



## Indian Oil Market Outlook to 2030: IEA

**For Prelims:** Indian Oil Market Outlook to 2030: IEA, [International Energy Agency \(IEA\)](#), Crude oil, [Electric Vehicles](#).

**For Mains:** Indian Oil Market Outlook to 2030: IEA, Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

[Source: IE](#)

### Why in News?

Recently, the [International Energy Agency \(IEA\)](#) has released the **Indian oil market outlook to 2030 report**, which looks in-depth at how India's role on the global oil market may evolve over the period **through to 2030**.

- The Report looks at energy transition trends that may affect the demand for oil in different sectors and how these changes could impact the country's energy security.

### What are the Key Highlights of the Report?

- **India's Dominance in Oil Demand Growth:**
  - India is projected to become the **largest source of global oil demand growth** between now and 2030, surpassing China by 2027.
  - India's oil demand is set to rise by **about 1.2 million barrels per day (bpd)** by 2023. This increase constitutes over a **third of the expected global demand growth of 3.2 million bpd** by 2030.
    - India's total oil demand projections will stand at 6.64 million bpd in 2030 against **5.48 million bpd in 2023**.
  - This growth is fueled by factors such as strong growth in its economy, population and demographics.
- **Growth in Fuel Demands:**
  - **Diesel/gasoil is identified as the single largest source of oil demand growth** in India, accounting for nearly half of the rise in the nation's demand and over one-sixth of total global oil demand growth through 2030.
  - **Jet-kerosene** demand is poised to grow strongly, at around 5.9% per year on average, but from a low base compared to other countries.
  - **India's petrol demand** is projected to grow by 0.7% on average, as the electrification of India's vehicle fleet avoids a more substantial rise.
  - **Gasoline demand** is projected to grow modestly due to the electrification of India's vehicle fleet. **LPG demand** is expected to increase due to investments in production facilities.
- **Crude Oil Imports:**
  - India's Crude oil imports are forecasted to rise by over a fourth to 5.8 million bpd by 2030 due to robust oil demand growth and declining domestic production. India currently

depends on imports to meet over 85% of its oil requirement.

- India **currently is the third largest consumer of crude** oil behind the US and China. The domestic consumption as per the oil ministry data is around **5 mb/d**.

#### ▪ Investment in Refining Sector:

- Indian oil companies are investing heavily in the refining sector to meet the rise in domestic oil demand.
- Over the next seven years, **1 mb/d of new refinery distillation capacity** will be added – more than any other country in the world outside of China.
- Several other large projects are currently under consideration that may lift capacity beyond the 6.8 mb/d capacity that we expect so far.

#### ▪ Role in Global Oil Markets:

- India is set to maintain its position as a key exporter of transportation fuels to markets in Asia and the Atlantic Basin.
- India's role as a global swing supplier has risen **since 2022 as the loss of Russian product exports** to European markets has increased the pull of Asian diesel and jet fuel westward.
  - In 2023, India was the **fourth-largest exporter of middle distillates** globally and the sixth largest refinery product exporter at 1.2 mb/d.
  - New refining capacity is forecast to boost product supplies to global markets to 1.4 mb/d through mid-decade before edging lower to 1.2 mb/d by 2030 given the steady rise in domestic demand.

#### ▪ Biofuels in Decarbonisation:

- Biofuels are also expected to play a key role in India's decarbonisation of the transport sector.
  - India is already the **world's third-largest producer and consumer of ethanol**, as domestic production has tripled over the last five years.
- Supported by the country's abundant feedstocks, political support and effective policy implementation, its ethanol **blending rate of around 12% is amongst the world's highest**.
  - India has advanced by five years its deadline for doubling nationwide [ethanol blending in gasoline to 20% in Q4 2026](#).
  - Achieving 20% ethanol blending in such a short time frame presents several challenges, not least rapidly expanding feedstock supplies.

#### ▪ Efforts in Energy Transition:

- Increased uptake in [Electric Vehicles](#) is set to play a key role in decarbonising the transport sector.
- It is estimated that combined, new EVs and energy efficiency improvements will avoid 480 kb/d of extra oil demand in the 2023-2030 period.
  - That means without these gains India's oil demand would reach a much higher 1.68 mb/d by 2030 compared with the current forecast.

#### ▪ Challenges:

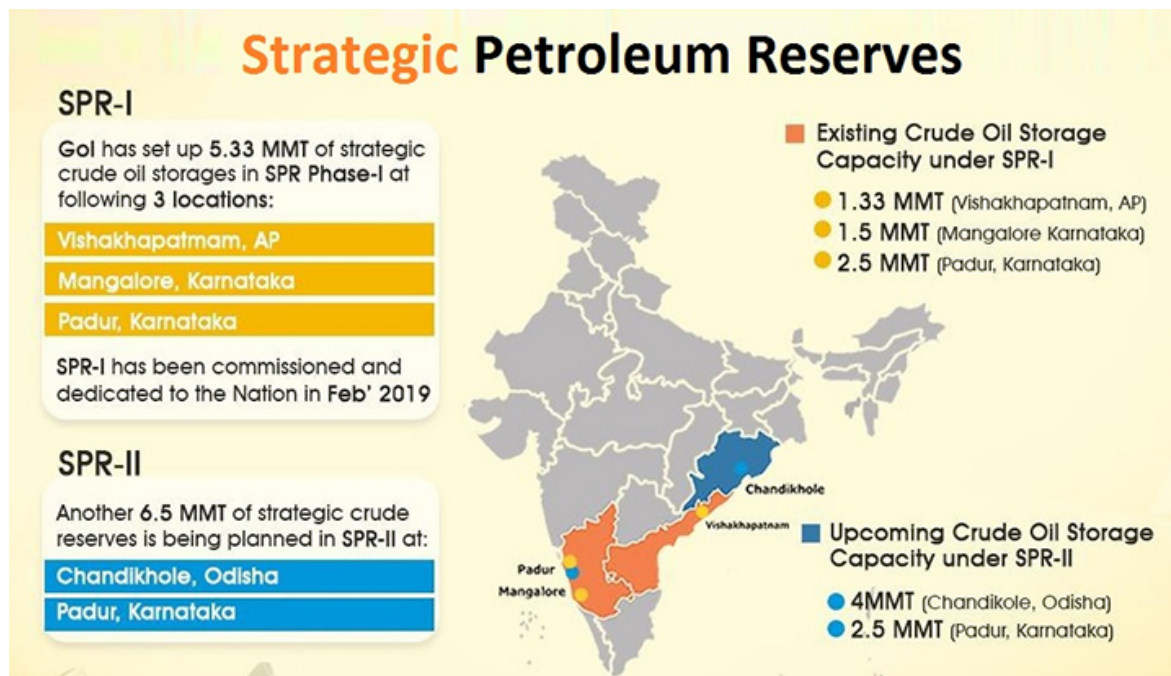
- Despite efforts to attract foreign upstream investment, domestic crude oil production is **expected to continue declining over the medium term** due to a dearth of new discoveries.
- India was already the world's second-largest crude oil net importer in 2023, having boosted imports by 36% over the past decade to 4.6 mb/d to meet rising refinery intake.
- Increased refining processing will lift crude oil imports further, to 5.8 mb/d by 2030, with **major implications for India's security of supply**.

#### ▪ Recommendations:

- India's current oil stock holding levels equate to **66 days of net-import cover**, with [Strategic Petroleum Reserve \(SPR\)](#) stocks of seven days.
  - IEA member countries maintain a stockpile equivalent to 90 days of their demand.
  - India is not a full member of the agency and has an associate member status.
- India needs to enhance its capacity to respond to possible oil supply disruptions by implementing and **strengthening its SPR Programmes** and improving oil industry readiness.
  - Strategic petroleum reserves help mitigate the impact of emergencies like wars on energy supplies.

## What are Strategic Petroleum Reserves?

- Strategic petroleum reserves (SPRs) are stockpiles of [crude oil](#) maintained by countries ensuring a stable supply of crude oil even during times of geopolitical uncertainty or supply disruptions.
- These underground storage facilities play **a crucial role in maintaining a steady flow of energy resources** for the nation's growth and development.
  - India currently has a strategic crude oil reserve **capacity of 5.33 million tonnes**.
  - More strategic reserves with a combined capacity to hold 6.5 million tonnes of crude oil will be built under the second phase of the country's strategic petroleum reserves programme.



## What is the International Energy Agency?

- **About:**
  - The **International Energy Agency (IEA)**, which has its headquarters in Paris, France was set up as an autonomous agency in **1974** by member countries of the [Organisation for Economic Cooperation and Development \(OECD\)](#) in response to the mid-1970s oil crisis.
  - The IEA's main focus is on energy policies, which include economic development, energy security, and environmental protection.
  - The IEA also plays a major role in providing information related to the international oil market and taking action against any physical disruptions in the supply of oil.
- **Members:**
  - The IEA family is made up of 31 member countries, 13 association countries **including India**, and 4 accession countries.
    - A candidate country to the IEA must be a member country of the OECD.
- **Major Reports:**
  - [World Energy Outlook](#).
  - [World Energy Investment Report](#).
  - [India Energy Outlook Report](#).

UPSC Civil Services Examination, Previous Year Questions (PYQs)

**Prelims**

**Q1. Consider the following statements: (2019)**

1. Coal sector was nationalised by the Government of India under Indira Gandhi.
2. Now, coal blocks are allocated on lottery basis.
3. Till recently, India imported coal to meet the shortages of domestic supply, but now India is self-sufficient in coal production.

**Which of the statements given above is/are correct?**

- (a) 1 only  
(b) 2 and 3 only  
(c) 3 only  
(d) 1, 2 and 3

**Ans: (a)**

**Q2. Which of the following is/are the characteristic/characteristics of Indian coal? (2013)**

1. High ash content
2. Low sulphur content
3. Low ash fusion temperature

**Select the correct answer using the codes given below:**

- (a) 1 and 2 only  
(b) 2 only  
(c) 1 and 3 only  
(d) 1, 2 and 3

**Ans: (a)**

**Q3. Consider the following statements:**

1. "The Climate Group" is an international non-profit organization that drives climate action by building large networks and runs them.
2. The International Energy Agency in partnership with the Climate Group launched a global initiative "EP100".
3. EP100 brings together leading companies committed to driving innovation in energy efficiency and increasing competitiveness while delivering on emission reduction goals.
4. Some Indian companies are members of EP100.
5. The International Energy Agency is the Secretariat to the 'Under2 Coalition'.

**Which of the statements given above are correct?**

- (a) 1, 2, 4 and 5  
(b) 1, 3 and 4 only  
(c) 2, 3 and 5 only  
(d) 1, 2, 3, 4 and 5

**Ans: (b)**

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**Mains:**

**Q. "In spite of adverse environmental impact, coal mining is still inevitable for development". Discuss. (2017)**

