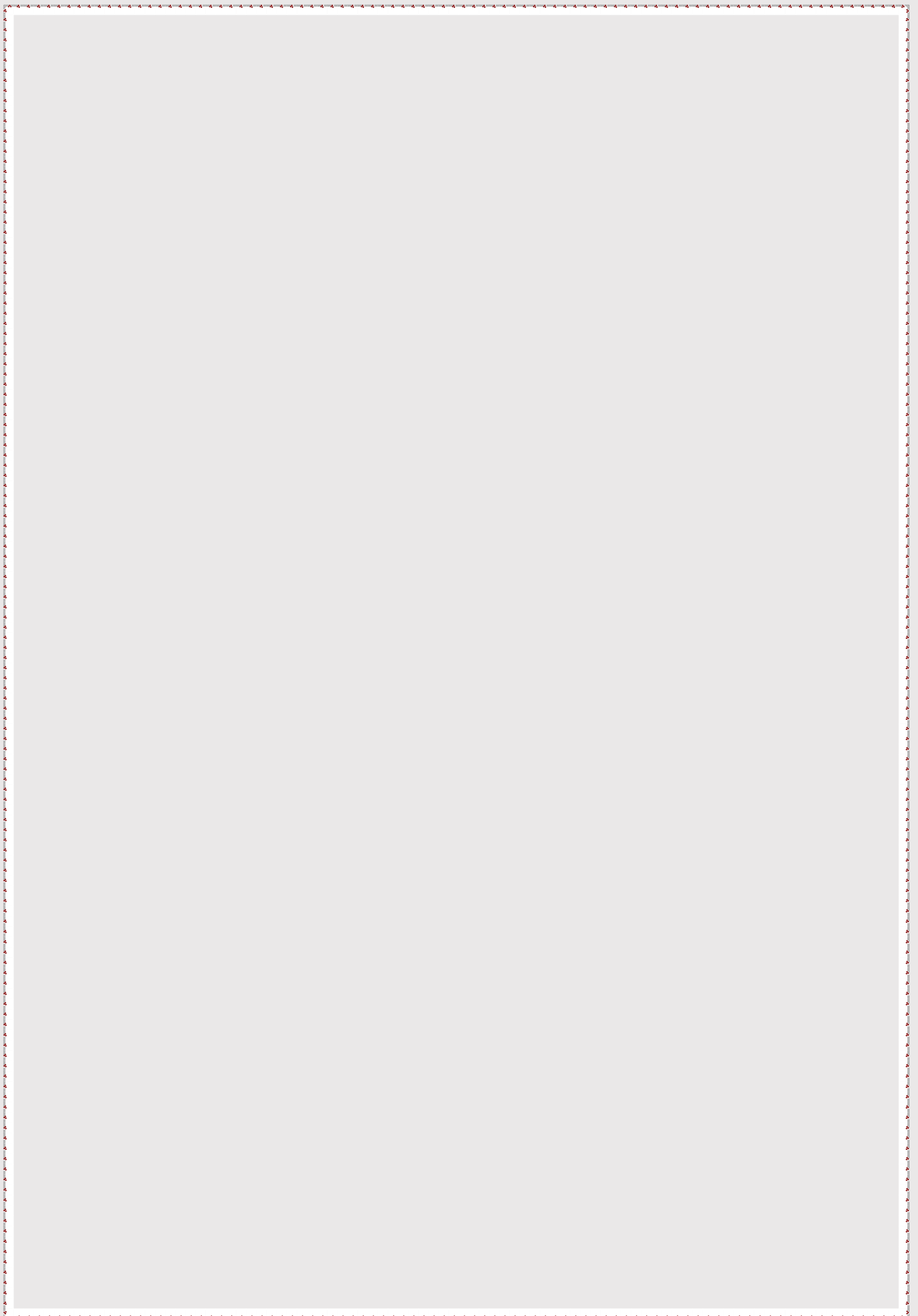


# 4

## Chapter

### Foreign Trade and Prices of Energy Resources





## CHAPTER 4

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#### **Introduction**

India's economic growth is significantly shaped by foreign trade, with energy resources playing a central role. The country's heavy reliance on imports, particularly crude oil, natural gas, and coal, makes it highly susceptible to fluctuations in global energy prices. These fluctuations affect the trade balance, as rising energy prices increase India's import bill, leading to a higher trade deficit.

Energy prices are particularly influential on key sectors like transportation, manufacturing, and agriculture, all of which depend heavily on affordable energy. As India continues to expand its industrial base and infrastructure, the cost of energy becomes a critical factor in maintaining competitiveness and economic stability. India is focusing on increasing its energy security by diversifying sources, investing in renewable energy, and promoting energy efficiency. Managing energy imports and stabilizing energy prices are key to India's goal of achieving sustainable economic growth while reducing its dependence on volatile global energy markets.

This chapter presents the foreign trade and prices of energy resources i.e. Coal, Crude Oil, Petroleum, Natural Gas and Electricity.

## Chapter 4: Foreign Trade and Prices of Energy Resources

### 4.1 Coal Imports

India has experienced a steady increase in coal imports over the last decade, reflecting the country's growing demand for energy. The net import of coal increased from **216.54 million tonnes (MT)** in FY 2014-15 to **236.50 MT** in FY 2022-23. In FY 2023-24 (P), this figure rose further to **262.99 MT**, marking an **11.20%** increase compared to the previous year. Despite fluctuations in certain years, coal imports have followed a consistent upward trend.

### 4.2 Crude Oil Imports

India remains heavily reliant on crude oil imports to meet domestic consumption. Crude oil imports grew from **189.43 MT** in FY 2014-15 to **226.95 MT** in FY 2019-20. The COVID-19 pandemic caused a dip in 2020-21, reducing imports to **196.46 MT**. However, imports rose again in FY 2023-24 (P), reaching **234.26 MT**, an increase of **0.67%** from the previous year.

### 4.3 Petroleum Product Exports

India is an exporter of petroleum products. The export of petroleum products has grown at a slow but steady rate, from **63.93 MT** in FY 2014-15 to **65.69 MT** in FY 2019-20. Exports decreased in 2020-21 but rebounded in subsequent years, reaching **62.59 MT** in FY 2023-24 (P), reflecting a **2.59%** increase compared to the previous year.

### 4.4 Natural Gas Imports

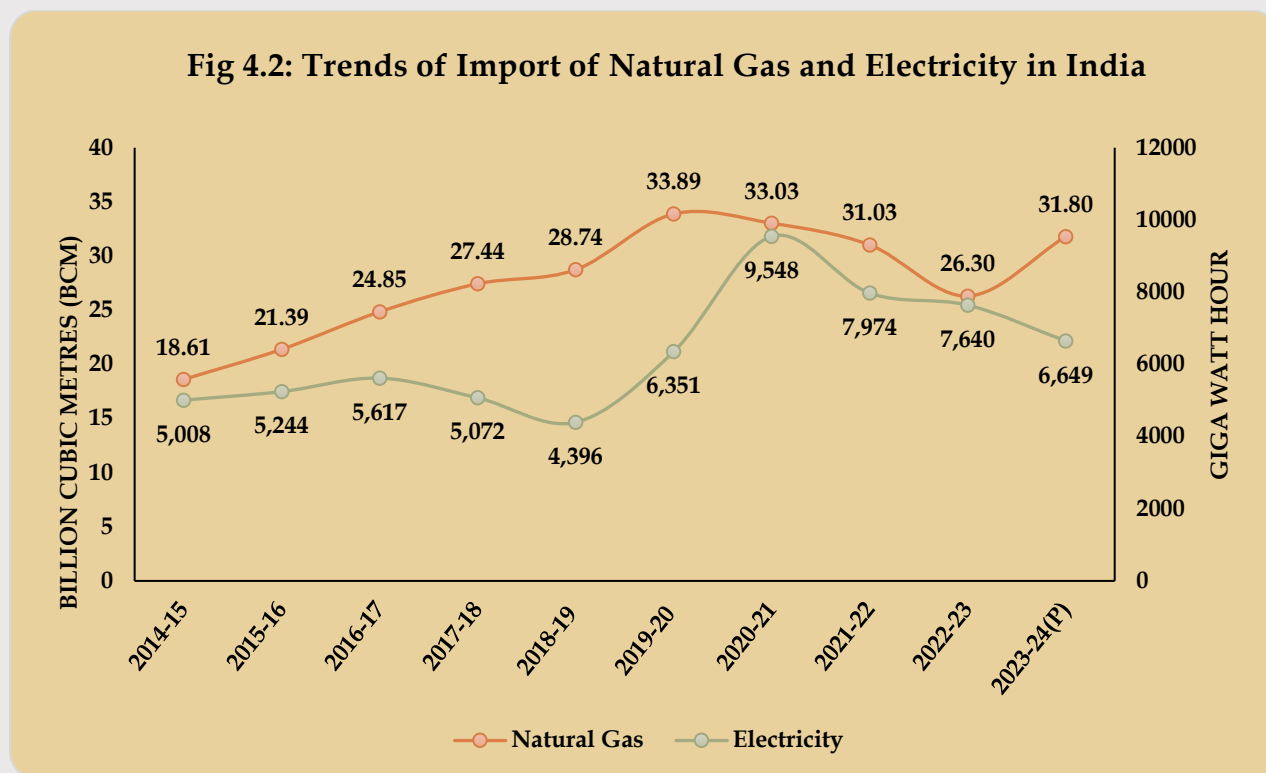
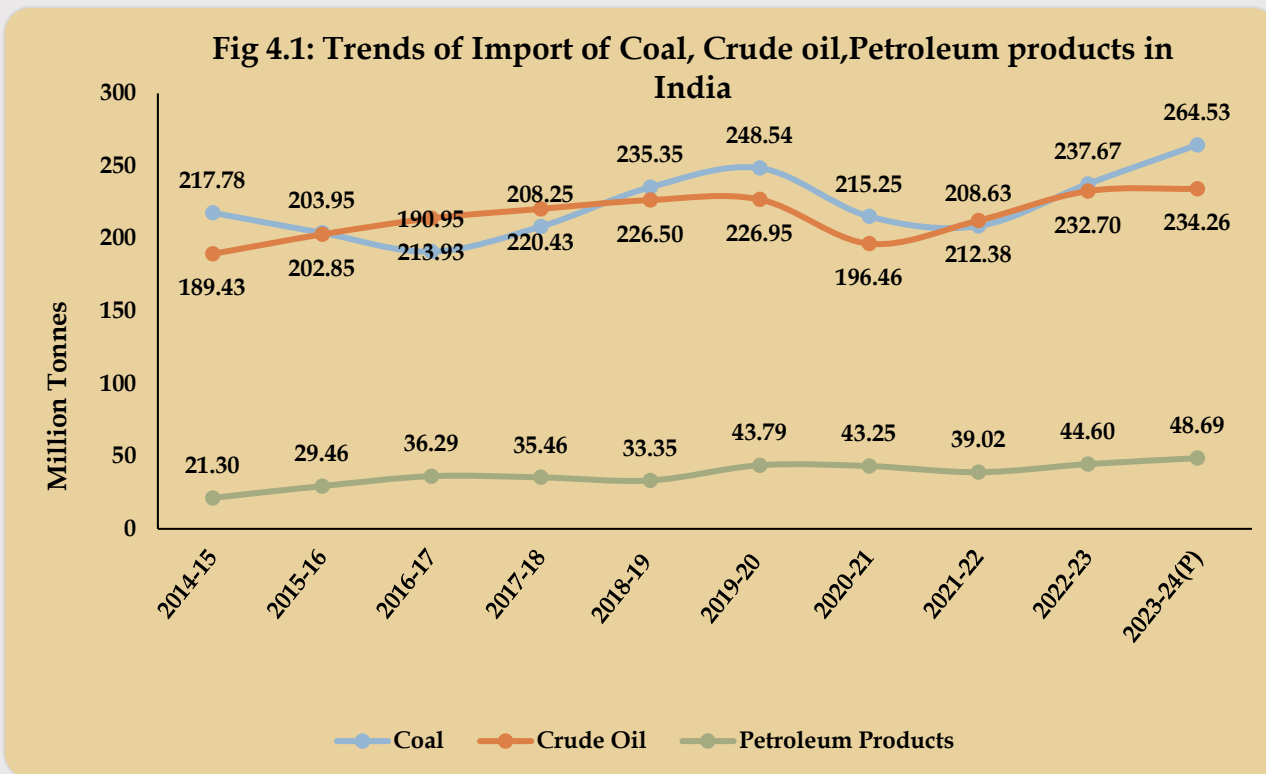
Natural gas imports have risen substantially over the past decade. From **18.61 BCM** (Billion Cubic Meter) in FY 2014-15, imports grew to **33.89 BCM** in FY 2019-20. In FY 2023-24 (P), the import figure stood at **31.80 BCM**, up from **26.30 BCM** in FY 2022-23. The compound annual growth rate (CAGR) of natural gas imports between FY 2014-15 and FY 2023-24 (P) is **6.13%**.

### 4.5 Electricity Exports and Imports

India's electricity exports rose from **4,432.76 GWh** in FY 2014-15 to **11,361.98 GWh** in FY 2023-24 (P) with a CAGR of **11.02%**.

Simultaneously, India also imported electricity to meet domestic demand. The gross import of electricity increases from **5,007.74 GWh** in FY 2014-15 to **6,648.69 GWh** in **2023-24(P)** with a CAGR of **3.20%**. However, compared to the previous year, the gross import of electricity marked a 12.97% decrease, standing at **7,639.76 GWh**.

4.6 Trend of Import of Coal, Crude Oil, Petroleum Products, Natural Gas and electricity in India during 2014-15 to 2023-24(P)



4.7 Trend of whole sale price Indices (base 2011-12) of Energy commodities

Fig 4.3: Yearwise Wholesale Price Indices (base 2011-12) of Energy Commodities

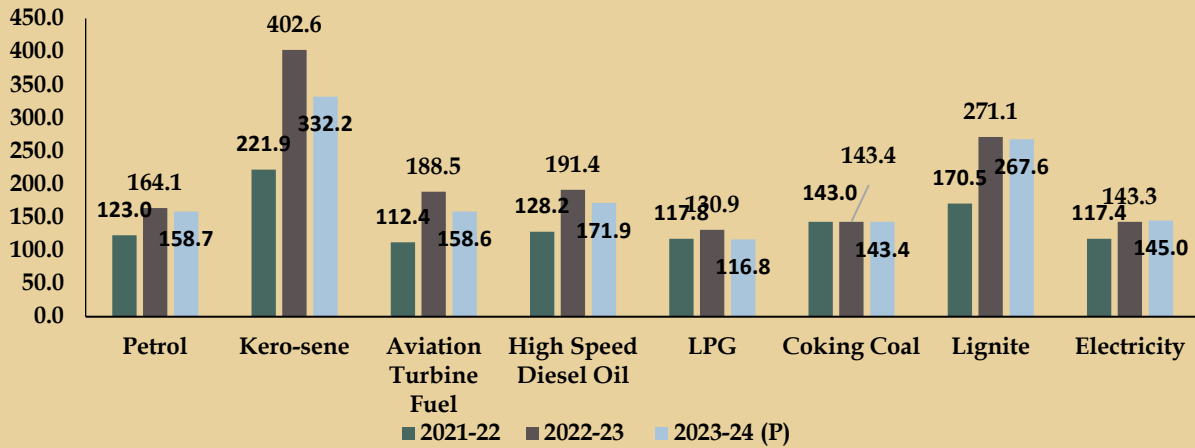


Figure 4.3 shows that most energy prices (Petrol, Kerosene, Aviation Fuel, Diesel, LPG, and Lignite) decreased in 2023-24 compared to 2022-23, with the biggest drop in Kerosene. However, Coking Coal prices remained the same, and Electricity prices slightly increased.

## Chapter 4: Foreign Trade and Prices of Energy Resources

**Table 4.1: Yearwise Foreign Trade in Coal, Crude Oil, Petroleum Products(total), Natural Gas and Electricity**

(Million Tonnes)

Year	Coal			Lignite			Crude Oil			Petroleum Products		
	Gross Imports	Exports	Net Imports	Gross Imports	Exports	Net Imports	Gross Imports	Exports	Net Imports	Gross Imports	Exports	Net Imports
1	2	3	4=2-3	5	6	7=5-6	8	9	10=8-9	11	12	13=11-12
2014-15	217.78	1.24	216.54	0.00	0.00	0.00	189.43	0.00	189.43	21.30	63.93	-42.63
2015-16	203.95	1.58	202.37	0.00	0.00	0.00	202.85	0.00	202.85	29.46	60.54	-31.08
2016-17	190.95	1.77	189.18	0.02	0.01	0.01	213.93	0.00	213.93	36.29	65.51	-29.23
2017-18	208.25	1.50	206.75	0.01	0.00	0.01	220.43	0.00	220.43	35.46	66.83	-31.37
2018-19	235.35	1.31	234.04	0.02	0.08	-0.06	226.50	0.00	226.50	33.35	61.10	-27.75
2019-20	248.54	1.03	247.51	0.05	0.09	-0.04	226.95	0.00	226.95	43.79	65.69	-21.90
2020-21	215.25	2.95	212.31	0.02	0.19	-0.17	196.46	0.00	196.46	43.25	56.77	-13.52
2021-22	208.63	1.32	207.31	0.01	0.02	-0.01	212.38	0.00	212.38	39.02	62.75	-23.74
2022-23	237.67	1.17	236.50	0.02	0.33	-0.31	232.70	0.00	232.70	44.60	61.01	-16.42
2023-24(P)	264.53	1.55	262.99	0.05	0.00	0.05	234.26	0.00	234.26	48.69	62.59	-13.90
<b>Growth rate of 2023-24 over 2022-23(%)</b>	<b>11.30</b>	<b>32.53</b>	<b>11.20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.67</b>	<b>-</b>	<b>0.67</b>	<b>9.18</b>	<b>2.59</b>	<b>-15.33</b>
<b>CAGR 2014-15 to 2023-24 (%)</b>	<b>2.18</b>	<b>2.49</b>	<b>2.18</b>	<b>-</b>	<b>-6.10</b>	<b>-</b>	<b>2.39</b>	<b>-</b>	<b>2.39</b>	<b>9.62</b>	<b>-0.23</b>	<b>-11.71</b>

## Chapter 4: Foreign Trade and Prices of Energy Resources

**Table 4.1 (Contd): Yearwise Foreign Trade in Coal, Crude Oil, Petroleum Products, Natural Gas and Electricity**

Year	Natural Gas (BCM)			Electricity(Gwh)		
	Gross Imports	Exports	Net Imports	Gross Imports	Exports	Net Imports
1	14	15	16=14-15	17	18	19=17-18
2014-15	18.61	0.00	18.61	5007.74	4432.76	574.98
2015-16	21.39	0.00	21.39	5244.21	5150.30	93.91
2016-17	24.85	0.00	24.85	5617.30	6710.19	-1092.89
2017-18	27.44	0.00	27.44	5072.08	7202.86	-2130.78
2018-19	28.74	0.00	28.74	4395.86	8468.94	-4073.08
2019-20	33.89	0.00	33.89	6350.60	9490.91	-3140.31
2020-21	33.03	0.00	33.03	9547.70	9573.55	-25.85
2021-22	31.03	0.00	31.03	7974.01	9249.39	-1275.39
2022-23	26.30	0.00	26.30	7639.76	13791.92	-6152.16
2023-24(P)	31.80	0.00	31.80	6648.69	11361.98	-4713.29
<b>Growth rate of 2023-24 over 2022-23(%)</b>	<b>20.87</b>	-	<b>20.87</b>	<b>-12.97</b>	<b>-17.62</b>	<b>-23.39</b>
<b>CAGR 2014-15 to 2023-24 (%)</b>	<b>6.13</b>	-	<b>6.13</b>	<b>3.20</b>	<b>11.02</b>	-

(P): Provisional.

Sources:

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

**Table 4.2 : Yearwise Wholesale Price Indices of Energy Commodities**

(Base Year 2011-12=100)

Year	Petrol	Kero-sene	Aviation Turbine Fuel	High Speed Diesel Oil	Bitumen	Furnace Oil	Lubri-cants	LPG	Coking Coal	Petroleum Coke	Lignite	Electricity
2014-15	108.6	103.5	105.1	114.8	106.1	93.6	118.8	103.5	101.4	94.3	99.2	105.7
2015-16	75.7	88.4	69.5	73.4	77.1	54.3	120.8	76.7	101.4	78.3	94.7	105.3
2016-17	72.4	94.3	69.3	74.4	68.0	58.1	116.8	72.0	108.2	93.0	90.2	104.2
2017-18	80.3	117.8	78.7	84.4	71.3	68.8	114.0	82.2	134.1	117.2	104.2	103.7
2018-19	88.4	152.4	102.8	97.1	85.6	94.7	124.8	92.1	132.9	149.7	120.3	109.6
2019-20	85.6	172.8	97.2	93.7	82.8	81.0	131.7	84.5	138.1	128.6	129.1	111.8
2020-21	75.5	116.8	62.5	80.2	77.9	67.9	137.2	82.2	141.8	132.4	130.9	109.6
2021-22	123.0	221.9	112.4	128.2	113.2	108.2	162.0	117.8	143.0	220.1	170.5	117.4
2022-23	164.1	402.6	188.5	191.4	131.4	127.2	180.0	130.9	143.4	293.6	271.1	143.3
2023-24 (P)	158.7	332.2	158.6	171.9	123.5	127.3	189.7	116.8	143.4	204.9	267.6	145.0
<b>Increase in 2023-24 over 2022-23(%)</b>	<b>-3.29</b>	<b>-17.49</b>	<b>-15.86</b>	<b>-10.19</b>	<b>-6.01</b>	<b>0.08</b>	<b>5.39</b>	<b>-10.77</b>	<b>0.00</b>	<b>-30.21</b>	<b>-1.29</b>	<b>1.19</b>

\* Annual average of monthly index, Financial Year wise

Source :Office of the Economic Advisor, Ministry of Commerce & Industry.