SWACHH SURVEKSHAN 2025-26



- The **10th edition** of the annual Swachh Survekshan Awards, organized by the **Ministry of Housing and Urban Affairs (MoHUA)** under the **Swachh Bharat Mission-Urban (SBM-U)**
- It is the **world's largest urban cleanliness survey** and a key pillar of the SBM-U.
- **Launched in 2016**, the survey assesses cleanliness and sanitation standards in urban areas across the country, encouraging competition among cities to improve waste management and sanitation.
- **Over 4,751 cities participated** in the latest edition. It **expanded its coverage** to include the **Hills and Himalayan cities** as well as **River front and coastal towns.**
- This year 60 national awards have been announced, under **the following categories:**
    - Clean Cities of **Super Swachh League**
    - **Swachh Shehar in 5 population categories,** **Swachh River Front Town**
    - **Swachh Coastal Town,** **Clean Himalayan City**
    - **Swachh Shehar Jodi (SSJ),** **State First Swachh City**
- **Swachh Survekshan 2025-26 Rankings:**
    - **Super Swachh League** (Recognises sustained excellence in cleanliness):
        - **Navi Mumbai, Surat, Vijayawad**
    - **Million Plus Population Category:**
        - **Greater Visakhapatnam (Andhra Pradesh)**
        - Jabalpur (Madhya Pradesh), Lucknow (Uttar Pradesh)
    - **Big Cities (Population 3–10 Lakh Category):**
        - **Ujjain (Madhya Pradesh),**
        - Union Territory of Chandigarh, Guntur (Andhra Pradesh)
    - **Medium Cities (Population 50000–3 Lakh Category):**
        - **Dewas (Madhya Pradesh)**
        - New Delhi Municipal Council (NDMC), Sagar (Madhya Pradesh)

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- **Small Cities (Population 20000–50000 Category):**
  - **Vita (Maharashtra)**
  - Aska (Odisha), Panaji (Goa)
- **Very Small Cities (Population < 20000 Category):**
  - **Bilha (Chhattisgarh)**
  - Panchgani (Maharashtra), Budhni (Madhya Pradesh)
- **Indore**, which had been **ranked the cleanest city** in the country for the **past eight years, did not figure** among the toppers this year.
- **New Award Categories:**
  - **Swachh River Front Town:**
    1. Rewa (Madhya Pradesh)
    2. Bilaspur (Chhattisgarh), 3. Varanasi (Uttar Pradesh).
  - **Swachh Coastal Town:**
    1. **Puri (Odisha)**
    2. Alappuzha (Keralam), 3. Ratnagiri (Maharashtra).
  - **Clean Himalayan City:**
    1. **Rudrapur (Uttarakhand)**
    2. Jammu, 3. Shopian
  - **Swachh Shehar Jodi Initiative:**
    - It is a **city-to-city mentorship and peer-learning programme** launched under the SBM-U.
    - **70 mentor cities** have been **paired with 191 mentee cities** to facilitate knowledge-sharing and improve sanitation outcomes.
    - **Ahmedabad** and its **partner town Sanand** secured the **top position** in this category.
    - **Indore, with its partner town, Depalpur,** secured the **second position,** while Tirupati and its partner town, Kuppam, ranked third.

Cross And Climb

VISTAR: INDIA'S LEAP TOWARDS A REAL-TIME, TECHNOLOGY-DRIVEN STATISTICAL SYSTEM

- **VISTAR** - ***Viksit Bharat Initiative for Statistical Transformation, Analytics & Research*** - is A scheme to move data collection beyond periodic surveys and administrative records, using interoperable datasets to bridge gaps and generate timely, reliable socioeconomic indicators.
- Approved for 2026-27 to 2030-31, with an outlay of ₹4,370 crore.
- Designed to ensure greater data granularity, interoperability, and AI readiness.

Why the Existing System Needed Reform?

- India's statistical architecture has relied on the National Statistical Office (NSO), Central Statistical Organisation (CSO), and National Sample Survey Organisation (NSSO) for national accounts, employment, consumption, and industrial data.
- The National Statistical Commission itself identified systemic weaknesses: **credibility, timeliness, data gaps, and poor coordination**.
- **Problems included**: information asymmetry in periodic surveys, fragmentation of administrative databases across ministries/states, and growing difficulty in measuring services, digital businesses, and the informal economy.

How VISTAR Is Different?

- Combines **conventional surveys** with **alternative data sources** — mobile-phone records, scanner data, and e-commerce data.
- Increasingly uses **AI and machine learning** for data processing, validation, and analysis.

Value Addition

- Enables a continuous, interconnected statistical architecture for evidence-based economic understanding.
- District-level data reveals regional disparities masked by national averages.
- Comprehensive enterprise data strengthens credit policy, infrastructure planning, and welfare targeting.

Cross And Climb

- Better captures services and informal businesses, often missed by conventional industrial indicators.
- Interoperability benefits investors, researchers, and businesses through harmonised definitions, machine-readable formats, and common data-sharing protocols — reducing duplication and inconsistency.
- VISTAR builds on (rather than replaces) earlier reforms like computer-assisted surveys and the **e-SIGMA platform**, consolidating them into a broader framework.

Implementation Challenges

- **Representation bias**: Mobile, e-commerce, and scanner data may disproportionately capture digitally connected consumers and formal businesses, skewing estimates.
- **Integration hurdles**: Requires common definitions, consistent classifications, and reliable data-sharing — complicated by uneven state-level infrastructure and technical capacity.
- **Privacy and cybersecurity concerns**: Greater reliance on digital data raises confidentiality risks, requiring robust identity protection for individuals and enterprises.
- **AI-related risks**: Algorithmic bias, lack of transparency in automated processing, and errors from **synthetic data** (which mimics patterns without reproducing real observations) necessitate **independent validation**.
- **Institutional capacity**: Funding must translate into **trained statisticians, field infrastructure, and accountability**, while preserving the **professional independence** of statistical agencies.

Conclusion

- VISTAR represents a tectonic shift in India's approach to economic measurement — from periodic snapshots to a real-time, AI-assisted statistical ecosystem.
- Its true test lies not in technological sophistication, but in ensuring official estimates authentically reflect ground realities, becoming a trustworthy foundation for Viksit Bharat's 2047 ambitions.

TURNING BATTERY WASTE INTO STRATEGIC MINERAL WEALTH

- At the 18th BRICS Summit in New Delhi (September 13, 2026), PM Narendra Modi warned against the "weaponisation of technology and critical minerals".
- This article highlights the potential of battery recycling to strengthen India's critical mineral security amid rising demand for lithium, nickel and cobalt.
- It examines the challenges posed by import dependence, China's dominance in mineral processing and the inefficient disposal of end-of-life lithium-ion batteries.

Why Battery Recycling Matters?

- End-of-life (EoL) lithium-ion batteries contain economically valuable critical minerals — making them either "waste" or a potential "waste-to-wealth" resource.
- India already uses lithium-ion batteries extensively in mobile phones and electronics, but most EoL batteries end up in landfills or informal recycling channels run by kabadiwalas.
- Recovery rate gap: Informal recycling recovers only 10-20% of materials, versus 90%+ in formal facilities — meaning vast quantities of critical minerals are being lost.

A Five-Point Strategy for India

- **Integrate recycled minerals into strategic planning**: The proposed **national critical mineral stockpile** should mandate a share of recycled minerals, creating predictable demand and discouraging recyclers from stopping at the intermediate "black mass" stage.
- **Boost R&D in recycling technology**: Diverse battery chemistries make recovery complex; technologies must deliver **higher mineral recovery and purity** with minimal environmental impact.
- **Set standards and testing infrastructure**: For battery characterisation, recycled mineral quality, and second-life applications — supported by a **"design for repurposing and recycling"** approach at the manufacturing stage.
- **Provide patient capital**: Battery recycling facilities have **long gestation periods** and are not an immediate profit windfall — long-term investment support is essential.

- **Simplify battery collection for EV users**: EV makers and their dealer/service networks should offer **remunerative take-back or buy-back schemes** — without public participation, a circular economy cannot scale.

Conclusion

- India stands at an early, opportune stage of its EV transition to embed circularity by design. A well-planned battery recycling ecosystem can convert end-of-life liability into strategic mineral wealth, strengthening resource security while building a resilient, self-reliant industrial future.

STAND-UP INDIA SCHEME

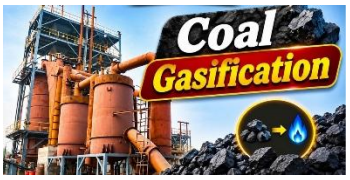


- It **was launched on 5th April, 2016** to **promote entrepreneurship** among the **Scheduled Castes/Scheduled Tribes and Women.**
- Under the recent extension period, it aims to provide financial **assistance to an additional 2.5 lakh entrepreneurs in a span of five years**.
- It operates under the **Ministry of Finance.**
- **Age Requirement:** The applicant **must be above 18 years of age.**

Features of the Scheme:

- **Eligible borrowers:** Women, SC and ST entrepreneurs for setting up new/greenfield enterprises
- **Financial Support:** The loan can be in the form of either Composite (Working Capital and Term Loan) or Term Loan for amounts **above Rs.10.00 lakh and upto Rs.1.00 crore** (upto 85% of the project cost).
- **Eligible Sectors:** Manufacturing, Services, Trading and Agri-allied activities.
- **Credit Guarantee coverage:** 85% of the loan amount
- **Guarantee Fee:** Standard guarantee fee of 0.50 %

WHAT IS COAL GASIFICATION?

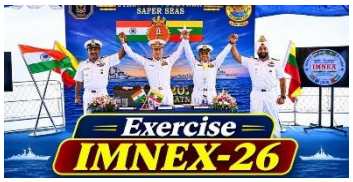


- It is a **thermo-chemical process** that **converts coal into syngas.**
- Contrary to what the name of the process suggests, coal gasification **does not burn coal directly.** It **heats crushed coal** with **limited oxygen and steam** at very **high temperatures** (typically around 800–1,600°C) **and pressure,** producing syngas.
- **Syngas** typically **contains:**
  - **Carbon monoxide (CO), Hydrogen (H_2),** Methane (CH_4)
  - Carbon dioxide (CO_2), Water vapor (H_2O),
  - Trace gases (e.g., sulfur compounds)
- **Process** of Coal Gasification:
  - **Preparation: Coal** is **finely crushed** to increase surface area.
  - **Drying**: **Moisture** is **removed** from the coal.
  - **Pyrolysis**: Coal is **heated** in the **absence of oxygen** to **release volatile gases.**
  - **Oxidation**: A **controlled amount of oxygen** or air is added to **partially combust the coal**, generating heat.
  - **Reduction: Steam reacts with hot carbon** to **form syngas** through water-gas reactions.
- **Advantages of Coal Gasification:**
  - **Fuel Flexibility:** Can **utilize low-grade coal** and waste coal.
  - **Cleaner Combustion**: **Lower SOx, NOx,** and **particulate emissions** than direct coal combustion.
  - **Feedstock for Chemicals:** Syngas can be converted into ammonia, methanol, or synthetic fuels.
  - **Power Generation: Integrated Gasification Combined Cycle (IGCC) plants convert syngas to electricity** more cleanly.

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- **Hydrogen Production:**
  - Provides a **source of hydrogen for fuel cells** and other industrial applications.
  - With carbon capture and storage, coal-based hydrogen production can have substantially lower carbon emissions.

EXERCISE IMNEX-26



- It is a bilateral naval exercise conducted **between India and Myanmar.**
- **Participating Fleets:** INS Rana and INS Sumedha
- The exercise provides an opportunity for both the Navies to **exchange professional expertise, enhance mutual understanding and** develop greater operational synergy.
- IMNEX serves as an important platform for advancing maritime cooperation between the two neighbouring countries.
- **Phases:**
  - **Harbour Phase:** It includes **professional interactions, Subject Matter Expert Exchanges** (SMEEs), cross-deck visits, sporting engagements and discussions on operational matters. **Sea Phase:** It will involve **coordinated maritime operations, tactical manoeuvres** and exercises aimed at enhancing interoperability between the participating units.
- **Significance:**
  - IMNEX-26 underscores the enduring friendship and maritime partnership between India and Myanmar.
  - It is **aligned with India's vision of MAHASAGAR** (Mutual and Holistic Advancement for Security and Growth Across Regions) and reflects the shared commitment of both Navies to maritime cooperation and a secure and stable regional environment.

EXERCISE SEA VIGIL-26



- It is the **fifth edition** of the **pan-India Coastal Defence Exercise.**
- The exercise is being coordinated by the **Indian Navy** as the **lead agency.**
- **Objective**: To **assess** and **strengthen** the **country's maritime security and coastal defence**
- Exercise Sea Vigil was **conceptualised in 2018** to validate the measures instituted to **strengthen maritime security** in the **aftermath of the 26/11 Mumbai terror attacks.**
- The **2026 edition** will cover the **entire Indian coastline and Exclusive Economic Zone (EEZ),** involving **all coastal states and Union Territories,** along with v**arious maritime stakeholders,** including **fishing and coastal communities.**
- It is the **first since India's coastline** was **officially re-measured at 11,098.81 km,** nearly 48 percent longer than the 7,516.6 km figure used for decades.
- The exercise is being conducted in two phases. The Coastal Defence and Security Readiness Evaluation (CDSRE) phase, followed by the Sea Phase on November 18 and 19.
- The exercise will bring together **personnel and assets from the Indian Navy, the Indian Coast Guard, Coastal Security Police, Customs,** and other **maritime agencies.**
- The exercise is being **facilitated by the Ministries of Defence; Home Affairs; Ports, Shipping and Waterways; Petroleum and Natural Gas; and Fisheries, Animal Husbandry and Dairying,** along with other central government agencies and coastal states and Union Territories.
- Sea Vigil also serves as a **precursor to** the **Indian Navy's biennial Theatre Level Readiness Operational Exercise (TROPEX).**
- Together, **Sea Vigil and TROPEX address** the **entire spectrum of maritime security challenges**, from coastal defence to operations on the high seas.

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