



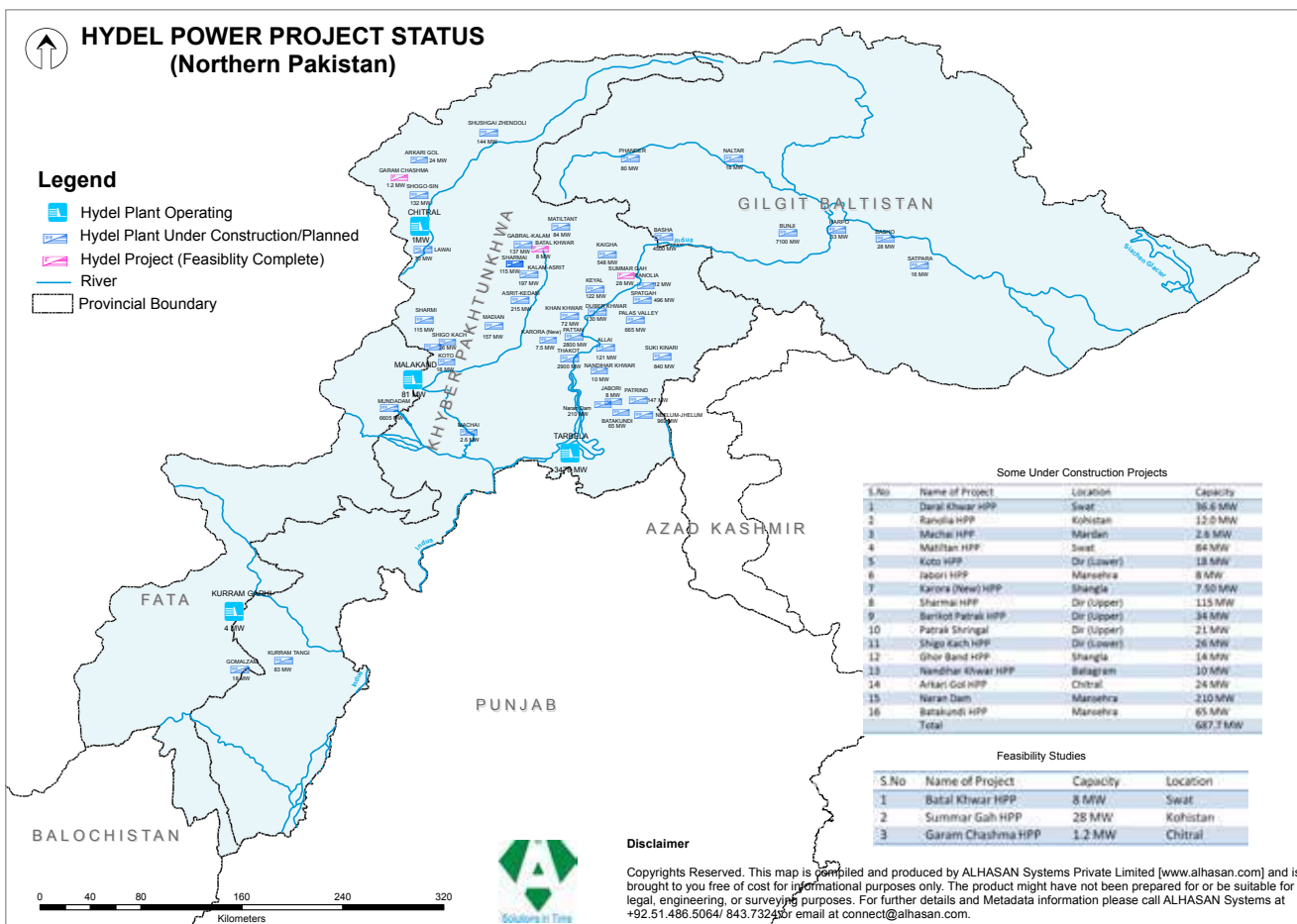
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ALHASAN Systems Private Limited

4-Green, Sahibzada Abdul Qayyum Road, I-8/2,
Islamabad, 44000 Pakistan

For information:

Landline: +92.51.486.5064

Email: connect@alhasan.com

Facebook: <http://www.facebook.com/alhasan.com>

Twitter: [@alhasansystems](https://twitter.com/alhasansystems)

Website: www.alhasan.com

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News Headlines

Natural gas answer to energy woes

Dawn, May 30, 2013

Details

LAHORE: Advanced technological contribution with a focus on enhancing energy production efficiency and effectively tapping the potential of natural gas were needed to address the power shortage faced by the country. This was highlighted at the 9th Pakistan Oil, Gas and Energy Industry Conference held at Expo Centre on Thursday. The main theme for this year's conference was "Securing Pakistan's Energy Future: Options and Solutions. Elaborating the technologies at the Energy Trends and Issues: Pakistan and Global Perspective" session, GE Pakistan president and CEO Sarim Sheikh said efficient use of natural gas could significantly help overcome the power crisis and increase supply and affordability. Natural gas is a significant part of the Pakistan energy mix, contributing approximately 50 per cent to the energy supply. With sizable gas reserves, the country can effectively tap the natural gas resources, which is much more cost-competitive and environmentally friendly than other energy sources. Natural gas is one of the most efficient and cleanest hydrocarbons fuels known to mankind. It is 30 per cent more energy efficient, emits around half the CO₂ and has similar operating costs as coal and nuclear," he said. The global gas market has been going through a significant shift with abundant supplies becoming available and current reserves estimated to equal more than 250 years of existing demand levels. The Pakistan Petroleum Policy 2012 has offered attractive incentives and prices for new exploration and field development for natural gas and is likely to deliver increased supply in the medium term. By using the country's gas resources efficiently and effectively, Pakistan can unlock the value of this indigenous resource and improve energy supply and affordability. This can also help Pakistan reduce circular debt, subsidies and import bill," he said.

Regarding leveraging existing assets, Mr Sheikh emphasised on the need to provide uninterrupted gas supply to the high efficiency gas plants of Genco, KESC and IPPs for delivering low-cost electricity and savings of over Rs100 billion annually in subsidies. Moreover, there is a need for complete gas based high-efficiency thermal projects such as developing and completing 1,050MW of Genco based gas IPPs in Nandipur, Chicho ki Malian within the next 18-24 months to add capacity and lower costs. He added that to unlock the potential of natural gas in Pakistan, there is a need to focus on better use of existing assets, improving supply and developing new infrastructure. He stressed the need for reducing 'unaccounted-for-gas' by making infrastructure improvements in SSGC and SNGPL transmission and distribution network through better measurement and control, smart pressure management and improving pipelines health. Developing 'low BTU gas fields' and dedicating the gas produced to new power plants adjacent or near to the field, developing an LNG merchant terminal with short to medium-term contracts with throughput guarantees to take advantage of global supply length and allowing private users to access supplies at a competitive tolling fee are also key to boosting the supply side.

Energy crisis: Textile mills delay investment plans

The Nation, May 31, 2013

LAHORE - Central chairman of All Pakistan Textile Mills Association (APTMA) Ahsan Bashir has sought uninterrupted gas supply to the Punjab-based textile industry on the SNGPL network, which is yet being subjected to four days a week supply suspension and eventually limiting industry's export potential, growth, investment and job creation. The supply chain of textile industry is inter-dependent to manufacture textile products, predominantly meant for exports. The gas supply constraints have impaired 35pc of the production capacity of the industry and, if enabled to operate uninterrupted, it has potential to add another \$3 billion export of the country. It is an irony that the Punjab-based textile industry is being hit hard by the gas supply constraints, which is in actual 75% of total textile industry of Pakistan. Meanwhile, Chairman APTMA Punjab Shahzad Ali Khan added that the textile mills in Punjab have been delaying their investment plans due to energy shortage. He said the new government should take up the issue on war-footing basis and resolve the energy supply issue at the earliest.

Shahzad further pointed out that unannounced loadshedding has caused huge machinery loss in the industry. He said the textile workers are the worst victims of the situation because rising lay off in the mills situation in Punjab. The central chairman APTMA said there is an immediate need of resumption of five days a week gas supply to enable the industry for meeting export orders in hand and further commit to the international buyers that the Punjab-based textile industry is capable of manufacture export orders of any volume. Furthermore, it is pertinent to note that Pakistan has applied for the GSP Plus market access for European Union, which is likely to be effective by 2014 onwards. This is right time for the government to prepare its textile industry and let it grow and expand in all directions to avail benefit of the market access scheme. It becomes more imperative when the upcoming government has shown clear-cut commitment of bringing investment and growth in the country. Therefore, the economic planners and policymakers are urged to ensure uninterrupted gas supply to the industry for meeting energy requirement for manufacture exportable goods to earn foreign exchange, create employment and increase share of textile industry in overall economic growth of the country.

Google Makes Its First Renewable Energy Investment In Africa, Puts \$12M Toward South African Solar Plant

Tech Crunch, 30 May 2013

Google announced that it is investing \$12 million in a 96 megawatt solar photovoltaic plant in South Africa. This marks Google's first renewable energy investment in Africa and its 12th overall renewable energy investment. Once it's completed, Google says, the Jasper Power Project, which is situated in the Northern Cape province of South Africa, will generate enough power for 30,000 South African homes. In total, Google has now committed more than \$1 billion to green energy projects. In South Africa, Google is joining SolarReserve, Intikon Energy and the Kensani Group as the main funders for this project, which is also backed by Rand Merchant Bank, the Public Investment Corporation, Development Bank of South Africa and the PEACE Humansrus Trust. The project will be one of the largest in South Africa and cover about 450 acres with more than 325,000 solar modules. In today's announcement, Google's director for energy and sustainability, Rick Needham, also lays out some of the criteria the company uses to make these kinds of investments. He notes, for example, that Google will "only pursue investments that we believe make financial sense." Because South Africa has policies that support these kind of projects, Google believes it is an attractive place for it to invest in this technology. The company, however, is also looking for "projects that have transformative potential – that is, projects that will bolster the growth of the renewable energy industry and move the world closer to a clean energy future."

Clean energy for a carbon-choked world

The Guardian, 30 May 2013

This month, the concentration of carbon dioxide in the atmosphere exceeded 400 parts per million for the first time in human history. If the trend continues, the International Energy Agency has warned, the world could warm by 6C by the end of the century. In December 2009, the US Secretary of Energy, Steven Chu, called the world's first Clean Energy Ministerial. The aim was to speed the transition from a carbon economy to clean energy production in the 22 countries that together produced 80% of the world's greenhouse gases. Clearly the scheme has not gone well. A report on the clean energy market by the IEA last month had harsh words for the countries involved. They account for 90% of global investment in clean energy, but progress has been slow, and their policies too narrow. The markets have failed clean energy, said the IEA. Research and development must move faster. For a series of posts over the coming month, I will interview six scientists who work on clean energy. Each has their own solution to the problem. All hope to make a difference. In the next post, I talk to Didier Houssin, director of sustainable energy policy and technology at IEA, about the challenge of energy production. The following posts will look at the promise of photosynthesis to make biofuels; high altitude wind power; organic solar cells; new forms of hydrogen production; and hydroelectric power. My posts will cover what scientists think, but I want to know your thoughts too. If you have questions or suggestions, please add them to the comment thread and I will raise them with the scientists I interview. I'll let you know how they respond.

Energy crisis is first priority, says Nawaz

The Dawn, 29 May 2013

LAHORE: Chief of the election winning Pakistan Muslim League – Nawaz (PML-N) Nawaz Sharif held a meeting at his Raiwind residence on Wednesday to address the energy crisis during which he said that the energy crisis was his party's first priority, DawnNews reported. Nawaz Sharif said that after coming into power his government would initially bring an end to unannounced loadshedding in the country. The meeting presided by Nawaz Sharif was also attended by former federal finance minister Shaukat Tareen, Mian Mansha among other leaders of the PML-N. Though other challenges faced by the country were also discussed in the meeting but the energy crisis remained the topmost agenda of the meeting. Sharif said that all resources would be fully utilised to bring an end to loadshedding whereas no decision has been taken to freeze development funds.

Experts foresee political will to create integrated energy ministry

Pakistan Today, 29 May 2013

KARACHI - The 5Th Pakistan Oil and Gas Forum 2013, organised by SHAMROCK Conferences International, concluded on May 30 at the Marriott Islamabad demanding and foreseeing political will as the conduit to create an integrated Energy Ministry to build, improve and implement a comprehensive energy policy. A large number of delegates and industry stalwarts from government, regulatory bodies, oil & gas companies, the power generation sector and allied organisations, including multiple panels of experts attended the forum. The Federal Petroleum Secretary Abid Saeed, while dilating upon some critical issues facing the oil and gas sector, said the conference had come at an appropriate time and hoped that the incoming government would take favorable and pragmatic decisions. Shahid Sattar, member energy, Planning Commission of Pakistan highlighted the need for implementation of the petroleum policy but added that good governance was one of the factors to be dealt with. He was also of the opinion that the way forward would be to consider the privatisation of state companies. Diplomatic presence from the embassies of Italy, Hungary, Argentina, Poland, Malaysia and Ukraine and Turkmenistan; and delegate representations from Kuwait, UAE and Singapore, gave an international flavour to the annual forum.

Their presence indicated a significant importance to the forum due to the alarming energy crisis in Pakistan and the start of a newly elected regime. Earlier, O&G Forum Chairman Menin Rodrigues welcomed delegates and highlighted the company's commitment towards organising knowledge-based

forums to enhance capacity, influence decisions, seek alternatives and make a difference to nurture good governance to meet the challenges of the time. The exclusive 'Thought-Leadership CEOs Forum', a novel pre-session interlude to discuss the 'state of the industry' was led by Moazaam M Malik, chairman and CEO of BMA Capital Management Limited. It included Ocean Petroleum Limited CEO Anwer Moin, Pakistan Refinery Limited Chairman Farooq Rahmatullah, Islamabad Electric Supply Company (IESCO) Chairman Mohsin Khalid and Saif Energy Limited CEO Jehangir Saifullah Khan. A presentation by BMA Capital on 'M&A and Investment Opportunities in Pakistan's Energy and Power sectors' concluded the session.

The opening session was on "Oil & Gas Policy – Balancing the Investment, Demand and Supply Equation" and was steered by a comprehensive presentation on the petroleum policy by. Farooq Rahmatullah, chairman of the Board, Pakistan Refinery Limited. Sayem Ali, Senior Economist, ME & Pakistan, Standard Chartered Bank Limited, gave an insight on energy issues and its impact on the economy of the country. Shahzad Iqbal, Executive Director, Oil & Gas Regulatory Authority (OGRA) highlighted the demand and supply equation concerning the industry.

The session on "Diversifying the Energy Mix – A Road-Map Towards Sustainable Energy Solutions" was chaired by former federal secretary and currently Independent Power Producers Advisory Council (IPPAC) Chairman M. Abdullah Yousuf. The discussions included presentations by Syed Imran Shah, Project Director, Fauji Fertilizer Energy Limited; Dr Saqib Nasir, scientist at Pakistan Council of Scientists & Industrial Research (PCSIR) and Air Commodore (r) Khalid Iqbal, Consultant, Policy & Strategic Response, Islamabad Policy Research Institute (IPRI). The closing session of the forum "Pakistan Energy Model v/s the Developing World's Model" was chaired by Werner Liepach, Country Director, Asian Development Bank (ADB) and it concluded that Pakistan was an energy-rich country but yet there was energy deficiency therefore the need for alternate sources and coal was to be considered. It featured presentations and in-depth discussions by Shamsuddin Ahmed Sheikh, CEO, Sindh Engro Coal Mining Company, Dr Gulfaraz Raja, former secretary petroleum M Abdullah Yusuf and Dr Muhammad Bilal Khan, Director and Principal, Center for Energy System at NUST.

German bank invests in Pakistan energy sector

The Nation, May 28, 2013

LAHORE - A delegation of the KfW Development Bank, Germany, headed by Dr Claudia Loy called on Wapda Chairman here on Monday and discussed with him the matters relating to financing of various hydropower projects. The KfW Development Bank is providing 97 million Euros for the construction of 122 MW-Keyal Khwar and has also committed to co-finance the 35 MW-Harpo Hydropower Project along with its French counterpart AFD by providing 20 million Euros. In addition, the KfW Development Bank has also shown interest in financing the 80 MW-Phandar Hydropower Project. During the meeting with the KfW Development Bank's delegation, Wapda Chairman thanked them for their support in financing a number of Wapda projects. He expressed the hope that the cooperation between the KfW Development Bank and WAPDA would be further enhanced in the days to come. He apprised the delegation that main works of Keyal Khwar Hydropower Project will soon be initiated, as all the pre-requisites are almost finalised in this regard. Wapda Chairman expressed the hope that KfW Development Bank will come forward for better investment opportunities in other hydropower projects and well being of the people of Pakistan. The KfW Development Bank Division Chief, appreciating the technical expertise of WAPDA, said that WAPDA is one of the best organizations in Asia. She said that the KfW Development Bank and WAPDA have a long history of mutual cooperation, adding that the Bank would continue supporting WAPDA for construction of water and hydropower projects. We feel Pakistan's energy sector needs more financing from Germany, she added.

Market watch: Energy sector powers KSE to record high

The Express Tribune, May 31, 2013

KARACHI: On Thursday, the Karachi bourse continued on its history-making spree and this time the energy sector played the major role as local and foreign interest lead the market to a rebound which again closed above the 21,500-point levels thus cementing the level as major support. Stocks that are expected to be the major beneficiaries of the resolution of the circular debt remained as top-picks. Moreover, abnormal activity in second- and third-tier low-priced stocks pushed the volume to touch a seven-year high. The Karachi Stock Exchange's (KSE) benchmark 100-share index gained 0.7% or 149.54 points to end at 21,590.66 point level. Trade volumes shot to 638 million shares compared with Wednesday's tally of 485 million shares. Oils and independent power producers were in favour along with Pakistan State Oil, Oil and Gas Development Company and Pakgen Power stayed in the limelight as these scrips are expected to the major beneficiaries of the resolution of the circular debt issue and coal conversion," reported Muhammad Rawjani, analyst at Elixir Securities. However, momentum in the energy sector was marginalised by small- and mid-tier bargain stocks which have been delivering staggering returns. Pakistan International Airlines hit its upper lock after the national flag carrier announced to add four planes to its fleet, while expectations of recapitalisation of Bank of Punjab by the Pakistan Muslim League –

PML-N govt will remove heads of all loss-making enterprises: Ahsan

The News, May30, 2013

PML-N plans \$5bn debt issue to switch lights on

Pakistan today, 29 May 2013

Nawaz government pushed the stock also to hit its upper limit. Furthermore, investors also accumulated Jahangir Siddiqui and Company, JS Bank and Azgard Nine after reports clarified that the Group was not involved in any inquiries pertaining to market manipulation.

Shares of 403 companies were traded on Thursday. At the end of the day 241 stocks closed higher, 117 declined while 45 remained unchanged. The value of shares traded during the day was Rs13.12 billion. Bank of Punjab (rights issue) was the volume leader with 83.54 million shares gaining Re1 to finish at Rs4.16. It was followed by Pakistan Telecommunication Company with 45.89 million shares gaining Rs0.69 to close at Rs21.6 and WorldCall Telecom with 32.22 million shares also gaining Rs0.23 to close at Rs3.4. Foreign inflows were Rs577 million and outflows were Rs655 million, according to data maintained by the National Clearing Company of Pakistan.

LAHORE: The PML-N will immediately remove the heads of all the loss-making public sector enterprises after taking the charge of the government and appointing competent Pakistanis who will end corruption and nepotism from these institutions. The PML-N's central leader Ahsan Iqbal has said that heads and chief executives of loss-making state-owned enterprises including Pakistan Steel, PIA, Pakistan Railways and National Shipping Corporation would be removed with an objective to end the financial haemorrhaging worth Rs450 billion annually to the national exchequer. Applications for these apex posts will be advertised in media on the very first day of the new federal government and competent Pakistanis will be appointed with major task to end corruption and nepotism in the loss-making public sector enterprises and make them self-dependent," Ahsan Iqbal said while talking to the members of Lahore Economic Journalists Association (LEJA) Wednesday. The PML-N government after taking the charge will remove the heads on the first day of the government. The plan has been evolved to take the briefed Ahsan Iqbal on the working of the association.

Ahsan Iqbal said the new government was elected with inherited energy crisis, financial constraints, poor law and order and bad governance at the worst critical level of country's history. However, the PML-N is committed to make every possible effort to mitigate the sufferings of people due to power outages. In this regard, short-term and long term measures are being taken, he added. "But it will be illogical to give any deadline for ending loadshedding. This may lead to media trial of the new government," Ahsan said. The PML-N leadership has evolved its strategy to control the energy crisis as well as bring down the cost of energy generation. The focus of the PML-N government will be on coal, hydel, natural gas and solar power generation which are all indigenous resources. The PML-N believed that without utilising the indigenous power generation resources, cheap energy will not be available, he mentioned. On the other hand, the cheap and smooth energy is also vital for industrial and agricultural growth of Pakistan, he added. He said a five-year development plan for Punjab province was being developed. All the future budgets of the province would be prepared in line with this plan. Ahsan Iqbal said the PML-N wanted to make Punjab a model economy for other provinces and the federation. He claimed that the Punjab government had adopted zero tolerance for corruption over the last five years and added that a similar policy would be adopted at federal and Balochistan level for the next five years. To bring the all stakeholders on board, the Punjab Governance and Development Conference is planned within the next couple of days after the Punjab chief minister takes oath of the office, he said. In this conference, the Punjab government will chalk out long term policies and develop next five years budget of the province with the consultations of all the stakeholders, Ahsan Iqbal disclosed. He said the PML-N while having federal government and enjoying rule in Punjab and Balochistan, would extend every possible support to the governments of Sindh and Khyber Pakhtunkhwa. "It is time to compete in performance only, not in the fields of 'dharnas' and strikes," he added.

The Pakistan Muslim League-Nawaz government plans to sell \$5 billion in treasury bills to pay off a chain of debt choking the country's power sector and its economy and boost electricity output by a quarter – all within its first 100 days in power, a foreign news agency reported on Tuesday. The incoming administration of Prime Minister-elect Nawaz Sharif has identified widespread blackouts that last up to 20 hours a day in some areas as its top political and economic challenge. Several key members of the incoming government's energy team interviewed by Reuters over the past few days said that out of a long list of challenges ranging from lack of investment to electricity theft, plugging a Rs 500 billion financing hole was the most pressing task. Sources in the new administration said these funds would be raised through sales of 3-month, 6-month and 12-month treasury bills. By breaking a vicious cycle of withheld payments running through the entire power-generation chain from end consumers to electricity distributors, power plants to refiners who can't import enough oil because of unpaid fuel bills, the team hopes to bring immediate relief. In the first three months of our government, we plan to add 2,000-3,000 megawatts to the national grid and at least 16,000 megawatts in the medium term," said Khawaja Asif,

**Dirty' dealing : A thriving
'grey' market fuels
Pakistan's power sector**
The Express Tribune, May 31, 2013

who is due to take the energy portfolio in Sharif's cabinet that will be sworn in on June 5. Pakistan's power sector now generates about 8,000 MW, with needs estimated at 15,000. A "100-day roadmap" for the energy sector, due to be unveiled by Sharif on June 5, and made available to Reuters, also calls for an overhaul of a decades-old system of subsidies that is considered one of the root causes of the crisis. 100-day roadmap It makes no sense that you subsidise electricity at the same rate for the person who drives a Mercedes and the poor guy who rides a bicycle to work," said Asif. "People who can pay more for power will pay more. That will be the hallmark of our government's energy policy. That, alongside a promised push to tackle electricity theft and a growing mountain of unpaid electricity bills, can set the new government on a collision course with the country's rich and influential elite. While hooking up a cable to overhead electricity wires is the common man's way of getting power without paying for it, well-connected businessmen, politicians and even government departments simply refuse to pay their bills.

The incoming government's response is to pick competent managers to run power distribution companies and give them revenue and other performance targets. The priority is to appoint professional management in power distribution companies, and sack political appointees and cronies of the previous government," said Salman Shahbaz, Nawaz Sharif's nephew who runs the party's economic think-tank. The sector has long been plagued by waste and allegations of endemic corruption with public funds lavished on poorly-run state power firms while more efficient independent power producers were starving for cash. It is mind-boggling that there was so much low-hanging fruit that the previous government didn't even bother to pick," said Miftah Ismail, who co-authored the incoming administration's energy policy, referring to missed opportunities. The 100-day plan is meant to buy the government time to focus on medium- and long-term solutions, such as modernisation of power generators, investment in new capacity, encouraging sugar mills to use biofuels to produce electricity and finally, to reduce the nation's reliance on expensive imported oil. We have to move from oil to coal, hydro and gas-based power generation to bring down costs," said Ismail. "There is no other way." With an estimated nationwide electricity shortfall of more than 60 percent exacerbating a balance of payments crisis, Asif says the new government is well aware of its responsibility. How we tackle the energy crisis will not just determine the political life of this government but also life itself of this country," he said. "Failure is not an option."

KARACHI: If you have held an important position in the energy supply business in recent years and if you know rogue traders in power companies, here's an offer you can't refuse. If you can secure a deal between a power utility and a furnace oil supplier, you will earn Rs150 for every ton of fuel oil supplied. You think that figure looks small? Even an average 200 megawatt (MW) power station consumes around 20,000 tons of oil a month. Do the math – that's a profit of Rs3 million, merely for playing the middleman. It may seem to be the worst time to be part of Pakistan's energy chain: nothing could be farther from the truth," an official confided to The Express Tribune. He is linked to a petroleum company's furnace oil supply business. "Oil prices have reached such high levels that huge sums can be made by pocketing only half a percent as commission," he explained. Pakistan's dependence on furnace oil for power generation has increased as gas shortages exacerbated over the years. The country spent billions of dollars for the import of around 6.5 million tons of furnace oil this fiscal year, according to estimates. Total sales of furnace oil currently stand at nine million tons, almost 90% of which are made to power plants. Due to the uptick in demand, the ex-refinery price of furnace oil has more than doubled to over Rs62,000 per ton over the past four years. This surge [in price] has given a whole new dimension to the business. Everyone is trying to get hold of contracts and furnace oil supplies. After all, it will be end consumers who will bear the cost differentials," another official said. The price of furnace oil, its transportation costs and the margins earned by suppliers are usually passed on to consumers under the power tariff.

Going rogue

The 11 IPPs commissioned in the country under the 2002 Power Policy have exclusive Fuel Supply Agreements with members of the Oil Companies Advisory Committee. These agreements cover supplies for 10 to 12 years. A 3.5% margin has been fixed for furnace oil suppliers under the policy. "Everything looked okay for the first few months [after the agreements were signed]. Then the IPPs started asking for credit. There is no clause in the agreement for that – on the contrary, they are bound to make advance payments to us," executives of a company, which has seen a drop in its business, told The Express Tribune. The IPPs then started buying fuel from the open market – a network of small suppliers who acquire furnace oil and are willing to pay for someone to find them buyers. After the government started delaying payments to the power sector, the backdoor dealing also helped diversify IPPs' risk, who started strengthening relationships with suppliers who offered credit sales and better prices. The size of trades settled in backdoor dealings ranges between 50,000 to 100,000 tons of fuel oil a month. "In almost all cases, the rogue employee [who sets up the deal] is a nephew or some relative of the owner of the IPP involved," an official revealed. Pakistan State Oil (PSO) is by far the largest furnace oil supplier, with a

60% market share. "We were approached to become a part of the game, but we had to refuse because all our records are audited," a company official said, asking not to be named.

How the system works

IPPs, small suppliers and middlemen use deceptive payment techniques which are hard to detect. Executives explained that the 3.5% margin (allowed officially) comes to around Rs2,100 per ton, out of which around Rs1,100 is taken by the supplier as his margin on sales and Rs150 is paid to the person who arranges the contact. The remaining sum (Rs850) is split between the rogue employee of the IPP (the other middleman in the deal) and the fuel transporter. Their invoices won't tell you anything. As a matter of fact, the price of furnace oil is stated below actual cost to pacify the regulator. They erase all evidence of dirty deals," an official said. However, officials insist that an audit of IPPs' records will help identify underhanded dealings. Despite repeated attempts, no one at the National Electric Power Regulatory Authority was available for comments. The Securities and Exchange Commission of Pakistan has reportedly initiated an investigation into the matter: its outcome is still awaited.

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Energy & Power Regulatory Frameworks News

National Electric Power Regulatory Authority (NEPRA)

Nepra approves tariff for bagasse power projects

The News International, May 31, 2013

KARACHI: The National Electric Power Regulatory Authority (Nepra) has determined and approved the upfront tariff for new bagasse based electricity generation projects, official documents revealed. The rate determined for delivery of electricity to the power purchaser is Rs11.7396 per unit for the first 10 years and Rs7.914 per unit for the next 20 years. The reference tariff is applicable for 30 years from commencement of commercial operation date and is applicable for new co-generation projects based on bagasse. Additionally, there is no maximum or minimum cap on the installed capacity by the co-generation projects. Moreover, the option for accepting upfront tariff will be applicable for one year from the date of approval of tariff by the Authority. Project sponsors are expected to achieve commercial operation date within two years from the date of grant of upfront tariff. Furthermore, sponsors interested in availing the tariff are to submit an unconditional formal application to Nepra for approval by the Authority in accordance with the Nepra upfront tariff (Approval & Procedure) Regulations 2011. The power purchaser and Alternate Energy Development Board (AEDB) will monitor project progress and ensure that all machinery is new and as per the latest IEC standards. The projects recommended by the AEDB, whose plant and machinery is confirmed to be new and of acceptable quality by the AEDB, will be eligible for this tariff. Companies that have the consent of the power purchaser for procurement of electricity along with a certificate from the power purchaser (that it will have the necessary infrastructure in place to evacuate all the power supplied by the applicant) will qualify for the tariff. Moreover, power producers will have the option to offer energy to the respective distribution company or to the central power purchaser provided that the cost of inter-connection and grid station upgrades shall be incurred by the respective distributor or power purchaser, the official documents said.

The projects based on foreign financing may opt for the approved upfront tariff. However, the risk of currency exchange rate of foreign financing will be borne by the project sponsors. In the upfront tariff, no adjustment for certified emission reductions has been accounted for. However, upon actual realisation of carbon credits, the same shall be distributed between the power purchaser and the power producer in accordance with the Policy for Development of Renewable Energy for Power Generation 2006 as amended from time to time. According to official documents, co-generation projects may use other biomass fuel such as rice husk and cotton stalk in combination with bagasse or separately. However, use of coal is not allowed. After a period of five years, the Authority may review the fuel pricing mechanism in accordance with Nepra Rules, if it is deemed that the existing mechanism is not representative of market realities.

NEPRA's Website

May 29, 2013

Determination of the Authority in the matter of Suo-Moto Proceedings for Development of Upfront Tariff for New Bagasse Based Co-Generation Power Projects- Intimation of Determination of Tariff pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) The Determination is being intimated to the Federal Government for the purpose of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998. Please note that only Order of the Authority at para 19 of the Determination relating to the reference tariff, adjustments, indexations and terms and conditions along with Annex-I & II needs to be notified in the official Gazette

NEPRA's Website

May 30, 2013

Approval of the Authority in the matter of Power Acquisition Request filed by Hyderabad Electric Supply Company Ltd. (HESCO) for Purchase of 12 MW from Agar Textiles (Pvt.) Limited (ATPL) under NEPRA Interim Power Procurement (Procedures and Standards) Regulations, 2005 [Case # PAR-761 The Approval is being intimated to the Federal Government for the purpose of notification in the official gazette in accordance with the provisions of Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997). Please note that Order of the Authority at paras 20-22 of the Approval relating to the reference tariff, adjustments & indexations etc. along with Annex-I needs to be notified in the official Gazette

National Transmission and Dispatch Company (NTDC)

Power shortfall swells to 5,500 MW

Bussines Recorder, May 27, 2013

The electricity shortfall in the country on Sunday surged to 5,500 megawatt with no immediate relief in sight. According to National Transmission and Despatch Company officials, the electricity production from all sources, hydel, IPPs, Thermal, Gencos etc was 10,500 megawatts against demand of 16000 megawatts in the sizzling weather across the country. The 18-20 hours power load-shedding in Punjab has left people wondering and protesting if there was any government or agency to take responsibility for this cruelty on the people. FA/FSc students are the worst hit who are taking examinations in the worst-ever environment and physical endurance. Lesco Chief Engineer Muhammad Saleem said that power shortfall reached 2,700 megawatt in Lahore region as electricity demand had exceeded 4500 megawatt while supply stood at 1800 megawatt. According to the sources in the NTDC, more than 11 power houses were not functioning due to non-supply of oil, gas and water.

Peshawar Electricity Supply Company (Pesco)

Pesco replaces two Superintendent Engineers for poor performance

Bussines Recorder, May 28, 2013

PESHAWAR: Chief Executive, Peshawar Electricity Supply Company (Pesco), Tariq Saddozai has replaced two senior engineers of the company over poor performance and sluggish response towards the complaints of consumers in Peshawar and Mardan. The decision was taken during a meeting of the all Superintendent Engineers (S.Es) of Pesco held here at Wapda House Monday. The meeting reviewed the progress of all circles in detail and transferred SE Peshawar Circle, Mian Muharram Shah and SE Mardan Circle, Pir Mujahid. Both were transferred and directed to report to Wapda House, Peshawar while Dr Amjad Khan has been posted as SE Peshawar Circle and Fazle-e-Samad as SE Mardan Circle. The meeting was held to analyse the progress of circles for provision of facilities to the good customers. Deputy General Manager Finance Anwar-ul-Haq Yousafzai, Chief Engineer Technical Fida Muhammad Khan, Chief Engineer Customer Services Mian Musarat Gul, Director General (HR) Khurshid Ahmad Orakzai, Director General (Admin & Services) Iqbal Haider, Additional Director General Public Relations Shaukat Afzal, Manager Material Management Nadar Khan and all Superintending Engineers of Pesco Circles attended the meeting. Speaking on the occasion, Chief Executive, Peshawar Electricity Supply Company (Pesco), Tariq Saddozai asked all field officers to discharge their duties with devotion for overcoming the unexpected break downs and for replacement of burnt transformers on top priority basis. Similarly, distribution burnt transformers be replaced on priority basis in the areas where electricity bills are paid regularly. In this connection PDC has also been mobilised. CEO Pesco has also directed to update him from minute-to-minute progress and all efforts be made for provision of better facilities to consumers. He said reduction in line losses and complaints and increase in recovery must be given top priority.

Protest against Pesco called off

The News, May 26, 2013

PESHAWAR: The residents of Warsak village on Saturday called off their protest against unscheduled and prolonged power cuts after the assurance given by the Peshawar Electric Supply Company (Pesco) officials to end their miseries. The residents announced to end their protest after a representative jirga of the Warsak village elders held talks with the Pesco officials. The elders lamented that the unscheduled and prolonged power breakdowns have led to scarcity of potable water in the area and they were facing numerous hardship. The Peshawar Electric Supply Company officials said that they have withdrawn all the cases against the local people and would provide relief to the electricity consumers in the coming days.

LAHORE Electric Supply Company (LESCO)

Lesco takes notice of corruption

The News, May 29, 2013

LAHORE: LAHORE Electric Supply Company (Lesco) finally wakes up to the rampant corruption and losses in the utility and came up with, what it called, multi-pronged strategy to check such menaces. According to a Lesco official, Board of Directors of the power utility under the chairmanship of Kamran Arshad took serious notice of the electricity theft in Lesco. Unlike past, the BoD also decided to make a strict policy for reconnection of defaulters in the category of public and private consumers. For public consumers, the recovery amount has been fixed from 15 per cent to 30 per cent and for private consumers the amount is fixed to 100 per cent for reconnection. Lesco also officially admitted for the first time that its employees issued inflated bills to the consumers. According to the official of Lesco, the BoD also got an internal audit conducted in Kasur circle and on the report ordered severe disciplinary action against the Lesco officials involving in over-billing. The Lesco CEO has already suspended XENs of Dipalpur and Chunia due to poor performance on the guidelines formulated by BoD of Lesco. Lesco has also come up with an idea to go ahead with a comprehensive strategic plan for performance enhancement for the company.

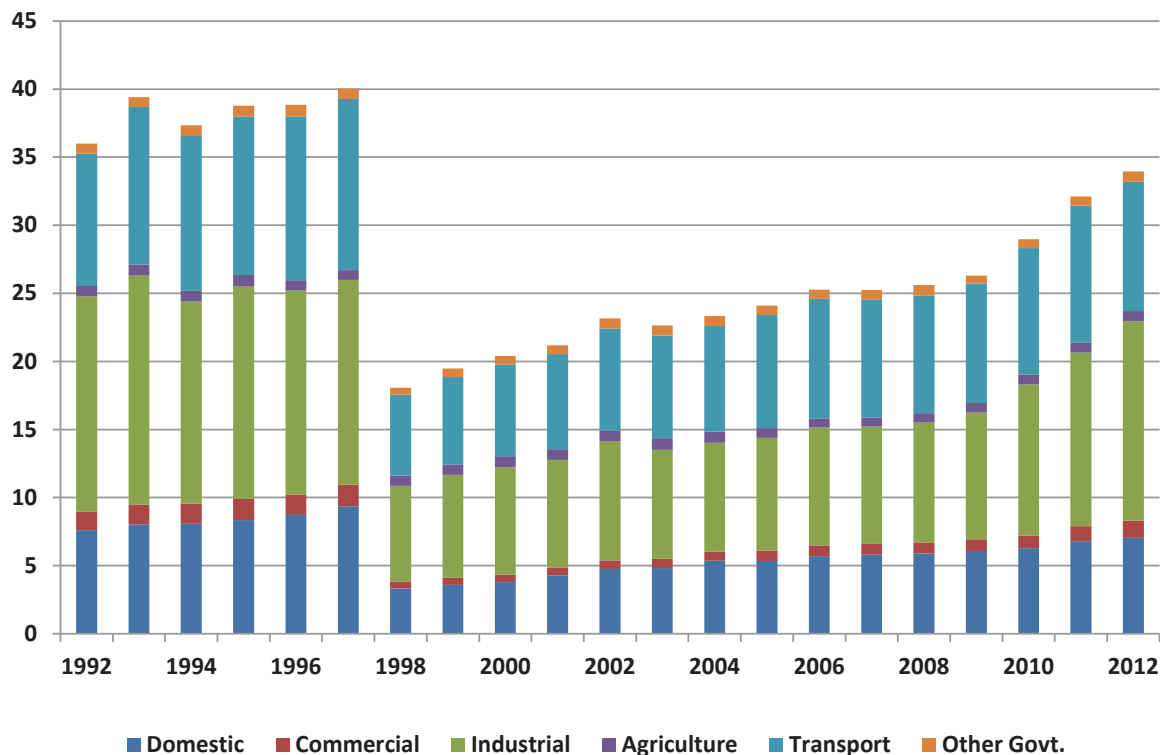
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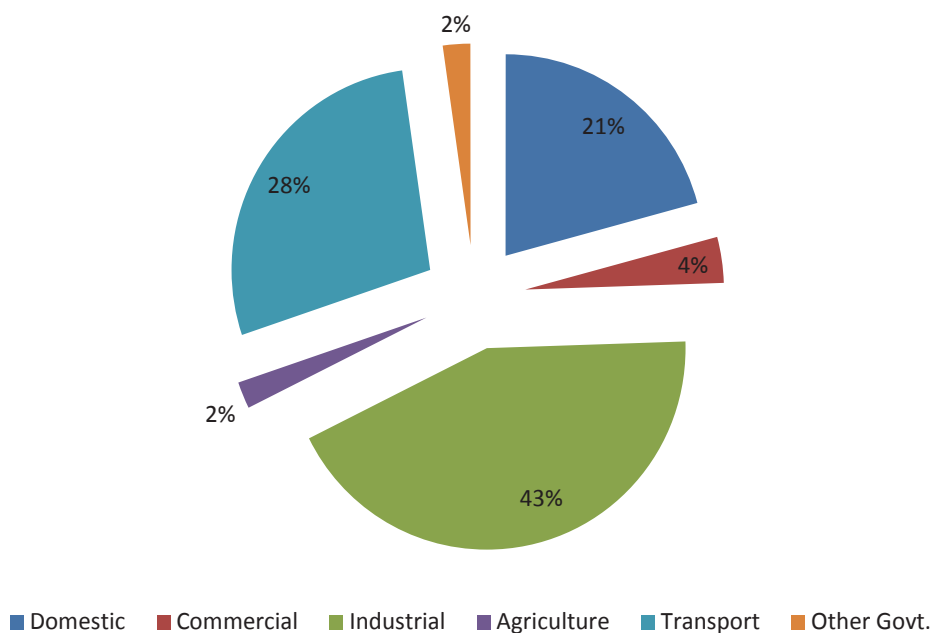
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Share of Different Consumption Sectors



Share of Different Sectors in Year 2012



Power play: Nawaz sets energy plan in motion

By Farooq Tirmiz
 May 28, 2013
 The Express Tribune

Across the country, the smart-phones of high-ranking engineers and energy sector corporate executives are buzzing with e-mails, texts or phone calls, all emanating from one place: Raiwind. All of them are getting the same message: the prime minister-elect would like to interview you to be part of the team to revamp the state-owned part of the energy sector. Even before he has been formally sworn in as prime minister, Nawaz Sharif and his team appear to have begun to implement what appears to be a highly detailed plan to solve Pakistan's energy crisis, according to sources familiar with the matter. The victorious Pakistan Muslim League Nawaz has a week-by-week plan on measures that their government will take in trying to fulfill their single biggest electoral promise: getting the lights back on. "The new government is going to be ruthless in its management of all the public-sector energy companies," said Zafar Iqbal Sobani, who was CEO of Hub Power Company until a couple of weeks ago. "Expect to see many people summarily fired from these organisations as well as the ministry of water and power. After all, if he is seen as removing incompetent management of the power sector, who will complain?"

The PML-N appears to have done its homework with respect to the power sector. Over the past week, the party's senior leadership has met with the CEOs of virtually all privately owned power generation companies in a bid to gauge the exact levels of circular debt in the energy sector. According to sources familiar with the matter, Nawaz is not simply asking them how much they have stuck in circular debt: he is matching their figures against numbers that the party has collected from other sources, suggesting a degree of thoroughness in research. "Circular debt is currently in the range of Rs500 billion. If the government can get that down by even 60-70% with a long-term loan from Saudi Arabia or even by issuing treasury bonds, that should be enough to get about 3,000 megawatts of idle power generation capacity back online, which would reduce loadshedding by half," said Sobani. "That would fulfill the immediate campaign promise to reduce power outages while also buying time to put in place long-term reforms." The headhunting for new management of the state-owned power generation and distribution companies is one element of that multi-stage strategy.

In the first stage, the Nawaz government will just want to get the power plants going, all of them, regardless of their levels of efficiency, just to get the confidence of the people in their plan. In the second stage, the state-owned power companies will get new management teams, and will see a wholesale sacking of large segments of their staff. The new managements will crack down on things like fuel theft and supplying electricity to people who have not paid their bills, as well as power theft. They are expected to invest in improving the efficiency of the machinery by conducting long-neglected repairs. The idea behind this phase, expected to last between six months and a year, is to get the power sector as it currently exists to perform at maximum efficiency to reduce circular debt accumulation and the need for subsidies. Having thus built up its credibility, the Nawaz administration is then expected to launch the third phase to further reduce the need for subsidies: increasing power tariffs while simultaneously investing in cheaper sources of electricity. State-owned power companies are expected to invest in hydroelectric power generation, in the hopes of spurring more private sector firms to set up run-of-the-river hydropower plants. Private sector companies will likely be pressured to invest in converting away from their oil-fired power plants to coal-fired turbines. First in line for coal conversion is likely to be the Nishat Group-owned AES Lalpir. This phase is expected to last between two-and-a-half and three years.

The financing for this phase is likely to come from the Chinese engineering and construction companies that will likely get the contracts for the coal-conversions. "Western firms, and western finance institutions no longer finance coal-fired power plants owing to their negative environmental impact," said Sobani. In the final stage, the Nawaz administration is expected to seal the benefits of this proposed transformation by privatising what they hope by then will be a highly profitable state-owned energy sector. The removal of state ownership is hoped to remove the temptation for future governments from trying to implement populist measures at the expense of the energy sector.

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ENERGY RESOURCES OF PAKISTAN

By Mehboob Allam
Intern at Alhasan Systems
May 31, 2013

In 1980 Pakistani the then Water senior director of PAEC Sultan Bashiruddin Mahmood started project worth millions of rupees to harness energy from djins. The work continue for 7 years at the end of 7th year the project was shot to an end without any success. at the end what Bashiruddin Mahmood said was we can only obtain energy from djins only if we develop our souls who can communicate with them. Where even the existence of djins may be a myth to the modern minds but the huge energy resources of Pakistan are a reality. According to Pakistan economic survey Pakistan has 339 million barrel recoverable resources of crude oil, 31266 trillion cubic feet, 185 billion tons of coal, 46000 MW identified potential of hydro energy. Also in the renewable energy resources Pakistan has the potential for solar energy, wind Energy, Bio mass & Bio Fuel and Geothermal Energy. Energy is the life line of the economy and energy production is the reliable indicator of the development of the country. A rough sketch of the energy resources of Pakistan is given below. **Hydel Energy:** Water flowing in the rivers has kinetic energy. Once they are used to drive the turbine and produce electricity the power generated as hydel energy. Energy generated in this way depends upon the head of the water and also the quantity and speed of the water. Hydal energy can be harnessed either through the construction of dam where the level of water is maintained at a higher levels and turbine are operated through the stored water by guiding the water through proper spillways, or through constructing barrages. Hydal energy is the cheapest and eco friendly source of energy. In Pakistan 34% of electricity potential comes from the hydal energy. Currently Pakistan is getting 6555 MW against the identified potential of 46000 MW. The reason of not utilizing the hydro potential is the lack of proper planning, and different political and nationalistic issues, aging equipment, unproductive efforts and silting.

Major hydal Power stations of Pakistan are Tarbela dam 3478 MW, Ghazi barotha dam 1450 MW, Mangla 1000 MW, Warsak 240 and Chashma 184. While potential hydal power stations are Diamer Bhasha 4500, Munda 740, Kalabagh 3600, Bunji 5400, and Dasu 3800. **Coal:** Pakistan has about 185 billion identified coal reserves, of which 175 billion tons are identified only at Thar, which is the 6th largest coal reserve in the world. Coal accounts for the 11.07 % of the energy mix of the country. Work on the first phase of the project has recently been started with the collaboration of Sindh Government and Engro corporation which will produce about 600 MW. In the second and third phase power production will be scaled up to 4000 MW. Lakhra, Sonda, Thatta, Jherruck and Thar are the main discoveries of the coal fields in Pakistan. **Natural Gas:** Pakistan has 35 trillion cubic feet of natural gas reserves. Sui is the largest gas producing field of Pakistan. Average production of natural gas is 4,048.76 million cubic feet per day. Natural gas is used in different industries and also is used in the production of electricity. Pakistan is the second largest country with the CNG vehicle in the world.

Crude Oil Energy Resource: 30% of energy consumption is from the oil. the total recoverable reserves of Pakistan is 280.647 million barrels. **Renewable Energy:** Renewable energy contributes a lot to balancing the energy mix of the country. Being eco friendly and cost effective and less maintenance cost renewable energy is gaining momentum day by day. In 2012 China produced about 7GW of just from solar energy. Pakistan too has potential for solar energy as it is located at the tropic of cancer and hence receives substantial amount of solar radiation, Which is clear from the solar map of

Pakistan. Insolation of solar radiation in Pakistan is 5.3 kWh/m²/day which is considered to be very high. With the collaboration of Germany 1500 houses have been electrified from solar energy in Baluchistan. German company CAE has set up the first solar energy plant in Pakistan which is the second of its kind in Asia. As for wind energy Pakistan Meteorological department has conducted detail survey of Pakistan which has identified the economical feasible wind farm sites. The exploitable electrical power potential of the coastal areas of Pakistan is estimated to be 11000 MW. Keeping in view the Worst Energy crisis Pakistan is facing it is imperative to materialize the energy resources through proper planning. The current shortfall is 5300 MW. It has hit the economy hard, has created unemployment and has left lots of companies to flee to other countries. We have seen that government that have failed to solve the energy have been sent home. In recent election Energy plans have helped the PML(N) and PTI to grab the maximum seats. Energy plans of both sounds great but would they be materialize is the question that the time will answer.

Energy Potential Of Sugar Industry

By Akhtar Ali
 April 10, 2013
 Business Recorder

Sugar industry sector in Pakistan is said to be only second to textiles in terms of sales, investment and employment. Pakistan is the fifth largest producer of sugar in the world. In some countries, sugar companies earn more revenue from producing and selling electricity than from sugar itself. For the last five years or more, various proposals have been around to co-generate power and supply it to the national grid. There has not been much of a progress in this direction despite a severe energy crisis faced by the country. In this article, we will explore the subject, examine the reasons of lack of success and present some thoughts and recommendations for meaningful prospects in this respect. There are 89 sugar plants operating in Pakistan with a total sugar production capacity of 5 million tons per year. Additionally, there are 19 distilleries which process the by-product molasses into Ethanol with a combined capacity of 400,000 tons. It is amazing, how quickly the market scenario changes and even companies in Pakistan manage to respond accordingly. By the year 2005, most of the molasses were exported, and today molasses are not exported at all and the value-added product Ethanol is exported. The same could happen in energy sector, provided both the sugar sector and the government develop and pursue viable proposals benefiting both the consumers and the producers.

It is said that cogeneration potential of the sugar sector stands at 3000 MW which may be a little exaggeration. By comparison, Indian sugar sector is about 5 times larger than Pakistan's and they estimate their potential at 5000 MW of which only 1666 MW has been achieved by now. In that comparison, Pakistan potential comes out to be 1000 MW. My own estimates are of 2000 MW based on a cane crushing of 50 million tons per year. It should be reasonable to expect a realisable potential of 1000 MW and if coal is added, as we shall see later, this may go up to 2000 MW. The most important thing that has to be kept in view is that sugar sector has the dynamism, organisational and institutional capacity and the financial muscle to undertake capital intensive ventures of this nature. All sugar mills have experience of power production, albeit for their own self use. So if a reasonable framework is developed, it is reasonable to expect that progress would come by. Let me explain why the sugar mills should be interested in this venture. Bagasse traditionally a waste product in the production of sugar used to be a nuisance and a liability to be disposed of and was thus burnt rather carelessly in low efficiency systems to produce electricity for self use. In the times of low oil prices, there was no market for selling electricity at the prices sugar industry could offer. With the rise in oil prices and general energy scarcity, it is now possible for the sugar mills to produce electricity at rather competitive prices. Of course, they have to replace their existing low pressure-efficiency systems by high pressure (80-100 bars) and efficiency of the order of 25-28%. This way an average sugar mill may be able to produce around 30 MW. The problem, however, is that there is a very short crushing season of 100-120 days. What to do with an investment of 50-60 million USD for the other remaining days of the year. One solution is to look for other biomass sources such as agricultural residue and the other is to use coal. Environmentalists argue that biomass should be used, while investors are skeptic of biomass. Although, there are quite optimistic estimates of biomass availability, there is no established market and supply system. The resource is widely distributed and point sources are far and few. In India, they have been working without coal at a low capacity utilisation of 45%. In Pakistan, sugar mills want to have a capacity utilization of 80 %, use coal in non-season period and

offer a tariff of 11.1 cents as against Nepra's last ruling of 9.28 cents and to JDW a tariff determination of 9.9 cents. Nepra has already offered a tariff of 13.5 cents to two Biomass projects which however do not intend to use coal. In India, the Bagasse power tariff is around 12 cents varying slightly from state to state depending upon varying prices of Bagasse and Biomass in different states of India. The reasons for controversy are many; high capital cost assumed or demanded by sugar mills; insistence on using coal to a rather high extent of 75% and Bagasse 25% only; the difficulty of ascribing a price or opportunity cost of Bagasse due to a non-functioning market of Bagasse; pollution causing potential of coal, as no pollution control equipment has been proposed; and to the competition seekers, the monopoly character of PSMA which has been negotiating the Tariff with Nepra.

What is the right price at which Bagasse based electricity should be bought? It is a question that has eluded a mutually satisfactory answer. When the right price is not known, a normal process acceptable almost anywhere is bidding and auction. Although, prices may still be manipulated and set through collusion in the background of previous lobbying and negotiation that has taken place. There are solutions to this minimising the incentives and opportunity to colluded bidding. There are many contenders to installing the plants. If only a few projects are offered every year, the camaraderie may be broken by sheer self interest and competition may ensue. This has been the experience in India, Brazil, Turkey, South Africa and other countries recently. Real low prices have been obtained once competition replaced the cost-plus non-competitive tariff system. Why not competition would reward the most efficient and benefit the consumer. For income enhancing, sugar mills should pursue other options as well. In addition to Bagasse, Electricity can also be produced by installing digesters for press mud, another waste generated by the sugar industry. Effluents generated by the Sugar Mills and distilleries can be digested to generate Methane which can be combusted in IC engines to produce electricity. To my knowledge only one or two mills are doing this. Of those who have installed effluent treatment plants, the methane generated is burnt in the low efficiency boilers wasting the energy generation potential to a great extent. A significant amount of income can be generated through CDM schemes. Methane is 21 times more active than CO₂ for global warming. Press mud through conventional uses emits Methane to the atmosphere and so does the sulphur effluent which not only pollutes stream and river water but also emit Methane. Thus Sugar Mills can earn CDM revenue on two counts; one displacing fossil energy by renewable and the other by utilising methane (and earning Carbon revenue) which would and does presently emit into the atmosphere.

High prices promote supply but deter demand and low price deters supply and promotes demand. A reasonable approach towards price negotiations can approximate the prices discovered in auctions, although there are always surprises. This is an hour of national crisis, at least, of energy. Self-sacrifice, understanding and national interest should be the guiding principle at this moment. I am not aware what would be the attitude of PSMA to open bidding, although policymakers appear to be scared of it. Bidding is anathema to power. It transfers power to the market. Let sovereignty of the market prevail.

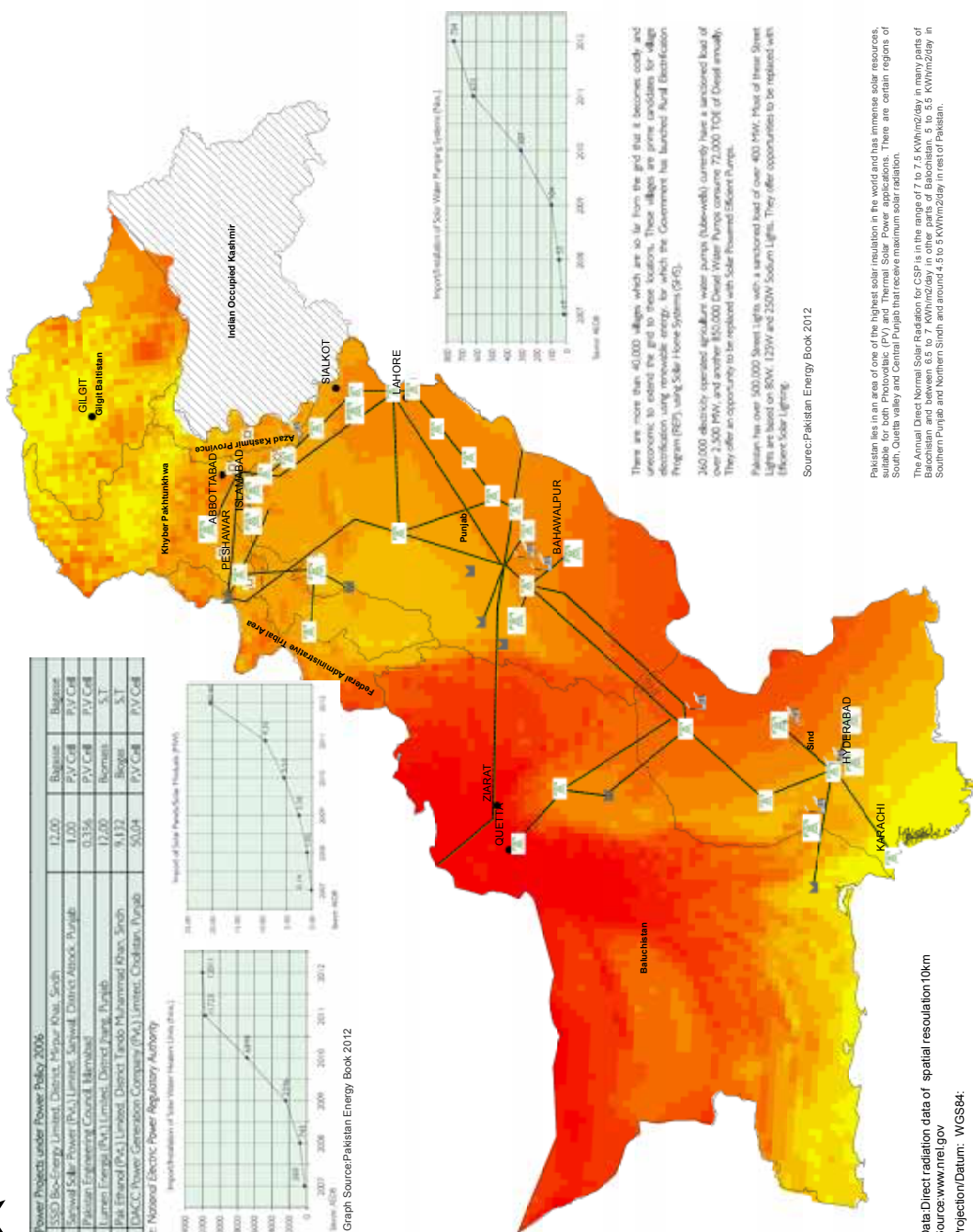
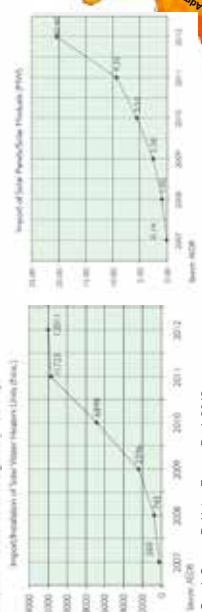
Solar Potential Vs National Energy Grid



Solar Power Projects under Power Policy 2006

1. ESSO Bio-Energy Limited, District, Mirpur Khas, Sindh	12,000	Bagasse
2. Sindh Solar Power (Pvt.) Limited, District, Mirpur Khas, Sindh	1,000	PV Cell
3. Pakistan Engineering Council, Islamabad	0.354	PV Cell
4. Lurain Energy (Pvt.) Limited, District, Faisalabad, Punjab	12,000	Biomass
5. PPA Faisalabad (Pvt.) Limited, District, Faisalabad, Punjab	9,112	Biomass
6. [PACC] Power Generation Company (Pvt.) Limited, District, Chakwal, Punjab	50,000	PV Cell

Source: National Electric Power Regulatory Authority



Data: Direct radiation data of spatial resolution 10km

Source: www.mre.gov

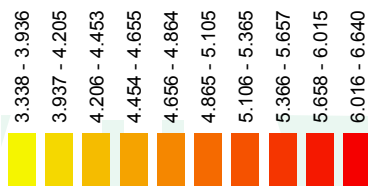
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Legend

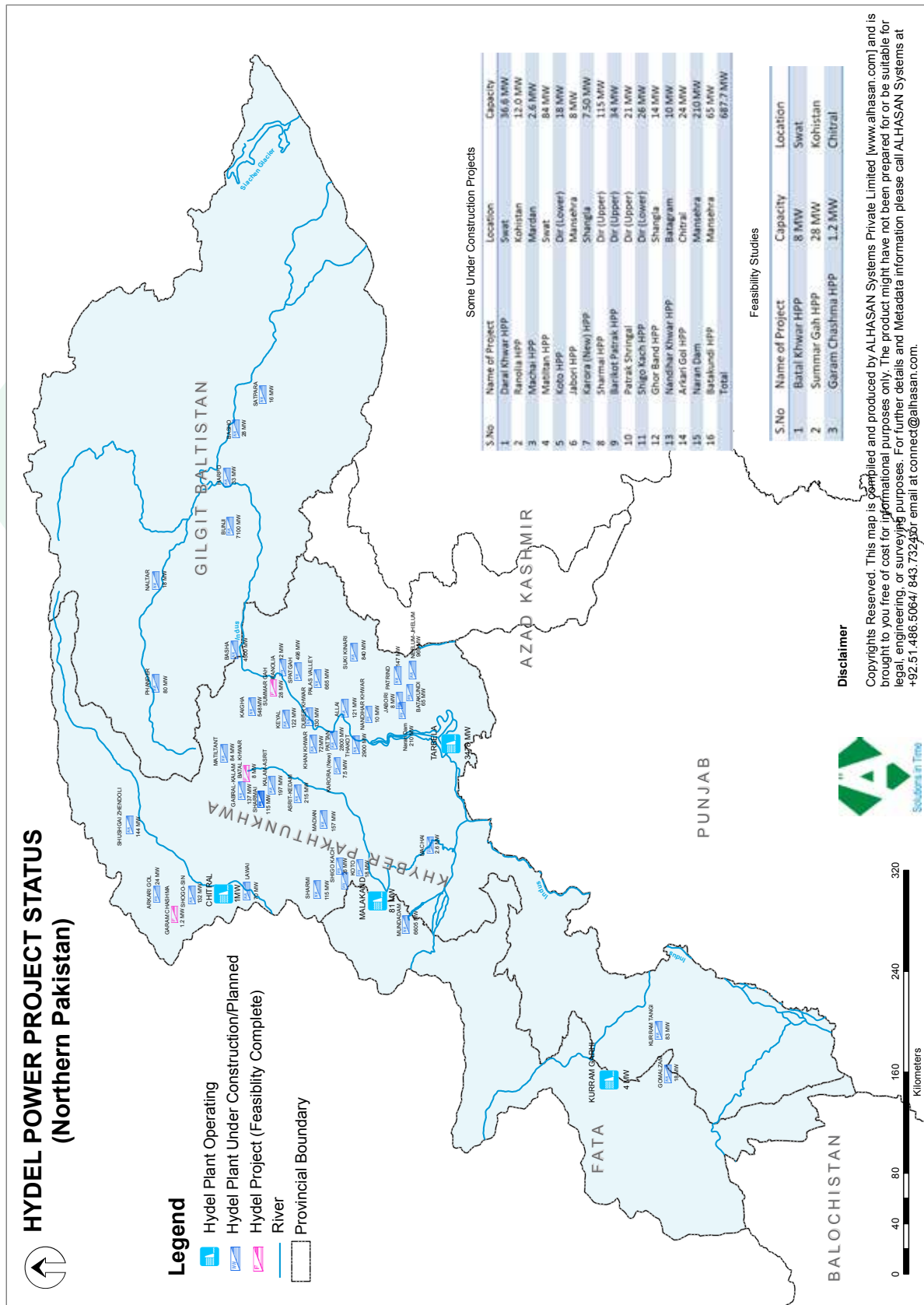
- Diesel/M-F Power Station
- ☀ Hydro Power Station
- ⚡ Sub-Station
- ⚡ Sub-Station 500 KV
- 🏠 Thermal Power Station
- Transmission line
- ★ Capital
- Major Cities
- Province/Region Boundary

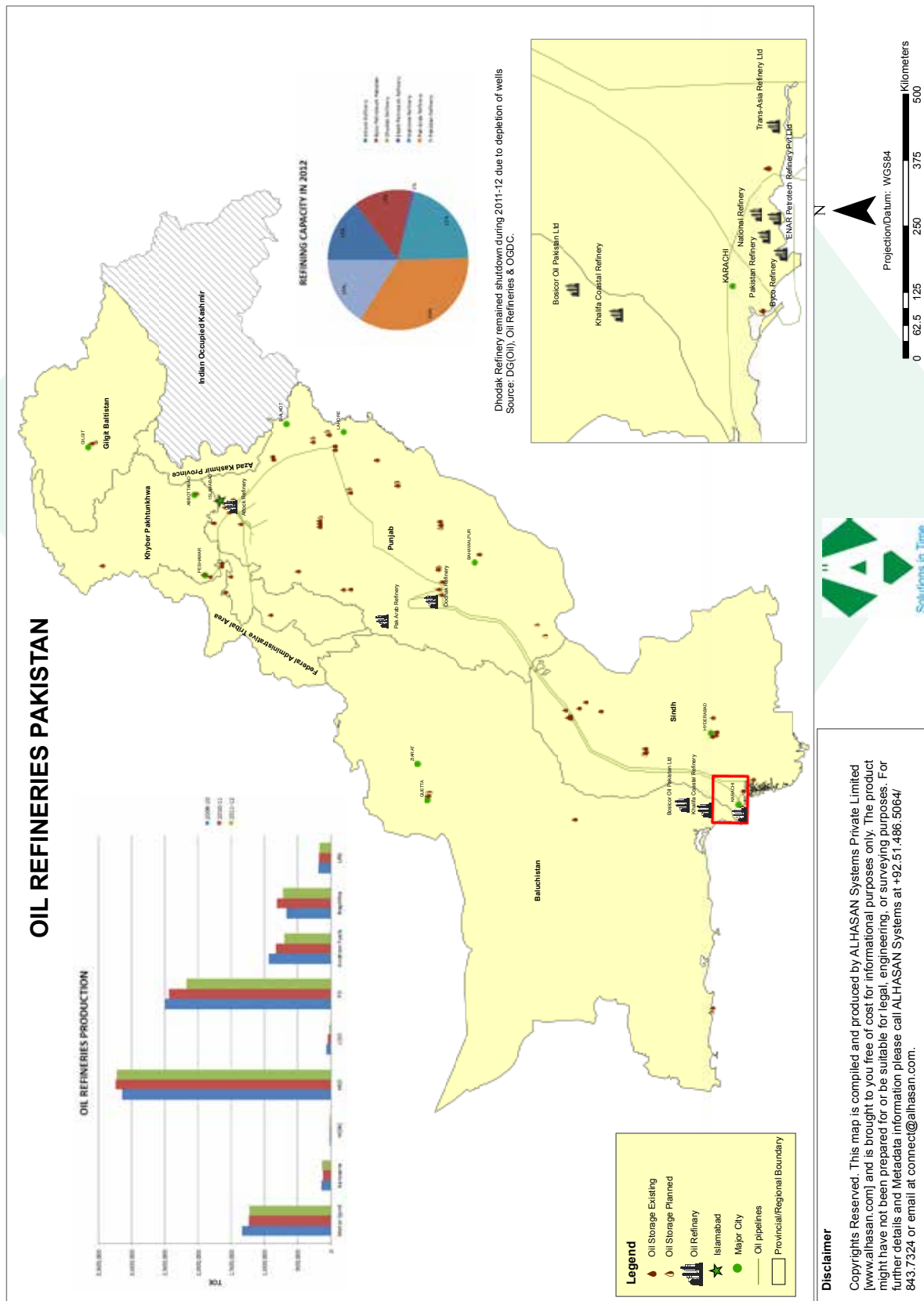
Annual Direct Radiation KWh/m²/day



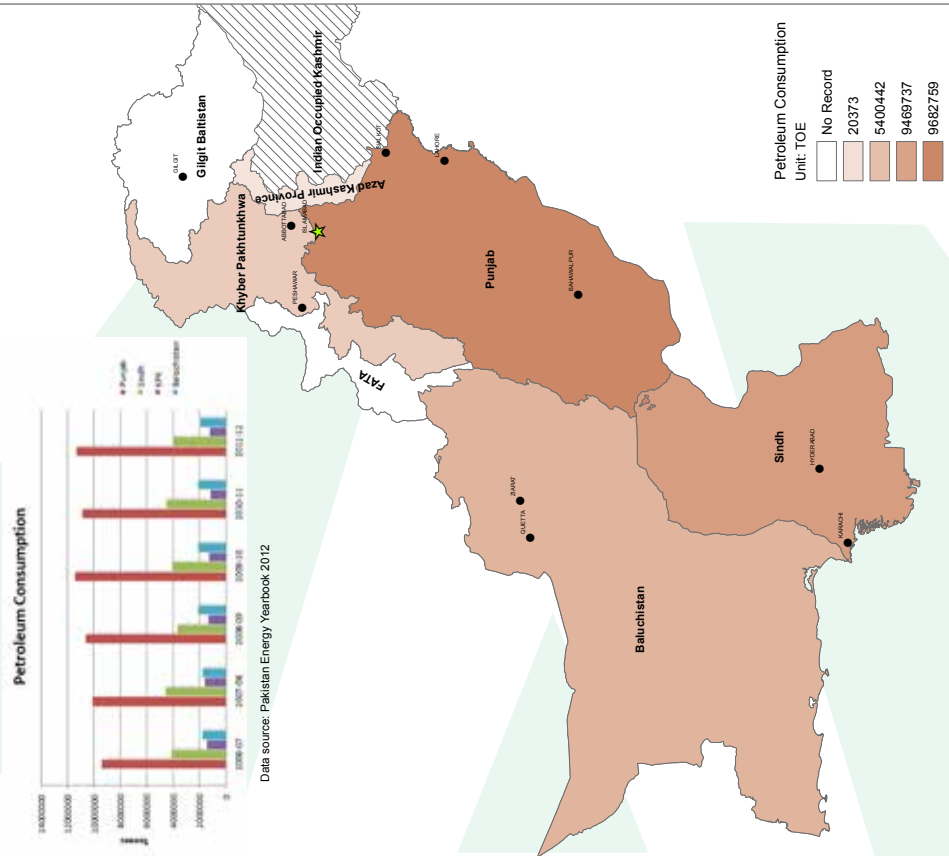
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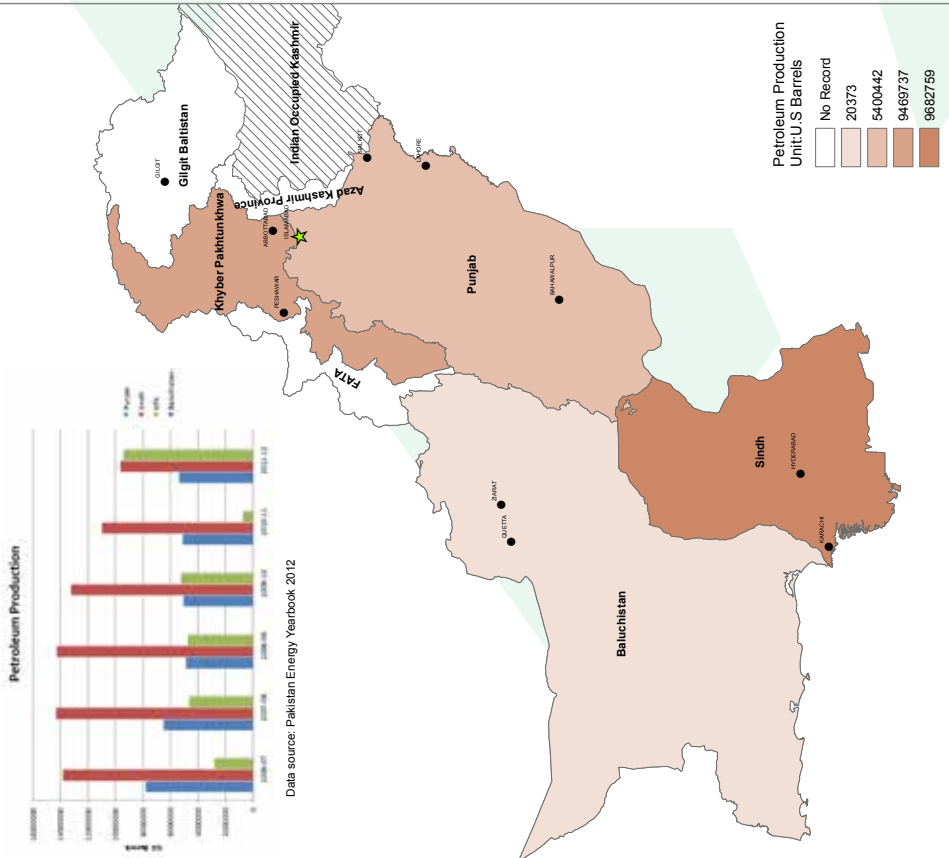




PETROLEUM ENERGY PRODUCTS CONSUMPTION



PETROLEUM ENERGY PRODUCTS PRODUCTION



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Projection/Datum: WGS84

0 90 180 360 540 720 900
Kilometers

Legend

★ Capital

● Major Cities

□ Provincial/Regional Boundary

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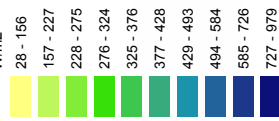
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Wind Power Vs National Energy Grid

Legend

- Diesel/M-F Power Station
- ⚡ Hydro Power Station
- ⚡ Sub-Station
- ⚡ Sub-Station 500 KV
- ⚡ Thermal Power Station
- Transmission line
- ⚡ Wind Farm
- ★ Capital
- Major Cities
- Provincial/Regional Boundary

Wind Power Density Win2



Current Status of Wind Projects

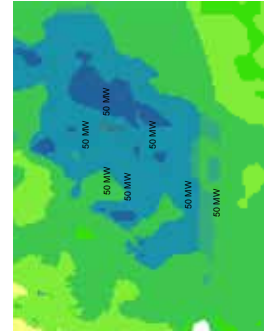
Private sector has been triggered to invest in wind power. Currently 48 projects of around 32,000 MW are under process. Government of Sindh has leased around 20,000 acres of land for wind power projects. The total installed capacity of 200 MW which are at various stages of development. For account is as follows:
 -Under construction: 156 MW
 -Financial closure (expected) during 2012/200 MW
 -Financial closure by 2013/550MW

Wind Power Density Categories

Wind power density directly determines cost efficiency in using wind energy. We may categorise the density as poor (< 150 Watt/m²), fair (150 ~ 250 Watt/m²), good (250 ~ 350 Watt/m²), or excellent (> 350 Watt/m²). Local topography, should be taken into account when executing wind energy applications as topography is very important factor when working on wind project.

S. No.	Name of Company and Location	Installed Capacity (MW)	Fuel	Technology
1	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	1500	Wind	Wind Turbine
2	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
3	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	250.00	Wind	Wind Turbine
4	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
5	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	50.00	Wind	Wind Turbine
6	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	54.40	Wind	Wind Turbine
7	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	2.40	Wind	Wind Turbine
8	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
9	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
10	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
11	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	50.00	Wind	Wind Turbine
12	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	50.00	Wind	Wind Turbine
13	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	50.00	Wind	Wind Turbine
14	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
15	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	50.00	Wind	Wind Turbine
16	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
17	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	49.50	Wind	Wind Turbine
18	1500 MW Wind Energy (Pvt) Limited, Pagar Sarni, District Thatta, Sindh	4.80	Wind	Wind Turbine

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Thermal	11,794	11,794	11,794	11,794	11,794	11,794	11,794	11,794	11,794	11,794	11,794
Hydro	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Nuclear	0	0	0	0	0	0	0	0	0	0	0
Wind	11,894	11,894	11,894	11,894	11,894	11,894	11,894	11,894	11,894	11,894	11,894
Total	23,688	23,688	23,688	23,688	23,688	23,688	23,688	23,688	23,688	23,688	23,688



Data: wind speed and wind power data, 50m above the ground surface
 Source: www.mrii.gov



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Energy Directory

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
1	AB Gas Company	LPG MARKETING COMPANIES	Private Company	Muhammad Bashir Chief Exclusive	-	042-5894057, 042-5865271 03004353595	042-5884450	78 HH -DHA, Cantt., Lahore.	-
2	Admore Gas Private Limited,	Oil Marketing Companies	Private Company	Mr. Razi A. Hanafi, Managing Director	agpkhi@admore.com.pk - agplisb@admore.com.pk	111-ADMORE (236673) - (92-21) 5303191-92, 5364168-69, 5364171-72	(92-21) 5364170 & 5864562	316, 3rd Floor, Continental Center, Sharah-E-Iqbal, Clifton Karachi-75600	www.admore.com.pk
3	Aftab Traders (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Abdul Hadi Khan Chief Exclusive	premiergas@hotmail.com	021-4389244-6	021-4521361	Office No. 603, P. No. 30-A Progressive Center, 6th Floor, Block-6, Shara-e-Faisal, PECHS Karachi	www.premiergas.com.pk
4	Agha Gas Company (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Agha Syed Liaqat Ali Chief Exclusive	-	081-2844058	081-2835144	S. Salahuddin Building, M.A. Jinnah Road, Quetta	-
5	Akbar Associates (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Jamal Akbar Ansari Chief Exclusive	info@akbarassociates.com	051-2264308	051-2281678	No. 88, Khayaban-e-Iqbal, F-8/2, P.O. Box 1416, Islamabad	www.akbarassociates.com
6	Al Hamra Handicrafts	Marble Handicrafts	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
7	Ali Brothers.	LPG MARKETING COMPANIES	Private Company	Sardar Ali Khan Chief Exclusive	-	091-5830855, 2650114 03334256623, 03005903242 0321-9159442	091-5830855	H. No. 223-A, St. No. 6, Sector K -1, Phase III, Hayatabad, Peshawar.	-
8	Ali Pakistan Marble Industries Association	Marble Industries	Private Company	Mr. Farukh Majeed Chairman	apmia@hotmail.com	(+92-51) 4433508, 4432774	(+92-51) 4432774	Bhatti, Plaza I-9 Markaz, Islamabad	-
9	Alternative Energy Development Board Ministry of Water and Power Government of Pakistan	Energy	Govt Dept	-	-	-	-	-	-
10	Anoud Gas Limited formerly Eirad Company Limited	LPG MARKETING COMPANIES	Private Company	Syed Amjed Husain Chief Exclusive	info@anoudgroup.com.pk	021-5681084(5 lines), 051-2850486	021-5682967, 051-2256074	N o-G-5, Al-Mustafa Apartment Markaz G-8, Islamabad.	www.anoudgroup.com.pk
11	Asia Geophysical Services (Private) Limited	Oil & Gas	Private Company	Javed Ahmed (Chief Executive Officer)	ags@isb.comsats.net.pk	92(42)5167820/92(42)21 00945/92(300)8562301	92(42)516783 0	172-M Commercial Area, Model Town Extension, Lahore.	-
12	Attock Petroleum Limited	Oil Marketing Companies	Private Company	Mr. Shuaib A. Malik, Chief Executive Officer	contact@apl.com.pk	92-51-5127250-54	92-51-5127255	Attock House, Morgah, Rawalpindi.	www.apl.com.pk
13	Awami Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mrs. Maryam Ahsan Maqbool Chief Exclusive	-	042-5380236 & 38	042-5380237	17-C-2, Gulberg III, Lahore.	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
14	B.B.N Energy (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Fairukh Mahmood Bukhari hief Exclusive	-	042-5123597, 5122189	042-5115295	140 Main Industrial Area, Kot Lakhpat, Lahore.	-
15	Balochistan Gas Co. (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mohammad Sawar Khan Chief Exclusive	-	051-4862386-7	051 - 4862388	Anique Arcade, First Floor, Office # 14 & 16, I/8 Markaz Islamabad.	-
16	Balochistan Minerals & Oils Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Sardar Muhammad Anwar Khan Jaffar Chief Exclusive	-	081-2892233, 2447460, 081-2832779	081 - 2828178	BMO International, Jaffar House, Spiny Road, Quetta.	-
17	BBN Energy (Pvt.) Limited	Oil & Gas	Private Company	-	ahsan@bbnenergy.com - bukharib@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
18	Best Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Ashar Shahab Mirza Chief Exclusive	-	: 051-2851064	051 - 2255164	House # 7/B, St. 70, F - 8/3, Islamabad.	-
19	Bolan Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	A.A.Aref Gilani	-	042-6666475	042 - 6360792	13-A, Bolan House, St. No. 15, Cavalry Ground (Ext.), Lahore	-
20	Boscor Pakistan Limited,	Oil Marketing Companies	Private Company	Mr. Amir Abbassiy, Chairman / CEO	-	021-111-222-081, 021-2410099 & 021-4210909	021-2410722 & 2420722	2nd Floor, Business Plaza, Mumtaz Hassan Road, Karachi	www.boscor.com.pk
21	BP Pakistan Exploration & Production Inc.	Oil & Gas	Private Company	Mr. Ferhat A. Sheikh (Country Representative)	-	92 (21) 35829000	92 (21) 35297601	5th Floor, Dolmen Executive Tower Scheme No 5, Clifton Block 4, Karachi	-
22	Brothers Engineering (Pvt.) Ltd	Oil & Gas	Private Company	Mian Muhammad Umar Idrees (Director)	bsml_lhr@yahoo.com	92(42)5757013-16,	92(42)5710417	135 Upper Mall Lahore.	-
23	Cap Gas (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Badar-e-Alam Chief Exclusive	-	051-5487586, 051-5487589-97	051 - 5487599, 5450564	POL House, Morgah, Rawalpindi	-
24	Chevron Pakistan Limited formerly Caltex Oil (Pakistan) Ltd	LPG MARKETING COMPANIES	Private Company	Nadeem N. Jafarey Chief Exclusive	nasghar@chevron.com	0092- 021 - 111-866-111 - 021-5681371 051-2277580	021 - 5685014, 021-5218412	State Life Building 11 Abdullah Haroon Road Karachi 74400.	www.caltex.com/pk
25	China National Logging Corporation	Oil & Gas	Private Company	Li Wanjun (Country Manager)	Pakistan@cnlc.cn /liwanjun@cnlc.cn	92(51)2105901-2, 92(300)5079695	92(51)2105903	House 143, Street 37, F-10/1 Islamabad	-
26	Compagnie General De Geophysique	Oil & Gas	Private Company	Moenuddin (Resident Representative)	-	92(51)2299031-36/92(51)2299025/92(30)8552156	92(51)2299027-29	15-Nazimuddin Road, Sector F-10/4 Islamabad, P.O.Box-1440	-
27	COMSATS Institute of Information Technology	Education	Academic Institutions	Dr. S.M. Junaid Director	admissions@comsats.edu.pk /www.cit.edu.pk/infocit.edu.pk	-18296812.03	-9246965	Park Road, Chak Shahzad	-
28	Comsats Institute of Information Technology Library	Education	Library	Raja Muhammad Ibrahim	rajaibrahim@comsats.edu.pk / www.cit-isb.edu.pk/Library/Library.aspx	-18517055.9	-	Park Road, Chak Shahzad, Islamabad	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
29	Corporation(Pvt)Ltd.	-	Private Company	Mir Saeed Zahri CEO	-	-	-	S-32,SITE,Hawksbay Road,Karachi	-
30	Cress LPG (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Muhammad Sharif Chief Exclusive	-	042-6279066, 6371323,042-6371324	042-6279067, 6362402	30, Lawrence Road, lahore.	-
31	DAWOOD HERCULES Fertilizer	Fertilizer	Private Company	-	info.dh@dawoodgroup.com	(92-42) 6301601-07	(92-42) 6364316, 6360343	35-A, Shahrah-e-Abdul Hameed Bin Baadees (Empress Road), Lahore 54000, Pakistan.	www.dawoodgroup.com
32	Descon Exploration (Pvt.) Limited	Oil & Gas	Private Company	Abdul Razak Dawood (Chairman/Director)	Rdawood@Descon.com.pk	92(42)5805134	92(42)581100 5, 92(42)581113 5	Descon World Head Quarters, 18 Ferozpur Road, P.O. Box 1201 Lahore 53000, Pakistan	-
33	Dewan Petroleum (Pvt.) Limited	Oil & Gas	Private Company	Dewan Zia-ur-Rehman Farooqui (Chairman & Chief Executive)	an.sect@dewanpetroleum.com	92(51)111-313-786, 92(51)2277648	92(51) 2276535	46 Nazimuddin Road, F-7/4, Islamabad 44000	-
34	Energy & Power Department	Energy	Govt Of KPK	-	Secretary, E&P@kpk.gov.pk/	091-9212686	091-9212657	-	-
35	Energy/Department,	Energy	Govt Dept	-	-	-	-	-	-
36	Energy/Department,	Energy	Govt of Punjab	Mr. Mohammad Jehanzeb Khan, Secretary,	ed.contact@energy.punjab.gov.pk	042-99213974-5	042-99213906	Library Road, Old Anar Kall, Lahore, Pakistan.	-
37	Energy/Department,	Energy	Govt Of Sindh	-	-	-	-	Plot No ST/2/1, Sector 23, Korangi Industrial Area Karachi	-
38	ENGRO	Fertilizer	Private Company	-	eeel_hiring@engro.com	+92 21 111 211 211	-	Engro Chemical Pakistan Ltd. 7th & 8th Floors, The Harbor Front Building HC # 3, Marine Drive, Block 4, Clifton - Karachi	www.engro.com
39	ENI PAKISTAN LIMITED	Oil & Gas	Private Company	-	hro.recruitment@enipakistan.com.pk	-	-	5th Floor, The Forum, G-20, Block-9, Khayaban-e-Jami, Clifton, Karachi	-
40	Exploration and Production Companies Association (PPEPCA).	Oil & Gas	Private Company	-	mail@ppepca.com	(92) 51-2112015-16	(92) 51-2112108	House No. 119-A, Street No. 37 F-10/1, Islamabad, Pakistan.	www.ppepca.com/communitydevelopment/Polish_Oil_and_Gas_Company.html
41	FATIMA GROUP	Fertilizer	Private Company	-	mail@fatima-group.com	+92(61)4512031-2	+92(61)45116 77	2nd Floor Trust Plaza, L.M.Q Road, Multan	www.fatima-group.com
42	Fauji Fertilizer Bin Qasim Ltd	Fertilizer	Private Company	Lt Gen Muhammad Zaki, HI, HI (M), (Retd) is	info@ffbl.com.pk	(051) 9272196-97	(051) 9272198-99	Fauji Fertilizer Bin Qasim Limited 73 - Harley Street, Rawalpindi.	www.ffbl.com
43	Fauji Fertilizer Company	Fertilizer	Private Company	Lt Gen Naeem Khalid Lodhi, HI(M) (Retired)	ffcrwp@ffc.com.pk	(051) 111-332-111	(051) 845992 5	156-The Mall, Rawalpindi	www.ffc.com.pk

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
44	Fauji Foundation	Fertilizer	Private Company	-	info@fauji.org.pk	+92-51-595-1821 to 40	-	68 Tipu Road, Chakala Rawalpindi, Pakistan-46000	www.fauji.org.pk
45	Fine Gas Co Ltd. (FG)	GAS	Govt	-	info@finegases.com /	0092-42-35118937-40	0092-42-35122642 00-92-42-35112905	130, Industrial Estate Kot Lakhpat, Lahore - 40, Pakistan	www.finegases.com
46	Foundation Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Brig (R) Hassan Shah (General Manager)	-	051-5584936	051-5568577	Shahrahe Quaid-e-Azam, P.O.Box No. 422, Rawalpindi.	-
47	Frontier Holding Limited	Oil & Gas	Private Company	Khalid Shoab (Senior Staff Geophysicist)	fhlsd@comsats.net.pk, /	92(51)2654471-73,	92(51)2665380 7	House# 149, Street 15, Sector E-7 Islamabad	www.luraenergy.com
48	Fugro Geodetic Ltd.	Oil & Gas	Private Company	Richard Hall (Country Manager)	fugro@fugro.com.pk	92(21) 4532041, 4539165, 92(21)4532041	92(21)453204 2	28-B, K.D.A Scheme # 1Karachi -753850.	-
49	Fusions Group	Solar Energy	Private Company	-	info@fusionsgroup.com	0092-213-4662642 / 92-213-4662643 / 92-213-8045043	-	-	www.fusionsgroup.com
50	GasMan (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mrs. Abida Khurshid Chief Exclusive	-	051-2255048, 2255148	051-2255948	House # 12, Street 32/1, F-8/1, Islamabad	-
51	GEMS AND GEMOLOGICAL INSTITUTE OF PAKISTAN	GEMS	Govt Dept	-	ggpeshawar@yahoo.com	(+92-91) 9213303, 9213196, 9213197	(+92-91) 9213198	Suite # 209, 1st Floor, Benevolent Fund Building, Saddar Road, Peshawar - Khyber Pakhtoon Khuwa – Pakistan	www.ggip.com.pk/
52	Geofizyka Krakow Limited	Oil & Gas	Private Company	Dr Ivan Vrubel (Country General Manager)	gkoffice@dsl.net.pk /Gkoffice@dsl.net.pk	92(51)2262608, 2261016	92(51)225182 9	Park Road, F-8/2 Islamabad.	-
53	Global Gas International (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Muhammad Saeed Chief Exclusive	-	051-5464062, 5464063	051-2293616	H. # 297, Street 59-A, F-10/3, Islamabad.	-
54	GO Pakistan (Gas & Oil Pakistan Pvt. Limited)	Oil & Gas	Govt	-	info@gno.com.pk	(+92) 42 3864 0618	-	3rd Floor, 19J CCA, DHA Phase 5, Lahore,	www.gno.com.pk
55	Golden Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Shahbaz Aftab Khan Chief Exclusive	-	042-6653894-6, 5726804, 042-5726805	042-6655560 -1	45-CMA Colony, Abid Majeed Road, Lahore-Cantt.	-
56	Government Holdings (Private) Limited (GHPL)	Oil & Gas	Govt	Khushid Anwer (Managing Director /Chief Executive Officer)	ka@ghpl.com.pk/las hz@ghpl.com.pk/	92(51)9266895, 9266649, 9266766	-	House # 9, Street # 29, F-10/1, Islamabad, Pakistan	www.ghol.com.pk
57	Haliburton	Oil & Gas	Private Company	Rick Stewart (Operations Manager)	rick.stewart@haliburon.com	0(092)300-5010092 92(51)4444951-2,	92(51)443904 6	Plot No. 18-20, Industrial Area 1-9/2 Islamabad	-
58	Hannan corporation	Marble	Private Company	Mr.Khuram Rangoonwala CEO	-	-	-	1-D25/26 Mangopeer Road , Qasba Metrville Karachi.	-
59	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

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
60	Hi-Tech Alternative Energy System	Solar Energy	Private Company	-	hitech@cyber.net.pk;	0092-21-3521 2315/3562 1864,	+92-21-3562 1869	Ground Floor, Hotel Royal City Building Sarmad Road, Near Regal Chowk Saddar, Karachi-74400 Pakistan	www.hitech.com.pk
61	Hycarbex Inc.	Oil & Gas	Private Company	Dr. Iftikhar Zahid (President /Chief Executive Officer)	hypak@comsats.net.pk/amel@mail.com sats.net.pk	92(51)2855713-4, 2853052, 2853152	92(51)285571 7	House #3 Street 32, F 8/1, Islamabad	-
62	Indus Mining Company Peshawar	Mining	Private Company	Mr. Shahid R. Khan Chief Executive,	Indus_mining@hotmail.com	091-9214074/091-9214046	091-9214046	House No. 74, Street No. 4, Sector K-5, Phase-3, Hayatabad Peshawar	-
63	Inter State Gas Systems (Private) Limited	Gas	Private Company	-	mail@isgs.pk/	051-9267672-74	051-9267671	517, Main Margalla Road, F-10/2, Islamabad	www.isgs.pk
64	IPR Trend Oil Corporation	Oil & Gas	Private Company	Wasim A. Zuberi (General Manager)	iprgoc@isb.comsats.net.pk, ipr@isb.paknet.com.pk	92(51)2871501-3	92(51)287150 4	52-East, Dody Building, 3rd Floor, Jinnah Avenue, Blue Area, Islamabad	-
65	Iqra Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Zulfiqar Ali Chief Exclusive	-	055-3842900, 6818247 - 48 0300-6404991	055 - 3843600, 6818242	21-Km, Lahore Side, G.T Road, Kamoke, District Gujranwala.	-
66	Irfan Orient Arts & Crafts,	Marble /Handicrafts	Private Company	-	iranorientlac15@yahoo.com	0336-3049620	-	F-959/3, WAPDA Labour Union Hall, Khokh Muhallah Gari Khata, Hyderabad	-
67	Khyber Energy (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Muhammad Ishaq Khan Chief Exclusive	-	091-5260618	091 -5260372, 5274705	Off. No. 19, Cantonment Commercial Complex, Fakhr-e-Alam Road, Saddar Peshawar.	-
68	Kim Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Ch. Mohammad Rafique Chief Exclusive	kingas@yahoo.com	042-7579950, 7591328 7591797 : 03334264372	042 - 7591698	14-Taj Arcade, Jail Road, Lahore.	www.kimgas.com/
69	Kotal Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Ameer Nawshad Chief Exclusive	-	051-2878416	051-2874795	No. 210, 1st Floor, Shahid Plaza, Blue Area, Islamabad.	-
70	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.	-
71	LMK Resources	Oil & Gas	Private Company	Alif Rais Khan (President & CEO)	office@lmkr.com,	92(51)111-101-101	92(51)287985 4, 2879855	300, Software Technology Park 1, Evacuee Trust Center Sir Agha Khan Road, F-5/1, Islamabad - 44000	-
72	LPEB Fecto Co-Sail (JV)	Oil & Gas	Private Company	-	-	-	-	-	-
73	Lub Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Iqbal Z. Ahmed Chief Exclusive	-	042-6306106&08, 6368844, 051-2652727 & 2652728	042 -6368742	7-Egerton/Kashmir Road, Lahore.	-
74	Madni Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mian Muhammad Mukhtar Chief Exclusive	-	042-5850027 0333-4709408	042 -5850027, 042-5893608	Al-Haider Tower 72-CCA, Phase 4, DHA, Lahore.	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
75	Makran Gas & Oil Co (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Major (R) Azizullah Khudadad Dashti Chief Executive	-	0852-611237, 413264 0321-8091101, 2, 4	0852-413884	Pasni Road Turbat District Kech, Balochistan.	-
76	Marble/ Slabs Marmonyx.	Marble /Slabs	Private Company	Mr. Haroon Rashid, Director	haroon@marmonyx.com	0092-21-6976381 /0300-8228982	009221-4375706	504 Windsor Place, Block 7 & 8, KCHS Karachi	www.marmonyx.com
77	Mari Gas Company Limited	Oil & Gas	Private Company	General (Retd.) Imtiaz Shaheen (Managing Director)	info@marigas.com.pk/info@marigas.com.pk	92(51) 111-410-410, 2297683-86	92(51)2297680	Plot no 21, Mauve Area, 3rd Road, Sector G-10/4, Islamabad	www.marigas.com.pk
78	Mari Petroleum Company Limited	Petroleum	Private Company	-	info@mpcl.com.pk /	(+92) 051 111-410-410, (+92) 051 2352853/(+92) 051 2352857, (+92) 051 2352861	(+92) 051 2352859	21, Mauve Area, 3rd Road, G-10/4 P.O. Box 1614, Islamabad – 44000	www.mpcl.com.pk
79	Marina Industries,	Marble	Private Company	Mr. Abdul Hameed Shera Chief Executive Officer,	marinaindus@yahoo.com	92- 021-2577490 / 0300-9233819	-	M-1/1, Hasrat Mohani Colony S.I.T.E., Karachi	-
80	Marina Marble & Granite	Marble & Granite	Private Company	Mr. Abdul Hameed Shera CEO,	Marina_indus@hotmail.com, Marina_indus@yahoo.com	0092-345-3165979/32563897, 32577490	0092-21-3256419	Plot# M-1 Hasrat Mohani colony, SITE, Karachi	www.marinaindustries.com
81	Marshal Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Syed Asghar Ali Shah Chief Executive	-	021-4322677-8, 2033000	021 -4322677	Suite # 11, 2nd Floor, Kerkashan Mall, Block -2 P.E.C.H.S, Tariq Road, Karachi.	-
82	Mecom Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Abdul Wahid Chief Executive	-	021-5894428, 5894429.	021 -5894432	9-C, 13th Commercial Street Phase-II, Ext DHA, Karachi.	-
83	Mehran LPG (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Qazi Hamayun Fareed Chief Executive	-	042-6306106&8, 6368844, 051-2652727 & 2652728	042 -6368742	7-Egerton / Kashmir Road, Lahore.	-
84	Mehran Marble Industries	Marble Industries	Private Company	Mr. Muhammad Arif CEO	sales@mehranmarble.com	0092 (312) 669 3333/ +92 322 200 8493	-	1D9/3 Manghoper Road ,Qasba Moteroville Karachi.	www.mehranmarble.com/
85	Memon Marble Industries	Marble	Private Company	Mr. Khurram Ibrahim CEO	memonmarble@yahoo.com	0092-321 9257708/ 03009257708/ 021-36661134-36669585	-	1-D 9/32 Mangopeer Road ,Qasba Moteroville, Karachi.	www.memonmarble.com/
86	Mesa Petroleum (Pvt.) Ltd.	Oil & Gas	Private Company	Muslim Lakhani (Chairman & CEO)	mlakhani@mesa.com.pk	92(51)2654146-47	92(51)2654148-49	324, Hillside Road, E -7, Islamabad Pakistan.	-
87	Ministry Of Petroleum & Natural Resources	Petroleum	Govt	-	info@mpmr.gov.pk/	+ (92-51) 9210220	+ (92-51) 9206416	Room No. 301, 3rd Floor, A block Pak Secretariat Islamabad.	www.mpmr.gov.pk
88	Ministry of Water & power.	Electricity	Govt	Dr. Musadik Malik Federal Minister	info@mowp.gov.pk/ secretary@mowp.gov.pk/	0092-51-9212442/0092-51-9210533	0092-51-9224825	Room No. 201-204, 2nd Floor, A Block Pak Secretariat	www.mowp.gov.pk
89	MND Exploration & Production Limited	Oil & Gas	Private Company	Alangir Khan (General Manager)	mnd@sp.comsats.net.pk, alangir@mnd.com.pk	92(51)2651959, 2651894	92(51)2651875	House 236, Street 11, Sector E-7 Islamabad	-
90	MOL PAKISTAN	Oil & Gas	Private Company	-	-	(+92) / 51111665725	(+92) / 512820113	Plot No. 5/A, Crown Plaza, F-7 Markaz, P.O.Box 1562	www.molpakistan.pk

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
91	Muhammadi Gas Company (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Amir Khurshid Chief Executive	mgc@gsi.net.pk	051-2255048, 2255148	051-2255948	House # 12, Street 32/1, F-8/1, Islamabad	-
92	National Engineering Corporation	Solar Energy	Private Company	-	nec@cyber.net.pk	0092-21-32788336	-	202 Sea Breeze Plaza, Main Shahrah-e-Faisal, Karachi - Pakistan	-
93	National Fertilizer Corporation of Pakistan (Private) Limited	Fertilizer	Private Company	Mr. Muhammad Khalid Malik	-	(042) 6284983 to 88	(042) 6284989	1st Floor, Alfaiah Building (Tail Wing) Shahrah-e-Quaid-e-Azam Lahore, Pakistan	-
94	NATIONAL TRANSMISSION & DESPATCH COMPANY (NTDC) LIMITED PAKISTAN	Electricity	Govt	Mr. Khalid Mohtadullah chairman	hr@ntdc.com.pk /	92(042) 99201020-2283,	-	Room No: 419 - WAPDA House, The Mall, Lahore, Pakistan.	www.ntdc.com.pk
95	Nativus Resources Limited	Oil & Gas	Private Company	Javed Ahmad (Resident Director)	nativus@isb.paknet.com.pk /nativus@isb.paknet.com.pk	92(51)2291033, 2100605, 2212339, 2102065, 2102066	92(51)2102067	148, Street # 48, F10/4, Islamabad	-
96	NEC	Solar Energy	Private Company	-	nec@cyber.net.pk	0092-21-32788336	-	202 Sea Breeze Plaza, Main Shahrah-e-Faisal, Karachi - Pakistan	-
97	Nemmo Petroleum Limited	Oil & Gas	Private Company	S. Munsif Raza (Chief Executive / Managing Director)	info@ppl.com.pk/m_raza@ppl.com.pk/	111-568-568,	92(2)5680005, 5682125	4th Floor, P.I.D.C House, Dr. Ziauddin Ahmad Road, Karachi 75530, Pakistan.	www.ppl.com.pk,
98	New Horizon Exploration & Production Limited	Oil & Gas	Private Company	Syed Wamiq Abrar Bokhari (Chairman & CEO)	info@nhpl.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.	-
99	Noor LPG Co. (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Belal Jabbar Chief Executive	info@noorlpg.com	042-5761187, 5873698	042-5750560	House # 8, 7-Aziz Avenue, Canal Bank Road Gulberg V,Lahore.	www.noorlpg.com
100	Nortech Surveys Pakistan Limited	Oil & Gas	Private Company	Zafar Iqbal (Director)	Pepl@isb.paknet.com.pk, /	92(51)2299025, 2299028.Mob: 92(300)8555191	-	House No 66, Street 25, F-10/1 Islamabad	www.shahzadintl.com.pk
101	Ocean Pakistan Limited	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.opil.com
102	Oil & Gas Development Company Limited	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
103	Oil & Gas Development Company Limited (OGDCL)	Oil & Gas	Govt	Arshad Nasir (Chairman & Chief Executive Officer)	info@ogdcl.com /www.ogdcl.com/ceo@ogdcl.com	92(51)9209811-8	92(51)9209804-6	OGDCL House, Plot No .3, Block P Jinnah Avenue, Blue Area, Islamabad	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
104	Oil & Gas Investment Limited (OGIL)	Oil & Gas	Govt	-	-	92 21 3530-2963-65/92 21 3530-2967-78	92 21 3586-1662	Oil and Gas Investment Limited 508, 5th Floor Continental Trade Centre, Block-8, Clifton, Karachi-75600, Pakistan	www.ogil.com.pk
105	Oil Companies Advisory Committee	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
106	Oil Industries Pakistan (Pvt.) Limited	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
107	OK Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Rehmat Khan Chief Exclusive	-	P: 051-4102016	051 -4102096	House No. 503 -A, Street No. 67, Sector I-8/3, Islamabad.	-
108	OMV (Pakistan) Exploration G.m.b.H.	Oil & Gas	Private Company	Dr. Georg Wachtel (General Manager)	.wachtel@omv.com/	92(51)20899/111-668-668/2273620	92(51)227364 3-2273644	5th Floor, UBL Building, Jinnah Avenue, F-6/1, Islamabad, Pakistan	www.omv.com
109	OPI Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Murtaza Hashwani Chief Exclusive	-	051-2273451	051-2273392	House # 21 -B, Street 55, F-7/4, Islamabad	-
110	Orient Petroleum International Inc.	Oil & Gas	Private Company	Mr. Sadruddin Hashwani (Chairman)	orient@opil.com	+92(51)2274261-68	+92(51)2274244	Hayat Hall, Block No.2, Diplomatic Enclave No .1, G-5, Islamabad	-
111	Paige Limited	Oil & Gas	Private Company	Javed Ahmad (Country Manager)	Paige@isb.paknet.com.pk/paige@isb.paknet.com.pk	92(51)2100605, 2212339, 2103128-9	92(51)221447 5	148, Street # 48, F 10/4, Islamabad	-
112	Pak -Arab Refinery Limited. (PARCO)	LPG MARKETING COMPANIES	Private Company	Mr. Muhammad Rasheed Jung Chief Exclusive	-	021-5090100-13,021-5090114-25	021-5090625, 5090929	Corporate Headquarters,Korangi Creek Road P.O. Box No. 12243, Karachi	-
113	Pakistan GasPort Limited	GAS	Govt	-	-	-	+92 42 3636.8742	-	www.ag.com.pk/pakistan-gasport/
114	Pakistan Institute of Engineering & Applied Sciences (PIEAS)	Education	Academic Institutions	-	registratr@pieas.edu.pk /webmaster@pieas.edu.pk	0092-51-2207380 /+92-51-2207381/+92-51-2207382/92-51-2207383/+92-51-2207384	0092-51-2208070	P.O. Nilore, Islamabad Pakistan	www.pieas.edu.pk
115	Pakistan Oilfields Limited	LPG MARKETING COMPANIES	Private Company	Sajid Nawaz Chief Exclusive	polcms@pakoil.com.pk	051-5487589-96	051 -5487599	POL House, Morgah, Rawalpindi.	www.pakoil.com.pk
116	Pakistan Oilfields Limited	Oil & Gas	Private Company	Shuaib A. Malik (Chairman)	polcms@isb.paknet.com.pk	92(51)5487589-97 /92(51)5487562	92(51)548759 8-99	POL House, Morgah, Rawalpindi	-
117	Pakistan State Oil Company Limited.	Oil Marketing Companies	Govt	Mr. Irfan K. Qureshi, Managing Director	taaliq@psopk.com	021-111-111-776/ (92 21) 99203866-85	92(21) 99203835	PSO House, Khayaban-e-Iqbal P.O.Box-3983, Karachi-75600	www.psopk.com
118	Pakistan Stone Development Company	stone	Govt	Mr. Ihsanullah Khan Chief Executive	info@pasdec.com.pk	(92 51) 9263465-7/ 9261633-36	(92 51) 9263664	Chamber of Commerce Building, Mauve Area, G-8/1Islamabad.	www.pasdec.com.pk

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
119	Pakistan's First Fully Integrated LPG Company	Petroleum Gas	Govt	-	progas@progas.cc	(92 21) 472 0079, 472 0075	(92 21) 472 0075	Progas Pakistan Limited NWZ/JP-305(A4 LPG Area) North Western Industrial Zone Bin Qasim Karachi.	www.petrosin.com
120	PARCO Pearl Gas (Private) Limited (formerly SHV Energy Pakistan)	LPG MARKETING COMPANIES	Private Company	Patrick J. Gregory Chief Executive	supergas@parco.com.pk	111-798-798	051-2275576	98-A, F/6-2, Margallah Road, Islamabad. Rawalpindi.	www.parco.com.pk/pgg
121	Petro Search (Pvt.) Ltd., PSL	Oil & Gas	Private Company	Shahid Ahmed (Managing Director)	Shahid1407@gmail.com	92(51)2103594, 2103593	92(51)2294034, 2103594	Fiat # 76, Park Towers, Studio Apartments, F-10/3 Islamabad.	-
122	Petroleum Consultant International (PCI)	Oil & Gas	Private Company	Saifraz U. Siddiqui (Chief Executive)	info@petroconpak.com	92(51)2299198, 2102999	92(51)2296789	House 87, Street - 14, Sector F-11/1, Islamabad	www.petroconpak.com
123	Petroleum Exploration (Pvt) Ltd	Oil & Gas	Private Company	Zaheeruddin (Chairman & CEO)	pepl@sb.com.pk / info@petroconpak.com	92(51)2299031-36	92(51)2299027-29	15 Nazimuddin Road, Sector, F-10/4, Islamabad, P.O. Box-1440	www.shahzadintl.com.pk
124	Petroleum Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mrs. Farida Tariq Chief Executive	-	042-5873698	042-5750560	House # 8, 7-Aziz Avenue, Canal Bank Road, Gulberg V, Lahore	www.petroleumgas.com.pk
125	Petronas Carigali (Pakistan) Ltd., (PCPL)	Oil & Gas	Private Company	Mohd Ariffin Daud (General Manager)	mariffin_daud@petronas.com.pk / akhan@imkr.com	92(51)111-538-111/92(51)2097120	92(51)2277997	508, Evacuee Trust Center, Agha Khan Road, F-5/1, Islamabad	-
126	Petrosin Gas Pakistan (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Sohail Latif Chief Executive	mail@petrosin.com	051-2829027	051-2825524	82 (115), Attaturk Avenue (Embassy Road), G -6/3, Islamabad.	www.petrosin.com/pgp.asp
127	Pioneer Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Khuram Khan Chief Executive	info@pioneerlpg.com	042-7222519-20	042-7226348	Ground Floor, Co-operative Insurance Building, 23-The Mall, Lahore.	www.pioneerlpg.com
128	Polish Oil & Gas Company Pakistan Branch, (POGC)	Oil & Gas	Private Company	Jacek Oleksy (Resident Manager)	pogc@comsats.net.pk / Jopogc@mail.comsats.net.pk	92(51)2251530, 92(51)2654597-392(51)2654599, Mob: 0(092)300-8555611	92(51)2654594	House # 321 Street # 17, Sector E-7 Islamabad.	-
129	Power Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Muhammad Ali Haider Chief Executive	-	021-5689243-4	021-5689212	305, Progressive Plaza, Beaumont Road, Civil Lines Karachi.	-
130	Premier KUFPEC Pakistan B.V.	Oil & Gas	Private Company	Zaffar Chida (Chief Executive Officer)	mail@pkp.com.pk / zchida@pkp.com.pk	92(51)111-211-311, 892(51)22514530,	92(51)2251104	House No.2 Street 71, F-8/3Islamabad	-
131	Pro Gas Pakistan Limited.	LPG MARKETING COMPANIES	Private Company	Abbas Bilgrami Chief Executive	progas@progas.cc	021-111-574-000	021-5823995	Pro Gas House, D-133, Block 4, Clifton Karachi - 75600.	-
132	Pyramid Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Muhammad Farooq Azam Chief Executive	-	042-5725781 0300-8478418	042-5775064	W-564, Phase-III, DHA, Lahore.	-
133	Qureshi Gas Company (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Muzaf far Ali Qureshi Chief Executive	-	022-2637656, 2610051 0333-2722508	022-2781530, 2610051	Al-Noor Heights, Shop No. 9, Jamshoro Road, Hyderabad.	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
134	Ravi Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Muhammad Siddique Chief Executive	karachi@crecentiservices.com.pk	042-6305305, 6371323 - 24	042-6362402	301-B, Lawrence Road, Lahore	www.cressipg.com/ravi_gase.htm
135	RDC International (Pvt.) Limited	Oil & Gas	Private Company	(Chief Executive Officer)	rdc@lhr-paknet.com.pk	92(42)5167820, 92(42)5167975, 92(42)5172514	92(42)5167530	172-M Block, Model Town Extension Model Town, Lahore	-
136	Renewable & Alternative Energy Association of Pakistan (REAP)	Education	Academic Institutions	Mir Ahmad Shah Executive Secretary	write@reap.org.pk	0092-300-6221718 /+92-51-4100084-85	0092-51-4100083	Plot 140 Street 9, I-10/3 Industrial Area, Islamabad, Pakistan.	www.reap.org.pk
137	Rivaj	Marble Handicrafts	Private Company	Ms. Azra Ahmed,	azra@rivajcraft.com	(92) 0300-9298757 / (92-21) 5823471-72	(92-21) 5661287	18, Khayaban-e-Shaheen, 18, Khayaban-e-Shaheen, Karachi	www.rivajcraft.com/
138	Rousch (Pakistan) Power Limited (RPPL)	Electricity	Private Company	Abdul Razak Dawood Chairman	site@rouschpak.com	+92-65-2441572, 2441822-23,	+92-65-2441570,	450 MW Combined Cycle Power Plant Near Sidhrai Barrage, Abdul Hakim, District Khanewal	www.rouschpak.com
139	Sadiq Gas Company.	LPG MARKETING COMPANIES	Private Company	Faizan Tariq Chief executive	-	055-3258100, 3258200	055-3257600	76-A, S.I.E # 1, Gujranwala	-
140	Saif Energy Limited	Oil & Gas	Private Company	Ahmed Nawaz Khan (President)	Saifenergy@saienergy.com /anawaz@saienergy.com	92(51)2870361-3	92(51)2870365	2nd Floor, 2020-Kulsum Plaza, Blue Area Islamabad	-
141	SAM Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mrs. Bushra A. Ahsan Chief Executive	-	042-6278882, 6286528	042-6368435	Azmat House, 32-Davis Road, Lahore	-
142	SANCO	Marble /Slabs	Private Company	Mr. Sana Ullah Khan, Chief Executive Office,	info@sancomarble.com, sancos@inbox.com	0092-21-6553838 /0332-225555	0092-21-4960416	B-18 Block -3, Gulshan-e-Iqbal, Post Code # 75300 Karachi	sanco.aurasourcing.com
143	Sangi Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Masood Sadiq Malik Chief Executive	-	051-2829586-87, 7128081	051-2829587	Office # 03, Hill Road, F-6/2, Islamabad	-
144	Sarhad Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Tauseef Gilani Chief Executive	-	051-2871134	051-2871135	Suite No. 4, Mezzanine Floor, Sethi Plaza, Jinnah Avenue, Main Blue Area, Islamabad.	-
145	Saudi Energies (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Shahid Farukh Chief Executive	-	042-7241072-3	: 042-7241074	Ghani Chambers – Pattala Ground Link Mleod Road, Lahore	-
146	Sehwan Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Ishti aq Asif Chief Executive	-	042-5323164-65	042-5322437	½ Km Bhojpur Chowk Defence Road, Off-Rawind Road, Lahore.	-
147	Shabir Marble Works	Marble	Private Company	Mr. Aslam Shafi CEO	-	021 2562291	-	Plot# A- 52 Wilayatnabad Manghopir Road Karachi.	-
148	Shaheen Gas Company.	LPG MARKETING COMPANIES	Private Company	Mushtaq Anif Chief Executive	-	0300-8737233	-	6-A, Gulgasht Colony, Multan.	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
149	Shaheen Group of Companies	Solar Energy	Private Company	-	info@shaheensolar.com	0092-427211390 - 92427359666 - 92427320798 - 923008442237	+92 42- 7228459	Shaheen Solar Company & Shacho Electronics 16-Hall Road (Electronics Parts Market)	www.shaheensolar.com
150	Shell Development & Offshore Pakistan B.V	Oil & Gas	Private Company	Brendon Connolly (Asset General Manager)	brendon.connolly@gec.shell.com	92(51)2823136 2823573, 2271432, 2276150971(4) 3350335	92(51)222858 4	House 80, Khayaban-e-Iqbal, F-6/2 Islamabad	-
151	Shell Gas LPG (Pakistan) Limited	LPG MARKETING COMPANIES	Private Company	Fawzia Kazmi Chief Exclusive	-	021-5301270	021-5301673	Suite # 606-608, 6th Floor, The Forum, Block - 9, Clifton, Karachi	-
152	Shell Pakistan Limited,	Oil Marketing Companies	Private Company	Mr. Zaiviji Ismail Bin Abdullah, Chairman	nataasha.qamar@shell.com, generalpublicenquiry@es-pk@shell.com	0092 (21) 111-888-222 - 021-5689525/26	0092 (21) 3563-0110 - 021-5660071	Shell House, Ch.Khaliqzaman Road, Karachi.	www.shell.com.pk
153	Sindh Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Yawar Abbas Manda ni Chief Exclusive	-	021-2421956	021 -2414203	11, Karachi Chamber of Commerce & Industry Awan-e-Tajarat Road, Karachi.	-
154	Solar Line Adaptive Technologies (PVT) LTD.	Solar Energy	Private Company	S. Abdul Aziz Mehboob (Director)	info@adaptive-com	(92 - 21) 35865896, 35868044	-	Suite # 3, 4th Floor Dean Arcade, Block - 8, Clifton, Karachi-75600, Pakistan	www.adaptive-tec.com
155	Solar System Karachi.	Solar Energy	Private Company	Saqib Murtaza	sales@solarsystemspk.com	92-21-35830127	92-21-35373020	G23 A/1 Park Lane Clifton Block 5, Karachi, Pakistan 75600	www.solarsystemspk.com
156	South Asia Geophysical Services (SAGEO)	Oil & Gas	Private Company	Chen Zhicun (General Manager)	mail@bgpsouthasia.com/ chenzhicun@bgpsouthasia.com	92(51)2293494-95 /0(092)300-8562986,	92(51)210817 6	House No.2, St No.58, F-10/3, Islamabad	-
157	SRE Solutions	Solar Energy	Private Company	Mr. Saadat Hayat Khan (CEO)	Info@solarmagicbox.com	021 32046383 /35388736	-	Shop no 3 Street 11 commercial Area DHA Phase 7	www.solarmagicbox.com
158	Stone Marks	Marble	Private Company	Mr. Shahnawaz, Director	khan_and_brothers@yahoo.com	0092- 051-2113646 /0344-3151468	-	Suit No.11, Millat Plaza F-10, Markaz, Islamabad.	-
159	Sun Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mr. Junaid Khan Chief Exclusive	-	051-111-666-999 2654242-4	051 -111-444-999, 2654245	279, St. 21, E-7, Islamabad.	-
160	Super Star Gas Company Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Cap. (R) Basharat Ahmed TI (M) Chief Exclusive	-	051-2291003, 2292860	051 -2113039	18-A / 18-B, Super Star Plaza G -10 Markaz, Islamabad	-
161	SYNDICATE Mineral Export Company	Mineral	Private Company	Mr.Nazim Hashwani CEO	harec@hashgroup.com	(9221) 2412946-49/ (+92-21) 32424776, 32413367	(9221) 2416725 & 2411874/ (+92-21) 32416725	108-Colton Exchange Building ,LI chunrigar Road Karachi.	www.hashgroup.com
162	Synergy Resources (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Ahsan Latif Chief Exclusive	-	042-5380236/8	042 -5380237	17-C/2, Gulberg 3, M.M. Alam Road, Lahore	-
163	Techno Petroleum (Pvt.) Ltd	Oil & Gas	Private Company	Abid Ali (Chief Executive Officer)	techno@ish.comsat s.net.pk /CEO@tech_engg.com.pk	92(51)2873779,2275514/ 92(51)2275514/0(092)300-8555524	92(51)220166 1	House 30, Street 19, F-6/2, Islamabad.	www.tech_engg.com/

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
164	Terra Energy (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Farasat Ali Chhatta Chief Executive	info@terraenergy.com.pk	042-6280024	042-6280023	Suite 426, 4th Executive Floor, Sadiq Plaza, 69 The Mall, Lahore	www.terraenergy.com.pk
165	Tez Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Farooq Iftikhar Chief Executive	-	042-5847791-92, 5856809.	042-5847793	116-C, Model Town, Lahore	-
166	The Attock Oil Company Limited	Oil & Gas	Private Company	Shuaib A. Malik (Chief Executive)	-	92(51)2270542, 92(51)2270546, 92(51)2270544	92(51)2270541	House # 6 Faisal Avenue F-7/1, Islamabad	-
167	The Hydrocarbon Development Institute	Education	Academic Institutions	Dr. Asim Hussain Chairman	hdip@apollo.net.pk	+ (92-51) 925-8301, 925-8302.	+ (92-51) 925-8310.	Plot# 18, Street# 6, H-9/1, Islamabad.	www.hdip.com.pk
168	The Petroleum Institute of Pakistan	Education	Academic Institutions	Mr. S. Nazeer Iqbal Secretary	info@pip.org.pk	92(21)35378701-2	(92)(21)35378704	1st floor, Federation House, Block V, Kehkashan, Clifton, Karachi - Postal code 75600	www.pip.org.pk
169	The Terminators	Solar Energy	Private Company	-	-	021-35476316	-	104, Yasir Chambers, Opp. PIA Planetarium 13-A, University Road, Gulshan-e-Iqbal Karachi.	-
170	Total-Parco Pakistan Limited	Oil Marketing Companies	Private Company	Mr. Marc Soisson, Chief Executive Officer	-	111-709-709	042-5843535-6	11/1, Block-B, Model Town Lahore.	-
171	TRDP TIED	Solar Energy	Private Company	-	-	92-21-35868791	92-21-35867300	Coordination Office F-178/3, Block-5, Kehkashan, Clifton Karachi, Sindh, Pakistan	-
172	United Energy Pakistan (UEP)	Electricity	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
173	Wak Limited.	LPG MARKETING COMPANIES	Private Company	Ammar Ahmed Khan Chief Executive	info@wakgroup.com	042-5870230-36	042-5877442, 042-5877593, 5877596	135-E I, Gulberg-III, Lahore.	www.wakgroup.com
174	Wakgroup	Multiple	Private Company	-	info@wakgroup.com	92 42 111-66-3333/92 42 5870230-6	92 42 5877442, 92 42 5877596	135 Block E-1, Stadium Road, Gulberg III, Lahore Punjab, Pakistan	www.wakgroup.com/group-of-companies/
175	Wellbeinggreen	Solar Energy	Private Company	-	info@wellbeinggreen.com.pk	0800 - 92477	-	172/P, Third Floor PECHS Block - 2 Tariq Road, Karachi	www.wellbeinggreen.com.pk
176	Wyne Gas (Pvt.) Limited.	LPG MARKETING COMPANIES	Private Company	Mrs. Ryda Nabeel Nawaz Chief Executive	-	051-7101999, 2878481	051-2250835, 2878 482	State Life Building # 5, Phase-II, Ground Floor, Jinnah Avenue, Islamabad - 44000	-
177	Yasin Akram Associates (Pvt.) Limited	LPG MARKETING COMPANIES	Private Company	Muhammad Yasin Chaudary Chief Executive	-	051-2277117, 2277473, 2277607	051-2277931	M ezzanine, 5-6 Block 106 E, Asif Plaza, F. Haq Road, Blue Area, Islamabad.	-

Sr #	Name	Sector	Type	Contact Person	Email	Phone	Fax	Address	URL
178	Zaver Petroleum Corporation Limited	Oil & Gas	Private Company	Sadruddin Hashwani (Chairman & CEO)	Zaver@zpci.com	92(51)2832070/92(51)22 74800	92(51)282323 0	Sitara Plaza ,Block No 3, Diplomatic Enclave NO 1G-5, Islamabad.	www.zpci.com
179	Zehrf Onyx & Mineral	Marble & Granite, Mosacs, Iron Ore	Private Company	Syed M.Akhtiar Ali	abrafc@gmail.com	0092-021-4391748-49 /0323-2257389	0092-21-4559237	401-4th floor Shawer Trade Centre Alma Iqbal Road ,P.E.C.H.S Block-2 Karachi	-

انہوں نے حکومت کو خبردار کیا کہ گیس کی قیمت پر نظر ثانی کے نام پر اس میں مسلسل اضافہ اور اسے تیل کی قیمت کے برابر لانے کی پالیسی جسے ”ناگہانی کیفیت کا حل“ بنا کر پیش کیا جا رہا ہے نیز محض مالی مراعات کے ذریعے بیرونی سرمایہ کاری کو دعوت دینا کبھی بھی کامیاب پالیسی نہیں سمجھی جائے گی۔ ان کا خیال تھا کہ پیٹرولیم پالیسی میں عدم یکسانیت اور بار بار تبدیلی بین الاقوامی سرمایہ کاروں کو پاکستان سے دُور رکھے گی۔ اگر پاکستان میں بیرونی سرمایہ کاری کو لانے کے بارے میں ہمارے پالیسی ساز سنجیدہ ہیں تو انہیں دیگر عوامل کو بھی نظر میں رکھنا ہو گا جن میں بہتر حالات کار، جان و مال کا تحفظ، امن و اطمینان کی کیفیت، توانائی کی فراہمی کا مؤثر نظام، بیوروکریسی کی جانب سے حمایت، پالیسیوں کا تسلسل، پیش بینی کا قابل عمل نظام وغیرہ عوامل قابل ذکر ہیں۔

انہوں نے آئی پی ایس کی انرجی پروگرام سٹیرنگ کمیٹی کی کوششوں کو سراہا جس نے باخبر حلقوں کی بھرپور شرکت کے ساتھ ایک بہت معلومات افزا سیمینار کا انعقاد ممکن بنایا۔ اور اس امید کا اظہار کیا کہ اس سیمینار میں پیش کی گئی تجاویز اور سفارشات زیر نظر پیٹرولیم پالیسی کو حتمی شکل دینے میں مثبت کردار ادا کرنے کا باعث ہوں گی۔

آخر میں آئی پی ایس کے ڈائریکٹر جنرل جناب خالد رحمن نے تمام شرکاء کا شکریہ ادا کرتے ہوئے اس عزم کا اظہار کیا کہ آئی پی ایس کی جانب سے ایسے اہم قومی اور بین الاقوامی معاملات پر گفتگو اور تبادلہ خیال کا یہ سلسلہ آئندہ بھی جاری رہے گا تاکہ ہمارے پالیسی ساز اور قانون ساز حلقے ماہرین کی آراء کی روشنی میں درست فیصلے کر سکیں۔

توانائی بحران پر انرجی کانفرنس آئندہ ماہ ہوگی

2 روزہ عالمی کانفرنس نواز شریف کی زیر صدارت اسلام آباد میں منعقد ہوگی، ذرائع

عامر خان جمعہ 31 مئی 2013ء

کراچی: نئی وفاقی حکومت نے ملک کو توانائی بحران سے نکالنے کیلئے دو روزہ عالمی انرجی کانفرنس منعقد کرنے کا فیصلہ کیا ہے۔ یہ کانفرنس اسلام آباد میں منعقد کی جائے گی، جس کی صدارت متوقع وزیراعظم نواز شریف کریں گے۔ مسلم لیگ (ن) کے ذرائع نے بتایا کہ مسلم لیگ (ن) کے سربراہ نواز شریف وزیراعظم کا حلف اٹھانے کے بعد قوم سے اپنے پہلے خطاب میں ملک کو درپیش توانائی کے بحران سے نکالنے کیلئے اپنی حکومت کی ترجیحات کا اعلان کریں گے۔ مسلم لیگ (ن) کے معاشی اور توانائی کے ماہرین نے نواز شریف کو تجویز دی ہے کہ فوری طور پر ملک میں عالمی انرجی کانفرنس بلائی جائے۔

اس تجویز سے اتفاق کرتے ہوئے نواز شریف نے واضح کیا ہے کہ وفاقی حکومت قائم ہونے کے بعد جولائی کے پہلے ہفتے میں اسلام آباد میں دو روزہ عالمی انرجی کانفرنس بلائی جائے گی، جس میں دنیا بھر سے تعلق رکھنے والے انرجی ماہرین اور سرمایہ کار کمپنیوں کو شرکت کی دعوت دی جائے گی اور متوقع وزیراعظم ان کمپنیوں کو پاکستان میں انرجی سیکٹر میں سرمایہ کاری کرنے کی باقاعدہ دعوت دیں گے اور حکومت کی جانب سے اپنے بھرپور تعاون یقین دلا یا جائیگا، اس کانفرنس میں توانائی کے شعبے میں بڑی سرمایہ کاری اور معاہدوں کی توقع ہے۔

انہوں نے خیال ظاہر کیا کہ دستور میں اٹھارویں ترمیم نے قدرتی توانائی کے حصول اور اس کی پیدوار کی سرگرمیوں پر بہت منفی اثر ڈالا ہے اور اس کی وجہ یہ ہے کہ دستور کی دفعہ (3) ۷۲ اور دفعہ 161 کو ملا کر پڑھا جائے تو مرکز اور صوبے کے اختیارات میں ابہام پیدا ہو گیا ہے۔ چنانچہ جون 2010ء سے تیل اور گیس نکالنے اور اس کی پیدوار کی سرگرمیاں رُک گئی ہیں۔ اُس وقت سے کسی نئے ایکسپلوریشن بلاک کے لیے سرکاری نوٹیفیکیشن جاری نہیں ہوا ہے جبکہ اس سے پہلے نئے ایکسپلوریشن بلاکس کے لیے سال میں اوسطاً دو مرتبہ نوٹیفیکیشن جاری ہوتا تھا۔ انہوں نے کہا کہ یہ دستور کی ابہام جلد از جلد دور کیا جانا چاہیے۔

جناب محمد عارف نے توانائی کی پیدوار اور اس کی کھپت کا جائزہ لیتے ہوئے بتایا کہ پاکستان میں کونکے کے وسیع ذخائر کی موجودگی کے باوجود اسے توانائی کے بحران کو حل کرنے کے لیے استعمال نہیں کیا گیا۔ بجلی کی پیدوار کے لیے پاکستان زیادہ تر تیل اور گیس پر انحصار کرتا ہے۔ 62 فی صد سے زائد بجلی ان ذرائع سے پیدا کی جاتی ہے۔ بجلی کی پیدوار کے لیے کونکے کا استعمال نہ ہونے کے برابر یعنی 0.15 فی صد ہے۔ اگرچہ پاکستان میں کونکے کے معیار اور ذخائر کی مقدار کے تخمینے کے بارے میں دو آراء پائی جاتی ہیں، ایک طبقہ اُس کو حقیقت سے کم تر اور دوسرا اسے حقیقت سے بعید تر تخمینہ باور کرتا ہے۔

انہوں نے اس بات پر زور دیا کہ توانائی کے اس بحران کی حالت میں ہم تھرکول منصوبے کو ختم کرنے کے متحمل نہیں ہو سکتے۔ ان کا خیال تھا کہ اگر تھرکول ذخائر کی دولت بڑھا چڑھا کر بیان کیے گئے تخمینوں کا 10 فی صد بھی مان لی جائے تو بھی یہ ہماری توانائی اور ایندھن کی 50 سال کی ضروریات پوری کر سکتا ہے۔

انہوں نے انکشاف کیا کہ 2012ء کی پالیسی میں تیل اور گیس کی جو قیمت پیش کی گئی ہے وہ علاقے کے دیگر پڑوسی ممالک بشمول بھارت کے مقابلے میں بہت زیادہ ہے۔

سیمینار کے صدر مرزا حامد حسن نے گفتگو کو سمیٹتے ہوئے کہا کہ ماضی میں ملک میں بہت سی پٹرولیم پالیسیاں سامنے آئیں۔ پہلی مرتبہ 1991ء کی پالیسی میں صارفین کے لیے قیمت کے مسئلہ کو زیر غور لایا گیا۔ انہوں نے زور دیا کہ قیمتوں کا تعین کرنے کے ذمہ داران کو اس بات کو یقینی بنانا ہو گا کہ توانائی کی قیمتیں لازماً صارفین کے لیے قابل برداشت حد کے اندر ہوں۔

مرزا حامد حسن نے تنقید کرتے ہوئے اسے پالیسی کے ذمہ داران کی ناکامی قرار دیا کہ وہ مقامی صنعت اور عام صارفین کے مفادات کا تحفظ نہیں کر سکے اور پاکستان میں بجلی کے ایک یونٹ کی قیمت 20 روپے تک پہنچ چکی ہے۔ انہوں نے کہا کہ پالیسی 2012ء کا مسودہ بھی صارفین کے مسائل پر توجہ دینے میں ناکام ہے اس لیے کہ یہ قیمتوں کے مسئلہ سے بحث ہی نہیں کرتا یہ پالیسی صرف تیل نکالنے اور اس کی ترقی کے امور تک محدود ہے۔

1960ء اور 1970ء کے عشروں میں ملک کی قومی توانائی کا بیشتر انحصار پانی سے بنائی گئی بجلی پر تھا۔ پن بجلی سے تھرمل بجلی کی طرف منتقلی نے ایک کے بعد ایک نیا بحران پیدا کیا پہلے اس کا انحصار تیل سے پیدا ہونے والی بجلی پر تھا جب یہ آہستہ آہستہ بہت مہنگا ہو گیا تو تیل سے گیس کی طرف رجوع ہوا۔ اس موقع پر یہ بھی دیکھا گیا کہ گیس کے ذخائر آخر کتنے عرصہ چلیں گے اور پھر اچانک محسوس کیا گیا کہ ملک میں تو گیس ہے ہی نہیں۔

انہوں نے فیڈریشن اور صوبوں کے درمیان انرجی سیکٹر کے حوالے سے اختیارات میں پیدا شدہ ابہام کے مسئلہ کو جلد از جلد حل کرنے کی ضرورت پر زور دیا۔

مجوزہ پیٹرولیم پالیسی 2012ء۔

موجودہ توانائی بحران کا جائزہ

Institute of Policy Studies – Islamabad

27 مارچ 2012ء کو انسٹی ٹیوٹ آف پالیسی اسٹڈیز میں ”مجوزہ پیٹرولیم پالیسی 2012ء۔ موجودہ توانائی بحران کا جائزہ“ کے موضوع پر سیمینار کے انعقاد کا پس منظر یہ صورت واقعہ ہے کہ حکومت نے پیٹرولیم پالیسی 2012ء کا مسودہ جاری کیا ہے اور وہ اس مسودہ میں بہتر تبدیلیوں کے لیے ماہرین سے تجاویز کی طلب گار ہے۔

آئی پی ایس میں ہونے والے اس سیمینار کی صدارت سابق سیکرٹری وزارت پانی و بجلی جناب مرزا حامد حسن نے کی۔ وہ آئی پی ایس میں انرجی پروگرام کی سٹیرنگ کمیٹی کے چیئرمین بھی ہیں۔ سیمینار کے کلیدی پیش کار جناب محمد عارف تھے جو انرجی لائزر ایسوسی ایشن آف پاکستان کے صدر بھی ہیں۔ آئی پی ایس کے انرجی پروگرام کی سربراہ محترمہ امینہ سہیل نے سیمینار میں موڈریٹر کے فرائض انجام دیے۔ آئی پی ایس کے ڈائریکٹر جنرل جناب خالد رحمن نے افتتاحی کلمات پیش کیے۔ سیمینار میں نمایاں علمی شخصیات، معروف تحقیق کاروں، ماہرین معیشت، پالیسی تجزیہ کاروں، موجودہ اور سابقہ اعلیٰ سرکاری عہداروں، وکلاء، صنعتکاروں اور سول سوسائٹی کے ممبران نے شرکت کی۔ خصوصیت سے جن حضرات نے اظہار خیال کیا ان میں پالیسی تجزیہ کار اور سابق فیڈرل سیکرٹری جناب مسعود داہر، حکومت پاکستان کے سابق چیف اکانومسٹ اور آئی پی ایس کی نیشنل اکیڈمک کونسل کے رکن جناب فصیح الدین، انرجی سیکٹر کے ماہر جناب اے رحیم خان، راولپنڈی چیئرمین آف کامرس اینڈ انڈسٹری کے سابق صدر جناب امان اللہ خان اور پبلک پروکیورمنٹ ریگولیٹری اتھارٹی (پپرا) کے پہلے مینجنگ ڈائریکٹر جناب محمد خالد جاوید شامل ہیں۔

جناب محمد عارف نے اپنی پریزنٹیشن میں سیمینار کے شرکاء کے سامنے پاکستان کے موجودہ توانائی مسائل کے بارے میں ایک جامع جائزہ اور بجلی کی پیداوار کے ذرائع کی تفصیلات پیش کیں۔ اس کے ساتھ ہی انہوں نے اٹھارویں دستور کی ترمیم کے بعد درپیش مسائل کا ذکر کیا جس سے توانائی کا شعبہ بُری طرح متاثر ہوا ہے۔

انہوں نے کہا کہ گزشتہ دو عشروں میں پاکستان نے سات پیٹرولیم پالیسیاں جاری کیں لیکن ایک مرتبہ بھی کسی گزشتہ پالیسی کے اثرات کو نئی پالیسی میں زیر غور نہیں رکھا گیا۔ جبکہ ضرورت اس بات کی تھی کہ اغراض و مقاصد اور سفارشات میں بنیادی تبدیلیاں کیے بغیر ہر دوسرے تیسرے سال نئی پالیسی پیش کی جاتی۔ صورت حال میں مزید خرابی اس وجہ سے پیدا ہوئی کہ ان پالیسیوں پر حقیقی معنوں میں عمل درآمد ہی نہیں ہوا۔

انہوں نے کہا کہ گزشتہ عشروں میں پاکستان میں آگے پیچھے آنے والی حکومتوں نے بار بار پیٹرولیم پالیسی متعارف کروائی لیکن یہ تمام اقدامات حقیقی تبدیلی کے لیے نہیں بلکہ محض سیاسی فائدوں کے لیے تھے۔ ۲۰۱۲ء کی پیٹرولیم پالیسی کا مسودہ بھی گزشتہ پالیسیوں سے زیادہ مختلف نہیں ہے، سوائے اس کے کہ اس میں گیس کی قیمتوں کا ایک ایسا نظام وضع کیا گیا ہے جو گیس کی قیمتوں میں کئی گنا اضافہ کرنے کا باعث ہوگا۔

پر توجہ مرکوز کرنی چاہیے جبکہ دیگر منصوبوں پر محض ابتدائی کام جاری ہے۔ جبکہ مقامی اور غیر ملکی مہارت اور وسائل سے چھوٹے اور درمیانے درجے کے ایک سے زیادہ منصوبے ایک ہی وقت میں بھی لگائے جاسکتے ہیں۔

انجینئر محمد احمد صدیقی نے کہا کہ پن بجلی کی پیداوار بڑھانے کی راہ میں بہت رکاوٹیں ہیں جس میں سب سے اہم مسئلہ غیر ملکی ٹیکنالوجی اور آلات و مشینری پر انحصار ہے۔ مقامی تکنیکی صلاحیتوں پر روشنی ڈالتے ہوئے انہوں نے کہا کہ ملک جب پن بجلی کی پیداوار حاصل کرنے کے لیے مقامی انڈسٹری قائم کر رہا تھا اور مزید بہتری کے لیے مصروف عمل تھا تو تمام تر توجہ تھرمل پاور کی جانب مبذول کر دی گئی جس کی وجہ سے مقامی انڈسٹری کو شدید دھچکا لگا۔ ہیوی میکینیکل کمپلیکس نے چھوٹے پیمانے پر ہائیڈل پاور کی پیداوار کے لیے تقریباً چالیس چھوٹے ٹربو جنریٹر بنائے جو کہ شمالی علاقہ جات میں مختلف جگہوں پر لگائے گئے جو ابھی بھی کامیابی کے ساتھ چل رہے ہیں۔

مقامی انڈسٹری پن بجلی کی پیداوار کی مشینری کے تمام پرزہ جات بنانے کی صلاحیت رکھتی ہے اور بنارہی ہے۔ حال ہی میں 'نال تر' گلگت بلتستان میں ایک مقامی سطح پر تیار کردہ جنریٹر لگایا گیا ہے انہوں نے صلاحیت بڑھانے کے ساتھ ساتھ اس سے استفادہ کرنے کی ضرورت پر زور دیا۔ انہوں نے حکومت سے کہا کہ موجودہ صورت حال کی طرح بڑے منافع خوروں کی حمایت کے بجائے مقامی انڈسٹری کو مربوط اور مضبوط کرنے کے لیے اقدامات کرنے چاہئیں۔



توانائی بحران کا فوری حل ایران و بھارت سے بجلی کی درآمد ہے

روزنامہ ایکسپریس، بزنس رپورٹر بدھ 29 مئی 2013

کراچی: بے لگام کرپشن اور نااہلی ملک میں بجلی کے بحران کی اہم وجہ ہیں، سابقہ دور حکومت میں 5 سے 6 وزیر اور سیکریٹریز تبدیل کیے گئے تاہم بحران کے حل کے لیے تمام پالیسیاں ناکام رہیں۔

ایران اور بھارت سے بجلی کی درآمد توانائی کے بحران کا فوری اور وسط مدتی حل ہو سکتا ہے۔ وفاق ایوان ہائے صنعت و تجارت کے تحت توانائی کے بحران کے حل پر غور کے لیے منعقدہ راونڈ ٹیبل کانفرنس میں شریک ماہرین انجینئر انوار الحق صدیقی، ڈاکٹر یعقوب چغتائی، پروفیسر نسیم اے خان، انجینئر کشور کمار شرما، اطہر ایوب، ہادی خان، سرور احمد، صدیق شیخ، رخصانہ جہانگیر، ذکریا عثمان اور اصغر مورادوالا نے تجاویز پیش کیں۔ کانفرنس میں توانائی کے بحران کے لیے حل کے لیے قلیل، وسط اور طویل مدتی تجاویز پر اتفاق کیا گیا، یہ تجاویز آنے والی حکومت کو پیش کی جائیں گی۔

راونڈ ٹیبل سے خطاب کرتے ہوئے ایف پی سی سی آئی کے صدر زبیر احمد ملک نے کہا کہ بجلی کا بحران جنگلی بنیادوں پر حل کرنا ہوگا، فوری طور پر پاور کمپنیوں کو واجبات ادا کیے جائیں اور سرکلر ڈیٹ کا مسئلہ یکدم ختم کیا جائے۔ انہوں نے کہا کہ ملک میں 23 ہزار میگا واٹ بجلی پیدا کرنے کی گنجائش کے اعداد و شمار کو حتمی قرار نہیں دیا جاسکتا کیونکہ بہت سے پاور پلانٹ پرانے ہو چکے ہیں اور ان کی پیداواری صلاحیت بھی کم ہو رہی ہے۔ انہوں نے توانائی کے شعبے میں سرمایہ کاری کرنے والے نجی شعبے کو بھی تنقید کا نشانہ بنایا اور کہا کہ بہت سے نجی سرمایہ کاروں نے متبادل توانائی کے لیے اراضی حاصل کر لی تاہم اس پر کوئی پیشرفت نہیں ہو سکی

پاکستان میں پن بجلی کی پیداواری صلاحیت:

ایک جائزہ

(روداد سیمینار تاریخ: ۶ مارچ ۲۰۱۳ء)

پاکستان میں پن بجلی کی کم پیداوار محض تکنیکی اور عمل درآمد کے مسائل سے متعلق نہیں ہے بلکہ غیر فعال حکومتی پالیسیوں، غیر تکنیکی افراد کی مداخلت اور مالی مشکلات کی وجہ سے عوام الناس کو لوڈ شیڈنگ کے عذاب کا سامنا ہے۔

یہ بات انسٹی ٹیوٹ آف پالیسی اسٹڈیز میں منعقدہ سیمینار میں سامنے آئی جس میں توانائی کے ماہرین امتیاز مجید اور چیئرمین انسٹی ٹیوٹ آف انجنیئرنگ پاکستان حسین احمد صدیقی شامل تھے۔ یہ پروگرام مورخہ ۶ مارچ ۲۰۱۳ء کو منعقد کیا گیا جس میں توانائی ماہرین کی منتخب تعداد نے شرکت کی۔

امتیاز مجید کا کہنا تھا کہ سرکاری طور پر جاری کیے گئے حالیہ اعداد و شمار کے مطابق ملکی سطح پر پن بجلی کی ساٹھ ہزار میگاواٹ کی صلاحیت موجود ہے۔ جس میں اب تک کی پیداواری صلاحیت، تمام جاری منصوبے اور ایسی تمام سائٹس شامل ہیں جن کی نشاندہی کی جا چکی ہے۔ اس تمام میں سے انیس ہزار میگاواٹ کے منصوبے زیر تعمیر ہیں لیکن اصل ترقیاتی کام نیلم جہلم، بھاشا اور سد پارا ڈیم پر جاری ہے جس کی کل صلاحیت چھ ہزار سات سو میگاواٹ ہے۔

اٹھارہ ہزار چھ سو میگاواٹ کی پیداوار کے لیے دیگر جگہوں کی نشاندہی کر دی گئی ہے لیکن ابھی تک کوئی فیئر سیسٹی رپورٹ تیار نہیں ہو سکی ہے۔

ان کا کہنا تھا کہ قدرت نے پاکستان کو وافر پن بجلی پیدا کرنے کے وسائل سے نوازا ہے جن سے فائدہ حاصل کرنے کے لیے مناسب پالیسیوں، ضروری مالی وسائل اور مجاز تکنیکی عملے کی ضرورت ہے۔ کیونکہ پن بجلی کے تمام منصوبوں کے لیے بھرپور مالی وسائل، بے عیب ڈیزائن اور مکمل مہارت یافتہ عملے کا ہونا ضروری ہے اور اس سب سے بڑھ کر موجودہ حکومت کی سیاسی جرأت اور خواہش کا ہونا ہے۔ زمین کا حصول کسی بھی منصوبے کی جانب پہلا قدم ہوتا ہے لیکن سب سے زیادہ مشہور بھاشا ڈیم کے لیے ابھی تک یہ مرحلہ مکمل طور پر طے نہیں کیا جا سکا ہے۔ انہوں نے تجویز دی کہ ایک وقت میں صرف ایک منصوبے

ڈیٹ یکشت ختم کرنا ہوگا۔



ترکمانستان، افغانستان، پاکستان اور

بھارت پائپ لائن کو براستہ ایران لانے کی کوشش کی جائے، کام شروع نہ کرنے پر کمیٹی کا اظہار برہمی فوٹو: فائل

ایکپریس ڈاٹ کام، 29 مئی 2013

اسلام آباد: کمیٹی کی قائمہ کمیٹی نے وزارت پٹرولیم و قدرتی وسائل کو ہدایت کی ہے کہ ایران پاکستان گیس پائپ لائن منصوبے پر تیزی سے عمل کیا جائے اور اس کو مقررہ مدت میں مکمل کیا جائے۔

کمیٹی نے سفارش کی ہے کہ فی الحال ایران پاکستان گیس پائپ لائن منصوبے سے حاصل ہونے والی گیس کو توانائی کے شعبے میں استعمال کرنے کیلئے گواد اور دیگر ملحقہ علاقوں میں بجلی پیدا کرنے والے پورٹ قائم کیے جائیں۔ اس کے علاوہ ترکمانستان، افغانستان، پاکستان اور بھارت گیس پائپ لائن کو براستہ ایران لانے کی کوشش کی جائے تاکہ افغانستان میں امن و امان کی ابتر صورتحال کے باعث گیس کی فراہمی متاثر نہ ہو۔ وزارت پٹرولیم اور قدرتی وسائل کے حکام نے کمیٹی کو یقین دلایا کہ ایران پاکستان گیس پائپ لائن منصوبہ مقررہ وقت و سہر 2013 تک مکمل کر لیا جائیگا۔

اگر ہم فوری طور پر دس ہزار زرعی ٹیوب ویلوں کو اس پر چلانے میں کامیاب ہو جاتے ہیں جن کی لاگت تقریباً پچپن کروڑ بنتی ہے اور جس کی تکمیل کے لئے تقریباً ایک سال کا عرصہ درکار ہوگا، بچت کا تخمینہ لگایا جائے تو خالص بچت کروڑوں میں نکلے گی ہے ایک درمیانے سائز کے بائیو گیس پلانٹ کی تنصیب پر تقریباً ساٹھ ہزار کا خرچ آتا ہے جبکہ وہ ڈیزل کی مد میں سالانہ ایک ہزار چار سو چالیس لیٹر ڈیزل کی بچت کرتا ہے۔

جس کی مارکیٹ میں قیمت تقریباً ایک لاکھ پندرہ ہزار بنتی ہے اگر اس میں سے پلانٹ کی تنصیب پر آنے والے خرچ کو نکال دیا جائے تو ایک سال میں پلانٹ کی قیمت نکال کر پچپن ہزار روپے سالانہ کی بچت ہوتی ہے اس تناسب سے دس ہزار بائیو گیس پلانٹ سے تقریباً پچپن کروڑ روپے بچت ہو سکتی ہے اگر حکومت ساٹھ کروڑ لگا کر پچپن کروڑ کی سالانہ بچت کر لے تو گھٹے کا سودا نہیں۔

بائیو گیس سے ٹیوب ویل چلنے سے چونکہ براہ راست فائدہ زمیندار ہی حاصل کرے گا اس لئے زمیندار اس کی تکمیل کے لئے کچھ کام اپنے ذمہ لینے پر آسانی سے رضامند ہو جائے گا اور حکومت مندرجہ بالا تخمینہ سے بھی کم لاگت میں اس منصوبے کو پایہ تکمیل تک پہنچا سکتی ہے۔ دنیا کی کوئی بھی ٹیکہ ذلوجی ایسی نہیں جو سال کے اندر اپنی قیمت بھی پوری کرے اور بچت بھی دے اس ٹیکنالوجی کی سب سے بڑی خوبی یہ ہے کہ ایک مرتبہ اس کو سمجھ لینے کے بعد پھر کبھی ماہرین کی ضرورت نہیں رہتی اور اگر بوقت تنصیب صحیح میٹرل استعمال کیا جائے اور اس کی مناسب دیکھ بھال ہوتی رہے تو بیس سالوں تک اس بائیو گیس پلانٹ کو کچھ نہیں ہوتا اسی طرح اگر ہم بجلی کی بچت کی طرف آئیں اور سرسری طور پر ان ٹیوب ویل کا جائزہ لیں جو بجلی سے چل رہے ہیں تو وہ عام طور پر اٹھائیس ہارس پاور کے ہوتے ہیں جو ساٹھ فٹ کی گہرائی سے پانی نکالنے کی صلاحیت رکھتے ہیں اور ایک گھنٹہ میں تقریباً پندرہ سے بیس یونٹ استعمال کرتے ہیں۔ اگر ہم بائیو گیس سے ٹیوب چلانے میں کامیاب ہو جاتے ہیں تو جو بجلی کی بچت دیہات میں ٹیوب ویل سے ہوگی وہ شہروں میں دی جاسکتی ہے جس سے لوڈ شیڈنگ پر قابو پایا جاسکتا ہے۔

وہ قومیں جو ترقی کرنا چاہتی ہیں سب سے پہلے اپنے وسائل میں رہتے ہوئے کام کرنے کی کوشش کرتی ہیں بالکل چین کی طرح اور چوٹی کی طرح دانہ دانہ چنے میں مصروف رہتی ہیں قیادت اور قوم ایک بات پر متفق ہو جاتی ہیں کہ وہ دریا کا انتظار نہیں کریں گے جبکہ ہم دریا اور ڈیم کے انتظار میں اپنا ذخیرہ بھی ختم کرنے پر تلے ہوئے ہیں ہم اپنے دریاؤں کو ضائع کر کے زمینوں کو بنجر کرنے پر تلے ہوئے ہیں اور آنے والی نسلوں کو خشک دریا اور بنجر زمینیں تحفے میں دینے کا انتظام کر رہے ہیں۔ ان سب باتوں پر توجہ دینے کی ضرورت ہے۔

پیٹرول اور ڈیزل مہنگا کرنے کی منظوری دے دی ہے۔ جس کے بعد پیٹرول دو روپے اٹھارہ پیسے فی لیٹر اور لائٹ ڈیزل سات پیسے فی لیٹر مہنگا کر دیا گیا ہے جبکہ ہائی اسپیڈ ڈیزل ایک روپے چھیالیس پیسے اور مٹی کا تیل اڑتیس پیسے فی لیٹر سستا کرنے کی منظوری دی گئی ہے۔ پیٹرول کی نئی قیمت تین روپے ستتر پیسے فی لیٹر، ہائی اسپیڈ ڈیزل کی نئی قیمت ایک سو چار روپے ساٹھ پیسے فی لیٹر اور مٹی کے تیل کی نئی قیمت تین روپے اسی پیسے فی لیٹر جبکہ لائٹ ڈیزل کی نئی قیمت نو روپے تیرہ پیسے فی لیٹر ہو جائے گی۔



بجلی کے شارٹ فال میں کمی کے باوجود طویل لوڈ شیڈنگ جاری

ڈیلی اب تک، 28 مئی 2013ء

ملک میں بجلی کا شارٹ فال کم ہو کر تین ہزار پانچ سو بیس میگا واٹ پر آنے کے باوجود طویل لوڈ شیڈنگ جاری ہے۔ راولپنڈی اور اسلام آباد میں بجلی کی بندش سے معمولات زندگی متاثر ہیں۔

وزارت پانی و بجلی کے مطابق ملک میں بجلی کی طلب پندرہ ہزار دو سو چالیس میگا واٹ اور مجموعی پیداوار گیارہ ہزار سات سو بیس میگا واٹ ہے۔ جس سے بجلی کا شارٹ فال تین ہزار پانچ سو بیس میگا واٹ ہے۔

شارٹ فال میں کمی کے باوجود شہروں میں بارہ سے چودہ اور دیہاتوں میں اٹھارہ سے بیس گھنٹے تک کی لوڈ شیڈنگ کی جارہی ہے۔ جنیش پاور کنزول سینٹر کی جانب سے غیر علانیہ لوڈ شیڈنگ جاری ہے جس سے راولپنڈی اور اسلام آباد سمیت مختلف شہروں میں معمولات زندگی بری طرح متاثر ہیں

کرپشن و نااہلی بحران کی وجہ، پاور کمپنیوں کو یکمشت ادائیگی سے سرکڑیٹ ختم کیا جائے

ایکپریس ڈاٹ کام، بدھ 29 مئی 2013

ایف پی سی سی آئی کے نائب صدر گھڑا فیروز نے تجویز دی کہ بجلی کی بچت کے لیے کاروباری اوقات صبح 8 بجے سے شام 4 بجے تک مقرر کیے جائیں، شادی ہائز رات 10 بجے بند کیے جائیں۔ انجینئر جبار نے کہا کہ عبوری حکومت صورتحال کو قابو کرنے میں ناکام رہی جس سے توانائی کا بحران مزید شدت اختیار کر گیا۔ انہوں نے کہا کہ آئی پی میز کو فیڈز کی فراہمی مسئلہ کا دیرپا حل نہیں ہو سکتا، آنے والی حکومت کو سرکڑیٹ



بانگ کانگ، بڑھتی ہوئی ماحولیاتی آلودگی کو کم کرنے کیلئے پہلی الیکٹرک ٹیکسی متعارف کرا دی گئی۔

ٹی بی سی ڈاٹ کام، 18 مئی 2013ء

بانگ کانگ (این این آئی) بڑھتی ہوئی ماحولیاتی آلودگی کو کم کرنے کیلئے بانگ کانگ میں پہلی الیکٹرک ٹیکسی متعارف کرا دی گئی ہے۔ ابتدائی طور پر 45 ماحول دوست گاڑیاں چلائی گئی ہیں جو 300 کلو میٹر فی گھنٹہ کی رفتار سے چلنے کی حامل ہیں۔ ٹیکسیوں میں آئرن فاسفٹ کی بیٹریاں لگائی گئیں ہیں جن کو چارج کرنے کیلئے دو گھنٹہ درکار ہونگے۔ ٹیکسیوں کو چارج کرنے کیلئے شہر میں 9 مقامات پر 47 چارجنگ پوائنٹس بنائے گئے ہیں۔ الیکٹرک گاڑیوں کے استعمال سے ایندھن کے خرچ میں بھاری بچت ہوگی۔



او گرا کرپشن کیس: ڈاکٹر عاصم تفتیش کیلئے نیب کے سامنے پیش

آج نیوز ڈاٹ کام، 30 مئی 2013ء

اسلام آباد: سابق مشیر پٹرولیم ڈاکٹر عاصم حسین او گرا کرپشن کیس میں تفتیش کیلئے نیب کے سامنے پیش ہو گئے، لیکن میڈیا کا سامنا کئے بغیر نیب کے خفیہ دروازے سے گھر چلے گئے۔ نیب کی ٹیم نے او گرا کرپشن کیس میں سابق مشیر پٹرولیم ڈاکٹر عاصم حسین سے پونے دو گھنٹے تفتیش کی، ذرائع کے مطابق ڈاکٹر عاصم حسین سے پوچھا گیا کہ سابق چیئرمین او گرا تقریر صادق کی تقریر کیلئے کس کس نے سفارش کی، کراچی میں ذاتی اسپتال کو دو سال تک مفت گیس کیوں فراہم کی گئی، کنہار بیسکھی گیس فیلڈ سے گیس کس کے کہنے پر چوری ہوئی رہی، دو گھنٹے ٹیم کو بیان ریکارڈ کرانے کے بعد ڈاکٹر عاصم حسین میڈیا سے جان بچا کر نیب دفتر کے پچھلے دروازے سے ہی گھر چلے گئے

پیٹرول 2.18 روپے فی لیٹر مہنگا

آج نیوز ڈاٹ کام، 31 مئی 2013ء

اسلام آباد: حکومت نے پیٹرول دور واپے اٹھارہ پیسے فی لیٹر اور ڈیزل سات پیسے فی لیٹر مہنگا جبکہ دیگر مصنوعات کی قیمتیں کم کرنے کی منظوری دیدی ہے، اطلاق یکم جون سے ہوگا۔ حکومت نے پیٹرول کی قیمت برقرار رکھنے کی او گرا کی سفارش مسترد کرتے ہوئے

ایک درمیانے سائز کے درخت کو کاٹ کر اپنی ضروریات پورا کرتا تھا کٹنے سے بچا، اس سے فضا میں آکسیجن اور کاربن ڈائی آکسائیڈ میں توازن پیدا ہوا جس سے فضائی آلودگی میں کمی واقع ہوئی۔

ہمارے قارئین بھی سوچ رہے ہونگے کہ اس ایک بائیو گیس پلانٹ سے توانائی کے بحران پر کیسے قابو پایا جاسکتا ہے تو عرض کرتے چلیں کہ بائیو گیس جدید تحقیق کے مطابق صرف کھانا پکانے کے کام ہی نہیں آتی بلکہ اس سے ٹیوب ویل بھی چلائے جاسکتے ہیں اور اس سے جزیئر چلا کر بجلی بھی پیدا کی جاسکتی ہے، صرف اس ذریعہ پر اعتماد کرنے کی ضرورت ہے جبکہ پکریٹ کے ہی زیر انتظام دینہ میں ایک ریسٹورنٹ اور ٹوبہ ٹیک سنگھ میں بھی ایک ریسٹورنٹ کامیابی سے چلایا جا رہا ہے جبکہ پاکستان میں ایک حکیم صاحب کی فارمیسی بھی اسی بائیو گیس سے چلائی جا رہی ہے جس سے وہ ہزاروں روپے کی بچت کرتے ہیں۔ مگر زیر نظر مضمون میں ہمارا مقصد بائیو گیس کو صرف زراعت کے استعمال کے لئے سودمند بنانے کے بارے میں ہے ایک بائیو گیس پلانٹ پر لاگت تقریباً پچاس ہزار سے لے کر ساٹھ ہزار تک آتی ہے جو ایک چار انچ قطر کے ٹیوب ویل کو تقریباً تین سے چار گھنٹے تک روزانہ چلانے کی صلاحیت رکھتا ہے جبکہ اسی دورانیہ کے لئے ٹیوب ویل کو ڈیزل پر چلایا جائے تو تقریباً چار لیٹر ڈیزل استعمال ہوتا ہے جس کی قیمت تین سو بیس روپے بنتی ہے اس طرح ایک ٹیوب ویل سے تقریباً سالانہ ایک لاکھ پندرہ ہزار دو سو روپے کی بچت ہوتی ہے جبکہ کھاد کی مد میں بچنے والا زر مبادلہ اس کے علاوہ ہے جدید تحقیق سے یہ بات ثابت ہو چکی ہے کہ بائیو گیس پلانٹ سے بننے والی کھاد فصلوں اور زمین کے لئے کسی بھی دوسری کھاد سے زیادہ مفید ہے اس کھاد کے استعمال سے فصل جاندار ہوتی ہے اور اس پر وائرس کا حملہ بھی نسبتاً کم ہوتا ہے فصل کی قوت مدافعت بھی بڑھ جاتی ہے اور زمین بھی جاندار رہتی ہے۔

اگر ہنگامی طور پر پاکستان میں بائیو گیس کے استعمال سے زراعت کو سودمند بنانے کے لئے پروگرام ترتیب دیئے جائیں تو ہم یقینی طور پر کسی حد تک توانائی کے بحران پر قابو پانے میں کامیاب ہو جائیں گے۔

آج سے تقریباً تین سال قبل ڈسکہ کے علاقہ پنڈ ملہیاں میں محترم عباس ملی کے ساتھ مل کر بائیو گیس سے ٹیوب ویل چلانے کا پروگرام بنایا گیا جس کے دوران ایک مرتبہ پیٹر انجن جل بھی گیا اور لوگوں کے طعنے بھی سننا پڑے مگر آج اس سے وہی لوگ فائدہ بھی اٹھا رہے ہیں بالکل اسی طرح بائیو گیس سے انجن چلانے کا تجربہ ہے کہ آج کئی جگہ پر لوگ اس سے استفادہ حاصل کر رہے ہیں پہلے پہل تو نتائج کچھ حوصلہ افزانہ تھے مگر

مسلسل تحقیق اور محنت سے آخر کار ٹیوب ویل چلانے میں کامیاب ہو ہی گئے اور آج تقریباً گزشتہ تین سالوں سے مسلسل پیٹر انجن بائیو گیس سے چلا کر زمینوں کو سیراب کیا جا رہا ہے جبکہ اس دوران صرف بیس فیصد ڈیزل استعمال کیا جاتا ہے اور اس سے نکلنے والے فضلے کو بطور ایندھن استعمال کیا جا رہا ہے جس سے زمین کی طاقت میں بھی اضافہ ہوتا ہے۔

توانائی کا بحران صرف سورج، پانی پر ہی انحصار کیوں

ٹیکنالوجی نام، 29 مئی 2011ء

اس وقت نہ صرف پاکستان بلکہ پوری دنیا توانائی کے بحران میں مبتلا ہے اور ہر ملک اپنے ذرائع اور ضروریات کو دیکھتے ہوئے توانائی کے بحران سے نمٹنے کے کوششوں میں مصروف عمل ہے اور پاکستان کے ارباب اختیار اور سائنسدان بھی اس بحران سے نبرد آزما ہونے کی کوششوں میں مصروف عمل ہیں مگر افسوس کے ساتھ کہنا پڑتا ہے کہ ہم صرف ایک رخ پر کام کر رہے ہیں اور یہ دیکھنے کی کوشش نہیں کر رہے کہ ہم اس توانائی کے بحران سے کیسے نمٹیں ہماری زیادہ تر کوشش یہ ہے کہ شمسی توانائی سے استفادہ کیسے کریں یا ریئل پاور پلانٹ لے کر وقتی طور پر بحران پر قابو پالیں اس سے قطع نظر کہ اس کے اثرات عام زندگی پر کیا پڑتے ہیں یا اس کے اخراجات کہاں تک جاتے ہیں ہم اپنے ملک کے ذرائع کو دیکھتے ہوئے کام کرنے کی طرف توجہ نہیں دے رہے اور یہی ہماری سب سے بڑی غلطی ہے ہم بجلی بھی پیدا کرنا چاہتے ہیں گیس کی لوڈ شیڈنگ بھی ختم کرنا چاہتے ہیں مگر اس کے لئے کوئی مربوط لائحہ عمل اختیار نہیں کر رہے بلکہ مہنگے ترین ذرائع پر توجہ مرکوز کئے ہوئے ہیں ہمارا پانی عرصہ دراز سے سمندر میں گر کر ضائع ہو رہا ہے مگر ہم ڈیم نہ بنا سکے اور اب ہم دنیا کے مہنگے ترین سولر سسٹم کی طرف توجہ دے رہے ہیں جس کے لئے ہمیں مغرب کا ہی مرہون منت ہونا پڑے گا مگر اس سے پھر بھی مسئلہ حل نہ ہو گا اس کے برعکس اگر ہم تھوڑی سی توجہ دوسرے ذرائع کی طرف دیں تو یقینی طور پر اس کے مثبت نتائج برآمد ہونا شروع ہو جائیں گے۔

پاکستان کا شمار بھی ڈیری کی مصنوعات میں دنیا کے بڑے ممالک میں ہوتا ہے اس لحاظ سے اس کے پاس جانور بھی بڑی تعداد میں پائے جاتے ہیں جن کا گوشت باہر پڑے رہنے کی وجہ سے سود مند ہونے کی بجائے مضر صحت و ماحول ہے۔ گوشت کو انسان صدیوں سے اپنے استعمال میں لاتا رہا کھیتوں میں بطور کھاد اور گھروں میں بطور ایندھن۔ مگر یہ دونوں طریقے جہاں تھوڑا سا فائدہ دیتے تھے وہیں پر اس کے مضر اثرات بھی ماحول میں پڑتے تھے جن میں سانس کی بیماریاں، آنکھوں کی بیماریاں اور ماحولیاتی آلودگی وغیرہ سر فہرست ہیں، گزشتہ چند سالوں سے پاکستان کے اداروں جن میں انرکان اے ای ڈی پی اور پاکستان کونسل فور رینو ایبل انرجی ٹیکنالوجیز (P.C.R.E.T) وغیرہ شامل ہیں نے بائیو گیس پر خاطر خواہ کام کیا اور اس میں بھی کریڈٹ پکریٹ کو زیادہ جاتا ہے کہ اس نے ملک کے طول و عرض میں بائیو گیس پلانٹ کو متعارف کرایا ہے اس سے جہاں خاتون خانہ کو صاف ستھری گیس ملی وہیں پر اس کے ماحول پر بھی مثبت اثرات مرتب ہوئے ایک گھر جو ایک مہینہ میں

دولر بیراج کی انسپشن، بھارت نے پاکستان کا مطالبہ مان لیا

نوائے وقت ڈاٹ کام، 28 مئی 2013ء

نئی دہلی (نوائے وقت رپورٹ) بھارت نے پاکستان کا متنازع دولر بیراج کی انسپشن کا مطالبہ مان لیا۔ پاکستان کا 3 رکنی وفد آج متحوضہ کشمیر روانہ ہوگا۔ پاکستانی وفد کی قیادت جوائنٹ کمانڈر سندھ طاس شیراز سمن کی قیادت کریں گے۔ اطلاعات ہیں کہ بھارت نے 28 سال بعد دولر جھیل پر دوبارہ تعمیرات شروع کر دی ہیں۔ جوائنٹ سیکرٹری پانی و بجلی شہزاد محمد علی، انجینئر مہر علی وفد میں شامل ہوں گے۔ پاکستان نے کئی خطوط لکھے، ایک سال سے انسپشن کا مطالبہ کیا جا رہا تھا۔ وزارت پانی و بجلی کے مطابق بھارتی رضامندی منوبہن، نواز راہٹوں کا نتیجہ ہو سکتی ہے۔ بھارت دولر جھیل پر بیراج بنا کر دریائے جہلم کا پانی کنٹرول کرنا چاہتا ہے۔



پاکستان، چین انرجی فنڈ قائم کرنے پر متفق

آج نیوز ڈاٹ کام، 29 مئی 2013ء

اسلام آباد : پاکستان اور چین کے درمیان انرجی فنڈ قائم کرنے پر اتفاق رائے ہو گیا ہے۔ دونوں ممالک نے تجارت کے فروغ کے لئے گوارڈ پورٹ سے چین کی سرحد تک بجپیس سوکلو میٹر طویل شاہراہ تعمیر کرنے کا فیصلہ کیا ہے۔ اسلام آباد میں چین کے وزیر اعظم کی چیپٹنگ اور مسلم لیگ کے سربراہ نواز شریف کے درمیان ملاقات ہوئی، جس میں دونوں ممالک کے درمیان دوطرفہ تجارتی اور سفارتی تعلقات مزید مضبوط بنانے پر تبادلہ خیال کیا گیا۔ ملاقات میں چین کے وزیر اعظم نے پاکستان میں بجلی کے بحران پر قابو پانے کے لئے انرجی فنڈ قائم کرنے کی تجویز پیش کی جس سے میان نواز شریف نے اتفاق کیا، فنڈ سے توانائی بحران سے نمٹنے کے لئے فوری طور پر جوہری، شمسی اور کوند سے بجلی پیدا کرنے کے منصوبوں پر کام کیا جائے گا۔ پاکستان اور چین کے درمیان تجارت کو فروغ دینے کے لئے گوارڈ سے چین کی سرحد تک بجپیس سوکلو میٹر شاہراہ تعمیر کرنے کا بھی فیصلہ کیا گیا ہے اور یہ بھی طے پایا ہے کہ چین پاکستان کے ذریعے دیگر ممالک کو اپنی مصنوعات فروخت کرے گا۔ نواز شریف کے بعد چینی وزیر اعظم نے چیئر مین سینیٹ نیر حسین بخاری اور سابق پیپکری قومی اسمبلی فہیدہ مرزا سے بھی ملاقات کی جس کے دوران مختلف شعبوں میں دوطرفہ تعلقات کو مزید فروغ دینے پر تبادلہ خیال کیا گیا

القرآن

وَجَعَلَ الْقَمَرَ فِيهِنَّ نُورًا وَجَعَلَ الشَّمْسَ سِرَاجًا

اور ان میں چاند کو خوب چمکاتا بنایا، اور سورج کو روشن چراغ بنایا

.And has made the moon a light therein, and made the sun a lamp

Al-Qur'an, 071.016 (Nooh/ Nuh [Noah])

Ismail ibn Kathir (Arabic: ابن كثير) (1301–1373) - Abu Al-Fida, 'Imad Ad-Din (Kunyah)
Muslim Muhaddith, Faqih, Mufassir, and Historian

کاپی رائٹ ۲۰۱۳

الحسن سسٹمز پرائیویٹ لمیٹڈ سکیورٹی اینڈ آپیکس کمیشن کے ساتھ کمپنی آرڈیننس ۱۹۸۴ (XL VII of 1984) کی شق ۳۲ کے تحت رجسٹرڈ ہے۔ الحسن سسٹمز نے اس انرجی بلیٹن کا اجراء بغیر کسی قیمت پہ مفاد عامہ اور معلوماتی مقاصد کے لئے کیا ہے۔

اپنی رائے، تجاویز، میٹاڈیٹا یا مزید معلومات کے لئے ہم سے رابطہ کیجئے۔

ہاؤس نمبر 4- گرین، صابزادہ عبدالقیوم روڈ، آئی۔ 8 / 2، اسلام آباد، پاکستان

لینڈ لائن نمبر: +92.51.843.7324 +92.51.486.5064

ای۔ میل: connect@alhasan.com ویب سائٹ: www.alhasan.com

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بلیٹن میں شامل

- 41-38 توانائی کی خبریں
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پاکستان، چین انرجی فنڈ قائم کرنے پر متفق
وولر بیراج کی انسپکشن، بھارت نے پاکستان کا مطالبہ مان لیا
پیٹرول 2.18 روپے فی لیٹر مہنگا
اوگرا کرپشن کیس: ڈاکٹر عاصم تقشیش کیلئے نیب کے سامنے پیش
ہانگ کان، بڑھتی ہوئی ماحولیاتی آلودگی کو کم کرنے کے لئے پہلی الیکٹرک۔
ٹیکسی متعارف کرا دی گئی۔
کرپشن و نا اہلی بحران کی وجہ، پاور کمپنیوں کو یکمشت ادائیگی سے سرکلر ڈیٹ۔
ختم کیا جائے
بجلی کے شارٹ فال میں کمی کے باوجود طویل لوڈ شیڈنگ جاری
ترکمانستان، افغانستان، پاکستان اور بھارت پائپ لائن کو براستہ ایران لانے کی۔
کوشش کی جائے، کام شروع نہ کرنے پر کمیٹی کا اظہار برہمی
توانائی بحران کا فوری حل ایران و بھارت سے بجلی کی درآمد
توانائی بحران پر انرجی کانفرنس آئندہ ماہ ہوگی

- قومی توانائی گرڈ کا شمسی توانائی سے موازنہ
- پین بجلی منصوبوں کی حالت (شمالی پاکستان)
- آئل ریفائرنریز پاکستان
- معدنی تیل کی صوبجاتی کھپت اور پیداوار
- قومی توانائی گرڈ کا پون توانائی سے موازنہ

نقشہ جات

