# Chapter 14

# **Energy**

Energy is inarguably one of the most important inputs for economic growth that can sustain industrial and commercial activities. The sector has progressed since 2013 in terms of power generation and reducing power outages. The initiation of CPEC power projects has addressed historical gaps in electricity production and improved the reliability of the supply chain. However, the reliance on imported and costly fossil fuels for electricity generation underscores the need for a shift in the fuel mix.

Pakistan is taking steps towards meeting its energy demand and reducing greenhouse gas emissions. The Government of Pakistan (GoP) is actively pursuing large-scale renewable energy investments to achieve its clean energy goals. Pakistan has set a target to reduce its 50 percent greenhouse gas emissions by 2030, and clean energy expansion will play a crucial role in achieving this objective. The GoP has developed a wind power energy corridor along the southern coastal regions of Sindh and Balochistan. Solar power entered Pakistan's energy mix in 2013 after the government introduced a set of support foster policies to renewable energy development.

Nuclear power plants (NPPs) are a reliable source of electricity. They can run for up to 18 months without refueling and store enough fuel for another 18 months on-site. This makes them immune to short-term changes in fuel prices or availability and allows them to achieve high capacity factors. The nuclear fleet, comprising six NPPs with a total installed capacity of 3,545 MW, contributed about 18.2 percent of the total

electricity generation in the national grid, during July-March FY 2024 (NEPRA).

In Pakistan, the transport sector is the major consumer of petroleum products, covering 79 percent of total demand. However, during the current fiscal year, the demand for Motor Spirit (MS) and High-Speed Diesel (HSD) has decreased mainly due to the high prices of these products; thus, the total consumption for petroleum products reduced by 7.2 percent during July-March FY 2024, compared to the same period of the last fiscal year. In the gas sector, the total gas consumption was reported at 3,207 MMCFD from July-March FY 2024, which includes natural gas consumption of 2,512 MMCFD and 695 for RLNG.

#### 14.1 POWER SECTOR

# **Installed Capacity and Generation of Electricity**

As of the end of March 2024, the country's total installed electricity capacity stands at 42,131 MW. The percentage shares of hydel, nuclear, renewable, and thermal are 25.4 percent, 8.4 percent, 6.8 percent, and 59.4 percent, respectively (Table 14.1). The share of thermal power as a dominant source of electricity supply has declined over the past few years, showing an increased reliance on indigenous sources. Out of total electricity generation of 92,091GWh, the share of hydel, nuclear, and renewable stands at 54.1 percent, which can be taken as a good sign for the economy as the sources of electricity generation shift from thermal to cleaner sources (Table 14.2).

**Table 14.1: Installed Capacity of Electricity** 

C	FY2	FY2023		h FY2023	July-March FY2024	
Source	MW	Share (%)	MW	Share (%)	MW	Share (%)
Hydel	10,681	25.44	10,681	25.44	10,681	25.35
Thermal	25,046	59.66	25,046	59.66	25,046	59.45
Nuclear	3,545	8.44	3,545	8.44	3,545	8.41
Renewable	2,709	6.45	2,709	6.45	2,859	6.79
Total	41,981		41,981		42,131	

Source: National Electric Power Regulatory Authority

**Table 14.2: Generation of Electricity** 

Source	FY2023		July-Marc	ch FY2023	July-March FY2024	
	GWh	Share (%)	GWh	Share (%)	GWh	Share (%)
Hydel	36,254.80	28.11	26,936.90	28.93	29,167.10	31.67
Thermal	62,639.00	48.57	43,525.60	46.75	42,249.20	45.88
Nuclear	24,054.60	18.65	18,738.80	20.13	16,753.70	18.19
Renewable	6,014.30	4.66	3,909.90	4.20	3,921.00	4.26
Total	128,962.70		93,111.20		92,091.00	

Source: National Electric Power Regulatory Authority

### **Electricity Consumption**

During FY2024 (July-March), total electricity consumption was reported at 68,559 GWh (Table 14.3). The household sector is the largest consumer of electricity, consuming 33,737 GWh (49.2 percent), followed by the industrial sector

with 18,022 GWh (26.3 percent). Moreover, agriculture and commercial sectors consume 6,905 GWh (10.1 percent) and 5,365 GWh (7.8 percent), respectively, whereas the electricity consumption in other sectors (streetlights, general services, and other government) is 4,530 GWh (6.6 percent).

<b>Table 14.3:</b>	Sectoral	Share in	Electricity	Consumption

Source	FY2023		July-Marc	ch FY2023	July-March FY2024			
Source	GWh	Share (%)	GWh	Share (%)	GWh	Share (%)		
Household	53,522.91	47.41	33,319	48.12	33,737	49.21		
Commercial	8,891.62	7.88	5,174	7.47	5,365	7.83		
Industry	31,088	27.54	19,626	28.34	18,022	26.29		
Agriculture	9,639.68	8.54	6,854	9.90	6,905	10.07		
Others	9,748.99	8.64	4,274	6.17	4,530	6.61		
Total	112,891.20		69,247		68,559			

Source: National Electric Power Regulatory Authority

#### **Private Power and Infrastructure Board**

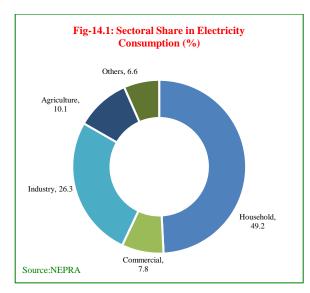
The Private Power and Infrastructure Board (PPIB) was created in 1994 as a One Window Facilitator on behalf of the GoP to promote private investment in the power sector. It was given statutory status in 2012 through an Act of the Parliament, PPIB Act, 2012, that empowered PPIB to facilitate certain public sector power and related infrastructure projects in Independent Power Project (IPP) mode. PPIB approves IPPs, issues Letters of Intent (LOIs) and Letters of Support (LOSs) (including Tripartite LOSs), feasibility approves studies, executes Implementation Agreements (IAs), provides GoP guarantees, and formulates regulations

related to power generation and transmission lines. To create synergy in the power sector, the Alternative Energy Development Board (AEDB), with a similar mandate, has also been merged into PPIB in June 2023.

So far, PPIB has successfully managed the development of 100 IPPs with a capacity of about 24,958 MW, more than half of the country's total installed capacity, attracting FDI of over US\$33 billion. In addition to the commissioning of 100 IPPs, another five multiple fuel-based IPPs of 1,066 MW are at the advanced stage of construction and are expected to be completed during 2024-25. These initiatives help boost economic development,

employment, and livelihoods by generating much-needed electricity. Table 14.4 presents

information associated with PPIBs-facilitated installed generation capacity.



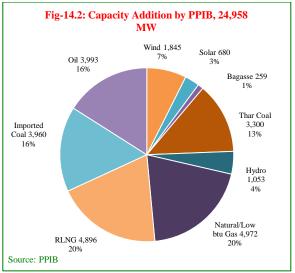


Table 14.4: PPIB's Facilitated Installed Capacity

	Commissioned Projects: Fuel/Technologies										
Total	Wind	Solar	Bagasse	Thar Coal	Hydro	Natural/Low BTU Gas	RLNG	Imported Coal	Oil		
24,958 MW	1,845 MW	680 MW	259 MW	3,300 MW	1,053 MW	4,972 MW	4,896 MW	3,960 MW	3,993 MW		

Source: Private Power and Infrastructure Board

PPIB promotes indigenous Thar-coal and hydel resources to generate cheaper electricity and accelerates hydel and Thar coal-based power generation projects. The Portfolio of upcoming power generation projects, currently being processed by PPIB, comprises 24 projects of

7,460 MW at different completion stages (Table 14.5). The government understands the adverse impacts of climate change; thus, all the projects, including coal, meet the World Bank/International Finance Corporation's environmental standards.

Table	14 5.	Power	Projects	under	<b>Facilitation</b>	hy PPIR
Laule	17.5.	IUWCI	1101663	unuci	r aciiitauvii	$\mathbf{n}_{1}$

Year/Description	No. of IPPs	Fuels	Power Generation (MW)
2024	3	Bagasse, Solar, Hydel (32+100+884)	1,016
2025	6	Solar, Hydel, Imp Coal (132+7+300)	439
2026	3	Wind, Hydel (100+8)	108
2028	1	Thar Coal (1,320)	1,320
2029	1	Hydel (82)	82
2030	1	Hydel (701)	701
2031	3	Hydel (1,556)	1,556
2032	1	Hydel (640)	640
Other Projects in Process	5	Hydel, Gas (1578+20)	1,598
Total	24		7,460

Source: Private Power and Infrastructure Board

Under the short-term targets, apart from opening new investment landscapes in Thar Coal and Hydel power generation in accordance with the power demand-supply scenario under the Integrated Generation Capacity Expansion Plan (IGCEP) 2022 and policies in vogue, PPIB is striving to complete 12 ongoing IPPs of 1,563 MW during 2024-26 (Table 14.6).

Table 14.6: Ongoing IPPs (MW)

Year	Wind	Solar	Bagasse	Hydro	Imported Coal	Total
2024	-	100	32	884	-	1,016
2025	-	132	-	7.0	300	439
2026	100	-	-	8.0	-	108
Total	100	232	32	899	300	1,563

Source: Private Power and Infrastructure Board

PPIB is actively processing a diversified portfolio of IPPs (Wind/ Solar/ hydel/Bagasse/ Coal and Gas) under the provisions of Power Generation Policy 2015, Alternative and Renewable Energy (ARE)Policy 2019, and National Electricity Policy 2021. PPIB has achieved Significant accomplishment for the implementation of various advanced staged IPPs during the July-March FY 2024:

Successful Completion of 3 solar projects by Scatec, Norway: Scates ASA is establishing three solar power projects (each 50 MW) in Sukkur. Due to the expeditious processing & Facilitation of PPIB, these projects have successfully achieved commercial Operation Dates (COD).

**Suki Kinari Hydropower Project:** The largest hydro IPP of 884 MW, the Suki Kinari project achieved completion of over 96 percent of the work by March 2024. The Project is well on Track to be operational in November 2024.

### Bagasse-Based Shah Taj Sugar Mills Project:

Thanks to PPIB's swift processing and facilitation services, the 32 MW Bagasse-based project by Shah Taj Sugar Mills, located in Mandi Bahauddin, has accomplished a significant proportion of construction work and is progressing satisfactorily toward commissioning by June 2024.

**Net-Metering:** As of March 2024, net metering-based solar installations stand at 117,807 with a cumulative capacity of 1,822 MW. The number of active certified installers has surpassed 400.

To prioritize indigenous and renewable resource-based power generation, IGCEP has targeted increasing the share of RE, including hydropower, from 33 percent to 62 percent by

2031. In this regard, the following measures have been taken in the ongoing fiscal year:

- Development of solar PV Project under Fast Track Solar Initiatives 2022 (600 MWp and 50 MWp Projects at Kot Addu/ Muzaffargarh and Manjhand)
- Development of RE projects under G2G mode (600 MWp and 1200 MWp projects at Jhang & Layyah)
- Small-scale Solar PV project at 11 KV level through competitive bidding by DISCOs
- Constraints in power evaluation capacity and transmission line development are among the power sector's top priorities, and PPIB plans to carry out competitive bidding for private sector investment in transmission lines.

For the promotion of local resources for power generation, PPIB has already imposed a moratorium on the processing of new imported fuels-based power projects since 2016. Further, due to the increased price of imported coal in the international market, GoP took the initiative to substitute imported coal-based IPPs with Thar coal which is abundantly available. In this regard, a feasibility study has been conducted to convert imported coal-based IPPs to Thar coal. Efforts are underway to start the blending of Thar Coal by three imported coal IPPs with a cumulative capacity of 3,960 MW, including 1,320 MW Sahiwal Coal Power Project, 1,320 MW Port Qasim Coal Power Project, and 1,320 MW Hub Coal Power Project.

These initiatives will reduce electricity generation costs, lower tariffs, and save valuable foreign exchange.

#### **Fast Track Solar Initiatives**

For promotion and development of indigenous renewable energy resources in the country on the least cost principle and in the realization of the need to reduce the impact of prevailing high prices of imported fossil fuels in international markets resulting in high electricity tariffs and drain of precious foreign exchange, the government has approved the Framework Guidelines for Fast-Track Solar PV Initiatives 2022 for fast-track deployment of solar PV. This framework is based on the following three key pillars.

# **Substitution of Expensive Imported Fossil Fuels with Solar PV Energy**

Under this initiative, solar-based power generation capacity shall be solicited to substitute expensive imported fossil fuels used for power generation. This will lower the average basket cost of generation for the system by utilizing solar energy during the daytime in substitution of the imported fossil fuels-based thermal generation at that time while utilizing the same thermal power generation capacity at night to meet the peak demand at that time. The government plans to add around 6,000 MW of solar PV capacity under this initiative primarily through competitive bidding. The following three (03) solar PV projects of 2,400 MW cumulative power generation capacity will be implemented shortly. These are the 600 Megawatt peak (MWp) solar project at Kot Addu / Muzaffargarh, the 600 MWp Solar Project at Jhang, and the 1200 MWp Solar Project at Layyah.

#### Solar PV Generation on 11 kV Feeders

Many electricity consumers in Pakistan suffer from poor power quality (scheduled & unscheduled outages, low voltage, etc.). Decentralized, medium-scale Solar PV power can contribute cost-efficiently to alleviate some of these problems by feeding directly into the medium-voltage (MV) network, thereby improving the local losses and voltage situation. Furthermore, the injection of Solar PV power into the MV network would provide cheap

electricity to the national grid without any augmentation or significant upgrade of the grid infrastructure. Accordingly, solar PV projects with a suitable capacity of up to a maximum of 4 MW will be procured through a competitive bidding process at the 11 kV feeder level. It is envisaged that approximately 2000 MW of solar PV capacity will be added under this initiative.

## **Solarization of Public Buildings**

Solarization of public sector buildings will help meet particular portion of the electricity load through clean solar energy technology, reduce electricity bills of public offices, and relieve electricity utilities/ distribution companies from long-term dues. Under this initiative, building-specific Solar PV net-metering-based systems are being installed through bidding. This initiative is expected to result in the installation of 1000 MW rooftop-based solar PV capacity.

# Other Initiatives During FY 2024 for Promoting Renewable Energy

PPIB undertook many supportive measures to promote RE technologies and attract private sector investments. Some of the supportive measures taken by PPIB are as follows:

- i. PPIB proactively facilitated the RE power projects' achievement of project milestones and resolution of issues and impediments faced by the project sponsors from different public sector entities.
- ii. PPIB engaged with the World Bank to carry out an initial study on RE development in Balochistan titled "Balochistan Renewable Energy Development Study" with the objective of strategic development of utility-scale solar and wind power in Balochistan to help meet Pakistan's ambitious renewable energy targets for the power sector and support the broader transition that is needed to achieve "affordable, reliable, sustainable and modern energy for all."
- iii. An online net-metering portal (ONMAP) was redesigned and reactivated in IESCO and LESCO for the online processing of consumer applications for net-metering-

based systems. PPIB is currently working on the expansion of ONMAP with improved features such as solar PV equipment verification & tracking and a rooftop solar monitoring program.

- iv. With the support of GIZ, a program for the training of solar technicians has been initiated. Under this program, customized training for 500 technicians at relevant Pakistani training institutions will be provided a Competency-Based using Training and assessment approach, following Vocational the National Qualification Framework.
- v. PPIB is also engaged in international initiatives such as the Danish Energy Transition Initiative (DETI) and RELP. Under the DETI initiative, the Danish Government is providing capacity building to Pakistan's power sector. RELP, an international NGO, is assisting PPIB in designing a competitive bidding framework and preparing a broader roadmap for Pakistan's renewable energy sector, along with de-risking guarantees/tools.

# **Nuclear Energy**

Pakistan was the 15th country worldwide to install an NPP when the 137 MW Karachi Nuclear Power Plant (KANUPP) became operational in 1972. The plant's economic life assessment was 30 years; however, it operated for around 50 years under the supervision of the Pakistan Atomic Energy Commission (PAEC) and finally shut down in August 2021.

For almost three decades after the start of the KANUPP. international embargoes transferring civil nuclear technology to Pakistan restrained the expansion of nuclear energy generation capacity in the country. Steady efforts regarding technology and manpower development have resulted in the addition of six NPPs with 3530 MW capacity in Pakistan's power system. Units (C1 and C2, each of 325 MW, and C3 and C4, each of 340 MW) are currently operational in Chashma, Mianwali, while two plants, each with a capacity of 1100 MW, are operational in Karachi. KANUPP was a Pressurized Heavy Water Reactor (PHWR) constructed with the help of Canada, the new generation of nuclear plants are all Pressurized Water Reactor (PWR) designed and built with the assistance of China. One more PWR plant of 1200MW capacity is in the initial phase of its development at the Chashma site, called C-5.

A unique Characteristic of a PWR NPP is that once fueled, it can produce electricity at total capacity for around 14 to 18 months. This is called one cycle of electricity production. Fuel is only added during break time between these cycles. This not only makes them invulnerable to short-term energy price fluctuations but also a source of secure energy supply to the grid. These attributes of nuclear power technology ensure a high availability of NPP. The six NPPs supplied about 16,753 million units of electricity to the national grid during July-March FY 2024 (Table 14.7). During this period, the monthly share of nuclear in the generation mix remained between 12.8 percent to 25.8 percent.

Table 1	1.7: Performance of Nuclea	n Downen Dlanta
IMDIE	. /: Feriorinance or Nuclea	r Fower Fiams

Plants	Capacit	ty (MW)	Electricity sent to Grid (million kWh)		
	Gross	Net	July-March FY2024	Lifetime up to 31st March 2024	
C-1	325	300	1,317	48,187	
C-2	325	300	1,976	29,781	
C-3	340	315	1,666	17,522	
C-4	340	315	1,984	15,676	
K-2	1,100	1,017	3,900	19,991	
K-3	1,100	1,017	5,911	14,661	

Source: Pakistan Atomic Energy Commission

Nuclear energy is clean, so it avoids the emission of greenhouse gases (GHG) in the environment. During July-March FY 2024, nuclear generation in Pakistan avoided about 10 million tonnes of GHG entering the environment. The lifetime avoidance of GHG emissions by Pakistan-operating NPPs is estimated at around 103 million tonnes.

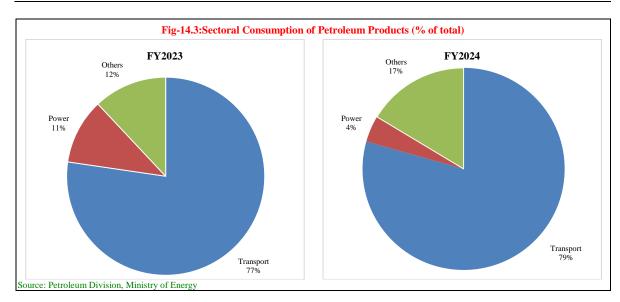
### 14.2 OIL SECTOR

A decline in demand for oil to 12.3 million tonnes was observed during July-March FY 2024, from 13.3 million tonnes during the same

period last year. The declining trend may be attributed to a decrease in demand for HSD, MS, and Furnace Oil (FO), which comprises more than 95 percent of the total demand. The total demand for petroleum products remained at 17.5 million tonnes during FY 2023. Furthermore, the transport and power sectors are major petroleum consumers, covering 77.3 percent and 10.7 percent of total demand, respectively. Overall, the total demand for petroleum products decreased by 7.23 percent during July-March FY 2024 compared to last year. Sector-wise consumption of petroleum products is depicted in Table 14.8.

Table 14.8: Sectoral Consumption of Petroleum Products   000 M							
Sector	FY2023	July-March FY2023	July-March FY2024	Change (%)			
Domestic	17.95	13.55	18.80	38.80			
Industry	1,126.85	889.71	815.32	-8.36			
Agriculture	9.21	7.40	10.16	37.31			
Transport	13,606.63	10,254.53	9,764.55	-4.78			
Power	1,668.15	1,417.08	520.70	-63.26			
Government	365.09	262.26	224.70	-14.32			
Overseas	696.85	416.63	948.03	127.55			
Total	17,490.73	13,261.15	12,302.25	-7.23			

Source: Petroleum Division, Ministry of Energy



Pakistan is a net importer of petroleum products and crude oil. Imports of petroleum products and crude oil during July-March FY 2024 are around 11.0 million tonnes, valued at around US\$ 8.4 billion. The major imported products are Motor Spirit (MS), High-Speed Diesel (HSD), and

crude oil, with import quantities of 3,528.1 thousand tonnes, 1,233.5 thousand tonnes, and 6,169.3 thousand tonnes, respectively. During the period under review, the import value of petroleum products declined by 16.7 percent compared to the same period last fiscal year.

Furthermore, due to the government's efforts, the country's reliance on FO for power generation declined, leading to zero imports for furnace oil, which was US\$ 307.7 million in FY 2023 (Table 14.9).

<b>Table 14.9: I</b>	mport of Petrol	eum Products		Quantity in tl	nousand MT; Valu	ie in million US\$
Period/	FY2	2023	July-Marc	ch FY2023	July-Marc	ch FY2024
Product	Quantity	Value (C&F)	Quantity	Value (C&F)	Quantity	Value (C&F)
MS	5,181.04	4,829.87	3,853.99	3,704.34	3,528.13	3,156.31
Crude Oil	7,595.47	5,334.17	5,858.44	4287.35	6,169.27	4,051.07
HOBC	31.57	30.57	18.05	18.54	17.83	16.25
HSD	2,367.03	2,219.08	1,645.59	1,646.31	1,233.53	1,050.27
FO	530.59	307.66	530.59	307.20	-	-
JP-1	113.94	100.68	70.06	65.65	98.24	85.51
Total	15,819.63	12,822.03	11,976.73	10,029.39	11,047.00	8,359.41

Source: Petroleum Division, Ministry of Energy; C& F = Cost and Freight

#### 14.3 GAS SECTOR

Natural Gas is a clean, safe, efficient, and environmentally friendly fuel. Its indigenous supplies contribute about 28.9 percent (FY 2023) of the country's total primary energy supply mix. Pakistan has an extensive gas network of over 13,989 KM Transmission, 161,806 KM Mains, and 41,463 KM Services gas pipelines to cater to the requirements of more than 10.77 million consumers nationwide. The government is pursuing its policies to enhance indigenous gas production and import gas to meet the increasing energy demand in the country. Currently, the capacity of two FRSUs to Re-gasified Liquefied Natural Gas (RLNG) is 1,200 MMCFD and accordingly, RLNG is being imported to mitigate the gas demand-supply shortfall.

The total natural gas consumption was about 3,207 million Cubic Feet per day (MMCFD), including 695 MMCFD volume of RLNG from July-March FY 2024. The maximum gas consumption is from the power sector, domestic, and fertilizers, with 894 MMCFD, 864 MMCFD, and 764 MMCFD, respectively. During the same period, two gas utility companies (SNGPL & SSGCL) have laid 156 Km Gas Transmission network, 3,614 Km Mains, and 76 Km service lines and connected 56 villages/towns to the gas network. Moreover, 11,554 additional gas connections, including 9.871 domestic, 1.621 commercials, and 62 industrial, were provided across the country. Table 14.10 depicts sector-wise natural gas consumption.

Table 14.10: Secto	or-wise Gas Consump	tion				MMCFD
	July-Marc	ch FY2023		July-Mar	rch FY2024	
Sector	Gas Consumption	RLNG	Total	Gas Consumption	RLNG	Total
Power	600	399	999	461	433	894
Domestic	906	1	907	863	1	864
Commercial	54	6	60	43	6	49
Transport (CNG)	60	2	62	58	3	61
Fertilizer	635	52	687	721	43	764
General Industry	369	171	540	366	209	575
Total	2,627	631	3,258	2,512	695	3,207

Sources: Ministry of Energy (Petroleum Division)

In pursuance of OGRA Ordinance 2002 and LNG policy 2011, OGRA notified LNG rules 2007 to bring the anticipated LNG activities

under the regulatory regime. The licensing process related to the regulated activities of the LNG sector is governed under OGRA (LNG)

rules 2007.

For the period July-March FY 2024, the progress/status of the project and steps undertaken by OGRA in the LNG sector is mentioned below:

- To date, 02 LNG terminals are operational with OGRA, licenses granted in 2016 and 2018 to M/s Engro Elengy Terminal Limited (EETL) and M/s Pakistan GasPort Consortium Limited (PGPCL), respectively.
- OGRA granted construction licenses in April 2021 to M/s Tabeer Energy Private Limited (TEPL) and M/s Energas Terminal Private Limited (ETPL) to develop LNG terminals in Port Qasim Karachi. Moreover, an extension in the validity of these licenses has been granted by OGRA for a further two years.

Gas companies plan to provide new connections during FY 2025 subject to OGRA approval. In addition, gas utility companies plan to invest Rs 45,483 million in transmission projects, Rs 39,610 million in distribution projects, and Rs 5,878 million in other projects, bringing the total investment to Rs 90,971 million during FY 2025.

OGRA is empowered to regulate the LPG sector under the OGRA Ordinance, 2002, and LPG (Production & Distribution) Rules, 2001 w.e.f. 15<sup>th</sup> March 2003. LPG is essential in Pakistan's energy mix as it provides a cleaner alternative to biomass-based sources, especially in locations where natural gas is unavailable. During July-February FY 2024, the total supply of LPG stood at 935,574 M. tonnes. Currently, 11 LPG producers and 313 LPG marketing companies operate in the country with over6,000 authorized distributors.

OGRA has simplified the procedure for granting LPG licenses, and the same is granted on a fast-track basis once the requirements are met. During July-March FY 2024, 36 permits for the operation of LPG storage & filling plants, 33 licenses for the construction of LPG storage & filling plants, 02 operational licenses for LPG air

mix plant, and 08 licenses for road bowsers for transportation of LPG were issued. In addition, OGRA has also issued 04 permits for the construction of LPG auto refueling stations during the same period.

Due to augmented investment and future expansion plans of the LPG marketing companies, significant investment in LPG supply and distribution infrastructure has been witnessed. OGRA has made a noteworthy contribution to national economic progress and created environment for additional investment, which will not only result in the creation of infrastructure in the LPG sector all over the country but also provide jobs to hundreds of unemployed people. OGRA is playing a role in increasing private investment in the midstream and downstream petroleum industry. During July-March FY 2024, an investment of around Rs 6.57 billion has been made in LPG infrastructure.

#### **COAL**

Coal is an important energy source, and the power sector uses a significant share of coal for electricity generation. Indigenous coal resources are reasonably substantial and sufficient to meet the country's requirements on a long-term sustainable basis. Domestic coal production is expected to increase in the coming years, starting with mining activity at Thar Coalfield Block-I and expanding the existing mine at Block-II. Indigenous coal production is mainly consumed by power generation plants situated at Thar Coalfield, whereas production from other coalfields is utilized in brick kilns. Furthermore, power plants and the industrial sector consumed imported coal.

During July-March FY 2024, the power sector's coal consumption remained at about 68.9 percent (11,906.7 thousand tonnes), whereas, in the brick Kilns sector, it stands at 14.9 percent (2,572.3 thousand tonnes). On the other hand, the cement and other industries sector consumes 16.2 percent (2,800.0 thousand tonnes). Sectorwise consumption of coal is depicted in Table 14.11.

<b>Table 14.11: Sector-wise Cons</b>	umption of Coal	000 metric tonnes
Sector	FY2024(July-March)	Share (%)
Power	11,906.70	68.91
Brick Kilns	2,572.26	14.89
Cement/Others	2,800.00	16.20
Household	-	-
Total	17,278.96	

## **Concluding Remarks**

Achieving self-reliance in energy production is crucial to reducing economic vulnerabilities, lowering production costs, and enhancing global competitiveness. As such, Pakistan's energy sector is paving the way towards transitioning from imported fossil fuel to renewable energy sources, as demonstrated by substantial investments in wind and solar power. Furthermore, the government has approved the Framework Guidelines for Fast Track Solar Initiatives 2022 to promote and develop cost-effective, climate-friendly, and local renewable energy sources.

According to IGCEP-2022, no new power plants

based on imported fossil fuels will be inducted. By 2030, the share of electricity from hydel, wind, and solar sources is projected to rise from 28 percent, 4 percent, and 1 percent, respectively, to 39 percent, 10 percent, and 10 percent, increasing the total share of green electricity in the generation approximately 59 percent. Accordingly, the government has been focusing on strengthening the regulatory framework and incentivizing the private sector investment in renewable energy that will help ensure energy security and climate change mitigation. The Private Infrastructure Board is facilitating twenty-four (24) power generation projects (including 22 renewable projects), having an installed capacity of 7,460 MW, which will be completed by 2032.

TABLE 14.1
COMMERCIAL ENERGY CONSUMPTION

Fiscal		1. Oil/Petroleum (tons)										
Year	Households	Industry	Agricul-	Transport	Power	Other Govt.	Total					
			ture									
2010-11	85,449	1,355,443	40,597	8,892,268	8,138,956	373,794	18,886,507					
2011-12	79,448	1,419,125	23,297	9,265,883	7,594,663	295,847	18,678,263					
2012-13	97,847	1,379,096	31,828	9,817,546	7,749,007	317,805	19,393,129					
2013-14	100,679	1,297,035	46,655	10,299,718	9,006,085	358,512	21,108,684					
2014-15	89,017	1,300,190	37,235	11,372,924	8,995,231	365,471	22,160,068					
2015-16	74,357	2,023,377	14,512	13,022,573	7,765,629	386,232	23,286,680					
2016-17	77,169	1,990,398	12,671	14,582,925	8,531,825	366,958	25,561,946					
2017-18	66,075	1,784,781	14,527	16,047,392	6,377,388	387,801	24,677,964					
2018-19	60,557	1,299,437	15,021	14,673,564	2,759,465	409,132	19,217,176					
2019-20	45,844	1,221,474	11,993	13,861,073	1,526,796	371,303	17,038,484					
2020-21	29,816	1,472,777	12,134	15,779,499	2,364,586	306,961	19,965,773					
2021-22	29,522	1,332,899	11,822	17,409,035	3,683,322	373,489	22,840,089					
2022-23	17,952	1,126,885	9,209	13,606,565	1,664,850	364,001	16,789,462					
(July-March	)											
2022-23	13,547	889,708	7,400	10,254,531	1,417,076	262,263	12,844,525					
2023-24	18,803	815,318	10,161	9,764,549	520,698	224,695	11,354,224					

P: Provisional (Contd...)

Note: HSD consumption in agricultural sector is not available separately and is included under transport sector. Agricultural sector represents LDO only.

Source: Oil Companies Advisory Committee.

TABLE 14.1
COMMERCIAL ENERGY CONSUMPTION

Fiscal	2. Gas (mm cft)												
Year	Households	Commercial	Cement	Fertilizer	Power	SSGC*	Industry	Transport	Total				
								CNG**					
2010-11	232,244	36,466	1,378	228,460	337,401		291,667	113,055	1,240,671				
2011-12	261,915	39,627	1,266	211,828	358,381		296,181	119,000	1,288,198				
2012-13	291,917	40,689	586	188,020	362,262		284,278	100,228	1,267,980				
2013-14	269,135	38,117	522	216,518	349,535		259,032	87,634	1,220,493				
2014-15	278,069	35,187	831	225,512	371,562		247,214	66,517	1,224,892				
2015-16	271,302	33,633	497	262,923	440,593		231,517	64,455	1,304,920				
2016-17	290,868	32,858	583	276,805	446,941		262,006	67,245	1,377,307				
2017-18	284,428	32,096	886	248,104	544,654		274,074	70,455	1,454,697				
2018-19	311,887	31,205	387	233,834	511,140	53,261	246,706	65,099	1,453,517				
2019-20	325,348	26,999	266	248,204	424,579	26,222	225,660	46,448	1,323,725				
2020-21	312,688	27,316	932	314,536	434,878	56,503	262,370	53,780	1,463,002				
2021-22	309,768	24,013	1,101	319,751	385,522	47,219	233,116	21,945	1,342,434				
2022-23	312,963	21,114	1,188	285,563	387,556	-	193,686	23,337	1,225,407				
(July-March)													
2022-23	249,795	16,926	819	188,370	273,819	-	145,509	16,653	891,891				
2023-24 (P)	236,736	13,426	-	209,336	244,956	-	157,550	16,714	878,718				

P: Provisional -: Not available (Contd...)

 $<sup>\</sup>ast$  RLNG withheld by SSGCL.

TABLE 14.1 COMMERCIAL ENERGY CONSUMPTION

Fiscal					3. Electricity	(Gwh)						4. Coal (000	metric ton)		
Year	Trac-	House-	Comm-	Indus	Agricul-	Street	General	Other	Total	House-	Power	Brick	Cement	Other	Total
	tion	hold	ercial	trial	tural	Lights	Services*	Govt.		hold		Kilns		Govt.	
2010-11	1	35,885	5,782	21,207	8,971	456		4,797	77,099		96.5	3,003.6	4,617.1	-	7,717.1
2011-12	1	35,589	5,754	21,801	8,548	478	-	4,590	76,761	-	104.6	3,108.2	4,456.9	-	7,669.7
2012-13	-	36,116	6,007	22,313	7,697	457	-	4,199	76,789	-	63.0	2,696.0	4,129.9	-	6,889.0
2013-14	-	39,549	6,375	24,356	8,290	458	-	4,381	83,409	-	160.7	2,727.6	3,669.2	-	6,557.5
2014-15	-	41,450	6,512	24,979	8,033	441	-	4,403	85,818		151.2	3,010.4	5,553.8	-	8,715.4
2015-16	-	44,486	7,181	25,035	8,526	459	-	4,744	90,431	-	204.4	3,541.1	5,485.3	-	9,230.8
2016-17	-	48,698	7,856	24,010	9,221	484	-	5,260	95,529	-	859.6	2,855.3	7,470.8	-	11,185.8
2017-18	-	54,028	8,606	27,468	10,128	475	-	6,222	106,927		4,436.1	3,941.7	9,603.3	-	17,981.1
2018-19	-	53,685	8,513	28,760	9,809	451	1	8,240	109,461	-	5,901.5	5,391.2	10,234.3	-	21,527.1
2019-20	-	55,963	7,975	25,708	9,757	385	256	8,328	108,371	1.3	10,897.0	8,183.8	6,074.8	-	25,156.9
2020-21	-	58,722	8,501	29,954	10,238	413	368	8,621	116,816	1.5	9,215.5	8,678.1	10,184.2	-	28,079.3
2021-22	-	56,202	8,652	31,600	10,247	387	427	3,748	111,263	1.6	12,808	5,643	9,245	-	27,697.5
2022-23	-	54,354	9,005	31,138	9,543	521	433	9,305	114,300	1.6	15,493	2,991	5,432	-	23,916.5
(July-March)															
2022-23	-	36,683	6,080	21,746	6,276	335	2,473	4,152	77,745		7,295	3,321	4,800	-	15,418
2023-24 (P)	-	39,286	6,776	22,031	6,951	523	4,633	2,909	83,109	-	11,907	2,572	2,800	-	17,279.000

<sup>- :</sup> Not available P: Provisional

Source: Ministry of Energy,

 $<sup>\</sup>ast$  Introduction of General Services category post notification of K-Electric's MYT on May 22, 2019.

 $<sup>\</sup>ensuremath{^{**}}$  Coal consumption data for power sector from NEPRA is not available.

TABLE 14.2

COMMERCIAL ENERGY SUPPLIES (ELECTRICITY)

Fiscal Year	Installed Capacity	Generation GW/h	n Hydroelectric		Ther	mal	Nuc	lear	Rene	wable	Imported (GW/h)
	MW		Installed	Generation	Installed	Generation	Installed	Generation	Installed	Generation	
			Capacity	(GW/h)	Capacity	(GW/h)	Capacity	(GW/h)	Capacity	(GW/h)	
			(MW)		(MW)		(MW)		(MW)		
2010-11	22,477	94,653	6,481	31,811	15,209	59,153	787	3,420			269
2011-12	22,797	95,365	6,556	28,517	15,454	61,308	787	5,265	-	-	274
2012-13	22,812	96,497	6,773	29,857	15,289	61,711	750	4,553	-	-	375
2013-14	23,531	104,089	6,893	31,873	15,887	66,707	750	5,090	-	-	419
2014-15	23,759	107,408	7,030	32,474	15,541	67,886	750	5,804	438	802	443
2015-16	25,889	111,763	7,122	34,633	17,115	70,512	750	4,605	902	1,549	463
2016-17	29,944	123,614	7,129	32,183	20,488	81,268	1,090	6,999	1,237	2,668	496
2017-18	33,554	131,275	7,139	27,925	23,347	89,614	1,430	9,880	1,637	3,857	556
2018-19	35,114	128,532	8,639	27,339	23,347	86,602	1,430	9,909	1,698	4,682	487
2019-20	36,701	128,673	8,668	33,585	24,682	80,121	1,430	10,815	2,047	4,152	514
2020-21	36,536	135,671	8,723	33,548	24,461	88,453	1,430	9,346	1,921	4,323	498
2021-22	41,402	150,866	8,723	32,706	26,307	92,791	3,630	19,174	2,742	6,195	463
2022-23	45,605	139,380	10,686	36,643	28,547	70,938	3,630	25,959	2,742	5,840	479
(July-March)											
2022-23	41,981	93,111	10,681	26,937	25,046	43,526	3,545	18,739	2,709	3,910	389
2023-24**	42,131	92,091	10,681	29,167	25,046	42,249	3,545	16,754	2,859	3,921	171

<sup>- :</sup> Not Available

Source: Ministry of Energy

<sup>\*\*</sup> Information on WAPDA Thermal is available upto February 2024, while data on electricity import is available till December 2023.

Also electricity generation data from some of IPPs is not available.

TABLE 14.3

COMMERCIAL ENERGY SUPPLIES (OIL, GAS, PETROLEUM, COAL)

Fiscal	O	il	Gas	s	Petroleum	Products	Coa	l
Year	Crude Oil	Local Crude	Production	Imports	Imports	Production	Imports	Production
	Imports	Extraction	mcf*	mcf	000 tons	000 tons	000 tons	000 tons
	000 barrels	000 barrels						
2010-11	51,306	24,041	1,471,591	-	12,371	8,911	4,267	3,450
2011-12	47,104	24,573	1,558,959	-	11,507	8,395	4,057	3,613
2012-13	57,037	27,841	1,505,841	-	10,489	9,914	3,710	3,179
2013-14	61,933	31,585	1,493,508	-	11,523	10,926	3,119	3,438
2014-15	64,208	34,490	1,465,760	20,191	13,347	11,253	5,004	3,712
2015-16	66,855	31,652	1,481,551	102,735	13,550	11,021	4,885	4,142
2016-17	66,737	32,269	1,471,855	190,406	15,145	11,513	7,021	4,165
2017-18	79,607	32,557	1,458,936	320,180	13,344	12,929	13,684	4,297
2018-19	66,833	32,496	1,436,455	380,879	8,807	11,839	15,686	5,841
2019-20	50,022	28,087	1,316,635	355,559	7,539	9,353	16,422	8,735
2020-21	65,494	27,568	1,279,243	423,951	10,117	10,070	18,850	9,230
2021-22	84,441	26,804	1,237,251	405,925	13,186	10,992	18,103	9,595
2022-23	63,848	25,372	1,189,515	344,061	8,225	9,413	8,903	15,013
(July-March)								
2022-23	43,916	19,275	899,059	-	6,118	7,383	-	-
2023-24 (P)**	38,849	19,645	866,345	285,788	4,320	7,311	3,353 #	10,169 #

P: Provisional -: Not available

\*: Million cubic feet

Source: Ministry of Energy

<sup>\*\*:</sup> Data on Crude Oil /POL Imports and production, thermal electricity generation is available upto February 2024. Also data from some of IPP's is not available.

<sup>#</sup>: Coal production for Balochistan is available upto December 2022, while for Punjab it is available upto February 2023

TABLE 14.4 Consumer-End Applicable Tariff

Description	Fixed Charges	Notified Tariff w.e.f. 01- 01-2019	* Industrial Support Package w.e.f. July 01, 2019	Qtr. Adjust. for 1st & 2nd quarter, Notified w.e.f 1/7/2019	Qtr. Adjust. for 3rd & 4th quarter and interim increase on account Distribution Margin, notified w.e.f. 1- 10-2019	Quarterly Uniform Tariff 1 <sup>st</sup> Qtr 2019-20 w.e.f. 1-12-2019	Total Applicable Tariff
		Variable Charges	Variable Charges	Variable Charges	Variable Charges	Variable Charges	Variable Charges
	Rs./ kW/M	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh	Rs./kWh
	A	В	c	D	E	F	G=B+C+D+E+F
1- Residential							
Up to 50 Units For peak load requirement less than 5 kW		2		•	-	-	2
01-100 Units		5.79		-	-	-	5.79
101-200 Units		8.11		-	-	-	8.11
201-300 Units		10.2		-	-		10.2
301-700Units		17.6		0.75	0.83	0.07	19.25
Above 700 Units		20.7		0.75	0.83	0.07	22.35
For peak load requirement exceeding 5 kW)							
Time of Use (TOU) - Peak		20.7 14.38		0.75 0.75	0.83 0.83	0.07 0.07	22.35 16.03
Time of Use (TOU) - Off-Peak 'emporary Supply		20.84		1.8	0.83	0.07	23.54
cinporary supply		20104		110	0.00	0.07	20.04
2- Commercial							
or peak load requirement less than 5 kW		18		0	0.83	0.26	19.09
or peak load requirement exceeding 5 kW							
Regular	400			1.8	0.83	0.26	22.57
Time of Use (TOU) - Peak	400	21.6		1.8	0.83	0.26	24.49
Time of Use (TOU) - Off-Peak emporary Supply	400	15.63 18.39		1.8 1.8	0.83 0.83	0.26 0.26	18.52 21.28
ешрогагу эпрріу		18.39		1.8	0.83	0.26	41.48
3- General Services		17.56		1.8	0.83	0.26	20.45
- Industrial							
- Industrial B1		15.28		1.8	0.83	0.26	18.17
B1 Peak		18.84	-3	1.8	0.83	0.26	18.73
B1 Off Peak		13.28		1.8	0.83	0.26	16.17
B2	400			1.8	0.83	0.26	17.67
B2 - TOU (Peak)		18.78	-3	1.8	0.83	0.26	18.67
B2 - TOU (Off-peak)	400	13.07		1.8	0.83	0.26	15.96
B3 - TOU (Peak)	380	18.78 12.98	-3	1.8	0.83 0.83	0.26 0.26	18.67 15.87
B3 - TOU (Off-peak) B4 - TOU (Peak)	380	12.98	-3	1.8 1.8	0.83	0.26	18.67
B4 - TOU (Peak) B4 - TOU (Off-peak)	360		-3	1.8	0.83	0.26	15.77
Cemporary Supply	300	16.36		1.8	0.83	0.26	19.25
C - Single Point Supply C1(a) Supply at 400 Volts-less than 5 kW		18.68		1.8	0.83	0.26	21.57
C1(a) Supply at 400 Volts-ress than 5 kW	400	18.18		1.8	0.83	0.26	21.07
Time of Use (TOU) - Peak	400	21.6		1.8	0.83	0.26	24.49
Time of Use (TOU) - Off-Peak	400	15		1.8	0.83	0.26	17.89
C2 Supply at 11 kV	380	17.98		1.8	0.83	0.26	20.87
Time of Use (TOU) - Peak		21.6		1.8	0.83	0.26	24.49
Time of Use (TOU) - Off-Peak	380			1.8	0.83	0.26	17.69
C3 Supply above 11 kV	360			1.8	0.83	0.26	20.77
Time of Use (TOU) - Peak Time of Use (TOU) - Off-Peak	360	21.6 14.7		1.8 1.8	0.83 0.83	0.26 0.26	24.49 17.59
Time of Ose (100) - Oll-Team	500	14.7		110	0.00	0.20	17.00
9- Agricultural							
Scarp		15.68		1.8	0.83	0.26	18.57
Time of Use (TOU) - Peak	200	18.6 11.35		1.8	0.83	0.26 0.26	21.49 14.24
Time of Use (TOU) - Off-Peak Agricultual Tube-wells	200 200			1.8 1.49	0.83 0.83	0.26 0.26	14.24 7.934
Time of Use (TOU) - Peak	200	5.35		1.49	0.83	0.26	7.934
Time of Use (TOU) - Off-Peak	200	5.35		1.49	0.83	0.26	7.934
ALEXANDER TO THE		** **		**	0.00	0.50	2
Public Lighting - Tariff G Residential Colonies - Tariff H		18.68 18.68		1.8	0.83	0.26 0.26	21.57 21.57
tailway Traction Tariff I		18.68		1.8	0.83	0.26	21.57
ariff K - AJK	360			1.8	0.83	0.26	18.79
Time of Use (TOU) - Peak		21.6		1.8	0.83	0.26	24.49
Time of Use (TOU) - Off-Peak Fariff K -Rawat Lab	360	14.7 18.68		1.8 1.8	0.83 0.83	0.26 0.26	17.59 21.57
		23.00		210	- 3550		
Special Contract	360	17.88		1.8	0.83	0.26	20,77
J-1 For Supply at 66 kV & above Time of Use (TOU) - Peak	360	17.88 21.6		1.8 1.8	0.83 0.83	0.26 0.26	20.77 24.49
Time of Use (TOU) - Peak Time of Use (TOU) - Off-Peak	360			1.8	0.83 0.83	0.26	24.49 17.59
J-2 (a) For Supply at 11, 33 kV	380			1.8	0.83	0.26	20.87
Time of Use (TOU) - Peak		21.6		1.8	0.83	0.26	24.49
Time of Use (TOU) - Off-Peak	380			1.8	0.83	0.26	17.69
J-2 (b) For Supply at 66 kV & above	360	17.88		1.8	0.83	0.26	20.77
Time of Use (TOU) - Peak		21.6		1.8	0.83	0.26	24.49
Time of Use (TOU) - Off-Peak	360			1.8	0.83	0.26	17.59
J-3 (a) For Supply at 11, 33 kV	380			1.8	0.83	0.26	20.87
Time of Use (TOU) - Peak Time of Use (TOU) - Off-Peak	***	21.6		1.8	0.83	0.26	24.49 17.69
	380 360	14.8 17.88		1.8 1.8	0.83 0.83	0.26 0.26	17.69 20.77
J-3 (b) For Supply at 66 kV & above Time of Use (TOU) - Peak	300	21.6		1.8	0.83	0.26	24.49

Ondustrial Support Package (ISP) reduction shall be inclusive of any downward revision of Fuel Price Adjustment notified from time to time.
Note: FC Surcharge @ Rs. 0.43/kWh and NJ Surcharge @ 0.10/kWh are applicable in addition to above on all consumer categories except life line.

**TABLE 14.4 Consumer-End Applicable Tariff** 

	Fixed Charges	Notified Base Tariff w.e.f. 01-11- 2021	Uniform Applicable Quarterly adjustment 4th Qtr. FY 2019-20, 1st & 2nd Qtr. FY 2020-21 & Surcharge w.e.f. 01.10.2021	Total Applicable Tar
Description		Variable Charges	Variable Charges	Variable Charges
	Rs./ kW/M	Rs./kWh	Rs./kWh	Rs./kWh
	A	В	С	D= B+C
1- Residential			<u> </u>	
For peak load requirement less than 5 kW				
Protected				
Up to 50 Units - Life Line		3.95	0.0673	3.95
51-100 units - Life Line 0-100 Units		7.74 7.74	-0.0673 -0.0673	7.67 7.67
101-200 Units		10.06	-0.0673	9.99
Un-Protected				
01-100 Units		9.42	-0.0673	9.35
101-200 Units		11.74	-0.0673	11.67
201-300 Units		13.83	-0.0673	13.76
301-400 Units		21.23	1.6527	22.88
401-500 Units 501-600 Units		21.23 21.23	1.6527 1.6527	22.88 22.88
601-700Units		21.23	1.6527	22.88
Above 700 Units		24.33	1.6527	25.98
For peak load requirement exceeding 5 kW)				
Time of Use (TOU) - Peak		24.33	1.6527	25.98
Time of Use (TOU) - Off-Peak		18.01	1.6527	19.66
Temporary Supply		24.47	1.6527	26.12
2- Commercial				
2- Commercial or peak load requirement less than 5 kW		21.34	1.1327	22.47
or peak load requirement exceeding 5 kW		21.0.	111027	
Regular	440	23.02	2.9027	25.92
Time of Use (TOU) - Peak		24.94	2.9027	27.84
Time of Use (TOU) - Off-Peak	440	18.97	2.9027	21.87
Temporary Supply		21.73	2.9027	24.63
3- General Services		20.90	2.9027	23.80
- Industrial				
B1 (upto 25kW)		18.62	2.9027	21.52
B1 - TOU (Peak)		16.62	2.9027	19.52
B1 Off Peak		16.62	2.9027	19.52
B2 (25-500 kW)	440	18.12	2.9027	21.02
B2 - TOU (Peak)		16.41	2.9027	19.31
B2 - TOU (Off-peak)	440	16.41	2.9027	19.31
B3 - TOU (Peak)	420	16.32	2.9027	19.22
B3 - TOU (Off-peak) B4 - TOU (Peak)	420	16.32 16.22	2.9027 2.9027	19.22 19.12
B4 - TOU (Peak) B4 - TOU (Off-peak)	400	16.22	2.9027	19.12
Temporary Supply	100	19.70	2.9027	22.60
- Single Point Supply				
C1(a) Supply at 400 Volts-less than 5 kW		22.02	2.9027	24.92
C1(b) Supply at 400 Volts-exceeding 5 kW	440	21.52	2.9027	24.42
Time of Use (TOU) - Peak Time of Use (TOU) - Off-Peak	440	24.94 18.34	2.9027 2.9027	27.84 21.24
C2 Supply at 11 kV	420	21.32	2.9027	24.22
Time of Use (TOU) - Peak	420	24.94	2.9027	27.84
Time of Use (TOU) - Off-Peak	420		2.9027	21.04
C3 Supply above 11 kV	400	21.22	2.9027	24.12
Time of Use (TOU) - Peak		24.94	2.9027	27.84
Time of Use (TOU) - Off-Peak	400	18.04	2.9027	20.94
Agricultural Scarp		19.02	2.9027	21.92
Time of Use (TOU) - Peak		21.94	2.9027	24.84
Time of Use (TOU) - Off-Peak	200	14.69	2.9027	17.59
Agricultual Tube-wells	200	8.69	2.5927	11.28
Time of Use (TOU) - Peak		8.69	2.5927	11.28
Time of Use (TOU) - Off-Peak	200	8.69	2.5927	11.28
ublic Lighting - Tariff G		22.02	2.9027	24.92
esidential Colonies - Tariff H		22.02	2.9027	24.92
ailway Traction Tariff I		22.02	2.9027	24.92
ariff K - AJK	400	19.24	2.9027	22.14
Time of Use (TOU) - Peak		24.94	2.9027	27.84
Time of Use (TOU) - Off-Peak	400	18.04	2.9027	20.94

Note: In addition to above, Monthly FCA is also applicable FC Surcharge @ Rs. 0.43/kWh is applicable in addition to above on all consumer categories except life line.

TABLE 14.4 Consumer-End Applicable Tariff

Description		Applicable se Tariff	2nd Qtr. Adj. FY 2022-23 w.e.f. Apr. Jun. 23	F.C Surcharge w.e.f. March 2023	Total Applicable Tariff
Description	Fixed Charge Rs./kW/M	Variable Charges Rs./kWh	Variable Charges Rs./kWh	Variable Charges Rs./kWh	Variable Charges Rs./kWh
Residential					
For peak load requirement less than 5 kW					
Up to 50 Units - Life Line		3.95	-	-	3.95
51-100 units - Life Line		7.74	-	-	7.74
Up to 50 Units - Life Line 51-100 units - Life Line 01-100 Units 101-200 Units		7.74	0.47	0.43	8.64
101-200 Clints		10.06	0.47	0.43	10.90
01-100 Units		13.48	0.47	0.43	14.38
101-200 Units		18.95	0.47	0.43	19.85
201-300 Units 301-400 Units		22.14 25.53	0.47 0.47	0.43 3.82	23.04 29.82
Un 201-300 Units 301-400 Units 401-500 Units 501-600 Units		27.74	0.47	3.82	32.03
501-600 Units		29.16	0.47	3.82	33.4
601-700Units		30.30	0.47	3.82	34.59
Above 700 Units		35.22	0.47	3.82	39.5
For peak load requirement exceeding 5 kW)					
Time of Use (TOU) - Peak		34.39	0.47	3.82	38.68
Time of Use (TOU) - Off-Peak		28.07	0.47	3.82	32.30
Temporary Supply		34.53	0.47	3.82	38.82
Total Residential					
Commercial - A2					
For peak load requirement less than 5 kW		30.25	0.47	3.82	34.54
For peak load requirement exceeding 5 kW					
Regular	500	31.93	0.47	3.82	36.22
Time of Use (TOU) - Peak	=00	33.85	0.47	3.82	38.14
Time of Use (TOU) - Off-Peak	500	27.88	0.47	3.82	32.17
Temporary Supply Electric Vehicle Charging Station		30.64 31.93	0.47 0.47	3.82 3.82	34.93
Total Commercial		31.93	0.47	3.02	36.22
Total Collinereni					
General Services-A3		29.81	0.47	3.82	34.10
Industrial		2,101	•••	5102	0.113
B1		26.83	0.47	3.82	31.12
B1 Peak		30.39	0.47	3.82	34.68
B1 Off Peak		24.83	0.47	3.82	29.12
B2	500	26.33	0.47	3.82	30.62
B2 - TOU (Peak)		30.33	0.47	3.82	34.62
B2 - TOU (Off-peak)	500	24.62	0.47	3.82	28.91
B3 - TOU (Peak)		30.33	0.47	3.82	34.62
B3 - TOU (Off-peak)	460	24.53	0.47	3.82	28.82
B4 - TOU (Peak)		30.33	0.47	3.82	34.62
B4 - TOU (Off-peak)	440	24.43	0.47	3.82	28.72
Temporary Supply		27.91	0.47	3.82	32.20
Total Industrial Single Point Supply					
C1(a) Supply at 400 Volts-less than 5 kW		30.93	0.47	3.82	35.22
C1(a) Supply at 400 Volts-less than 5 kW	500	30.43	0.47	3.82	34.72
Time of Use (TOU) - Peak	500	33.85	0.47	3.82	38.14
Time of Use (TOU) - Off-Peak	500	27.25	0.47	3.82	31.54
C2 Supply at 11 kV	460	30.23	0.47	3.82	34.52
Time of Use (TOU) - Peak		33.85	0.47	3.82	38.14
Time of Use (TOU) - Off-Peak	460	27.05	0.47	3.82	31.34
C3 Supply above 11 kV	440	30.13	0.47	3.82	34.42
Time of Use (TOU) - Peak		33.85	0.47	3.82	38.14
Time of Use (TOU) - Off-Peak	440	26.95	0.47	3.82	31.24
Total Single Point Supply					
Agricultural Tube-wells - Tariff D					
Scarp		26.93	0.47	3.82	31.22
Time of Use (TOU) - Peak		29.85	0.47	3.82	34.14
Time of Use (TOU) - Off-Peak	200	22.60	0.47	3.82	26.89
Agricultural Tube-wells	200	16.60	0.47	3.82	20.89
Time of Use (TOU) - Peak	***	16.60	0.47	3.82	20.89
Time of Use (TOU) - Off-Peak	200	16.60	0.47	3.82	20.89
Total Agricultural Public Lighting - Tariff G		20.00	A 4=	2.02	24.2
0 0		29.93	0.47	3.82	34.22
Residential Colonies		29.93	0.47	3.82	34.23
Railway Traction Tariff K - AJK	440	29.93	0.47	3.82	34.22
Tariff K - AJK Time of Use (TOU) - Peak	440	27.15 32.85	0.47	3.82	31.44 37.14
		34.85	0.47	3.82	37.14
Time of Use (TOU) - Off-Peak	440	25.95	0.47	3.82	30.24

Source: NEPRA

TABLE 14.4 Consumer-End Applicable Tariff

	<b>5</b>		Applicable ase Tariff	2nd Quarter FY 2023-24	F.C Surcharge w.e.f	Total Applicable
	Description	Fixed Charge	Variable Charges	w.e.f Apr.June	Nov 2023	Tarrif
		Rs./kW/M	Rs./kWh	2024		
Resident	tial					
For pe	ak load requirement less than 5 kW					
$\mathbf{Prc}$	51-100 units - Life Line		7.74	2.75	0.43	10.92
Protected	01-100 Units - Life Line	-	7.74	2.75	0.43	10.92
ed	101-200 Units	-	10.06	2.75	0.43	13.24
	01-100 Units	-	16.48	2.75	0.43	19.6
_	101-200 Units	-	22.95	2.75	0.43	26.1
Un-Protected	201-300 Units 301-400 Units	-	27.14 32.03	2.75 2.75	3.23 3.23	33.1 38.0
rote	401-500 Units	-	35.24	2.75	3.23	41.2
ctec	501-600 Units	-	36.66	2.75	3.23	42.6
- 1	601-700Units	-	37.80	2.75	3.23	43.7
F	Above 700 Units	-	42.72	2.75	3.23	48.70
	ak load requirement exceeding 5 kW) e of Use (TOU) - Peak		41.89	2.75	3.23	47.8
	e of Use (TOU) - Teak	-	35.57	2.75	3.23	41.5
	oorary Supply	-	42.03	2.75	3.23	48.0
	Total Residential					
	rcial - A2		25.55	2.75	2 22	42.7
_	k load requirement less than 5 kW k load requirement exceeding 5 kW	-	37.75	2.75	3.23	43.7.
Reg	-	500	39.43	2.75	3.23	45.4
Tim	e of Use (TOU) - Peak	-	41.35	2.75	3.23	47.3
	e of Use (TOU) - Off-Peak	500	35.38	2.75	3.23	41.30
	orary Supply	-	38.14	2.75 2.75	3.23 3.23	44.12 45.4
Elect	ric Vehicle Charging Station  Total Commercial	•	39.43	2.73	3.23	45.4
	Services-A3	-	37.31	2.75	3.23	43.29
Industri			24.22	2.75	2 22	40.2
B1 R1	Peak	-	34.33 37.89	2.75 2.75	3.23 3.23	40.3 43.8
	Off Peak	-	32.33	2.75	3.23	38.3
B2		500	33.83	2.75	3.23	39.8
B2	- TOU (Peak)	-	37.83	2.75	3.23	43.8
	- TOU (Off-peak)	500	32.12	2.75	3.23	38.1
	- TOU (Peak) - TOU (Off-peak)	460	37.83 32.03	2.75 2.75	3.23 3.23	43.8 38.0
	- TOU (Peak)	400	37.83	2.75	3.23	43.8
	- TOU (Off-peak)	440	31.93	2.75	3.23	37.9
Temp	oorary Supply		35.41	2.75	3.23	41.3
c b	Total Industrial					
	oint Supply upply at 400 Volts-less than 5 kW		38.43	2.75	3.23	44.4
	upply at 400 Volts-exceeding 5 kW	500	37.93	2.75	3.23	43.9
	Time of Use (TOU) - Peak	-	41.35	2.75	3.23	47.3
1	Time of Use (TOU) - Off-Peak	500	34.75	2.75	3.23	40.7
	Supply at 11 kV	460	37.73	2.75	3.23	43.7
	Fime of Use (TOU) - Peak Fime of Use (TOU) - Off-Peak	460	41.35 34.55	2.75 2.75	3.23 3.23	47.33 40.53
	Supply above 11 kV	440	37.63	2.75	3.23	43.6
	Time of Use (TOU) - Peak	-	41.35	2.75	3.23	47.3
1	Time of Use (TOU) - Off-Peak	440	34.45	2.75	3.23	40.43
A anion14	Total Single Point Supply ural Tube-wells - Tariff D					
Agricuit Sca		_	34.43	2.75	3.23	40.4
	Гime of Use (TOU) - Peak	-	37.35	2.75		43.3
	Time of Use (TOU) - Off-Peak	200	30.10	2.75	3.23	36.0
	ricultural Tube-wells	200	24.10	2.75	3.23	30.0
	Time of Use (TOU) - Peak	-	24.10	2.75 2.75	3.23 3.23	30.09 30.09
	Time of Use (TOU) - Off-Peak  Total Agricultural	200	24.10	2.75	3,23	30.0
Public I	Lighting - Tariff G	_	37.43	2.75	3.23	43.4
	tial Colonies	-	37.43	2.75	3.23	43.4
	Traction	-	37.43	2.75		43.4
	f K - AJK	440	34.65	2.75		40.6
	Fime of Use (TOU) - Peak Fime of Use (TOU) - Off-Peak	440	40.35 33.45	2.75 2.75	3.23 3.23	46.3 39.4
	f K -Rawat Lab	770	37.43	2.75	3.23	43.4

Source: NEPRA

TABLE 14.5
OIL SALE PRICES

									Rs/Ltrs
Date		1-9-2018	1-10-2018	1-11-2018	1-12-2018	1-1-2019	1-2-2019	1-3-2019	1-4-2019
EX-N	RL/PRL KARACHI								
Motor	· Gasoline	92.83	92.83	97.83	95.83	90.97	90.38	92.89	98.89
нове	C (Automotive 100 Octane)								
Super	(90 Octane) Blend of Motor								
	Gasoline @ 60% and HOBC 40%)								
Keros	ene	83.50	863.50	86.50	83.50	82.98	82.31	86.31	89.31
HSD		106.57	106.57	112.94	110.94	106.68	106.68	111.43	117.43
LDO		75.96	75.96	82.44	77.44	75.28	75.03	77.54	80.54
Aviati	on gasoline (100LL)								
JP-1:		80.94	84.83	92.34	84.42	73.59	73.39	73.48	81.95
i)	For sale to PIA Domestic Flight								
ii)	For sale to PIA foreign								
	flights & foreign airline								
iii)	For Cargo & Technical								
	Landing Flights								
JP-4									
JP-8		80.75	84.64	92.15	84.23	73.41	73.20	73.29	81.92

<sup>- :</sup> Not available

TABLE 14.5
OIL SALE PRICES

								Rs/Ltrs
Date	1-5-2019	5-5-2019	1-6-2019	1-7-2019	1-8-2019	1-9-2019	1-10-2019	1-11-2019
EX-NRL/PRL KARACHI								
Motor Gasoline	98.89	108.42	112.68	112.68	117.83	113.24	113.24	114.24
HOBC (Automotive 100 Octane)								
Super (90 Octane) Blend of Motor								
Gasoline @ 60% and HOBC 40%)								
Kerosene	89.31	96.77	98.46	98.46	103.84	99.57	99.57	97.18
HSD	117.43	122.32	126.82	126.82	132.47	127.14	127.14	127.41
LDO	80.54	86.94	88.62	88.62	97.52	91.89	91.89	85.33
Aviation gasoline (100LL)								
JP-1:	85.75	85.75	87.45	83.99	92.30	87.90	89.33	86.15
i) For sale to PIA Domestic Flight								
ii) For sale to PIA foreign								
flights & foreign airline								
iii) For Cargo & Technical								
Landing Flights								
JP-4								
JP-8	85.73	85.73	87.42	83.97	92.28	87.68	89.31	86.12

<sup>-:</sup> Not available

TABLE 14.5
OIL SALE PRICES

								Rs/Ltrs
Date	1-12-2019	1-1-2020	1-2-2020	1-3-2020	25-3-2020	27-6-2020	1-8-2020	1-9-2020
EX-NRL/PRL KARACHI								
Motor Gasoline	113.99	116.60	116.60	111.59	96.58	100.11	103.97	103.97
HOBC (Automotive 100 Octane)								
Super (90 Octane) Blend of Motor								
Gasoline @ 60% and HOBC 40%)								
Kerosene	96.35	99.45	99.45	92.45	77.45	59.32	65.29	65.29
HSD	125.01	127.26	127.26	122.25	107.25	101.46	106.46	106.46
LDO	82.43	84.51	84.51	77.51	62.51	56.24	62.86	62.86
Aviation gasoline (100LL)								
JP-1:	85.34	93.02	93.02	80.92	77.37	49.05	24.85	48.64
i) For sale to PIA Domestic Flight								
ii) For sale to PIA foreign								
flights & foreign airline								
iii) For Cargo & Technical								
Landing Flights								
JP-4								
JP-8	85.32	87.09	87.09	74.06	51.46	19.31	24.84	48.61
- : Not available				Source: Hy	drocarbon De	evelopment Ins	titute of Pakis	tan (HDIP)

TABLE 14.5 OIL SALE PRICES

									Rs/Ltrs
Date		16-5-2021	1-6-2021	16-6-2021	1-7-2021	16-7-2021	1-8-2021	16-8-2021	1-9-2021
EX-N	RL/PRL KARACHI								
Motor	r Gasoline	108.56	108.56	110.69	112.69	118.09	119.80	119.80	118.33
HOB	C (Automotive 100 Octane)								
Super	(90 Octane) Blend of Motor								
	Gasoline @ 60% and HOBC 40%)								
Keros	ene	80.00	80.00	81.89	85.75	87.14	87.49	88.30	86.80
HSD		110.76	110.76	112.55	113.99	116.53	116.53	116.53	115.03
LDO		77.65	77.65	79.68	83.40	84.67			
Aviati	ion gasoline (100LL)								
JP-1:		-	-	-	91.04	90.58	90.59	91.48	91.48
i)	For sale to PIA Domestic Flight								
ii)	For sale to PIA foreign								
	flights & foreign airline								
iii)	For Cargo & Technical								
	Landing Flights								
JP-4									
JP-8		-	-	-	89.05	90.56	90.57	91.46	91.46

<sup>- :</sup> Not available Source: Hydrocarbon Development Institute of Pakistan (HDIP)

TABLE 14.5
OIL SALE PRICES

									Rs/Ltrs
Date		16-9-2021	1-10-2021	16-10-2021	1-11-2021	5-11-2021	6-11-2021	1-12-2021	16-12-2021
EX-N	RL/PRL KARACHI								
Motor	Gasoline	123.30	127.30	137.79	137.79	145.82	145.82	145.82	140.82
ново	C (Automotive 100 Octane)								
Super	(90 Octane) Blend of Motor								
	Gasoline @ 60% and HOBC 40%)								
Keros	ene	92.26	99.31	110.26	110.26	116.53	116.53	116.53	109.53
HSD		120.04	122.04	134.48	134.48	142.62	142.62	142.62	137.62
LDO									
Aviati	on gasoline (100LL)								
JP-1:		93.45	100.63	112.64	112.64	120.71	117.05	113.50	105.83
i)	For sale to PIA Domestic Flight								
ii)	For sale to PIA foreign								
	flights & foreign airline								
iii)	For Cargo & Technical								
	Landing Flights								
JP-4									
JP-8		93.42	100.61	112.61	112.61	120.69	117.02	113.48	105.80

<sup>- :</sup> Not available

TABLE 14.5
OIL SALE PRICES

									Rs/Ltrs
Date		1-1-2022	16-1-2022	1-2-2022	16-2-2022	1-3-2022	16-3-2022	1-4-2022	16-4-2022
EX-N	RL/PRL KARACHI								
Motor	r Gasoline	144.82	147.83	147.83	159.86	149.86	149.86	149.86	149.86
нове	C (Automotive 100 Octane)								
Super	(90 Octane) Blend of Motor								
	Gasoline @ 60% and HOBC 40%)								
Keros	sene	113.48	116.48	116.48	126.56	125.56	125.56	125.56	125.56
HSD		141.62	144.62	144.62	154.15	144.15	144.15	144.15	144.15
LDO									
Aviati	ion gasoline (100LL)								
JP-1:		111.21	114.54	114.54	123.97	118.31	118.31	118.31	118.31
i)	For sale to PIA Domestic Flight								
ii)	For sale to PIA foreign								
	flights & foreign airline								
iii)	For Cargo & Technical								
	Landing Flights								
JP-4									
JP-8		110.07	116.87	116.87	135.72	140.41	140.41	140.41	140.41

<sup>- :</sup> Not available

TABLE 14.5
OIL SALE PRICES

									Rs/Ltrs
Date		1-5-2022	16-5-2022	27-5-2022	1-6-2022	3-6-2022	16-6-2022	1-7-2022	16-7-2022
EX-N	RL/PRL KARACHI								
Motor	Gasoline	149.86	149.86	179.86	179.86	209.86	233.89	248.74	230.24
нов	C (Automotive 100 Octane)								
Super	(90 Octane) Blend of Motor								
	Gasoline @ 60% and HOBC 40%)								
Keros	ene	125.56	125.56	155.56	155.56	181.94	211.43	230.26	196.45
HSD		144.15	144.15	174.15	174.15	204.15	263.31	276.54	236.00
LDO		118.31	118.31	148.31	148.31	178.31	207.47	226.10	191.44
Aviat	ion gasoline (100LL)								
JP-1:		-	-	-	-	-	-	227.84	216.08
i)	For sale to PIA Domestic Flight								
ii)	For sale to PIA foreign								
	flights & foreign airline								
iii)	For Cargo & Technical								
	Landing Flights								
JP-4									
JP-8		-	-	-	-	-	-	276.54	216.05

<sup>- :</sup> Not available

TABLE 14.5
OIL SALE PRICES

									Rs/Ltrs
Date		1-8-2022	16-8-2022	1-9-2022	16-9-2022	1-10-2022	16-10-2022	1-11-2022	16-11-2022
EX-N	RL/PRL KARACHI								
Motor	· Gasoline	227.19	233.19	235.98	237.43	224.80	224.80	224.80	224.80
ново	C (Automotive 100 Octane)								
Super	(90 Octane) Blend of Motor								
	Gasoline @ 60% and HOBC 40%)								
Keros	ene	201.07	199.40	210.36	202.02	191.83	191.83	191.83	191.83
HSD		244.95	244.44	247.43	247.43	235.30	235.30	235.30	235.30
LDO		191.32	191.75	201.54	197.28	186.50	186.50	186.50	186.50
Aviati	on gasoline (100LL)								
JP-1:		215.02	211.85	228.28	215.95	199.13	206.25	214.00	209.79
i)	For sale to PIA Domestic Flight								
ii)	For sale to PIA foreign								
	flights & foreign airline								
iii)	For Cargo & Technical								
	Landing Flights								
JP-4									
JP-8		215.17	211.83	228.26	215.92	199.11	206.22	207.18	209.77

<sup>-:</sup> Not available

TABLE 14.5
OIL SALE PRICES

								Rs/Ltrs
Date	1-12-2022	16-12-2022	1-1-2023	16-1-2023	30-1-2023	16-2-2023	1-3-2023	16-3-2023
EX-NRL/PRL KARACHI								
Motor Gasoline	224.80	214.80	214.80	214.80	249.80	272.00	267.00	272.00
HOBC (Automotive 100 Octane)								
Super (90 Octane) Blend of Motor								
<b>Gasoline @ 60% and HOBC 40%)</b>								
Kerosene	181.93	171.83	171.83	171.83	189.83	202.73	187.73	190.29
HSD	235.30	227.80	227.80	227.80	262.80	280.00	280.00	293.00
LDO	179.00	169.00	169.00	193.78	213.84	196.68	184.68	184.68
Aviation gasoline (100LL)								
JP-1:	197.67	196.50	161.63	193.78	213.84	253.18	202.07	-
i) For sale to PIA Domestic Flight								
ii) For sale to PIA foreign								
flights & foreign airline								
iii) For Cargo & Technical								
Landing Flights								
JP-4								
JP-8	197.65	178.80	161.61	186.88	213.82	228.70	264.50	-

<sup>- :</sup> Not available

TABLE 14.5 OIL SALE PRICES

								Rs/Ltrs
Date	1-4-23	16-4-23	1-5-23	16-5-23	1-6-23	16-6-23	1-7-23	16-7-23
EX-NRL/PRL KARACHI								
Motor Gasoline	272.00	282.00	282.00	270.00	262.00	262.00	262.00	253.00
HOBC (Automotive 100 Octane)								
Super (90 Octane) Blend of Motor								
Gasoline @ 60% and HOBC 40%)								
Kerosene	180.29	186.07	176.07	164.07	164.07	164.07	171.05	172.39
HSD	293.00	293.00	288.00	258.00	253.00	252.99	260.50	253.50
LDO	174.68	174.68	164.68	152.68	147.68	150.20	154.22	156.45
Aviation gasoline (100LL)								
JP-1:	-	-	-	-	-	-	214.00	214.00
i) For sale to PIA Domestic Flight								
ii) For sale to PIA foreign								
flights & foreign airline								
iii) For Cargo & Technical								
Landing Flights								
JP-4								
JP-8	-	-	-	-	-	-	192.56	194.03

<sup>- :</sup> Not available

TABLE 14.5
OIL SALE PRICES

								Rs/Ltrs
Date	1-8-23	16-8-23	1-9-23	16-9-23	1-10-23	16-10-23	1-11-23	16-11-23
EX-NRL/PRL KARACHI								
Motor Gasoline	272.95	290.45	305.36	331.28	323.38	283.38	283.38	281.34
HOBC (Automotive 100 Octane)								
Super (90 Octane) Blend of Motor								
Gasoline @ 60% and HOBC 40%)								
Kerosene	192.38	217.15	233.52	244.81	237.28	214.85	211.03	204.98
HSD	273.40	293.40	311.84	329.18	318.18	318.18	303.18	296.71
LDO	176.40	199.79	210.13	220.22	212.45	192.86	189.46	180.45
Aviation gasoline (100LL)								
JP-1:	219.30	249.58	264.30	277.51	264.92	241.91	237.51	230.40
i) For sale to PIA Domestic Flight								
ii) For sale to PIA foreign								
flights & foreign airline								
iii) For Cargo & Technical								
Landing Flights								
JP-4	-	-	-	-	-	-	-	-
JP-8	270.46	245.18	264.27	277.49	268.69	241.89	237.49	230.37

<sup>- :</sup> Not available

TABLE 14.5 OIL SALE PRICES

								Rs/Ltrs
Date	1-12-23	16-12-23	1-1-24	16-1-24	1-2-24	16-2-24	1-3-24	16-3-24
EX-NRL/PRL KARACHI								
Motor Gasoline	281.34	267.34	267.34	250.34	272.89	275.62	279.75	279.75
HOBC (Automotive 100 Octane)								
Super (90 Octane) Blend of Motor								
Gasoline @ 60% and HOBC 40%)								
Kerosene	201.16	191.02	188.83	186.86	186.62	186.67	190.01	188.66
HSD	289.71	276.21	276.21	276.21	278.96	287.33	287.33	285.56
LDO	175.93	164.64	165.75	164.83	166.86	171.44	170.30	168.18
Aviation gasoline (100LL)								
JP-1:	227.83	215.98	212.73	211.36	216.09	211.62	223.70	215.15
i) For sale to PIA Domestic Flight								
ii) For sale to PIA foreign								
flights & foreign airline								
iii) For Cargo & Technical								
Landing Flights								
JP-4	-	-	-	-	-	-	-	-
JP-8	227.85	215.95	213.49	211.04	208.62	211.09	212.67	212.25

<sup>- :</sup> Not available

Source: Hydrocarbon Development Institute of Pakistan (HDIP)

Note: HOBC price has been totally deregulated since 1-11-2016

TABLE 14.6 GAS SALE PRICES

	* w.e.f		w.e.f	Sectors	w.e.f
	1/9/2020		27-09-2023		01-02-2024
1. DOMESTIC		1. DOMESTIC		1. Domestic	
Upto 0.5 hm3 per month		Projected Category		Proteetcted Category	
Upto 1 hm3 per month		Upto 0.25 hm3 per month		Upto 0.25 hm3 per month	200
Upto 2 hm3 per month		Upto 0.5 hm3 per month		Upto 0.5 hm3 per month	250
Upto 3 hm3 per month		Upto 0.6 hm3 per month		Upto 0.6 hm3 per month	300
Upto 4 hm3 per month		Upto 0.9 hm3 per month	250	Upto 0.9 hm3 per month Non-Protectcted Category	350
Above 4 hm3 per month	1400	Non Projected Category Upto 0.25 hm3 per month	200	Upto 0.25 hm3 per month	500
		Upto 0.6 hm3 per month		Upto 0.5 hm3 per month	850
2. Bulk Consumers	780	Upto 1 hm3 per month		Upto 1 hm3 per month	1,250
2. Dani Consumers	700	Upto 1.5 hm3 per month		Upto 1.5 hm3 per month	1,450
3. Special Commercial (Roti Tanoor)		Upto 2 hm3 per month		Upto 2 hm3 per month	1,900
Upto 0.5 hm3 per month	110	Upto 3 hm3 per month		Upto 3 hm3 per month	3,300
Upto 1 hm3 per month		Upto 4 hm3 per month		Upto 4 hm3 per month	3,800
Upto 2 hm3 per month	220	Above 4 hm3 per month	3,100	Above 4 hm3 per month	4,200
Upto 3 hm3 per month	220				
Over 3 hm3 per month	700	2. Bulk Consumers	1,600	2. Bulk Consumers	2,900
		3. Special Commercial (Roti Tanoor)		3. Special Commercial (Roti Tanoor)	
4. Commercial		Upto 0.5 hm3 per month		Upto 0.5 hm3 per month	110
5. Ice Factories		Upto 1 hm3 per month		Upto 1 hm3 per month	110
6.General Industries		Upto 2 hm3 per month		Upto 2 hm3 per month	220
7. Export Oriented (General Industrial)		Upto 3 hm3 per month		Upto 3 hm3 per month	220
8. Export Oriented (Captive)		Over 3 hm3 per month	700	Over 3 hm3 per month	700
9. Captive Power (General Industry) CNG Region-I	1087	4. Commercial	1 650	4. COMMERCIAL	3,900
CNG Region-II	1350	4. Commerciai	1,030	4. COMMERCIAL	3,900
10. Cement		5. Ice Factories	1,650	5. ICE FACTORIES	3,900
			-,		-,
11. Fertilizer Companies		6. General Industries	1,200	6. General Industries	2,150
On SNGPL's System					
(a) For Feed Stock		7. Export Oriented (General Industries)	1,100	7. Export Oriented (General Industries)	2,750
i. Pak American Fertilizer Limited.	302				
ii. Dawood Hercules Chemical Limited	302	8. Export Oriented (Captive)	1,100	8. Export Oriented (Captive)	
iii. Pak Arab Fertilizer Limited	302				
iv. Pak China Fertilizer Limited		9. Captive Power (General Industry)	1,200	9. CAPITIVE POWER(General Industry)	
v. Hazara Phosphate Fertilizer Plant Limited	302				
		10. CNG Region	1,805	CNG Region	3,750
vii. ENGRO Fertilizer Limited	1156 0 70	11. Cement	1 905	CNG Region -II	
VII. E.VGRO FEI UIIZEI EIIIIITEU	0.54 0.70	11. Cement	1,003	C.VG Region -11	
On SSGCL's System		12. Fertilizer Companies	1,506	Cement	4,400
(i) a) Fauji Fertilizer Bin Qasim Limited	302	-			
		On SNGPL's System		12. FERTILIZER COMPANIES	
(b) For Fuel - All Fertilizer Companies	1023	(a) For Feed Stock		ON SNGPL 'S SYSTEM	
		i. Pak American Fertilizer Limited.	510	(a) FOR FEED STOCK	
On MARI'S SYSTEM		ii. Dawood Hercules Chemical Limited	510		1,597
(a) For Feed Stock		iii. Pak Arab Fertilizer Limited	510	(i) Agritech (Formerly Pak American Fertilizer Limited.)	
i. Engro Fertilizer Company Limited		iv. Pak China Fertilizer Limited	510		1,597
ii. Fauji Fertilizer Company Limited	302	v. Hazara Phosphate Fertilizer Plant Limited		(ii) Fatima Fert. (Formerly Dawood Hercules Chemical Ltd.)	
(Goth Machi/Mirpur Mathelo)		vi. ENGRO Fertilizer Limited		(iii) Pak Arab Fertilizer Limited.	
iii. Fatima Fertilizer Company Limited	US\$ 0.70	(b) For Fuel	1,500	(iv) Pak China Fertilizer Limited.	
iv. Foundation Power Company (Dharki) Limited		On SSGCL's System		(v) Hazara Phosphate Fertilizer Plant Limited.	****
		i) a. Fauji Fertilizer Bin Qasim Limited		(vii) ENGRO Fertilizer Limited.	US \$ 0.70
(b) For Fuel	1023		1,500	(b) FOR FUEL	
		On MARI's System		On SSGCL's System	1.505
12. Power Station (WAPDA's and KESCS's	0.55	(a) For Feed Stock	202	(i) a) Fauji Fertlizer Bin Qasim Limited.	1,597
i. WAPDA & KESC Power Station ii. WAPDA's Gas Turbine Power Station		i. Engro Fertilizer Company Limited	302	(b) FOR FUEL- ALL FERTILIZER COMPANIES	
n. WAPDA's Gas Turbine Power Station Nishatabad, Faislabad	857	ii. Fauji Fertilizer Company Limited (Goth Machi/Mirpur Mathelo)	302	ON MARI'S SYSTEM	
Nishatabad, Faisiabad			202	(a) FOR FEED STOCK	
		iii. Fatima Fertilizer Company Limited		(i) Engro Fertilizer Company Limited	
		(b) For Fuel iv. Foundation Power Company (Dharki)		(ii) Fauii Fertilizer Company Limited (Goth Machi/Mirpur	
		Limited	1,050	Mathelo)	
13. Independent Power Producers	857	···-		(iii) Fatima Fertilizer Company Limited	
•		13. Power Station (Wapda's And KESCS's		(b) For Fuel	
		(i) WAPDA & KESC Power Station	1,050	(iv) Foundation Power Company (Dharki) Limited	
		(ii) WAPDA's Gas Turbine Power Station	,	• • • •	
			1,050	12 POWER OF LEVON ON LINE LIE LAW PERSONS	
		Nishabad, Faislabad	,	15. FOWER STATION (WAFDA'S AND RESCS S	
		·		(i) WAPDA & KESC Power station	1,050
		Nishabad, Faislabad 14. Independent Power Producers		15. FOWER STATION (WAFDA'S AND RESCS S	1,050
		·		(i) WAPDA & KESC Power station	1,050 1,050

\*: Effective till to date

Source : Directorate General of Gas.