

NEWS TODAY

'India's Energy Storage Landscape' Report released by Mercom India Research

Key findings (as of March 2024)

- India's **cumulative installed Battery Energy Storage System (BESS) capacity** is 219.1 Megawatt-hours (MWh).
- **Chhattisgarh** (Highest BESS capacity) accounts for **54.8% of cumulative installed capacity**.
- Solar photovoltaic (PV) systems, combined with BESS, accounted for 90.6% of total installed capacity.

About BESS

- It refers to an **electrochemical device** which enables **renewable energy like solar energy, wind energy to be stored and released when needed**.
- **Types of batteries used in BESS:** Lithium-ion (Li-ion) batteries, Lead-acid batteries, Sodium-sulfur batteries etc.

Significance of BESS

- **Minimizes greenhouse gas emissions:** Thus aid in achieving Panchamrit target of **net zero emission** by 2070.
- **Reduce Energy Costs:** Stored energy can be used during peak hours, when energy prices are highest.
- **Reduce Grid Dependency and Improves Grid Stability:** By sourcing and storing power, and by balancing supply and demand.

Concerns with BESS

- Increased **need for maintenance** and monitoring.
- **Initial cost can be high**, which may deter users from investing in these systems.
- **Extraction of raw materials like lithium is energy intensive**, and can lead to water pollution, land degradation etc.

Initiatives taken to promote BESS

- **Viability Gap Funding (VGF) scheme** for development of 4,000 MWh of BESS projects by 2030-31.
- **Waiver of Inter-State Transmission Charges on BESS Projects** commissioned up to June 2025.
- Production Linked Incentive Scheme for **National Programme on Advanced Chemistry Cell Battery Storage**.
- **National Framework for Promoting Energy Storage Systems** by Ministry of Power.

World Bank Group Guarantee Platform (WBG GP) goes live for business

Initiated in 2024, **WBG Guarantees consolidates** all guarantee products and experts from **across the WBG institutions at Multilateral Investment Guarantee Agency (MIGA)**.

- WB guarantees are **provided to private lenders**, for **infrastructure financing**, where the demand for debt funding is **large, political and sovereign risks are significant**, and **longdated financing** critical to a project's viability.
- Previous to the launch of the platform, the WBG offered **20 guarantee solutions** each with **different processes, rules, and standards** that impeded clients access.

WBG GP

- Aims to boost WBG **annual guarantee issuance to \$20 billion by 2030**.
 - ⊕ The WBG issued approximately **\$10.3 billion in new guarantees** using products from the platform in 2024.

Provides three types of coverages:

- ⊕ **Credit guarantees** for loans to the **public or private sector**;
- ⊕ **Trade finance guarantees**;
- ⊕ **Political risk insurance** against **non-commercial risks** for **private sector projects or public-private partnerships**.

Significance

- Simplified **market-friendly menu of guarantee options** offering **multiple options** to WB clients.
- **Streamlines processes, removes redundancies, and provides greater accessibility** by **de-risking** investments in developing countries.
- **Prioritizing high-impact projects** and facilitating growth.
- **Drive sustainable development and inclusive growth** through innovative financing.

About WB Group

Global partnership of **five institutions**. **India is a part of the first four (i.e., not a part of ICSID)**.

- **IBRD (The International Bank for Reconstruction and Development)**,
- **IDA (The International Development Association)**,
- **IFC (The International Finance Corporation)**,
- **MIGA (The Multilateral Investment Guarantee Agency)**,
- **ICSID (The International Centre for Settlement of Investment Disputes)**,
- **IBRD and IDA form the WB**.

Ratna Bhandar, the sacred treasury of Shree Jagannath Temple, Puri reopened after 46 years

Odisha government established high level committee led by retired Justice Biswanath Rath to supervise inventorisation of valuables including jewellery stored in Ratna Bhandar.

- Additionally, **Magji Ladoo (Odisha's Dhenkanal district)**, one of the 'chappan bhog' prasad at Shree Jagannath Temple got **Geographical Indication (GI) Tag**.

About Ratna Bhandar

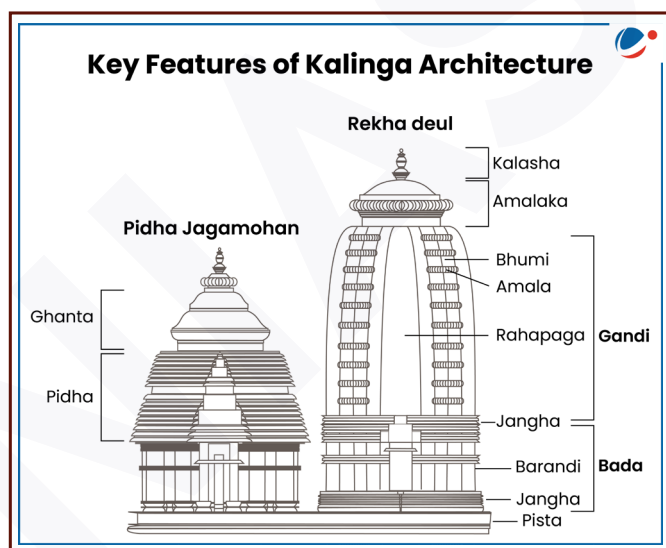
- Located on northern side of **Jagamohana (assembly hall of temple)**.
- Comprises of **Bahar Bhandar** (outer chamber) and **Bhitar Bhandar** (inner chamber).
- These chambers contain **jewels of three sibling deities – Lord Balabhadra, Lord Jagannath, and Devi Subhadra**.

Shree Jagannath Temple, Puri, Odisha (White Pagoda)

- Dedicated to **Lord Jagannath (incarnation of Lord Vishnu)**, Sister **Devi Subhadra** and elder brother **Lord Balabhadra** (holy trinity).
- Built during rule of **Anantavarman Chodaganga Deva**, the founder of **Ganga dynasty** in first part of **12th century A.D.**

Architectural style of Shree Jagannath Temple

- **Architecture style:** Kalinga Architecture
- Four component parts consisting of
 - ⊕ **Vimana or Deula (Garbhagriha):** Built in style of **nagara type Rekha deula** characterized by curvilinear tower known as **sikhara**.
 - ⊕ **Jagamohana:** It is in form of **Pidha deula**, in which sikhara has tiers of diminishing pidhas or platforms.
 - ⊕ **Natamandapa:** Audience/Dancing Hall
 - ⊕ **Bhogamandapa:** Hall for residuary offerings.
- On both sides of outer wall of main temple, figures of **Vishnu, four on either side are carved which altogether depict 24 forms of Vishnus**, like Keshava, Madhava, Damodara and Narayana etc.

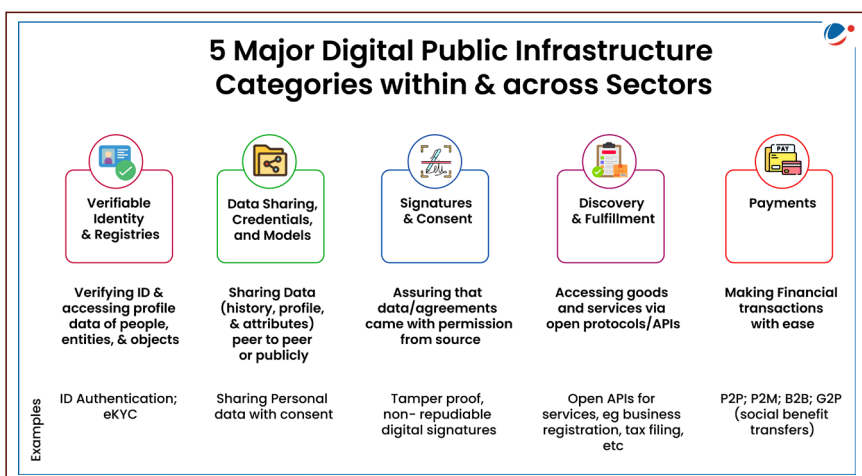


Report of India's G20 Task Force on Digital Public Infrastructure (DPI) released

Task force was established in 2023 under India's G20 Presidency to **facilitate priorities on DPI and Financial Inclusion**, and supplement efforts towards adoption of DPI globally.

About DPI

- Refers to building blocks or platforms like **digital identity, financial infrastructure, and data exchange solutions** that assist **governments** in empowering individuals, and improving lives through digital inclusion.
- India's DPI, **India Stack**, comprises **three foundational layers i.e.** Digital identification (Aadhaar); Real-time fast payment (UPI); and platform to safely share personal data without compromising privacy.
- **Achievements**
 - ⊕ **10 billion transactions per month** through UPI.
 - ⊕ **Over 6 billion documents stored by 211 Million people** in DigiLocker.
 - ⊕ **Rich and Poor divide** in bank account ownership reduced from **14 to 1% (2011-2022)**.
- **Significance**
 - ⊕ Empowers and protects individuals with **control over their money and data**.
 - ⊕ **Spurring market innovation by reducing transaction costs**, maintaining competition through interoperability, and attracting private capital.
 - ⊕ **Enables vulnerable groups** (physically remote populations, women, etc.) to **access services**, helping close inter- group disparities like gender gaps.
 - ◆ **Gender gap** in bank account ownership reduced from **18 to almost 0% (2011-2022)**.



Navigating New Horizons, A Foresight Report Released by UNEP

The report identifies various critical global shifts which are accelerating the **triple planetary crisis of pollution, biodiversity loss and climate change**.

➤ It also highlights that **Global polycrisis**, i.e, multiple shocks such as wars, extreme weather, pandemics etc faced today are interwoven and are a consequence of globalization.

Various shifts, Signals and Potential Disruptions

➤ **Changing relationship between humans and the environment:** Rising AMR, increase in uninhabitable Spaces due to climate change.

➤ **Scarcity and competition for critical resources is reshaping global security dynamics:** E.g. orbital space debris.

➤ **Waves of innovation in the digital landscape:** Internet of Things, AI Adoption.

➤ **Autonomous and artificial intelligence weapons systems:** Amplified risks of biological agents misuse.

➤ **Mass forced displacement:** 1.5% of world's population is forcibly displaced.

➤ **Eco-Anxiety:** Negative emotional responses related to the threat of environmental and climate crises.

Recommendations

➤ **'A new social contract' as per UN Secretary General's report 'Our Common Agenda'** by engaging diverse stakeholders including women, indigenous and young people.

➤ **Agile and adaptive governance** for a sustainable future with use of technology and funding.

➤ Guiding **governance through data and knowledge**.

Reserve Bank of India(RBI) revises rules to manage financial fraud

RBI has issued three revised master directions on fraud risk management for Regulated Entities.

Regulated Entities (RE) under RBI:

➤ Commercial Banks (including Regional Rural Banks) and All India Financial Institutions;

➤ Cooperative Banks (Urban Cooperative Banks / State Cooperative Banks / Central Cooperative Banks);

➤ Non-Banking Finance Companies (including Housing Finance Companies).

Major Points of Master Directions

➤ In compliance with the Supreme Court judgement in **State Bank of India & Ors. Vs. Rajesh Agarwal & Ors of 2023** REs shall ensure compliance with the **principles of natural justice** in a time-bound manner before classifying Persons / Entities as fraud.

➤ **The requirement for Data Analytics and Market Intelligence Unit** is mandated to strengthen risk management systems.

➤ **Framework on Early Warning Signals and Red Flagging of Accounts** has been strengthened for early detection and prevention of frauds in the REs.

⊖ Also timely reporting to **law enforcement agencies and supervisors**.

Significance

➤ Reducing and rationalising the compliance burden on the REs as the **existing 36 Circulars were withdrawn**.

➤ Instituting robust **internal audit and controls framework in the REs**.

➤ Extended to **Regional Rural Banks, Rural Cooperative Banks, and Housing Finance Companies** to enhance fraud risk management across **more financial institutions**.

Also in News



Indian Leopard

As per IUCN, Indian leopard (*Panthera pardus fusca*) is suspected to have **declined by 24.5% over the last three generations**.

About Indian Leopard

➤ **Habitat Distribution:** India, Nepal, Bhutan, and parts of Pakistan, excluding mangrove forests and deserts.

➤ **Characteristics:** Nocturnal animal, Skilled climbers, Solitary predators etc.

➤ **Status of Leopard in India (2022)**

⊖ Leopard population is estimated at 13,874.

⊖ Top 3 states having largest population of leopards are **Madhya Pradesh, Maharashtra, and Karnataka**.

➤ **Protection Status:**

⊖ **IUCN**- Vulnerable

⊖ **Wildlife Protection Act 1972:** Schedule 1

➤ **Threats:** Habitat loss, fragmentation, human-wildlife conflict, poaching, and illegal trade.



Biotechnology Research and Innovation Council (BRIC)

BRIC- Translational Health Science and Technology Institute hosted an industry meet 'SYNCHN 2024' (Synergy in science built through elements of collaboration for high quality data & expertise in NCR Biotech Cluster).

About BRIC

➤ BRIC has been created as a **registered society by Department of Biotechnology (DBT), Ministry of Science and Technology** by subsuming various Autonomous Institutions.

➤ It integrates multi-disciplinary research, training, and innovation programs.

➤ **BRIC-THSTI** acts as a catalyst to translate fundamental discoveries by building rigorous clinical research capacity.

⊖ THSTI is housed within the NCR Biotech Science Cluster in Faridabad.



Article 341

Supreme Court stated that the State Can't Alter the **Schedule Caste (SC) List Published Under Article 341**.

- The Court struck down Bihar govt resolution to merge Economically Backward Class Community in SC List.

About Article 341

- President can officially designate certain groups as Scheduled Castes for specific States or Union Territories.
 - ⊖ For States, this is done after consulting the Governor. The designation may include entire castes, races, tribes, or subgroups within these categories.
- **Parliament** may by **law** include in or exclude from the list of Scheduled Castes.



Uniform GST on Aircraft Parts

- **The Ministry of Civil Aviation** has announced the implementation of a uniform Integrated Goods and Services Tax (IGST) **rate of 5% on all aircraft and aircraft engine parts**.
- **Significance**
 - ⊖ Boost domestic Maintenance, Repair, and Overhaul (MRO) industry
 - ⊖ Help in making India Global Aviation Hub
 - ⊖ Simplifies tax structure
 - ⊖ Reduce operational costs, resolve tax credit issues and attract investment.



Pheromone Traps

A pilot project by **Central Institute for Cotton Research (CICR) - Indian Council of Agricultural Research (ICAR)** deploys **AI powered Pheromone traps**, to protect cotton crops from Pink Bollworm pest infestation.

About Pheromone Traps

- They uses **chemical signals (pheromones)** emitted by female moth to attract mate (hence catches only males of that species).
- Traps can be used to **monitor target pests in agriculture or in residential areas**.
- By constantly monitoring for insects, it may be **possible to detect an infestation before it occurs**.



Hydrogen-Fuel Cells

MV Sea Change, **world's first commercial passenger ferry** powered by **100% zero-emission hydrogen fuel cells** was launched in San Francisco.

- It can travel about **300 nautical miles** and **operate for 16 hours** before needing to refuel.

About Hydrogen Fuel Cells (HFC)

- It **produces electricity by combining oxygen** and hydrogen in an electrochemical reaction.
- HFC vehicles are **completely free from tailpipe pollutant emissions**, including particulates, oxides of nitrogen, carbon monoxide, and carbon dioxide.



Tizu and Zungki River

Inland Waterways Authority of India and Transport Department of Government of Nagaland to conduct detailed feasibility study for **development of Tizu and Zungki River (National Waterways 101)**.

About Tizu and Zungki River

- Tizu originates near Longkhim, Tuensang district, **of Nagaland** and falls into **Chinwin River** (one of the largest Tributary of river Irrawaddy river), also known as Ningthi river in Myanmar.
- **Main tributaries** of Tizu River are river **Zungki, Laneye and Likimro**.
 - ⊖ Zungki is biggest tributary of Tizu in Nagaland.



Electroencephalography (EEG)

2024 marks the 100th year of electroencephalography(EEG)

About EEG

- It is a **medical test which measures brain electrical activity** generated by neurons.
- It uses **small, metal discs called electrodes** that attach to the scalp.
- Brain cells communicate via electrical impulses, and this activity shows up as wavy lines on an EEG recording.
- **Uses:** Detecting epilepsy, neurological disorders, or any other brain related tumors, damage, etc.

Personality in News



Maharishi Sushruta (c. 7th or 6th century BCE)

- All-India Institute of Ayurveda (AIIA) organized the Second National Seminar SAUSHRUTAM Shalya Sangoshti on the occasion of **Sushruta Jayanti-2024 (15th July)**.
- Ancient physician from Kashi (Varanasi) known as the **Father of Indian Medicine and Father of Surgery**.

Key Contributions:

- Author of **Sushruta Samhita** (written in Sanskrit), **one of the Great Trilogy of Ayurvedic Medicine** (Others being Charaka Samhita by Maharishi Charak and Astanga Hridaya by Vagabhata).
 - ⊖ Covers extensively about pathology, anatomy, and surgical management, along with treatment of **12 varieties of fracture**, 6 types of **dislocation, skin grafting, rhinoplasty** (technique used to reconstruct nose), etc.
- **Values:** Courage, hard work, composure, proficiency, dedication.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI