

SANSKRITI IAS DAILY CURRENT AFFAIRS

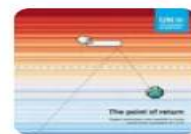
23-10-2026

Emissions Gap Report 2026

 UNEP - UN Environment Programme

Emissions Gap Report 2026

UNEP's Emissions Gap Report 2026: The point of return finds that with global temperature rise set to exceed 1.5°C above pre-industrial levels,...



Why in News

- The **Emissions Gap Report 2026** warns that limiting global warming to **1.5°C above pre-industrial levels** without, or with only limited, overshoot is no longer achievable.

Institutional Framework

- The report is published annually by the **United Nations Environment Programme (UNEP)**.
- It assesses global progress towards limiting warming to well below **2°C** and pursuing the **1.5°C target under the Paris Agreement**.
- It is released annually ahead of the **UN Climate Change Conference of the Parties (COP)**.

Emissions Profile

- Global greenhouse gas emissions reached **58.4 billion tonnes of CO₂ equivalent (GtCO₂e) in 2025**, approximately 0.16 GtCO₂e below the 2024 level.
- **More than two-thirds** of global greenhouse gas emissions originate from fossil sources.
- Other emissions arise from **land use, land-use change and forestry (LULUCF)**, methane, nitrous oxide and fluorinated gases (F-gases).

Climate Policy Implications

- The gap between required reductions and current national commitments highlights the need for more ambitious **NDCs**, faster decarbonisation and stronger climate action.
- The report reinforces the importance of implementing the **Paris Agreement** and accelerating reductions in fossil-fuel-related emissions.

Required Emission Reductions

- The report identifies the following reductions from 2025 emission levels as necessary for the lowest-overshoot pathway.
- **2030: Emissions need to fall by 18%.**
- **2035: Emissions need to fall by 45%.**
- **2040: Emissions need to fall by 69%.**
- Full implementation of countries' **Nationally Determined Contributions (NDCs)** would reduce emissions by only **5–8% by 2030** and **11–15% by 2035**, relative to 2025.

PM-DAKSH Scheme



PM-DAKSH trained 1.87 lakh candidates, placed over 96,000; merged with PMKVY to avoid duplication

A total of 1,87,305 candidates were trained and 96,162 placed under the Pradhan Mantri Dakshata Aur Kushalta Sampann Hitgrahi (PM-DAKSH)...



Why in News

- The Department of Social Justice and Empowerment reported that **1,87,305 candidates were trained** and **96,162 were placed** under PM-DAKSH between 2020–21 and 2023–24.

Scheme Architecture

- **Pradhan Mantri Dakshata Aur Kushalata Sampanna Hitgrahi (PM-DAKSH) Yojana** is a **Central Sector Scheme launched in 2020–21**.
- Its objective is to provide quality skill training to disadvantaged groups to improve their employability and livelihood opportunities.
- The **Ministry of Social Justice and Empowerment** is the nodal ministry.



Beneficiaries and Eligibility

- The target groups include **Scheduled Castes (SCs), Other Backward Classes (OBCs), Economically Weaker Sections (EWS), De-notified Tribes (DNTs), Safai Karamcharis and waste pickers**.
- The eligible age group is **18–45 years**.
- OBC and EWS candidates must have an annual family income **below ₹3 lakh**, while no income limit is specified for SCs, DNTs, Safai Mitras and waste pickers.

Training and Implementation

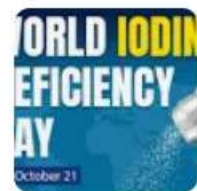
- The scheme covers **upskilling/reskilling, short-term training, long-term training and entrepreneurship development programmes**.
- Implementation involves the **National Scheduled Castes Finance and Development Corporation (NSFDC), National Backward Classes Finance & Development Corporation (NBCFDC)** and **National Safai Karamcharis Finance and Development Corporation (NSKFDC)**.
- PM-DAKSH has been **merged with the Pradhan Mantri Kaushal Vikas Yojana (PMKVY)** of the Ministry of Skill Development and Entrepreneurship.

Iodine

 News On AIR

World Iodine Deficiency Day 2026

On the occasion of World Iodine Deficiency Day today, the Ministry of Health and Family Welfare, has advised citizens to choose iodised salt...



Why in News

- On **World Iodine Deficiency Day**, the Ministry of Health and Family Welfare advised people to consume **iodised salt in moderation** to support good health.

Chemical Properties

- **Iodine** is a non-metallic chemical element belonging to **Group 17 (halogens)** of the periodic table.
- It is a **bluish-black, lustrous crystalline solid** at room temperature and can volatilise into a blue-violet vapour.
- Iodine forms stable compounds with metals and non-metals, including **iodides** formed through reactions with alkali metals.

Natural Occurrence

- Iodine occurs naturally in small quantities in **seawater, rocks and sediments**.
- It is an essential element for the normal functioning of humans and animals.

Biological and Medical Significance

- Iodine is essential for producing the thyroid hormones **thyroxine (T4)** and **triiodothyronine (T3)**.
- These hormones regulate **metabolism, protein synthesis and enzymatic activity**.
- Iodine is used in **iodised salt, medical antiseptics, photographic chemicals, industrial catalysts and nuclear medicine**.

Public Health Linkages

- Adequate iodine intake helps maintain normal thyroid function, making **iodised salt** an important public health intervention.
- Iodine intake should remain balanced because **both deficiency and excessive intake** can adversely affect thyroid function.

Charles Correa Gold Medal

Why in News

- A student of architecture from Kochi won the **28th Charles Correa Gold Medal** in Mumbai.

 The Hindu

'Indian architecture has critical markers for all generations'

Mumbai hosts the Charles Correa Gold Medal win and the launch of The State of Architecture, exploring equity, pedagogy, and India's...



Award Framework

- The **Charles Correa Gold Medal** is an annual award **initiated in 1998** by Indian architect and urbanist **Charles Correa**.
- It recognises outstanding talent among students through their undergraduate thesis projects in a first professional degree in architecture.
- The **Charles Correa Foundation (CCF)** administers the award annually.



Eligibility and Selection

- Eligible candidates must be **final-year undergraduate architecture students** at Indian colleges approved by the **Council of Architecture (COA)**.
- Participating colleges nominate one individual thesis project, and **group projects are not permitted**.
- A jury of eminent architects evaluates the submissions and selects the recipient.
- Since **2022**, the award has been **open to eligible architecture colleges across India**, rather than only colleges in Mumbai and Goa.
- The theme for **2025–2027** is **“Equitability through Design”**.

Contributions of Charles Correa

- **Charles Correa (1930–2015)** was a renowned Indian architect and urban planner born in **Secunderabad**.
- He contributed significantly to modern architecture in post-Independence India and emphasised the needs of the urban poor, traditional materials and the **open-to-sky concept**.
- He was one of the chief architects of **Navi Mumbai** and founded the **Urban Design Research Institute (UDRI)** in Mumbai in **1984**.
- He became Chairman of the **National Commission for Urbanisation** in 1985.

Major Works and Recognition

- His major projects include the **Mahatma Gandhi Memorial at Sabarmati Ashram**, **National Crafts Museum in New Delhi**, **Bharat Bhavan in Bhopal**, **Jawahar Kala Kendra in Jaipur** and the **British Council building in Delhi**.
- He received the **Padma Shri in 1972**, the **Royal Gold Medal from the Royal Institute of British Architects (RIBA) in 1984** and the **Padma Vibhushan in 2006**.

Akash Missile System

Why in News

- Reports of Akash missile exports to **Tajikistan and Turkmenistan** highlight India's defence-export ambitions.



Development and Features

- **Akash** is an **indigenous surface-to-air missile (SAM)** developed by **DRDO** under the **Integrated Guided Missile Development Programme (IGMDP)** and produced by **Bharat Dynamics Limited (BDL)**.
- It serves the **Indian Army and Indian Air Force** and is designed to intercept aircraft, cruise missiles, drones and helicopters.
- The reported operational range is **4.5–25 km**, with the **Rajendra radar** supporting target tracking and missile guidance.

Variants and Strategic Significance

- **Akash-1S** incorporates an indigenous RF seeker, **Akash Prime** is optimised for high-altitude conditions, and **Akash-NG** features advanced radar and seeker technologies.
- The system strengthens indigenous air defence under **Aatmanirbhar Bharat** and supports India's defence exports.
- The IGMDP also supported the development of **Agni, Prithvi, Trishul and Nag** missiles.

Kamala Hydroelectric Project

 The Indian Express

NHPC seeks Forest clearance to fell over 23 lakh trees for Kamala hydel project in Arunachal

Government enterprise National Hydroelectric Power Corporation (NHPC) has sought clearance from Union Environment Ministry to divert for...



Why in News

- **NHPC** sought environmental clearance to divert **3,278 hectares of forest land** in Arunachal Pradesh for the project.

Geographical and Technical Features

- Formerly known as the **Subansiri Middle Hydroelectric Project**, it is a proposed **1,720 MW project** on the **Kamala River** in **Kamle district, Arunachal Pradesh**.
- The **Kamala River** is a tributary of the **Subansiri River**, part of the Brahmaputra river system.
- The project involves a **216-metre-high concrete gravity dam**, an underground powerhouse and a storage-based design with flood moderation.

Financing and Benefits

- The project is expected to generate **6,869.92 million units annually** and support flood moderation in the Brahmaputra Valley.

- It is proposed under a **Build-Own-Operate-Transfer (BOOT)** model, with **74% NHPC equity** and **26% Arunachal Pradesh government equity**.
- The estimated cost is **₹26,069.50 crore**, and the state is proposed to receive **12% free power plus 1% for the Local Area Development Fund (LADF)**.

Environmental Significance

- Forest diversion and impacts on the ecologically sensitive **Eastern Himalayas** raise concerns about biodiversity conservation and local livelihoods.
- The project highlights the need to balance **renewable energy generation, flood management and environmental protection**.

Colorado River



There's another water crisis happening in the Colorado River Basin — and this one's invisible

The two largest reservoirs in the US have dropped to unprecedented lows as drought grips the Southwest, but groundwater levels are also...



Why in News

- A study found that the **Upper Colorado River Basin** experienced greater groundwater losses than the Lower Basin during the **2020–2022 drought**, despite higher natural recharge.

Geographical Profile

- The **Colorado River** originates in the **Rocky Mountains of Colorado, USA**, and flows towards the **Gulf of California in Mexico**.
- It is approximately **2,330 km long** and supplies water to the arid and semi-arid southwestern United States.
- Its major tributaries include the **Green, Gunnison, San Juan, Dolores, Little Colorado, Gila and Virgin rivers**; the **Green River is its longest tributary**.

Major Features and Water Infrastructure

- The river carved the **Grand Canyon**, a **UNESCO World Heritage Site**.
- **Hoover Dam** impounds **Lake Mead**, while **Glen Canyon Dam** created **Lake Powell**.
- The river is a vital source of water for agriculture, settlements and ecosystems in the southwestern United States.

Environmental Significance

- Prolonged drought and groundwater depletion threaten **water security, agriculture, ecosystems and reservoir management**.

- The river basin demonstrates the importance of integrated management of **surface water, groundwater recharge and water demand**.

Other Important News of the day

Environment

Centre for Research on Energy and Clean Air (CREA)

 India Today

GRAP failed to improve Delhi's winter air. But would pollution be worse without it?

CREA found no sustained improvement in Delhi's winter air despite years of GRAP restrictions. Other research indicates the emergency curbs...



Why in News

- A **CREA analysis** found **no consistent improvement in Delhi's winter air quality** during the four years following the revision of the **Graded Response Action Plan (GRAP) in 2022**.

Institutional Profile

- **CREA** is an **independent, non-profit research organisation** that studies air pollution, its causes, health impacts and potential solutions.
- It is based in **Helsinki, Finland**.
- The organisation uses scientific research and evidence to support governments, companies and civil society in advancing **clean energy and clean air**.

Research Priorities

- CREA examines pollution sources and trends, particularly pollutants associated with **fossil-fuel combustion**.
- Its research covers **coal phase-out, industrial emissions and the environmental impacts of energy production**.
- It also investigates geopolitical dimensions of energy, including the financing of fossil-fuel imports during conflicts.

Funding and Policy Relevance

- CREA receives funding through **philanthropic grants and revenue from commissioned research**.
- Its findings can inform air-quality policy, pollution-control measures and the transition towards cleaner energy systems.

Defence

Exercise SIMBEX 2026

DD India

33rd India-Singapore Maritime Exercise SIMBEX-2026 Begins in Visakhapatnam

The 33rd edition of the Singapore-India Maritime Bilateral Exercise (SIMBEX-2026) commenced in Visakhapatnam on 21 October, with a Harbour...



Why in News

- The **33rd edition of Exercise SIMBEX** commenced at **Visakhapatnam**.

Bilateral Defence Framework

- **SIMBEX** stands for **Singapore–India Maritime Bilateral Exercise** and is **conducted annually** by the **Indian Navy** and the **Republic of Singapore Navy (RSN)**.
- The exercise **began in 1994 as Exercise Lion King** and subsequently developed into a major bilateral maritime engagement.

Operational Structure

- The **Harbour Phase** includes professional interactions, Subject Matter Expert Exchanges (SMEEs), cross-deck visits, sporting engagements and planning conferences.
- The **Sea Phase** takes place in the **Bay of Bengal** and includes maritime operations, **anti-submarine warfare (ASW)**, anti-surface warfare, anti-air warfare, seamanship evolutions and tactical manoeuvres.

Strategic Significance

- SIMBEX strengthens **naval interoperability, maritime security cooperation and operational coordination** between India and Singapore.
- The exercise supports shared interests in promoting **peace and stability in the Indo-Pacific region**.

Other India–Singapore Exercises

- **Exercise AGNI WARRIOR** is a military exercise involving India and Singapore.
- **Joint Military Training (JMT)** is another defence engagement involving their armed forces.

Science and Technology

Shamonda Virus

TH | The Hindu

Shamonda virus, the livestock pathogen detected in human for the first time | Explained

Shamonda virus, a livestock pathogen, infects a human for the first time, prompting investigations into transmission, risk,...



Why in News

- France reportedly recorded the **first known human infection** with Shamonda virus in October 2026, and the patient died.

Key Scientific Characteristics

- **Shamonda virus** is an insect-borne virus belonging to the **Orthobunyavirus group**.
- It was first detected in cattle in **Nigeria in 1965** and has subsequently been identified in parts of Africa and Asia.
- It belongs to the same viral group as **Schmallenberg virus**, which causes reproductive disorders in livestock.

Transmission and Symptoms

- **Biting midges** transmit the virus, which primarily affects cattle but has also been detected in sheep, goats, horses and alpacas.
- Infection may cause **fever, diarrhoea, reduced milk production, abortions and foetal malformations** in livestock.
- **Neurological disorders** have been reported less commonly, including in some horses.

Veterinary and Public Health Significance

- The virus has historically not been recognised as a cause of human disease, making the reported French case significant.
- **No commercially available vaccine** against Shamonda virus.

Uttar Pradesh in News

Kashi Tamil Sangamam 5.0

HT | Hindustan Times

Kashi Tamil Sangamam 5.0 to focus on promotion of classical text Thirukkural

The fifth edition of Kashi Tamil Sangamam (KTS) will focus on the promotion of the classical Tamil text Thirukkural, and 1,000 students...



Why in News

- The **Ministry of Education** launched the registration portal for the fifth edition of Kashi Tamil Sangamam (KTS 5.0), scheduled for **28 November–12 December 2026**.

Objectives and Institutional Framework

- The programme promotes historical, cultural and educational links between **Tamil Nadu and Kashi (Varanasi)** under **Ek Bharat Shreshtha Bharat**.
- The theme is **“Thirukkural Payilvom – Thirukkural Abhyas Karen”**, encouraging young people to study the ethical and moral teachings of the **Thirukkural**.
- It is organised by the **Department of Higher Education, Ministry of Education**, with institutions including **IIT Madras, Banaras Hindu University (BHU) and the Central Institute of Classical Tamil (CICT), Chennai**.

Educational Outreach

- A nationwide student engagement programme across **1,000 higher education institutions** promotes Thirukkural-related study and activities.
- The **National Book Trust**, in association with **Rashtriya e-Pustakalaya**, promotes reading, storytelling and creativity.

Previous Editions

- **KTS 1.0 (2022)**: Introduced cultural exchanges between Tamil Nadu and Kashi, with visits to Varanasi, Prayagraj and Ayodhya.
- **KTS 2.0 (2023)**: Expanded professional and intellectual exchanges and introduced app-based Tamil translation during part of the inaugural address.
- **KTS 3.0 (2025)**: Focused on the legacy of **Sage Agasthyar** and connections between Indian knowledge traditions and contemporary issues.
- **KTS 4.0 (2025–2026)**: Used the theme **“Let us Learn Tamil”**, including spoken-Tamil and alphabet lessons, student visits to Tamil Nadu and the Agasthya Expedition from Tenkasi to Kashi.

Cultural Significance

- The **Thirukkural**, traditionally attributed to **Thiruvalluvar**, is a classical Tamil text dealing with **virtue, wealth and love**.