



## The worldwide oil-refining crunch

### What is the issue?

Drivers around the world are feeling pain at the pump with fuel prices soaring, and costs are surging for heating buildings, power generation, and industrial production.

### Background

- Prices were already elevated before Russia invaded Ukraine on Feb. 24.
- But since mid-March, fuel costs have surged while crude prices are up only modestly.
- Much of the reason is a lack of adequate refining capacity to process crude into gasoline and diesel to meet high global demand.

### How much can the world refineries produce daily?

- Across the globe, there is enough capacity to refine about 100 million barrels of oil a day, according to the International Energy Agency, however, about 20% of that capacity is not useable.
- Much of that unusable capacity is in Latin America and other places where there is a lack of investment.
- That leaves somewhere around 82-83 million barrels per day (bpd) in projected capacity.

### How many refineries have closed?

- The refining industry estimates that the world lost a total of 3.3 million barrels of daily refining capacity since the start of 2020.
- About a third of these losses occurred in the United States, with the rest in Russia, China, and Europe.
- Fuel demand crashed early in the pandemic when lockdowns and remote work were widespread.
- Before that, refining capacity had not declined in any year for at least three decades.

### Factors contributing to high prices

- The United States, China, Russia, and Europe are all operating refineries at lower capacity than before the pandemic.
- **United States:** US refiners shut nearly one million bpd of capacity since 2019 for various reasons.
- **Russia:** Nearly 30% of Russia's refining capacity was idled in May, sources told Reuters. Many Western nations are rejecting Russian fuel.
- **China:** It has the sparest refining capacity.
- Refined product exports are only allowed under official quotas, mainly granted to large state-

owned refining companies and not to smaller independent companies.

- China's state-backed refineries averaged around 71.3% and independent refineries were around 65.5%.
- That was up from earlier in the year, but low by historic standards.

### **What else is contributing to high prices?**

- The cost to carry products on vessels overseas has risen due to high global demand, as well as sanctions on Russian vessels.
- In Europe, refineries are constrained by high prices for natural gas, which powers their operations.
- Some refiners also depend on vacuum gasoil as an intermediate fuel.
- The loss of Russian vacuum Gasoil has prevented certain from restarting certain gasoline-producing units.

### **Who is gaining from the current situation?**

- Refiners, especially those that export a lot of fuel to other countries, such as US refiners.
- Global fuel shortages have boosted refining margins to historic highs, with the key 3-2-1 crack spread nearing \$60 a barrel.
- That has driven big profits for US-based Valero and India-based Reliance Industries.

### **Will oil refining pick up in the future?**

- Global refining capacity is set to expand by 1 million barrels per day in 2022 and 1.6 million bpd in 2023.
- In April, 78 million barrels were processed daily, down sharply from the pre-pandemic average of 82.1 million bpd.
- The IEA expects refining to rebound during the summer to 81.9 million bpd as Chinese refiners come back online.

### **What is India's Position?**

- India, which refines more than 5 million bpd, according to the IEA, has been importing cheap Russian crude for domestic use and export.
- It is expected to boost output by 450,000 by year-end, the IEA said.

### **What is the way forward?**

- More refining capacity is set to come online in the Middle East and Asia to meet growing demand.
- When the countries like the US, Russia, and China start operating to the pre-pandemic levels, then the demand can be met.

### **Reference**

1. <https://indianexpress.com/article/explained/explained-worldwide-oil-refining-crunch-7985206/ite/>



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