔ انھوں نے بتایا کہ اے ای ایس سی نے پی اے ای سی کو چار ارب سترہ کروڑ روپے کی ادائیگی کرنی ہے۔

## ENERGY DIRECTORY

### COMPANIES WORKING IN ENERGY SECTOR

<b>AB Gas Company</b> <b>LPG MARKETING COMPANIES</b> Private Company Muhammad Bashir Chief Exclusive 0092-42-5894057, 5865271 0092-3004353595 0092-42 -5884450 78 HH -DHA, Cantt. , Lahore.	<b>Abdullah Oil Industries</b> <b>Oil</b> Private Company 0092-21-35055057 Plot 15, Sector 25, ST-2/1, Korangi Industrial Area, Karachi
<b>Adeel Oil Traders</b> <b>Oil</b> private Company Mr.Malik Nadeem & Malik Ikram 0092-333-6560759 Basement Shop No.4,Near Nadir Cinema Plaza, Madina Center, Faisalabad	<b>Admore Gas Private Limited,</b> <b>Oil Marketing Companies</b> Private Company Mr. Razi A. Hanafi,Managing Director agplkhi@admore.com.pk - agplisb@admore.com.pk 111-ADMORE (236673) – 0092-21 5303191-92, 5364168-69, 5364171-72 0092-21 5364170 & 5864562 316,3rd Floor, Continental Center, Sharah-E-Iqbal, Clifton Karachi-75600 www.admore.com.pk
<b>Aftab Traders (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> Private Company Abdul Hadi Khan Chief Exclusive premiergus@hotmail.com 0092-21-4389244-6 0092-21 -4521361 Office No. 603, P. No. 30-A Progressive Center, 6th Floor, Block-6, Shara-e-Faisal, PECHS Karachi www.premiergus.com.pk	<b>Agha Gas Company (Pvt.) Limited</b> <b>LPG MARKETING COMPANIES</b> Private Company Agha Syed Liaqat Ali Chief Exclusive 0092-81-2844058 0092-81 -2835144 S. Salahuddin Building, M.A. Jinnah Road, Quetta
<b>AHMAD GEOMEMBRANE INDUSTRIES</b> <b>Geosynthetic</b> Private Company sales@geomembrane-geotextile.com 0092-42-352-60305 0092-42-352-60307 22 KM OFF FEROPUR ROAD LAHORE, 53100 PAKISTAN www.geomembrane-geotextile.com	<b>Akbar Associates (Pvt.) Limited</b> <b>LPG MARKETING COMPANIES</b> Private Company Jamal Akbar Ansari Chief Exclusive info@akbarassociates.com 0092-51-2264308 0092-51 -2281678 No. 88, Khayaban-e-Iqbal, F-8/2, P.O. Box 1416,Islamabad www.akbarassociates.com
<b>Al Hamra Handicrafts</b> <b>Marble Handicrafts</b> Private Company Rao Iftikhar, alhamra@cyber.net.pk 0092- 300-5001231/+92- 021-5380539 0092 21 5380543 3rd floor 92-C 11th Commercial Street, Phase-2, Extension DHA, Karachi www.al-hamra.com.pk	<b>Ali Brothers.</b> <b>LPG MARKETING COMPANIES</b> Private Company Sardar Ali Khan Chief Exclusive 0092-91-5830855, 2650114 03334256623, 03005903242 0321 -9159442 0092-91-5830855 H. No. 223-A, St. No. 6, Sector K -1, Phase III, Hayatabad, Peshawar.
<b>All Pakistan Marble Industries Association</b> <b>Marble Industries</b> Private Company Mr.Farrukh Majeed Chairman apmia@hotmail.com 0092-51 4433508, 4432774 0092-51 4432774 Bhatti, Plaza I-9 Markaz, Islamabad	<b>Anoud Gas Limited formerly Eirad Co mpany Limited</b> <b>LPG MARKETING COMPANIES</b> Private Company Syed Amjed Husain Chief Exclusive info@anoudgroup.com.pk 0092-21-5681084 (5 lines), 0092-51-2850486 0092-21 -5682967, 0092-51-2256074 N o-G -5, Al-Mustafa Apartment Markaz G -8, Islamabad. www.anoudgroup.com.pk

<p>Asia Geophysical Services (Private) Limited Oil &amp; Gas Private Company Javed Ahmed (Chief Executive Officer) ags@isb.comsats.net.pk 0092(42)5167820/92(42)2100945/92(300)8562301 0092(42)5167830 172-M Commercial Area, Model Town Extension, Lahore.</p>	<p>Attock Petroleum Limited Oil Marketing Companies Private Company Mr. Shuaib A. Malik, Chief Executive Officer contact@apl.com.pk 0092-51-5127250-54 0092-51-5127255 Attock House, Morgah, Rawalpindi. www.apl.com.pk</p>
<p>Awami Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Mrs. Maryam Ahsan Maqbool Chief Exclusive 0092-42-5380236 &amp; 38 0092-42-5380237 17-C -2, Gulberg III, Lahore.</p>	<p>B.B.N Energy (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Farrukh Mahmood Bukhari hief Exclusive 0092-42-5123597, 5122189 0092-42 -5115295 140 Main Industrial Area, Kot Lakhpat, Lahore.</p>
<p>Balochistan Gas Co. (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Mohammad Sarwar Khan Chief Exclusive 0092-51-4862386-7 0092-51 - 4862388 Anique Arcade, First Floor, Office # 14 &amp; 16, I/8 Markaz Islamabad.</p>	<p>Balochistan Minerals &amp; Oils Pvt.) Limited. LPG MARKETING COMPANIES Private Company Sardar Muhammad Anwar Khan Jaffar Chief Exclusive 0092-81-2892233, 2447460,081-2832779 0092-81 -2828178 BMO International, Jaffar House, Spiny Road, Quetta.</p>
<p>BBN Energy (Pvt.) Limited Oil &amp; Gas Private Company ahsan@bbnenergy.com - bukhari@bbnenergy.com 0092-42-35118512 / 92-42-35117859 / 92-42- 35122189 0092-42-35115295 140-Main Industrial Area, Quaid-e-Azam Industrial Estates Kot Lakhpat, Lahore 54760, Pakistan. www.bbnenergy.com</p>	<p>Best Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Ashar Shahab Mirza Chief Exclusive 0092-51-2851064 0092-51 -2255164 House # 7/B, St. 70, F -8/3, Islamabad.</p>
<p>Bolan Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company A.A.Aref Gilani 0092-42-6666475 0092-42 -6360792 13-A, Bolan House, St. No. 15, Cavalry Ground (Ext.),Lahore</p>	<p>Bosicor Pakistan Limited, Oil Marketing Companies Private Company Mr. Amir Abbasciy,Chairman / CEO 0092-21-111-222-081,021-2410099 &amp; 021-4210909 0092-21-2410722 &amp; 2420722 2nd Floor, Business Plaza,Mumtaz Hassan Road, Karachi www.bosicor.com.pk</p>
<p>BP Pakistan Exploration &amp; Production Inc. Oil &amp; Gas Private Company Mr. Ferhat A. Sheikh (Country Representative) 0092-21) 35829000 0092-21) 35297601 5th Floor, Dolmen Executive Tower Scheme No 5, Clifton Block 4, Karachi</p>	<p>Brothers Engineering (Pvt.) Ltd Oil &amp; Gas Private Company Mian Muhammad Umar Idrees (Director) bsml_lhr@yahoo.com 0092-42)5757013-16, 0092-42)5710417 135,Upper Mall Lahore.</p>
<p>Cap Gas (Pvt.) Limited LPG MARKETING COMPANIES Private Company Badar-e-Alam Chief Exclusive 0092-51-5487586, 5487589-97 0092-51 -5487599, 5450564 POL House, Morgah, Rawalpindi</p>	<p>Chevron Pakistan Limited formerly Caltex Oil (Pakistan) L td LPG MARKETING COMPANIES Private Company Nadeem N. Jafarey Chief Exclusive nasghar@chevron.com 0092- 021 - 111-666-111 - 021-5681371 051-2277580 0092-21 -5685014,021-5218412 State Life Building 11 Abdullah Haroon Road Karachi 74400. www.caltex.com/pk</p>
<p>China National Logging Corporation Oil &amp; Gas Private Company Li Wanjun (Country Manager)</p>	<p>Commerce International Energy Private Company info@comintl.com</p>

<b>Pakistan@cnlc.cn /liwenjun@cnlc.cn</b> <b>92(51)2105901-2, 92(300)5019695</b> <b>0092-51)2105903</b> <b>House 143, Street 37, F-10/1 Islamabad</b>	<b>0092-21-3530.9601-3</b> <b>0092-21- 3530.9604</b> <b>Suite #208, Marine Point Block 9, Clifton Karachi -</b> <b>75600 Pakistan</b> <b>www.comintl.com</b>
<b>Compagnie General De Geophysique</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Moenuddin (Resident Representative)</b> <b>0092-51)2299031-36/92(51)2299025/92(300)8552156</b> <b>0092-51)2299027-29</b> <b>15-Nazimuddin Road, Sector F-10/4Islamabad,</b> <b>P.O.Box-1440</b>	<b>COMSATS Institute of Information Technology</b> <b>Education</b> <b>Academic Institutions</b> <b>Dr. S.M. Junaid Director</b> <b>admissions@comsats.edu.pk</b> <b>/www.ciit.edu.pk/info@ciit.edu.pk</b> <b>0092-51-9247000-3 /0092-51-9049802</b> <b>0092-51-9247006</b> <b>Park Road, Chak Shahzad</b> <b>Islamabad</b>
<b>Corporation(Pvt)Ltd.</b> <b>Private Company</b> <b>Mir Saeed Zahri CEO</b> <b>S-32,SITE,Hawksbay Road, Karachi</b>	<b>Cress LPG (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Muhammad Sharif Chief Exclusive</b> <b>0092-42-6279066, 6371323,042-6371324</b> <b>0092-42 -6279067, 6362402</b> <b>30, Lawrence Road, Lahore</b>
<b>DAWOOD HERCULES</b> <b>Fertilizer</b> <b>Private Company</b> <b>info.dh@dawoodgroup.com</b> <b>0092-42) 6301601-07</b> <b>0092-42) 6364316, 6360343</b> <b>35-A, Shahr-e-Abdul Hameed Bin Baadees</b> <b>(Empress Road), Lahore 54000, Pakistan.</b> <b>www.dawoodgroup.com</b>	<b>Descon Exploration (Pvt.) Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Abdul Razak Dawood (Chairman/Director)</b> <b>Rdawood@Descon.com.pk</b> <b>0092-42)5805134</b> <b>0092-42)5811005, 92(42)5811135</b> <b>Descon World Head Quarters, 18 Ferozpur Road,</b> <b>P.O. Box 1201 Lahore 53000, Pakistan</b>
<b>Dewan Petroleum (Pvt.) Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Dewan Zia-ur-Rehman Farooqui (Chairman &amp; Chief</b> <b>Executive)</b> <b>an.sectt@dewanpetroleum.com</b> <b>0092-51)111-313-786, 92(51)2277648</b> <b>0092-51) 2276535</b> <b>46 Nazimuddin Road, F-7/4, Islamabad 44000</b>	<b>Energy &amp; Power Department</b> <b>Energy</b> <b>Govt Of KPK</b> <b>Secretary. E&amp;P@kpk.gov.pk/</b> <b>0092-91-9212686</b> <b>0092-91-9212657</b> <b>PESHAWAR</b>
<b>Energy Department,</b> <b>Energy</b> <b>Govt of Punjab</b> <b>Mr. Mohammad Jehanzeb Khan, Secretary,</b> <b>ed.contact@energy.punjab.gov.pk</b> <b>0092-42-99213974-5</b> <b>0092-42-99213906</b> <b>Library Road, Old Anar Kali, Lahore, Pakistan.</b>	<b>Energy Department,</b> <b>Energy</b> <b>Govt Of Sindh</b> <b>Plot No ST/2/1, Sector 23, Korangi Industrial Area</b> <b>Karachi</b>
<b>ENGRO</b> <b>Fertilizer</b> <b>Private Company</b> <b>eel_hiring@engro.com</b> <b>0092-21 111 211 211</b> <b>Engro Chemical Pakistan Ltd. 7th &amp; 8th Floors, The</b> <b>Harbor Front Building HC # 3, Marine Drive, Block</b> <b>4, Clifton - Karachi</b> <b>www.engro.com</b>	<b>ENI PAKISTAN LIMITED</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>hro.recruitment@enipakistan.com.pk</b> <b>5th Floor, The Forum, G-20, Block-9, Khayaban-e-</b> <b>Jami, Clifton, Karachi</b>
<b>Exploration and Production Companies</b> <b>Association (PPEPCA).</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>mail@ppepca.com</b> <b>0092-51-2112015-16</b> <b>0092-51-2112108</b> <b>House No. 119-A, Street No. 37 F-10/1, Islamabad,</b> <b>www.ppepca.com/communitydevelopment/Polish_</b> <b>Oil_and_Gas_Company.html</b>	<b>FATIMA GROUP</b> <b>Fertilizer</b> <b>Private Company</b> <b>mail@fatima-group.com</b> <b>0092-61)4512031-2</b> <b>0092-61)4511677</b> <b>2nd Floor Trust Plaza, L.M.Q Road, Multan</b> <b>www.fatima-group.com</b>

<b>Fauji Fertilizer Bin Qasim Ltd</b> <b>Fertilizer</b> <b>Private Company</b> <b>Lt Gen Muhammad Zaki, HI, HI (M), (Retd) is</b> <b>info@ffbl.com.pk</b> <b>0092-51 9272196-97</b> <b>0092-51-9272198-99</b> <b>Fauji Fertilizer Bin Qasim Limited 73 - Harley</b> <b>Street, Rawalpindi.</b> <b>www.ffbl.com</b>	<b>Fauji Fertilizer Company</b> <b>Fertilizer</b> <b>Private Company</b> <b>Lt Gen Naeem Khalid Lodhi, HI(M) (Retired)</b> <b>ffcrwp@ffc.com.pk</b> <b>0092-51) 111-332-111</b> <b>0092-51) 8459925</b> <b>156-The Mall, Rawalpindi</b> <b>www.ffc.com.pk</b>
<b>Fauji Foundation</b> <b>Fertilizer</b> <b>Private Company</b> <b>info@fauji.org.pk</b> <b>0092--51-595-1821 to 40</b> <b>68 Tipu Road, Chakala Rawalpindi, Pakistan-46000</b> <b>www.fauji.org.pk</b>	<b>Fine Gas Co Ltd. (FG)</b> <b>GAS</b> <b>Govt</b> <b>info@finegases.com/</b> <b>0092-42-35118937-40</b> <b>0092-42-35122642 00-92-42-35112905</b> <b>130, Industrial Estate Kot Lakhpat, Lahore - 40,</b> <b>Pakistan</b> <b>www.finegases.com</b>
<b>Foundation Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Brig (R) Hassan Shah (General Manager)</b> <b>0092-51-5584936</b> <b>0092-51 -5568577</b> <b>Shahrahe Quaid-e-Azam, P.O.Box No. 422,</b> <b>Rawalpindi.</b>	<b>Frontier Holding Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Khalid Shoaib (Senior Staff Geophysicist)</b> <b>fhlisd@comsats.net.pk, /</b> <b>0092-51)2654471-73,</b> <b>0092-51)2653807</b> <b>House# 149, Street 15, Sector E-7 Islamabad</b> <b>www.Juraenergy.com</b>
<b>Fugro Geodetic Ltd.</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Richard Hall (Country Manager)</b> <b>fugro@fugro.com.pk</b> <b>0092-21) 4532041, 4539165, 92(21)4532041</b> <b>0092-21)4532042</b> <b>28-B, K.D.A Scheme # 1Karachi -753850.</b>	<b>Fusions Group</b> <b>Solar Energy</b> <b>Private Company</b> <b>info@fusionsgroup.com</b> <b>0092-213-4662642 / 92-213-4662643 / 92-213-</b> <b>8045043</b> <b>www.fusionsgroup.com</b>
<b>GasMan (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Mrs. Abida Khurshid Chief Exclusive</b> <b>0092-51-2255048, 2255148</b> <b>0092-51 -2255948</b> <b>House # 12, Street 32/1, F-8/1, Islamabad</b>	<b>GEMS AND GEMOLOGICAL INSTITUTE OF</b> <b>PAKISTAN</b> <b>GEMS</b> <b>Govt Dept</b> <b>ggipeshawar@yahoo.com</b> <b>0092--91) 9213303, 9213196, 9213197</b> <b>0092--91) 9213198</b> <b>Suite # 209, 1st Floor, Benevolent Fund Building,</b> <b>Sadder Road, Peshawar - Khyber Pakhtoon Khuwa</b> <b>– Pakistan</b> <b>www.ggip.com.pk/</b>
<b>Geofizyka Krakow Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Dr Ivan Vrabel (Country General Manager)</b> <b>gkoffice@dsl.net.pk /Gkoffice@dsl.net.pk</b> <b>0092-51)2262608, 2261016</b> <b>0092-51)2251829</b> <b>Park Road, F-8/2 Islamabad.</b>	<b>Global Gas International (Pvt.) Limited</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Muhammad Saeed Chief Exclusive</b> <b>0092-51-5464062, 5464063</b> <b>0092-51 -2293616</b> <b>H . # 297, Street 59-A, F-10/3, Islamabad.</b>
<b>GO Pakistan (Gas &amp; Oil Pakistan Pvt. Limited)</b> <b>Oil &amp; Gas</b> <b>Govt</b> <b>info@gno.com.pk</b> <b>0092-42 3864 0618</b> <b>3rd Floor, 19J CCA, DHA Phase 5, Lahore,</b> <b>www.gno.com.pk</b>	<b>Golden Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Shahbaz Aftab Khan Chief Exclusive</b> <b>0092-42-6653894-6, 5726804,042-5726805</b> <b>0092-42 -6655560 -1</b> <b>45-CMA Colony, Abid Majeed Road, Lahore-Cantt.</b>
<b>Government Holdings (Private) Limited (GHPL)</b> <b>Oil &amp; Gas</b> <b>Govt</b> <b>Khushid Anwer (Managing Director /Chief</b> <b>Executive Officer)</b>	<b>Halliburton</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Rick Stewart (Operations Manager)</b> <b>rick.stewart@halliburton.com</b>

<p>ka@ghpl.com.pk/ashz@ghpl.com.pk/ 0092-51)9266895, 9266649,9266766 House # 9, Street # 29, F-10/1, Islamabad, Pakistan www.ghol.com.pk</p>	<p>0092-)300-5010092 92(51)4444951-2, 92(51)4439046 Plot No .18-20, Industrial Area ,I-9/2 Islamabad</p>
<p>Hannan corporation Marble Private Company Mr.Khurram Rangoonwala CEO 1-D25/26 Mangopeer Road ,Qasba Metrville,Karachi</p>	<p>Hassan Marble Marble /Handicrafts Private Company hassanmarbles@yahoo.com, mail@hassanmarbles.com 0092- 051-4435374-5 0092-51-4435376 Plot # 375-A, Potohar Road, 1/9 Industrial Area, Islamabad www.hassanmarbles.com</p>
<p>Hi- Tech Alternative Energy System Solar Energy Private Company hitech@cyber.net.pk; 0092-21-3521 2315/ 3562 1864, 0092--21-3562 1869 Ground Floor, Hotel Royal City Building Sarmad Road, Near Regal Chowk Saddar,karachi- 74400,Pakistan www.hitech.com.pk</p>	<p>Hycarbex Inc. Oil &amp; Gas Private Company Dr. Iftikhar Zahid (President /Chief Executive Officer) hypak@comsats.net.pk/amel@mail.comsats.net.pk 0092-51)2855713-4, 2853052, 2853152 0092-51)2855717 House #3 Street 32, F 8/1, Islamabad</p>
<p>Indus Minning Company Peshawar Minning Private Company Mr.Shahid R.Khan Cief Executive, Indus_mining@hotmail.com 0092-91-9214074/091-9214046 0092-91-9214046 House No. 74,Street No. 4, Sector K-5,Phase- 3,Hayatabad Peshawar</p>	<p>Innosol Energy Private Company Muhammad Abdur Rahman (MD) md@innosol.pk 0092-51-2538347, 0092-333-5533362 4-D 1st Floor Mahmood Plaza Fazal-ul-Haq Road Blue Area Islamabad www.innool.pk</p>
<p>Inter State Gas Systems (Private) Limited Gas Private Company ail@isgs.pk/ 0092-51-9267672-74 0092-51-9267671 517, Main Margalla Road, F-10/2, Islamabad www.isgs.pk</p>	<p>IPR Trend Oil Corporation Oil &amp; Gas Private Company Wasim A.Zuberi (General Manager) iprgoc@isb.comsats.net.pk, ipr@isb.paknet.com.pk 0092-51)2871501-3 0092-51)2871504 52-East, Dodhy Building, 3rd Floor, Jinnah Avenue, Blue Area, Islamabad</p>
<p>Iqra Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Zulfiqar Ali Chief Exclusive 0092-55-3842900, 6818247 -48 0300-6404991 0092-55 -3843600, 6818242 21-Km, Lahore Side, G.T Road, Kamoke, District Gujranwala.</p>	<p>Irfan Orient Arts &amp; Crafts, Marble /Handicrafts Private Company Iranorientac15@yahoo.com 0092-336-3049620 F-959/3, WAPDA Labour Union Hall, Khokh Muhalah Gari Khata, Hyderabad</p>
<p>Khalil Corporation Mutli Sector Private Company mail@khalilcorporation.net, yaallah@cyber.net.pk 0092--21 3438 4441 &amp; 438 4442/ 92-300) 824 6586 0092--21) 3520 6474 - 3438 4446 - 7 uite No. 1010, Kawish Crown, Main Shahrah - e - Faisal, Karachi - 75350, Sindh, Pakistan www.khalilcorporation.net</p>	<p>Khyber Energy (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Muhammad Ishaq Khan Chief Exclusive 0092-91-5260618 0092-91 -5260372, 5274705 Off: No. 19, Cantonment Commercial Complex, Fakhr-e-Alam Road, Saddar Peshawar.</p>
<p>Kirn Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Ch. Mohammad Rafique Chief Exclusive kingas@yahoo.com 0092-42-7579950, 7591328 7591797 : 03334264372 042 -7591698</p>	<p>Kotal Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Ameer Nawshad Chief Exclusive 0092-51-2878416 0092-51-2874795 No. 210, 1st Floor, Shahid Plaza, Blue Area,</p>

14-Taj Arcade, Jail Road, Lahore. <a href="http://www.kirngas.com/">www.kirngas.com/</a>	Islamabad
Links International (Pvt.) Limited LPG MARKETING COMPANIES Private Company Ijaz Muhammad Khan Chief Exclusive 042- 5321461-5 042- 5321324-5 1-Km Bhoptian Chowk, Defence Road, Off Raiwind Road Lahore.	LMK Resources Oil & Gas Private Company Atif Rais Khan (President & CEO) <a href="mailto:office@lmkr.com">office@lmkr.com</a> , 0092-51)111-101-101 0092-51)2879854, 2879855 300, Software Technology Park 1, Evacuee Trust Center Sir Agha Khan Road, F-5/1, Islamabad - 44000
Lub Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Iqbal Z. Ahmed Chief Exclusive 0092-42-6306106&08, 6368844, 051-2652727 & 2652728 0092-42 -6368742 7-Egerton/Kashmir Road, Lahore.	Madni Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Mian Muhammad Mukhtar Chief Exclusive 0092-42-5850027 0333-4708408 0092-42 -5850027, 042-5893608 Al-Haider Tower 72-CCA, Phase 4, DHA, Lahore.
Makran Gas & Oil Co (Pvt.) Limited LPG MARKETING COMPANIES Private Company Major (R) Azizullah Khudadad Dashti Chief Exclusive 0092-852-611237, 413264 0321-8091101,2,4 0092-852-413884 Pasni Road Turbat District Kech, Balochistan.	Marble/ Slabs Marmonyx, Marble /Slabs Private Company Mr. Haroon Rashid, Director <a href="mailto:haroon@marmonyx.com">haroon@marmonyx.com</a> 0092-21-6976381 /0300-8228982 009221-4375706 504 Windsong Place, Block 7 & 8, KCHS, Karachi <a href="http://www.marmonyx.com">www.marmonyx.com</a>
Mari Gas Company Limited Oil & Gas Private Company General (Retd.) Imtiaz Shaheen (Managing Director) <a href="mailto:info@marigas.com.pk">info@marigas.com.pk</a> / <a href="mailto:info@marigas.com.pk">info@marigas.com.pk</a> 0092-51) 111-410-410, 2297683-86 0092-51)2297680 Plot no 21, Mauve Area, 3rd Road, Sector G-10/4, Islamabad <a href="http://www.marigas.com.pk">www.marigas.com.pk</a>	Mari Petroleum Company Limited Petroleum Private Company <a href="mailto:info@mpcl.com.pk">info@mpcl.com.pk</a> / 0092-51 111-410-410, 2352853/2352857, 2352861 0092-51 2352859 21, Mauve Area, 3rd Road, G-10/4 P.O. Box 1614, Islamabad – 44000 <a href="http://www.mpcl.com.pk">www.mpcl.com.pk</a>
Marina Industries, Marble Private Company Mr. Abdul Hameed Shera Chief Executive Officer, <a href="mailto:marinaindus@yahoo.com">marinaindus@yahoo.com</a> 0092-21-2577490 / 0300-9233819 M-1/1, Hasrat Mohani Colony S.I.T.E., Karachi	Marina Marble & Granite Marble & Granite Private Company Mr. Abdul Hameed Shera CEO, <a href="mailto:Marina_indus@hotmail.com">Marina_indus@hotmail.com</a> , <a href="mailto:Marina_indus@yahoo.com">Marina_indus@yahoo.com</a> 0092-345-3165979/32563897, 32577490 0092-21-3256419 Plot# M-1 Hasrat Mohani colony, SITE, Karachi <a href="http://www.marinaindustries.com">www.marinaindustries.com</a>
Marshal Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Syed Asghar Ali Shah Chief Exclusive 0092-21-4322677-8, 2033000 0092-21 -4322677 Suite # 11, 2nd Floor, Kehkashan Mall, Block -2 P.E.C.H.S, Tariq Road, Karachi	Mecom Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Abdul Wahid Chief Exclusive 0092-21-5894428, 5894429. 0092-21 -5894432 9-C, 13th Commercial Street Phase-II, Ext DHA, Karachi.
Mehran LPG (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Qazi Hamayaun Fareed Chief Exclusive 0092-42-6306106&8, 6368844, 051-2652727 & 2652728 0092-42 -6368742 7-Egerton / Kashmir Road, Lahore.	Mehran Marble Industries Marble Industries Private Company Mr. Muhammad Arif CEO <a href="mailto:sales@mehranmarble.com">sales@mehranmarble.com</a> 0092 (312) 669 3333/ +92 322 200 8493 1D9/3 Manghoper Road ,Qasba Moteroville, Karachi. <a href="http://www.mehranmarble.com/">www.mehranmarble.com/</a>

<b>Memon Marble Industries</b> <b>Marble</b> <b>Private Company</b> <b>Mr.Khurrum Ibrahim CEO</b> <b>memonmarble@yahoo.com</b> <b>0092-321 9257708/ 03009257708/ 021-36661134-36669585</b> <b>1-D 9/32 Mangopeer Road ,Qasba Metrville,Karachi.</b> <b>www.memonmarble.com/</b>	<b>Mesa Petroleum (Pvt.) Ltd.</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Muslim Lakhani (Chairman &amp; CEO)</b> <b>mlakhani@mesa.com.pk</b> <b>0092-51)2654146-47</b> <b>0092-51)2654148-49</b> <b>324, Hillside Road, E -7, Islamabad Pakistan.</b>
<b>Ministry Of Petroleum &amp; Natural Resources</b> <b>Petroleum</b> <b>Govt</b> <b>info@mpnr.gov.pk/</b> <b>0092--51) 9210220</b> <b>0092-51) 9206416</b> <b>Room No. 301, 3rd Floor, A block Pak Secretariat</b> <b>Islamabad.</b> <b>www.mpn.gov.pk</b>	<b>Ministry of Water &amp; power:</b> <b>Electricity</b> <b>Govt</b> <b>Dr. Musadik Malik Federal Minister</b> <b>info@mowp.gov.pk/secretary@mowp.gov.pk/</b> <b>0092-51-9212442/0092-51-9210533</b> <b>0092-51-9224825</b> <b>Room No. 201-204, 2nd Floor, A Block Pak</b> <b>Secretariat</b> <b>www.mowp.gov.pk</b>
<b>MND Exploration &amp; Production Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Alamgir Khan (General Manager)</b> <b>mnd@isp.comsats.net.pk /alamgir@mnd.com.pk</b> <b>0092-51)2651959, 2651884</b> <b>0092-51)2651875</b> <b>House 236, Street 11, Sector E-7 Islamabad</b>	<b>MOL PAKISTAN</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>0092-51111665725</b> <b>0092- 512820113</b> <b>Plot No. 5/A, Crown Plaza, F-7 Markaz, P.O.Box</b> <b>1562</b> <b>www.molpakistan.pk</b>
<b>Muhammadi Gas Company (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Amir Khurshid Chief Exclusive</b> <b>mgc@dsl.net.pk</b> <b>0092-51-2255048, 2255148</b> <b>0092-51 -2255948</b> <b>House # 12, Street 32/1, F-8/1, Islamabad</b>	<b>Nano Bio-Solutions</b> <b>Bio Tech</b> <b>Private Company</b> <b>Dr. Zafar Altaf</b> <b>Info@nanobiosolution.com</b> <b>0092 51 250 5983</b> <b>0092 51 486 4301</b> <b>3<sup>rd</sup> Floor, Park 1, Constitution Ave F-5/1, Islamabad,</b> <b>44000, Pakistan</b> <b>www.nanobiosolution.com</b>
<b>National Engineering Corporation</b> <b>Solar Energy</b> <b>Private Company</b> <b>nec@cyber.net.pk</b> <b>0092-21-32788336</b> <b>202 Sea Breeze Plaza, Main Shahrah-e-Faisal,</b> <b>Karachi - Pakistan</b>	<b>National Fertilizer Corporation of Pakistan (Private)</b> <b>Limited</b> <b>Fertilizer</b> <b>Private Company</b> <b>Mr. Muhammad Khalid Malik</b> <b>0092-42) 6284983 to 88</b> <b>0092-42) 6284989</b> <b>1st Floor, Alfalah Building (Tail Wing) Shahrah-e-</b> <b>Quaid-e-Azam Lahore, Pakistan</b>
<b>National Gases Ltd</b> <b>GAS</b> <b>Private Company</b> <b>info@natgases.com, sales@natgases.com,</b> <b>customerservices@natgases.com</b> <b>0092-21 111-202, 0092-21-2551453-58</b> <b>0092-21-2561335</b> <b>F-74/A, S.I.T.E. P.O. Box No. 3647, Karachi - 75700,</b> <b>Pakistan</b> <b>www.natgases.com</b>	<b>NATIONAL TRANSMISSION &amp; DESPATCH</b> <b>COMPANY (NTDC) LIMITED PAKISTAN</b> <b>Electricity</b> <b>Govt</b> <b>Mr. Khalid Mohtadullah chairmain</b> <b>hr@ntdc.com.pk /</b> <b>0092-42) 99201020-2283,</b> <b>Room No: 419 - WAPDA House, The Mall, Lahore,</b> <b>Pakistan.</b> <b>www.ntdc.com.pk</b>
<b>Nativus Resources Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Javed Ahmad (Resident Director)</b> <b>nativus@isb.paknet.com.pk</b> <b>/nativus@isb.paknet.com.pk</b> <b>0092-51)2291033, 2100605, 2212339 , 2102065,</b> <b>2102066</b> <b>0092-51)2102067</b> <b>148, Street # 48, F10/4, Islamabad</b>	<b>NEC</b> <b>Solar Energy</b> <b>Private Company</b> <b>nec@cyber.net.pk</b> <b>0092-21-32788336</b> <b>202 Sea Breeze Plaza, Main Shahrah-e-Faisal,</b> <b>Karachi - Pakistan</b>

<b>Nemmoco Petroleum Limited</b> Oil & Gas Private Company S. Munsif Raza (Chief Executive / Managing Director) info@ppl.com.pk/m_raza@ppl.com.pk/ 111-568-568, 0092-21)5680005, 5682125 4th Floor, P.I.D.C House, Dr. Ziauddin Ahmad Road, Karachi 75530, Pakistan. www.ppl.com.pk,	<b>New Horizon Exploration &amp; Production Limited</b> Oil & Gas Private Company Syed Wamiq Abrar Bokhari (Chairman & CEO) info@nhepl.com (92)(21)5833901-3, (92)(21)5810927-8 (92)(21)5833926, (92)(21)7007525 D- 6/1, Block No 4, KDA Scheme No .5, Clifton Karachi-75600.
<b>Nexton Group</b> Solar Private Company saad@nexton-group.com, Info@nexton-group.com 0092-51-2288117, 0092-0333-5338035 Office # 5-C, Alhafeez Plaza, Imran Khan Cowk, Banigala, Islamabad www.nexton-group.com	<b>Noor LPG Co. (Pvt.) Limited</b> LPG MARKETING COMPANIES Private Company Belal Jabbar Chief Exclusive info@noorlpg.com 0092-42-5761187, 5873698 0092-42 -5750560 House # 8, 7-Aziz Avenue, Canal Bank Road Gulberg V, Lahore. www.noorlpg.com
<b>Nortech Surveys Pakistan Limited</b> Oil & Gas Private Company Zafar Iqbal (Director) Pepl@isb.paknet.com.pk, / 0092-51)2299025, 2299028, Mob: 92(300)8555191 House No 66, Street 25, F-10/1 Islamabad www.shahzadintl.com.pk	<b>Ocean Pakistan Limited</b> Oil & Gas Private Company ocean@opl.com.pk 0092-51-2351000-7 0092-51-2351044 PTET House, 3rd Road, Mauve Area G-10/4, PO Box 1325, Islamabad, Pakistan www.opii.com
<b>Oil &amp; Gas Development Company Limited</b> Oil & Gas Govt info@ogdcl.com/ 0092-51-9209811- 18/0092-51-2623101- 06 0092-51-2623113- 18 Plot No.13, Jinnah Avenue, Blue Area Islamabad www.ogdcl.com	<b>Oil &amp; Gas Development Company Limited (OGDCL)</b> Oil & Gas Govt Arshad Nasr (Chairman & Chief Executive Officer) info@ogdcl.com /www.ogdcl.com/ceo@ogdcl.com 0092-51)9209811-8 0092-51)9209804-6 OGDCL House, Plot No .3, Block P Jinnah Avenue, Blue Area, Islamabad
<b>Oil &amp; Gas Investment Limited (OGIL)</b> Oil & Gas Govt 0092-21 3530-2963-65/92 21 3530-2967-78 0092-21 3586-1662 Oil and Gas Investment Limited 508, 5th Floor Continental Trade Centre, Block-8, Clifton, Karachi-75600, Pakistan www.ogil.com.pk	<b>Oil Companies Advisory Committee</b> Oil Govt admin@ocac.org.pk 0092-21-34549016-17-18 0092-21-34549015 1st Floor, Federation House, St. No. 28, Block-5, Clifton, Karachi- 75600 www.ocac.org.pk
<b>Oil Industries Pakistan (Pvt.) Limited</b> Oil Industries Govt info@targetlubricants.com 0092-21-34549016-17-18 0092-21-34549015 228-A, Block-2, P.E.C.H.S., Karachi, Pakistan. targetlubricants.com	<b>OK Gas (Pvt.) Limited.</b> LPG MARKETING COMPANIES Private Company Rehmat Khan Chief Exclusive 0092-51-4102016 0092-51 -4102096 House No. 503 -A, Street No. 67, Sector I-8/3, Islamabad.
<b>OMV (Pakistan) Exploration G.m.b.H.</b> Oil & Gas Private Company Dr. Georg Wachtel (General Manager) .wachtel@omv.com/ 0092-51)20899/111-668-668/2273620 0092-51)2273643-2273644 5th Floor, UBL Building, Jinnah Avenue, F-6/1, Islamabad, Pakistan	<b>OPI Gas (Pvt.) Limited.</b> LPG MARKETING COMPANIES Private Company Murtaza Hashwani Chief Exclusive 0092-51-2273451 0092-51-2273392 House # 21 -B, Street 55, F-7/4, Islamabad

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<b>Orient Energy Systems</b> <b>Energy</b> <b>Private Company</b> <b>info@orient-power.com</b> <b>0092 21 111-507-507, 0092 21 35072091-94, 0092 21 35077101-04</b> <b>0092 21 35077105</b> <b>Plot No.9, Sector 24, Korangi Industrial Area</b> <b>Karachi 74900</b> <b>www.orient-power.com</b>	<b>Orient Petroleum International Inc.</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Mr. Sadruddin Hashwani (Chairman)</b> <b>orient@opii.com</b> <b>0092-51)2274261-68</b> <b>0092-51)2274244</b> <b>Hayat Hall, Block No.2, Diplomatic Enclave No .1,</b> <b>G-5, Islamabad</b>
<b>Paige Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Javed Ahmad (Country Manager)</b> <b>Paige@isb.paknet.com.pk</b> <b>paige@isb.paknet.com.pk</b> <b>0092-51)2100605, 2212339, 2103128-9</b> <b>0092-51)2214475</b> <b>148, Street # 48, F 10/4, Islamabad</b>	<b>Pak -Arab Refinery Limited. (PARCO)</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Mr. Muhammad Rasheed Jung Chief Exclusive</b> <b>0092-21-5090100-13,021-5090114-25</b> <b>0092-21-5090625, 5090929</b> <b>Corporate Headquarters,Korangi Creek Road P.O.</b> <b>Box No. 12243, Karachi</b>
<b>Pakistan GasPort Limited</b> <b>GAS</b> <b>Govt</b> <b>+92 42 3636.8742</b> <b>www.ag.com.pk/pakistan-gasport/</b>	<b>Pakistan Institute of Engineering &amp; Applied</b> <b>Sciences (PIEAS)</b> <b>Education</b> <b>Academic Institutions</b> <b>registrar@pieas.edu.pk /webmaster@pieas.edu.pk</b> <b>0092-51-2207380 /+92-51-2207381/+92-51-</b> <b>2207382/92-51-2207383/+92-51-2207384</b> <b>0092-51-2208070</b> <b>P.O. Nilore, Islamabad Pakistan</b> <b>www.pieas.edu.pk</b>
<b>Pakistan Oilfields Limited</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Sajid Nawaz Chief Exclusive chief Exclusive</b> <b>polcms@pakoil.com.pk</b> <b>0092-51-5487589-96</b> <b>0092-51 -5487599</b> <b>POL House, Morgah, Rawalpindi.</b> <b>www.pakoil.com.pk</b>	<b>Pakistan Oilfields Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Shuaib A Malik (Chairman)</b> <b>polcms@isb.paknet.com.pk</b> <b>0092-51)5487589-97 /92(51)5487562</b> <b>0092-51)5487598-99</b> <b>POL House, Morgah, Rawalpindi</b>
<b>Pakistan State Oil Company Limited.</b> <b>Oil Marketing Companies</b> <b>Govt</b> <b>Mr. Irfan K. Qureshi,Managing Director</b> <b>taaluq@psopk.com</b> <b>0092-21-111-111-776/ (92 21) 99203866-85</b> <b>0092-21) 99203835</b> <b>PSO House, Khayaban-e-Iqbal P.O.Box-3983,</b> <b>Karachi-75600</b> <b>www.psopk.com</b>	<b>Pakistan Stone Development Company</b> <b>stone</b> <b>Govt</b> <b>Mr. Ihsanullah Khan Chief Executive</b> <b>info@pasdec.com.pk</b> <b>0092-51) 9263465-7/ 9261633-36</b> <b>0092-51) 9263664</b> <b>Chamber of Commerce Building,Mauve Area,G-</b> <b>8/1Islamabad.</b> <b>www.pasdec.com.pk</b>
<b>Pakistan's First Fully Integrated LPG Company</b> <b>Petroleum Gas</b> <b>Govt</b> <b>progas@progas.cc</b> <b>0092-21) 472 0077, 472 0079</b> <b>0092-21) 472 0075</b> <b>Progas Pakistan Limited NWZ/II/P-305(A4 LPG</b> <b>Area) North Western Industrial Zone Bin Qasim</b> <b>Karachi.</b> <b>www.petrosin.com</b>	<b>PARCO Pearl Gas (Private) Limited (formerly SHV</b> <b>Energy Pakistan)</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Patrick J. Gregory Chief Exclusive</b> <b>supergas@parco.com.pk</b> <b>111-798-798</b> <b>0092-51 -2275576</b> <b>98-A, F/6-2, Margallah Road, Islamabad.</b> <b>Rawalpindi.</b> <b>www.parco.com.pk/ppg</b>
<b>Petro Search (Pvt.) Ltd., PSL</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Shahid Ahmed (Managing Director)</b> <b>Shahid1407@gmail.com</b> <b>0092-51)2103594, 2103593</b>	<b>Petroleum Consultant International (PCI)</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Sarfraz U. Siddiqui (Chief Executive)</b> <b>info@petroconpak.com/</b> <b>0092-51)2299198, 2102999</b>

0092-51)2294034, 2103594 Flat # 76, Park Towers, Studio Apartments, F-10/3 Islamabad.	0092-51)2296789 House 87, Street - 14, Sector F-11/1, Islamabad www.petroconpak.com
Petroleum Exploration (Pvt) Ltd Oil & Gas Private Company Zaheeruddin (Chairman & CEO) pepl@isb.com.pk, / 0092-51)2299031-36 0092-51)2299027-29 15 Nazimuddin Road, Sector, F-10/4, Islamabad, P.O. Box-1440 www.shahzadintl.com.pk	Petroleum Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Mrs. Farida Tariq Chief Exclusive 0092-42-5873698 0092-42 -5750560 House # 8, 7-Aziz Avenue, Canal Bank Road, Gulberg V, Lahore www.petroileumgas.com.pk
Petronas Carigali (Pakistan) Ltd., (PCPL) Oil & Gas Private Company Mohd Ariffin Daud (General Manager) mariffin_daud@petronas.com.pk /akhan@lmkr.com 0092-51)111-538-111/92(51)2097120 0092-51)2277997 508, Evacuee Trust Center, Agha Khan Road, F-5/1, Islamabad	Petrosin Gas Pakistan (Pvt.) Limited LPG MARKETING COMPANIES Private Company Sohail Latif Chief Exclusive mail@petrosin.com 0092-51-2829027 0092-51 -2825524 82 (115), Attaturk Avenue (Embassy Road), G -6/3, Islamabad. www.petrosin.com/pgp.asp
Pioneer Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Khurram Khan Chief Exclusive info@pioneerlpg.com 0092-42-7222519-20 0092-42-7226348 Ground Floor, Co-operative Insurance Building, 23-The Mall, Lahore. www.pioneerlpg.com	Polish Oil & Gas Company Pakistan Branch, (POGC) Oil & Gas Private Company Jacek Oleksy (Resident Manager) pogc@comsats.net.pk /Jopogc@mail.comsats.net.pk 0092-51)2251530, 92(51)2654591-3/92(51)2654589, Mob: 0(092)300-8555611 0092-51)2654594 House # 321 Street # 17 , Sector E-7 Islamabad
Power Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Muhammad Ali Haider Chief Exclusive 0092-21-5689243-4 0092-21 -5689212 305, Progressive Plaza, Beaumont Road, Civil Lines Karachi.	Premier KUFPEC Pakistan B.V. Oil & Gas Private Company Zaffar Chida (Chief Executive Officer) mail@pkp.com.pk /zchida@pkp.com.pk 0092-51)111-211-311 & 92(51)22514530, 0092-51)2251104 House No.2, Street 71, F-8/3 Islamabad
Prime Telecommunication Telecommunication Private Compny info@prime-telecom.com 0092-42-6370406/ 0092-42-6370406 0092-42-6371330 Office # 11/9, Durand Road, Shimla Complex, Near Queen Mary College, Lahore, Pakistan. 54000 www.prime-telecom.com/	Pro Gas Pakistan Limited. LPG MARKETING COMPANIES Private Company Abbas Bilgrami Chief Exclusive progas@progas.cc 0092-21-111-574-000 0092-21 -5823995 Pro Gas House, D-133, Block 4, Clifton Karachi - 75600.
Pyramid Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Muhammad Farooq Azam Chief Exclusive 0092-42-5725781 0300-8478418 0092-42 -5775064 W-564, Phase-III, DHA, Lahore.	Qureshi Gas Company (Pvt.) Limited LPG MARKETING COMPANIES Private Company Muzaf far Ali Qureshi Chief Exclusive 0092-22-2637656, 2610051 0333-2722508 0092-22-2781530, 2610051 Al-Noor Heights, Shop No. 9, Jamshoro Road, Hyderabad.
Ravi Gas (Pvt.) Limited. LPG MARKETING COMPANIES Private Company Muhammad Siddique Chief Exclusive karachi@crecentservices.com.pk 0092-42-6305305, 6371323 -24 0092-42 -6362402 30/I-B, Lawrence Road, Lahore	RDC International (Pvt.) Limited Oil & Gas Private Company (Chief Executive Officer) rdc@lhr.paknet.com.pk 0092-42)5167820, 5167975, 5172514 0092-42)5167530 172-M Block ,Model Town Extension Model Town,

<a href="http://www.cresslpg.com/ravi_gase.htm">www.cresslpg.com/ravi_gase.htm</a> <b>Renewable &amp; Alternative Energy Association of Pakistan (REAP)</b> Education Academic Institutions Mir Ahmad Shah Executive Secretary <a href="mailto:write@reap.org.pk">write@reap.org.pk</a> 0092-300-5221718 /+92-51-4100084-85 0092-51-4100083 Plot 140 Street 9, I-10/3 Industrial Area, Islamabad, Pakistan. <a href="http://www.reap.org.pk">www.reap.org.pk</a>	<b>Lahore</b>  <b>Rivaj</b> <b>Marble Handicrafts</b> <b>Private Company</b> Ms. Azra Ahmed, <a href="mailto:azra@rivajcraft.com">azra@rivajcraft.com</a> 0092-300-8298757/ (92-21) 5823471-72 0092-21) 5661287 18, Khayaban-e-Shaheen, 18, Khayaban-e-Shaheen, Karachi <a href="http://www.rivajcraft.com/">www.rivajcraft.com/</a>
<b>Rousch (Pakistan) Power Limited (RPPL)</b> <b>Electricity</b> <b>Private Company</b> Abdul Razak Dawood Chairman <a href="mailto:site@rouschpak.com/">site@rouschpak.com/</a> 0092-65-2441572, 2441822-23, 0092-65-2441570, 450 MW Combined Cycle Power Plant Near Sidhnai Barrage, Abdul Hakim, District Khanewal <a href="http://www.rouschpak.com">www.rouschpak.com</a>	<b>Sadiq Gas Company.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Faizan Tariq Chief exclusive 0092-55-3258100, 3258200 0092-55 -3257600 76-A, S.I.E # 1, Gujranwala
<b>Saif Energy Limited</b> <b>Oil &amp; Gas</b> <b>Private Company</b> Ahmed Nawaz Khan (President) <a href="mailto:Saifenergy@saifgroup.com">Saifenergy@saifgroup.com</a> <a href="mailto:/anawaz@saifgroup.com">/anawaz@saifgroup.com</a> 0092-51)2870361-3 0092-51)2870365 2nd Floor ,2020-Kulsum Plaza, Blue Area Islamabad	<b>SAM Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Mrs. Bushra A. Ahsan Chief Exclusive 0092-42-6278882, 6286528 0092-42 -6366435 Azmat House, 32-Davis Road, Lahore
<b>SANCO</b> <b>Marble /Slabs</b> <b>Private Company</b> Mr. Sana ullah Khan,/Chief Executive Office, <a href="mailto:info@sancomarble.com">info@sancomarble.com</a> , <a href="mailto:sanco@inbox.com">sanco@inbox.com</a> 0092- 21-6553838 /0332-225555 0092-21-4960416 B-18 Block -3, Gulshan-e-Iqbal, Post Code # 75300 Karachi <a href="http://sanco.aurasourcing.com">sanco.aurasourcing.com</a>	<b>Sangi Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Masood Sadiq Malik Chief Exclusive 0092-51-2829586-87, 7128081 0092-51-2829587 Office # 03, Hill Road, F -6/2, Islamabad
<b>Sarhad Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Tauseef Gilani Chief Exclusive 0092-51-2871134 0092-51-2871135 Suite No. 4, Mezzanine Floor, Sethi Plaza, Jinnah Avenue, Main Blue Area, Islamabad.	<b>Saudi Energies (Pvt.) Limited</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Shahid Farrukh Chief Exclusive 0092-42-7241072-3 0092-42-7241074 Ghani Chambers – Patiala Ground Link Mcleod Road,Lahore
<b>Sehwan Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Ishti aq Asif Chief Exclusive 0092-42-5323164-65 0092-42 -5322437 ½ Km Bhoptian Chowk Defence Road, Off-Raiwind Road, Lahore.	<b>Shabir Marble Works</b> <b>Marble</b> <b>Private Company</b> Mr.Asiam Shafi CEO 0092-21 2562291 Plot# A- 52 Wilayatatabad,Manghopir Road Karachi.
<b>Shaheen Gas Company.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> Mushtaq Arif Chief Exclusive 0092-300-8737233 6-A, Gulgasht Colony, Multan	<b>Shaheen Group of Companies</b> <b>Solar Energy</b> <b>Private Company</b> <a href="mailto:info@shaheensolar.com">info@shaheensolar.com</a> 0092- 427211390 - 92427359666 - 92427320798 - 923008442237 0092-42 7228459 <b>Shaheen Solar Company &amp; Shacho Electronics 16-</b>

<b>Shaz Services.</b> <b>Electricity</b> <b>Private Company</b> <b>info@shazservices.com</b> <b>0092 21 4390032-33, 4302647-48, 4559031, 0092 300 8223644 , 0092 333 3376651</b> <b>0092 21 4559032</b> <b>A-376, K.A.E.C.H.S Block 9, Main Shaheed-e-Millat Road, Karachi.</b> <b>www.shazservices.com</b>	<b>Hall Road (Electronics Parts Market)</b> <b>www.shaheensolar.com</b>
<b>Shell Gas LPG (Pakistan) Limited</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Fawzia Kazmi Chief Exclusive</b> <b>0092-21-5301270</b> <b>0092-21-5301673</b> <b>Suite # 606-608, 6th Floor, The Forum, Block -9, Clifton, Karachi</b>	<b>Shell Development &amp; Offshore Pakistan B.V</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Brendon Connolly (Asset General Manager)</b> <b>brendon.connolly-gec@gec.shell.com</b> <b>0092-51)2823136,2823573,2271432,227615/0971(4)335033 5</b> <b>0092-51)2228584</b> <b>House 80,Khayaban-e-iqbal, F-6/2 Islamabad</b>
<b>Sindh Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Yawar Abbas Mamda ni Chief Exclusive</b> <b>0092-21-2421956</b> <b>0092-21 -2414203</b> <b>11, Karachi Chamber of Commerce &amp; Industry</b> <b>Aiwan-e-Tajarat Road, Karachi.</b>	<b>Shell Pakistan Limited,</b> <b>Oil Marketing Companies</b> <b>Private Company</b> <b>Mr. Zaiviji Ismail Bin Abdullah,Chairman</b> <b>natasha.qamar@shell.com,</b> <b>generalpublicenquiries-pk@shell.com</b> <b>0092 (21) 111-888-222 - 021-5689525/26</b> <b>0092 (21) 3563-0110 - 021-5660071</b> <b>Shell House, Ch.Khalliquzaman Road, Karachi.</b> <b>www.shell.com.pk</b>
<b>Solar Line Adaptive Technologies (PVT) LTD.</b> <b>Solar Energy</b> <b>Private Company</b> <b>S. Abdul Aziz Mehboob (Director)</b> <b>info@adaptive-com</b> <b>0092-21) 35865896, 35868044</b> <b>Suite # 3, 4th Floor Dean Arcade, Block - 8, Clifton, Karachi-75600, Pakistan</b> <b>www.adaptive-tec.com</b>	<b>Solar System Karachi.</b> <b>Solar Energy</b> <b>Private Company</b> <b>Saqib Murtaza</b> <b>sales@solarsystemspk.com</b> <b>0092-21-35830127</b> <b>0092-21-35373020</b> <b>G23 A/1 Park Lane Clifton Block 5, Karachi, Pakistan 75600</b> <b>www.solarsystemspk.com</b>
<b>South Asia Geophysical Services (SAGeo)</b> <b>Oil &amp; Gas</b> <b>Private Company</b> <b>Chen Zhicun (General Manager)</b> <b>mail@bgpsouthasia.com/chenzhicun@bgpsouthasia.com</b> <b>0092-51)2293494-95 /300-8562986,</b> <b>0092-51)2108176</b> <b>House No.2, St No.58, F-10/3, Islamabad</b>	<b>SS ENERGENCY</b> <b>Energy</b> <b>Private Company</b> <b>ss.energypk@gmail.com, info@ssenergy.com.pk</b> <b>0092-323-5252-814, 0092-323-5252-814</b> <b>0092-42-3722-7572</b> <b>82-Nishter (Branderth Road) Lahore-54000 (Pakistan)</b> <b>www.ssenergy.com.pk</b>
<b>SRE Solutions</b> <b>Solar Energy</b> <b>Private Company</b> <b>Mr. Saadat Hayat Khan (CEO)</b> <b>Info@solarmagicbox.com</b> <b>0092-21 32046383 /35388736</b> <b>Shop no 3 Street 11 commercial Area DHA Phase 7</b> <b>www.solarmagicbox.com</b>	<b>Sun Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Mr. Junaid Khan Chief Exclusive</b> <b>0092-51-111-666-999,2654242-4</b> <b>0092-51 -111-444-999, 2654245</b> <b>279, St. 21, E-7, Islamabad.</b>
<b>Stone Marks</b> <b>Marble</b> <b>Private Company</b> <b>Mr. Shahnawaz, Director</b> <b>khan_and_brothers@yahoo.com</b> <b>0092- 051-2113646 /0344-3151468</b> <b>Suit No.11, Millat Plaza F-10, Markaz, Islamabad.</b>	<b>SYNDICATE Mineral Export Company</b> <b>Mineral</b> <b>Private Company</b> <b>Mr.Nazim Hashwani CEO</b> <b>harec@hashgroup.com</b> <b>0092-21) 2412946-49/ (+92-21) 32424776, 32413367</b> <b>0092-21) 2416725 &amp; 2411874/ (+92-21) 32416725</b> <b>108-Cotton Exchange Building ,I.I chunrigar Road Karachi.</b> <b>www.hashgroup.com</b>
<b>Super Star Gas Company Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> <b>Private Company</b> <b>Cap. (R) Basharat Ahmed TI (M) Chief Exclusive</b> <b>0092-51-2291003, 2292860</b> <b>0092-51 -2113039</b> <b>18-A / 18-B, Super Star Plaza G -10 Markaz, Islamabad</b>	

<b>Synergy Resources (Pvt.) Limited</b> <b>LPG MARKETING COMPANIES</b> Private Company Ahsan Latif Chief Exclusive 0092-42-5380236/8 0092-42 -5380237 17-C/2, Gulberg 3, M.M. Alam Road, Lahore	<b>Target Engineering Enterprise</b> <b>GAS</b> Private Company iqbalyasir7@gmail.com 0092-300-4246129 Century Tower Kalma Chowk Lahore
<b>Techno Petroleum (Pvt.) Ltd</b> <b>Oil &amp; Gas</b> Private Company Abid Ali (Chief Executive Officer ) techno@isb.comsats.net.pk / CEO@tech_engg.com.pk 0092-51)2873779,2275514/2275514/0, 300-8555524 0092-51)2201661 House 30, Street 19, F-6/2, Islamabad. www.tech_engg.com/	<b>Terra Energy (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> Private Company Farasat Ali Chatta Chief Exclusive info@terraenergy.com.pk 0092-42-6280024 0092-42 -6280023 Suite 426, 4th Executive Floor, Sadiq Plaza, 69 The Mall, Lahore www.terraenergy.com.pk
<b>Tez Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> Private Company Farooq Iftikhar Chief Exclusive 0092-42-5847791-92, 5856809. 0092-42 -5847793 116-C, Model Town, Lahore	<b>The Attock Oil Company Limited</b> <b>Oil &amp; Gas</b> Private Company Shuaib A.Malik (Chief Executive) 0092-51)2270542, 92(51)2270546, 92(51)2270544 0092-51)2270541 House # 6 Faisal Avenue F-7/1, Islamabad
<b>The Hydrocarbon Development Institute</b> <b>Education</b> Academic Institutions Dr. Asim Hussain Chairman hdip@apollo.net.pk 0092-51) 925-8301, 925-8302. 0092-51) 925-8310. Plot# 18, Street# 6, H-9/1, Islamabad. www.hdip.com.pk	<b>The Petroleum Institute of Pakistan</b> <b>Education</b> Academic Institutions Mr. S. Nazeer Iqbal Secretary info@pip.org.pk 0092-21)35378701-2 0092-21)35378704 1st floor, Federation House, Block V, Kehkashan, Clifton, Karachi - Postal code 75600 www.pip.org.pk
<b>The Terminators</b> <b>Solar Energy</b> Private Company 0092-21-35476316 104, Yasir Chambers, Opp. PIA Planetarium 13-A, University Road, Gulshan-e-Iqbal Karachi.	<b>Total-Parco Pakistan Limited</b> <b>Oil Marketing Companies</b> Private Company Mr. Marc Soissong, Chief Executive Officer 111-709-709 0092-42-5843535-6 11/1, Block-B, Model Town Lahore
<b>TRDP TIED</b> <b>Solar Energy</b> Private Company 0092-21-35868791 0092-21-35867300 Coordination Office F-178/3, Block-5, Kehkashan, Clifton Karachi, Sindh, Pakistan	<b>United Energy Pakistan (UEP)</b> <b>Electricity</b> Private Company Tariq Khamisani (President ) queries@uep.com.pk/ 0092-21-3561-1194 0092-21-3561-634 4th Floor, Bahria Complex 1 24 M. T. Khan Road Karachi - Pakistan. www.uep.com.pk
<b>Wak Limited.</b> <b>LPG MARKETING COMPANIES</b> Private Company Ammar Ahmed Khan Chief Exclusive info@wakgroup.com 0092-42-5870230-36 0092-42 -5877442, 042-5877593, 5877596 135-E I, Gulberg-III, Lahore. www.wakgroup.com	<b>Wakgroup</b> <b>Multiple</b> Private Company info@wakgroup.com 0092- 42 111-66-3333/92 42 5870230-6 0092- 42 5877442, 92 42 5877596 135 Block E-1, Stadium Road, Gulberg III, Lahore Punjab, Pakistan www.wakgroup.com/group-of-companies/
<b>Wellbeinggreen</b> <b>Solar Energy</b> Private Company info@wellbeinggreen.com.pk 0092-0800 - 92477 172/P, Third Floor PECHS Block – 2 Tariq Road, Karachi	<b>Wyne Gas (Pvt.) Limited.</b> <b>LPG MARKETING COMPANIES</b> Private Company Mrs. Ryda Nabeel Nawaz Chief Exclusive 0092-51-7101999, 2878481 0092-51 -2250835, 2878 482 State Life Building # 5, Phase-II, Ground Floor,

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<b>Behar Al Sindh Foundation</b> <b>BASF</b> <b>Local NGO</b> <b>0092-22-2653439</b> <b>0092-333-2603471</b> <b>info@basf.org.pk</b> <b>B-133 Phase One, Block 2 Main Post Office Road Qasimabad, Hyderabad</b>	<b>Connect (Woman and Child Organization)</b> <b>CONNECT</b> <b>Women Organizations</b> <b>0092-333-3375383</b> <b>connectwithus@hotmail.com</b> <b>102, Quality Heights, Teen talwar, Clifton, KARACHI</b>
<b>Consumer Rights Commission of Pakistan</b> <b>CRCP</b> <b>Local NGO</b> <b>0092-51-111-739-739</b> <b>0092-51-2823315</b> <b>sg@crpc.org.pk</b> <b>main@crpc.org.pk</b> <b>0092-51-2825336</b> <b>House No. 13, Street No.1, Sector: G-6/3, ISLAMABAD</b>	<b>Development Alternatives Inc</b> <b>DAI</b> <b>Local NGO</b> <b>0092-51-2652891-4</b> <b>uzair_adil@dai.com</b> <b>0092-51-2652890</b> <b>House No. 4-A Street No. 42, Sector F-7/1 ISLAMABAD</b>
<b>Development Concerns</b> <b>DC</b> <b>Local NGO</b> <b>0092-333-9964742</b> <b>0092-300-5791330</b> <b>d.concerns@gmail.com</b> <b>nthaheem@gmail.com</b> <b>Malik Inayat Ullah House, Khayaban-e-Iqbal Town, Near Alizai Daal Mill, Multan Road, LAHORE</b>	<b>FIDA</b> <b>FIDA</b> <b>Local NGO</b> <b>0092-51-2305154-56</b> <b>info@fidapk.org</b> <b>0092-51-8356996</b> <b>Islamabad, Pakistan</b>

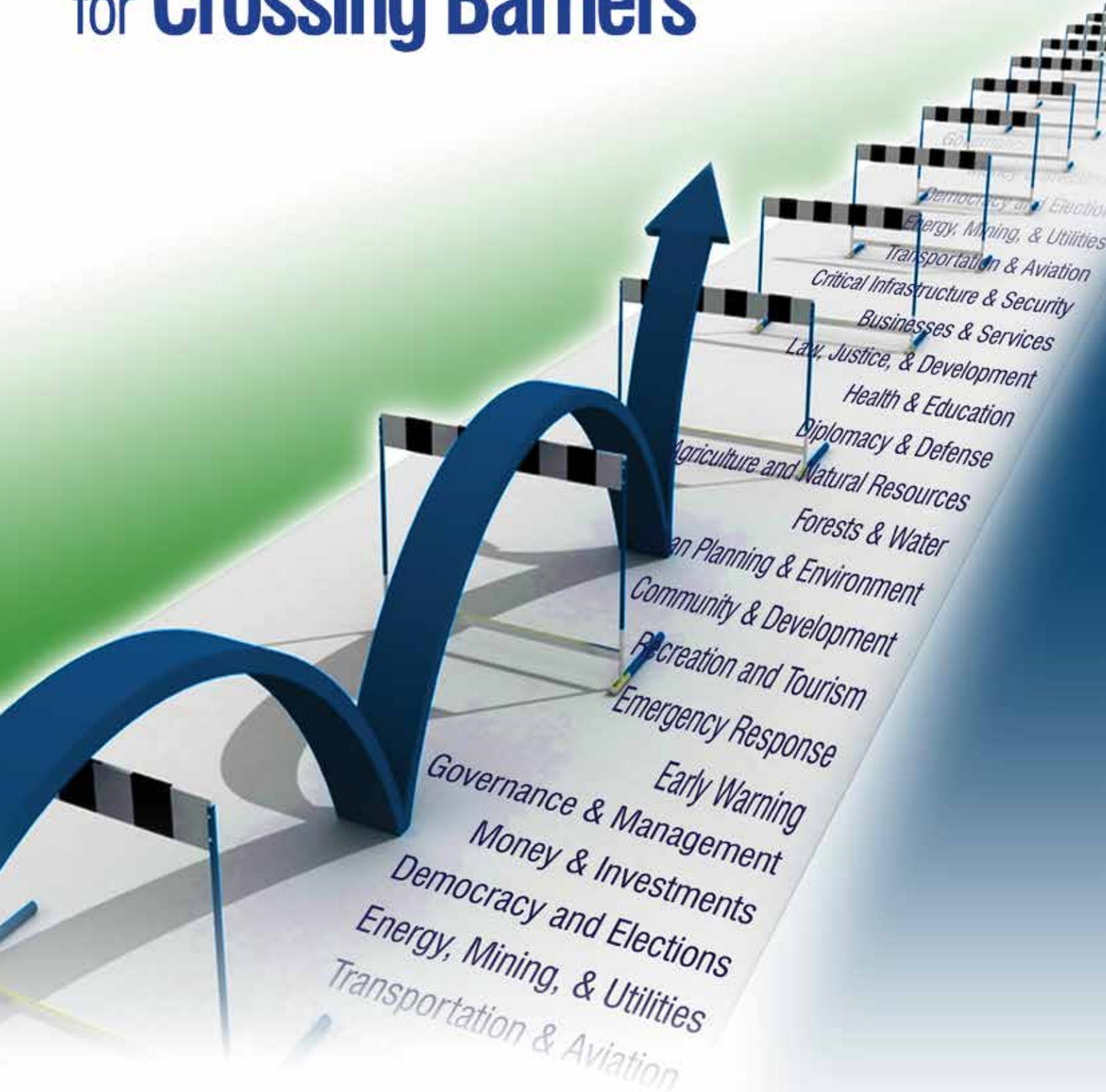
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<b>Sustainable Development Society</b> <b>SDS</b> <b>Local NGO</b> <b>0092-996-850744</b> <b>0092-996-414243</b> <b>sds@sds.org.pk</b> <b>0092-996-850618</b> <b>Bahind Distric Court, Near District Forest Office,</b> <b>Alpurai, SHANGLA</b>	<b>Swat Participatory Council</b> <b>SPC</b> <b>Local NGO</b> <b>0092-946-721296</b> <b>0092-345-9510067</b> <b>roshanswat@gmail.com</b> <b>spswat@gmail.com</b> <b>Naeem House, Near Girls College, SWAT</b>
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