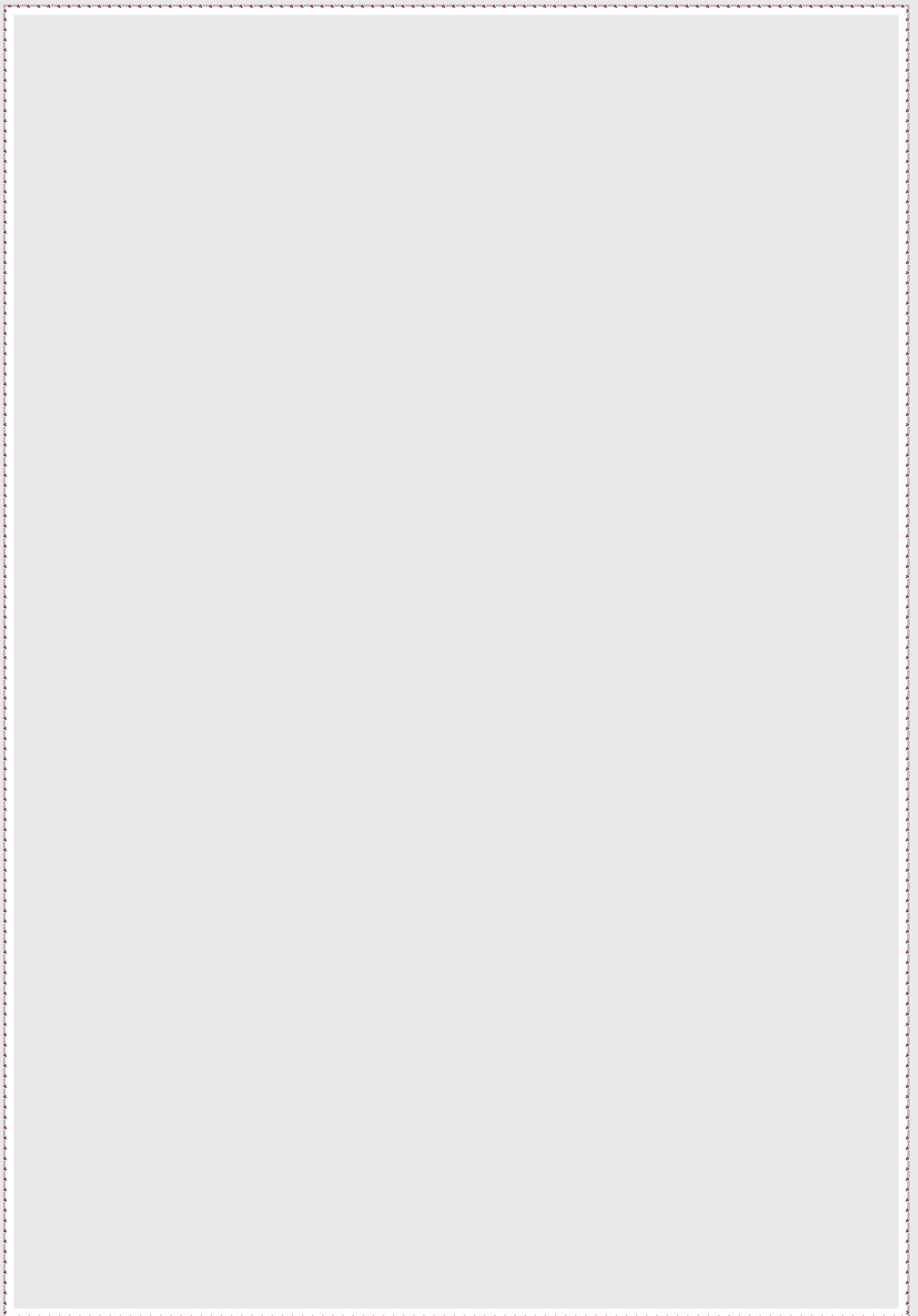


6

Chapter

Consumption of Energy Resources





CHAPTER 6

Consumption of Energy Resources

Introduction

The study of energy consumption patterns within any economy is essential to understand how final demand drives energy use. The SEEA – Energy highlights that "resource uses and environmental pressures at the level of production are determined by final use, which initiates the production chain." This implies that final consumption plays a significant role in shaping resource utilization and environmental impact.

In the context of climate change, understanding various consumption activities such as heating of buildings, electricity use, industrial processes, and transportation—activities involving combustion processes—is critical. Global economies are increasingly measuring and tracking energy-related air emissions, as most economic activities are linked to the combustion processes needed for energy production.

Total Energy Consumption (TEC) and Its Importance

The International Energy Agency (IEA), where India has been an associated member since March 2017, defines TEC as the total energy consumed in end-use sectors and for non-energy purposes, excluding energy used in transformation processes. TEC serves as an indicator of energy efficiency and can help identify areas requiring policy adjustments for sustainability. This chapter presents the total consumption of energy resources along with sector wise end use of different energy resources and products in India.

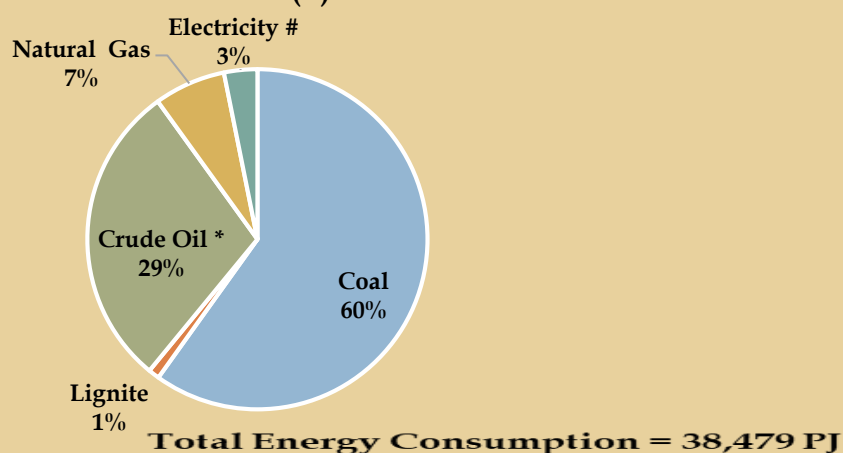
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Key Highlights of Energy Consumption

6.1 Source wise Consumption of Primary Energy Resources

Figure 6.1 shows the consumption of energy in petajoules from Coal which accounted for 60% of the total consumption during 2023-24(P) followed by Crude Oil (29%) and Natural Gas (7%).

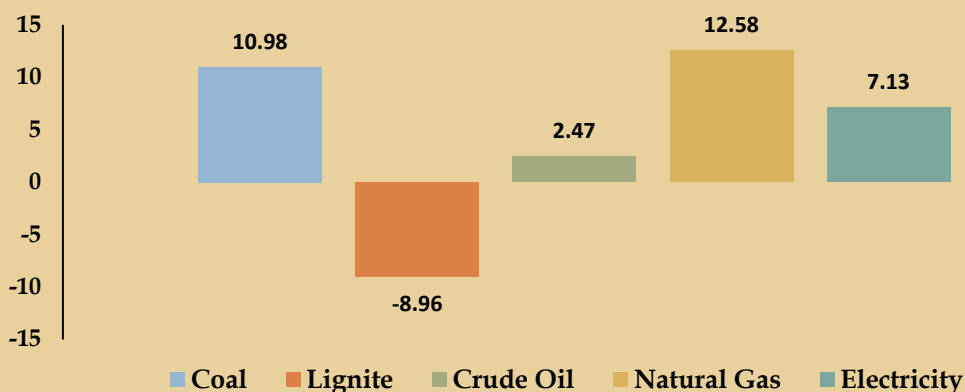
Fig 6.1: Source wise consumption of Primary Energy during 2023-24(P)



#: Electricity from Hydro, Nuclear and other Renewable energy sources (Utility)

Figure 6.2 shows the India's overall energy consumption trend for FY 2023-24 (P), highlighting a steady increase across all major energy resources. The figure shows a significant **growth in coal consumption**, which remains the dominant energy source, along with an upward trend in **electricity** and **natural gas** consumption. While **lignite** consumption slightly decreased, reflecting a shift in energy preferences, **crude oil** consumption experienced moderate growth.

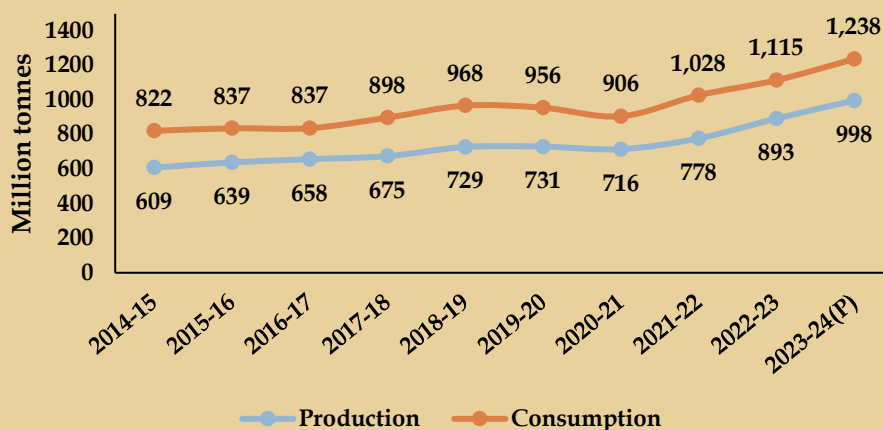
Fig 6.2 : Growth rate of consumption of energy resources during FY:2023-24(P) w.r.t 2022-23



Chapter 6: Consumption of Energy Resources

India, being one of the largest producers and consumers of coal, has witnessed a significant

Fig 6.3 : Yearwise Trend of Production and Consumption of Coal in India during FY:2014-15 to FY:2023-24(P)



growth in coal consumption over the years as shown in figure 6.3.

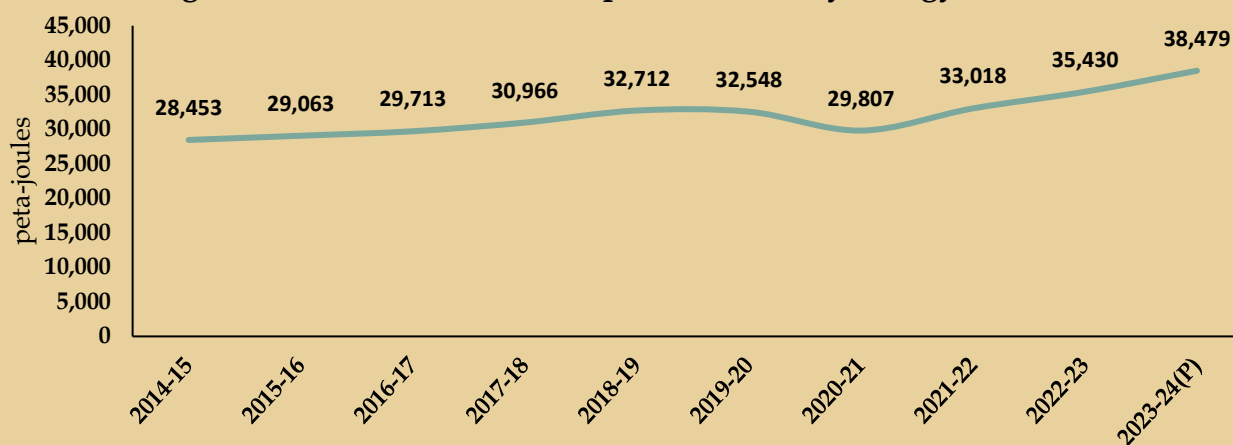
After a notable increase of 7.54% in FY 2021-22 compared to FY 2019-20, the trend of rising demand and consumption continues. In FY 2023-24(P), coal consumption has grown by 10.98% over FY 2022-23, reflecting

the ongoing strong demand across various sectors, particularly in power generation (Table 6.1).

6.2 Total consumption of Primary Energy in India

Figure 6.4 shows the total energy consumption of Primary energy Resources (Coal, Lignite, Crude Oil, Natural gas and Electricity) increased from 28,453 Petajoules (PJ) in 2014-15 to 38,479 Petajoules (PJ) in 2023-24 (P), reflecting a notable rise. Specifically, from 35,430 PJ in 2022-23, the consumption surged by 8.60% in FY 2023-24 (P). Among the various energy resources, Coal and Lignite accounted for the highest growth, with a combined increase of approximately 11.87% during FY 2023-24 (P) compared to the previous year.

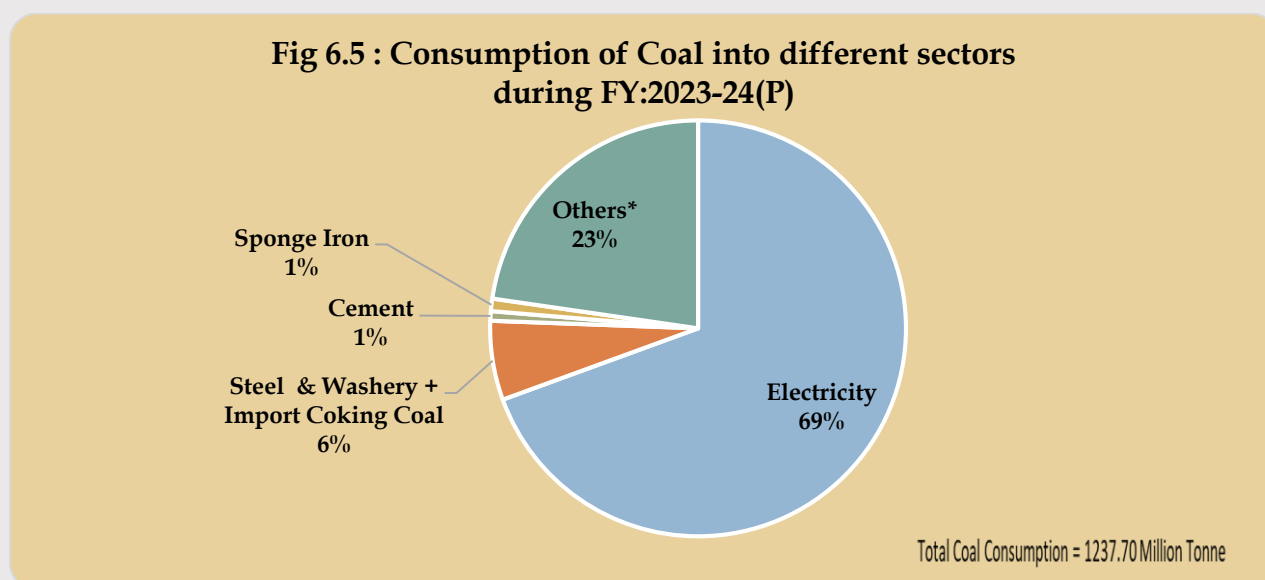
Fig 6.4 : Trend of total consumption of Primary Energy in India



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6.3 Consumption of Coal into different sectors

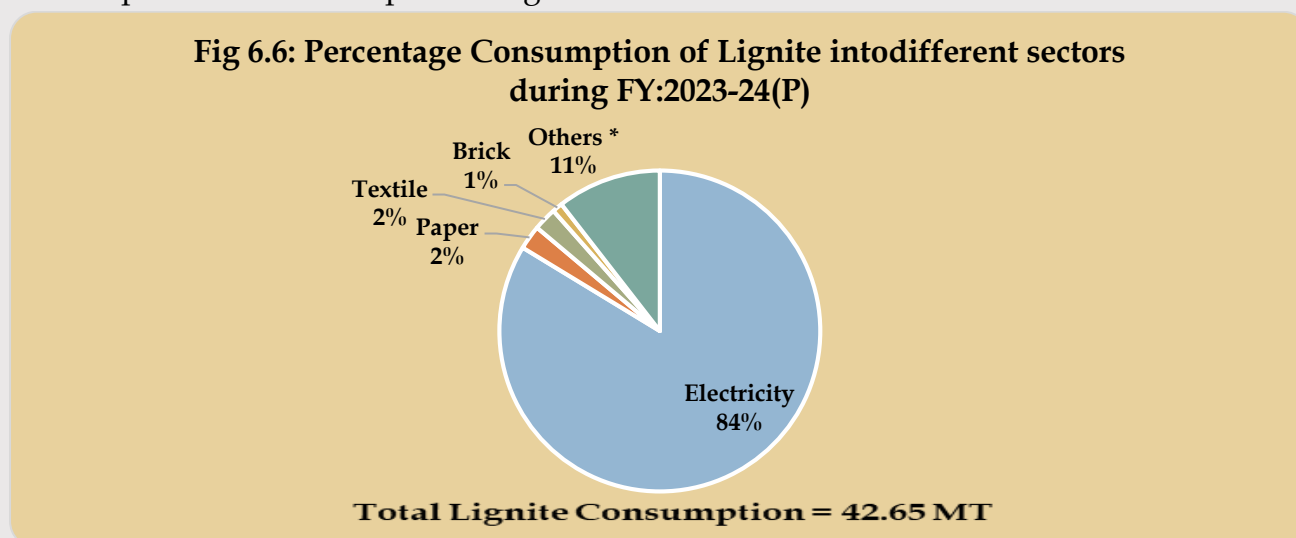
Figure 6.5 indicates that **Electricity** is the largest consumer, using **69%** of the total coal consumed in the country. Cement, Paper and Textile sectors are declining, non-coking coal imports and others are becoming increasingly important with significant growth in recent years (Table 6.2). The consumption of coal into different sectors is shown below:



#Others include Non-coking coal, Paper (0.08%), Textiles (0.01%), Fertilizers and Chemicals (0.06%), Bricks (0.01%) and colliery consumption, jute, coal for soft coke & other industries.

6.4 Consumption of Lignite into different sectors (in percentage)

Figure 6.6 indicates that electricity is largest consumer, using 84% of the total lignite consumption. The consumption of lignite into different sectors is shown in below:



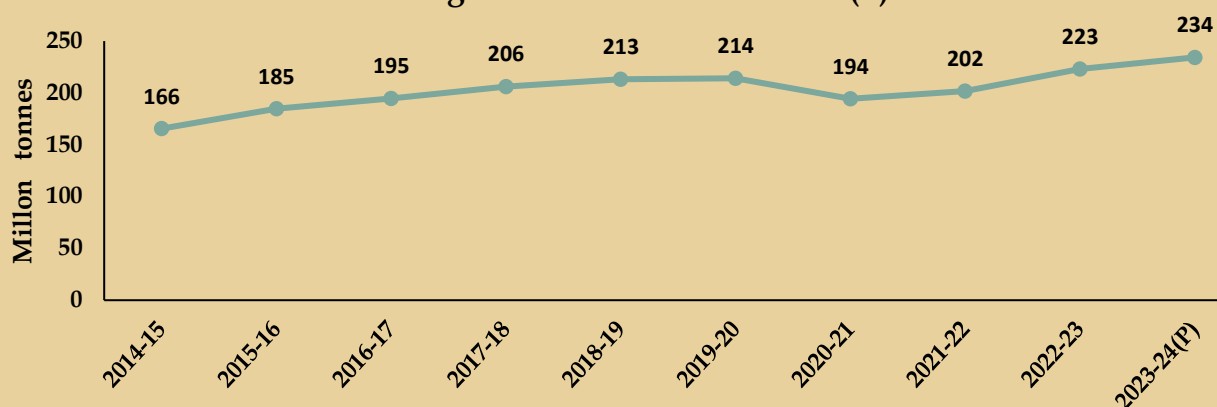
#Others include Steel and Washery (0.20), Cement (0.31) and Sponge Iron, colliery consumption., jute, bricks, coal for soft coke, chemicals, fertilizers & other industries consumption and imported lignite.

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6.5 Consumption of Petroleum products

Petroleum products in India have shown steady growth over time, increasing from **166 MTs** in 2014-15 to **234 MTs** in 2023-24(P), reflecting a CAGR of **3.93%** over a span of 10 years. However, due to the impact of the **COVID-19 pandemic**, consumption dropped by **9.26%** in FY 2020-21. In FY 2023-24 (P), there was a positive rebound, with a growth rate of **5.04%** compared to the previous year, bringing the total to **234.26 MTs** (Table 6.5).

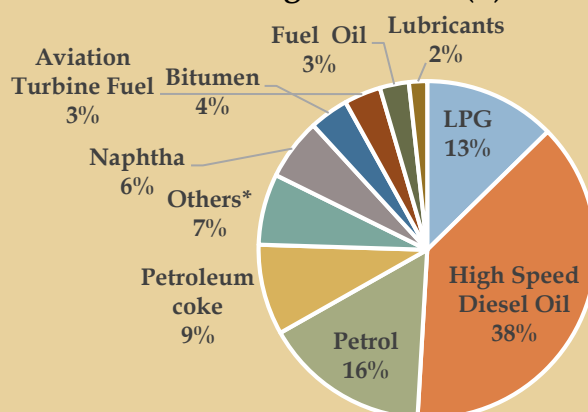
Fig 6.7 : Trend of total consumption of Petroleum Products in India during FY: 2014-15 to FY: 2023-24 (P)



6.5.1 Consumption of petroleum products- by type

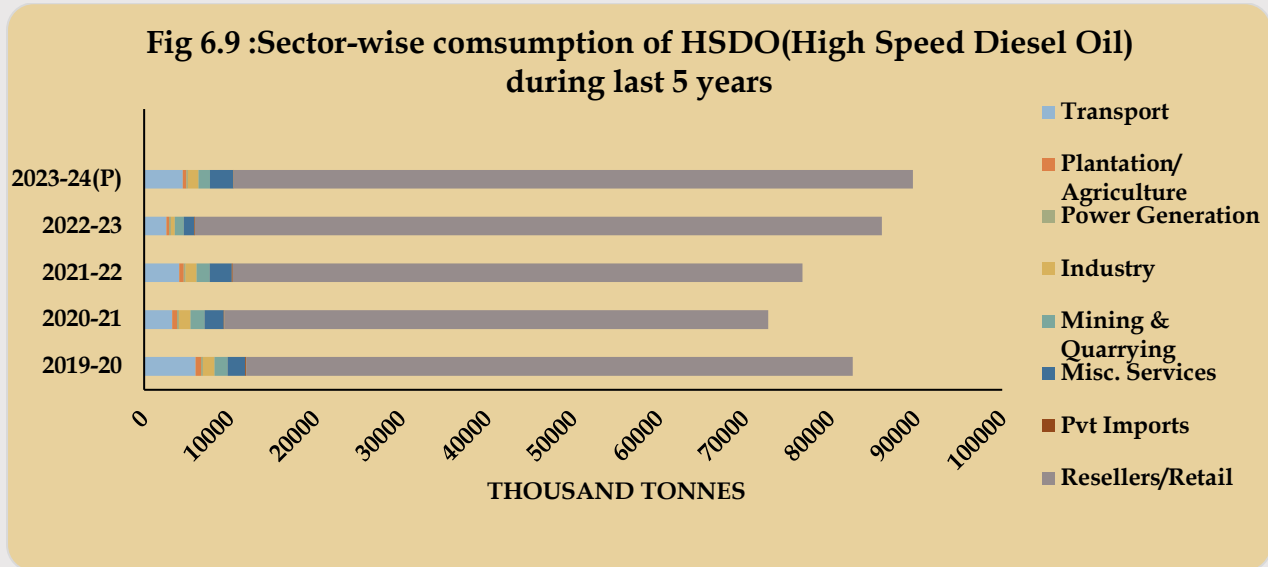
Figure 6.8 shows that among all the petroleum products, High Speed Diesel Oil (HSDO) accounted for 38% of total consumption, followed by Petrol (16%), LPG (13%) and Petroleum coke (9%).

Fig 6.8 : Consumption of Petroleum Products- By type during FY:2023-24(P)



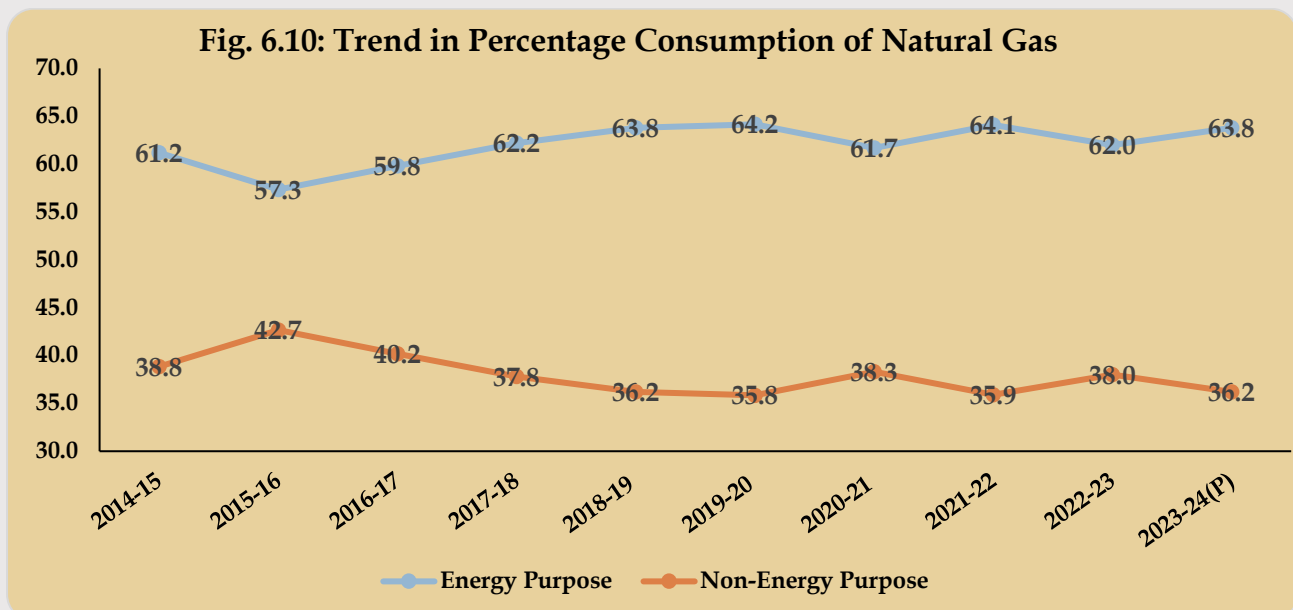
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During FY 2023-24(P), HSDO experienced a positive growth of 4.34% over last year. The Petrol and Pet coke are also having a growth of 6.41% and 10.77% respectively. The sector wise consumption of HSDO during last 5 years is shown in below graph:



6.6 Consumption of Natural Gas

Table 6.7 indicates that the consumption of Natural Gas has experienced a fluctuation over time. During FY: 2023-24(P) the consumption against the *Energy Purpose* has experienced a growth of 20.58% (from 36,383 BCM during 2022-23 to 43,872 BCM during 2023-24(P)); the *Non-Energy Purpose* however has experienced a growth of 11.52% (from 22,319 BCM during 2022-23 to 24,890 BCM during 2023-24(P)). The year wise consumption of Natural Gas (Energy and Non energy purpose) is shown in below graph:



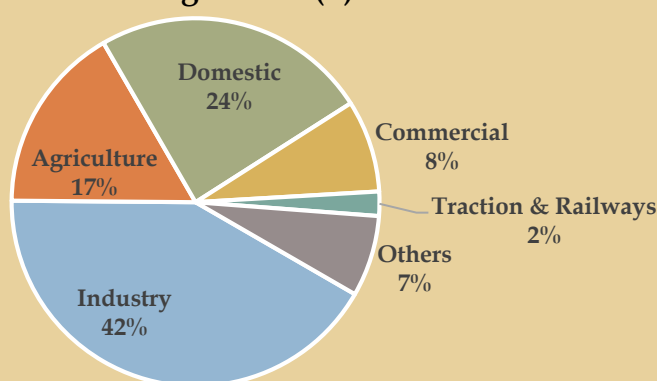
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From the **table 6.7** it is also observed that the maximum use of Natural Gas is in fertilizers industry (30.61%) followed by City or Local Natural Gas Distribution Network incl. Road Transport (19.62%). While 63.8% of natural gas has been used for Energy purposes, 36.2% is used for non-energy purposes.

6.7 Consumption of electricity

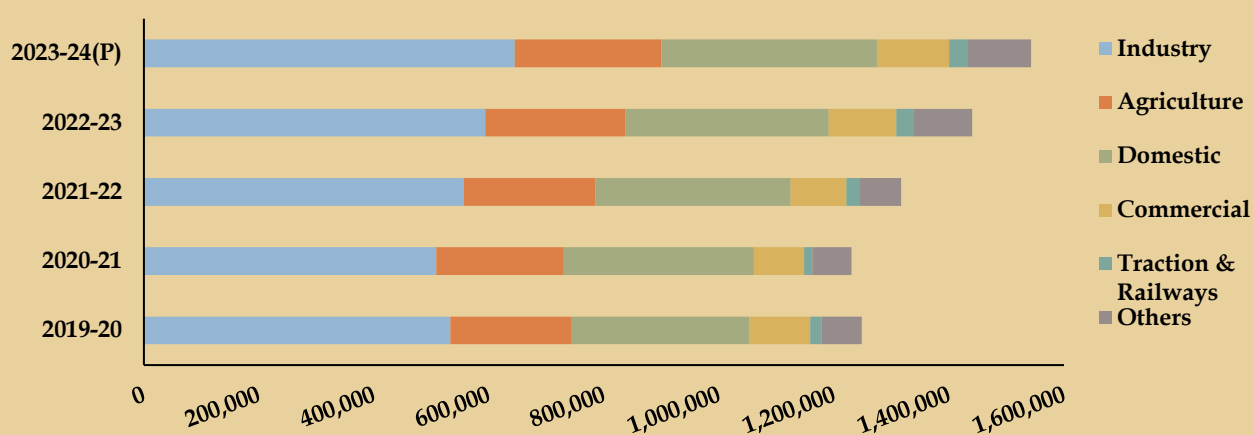
From **table 6.8** it can be seen that India's electricity consumption has grown significantly, from **9,48,522 GWh** in FY 2014-15 to **15,43,000 GWh** in FY 2023-24 (P), reflecting a **CAGR of 5.56%**. **Figure 6.11** shows that industrial sector remains the largest consumer of electricity, accounting for **42%** of the total consumption, followed by the **domestic sector (24%)**, **agriculture (17%)**, and **commercial sectors (8%)**. The sector wise consumption of electricity during last 5 years is shown in **figure 6.12**.

Fig 6.11: Consumption of Electricity by Sectors in India during 2023-24(P)



Total Electricity Consumption = 15,43,000 GWh

Fig 6.12: Sector-wise consumption of Electricity



Chapter 6: Consumption of Energy Resources

Table 6.1: Yearwise Consumption of Energy Resources in Physical Units

Year	Coal #	Lignite	Crude Oil*	Natural Gas	Electricity**
	(Million Tonnes)		MMT	(Billion Cubic Metres)	(GWh)
1	2	3	4	5	6
2014-15	822	47	223	51	948,522
2015-16	837	42	233	53	1,001,191
2016-17	837	43	245	56	1,061,183
2017-18	898	46	252	59	1,123,427
2018-19	968	46	257	61	1,209,972
2019-20	956	42	254	64	1,248,086
2020-21	906	38	222	61	1,230,208
2021-22	1,028	49	242	64	1,316,765
2022-23	1,115	47	255	60	1,440,311
2023-24(P)	1,238	43	262	68	1,543,000
Growth rate of 2023-24 over 2022-23(%)	10.98	-8.96	2.47	12.58	7.13
CAGR 2014-15 to 2023-24(P) (%)	4.65	-1.06	1.78	3.10	5.56

P: Provisional

GWh = Giga Watt hour = 10⁶ x Kilo Watt hour

Does not include Lignite

*Crude oil in terms of refinery crude throughput.

** Total Electricity Consumed

Sources:

1. Ministry of Coal
2. Ministry of Petroleum & Natural Gas.
3. Central Electricity Authority.

Table 6.2: Yearwise Consumption of Primary Energy Resources in Energy Units

(In Petajoules)

Year	Coal	Lignite	Crude Oil *	Natural Gas	Electricity #	Total
1	2	3	4	5	6	7
2014-15	15,812	448	9,552	1,976	664	28,453
2015-16	16,041	403	9,964	2,023	632	29,063
2016-17	15,972	412	10,499	2,145	684	29,713
2017-18	16,707	442	10,780	2,279	757	30,966
2018-19	18,072	437	11,006	2,342	855	32,712
2019-20	17,814	403	10,885	2,471	975	32,548
2020-21	16,616	367	9,489	2,362	972	29,807
2021-22	18,648	469	10,342	2,485	1,074	33,018
2022-23	20,520	447	10,921	2,323	1,219	35,430
2023-24(P)	23,048	407	11,191	2,615	1,217	38,479
% Share in total consumption for 2023-24 (P)	59.9	1.1	29.1	6.8	3.2	100.0
CAGR 2014-15 to 2023-24(%)	4.28	-1.06	1.78	3.16	6.96	3.41

*: Crude oil in terms of refinery crude processed.

P: Provisional.

#: Electricity from Hydro, Nuclear and other Renewable energy sources (Utility)

Note: The figure against electricity has been calculated using the following formula:

Generation from Electricity (Utility) from Hydro, Nuclear and other RE - Losses

Sources:

1. Ministry of Coal
2. Ministry of Petroleum & Natural Gas.
3. Central Electricity Authority.

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Table 6.3: Yearwise Consumption of Coal - Industrywise

(Million Tonnes)

Year	Electricity	Steel & Washery + Import Coking Coal	Cement	Paper	Textile	Sponge Iron	Fertilizers & Chemicals	Bricks	Others+ Import Non-Coking Coal*	Total
1	2	3	4	5	6	7	8	9	10	11 = 2 to 10
2014-15	497.70	56.24	11.36	1.65	0.42	17.77	2.70	0.09	234.22	822
2015-16	517.77	57.08	8.99	1.21	0.27	7.76	2.62	0.07	240.95	837
2016-17	535.04	51.98	6.36	1.18	0.24	5.56	2.45	0.10	234.31	837
2017-18	585.49	58.45	7.71	1.51	0.24	8.53	2.16	0.12	234.30	898
2018-19	621.64	64.65	8.82	1.64	0.20	12.09	1.79	0.09	257.44	968
2019-20	626.15	63.74	8.57	1.33	0.10	10.53	1.76	0.03	243.72	956
2020-21	581.23	60.17	6.75	1.05	0.08	9.57	1.53	0.03	245.93	906
2021-22	710.05	66.28	7.31	1.24	0.08	9.02	1.31	0.02	232.72	1,028
2022-23	785.40	69.43	9.31	1.26	0.09	8.09	0.86	0.11	240.67	1,115
2023-24(P)	859.34	76.16	9.16	1.03	0.17	11.97	0.80	0.10	278.98	1,238
% Share in total consumption for 2023-24 (P)	69.43	6.15	0.74	0.08	0.01	0.97	0.06	0.01	22.54	100.00
Growth rate of 2023-24 over 2022-23(%)	9.41	9.68	-1.57	-	-	-	-	-	15.92	10.98
CAGR 2014-15 to 2023-24(%)	6.26	3.43	-2.36	-5.12	-9.26	-4.30	-	1.05	1.96	4.65

(P): Provisional

* Includes colliery consumption, jute, coal for soft coke & other industries

Source : Ministry of Coal

Table 6.4: Yearwise Consumption of Lignite - Industrywise

(Million Tonnes)

Year	Electricity	Steel & Washery	Cement	Paper	Textile	Brick	Others *	Total
1	2	3	4	5	6	7	8	9=2 to 8
2014-15	39.47	0.02	1.27	0.65	2.89	0.67	1.98	47
2015-16	37.56	0.01	0.23	0.43	1.73	0.39	1.87	42
2016-17	38.82	0.04	0.29	0.53	1.29	0.42	1.77	43
2017-18	38.84	0.12	1.09	0.76	2.46	0.38	2.67	46
2018-19	37.73	0.09	1.80	0.60	2.61	0.63	2.34	46
2019-20	36.33	0.02	1.00	0.55	0.16	0.47	3.75	42
2020-21	32.94	0.02	0.81	0.57	0.29	0.43	3.44	38
2021-22	38.76	0.26	1.55	2.11	2.08	1.13	3.20	49
2022-23	38.95	0.12	0.84	0.89	1.85	0.61	3.58	47
2023-24(P)	35.70	0.09	0.13	1.04	0.99	0.44	4.26	43
% Share in total consumption for 2023-24 (P)	83.70	0.20	0.31	2.44	2.33	1.03	10.00	100.00
Growth rate of 2023-24 over 2022-23(%)	-8.35	-	-	-	-	-	18.99	-8.96
CAGR 2014-15 to 2023-24(%)	-1.11	15.78	-22.30	5.35	-11.17	-4.63	8.92	-1.06

(P): Provisional

* Includes Sponge Iron, colliery consumption., jute, bricks, coal for soft coke, chemicals, fertilisers & other industries consumption and imported lignite

Source : Ministry of Coal

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Table 6.5 : Yearwise Consumption of Petroleum Products - Categorywise

Year	Middle Distillates										Heavy Ends				Total Consumption 14=2 to 13	Refinery Fuel and Losses	Total including Refinery Fuel and Losses
	Light Distillates			Middle Distillates				Fuel Oil			Lubricants	Bitumen	Petroleum coke	Others*			
	LPG	Petrol	Naphtha	Kerosene	Aviation Turbine Fuel	High Speed Diesel Oil	Light Diesel Oil	Fuel Oil	10	11							
2	3	4	5	6	7	8	9	10	11	12	13	15	16				
2014-15	18.00	19.08	11.08	7.09	5.72	69.42	0.37	5.96	3.31	5.07	14.56	5.87	17.67	183.19			
2015-16	19.62	21.85	13.27	6.83	6.26	74.65	0.41	6.63	3.57	5.94	19.30	6.35	18.77	203.45			
2016-17	21.61	23.76	13.24	5.40	7.00	76.03	0.45	7.15	3.47	5.94	23.96	6.59	20.07	214.67			
2017-18	23.34	26.17	12.89	3.85	7.63	81.07	0.52	6.72	3.88	6.09	25.66	8.34	21.16	227.33			
2018-19	24.91	28.28	14.13	3.46	8.30	83.53	0.60	6.56	3.67	6.71	21.35	11.72	21.45	234.67			
2019-20	26.33	29.98	14.27	2.40	8.00	82.60	0.63	6.30	3.83	6.72	21.71	11.36	23.61	237.74			
2020-21	27.56	27.97	14.10	1.80	3.70	72.71	0.86	5.59	4.10	7.52	15.61	12.79	22.81	217.10			
2021-22	28.25	30.85	13.25	1.49	5.01	76.66	1.02	6.26	4.54	7.82	14.26	12.30	23.50	225.19			
2022-23	28.50	34.98	12.13	0.49	7.38	85.90	0.73	6.96	3.74	8.04	18.34	15.84	26.04	249.06			
2023-24(P)	29.66	37.22	13.81	0.48	8.25	89.63	0.78	6.52	4.09	8.81	20.32	14.70	26.65	260.91			
% Share in total consumption for 2023-24 (P)	12.66	15.89	5.90	0.20	3.52	38.26	0.33	2.78	1.74	3.76	8.67	6.27	-	100.00			
Growth rate of 2023-24 over 2022-23 (%)	4.07	6.41	13.90	-2.15	11.78	4.34	7.75	-6.29	9.37	9.53	10.77	-7.24	2.33	4.76			
CAGR 2014-15 to 2023-24 (%)	5.71	7.71	2.48	-	4.14	2.88	8.82	1.00	2.37	6.32	3.77	10.73	4.67	4.01			

(P) : Provisional; Consumption includes sales by oil companies, own consumption and direct private imports

* : Includes those of light & middle distillates and heavy ends and sales through private parties.

Total may not tally due to rounding off.

Source: Ministry of Petroleum & Natural Gas.

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Table 6.6 (A): Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)

Petroleum Product	Year	Transport	Plantation/ Agriculture	Power Generation	Industry	Mining & Quarrying	Resellers /Retail	Misc. Services	Pvt Imports	Total
1	2	3	4	5	6	7	8	9	10	11 =3 to10
High Speed Diesel Oil	2014-15	4617	575	197	794	998	60383	1768	83	69416
	2015-16	5765	630	224	1096	1184	63754	1940	55	74647
	2016-17	5658	607	208	1033	1224	65072	2179	46	76027
	2017-18	5999	618	223	1155	1255	69846	1887	90	81073
	2018-19	6210	639	222	1264	1465	71697	1938	93	83528
	2019-20	6011	616	214	1334	1542	70704	2064	117	82602
	2020-21	3257	571	204	1355	1642	63374	2232	79	72713
	2021-22	4089	530	213	1291	1540	66404	2552	39	76659
	2022-23	2608	299	166	439	1053	80026	1242	68	85901
2023-24(P)	4505	413	202	1253	1328	79135	2749	41	89626	
% Share in total consumption for 2023-24 (P)		5.03	0.46	0.23	1.40	1.48	88.29	3.07	0.05	100.00
Growth rate of 2023-24 over 2022-23(%)		72.75	38.28	21.76	185.07	26.11	-1.11	121.34	-38.85	4.34
CAGR 2014-15 to 2023-24 (%)			-3.61	0.27	5.20	3.22	3.05	5.03	-7.49	2.88

Source: Ministry of Petroleum & Natural Gas

Table 6.6(A-1) : Distribution of High Speed Diesel(HSD) under Reseller/ Retail into different End-Use sectors
('000 Tonnes)

FY	Road Transport	Shipping	Railways	Agriculture	Power Generation	Other Consumer/ Industrial Goods	Others	Total
2021-22	51,663	531	1,394	3,187	1,062	4,183	4,383	66,404
2022-23	62,260	640	1,681	3,841	1,280	5,042	5,282	80,026
2023-24	61,567	633	1,662	3,798	1,266	4,986	5,223	79,135
% Share in total consumption for 2023-24 (P)	77.80	0.80	2.10	4.80	1.60	6.30	6.60	100.00
Growth rate of 2023-24 over 2022-23(%)	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11	-1.11

Note : The above end-use distribution of High Speed Diesel(HSD) (under Retail/Reseller segment) has been made based on the findings mentioned in Figure 17 (End-use share(%) of diesel (retail and direct) across India) of Sectoral Study Report of PPAC (https://ppac.gov.in/uploads/rep_studies/1666932000_ExecutiveSummarySectoralConsumptionStudy.pdf).

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Table 6.6 (B) : Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)										
Petroleum Product	Year	Transport	Plantation/ Agriculture	Power Generation	Industry	Mining & Quarrying	Resellers /Retail	Misc. Services	Pvt Imports	Total
1	2	3	4	5	6	7	8	9	10	11 =3 to10
Light Diesel Oil	2014-15	4.95	1.06	132.18	54.63	3.80	3.81	164.83	0.00	365.26
	2015-16	3.74	1.26	154.21	60.79	2.23	1.11	183.77	0.00	407.11
	2016-17	7.23	2.02	174.35	59.50	2.30	1.04	202.54	0.00	448.98
	2017-18	7.16	9.29	142.94	148.82	6.12	2.57	206.89	0.00	523.79
	2018-19	9.98	15.65	276.51	174.77	22.42	33.33	65.32	0.00	597.97
	2019-20	4.55	12.47	342.15	153.33	14.44	37.53	63.33	0.00	627.80
	2020-21	5.02	15.30	252.28	308.66	7.71	124.83	128.90	12.36	855.06
	2021-22	6.04	17.75	288.58	296.79	10.28	205.95	187.20	4.91	1017.50
	2022-23	7.60	13.80	260.60	233.30	12.50	60.60	131.70	5.20	725.30
	2023-24(P)	11.00	11.50	290.40	214.30	10.60	56.10	187.20	0.90	782.00
% Share in total consumption for 2023-24 (P)		1.41	1.47	37.14	27.40	1.36	7.17	23.94	0.12	100.00
Growth rate of 2023-24 over 2022-23(%)		44.74	-16.67	11.44	-8.14	-15.20	-7.43	42.14	-	7.82
CAGR 2014-15 to 2023-24(%)		9.27	30.31	9.14	16.40	12.07	34.85	1.42	-	8.83

Source: Ministry of Petroleum & Natural Gas

Table 6.6 (C) : Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)										
Petroleum Product	Year	Transport	Plantation/ Agriculture	Power Generation	Industry	Mining & Quarrying	Resellers /Retail	Misc. Services	Pvt Imports	Total
1	2	3	4	5	6	7	8	9	10	11 =3 to10
Furnace Oil	2014-15	346	56	446	1748	45	197	2175	570	5584
	2015-16	380	57	430	2136	53	270	2564	592	6482
	2016-17	444	51	361	2492	71	357	2485	784	7046
	2017-18	601	50	314	2346	68	321	2234	672	6605
	2018-19	786	78	339	2577	54	298	1449	611	6195
	2019-20	849	71	303	2143	84	290	1398	775	5912
	2020-21	1022	80	226	1874	92	268	1330	316	5208
	2021-22	1209	65	312	2092	127	211	1388	411	5815
	2022-23	1561	50	418	1966	94	153	1405	537	6185
	2023-24(P)	1484	24	170	1226	115	125	1985	518	5648
% Share in total consumption for 2023-24 (P)		26.28	0.42	3.01	21.72	2.04	2.22	35.15	9.17	100.00
Growth rate of 2023-24 over 2022-23(%)		-4.94	-52.93	-59.31	-37.62	21.89	-18.30	41.31	-3.48	-8.69
CAGR 2014-15 to 2023-24(%)		17.55	-9.05	-10.15	-3.86	10.95	-4.91	-1.01	-1.06	0.13

Source: Ministry of Petroleum & Natural Gas

Chapter 6: Consumption of Energy Resources

Table 6.6 (D) : Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)

Petroleum Product	Year	Plantation/ Agriculture	Power Generation	Industry	Mining & Quarrying	Resellers/ Retail	Misc. Services	Pvt Imports	Total
1	2	3	4	5	6	7	8	9	10 = 3 to 9
Low Sulphur Heavy Stock	2014-15	0.00	226.18	103.54	0.00	0.00	47.50	0.00	377.22
	2015-16	0.00	50.70	70.45	0.00	0.00	29.23	0.00	150.38
	2016-17	0.00	16.43	50.88	0.00	0.00	36.91	0.00	104.23
	2017-18	1.18	0.00	53.78	0.31	14.67	46.33	0.00	116.27
	2018-19	7.90	9.31	175.13	0.00	48.04	128.67	0.00	369.04
	2019-20	6.42	17.88	201.93	0.00	50.29	113.02	0.00	389.54
	2020-21	6.79	10.71	196.23	0.00	48.50	115.97	0.00	378.20
	2021-22	6.51	29.66	191.26	0.00	67.39	151.88	0.00	446.70
	2022-23	3.50	18.90	250.30	0.00	83.60	416.70	0.00	773.00
	2023-24(P)	10.90	37.50	224.80	0.00	64.80	534.70	0.00	872.70
% Share in total consumption for 2023-24 (P)		1.25	4.30	25.76	0.00	7.43	61.27	0.00	100.00
Growth rate of 2023-24 over 2022-23(%)		-	-	-10.19	-	-22.49	28.32	-	12.90
CAGR 2014-15 to 2023-24 (%)		-	-18.10	9.00	-	-	30.87	-	9.77

Source: Ministry of Petroleum & Natural Gas

Table 6.6 (E) : Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)

Petroleum Product	Year	Transport	Plantation/ Agriculture	Power Generation	Manufacturing /Non domestic	Mining	Domestic Distribution	Non-Domestic /Industry/Commercial	Reseller/ Retail	Other/ Misc. Services	Private Import	Total
1	2	3	4	5	6	7	8	9	10	11	12	13= 3 to 12
Liquefied Petroleum Gas	2014-15	164.59	6.09	3.08	207.92	0.00	16040.39	1050.98	45.19	52.68	429.17	18000.10
	2015-16	171.83	7.13	2.68	201.66	0.00	17181.72	1464.37	44.92	59.87	489.05	19623.22
	2016-17	168.07	7.75	2.19	220.03	0.00	18871.36	1775.91	67.03	66.56	429.31	21608.21
	2017-18	185.09	7.46	1.25	204.57	0.00	20351.78	2085.82	74.25	67.13	364.46	23341.82
	2018-19	181.11	21.98	1.77	204.23	0.35	21728.02	2364.39	0.01	88.93	315.98	24906.79
	2019-20	172.79	25.70	1.49	153.40	0.07	23075.97	2614.43	0.00	81.90	204.04	26329.78
	2020-21	119.01	28.11	0.35	214.98	1.50	25128.09	1885.96	0.88	115.38	64.17	27558.43
	2021-22	122.99	29.57	0.41	180.03	3.48	25501.59	2238.83	2.46	174.07	0.06	28253.49
	2022-23	108.43	21.71	0.61	228.53	4.90	25381.61	2606.06	1.83	150.08	0.08	28503.83
	2023-24(P)	89.45	26.50	0.29	375.06	4.88	26207.42	2759.94	0.28	185.71	14.10	29663.62
% Share in total consumption for 2023-24 (P)		0.30	0.09	0.00	1.26	0.02	88.35	9.30	0.00	0.63	0.05	100.00
Growth rate of 2023-24 over 2022-23(%)		-17.50	-	-	64.11	-0.35	3.25	5.90	-	23.74	-	4.07
CAGR 2014-15 to 2023-24(%)		-6.55	17.74	-	6.77	-	5.61	11.32	-	15.03	-31.58	5.71

Source: Ministry of Petroleum & Natural Gas

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Table 6.6 (F) : Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)								
Petroleum Product	Year	Fertiliser Sector	Petro Chemicals	Power Sector	Steel Plants	Others	Private Import	Total
1	2	3	4	5	6	7	8	9 = 3 to 8
Naptha	2014-15	301	9530	199	0	208	844	11082
	2015-16	316	10350	50	0	37	2517	13271
	2016-17	349	10210	60	0	199	2423	13241
	2017-18	368	10011	67	0	405	2038	12889
	2018-19	352	10602	5	0	462	2711	14131
	2019-20	150	10874	0	0	880	2364	14268
	2020-21	66	11339	70	0	885	1740	14100
	2021-22	0	11904	6	0	799	536	13246
	2022-23	0	10402	19	0	714	991	12127
	2023-24(P)	0	10424	0	0	1038	2350	13812
% Share in total consumption for 2023-24 (P)		0.00	75.47	0.00	0.00	7.51	17.02	100.00
Growth rate of 2023-24 over 2022-23(%)		-	0.21	-	-	45.35	137.16	13.90
CAGR 2014-15 to 2023-24 (%)		-	1.00	-	-	19.58	12.06	2.48

Source: Ministry of Petroleum & Natural Gas

Table 6.6 (G) : Yearwise Consumption of Selected Petroleum Products - Sectorwise(end use)

('000 Tonnes)					
Petroleum Product	Year	Domestic/PDS	Commercial/ Industry	Others	Total
1	2	3	4	5	6= 3 to 5
SKO(Kerosene)	2014-15	6917	60	109	7087
	2015-16	6649	64	113	6826
	2016-17	5197	84	116	5397
	2017-18	3634	97	115	3845
	2018-19	3231	97	131	3459
	2019-20	2174	87	137	2397
	2020-21	1587	69	143	1798
	2021-22	1292	64	138	1493
	2022-23	308	62	119	490
	2023-24(P)	298	62	118	479
% Share in total consumption for 2023-24 (P)		62.29	12.99	24.72	100.00
Growth rate of 2023-24 over 2022-23(%)		-3.18	0.32	-0.74	-2.15
CAGR 2014-15 to 2023-24 (%)		-29.48	0.39	0.90	-25.87

Source: Ministry of Petroleum & Natural Gas

Chapter 6: Consumption of Energy Resources

Table 6.7: Yearwise Consumption of Natural Gas - Sectorwise

(Figures in MMSCM)

Sector	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24(P)	% Share of Total
	2	3	4	5	6	7	8		9	10	11
(a) Energy Purpose											
Power	10,720	10,889	11,616	12,028	12,005	11,080	10,836	10,157	8,153	9,082	13.21
Industrial & Manufacturing City or Local Natural Gas Distribution Network incl. Road Transport	533	545	794	999	1,086	701	555	829	865	1,458	2.12
Agriculture (Tea Plantation)	5,416	5,464	7,350	8,585	9,206	10,883	9,230	12,175	12,028	13,491	19.62
Internal Consumption for Pipeline System	180	187	183	189	192	200	177	156	154	142	0.21
Refinery	351	410	471	496	541	525	439	486	1,764	1,924	2.80
LPG Shrinkage	4,575	5,077	5,374	6,533	7,047	7,786	7,911	5,312	3,909	5,837	8.49
Miscellaneous	1,005	754	759	798	874	858	900	1,070	976	1,001	1.46
Total (a)	28,721	27,437	30,478	32,854	34,343	36,241	34,617	39,414	36,383	43,872	63.80
(b) Non-Energy Purpose											
Fertilizer Industry	15,190	16,135	15,429	14,676	14,987	16,115	17,781	18,079	19,400	21,046	30.61
Petrochemical	2,890	3,733	4,170	4,024	3,386	3,569	3,072	2,864	1,959	2,667	3.88
Sponge Iron	154	544	885	1,278	1,124	567	647	1,134	960	1,177	1.71
Total (b)	18,234	20,412	20,484	19,978	19,497	20,251	21,500	22,077	22,319	24,890	36.20
Total Sectorial Sales (a+b)	46,955	47,849	50,961	52,832	53,840	56,492	56,117	61,491	58,702	68,761	100
Total Consumption **	51,300	52,517	55,697	59,170	60,796	64,144	60,981	64,159	59,969	67,512	-
Total Consumption in MMSCMD	141	143	153	162	167	175	167	176	164	184	-

Note: **: Availability Basis (Net Production+LNG Imports) P: Provisional

1. Re-classification among the sectors of consumption of natural gas under energy and non-energy sectors, has been done depending on usage. Sectors where natural gas is being used as feedstock are classified as consumption of gas under non-energy purpose whereas those sectors where natural gas is being used as fuel are classified as consumption of gas under energy purpose .

2. Sectorial Sales/consumption of natural gas includes RLNG.

3. Total may not tally due to rounding off.

4. The reasons for the variation between the consolidated availability and the consumption can be attributed to stock changes, conversion factor (volume/energy) and the provisional data reported by the companies.

5. LPG shrinkage is being shifted from Non-Energy purpose to Energy Purpose. Since, LPG shrinkage is a transformation process and LPG produced is used for energy purposes to meet domestic / household energy

Source: Ministry of Petroleum and Natural Gas

Chapter 6: Consumption of Energy Resources

Table 6.8: Yearwise Consumption of Electricity - Sectorwise

(in Giga Watt Hour = 10⁶ Kilo Watt Hour)

Year	Industry	Agriculture	Domestic	Commercial	Traction & Railways	Others	Total Electricity Consumed
1	2	3	4	5	6	7	8=2 to 7
2014-15	418,346	168,913	217,405	78,391	16,177	49,289	948,522
2015-16	423,523	173,185	238,876	86,037	16,594	62,976	1,001,191
2016-17	440,206	191,151	255,826	89,825	15,683	68,493	1,061,183
2017-18	468,613	199,247	273,545	93,755	17,433	70,834	1,123,427
2018-19	519,196	213,409	288,243	98,228	18,837	72,058	1,209,972
2019-20	532,820	211,295	308,745	106,047	19,148	70,031	1,248,086
2020-21	508,776	221,303	330,809	86,950	14,668	67,701	1,230,208
2021-22	556,481	228,451	339,780	97,121	21,935	72,996	1,316,765
2022-23	593,895	243,852	353,156	117,231	30,028	102,149	1,440,311
2023-24(P)	645,000	255,000	375,000	125,000	33,000	110,000	1,543,000
% Share in total consumption for 2023-24 (P)	41.80	16.53	24.30	8.10	2.14	7.13	100.00
Growth rate of 2023-24 over 2022-23(%)	8.61	4.57	6.19	6.63	9.90	7.69	7.13
CAGR 2014-15 to 2023-24 (%)	4.93	4.68	6.24	5.32	8.24	9.33	5.56

(P): Provisional

Source : Central Electricity Authority.

Table 6.9 : Electricity Generated (from Utilities), Distributed, Sold and Transmission & Distribution Losses

(in Giga Watt hour =10⁶ Kilo Watt hour)

Year	Net Electricity Generated from Utilities	Purchases from Non-Utilities + Net Import from Other Countries	Net Electricity Available for Supply	Sold to Ultimate Consumers	Loss in transmission & distribution	Loss in transmission & distribution (%)
1	2	3	4=2+3	5	6=4-5	7
2014-15	1,040,582	13,773	1,054,355	814,250	240,105	22.77
2015-16	1,088,282	15,947	1,104,228	863,364	240,864	21.81
2016-17	1,154,314	8,977	1,163,290	914,093	249,197	21.42
2017-18	1,221,307	11,198	1,232,505	973,131	259,375	21.04
2018-19	1,288,393	19,291	1,307,685	1,037,518	270,167	20.66
2019-20	1,300,116	22,932	1,323,048	1,052,346	270,701	20.46
2020-21	1,292,715	21,310	1,314,025	1,041,656	272,369	20.73
2021-22	1,397,707	16,197	1,413,903	1,141,485	272,418	19.27
2022-23	1,524,475	11,191	1,535,665	1,264,103	271,563	17.68
2023-24(P)	1,634,302	12,696	1,646,998	1,365,642	281,356	17.08
Growth rate of 2023-24 over 2022-23(%)	7.20	13.45	7.25	8.03	3.61	-3.40
CAGR 2014-15 to 2023-24 (%)	5.14	-0.90	5.08	5.91	1.78	-3.14

(P): Provisional

Source : Central Electricity Authority.