

Management Discussion & Analysis



Management Discussion and Analysis

State of the Global & Indian Economy

Indian Economy remained a bright spot with growth of 8.2% in FY 2023-24 (7% in FY 2022-23) while majority of the global economies continued to be marred down by slow growth rate on account of continuation of Russia-Ukraine conflict and a new war & crisis in the Middle East.

the other hand is expected to remain stable at 4.1% for the year 2024 and 2025.

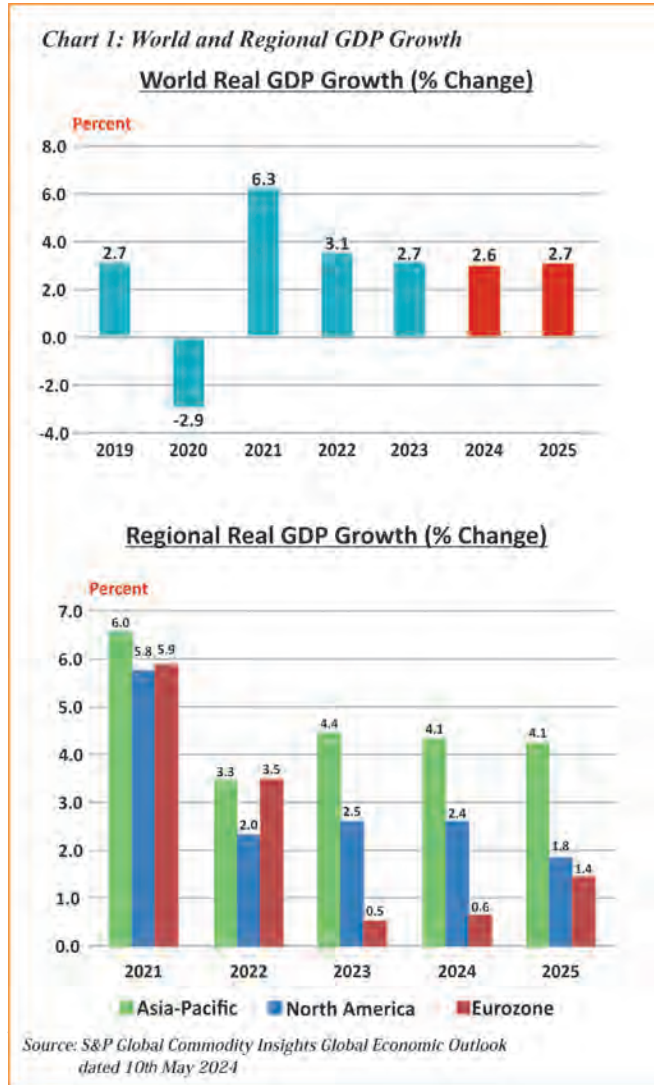
As regards to Indian economy, it has been doing very well and as per S&P projections, India's GDP is expected to achieve 6.1% in 2024 and 6.6% in 2025. The major sectors contributing to this growth are Manufacturing, Mining and Construction. Manufacturing will continue to play a crucial role in the future growth perspectives thereby providing necessary impetus for energy growth in the country.

INDUSTRY STRUCTURE AND DEVELOPMENTS

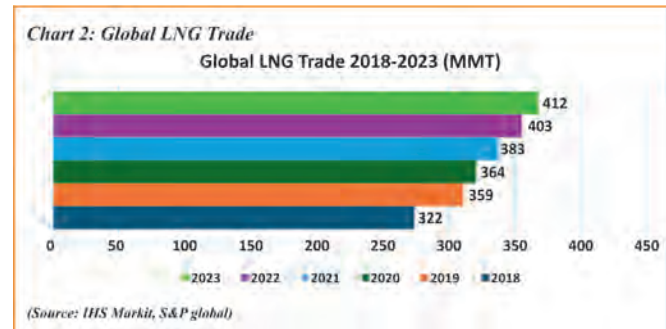
Global LNG Market

The global energy markets continued to be under crisis due to the continuation of Russia Ukraine war as well as conflict in Middle East which led to volatile energy prices in 2023.

As per IHS Markit, S&P global, Global LNG trade reached around 412 million MT in CY 2023 (refer Chart 2), which reflected 2.23% growth year-on-year (Y-O-Y).



As per S&P Global Outlook (Chart-1), World real GDP growth is expected to remain steady at 2.6% for 2024. The forecast for 2025 has been revised upward to 2.7% from the previous estimate of 2.6%. All the three major regions, namely Asia-Pacific, North America and Eurozone in the year 2024 are projected to have a stable growth rate like 2023. In the near future, North America's growth trajectory which is expected to be at 2.4% in 2024 is expected to decline to 1.8% in 2025 whereas Europe whose growth rate is expected to be at 0.6% in 2024 and increase rapidly to 1.4% in 2025. Asia Pacific on



In 2023, while European LNG demand remained broadly stable, however there was a significant redistribution of LNG flows within Europe. LNG imports shifted from Atlantic-facing countries such as the UK, France, and Spain to other nations, notably the Netherlands and Germany. This shift was driven by the development of new LNG import capacities in these countries, enabling direct deliveries and reducing dependency on neighboring countries for LNG reception.

In 2023, European supplies from US LNG grew stronger, with the US share of European LNG imports rising from the levels seen in 2022. Europe continued to be the top market for US-origin LNG, highlighting Europe's increasing reliance on American LNG amid broader geopolitical and market shifts.

Meanwhile, China overtook Japan to become the largest LNG importer in 2023, regaining the top spot it held in 2021 but lost in 2022. Despite a significant increase in its domestic natural gas production and a rise in Russian pipeline supplies, China's LNG imports grew reaching 72 million tonnes, although this was still 10% below the record level of 2021.

South-East Asian countries showed the second-largest demand growth in Asia, driven primarily by its increasing LNG-to-power needs. Thailand has doubled its imports and has become major LNG growth center in Asia.

However, the growth in LNG imports by China and Thailand was partly offset by declines in demand from Japan and South Korea owing to increased nuclear availability.

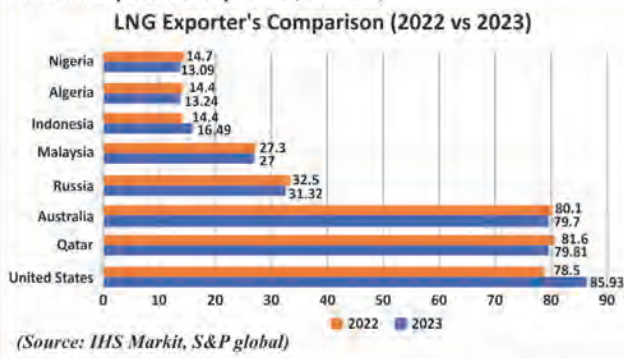
Global LNG Trade

United States of America (USA) in the year 2023 became the largest exporter of Natural Gas and its record production was majorly driven by two factors: the return of Freeport LNG to full service, which added 6 MT and the full year output of Venture Global LNG’s Calcasieu Pass facility that contributed 3 MT more than in 2022. Similar to 2022, Europe remained the primary destination for US LNG exports in 2023, accounting for 66% of US exports, followed by Asia at 26% and Latin America and the Middle East with a combined 8%.

As per Chart 3 and 4, United States emerged as the largest exporter in year 2023 (85.93 MMT). Qatar (79.81 MMT) and Australia (79.7 MMT) were almost tied for the position of the 2nd largest exporter in 2023. Russia (31.32 MMT) was at the fourth place.

While Qatar and Australia’s production remained almost similar between 2022 and 2023 but US LNG exports have increased significantly with majority of the volumes flowing to European Markets.

Chart 4: Exporters Comparison (MMTPA)



LNG Imports:

Basis S&P global estimates, China (Mainland) emerged as the biggest LNG importing region in the world in 2023, accounted for 18% of global LNG demand. Japan stood at second position with its share declining to 16% in 2023 from around 18% in 2022. The number of importing markets rose to 48, with three new entrants (Hong Kong, Philippines & Vietnam). Also, during the year 2023, South Korea imported 45.12 MMT, which accounted for 11% of the total LNG trade. India imported 22.59 MMT accounting for 6% of the total LNG trade, followed by Taiwan, France, Spain, United Kingdom, and Netherlands as depicted in Chart 5 (A) and 5 (B).

Chart 3 : 2023 Export Country (MMTPA and Percentage)

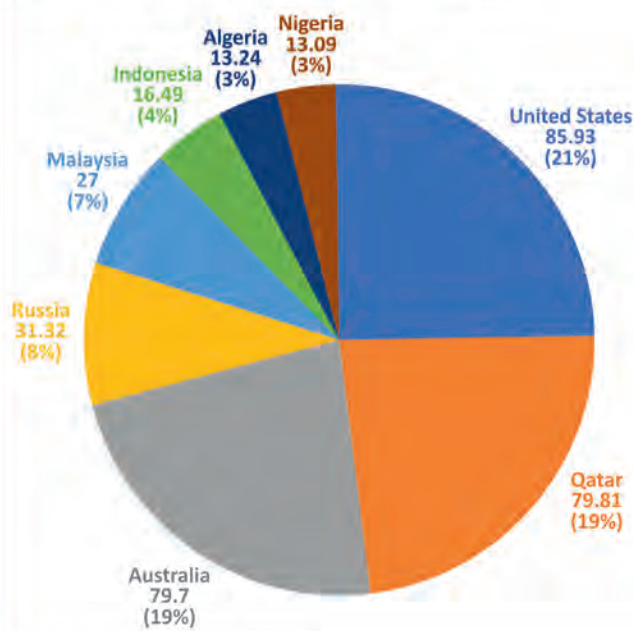
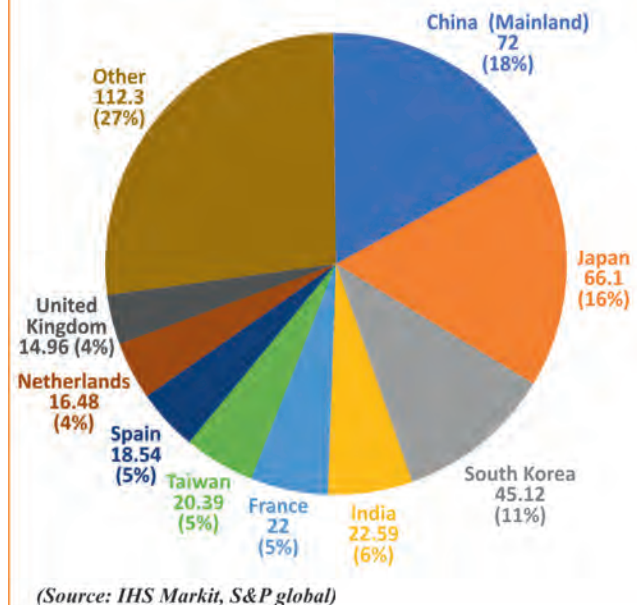
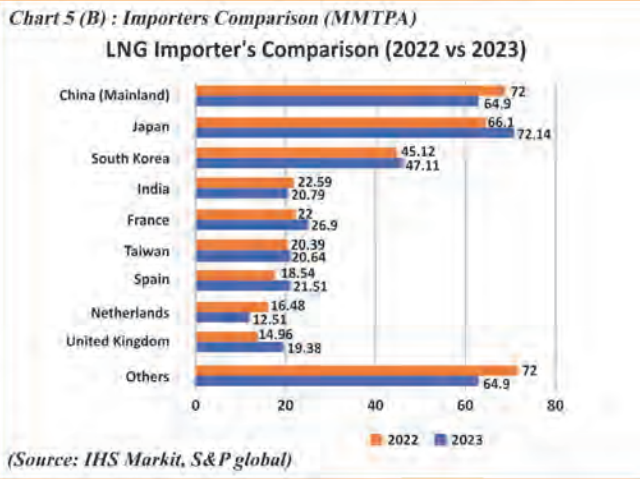


Chart 5 (A) : 2023 Import Country (MMTPA and Percentage)





LNG Pricing

When it comes to LNG spot pricing, the global LNG spot market faced extreme price volatility over the last 3 years due to various geopolitical events as shown in Chart 6 below, which depicts Platts Japan Korea Marker (JKM) spot market price assessment, and the Dutch TTF (European gas hub price) front month price. However, in 2023, LNG spot market prices declined and have shown stability with not much volatility. This was due to the fact that after the initial shock of Russian gas supply disruption to Europe, European Union implemented various measures to manage the gas supply deficit. For the 2023/24 winter season, Europe had more time to prepare for heating demand and kept its gas storage levels continually high throughout the year. As the winter season in Europe was mild and required less gas consumption for heating, it resulted in keeping the Dutch TTF gas price in Europe below \$20 / MMBTU. European Union also had gas demand control measures in place and started to add new

LNG import infrastructure to expand LNG imports.

Following the all-time high LNG prices in 2022, LNG prices moderated significantly across all key markets in 2023. The steep demand declines recorded in Europe and mature Asian markets provided downward pressure on gas prices. Correlation between Asian and European prices continued to be strong amid an increasingly globalised gas market.

Asian spot LNG prices followed a similar trajectory. Platts JKM prices declined by about 60% compared with 2022 and averaged around \$14/MMBTU – in 2023. Improving LNG supply availability and lower competition for LNG from Europe softened prices.

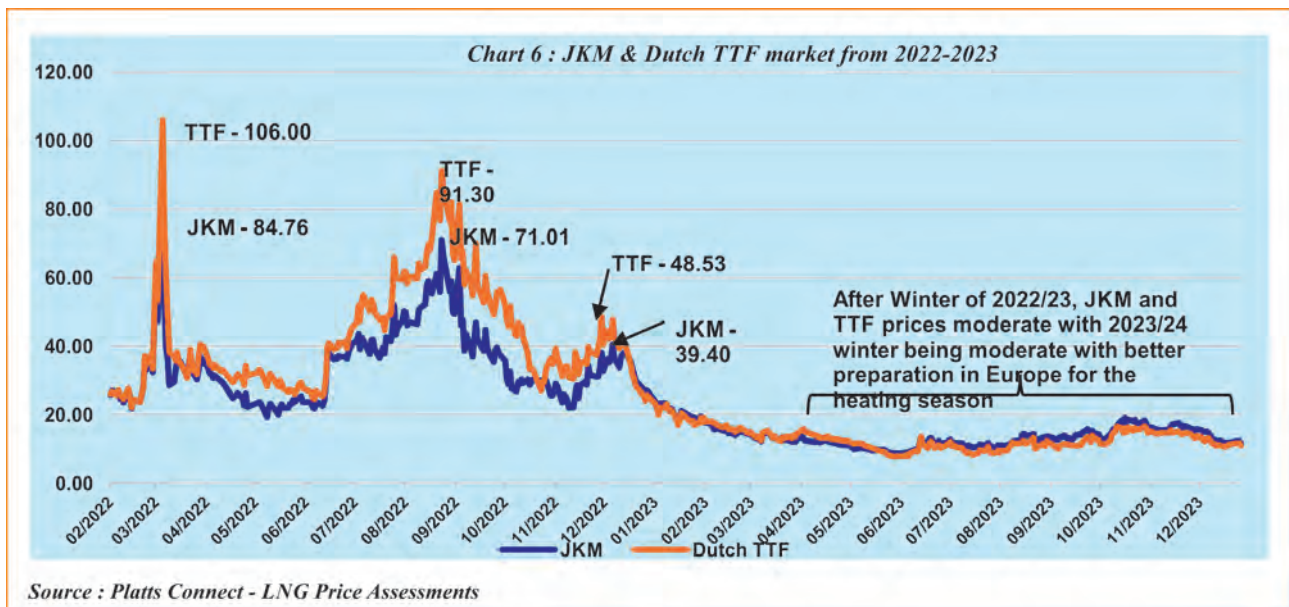
The correlation between TTF and Platts JKM remained strong and averaged close to 0.9. This reflects the interconnected nature of regional import markets amid the growing share of destination-flexible LNG supplies.

Europe and Asia competition for LNG

There has been a significant decline in gas consumption in Europe and the major reason for it was the enactment of the EU regulation encouraging a voluntary 15% reduction in gas demand, effective from April 1, 2023, to March 31, 2024. Additionally, the rise in renewable energy production, especially solar, led to a decrease in the reliance on gas within the EU's power generation mix.

Natural gas demand in Asia returned to growth in 2023 and expanded by an estimated 6% y-o-y during the 2023/24 winter season of the northern hemisphere. This growth was largely driven by a strong increase in gas demand in China, India, and emerging Asian markets.

Based on relatively stable gas demand, robust pipeline gas imports and record end-of-winter storage fill levels, European LNG imports are expected to decrease in 2024.



Natural Gas and LNG in India

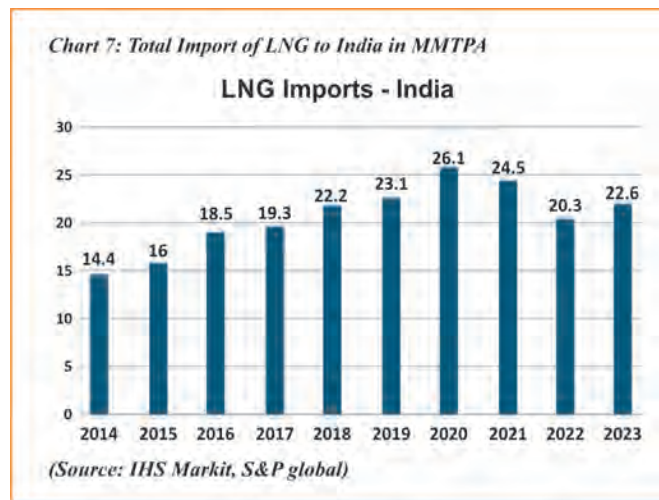
India's current share of per capita energy consumption is around one third of world's average. Current energy consumption of India is around 6% of world's total primary energy consumption against population of around 18% (1.40 billion plus) of the world.

Total natural gas consumption in India in FY 2023-24 recovered and averaged 188 MMSCMD as compared to 161 MMSCMD in FY 2022-23, more than 17% (27 MMSCMD) increase.

India's LNG Imports

Year 2023 experienced much stable and lower LNG spot prices, which led to much higher LNG imports and gas consumption as compared to year 2022.

As a result of increase in LNG consumption, LNG imports in price sensitive Indian market increased from 20.3 MMT in 2022 to 22.6 MMT in 2023. India's LNG Imports as shown in Chart 7 below, there was an increase of 2.3 MMT of LNG imports in the year 2023 as compared to immediately preceding year 2022.



OPPORTUNITIES, THREATS, RISKS AND CONCERNS

Long term LNG contracts providing stability to growing Natural Gas/LNG market in India

In India, Natural Gas is majorly consumed in Fertilizers, Refineries, Petro-chemicals, Industries and City Gas. These sectors require reliability of supply and affordable price at predictable & competitive terms vis a vis alternative fuel.

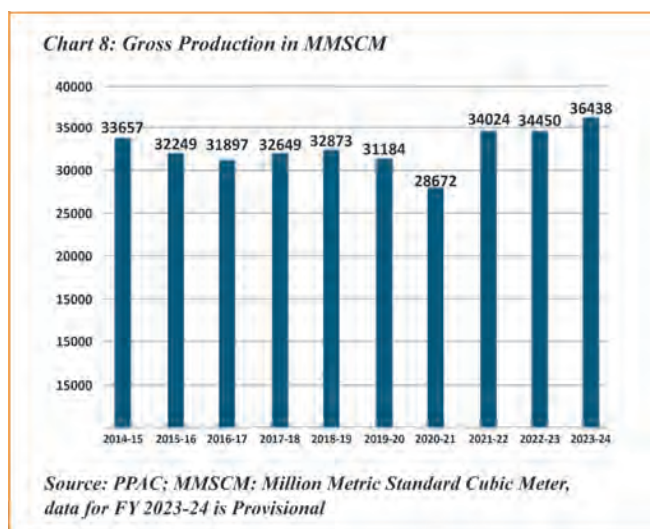
India traditionally relied on the long-term gas sourcing. India has long term LNG contracts of around 20 MMTPA, which constitutes approximately 90% of around 22.6 MMTPA LNG imports in the CY 2023.

Indian gas market, which is one of the few growing gas markets, can be developed in a better way by having long term contracts rather than relying heavily on spot supplies,

prices of which are highly volatile and do not provide energy security.

In 2024, PLL has renewed the existing LNG Sales and Purchase Agreement (SPA) with Qatar Energy for purchase of 7.5 MMTPA of LNG supplies for another 20 years starting from 2028 till 2048. In FY 2023-24, other players like GAIL and IOCL have also tied up LNG on long term basis.

Developments in transportation including LNG as a fuel, infrastructure, industrial, power generation facilities, refineries, fertilizer units and allied products and services are expected to provide much boost to gas demand in India in the coming years. As India moves forward as a gas-based economy, LNG is going to play a major role to cater the growing gas demand in India.



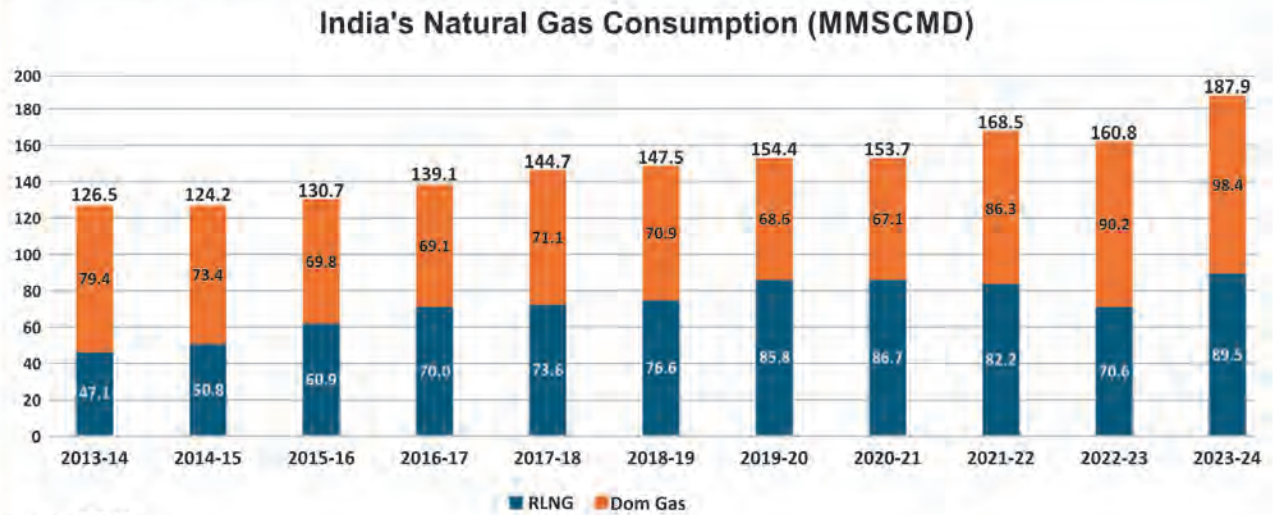
Gross production of Domestic Natural Gas

Chart 8 above shows that the domestic gross production of 34,450 MMSCM (94.38 MMSCMD) in FY 2022-23 increased to 36,438 MMSCM (99.83 MMSCMD) in FY 2023-24, registering a growth of 5.8% (1988 MMSCM). However, the domestic gas production from new fields have short asset-life and is expected to plateau in coming 3 to 4 years and then starting to decline.

Gas Consumption

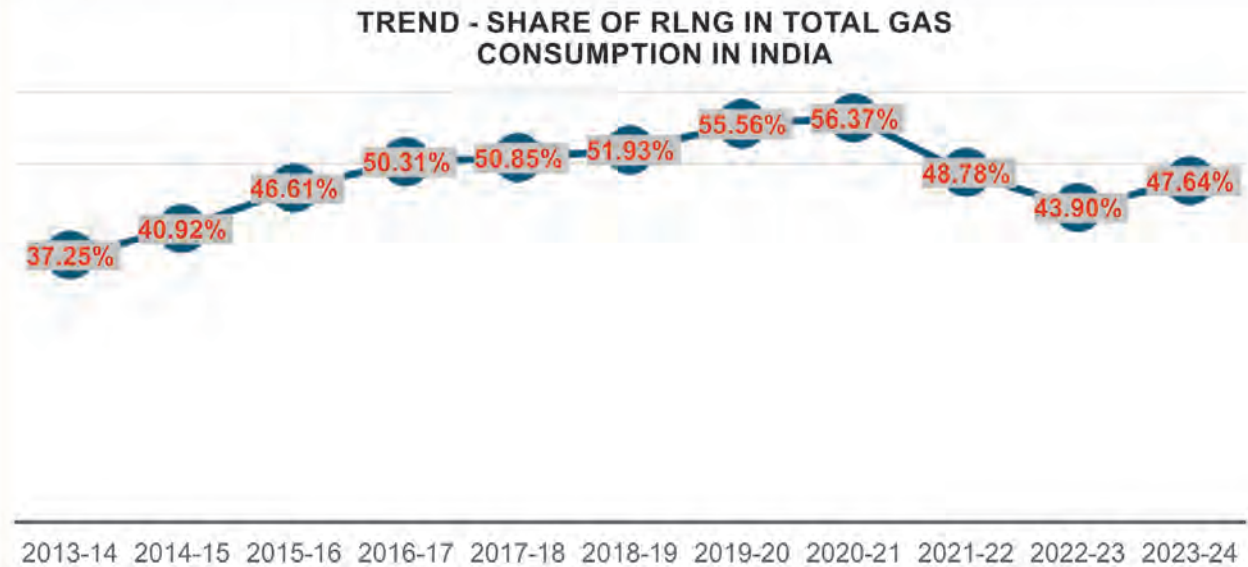
India's total natural gas consumption, share of LNG in gas consumption and sector wise gas consumption is depicted at charts 9A, 9B and 9C respectively. The share of LNG in India's gas consumption stood at around 47.64% in the FY 2023-24. As the LNG and global gas markets have stabilized after a few volatile years, Indian LNG imports have started to recover.

Chart 9A: India's Natural Gas Consumption (MMSCMD)



Source : PPAC

Chart 9B : India's Natural Gas Consumption - Trend in share of RLNG in Total Gas Consumption in India



Source : PPAC



Chart 9C: Average sector wise gas consumption

Average Sectoral Consumption (MMSCMD) 2023-24				
Sector	RLNG	Dom Gas	Total	% Share of sector in total gas consumption
Fertilizer	49.23	8.28	57.50	31%
Power	7.04	17.77	24.81	13%
City Gas	9.43	27.43	36.86	20%
Refinery	10.08	5.87	15.95	8%
Petrochem	4.24	3.05	7.29	4%
Others	9.48	35.98	45.46	24%
Total	89.50	98.37	187.87	100%

Source: PPAC

Gas Infrastructure Development

The Government of India has been focusing on expanding the country’s natural gas infrastructure, including the development of pipeline networks, LNG Regasification terminals and city gas distribution (CGD) networks.

One important component of the integral gas infrastructure in India is the Regasification Terminals. Since India is a gas deficit country and relies heavily on LNG imports, Regasification Terminals play an important role in the country’s gas development plans. Current regasification capacity in India is 47.7 MMTPA. There are new Regasification projects under construction at various locations namely Chhara & Jafrabad, PLL’s greenfield LNG terminal at Gopalpur on East Coast of India and expansion of PLL’s existing regasification terminal at Dahej from 17.5 MMTPA to 22.5 MMTPA. It is expected that with completion of all these new terminals and expansion projects, the total regasification capacity in India will increase from 47.7 MMTPA to 66.7 MMTPA. In order to achieve 15% share of Natural Gas in the energy basket of India by the year 2030, the country would require around 150 MMTPA of LNG re-gas infrastructure at an average capacity utilization of 80%. Thus, creation of additional capacity of over 83 MMTPA would be required.

Further, India is adding another 10,404 kms natural gas pipeline network to its current length of about 24,881 kms. Further, after the completion of 12 and 12A CGD round bidding, the CGD network shall cover almost entire part of the country, except Andaman and Nicobar Islands and Lakshadweep and other smaller islands. With such accelerated progress in City Gas Distribution network, access to cleaner cooking fuel to households, other industrial and commercial facilities as well as fuel for transportation will become more rapid.

Development of these infrastructure projects would enhance the accessibility and availability of natural gas across different regions of India.

Government Policies and Initiatives to increase share of Natural Gas - Exploration and Production

In order to encourage an increase in domestic oil and gas production in the country, the Government of India has carried out a series of reforms in recent few years in the Exploration and Production sector of India which include Hydrocarbon Exploration and Licensing Policy (HELP), Discovered Small Field (DSF) Policy, Open Acreage Licensing Policy (OALP), policy to promote and incentivize Enhanced Oil Recoveries (EOR), policy framework for exploration and exploitation of Coal Bed Methane (CBM) from areas under Coal Mining Lease and early monetization of CBM.

Pricing

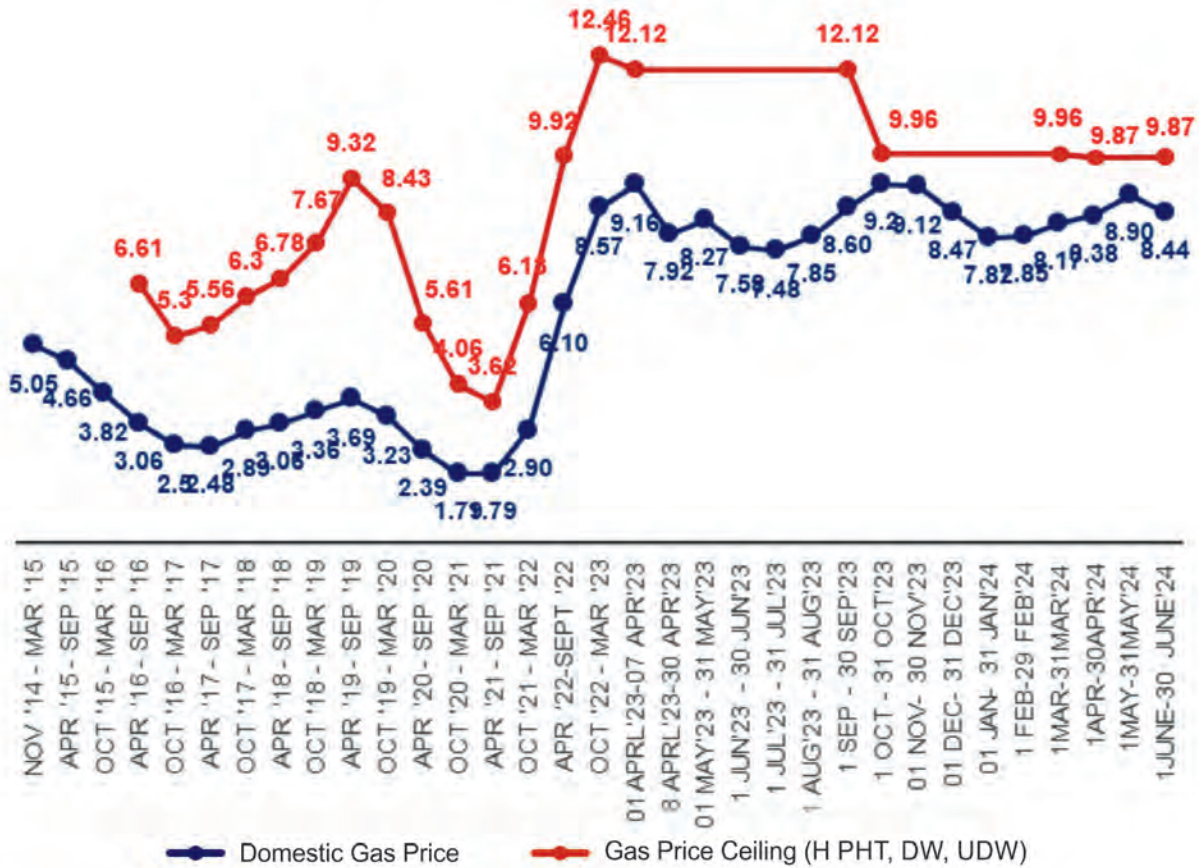
The Government of India based on the recommendations of Kirit Parikh Committee notified changes to the New Domestic Gas Pricing Guidelines, 2014, wherein Domestic Natural gas Price (APM price) shall be 10% of the Indian Crude Basket Price as defined by Petroleum Planning and Analysis Cell (PPAC) from time to time. For the gas produced by ONGC & OIL from their nomination fields, the APM price shall be subject to a floor and a ceiling. The initial floor and ceiling prices shall be \$4/MMBTU and \$6.5/MMBTU respectively. The ceiling price was fixed for initial two years i.e. 2023-24 and 2024-25 and then will be increased by \$0.25/MMBTU each year. A chart of India’s Domestic Natural Gas price (APM) and gas price ceiling (High Pressure High Temperature (HPHT), Deep Water (DW), Ultra Deep Water (UDW)) since November 2014 is depicted at Chart 10.

Unified gas pipeline tariff

The introduction of a unified tariff system has resulted in making gas affordable in far flung demand centres and is expected to provide substantial push to gas demand and transition from other fuels.

Chart 10 : India's Domestic Natural Gas Price History since November 2014

Domestic Gas Price (\$/MMBTU)



The major threats and risks associated with development of liquified natural gas market in India include delay in start-up of new LNG projects, substantial increase in domestic gas production, delay in connectivity of pipelines with LNG terminal, any adverse regulation/policy, delay in implementation of GST on natural gas sector, geopolitical risks which could create turbulence in international LNG prices.

SEGMENT-WISE OR PRODUCT-WISE PERFORMANCE

The financial year 2023-24 marked a pivotal phase in the evolution of the global LNG markets, characterized by modest growth and the entry of new importers with US becoming dominant LNG exporter. Despite continuation of Russia-Ukraine war and a new geopolitical crisis in Middle East, the LNG markets witnessed price decline and stability along with revival of economic activities across the globe. Following the all-time high LNG prices in 2022, LNG prices moderated significantly across all key markets in 2023.

The decline in LNG prices supported increase of LNG imports and its consumption in India which led to increase in utilisation levels of Dahej and Kochi Terminals of your Company.



Operational Performance			
Particulars	Plant	2023-24	2022-23
Installed Regasification capacity (MMTPA)	Dahej	17.5	17.5
	Kochi	5	5
	Total	22.5	22.5
Total send out (TBTU)	Dahej	864.90	703.41
	Kochi	54.05	48.25
	Total	918.95	751.66
Total Send out (MMT)	Dahej	16.71	13.61
	Kochi	1.04	0.93
	Total	17.75	14.54
Capacity utilization (%)	Dahej	95.5	77.8
	Kochi	20.8	18.6
Total cargos unloaded (Numbers)	Dahej	254	212
	Kochi	17	14
	Total	271	226
Total LNG truck Filled (Numbers)	Dahej	9266	6987
	Kochi	2230	1494
	Total	11496	8481

Major Business Initiatives by Petronet LNG Limited

On 06th February 2024, Petronet LNG Limited executed a long-term LNG Sale Purchase Agreement for purchase of around 7.5 MMTPA LNG with Qatar Energy for a period of 20 years.

This is pursuant to extension of an existing LNG SPA for LNG supply of around 7.5 MMTPA on FOB basis, signed on 31st July 1999 for supplies till 2028. Under the new agreement, LNG supplies will be made on delivered (DES) basis commencing from 2028 till 2048.

Similar to earlier agreement of 1999, the LNG volumes under the new SPA shall also be offtaken by GAIL (India) Limited (60%), Indian Oil Corporation Limited (30%) and Bharat Petroleum corporation Limited (10%) after regasification primarily from Dahej Terminal of PLL on substantially back-to-back basis.

This LNG SPA between PLL and QatarEnergy will ensure energy security of India and assure continued supplies of regasified LNG to major consuming sectors like fertilisers, CGD, refineries & petchem, power and other industries.

Another major business initiative taken by Petronet LNG Limited is the foray into the petrochemical sector. PLL board has approved the setting up of a petrochemical complex of 750 KTPA of PDH and 500 KTPA of PP including ethane and propane handling facilities at a cost of Rs. 20,685 crores. Petronet LNG has received the Environmental Clearance from

the Ministry of Environment, Forest and Climate Change for the project and foundation stone for the project was laid by Hon'ble Prime Minister of India on 12th of March, 2024. The project would bring revenue generation from sale of Polypropylene, Propylene, Propane, Hydrogen and Ethane. The plant is expected to enhance the self-sufficiency of the country in the field of petrochemicals. The diversification towards petrochemicals comes at a time when the government is looking at making the country a petrochemical hub.

OUTLOOK

Indian Natural Gas Sector

India's natural gas demand is expected to increase steadily, driven by factors such as young population equipped with education and high aspiration, tremendous infrastructure growth including urbanization, industrialization, and government policies promoting cleaner energy sources. Considering India's commitment of achieving a net zero target by 2070 and in order to fulfil Hon'ble Prime Minister's vision of a gas based Indian economy, natural gas is poised to occupy a greater proportion in India's energy mix in the coming future.

India, to fuel its gas sector growth is required to have long-term LNG contracts to ensure security of supply and price stability for the domestic gas market. It is expected that new

supply additions in the LNG market will moderate prices and this will lead to a buyer's market in the second half of this decade. This will put India in an advantageous position to source more LNG on better commercial terms. Further, considering the intermittent nature of Renewables (solar and wind), the role of Natural Gas in power generation is likely to become increasingly important, as Renewable energy capacity is rapidly expanding in India. In this energy transition journey, Natural Gas/LNG will be playing a critical role for the next four to five decades, where it ensures energy security and at the same time supports decarbonization.

Indian Petrochemical Sector

India has a huge demand for chemical and petrochemical products and it aspires to become a global manufacturing hub for chemicals & petrochemicals. With the increasing demand, India is projected to contribute to more than 10 percent of the incremental global growth in petrochemicals over the next decade. The per capita consumption of polymers is about one-third of the global average. The key drivers for petrochemical industry growth include robust GDP outlook, under penetrated markets, rapidly growing end-user industries, and significant import substitution opportunity.

A large share of India's petrochemicals capacity continues to be refinery integrated due to limited feedstock availability. Historically, naphtha has been the dominant feedstock for Indian producers. This is in contrast with other regions such

as the Middle East and US, where abundant gas supply has led to a development of stand-alone petrochemicals assets. However, major new greenfield petrochemicals plants in India are increasingly adopting mixed feed in their assets. PLL's upcoming PDHPP plant at Dahej is based on Propane as feedstock.

Human Resources

Your Company believes that every employee has extraordinary potential and unlocking any such untapped talent through meaningful intervention is the company's path to excellence. To sustain robust transitions and pave the way for dynamic performances, the Company relies on a talented pool of people who are determined to foster excellence through a performance-driven work culture. The Company emphasises on people development, employee engagement and continuous learning and allows human resources to always remain poised to fulfil professional as well as organisational objectives. As on 31st March 2024, there were 521 employees including 3 Wholetime Directors.

Industrial Relation environment is always congenial and since inception, there has been no instances of disharmony at all work locations.

Operational Performance

The operational performance of your Company for the year 2023-24 is as follows:

Particulars	UoM	2023-24		2022-23	
		Quantity	Revenue from operations (Rs. crore)	Quantity	Revenue from operations (Rs. crore)
Sale of RLNG	TBTU	476	49,379	474	57,409
Regasification services	TBTU	443	2,548	278	1,518
Other operating revenue					
Use or Pay charges	-	-	610	-	849
Others	-	-	191	-	123

Revenue from operations on account of sale of RLNG in FY 2023-24 was Rs. 49,379 Crore as against Rs. 57,409 Crore in FY 2022-23, reflecting a decline of 14%, primarily due to fall in LNG prices. Total quantities sold in FY 2023-24 were 476 TBTUs against 474 TBTUs in FY 2022-23.

The Company's revenue from regasification services in FY 2023-24 was Rs. 2,548 Crore as compared to Rs. 1,518 Crore in FY 2022-23, showing a surge of 68% on account of increase in volume from 278 TBTUs in FY 2022-23 to 443 TBTUs in FY 2023-24.

Financial Performance

Particulars	FY 2023-24 (Rs. crore)	FY 2022-23 (Rs. crore)	Change Increase/(Decrease)
Revenue from operations	52,728	59,899	(12%)
Profit before tax (PBT)	4,757	4,335	10%
Profit after tax (PAT)	3,536	3,240	9%

Financial Parameter

Particulars	FY 2023-24 (Rs. crore)	FY 2022-23 (Rs. crore)
Capex	797	960
Reserves and Surplus	15,463	13,435
Net worth	16,963	14,935

Ratio Analysis

Particulars	FY 2023-24	FY 2022-23
Trade Receivables Turnover Ratio (Net sales/ Average Trade Receivable)	14.12	18.36
Inventory Turnover Ratio (Net sales/ Average Inventory)	40.27	69.26
Debt Equity Ratio*	-	-
Interest Coverage Ratio*	-	-
Current Ratio (Current Assets/ Current Liabilities)	3.10	4.04
Operating Profit Margin Ratio	9.57%	7.79%
Net Profit Margin Ratio	6.71%	5.41%
Return on Net Worth (PAT/ Average Net Worth)	22.17%	22.85%
Return on Capital Employed (EBIT/ Capital Employed)	24.51%	24.58%

*As there is no long-term debt, the ratios are NA

During FY 2023-24, your Company achieved turnover of Rs. 52,728 Crore as against Rs. 59,899 Crore in FY 2022-23. Your Company registered highest ever PBT and PAT of Rs 4,757 Crore and Rs 3,536 Crore for the FY 2023-24 as against PBT and PAT of Rs 4,335 Crore and Rs 3,240 Crore in FY 2022-23. Your Company was able to achieve robust financial results riding on higher capacity utilization, stable LNG prices, and achieving efficiency and optimization in its operations.

Riding on the robust financial results, the net worth of your Company has increased from Rs.14,935 Crore as on 31st March 2023 to Rs. 16,963 Crore as on 31st March 2024, registering a growth of around 14%, post disbursement of dividend of Rs. 10 per share to the shareholders.

With the increase in PAT by 9% and growth in Net worth by 14%, the Return on Net Worth (ROE) has declined to 22.17% in FY 2023-24 as compared to 22.85% in FY 2022-23. The Return on Capital Employed (RoCE) has largely remained at the same level.

The inventory turnover ratio decreased from 69.26 times in FY 2022-23 to 40.27 times in FY 2023-24 due to increase in inventory and lower LNG prices.

ADEQUACY OF INTERNAL FINANCIAL CONTROLS WITH REFERENCE TO THE FINANCIAL STATEMENTS

The Company has a robust system of the Internal Financial Controls (IFC) and its monitoring. The IFC framework and the Risk Matrix (RCM) for various business processes are in place and are reviewed consistently by the management and Audit Committee. Independent professional agency is

engaged for IFC testing. The IFC system ensures compliance of all applicable laws and regulations, optimum utilisation and safeguard of the company's assets and accuracy / completeness of financial records/reports.

CAUTIONARY STATEMENT

Statements in the Board's Report and Management Discussion & Analysis, describing the Company's objectives, strategies, projections and estimates, expectations, etc. may be "forward looking statements" and progressive within the meaning of the applicable laws and regulations. By their nature, forward-looking statements require your Company to make assumptions and are subject to inherent risks and uncertainties. Forward looking statements which involve several underlying identified/non identified risks and uncertainties that could cause actual results to differ materially from the expectations. Critical factors that could influence the Company's operations include global and domestic demand and supply conditions, changes in Government regulations/tax laws, economic developments within the country and factors such as litigation and industrial relations. Since the factors underlying these assumptions are subject to change over time, the estimates on which they are based, are also likely to change accordingly. These forward-looking statements represent only your Company's current intentions, beliefs and expectations. Your Company assumes no obligation to revise or update any forward-looking statement, whether as a result of new information, future events, or otherwise. Readers are cautioned not to place undue reliance on the forward-looking statements.