

# NEWS TODAY

## Cabinet approved Viability Gap Funding (VGF) scheme for Offshore Wind Energy Projects (OWEP)

With total outlay of Rs. 7,453 crore, VGF scheme provides for **commissioning of 1 GW of OWEP (500 MW each off the coast of Gujarat and Tamil Nadu)**, and **upgradation of two ports to meet logistics requirements** for these projects.

- **India is fourth largest wind energy producer in world** with cumulative installed capacity of 46.4 GW by May 2024.

### About VGF scheme for OWEP

- **Nodal Ministry:** Ministry of New and Renewable Energy (MNRE).
- It is a crucial step in implementing **National Offshore Wind Energy Policy, 2015** which aims to explore and promote deployment of India's vast offshore wind energy potential within its exclusive economic zone.
- **Private developers** will **establish projects** and **Power Grid Corporation of India Ltd.** will build the necessary transmission infrastructure like offshore substations.

### Significance of scheme

- ⊕ Commissioning of 1 GW OWEP will **generate approximately 3.72 billion units of renewable electricity** annually, **reducing CO<sub>2</sub> emissions** by 2.98 million tons each year for 25 years.
- ⊕ **Reduced cost of power from offshore wind projects** will make them viable for purchase by DISCOMs.
- ⊕ Lead to creation of required ecosystem for development of offshore wind sector further **attracting investments, development of indigenous manufacturing capabilities** in this sector.

### Offshore Wind Energy

- It is the energy derived from **winds blowing across the sea**, transformed into electricity and supplied into electricity network onshore.
- MNRE has set a target of **30 GW offshore wind installations by 2030**.
- **Benefits of Offshore wind energy:** Higher adequacy & reliability, lower storage requirement and higher employment potential.
- **Associated Challenges:** **Technical challenges** like installation, and infrastructural shortcomings; Displacement of **marine wildlife** etc.

## Ministry of Coal released Draft Mining Plan Guidelines for Coal and Lignite blocks 2024

These guidelines aim to **foster a more sustainable and ethical approach** to coal mining.

- **Primary objective** is to **optimize coal resource extraction through sustainable practices** that minimize waste and enhance operational efficiency.
- **Coal Controller Organization (CCO), New Delhi** (CCO also has offices at Kolkata, Dhanbad etc.) has been delegated with power of processing, scrutiny and approval of mining plan.
  - ⊕ CCO (under Ministry of Coal) is **major source of Coal Statistics** in Government of India and **monitors progress of development of Captive Coal/Lignite blocks**.
  - ⊕ It hears any objection to Government's notification relating to acquisition of coal-bearing areas.

### Key highlights

- **All coal/lignite blocks** shall have a **mining plan** approved by **competent authority**.
- **Calendar plan flexibility** to allow increased annual coal production.
- Preference for **blast-free** and **continuous coal-cutting technologies** in mining methods.
- Implementation of **Safety Management Plans as per Coal Mines Regulations, 2017** including **mandatory safety audits**.
- Integration of **fly ash filling protocols** into mining plans.
- **Mandatory** preparation of **Mine Closure Plans** for **abandoned or discontinued mines post-2009**.

### Significance of Sustainable coal mining

- Promotes **systematic, scientific mining** through **adoption of new technologies**.
- Promote **responsible mining practices** that support both **coal industry** and **broader ecosystem**.
- Robust **safety measures** to safeguard interest of workers.

### Coal sector in India

- Coal is the **most important and abundant fossil fuel** in India. It accounts for **55% of the country's energy need**.
- India has **fifth-largest coal reserves** globally and is **second-largest consumer** of coal.
- **Major coal producing states:** Jharkhand, Odisha, Chhattisgarh, Madhya Pradesh, Telangana, Maharashtra & West Bengal.
- Ministry of Coal launched **commercial coal mining** in 2020.

## World celebrates 10th International Yoga Day (IYD)

The United Nations proclaimed 21 June as IYD in 2014 to raise awareness worldwide of the many benefits of practicing yoga.

- The draft resolution was **proposed by India** and endorsed by a record **175 member states**.

### About Yoga

- **Meaning:** The word "Yoga" is derived from the Sanskrit root yuj meaning "to join".
  - ⊖ It symbolizes the **unity of mind and body**, and a holistic approach to health and well-being.
- It is one of the six Schools of **Indian Philosophy**. Remaining are **Vaisheshika, Nyaya, Samkhya, Purva Mimamsa and Vedanta or Uttara Mimamsa**.
- **Genesis:**
  - ⊖ A number of seals and fossil remains of **Indus Valley Civilisation**, dating back to **2700 BC** indicates that yoga was prevalent in ancient India.
  - ⊖ The word yoga is referred in **all the four Vedas**.
  - ⊖ However, systematic reference of yoga is found in **Patanjali's Yogasutra** (2nd century B.C.).
    - ◆ Other book of Patañjali: **Mahabhashya** ("Great Commentary")

### Summer Solstice (June 21)

- On this day, the **Northern Hemisphere (NH)** is tilted towards the sun and the **rays of the sun fall directly on the Tropic of Cancer**.
- **The North Pole is inclined towards the sun** and the places beyond the **Arctic Circle** experience **continuous daylight for about six months**.
- **The longest day and the shortest night** in the northern hemisphere occur on **this day**.
  - ⊖ At this time in the **Southern Hemisphere all these conditions are reversed**.

### Yoga and Cultural Diplomacy

- Yoga has emerged as a key instrument of **India's soft power** and one of India's biggest **cultural exports playing a major role in cultural diplomacy**.
  - ⊖ **Cultural diplomacy** is the "exchange of ideas, information, art, language and other aspects of culture among nations and peoples in order to foster mutual understanding".

## Union Education Ministry cancelled UGC-NET 2024

Exam was cancelled due to **reports of cheating and paper leak** which compromised the integrity of the exam.

- **University Grants Commission–National Eligibility Test (UGC–NET)** is conducted by the **National Testing Agency**.

### Reasons for cheating in examination

- **Positive attitude towards cheating:** due to which students avoid taking responsibility for their actions.
- **Societal pressures:** success is measured by marks rather than the ability to complete the learning process with integrity.
- **Delayed justice:** general perception of the judicial system being slow and ineffective.
- **Overambition and Pursuit of self-interest:** Students may intentionally cheat to gain an unjust advantage over others.

### Ethical reasonings against cheating in examinations

- **Violates deontological ethics:** Students adopt unfair means (cheating) for favourable ends (results).
- **Against Utilitarianism:** Cheating does not serve the Society and does not satisfy its interests as people who are not capable of providing the needed knowledge and services are given positions.
- **Justice as Fairness Principle:** Cheating violates human liberties and equality of opportunities and supports unjust differences.
- **Virtue Ethics:** Virtues of truth, trust, and excellence of character do not support deception or dishonesty.

### Public Examinations (Prevention of Unfair Means) Act, 2024.

- It was enacted by the government to **bring greater transparency, fairness and credibility** to the public examination systems.
- It deals with unfair means by various entities involved in conducting **public examinations by the Central Government and its agencies**.
- It lists 15 actions that **amount to using unfair means** in public examinations "for monetary or wrongful gain," like leakage of question papers.
  - ⊖ All offenses under the Act will be **cognizable, non-bailable, and non-compoundable**.



## Gulf region became integral part of India's Extended neighbourhood

It was highlighted in a report published by the **Italian Institute for International Political Studies**.

➤ **Extended Neighbourhood** is defined in geographical terms. It includes countries in the **Indian Ocean Region, East Africa, Gulf Region, Central Asian Region and in south-east Asia**.

### Strategic convergence in relation with Gulf Region

➤ **Economic:** The Gulf Cooperation Council (GCC) is India's **largest regional bloc trading partner**.

➤ **Energy security:** India imported 55.3% of its total crude oil in 2022–23 from the Gulf region.

➤ **Regional geo-economic and connectivity focus:** Engagement in various groups like I2U2 (India, Israel, United Arab Emirates, United States), India–Middle East–Europe Economic Corridor (IMEC), etc.

➤ **Defence and security cooperation:** Such as securing maritime lines of communication from pirates.

➤ **Welfare of Indian diaspora:** More than 8 million Indians (or people of Indian origin) working in and around this region.

### Challenges

➤ **Hamis-Israel war and the Red Sea attacks** on Indian ships by Yemen's houthis.

➤ **Growing engagement** of Gulf countries with China.

### About Gulf Cooperation Council

➤ **Established:** In 1981.

➤ **Members:** 6 Gulf states (UAE, Bahrain, Saudi Arabia, Oman, Qatar, and Kuwait)

➤ **Objectives:** To have coordination, integration and inter-connection between Member States in all fields.

### ➤ Organisational Structure

⊕ **The Supreme Council** is composed of the head of the states, and is the highest authority.

⊕ **Ministerial Council** consisting of foreign ministers.

## India's share in global space economy to rise 4 times by 2030 in comparison to 2021

This was highlighted by Minister of State for Science & Technology.

➤ In 2021, Indian space industry had a 2% global share in global space economy. This will **rise to 15% by 2047**.

### Indian Space Economy Status

➤ In 2023, size of India's space economy is estimated at \$8.4 billion (around 2-3% of global space economy).

➤ Potential to **capture 9% of global market share by 2030**.

➤ **Space Start-ups** have increased to nearly **200 in 2024** from 1 in 2022.

➤ Rising **involvement of private sector** in space missions.

⊕ For instance, Skyroot Aerospace successfully test-fired 3D-printed cryogenic engine capable of running on Cryogenic propellants liquefied natural gas and liquid oxygen.

➤ Presently, **100% FDI** is allowed in the space sector.

### Concerns related to Indian Space Economy

➤ **Constrained space budgets**, space spending as a percentage of GDP remains relatively low.

⊕ India only **spends 0.04% of its GDP on space**, whereas United States spends 0.28% of its economy on space.

➤ **Dearth for trained scientists, engineers, and technicians** to meet the demands of an expanding space program.

➤ **Absence of clear national space legislation**, which leads to a lack of clarity on planning and conducting space-related activities.

### Steps taken in Space Sector

➤ **Indian Space Policy 2023** enables end-to-end participation of Non-Governmental Entities in all domains of Space activities.

➤ **Indian National Space Promotion and Authorization Centre (IN-SPACe)**, an independent nodal agency under Department of Space for allowing space activities.

➤ **New Space India Limited** to promote private sector participation.

## Also in News



### Neglected Tropical Disease (NTD)

Chad has become the first country in 2024 and 51st globally to eliminate a NTD i.e. gambiense form of Human African trypanosomiasis (sleeping sickness).

➤ It is a **vector-borne parasitic disease** caused by **Trypanosoma parasite**.

### About NTDs

➤ **Diverse group of conditions** caused by **variety of pathogens** (including viruses, bacteria, parasites, fungi and toxins).

⊕ **Examples:** Dengue and chikungunya, leprosy, onchocerciasis etc.

➤ Mainly prevalent among **impoverished communities in tropical areas**.

➤ **Preventable and treatable** when detected early.

➤ **India** has **eliminated** NTDs like **guinea worm, trachoma, and yaws**.

➤ **Initiatives to eliminated NTDs:** London Declaration, and Kigali Declaration on NTDs; World NTD Day (30 January); etc.



### Iberian lynx (*Lynx pardinus*)

According to IUCN, **conservation status** of Iberian lynx has **improved from Endangered to Vulnerable**, reflecting significant **increase in its population**.

### About Iberian lynx

➤ **Habitat:** Medium-sized **wild cat species** native to **Iberian Peninsula in southwestern Europe**, (Portugal and Spain).

➤ **Appearance:** Weighs about half as much as Eurasian species, with long legs, short tail with a black tip, tufted ears and relatively small head.

➤ **Characteristics:** Solitary hunter; nocturnal or crepuscular; may temporarily become diurnal during winter; live in small, isolated meta-populations; **European Rabbit** accounts for **80-99%** of its diet.

➤ **Threats:** Decreasing food base, Poaching, habitat loss etc.

➤ **Conservation status:** Appendix I of CITES.



### Diatom

A new freshwater diatom genus named **Indiconema** discovered from **Eastern and Western Ghats**.

#### About Diatom

- They're **unicellular algae** belonging to a **phytoplankton group**.
- They're **eukaryotes** and **non-motile**.
- Only **organisms with cell walls** composed of transparent, **opaline silica**. Thus, the walls are indestructible.
  - ⊖ Diatom cell wall deposits **accumulate over billions of years** forming **diatomaceous earth**.

#### Significance

- Chief '**producers**' in oceans and produced **20-30% of global oxygen**.
- **Excellent indicators** of aquatic health.
- **Remove carbon dioxide (CO<sub>2</sub>) from atmosphere**, convert CO<sub>2</sub> to organic carbon in form of sugar, and **release oxygen**.
- Serve as a **base of aquatic food chain**. E.g. **Diatoms-Crustaceans-Herrings**.
- Help in **nutrient cycling** of marine and lake waters.



### Asiatic Lion

Six Asiatic lions have migrated from Gir Forest to the **Barda Wildlife Sanctuary (BWS)**.

#### About Asiatic lions

- **Protection status**
  - ⊖ **IUCN status:** Endangered
  - ⊖ **CITES:** Appendix I
  - ⊖ **Wildlife (Protection) Act 1972:** Schedule I and IV
- **Characteristics**
  - ⊖ They are **slightly smaller than African lions**.
  - ⊖ Males have only moderate **mane growth at the top of the head**.
  - ⊖ Lions have **no particular breeding season**.
- **Habitat:** Only in Gir forest and other protected areas in Gujarat's Saurashtra region.



### World Investment Report 2024

World Investment Report 2024 released by **UN Trade and Development (UNCTAD)**.

#### Key findings

- Globally, foreign direct investment flows **declined by 2% in 2023**.
- **Sizeable declines were recorded in India**.
- **Mobilization of funds for SDG investment** through sustainable finance **products is slowing down**.

#### About UNCTAD

- It is a **permanent intergovernmental body** established by the **United Nations General Assembly in 1964**.
- It **supports developing countries** to access the benefits of a globalized economy more fairly and effectively.



### Mata ni pachedi paintings

Mata ni pachedi is an ancient art form from **Gujarat** is a **religious textile folk art**, drawing inspiration from the **Kalamkari style of painting**.

- It means "**behind the idol of Mother Goddess**".
- Another form of Mata-ni-pachedi painting is **Matano candarvo**.

#### About Mata ni pachedi paintings

- The **Vaghari community** is known to paint these pachedis.
- These paintings are used **for rituals** and are only **Painted by men**.
- It features the **divine feminine** at the centre, surrounded by **depictions of devotees, flora and fauna**.
- It is drawn with **kalam (pen)** made of bamboo sticks.
- Paintings are traditionally in **maroon, black, white**.



### Kolar Gold Fields (KGF)

Karnataka Government cleared the Centre's proposal on reviving gold mining at KGF.

#### About KGF

- These gold mines are located about **100 kilometres** from Bangalore in **Kolar district** of Karnataka.
- These are operated by the **Bharat Gold Mines Limited (BGML)**, a public sector undertaking.
  - ⊖ BGML was established in 1972, under the **Department of Mines** with its office at KGF.
- These mines are **among the deepest in the world** which makes mining of this ore a very expensive process.



### Sangam: Digital Twin initiative

Department of telecom held 1st networking event of Sangam-Digital Twin Initiative at IIT Delhi.

#### About Sangam: Digital Twin initiative

- Initiative of **Department of Telecommunication**.
- It is a **Proof of Concept** focused on **revolutionizing planning & design** of infrastructure **through integration of Digital Twin technology** with Artificial Intelligence and Internet of Things
- Aims to **enhance utility value**, optimise resource utilisation, and **reduce costs through effective data integration**.

#### Twin Technology

- **Virtual representation** of a physical object or system.
- It is dynamic model that **mimics behaviour of its real-world counterpart** in real-time or near-real-time.



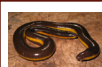
### Methanol

Recently, Many people died **after consuming hooch** (or spurious liquor) in Tamil Nadu.

- Spurious liquor is characterised by high **methanol content**.

#### About Methanol

- It is also known as **wood alcohol**.
- Appears as a **colorless fairly volatile liquid** with a faintly sweet pungent odor like that of ethyl alcohol.
- **Uses:** Solvent in paints, varnishes and chiefly for making formaldehyde.
- **Food Safety and Standards (Alcoholic Beverages) Regulations 2018** stipulate the maximum permissible quantity of methanol in different liquors.



### Striped caecilian (Ichthyophis spp)

A striped caecilian has been added to fauna in Kaziranga National Park and Tiger Reserve.

#### About Striped caecilian

- Caecilians are a **separate group of amphibians** classified under order **Apoda**.
- **Characteristics**
  - ⊖ **Limbless amphibians** that spend most of their life **burrowed under soil**.
  - ⊖ **Wormlike animals**, with smooth, moist skin which appears narrowly segmented.
  - ⊖ **Eyes are small and covered with skin**, and their **visual perception is limited** to determining between light and dark.
  - ⊖ Able to take in **oxygen both through their skin and lungs**.
  - ⊖ Genus **Ichthyophis** are **egg-laying**.
- **Habitat:** Six families of Caecilians are recognised ranging through Africa, South America and Southeast Asia.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



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