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School of Research Based Learning & Competition

## Current Affairs - 29 April 2026



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### ORGANISATION OF THE PETROLEUM EXPORTING COUNTRIES



Organisation of  
the Petroleum  
Exporting  
Countries  
**OPEC**

- It is a **permanent intergovernmental organization** of oil-exporting countries.
- It was **established in 1960** by the five founding members **Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela**.
- **Objective:** Its primary objective is to **stabilize global oil markets** and ensure fair prices for producers along with a steady supply for consumers.
- **Member countries:** Currently, it has **12 members**, including Algeria, Congo, Equatorial Guinea, Gabon, Libya, Nigeria, and the United Arab Emirates (Decided to quit from May 1 2026).
- **Headquarters:** Vienna, Austria.
- OPEC members collectively hold more than 75–80% of the world's proven crude oil reserves.
- The organization produces around 35–40% of the world's total crude oil supply.
- OPEC plays a crucial role in influencing global oil prices by adjusting production levels.

### What is OPEC+?

- It is an **extension** of the Organization of the Petroleum Exporting Countries formed in 2016.
- It consists of **22 oil-exporting countries** which meet regularly to decide how much crude oil to sell on the world market.
- **Members of OPEC+:** It comprises 12 OPEC countries plus Azerbaijan, Bahrain, Brunei, Kazakhstan, Russia, Mexico, Malaysia, South Sudan, Sudan, and Oman.
- These nations aim to work together on adjusting crude oil production to bring stability to the oil market.

### UAE EXIT FROM OPEC: IMPLICATIONS FOR GLOBAL OIL PRICES

- OPEC was founded in 1960 at the **Baghdad Conference** by five countries—**Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela**—to coordinate oil policies and ensure stable revenues for producing nations.
- It emerged as a response to the dominance of Western multinational oil companies (the “Seven Sisters”), which earlier controlled pricing.
- OPEC currently has **12 members**, including, aside from the **UAE**: Algeria, Republic of the Congo, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, and Venezuela.
- The United Arab Emirates joined OPEC in 1967, initially through Abu Dhabi, becoming part of the expanding group of oil-producing nations.
- **Emergence of OPEC+ and Global Role**
  - OPEC+ is a grouping formed in 2016 between OPEC and 10 major non-OPEC producers such as Russia, Mexico, and Kazakhstan.
    - As per a report, OPEC+ produced roughly 40% of the world’s crude oil and accounts for 60% of internationally traded petroleum.

### **Iran War and UAE’s Exit from OPEC**

- **Security Risks and Disrupted Oil Flows** - The US-Iran conflict has heightened security concerns for the United Arab Emirates, especially around the Strait of Hormuz—a route that previously carried about one-fifth of global oil trade.
- **Constraints within OPEC Framework** - As Iran is a founding member of OPEC, the bloc’s consensus-based decision-making limits the UAE’s flexibility in responding to the crisis and securing its oil exports.
- **Strategic Autonomy through Exit** - By exiting OPEC, the UAE seeks to remove diplomatic constraints, enabling it to independently leverage its oil production, pursue new strategic partnerships, and explore alternative security arrangements beyond traditional Western alliances.

- **Shifting Security Dynamics** - Gulf nations have traditionally depended on the United States for regional security. However, the conflict exposed gaps in this arrangement, as the U.S. could not prevent spillover impacts on Gulf infrastructure and trade.

### UAE's Economic Drivers Behind Exit from OPEC

- **Production Constraints and Capacity Underutilisation** - Beyond geopolitical factors, the UAE faced economic limitations within OPEC quotas, which capped its oil output below full capacity. Concerns over production policies influenced the decision to exit.
- **Balancing Oil Dependence and Economic Diversification** - UAE is pursuing a transition toward a knowledge-based economy, expanding into sectors like education and technology to attract global talent. Achieving this shift requires higher oil production in the short term to generate the financial resources needed for long-term diversification.

### Impact of UAE Exit on Global Oil Prices

- **Weakening of OPEC's Collective Power** - A key concern is the erosion of **spare capacity control**—the unused oil production that can be quickly deployed—traditionally held by countries like Saudi Arabia, Kuwait, and the UAE.
- **Rise of Competition and Market Pressure** - UAE could emerge as a more aggressive independent producer, putting pressure on OPEC members to increase their own production. This shift introduces greater competition in global oil markets.
- **Downward Pressure and Volatility in Prices** - In line with basic economic principles, higher supply and competition are expected to push oil prices downward and increase market volatility, especially amid disruptions from the ongoing geopolitical tensions.
- **Implications for Oil-Importing Countries** - In short term, lower oil prices could benefit import-dependent countries like India by reducing energy costs. Over time, increased competition may also expand the range of oil suppliers, improving energy security.
- **Risk of Further Fragmentation** - The UAE's move may set a precedent, raising the possibility that other members—such as Saudi Arabia—could reconsider quota commitments, potentially leading to further fragmentation of OPEC.

### INDONESIA'S BIOFUEL PUSH: WHY IT COULD RAISE COOKING OIL PRICES IN INDIA

Indonesia has announced the rollout of **B50 biofuel**, a blend of 50% palm oil-based biodiesel and 50% diesel, amid rising global oil prices due to the Iran war. The move is expected to **increase domestic use of palm oil in Indonesia**, reducing exports.

For India, a major importer of Indonesian palm oil, this could lead to **tighter supply and higher cooking oil prices**, linking global energy policy shifts directly to domestic food inflation.

#### **Drivers Behind Indonesia's B50 Biofuel Push**

- Indonesia's move toward B50 biofuel is largely driven by its need to cut crude oil imports, which stood at about \$7.8 billion in 2025.
- By substituting diesel with palm oil-based biodiesel, the country aims to improve energy security, especially as global oil prices surge beyond \$100 per barrel amid geopolitical tensions.

#### **Impact of Indonesia's B50 Policy on Global Vegetable Oil Markets**

- Indonesia's shift toward the B50 programme is expected to divert a significant portion of palm oil from exports to domestic biodiesel use.
- Since **Indonesia accounts for nearly half** of global palm oil exports, this reallocation will tighten global supply, leading to higher international palm oil prices.
- **Limited Substitution Options**
  - India can attempt to diversify imports toward alternatives like **sunflower oil** (from Russia and Ukraine) and **soybean oil** (from Argentina and Brazil).
  - However, these options are:
    - More expensive
    - Available in smaller volumes
    - Linked to longer and riskier supply chains
  - This limits India's ability to fully offset the palm oil shortage.

### Why India Imports Large Volumes of Vegetable Oils?

- India imports large quantities of vegetable oils because domestic demand far exceeds supply, driven by population growth and rising consumption.
- A key structural issue is **low productivity of oilseeds**, with yields per hectare below global standards.
- **Alternatives to Palm Oil in the Indian Market**
  - The main alternatives to palm oil include sunflower oil and soybean oil. However, these are:
    - More expensive than palm oil
    - Imported from distant regions such as Russia, Ukraine, Argentina, and Brazil
    - Associated with longer and riskier supply chains
- **Domestic Option: Mustard Oil**
  - Mustard oil, produced within India, serves as a domestic alternative but has limited scalability and is largely consumed in specific regions, restricting its nationwide substitution potential.

### Palm Oil Biodiesel and Climate Impact: A Mixed Outcome

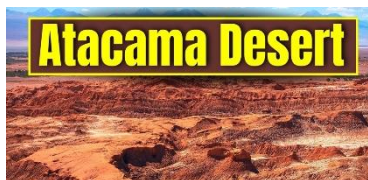
- In countries like Indonesia, where large plantations and high yields already exist, programmes like B50 can remain closer to climate-positive outcomes—provided deforestation is avoided and sustainability standards are enforced.
- In such cases, the policy risks undermining climate goals rather than supporting them.
- **India's Constraints and Trade-offs**
  - For India, the situation is more complex. Lower agricultural productivity means scaling up biofuel feedstock may require diverting food crops or expanding farmland, raising concerns about **food security, land use, and resource stress**.
  - This makes biofuel expansion less automatically climate-friendly.

### WHAT IS A MAMMOGRAM?



- Mammography is a test that uses low-dose X-rays to create images of the breast. These images are called **mammograms**.
- Healthcare providers use mammograms, or mammography, to look for early signs of **breast cancer before symptoms develop**. This is called a **screening mammogram**.
- Providers also use mammography to look for any abnormalities if one develops a new symptom, such as a **lump, pain, nipple discharge** or breast skin changes. This is called a **diagnostic mammogram**.
  - Although it's called a "diagnostic mammogram," it **can't diagnose breast cancer**.
  - However, it can **show whether the abnormal findings look like breast cancer**.
  - But these abnormal signs **can also be caused by a breast condition that is benign** (not cancer).

### ATACAMA DESERT



- **Location:** It is the **driest desert** in the world, located in **northern Chile**.
  - It is nestled between the **Andes Mountains** on the east and the **Pacific Ocean** on the west.
- **Bordered by:** It is bordered by **Argentina, Peru, and Bolivia**
- It also **hosts 12 volcanoes**, mainly located in the western outliers of the Andes.
- **Rainfall:** Average rainfall in this region is about 1 mm per year. Some locations within the desert have never had any rainfall whatsoever.
- **Temperature:** Temperatures are comparatively mild throughout the year. The average temperature in the desert is about 63 degrees F (18 degrees C).

- **Natural Resources:** This region has the largest natural supply of **Sodium Nitrate**, which can be used for producing fertilizers and explosives, amongst other things.
- **Chinchorro Mummies:** The oldest artificially mummified human remains have been found in the Atacama Desert.

### INDIA'S NIGHT-TIME ENERGY CRISIS - POWER GRID UNDER PRESSURE

- According to the Grid India data, India's peak power demand touched a historic **256 GW** on April 25, 2026, with a shortfall of around 4.2 GW at 10:39 PM.
- A day earlier saw a peak demand of 240 GW at 10:34 PM, accompanied by a steepest recorded shortfall of 5.4 GW.
- Crucially, daytime peak demand (around 3:45 PM) was met without any shortage, exposing a **structural vulnerability**: the grid can handle solar-hours demand, but struggles once the sun goes down.

#### **The Solar Paradox:**

- India now has nearly **150 GW** of installed solar capacity, a testament to its clean energy ambitions.
- But this very success creates a new problem — a sharp evening drop-off in generation, sometimes called the "**duck curve**" effect, where supply falls steeply just as residential demand climbs due to cooling needs.
- The grid then falls back entirely on coal, gas, hydro, nuclear, and wind to bridge the gap during non-solar hours (6 PM–6 AM).

#### **Why Coal Plants Failed to Deliver?**

- The immediate trigger for the shortfall was a spike in forced and partial **outages** in thermal power plants. Thermal plants generated only 184–187 GW against an installed capacity of 227 GW — a significant gap.
- **Extreme heat** itself was the culprit: high ambient temperatures put additional thermal stress on generation equipment, reducing plant availability exactly when the grid needed it most.

### Key Challenges:

- Evening demand surge coinciding with the complete withdrawal of solar power creates a dangerous daily window of **vulnerability**.
- Forced outages in coal plants during peak heat — the very conditions that drive maximum demand — expose a thermal generation **reliability** problem.
- Absence of utility-scale **battery storage** means there is no buffer to store surplus daytime solar energy for night-time use.
- Early seasonality of heatwaves is **compressing** the grid planning cycle, leaving less time to prepare.

### Way Forward:

- **Battery Energy Storage Systems (BESS):** Scaling up grid-scale storage is the most direct solution to the solar drop-off problem, enabling excess afternoon solar power to serve evening demand.
- **Demand-side management:** Incentivising large consumers to shift loads away from the 6–10 PM window can ease the peak.
- **Thermal plant resilience:** Heat-proofing of coal plant equipment and improving predictive maintenance to reduce forced outages during summer months.
- **Pumped storage hydro:** Expanding pumped hydro capacity as a proven, large-scale storage technology.
- **Operationalising idle gas-based capacity:** For evening peak support, alongside a coherent domestic gas pricing framework.
- **Transmission strengthening:** Expanding inter-regional transmission capacity so surplus power in one region can flow to deficit zones without congestion.

### Conclusion:

- India's power crisis of April 2026 is a preview of a **structural challenge** that will only deepen as solar capacity expands and climate change brings forward and intensifies heatwaves.



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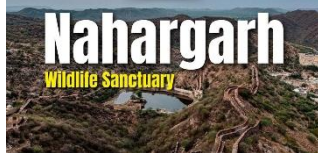
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### NAHARGARH WILDLIFE SANCTUARY



- It is located in **Rajasthan**, in the **Aravalli** range.
- The sanctuary is **named after Nahargarh Fort**, a historic fort built in the **18th century** by **Maharaja Sawai Jai Singh II**, the founder of **Jaipur**.
- It **connects** ecologically with other forest areas like the **Ranthambore Tiger Reserve**.
- Within the sanctuary is the **Nahargarh Biological Park**.

**Flora:** The sanctuary features a rugged terrain with hills, valleys, seasonal streams, and **dry deciduous forests typical of the semi-arid region**, including trees such as **dhok, babool, khejri, and ber**.

**Fauna:**

- Common species include leopards, wild boars, deer, lions, tigers, sloth bears, and several small mammals.
- It's a haven for bird watchers, with a variety of species, including peacocks, owls, and eagles.
- It is also home to reptiles like Indian rock pythons, monitor lizards, and amphibians like frogs and toads.