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DAILY NEWS

ANALYSIS



2nd January

Explained

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Playlist Link:



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www.nextias.com

DELHI CENTRE: Vivekananda House

6-B, Pusa Road, Metro Pillar No. 111,
Near Karol Bagh Metro
New Delhi-110060
Phone: 8081300200

DELHI CENTRE: Tagore House

27-B, Pusa Road, Metro Pillar No. 118,
Near Karol Bagh Metro
New Delhi-110060
Phone: 8081300200

DELHI CENTRE: Mukherjee Nagar

637, Banda Bahadur Marg,
Mukherjee Nagar,
Delhi-110009
Phone: 9311667076

PRAYAGRAJ CENTRE:

13A/1B, Tashkand Marg,
Civil Lines, Near Hyundai
Showroom, Prayagraj,
Uttar Pradesh-211001
Phone: 9958857757

JAIPUR CENTRE:

Plot No. 6 & 7, 3rd Floor,
Sree Gopal Nagar,
Gopalpura Bypass,
Jaipur-302015
Phone: 9358200511

EXPLAINED

1. GAGANYAAN'S FIRST UNCREWED MISSION LIKELY TO LIFT OFF BY MARCH.

Gaganyaan project envisages demonstration of human spaceflight capability by launching a crew of 3 members to an orbit of 400 km for a 3 days mission and bring them back safely to earth, by landing in Indian sea waters.

- Gaganyaan is the 1st human space flight programme of ISRO. India will become the 4th nation in the world to launch a Human Spaceflight Mission after the USA, Russia, and China.
- **Objective:** To demonstrate indigenous capability of human space flight to low earth orbit.
- **Launch vehicle:** GSLV-Mk III, also called the LVM-3 (Launch Vehicle Mark-3).

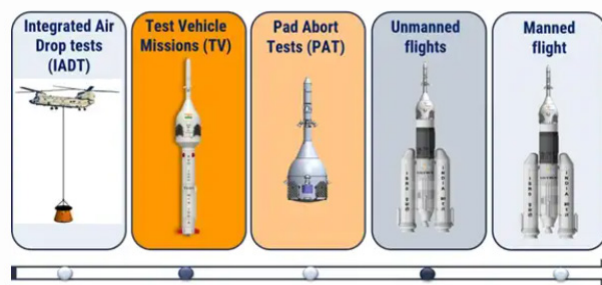
Payloads:

- **Crew Module:** It is the spacecraft carrying human beings. It houses the crew interfaces, human centric products, life support system, avionics and deceleration systems. It is also designed for re-entry to ensure safety of the crew during descent till touchdown.
- **Service Module:** It will support the crew module and is powered by liquid propellant engines.

This mission consists of:

- **Two uncrewed missions (G1 & G2):** 2nd uncrewed mission (G2) will carry "Vyommitra" (a humanoid robot developed by ISRO to function on-board the Gaganyaan).
- **One manned mission (G3):** The Orbital Module of the crewed mission will carry three Indian astronauts, including a woman into space for 7 days. It will orbit the Earth at a low-earth-orbit at an altitude of 300-400 km.
- Russia and France are cooperating with India for the Gaganyaan mission.
- The four astronauts completed their generic training at Russia's Yuri Gagarin Cosmonaut Training Centre between February 2020 and March 2021.
- France is training India's flight physicians and assisting in the development of microgravity applications and space operations.

Major milestones planned



Testing phase:

1. **Integrated Air Drop Test (IADT):** This Test is intended to validate the deceleration system (parachute and pyro's) performance using an IAF chopper
2. **Test Vehicle (TV) flights:** The Test Vehicle is a single-stage liquid rocket developed for this abort mission. Checks abort capability during ascent, and checks Crew module separation
3. **Pad Abort Test (PAT):** The test will involve dropping the crew module from a helicopter and will help understand the impact from various heights and velocity. It will check Crew safety in an instance of launch failure.

Unmanned missions: It will be for technology demonstration, safety and reliability verification and will be heavily instrumented to study the performance of systems before crewed flight. Some advanced tests are:

1. **Water Survival Test Facility (WSTF):** ISRO, along with the Indian Navy carried out WSTF to initial recovery trials of Crew Module in Feb 2023. The trials were part of the preparation for crew module recovery operations.
2. **Vyommitra:** The 'female' robot astronaut the humanoid designed and developed ISRO to fly aboard unmanned test missions before the Gaganyaan human space-flight mission.

Manned mission: Human spaceflight module of Gaganyaan will be followed by the two unmanned missions.

2. A SHIFT IN THE CLIMATE NARRATIVE AS THE PARIS PACT COMES UNDER SCRUTINY

The **Paris Agreement** was **adopted** on 12 December 2015 in Paris and entered **into force** on 4 November 2016 after meeting the dual threshold of ratification by at least 55 Parties contributing over 55% of global emissions.

It replaced the **Kyoto Protocol's top-down model** with a bottom-up system where countries set their own climate targets called NDCs.

The Paris Agreement lays out **four major objectives** aimed at balancing ambition with flexibility.

1. **Mitigation:** Limit temperature rise to well below 2°C and pursue 1.5°C by reducing global GHG emissions by ~45% by 2030.
2. **Adaptation:** Strengthen resilience, reduce vulnerabilities, and support climate-resilient development.
3. **Finance & Technology Transfer:** Mobilise financial and technological resources, especially for developing countries.
4. **Transparency & Global Stocktake:** Introduce a robust system for reporting, monitoring, and raising ambition every five years.

30th Conference of Parties (**COP30**) to United Nations Framework Convention on Climate Change (UNFCCC) was held in **Belém, Brazil** in November 2025.

Key Outcomes of COP30:

Belém Package: A comprehensive set of 29 negotiated decisions adopted at COP30, focused on **moving from discussion to implementation through stronger finance**, just transition measures, adaptation tracking, gender inclusion, and enhanced cooperation to accelerate delivery of the **Paris Agreement goals**.

Global Mutirão Agreement: COP 30 ended with the Global Mutirão Agreement, which prioritises cooperation and implementation rather than new mandatory targets.

- The deal is viewed as a compromise between developed and developing countries, focusing on deliverability over ambition.
- **Global Implementation Tracker and the Belem Mission to 1.5°C:** Launched at COP 30, both designed to monitor whether national actions and **Nationally Determined Contributions (NDCs)** align with pathways compatible with limiting warming to 1.5°C.
- **Tropical Forests Forever Facility (TFFF):** Launched by Brazil, TFFF is a payment-for-performance model that rewards countries for preserving tropical forests using satellite-based monitoring.
- **Belém 4x Pledge:** This pledge aims to quadruple the use of sustainable fuels by 2035 compared to 2024 levels, with flexibility for national circumstances.

- ♦ The International Energy Agency (IEA) will monitor progress annually.



INDIA'S CLIMATE TARGETS: EXISTING AND NEW

Target (for 2030)	Existing: First NDC (2015)	New: Updated NDC (2022)	Progress
Emission intensity reduction	33-35 per cent from 2005 levels	45 per cent from 2005 levels	24 per cent reduction achieved in 2016 itself. Estimated to have reached 30 per cent
Share of non-fossil fuels in installed electricity capacity	40 per cent	50 per cent	41.5 per cent achieved by the end of June this year
Carbon sink	Creation of 2.5 to 3 billion tonnes of additional sink through afforestation	Same as earlier	Not clear.

PRIME MINISTER'S PANCHAMRIT ANNOUNCED IN GLASGOW

Promise	Whether included in new NDC
Non-fossil fuel electricity installed capacity to reach 500 GW	Not included
At least 50 per cent of total installed electricity generation capacity to come from non-fossil fuel sources	Included
Reduction of one billion tonnes of carbon dioxide equivalent from cumulative projected emissions between now and 2030	Not included
At least 45 per cent reduction in emission intensity of GDP by 2030	Included
Net zero status by 2030	Never intended to be part of NDC

The article argues that the global climate consensus is weakening, and the narrative is shifting from *collective ambition* to *national pragmatism*.

Why is the Paris Agreement under scrutiny?

(a) Failure to meet temperature goals

- **Target:** Well below 2°C, preferably 1.5°C
- **Reality:** Current NDCs → ~2.5–2.7°C warming

(b) Unequal burden-sharing

- **Developed countries:** Historically largest emitters

Failed to:

1. Deliver the promised \$100 billion climate finance
2. Lead in deep emission cuts

Developing countries: Asked to decarbonise early while facing development and poverty constraints

(c) Exit / dilution by major players

- **US exit** shows climate policy is vulnerable to domestic politics
- **Some countries:**
 - ♦ Re-prioritising energy security
 - ♦ Expanding fossil fuel use post-COVID & Ukraine war

(d) Shift from multilateralism to unilateral pathways**1. Countries are pursuing:**

- ♦ National carbon markets (e.g. US's subsidy-driven climate policy - Inflation Reduction Act)
- ♦ Trade-linked climate measures (e.g. EU's Green Deal + CBAM)

2. Climate action increasingly linked to:

- ♦ Industrial policy
- ♦ Strategic competitiveness
- ♦ e.g. China's climate action aligned with industrial dominance
- ♦ Paris is no longer the **sole anchor** of climate governance.

- India's consistent stand:

- ♦ Climate action must not compromise poverty eradication

Way Forward

1. Re-centre climate action on Equity, Finance, and Technology access.
2. Integrate climate goals with Development priorities.
3. Strengthen South–South cooperation and formulate Regional climate arrangements.

3. AS EU CARBON TAX KICKS IN, INDIA'S METAL EXPORTS FACE PRICE

The article discusses the EU's Carbon Border Adjustment Mechanism (CBAM) and its implications for India–EU trade, especially steel and aluminium exports.

It links CBAM with the ongoing India–EU Free Trade Agreement (FTA) negotiations, suggesting the FTA could act as a “bridge” to manage carbon-related trade frictions.

What is the “Carbon Gap”?

- The “Carbon Gap” refers to the critical difference between current global emissions reduction efforts and what's needed to meet Paris Agreement goals

Implications for Developing Countries (esp. India)**(a) Policy and Implimentational concerns**

- Pressure to:
 - ♦ Peak emissions early
 - ♦ Phase down coal faster
- Without:
 - ♦ Adequate finance
 - ♦ Technology transfer

(b) Trade & competitiveness risks

- Measures like EU's CBAM:
 - ♦ Act as *de facto carbon tariffs*
 - ♦ Penalise exports from developing countries
- Climate becoming a trade barrier, not just an environmental issue

(c) Equity debate resurfaces

- Stronger emphasis on:
 - ♦ Historical responsibility
 - ♦ Developmental justice

What is CBAM and its Core Features?

- The Carbon Border Adjustment Mechanism (CBAM) is an EU environmental tool designed to apply a carbon price to certain imported goods, **addressing “carbon leakage”** where production moves to countries with weaker climate policies.
- It is a key element of the EU's “Fit for 55” plan to cut greenhouse gas emissions by 55% by 2030 and achieve climate neutrality by 2050.

Core Features of CBAM

- **Carbon Pricing:** CBAM requires importers to buy certificates matching the carbon emissions embedded in their goods, aligning their cost with EU domestic production under the Emissions Trading System (ETS).
- **Targeted Sectors:** In the initial phase, CBAM covers carbon-intensive goods identified as being at risk of carbon leakage, including iron and steel, aluminium, cement, fertilisers, electricity, and hydrogen.

- **Certificate System:** The price of CBAM certificates is linked to the weekly average auction price of EU ETS allowances.
- **Deduction for Existing Carbon Pricing:** Importers can deduct the cost of any carbon price already paid in the country of origin to prevent double taxation.
- **Reporting and Verification:** Importers must report embedded emission data using the EU methodology. From 2026, this data must be verified by an accredited third party.
- **Global Impact:** CBAM encourages other countries to adopt carbon pricing and prompts global industries to reduce emissions to remain competitive in the EU market.

Impact on India

(a) Trade & Industry

- India is a major exporter of Steel and aluminium to the EU.
- CBAM is likely to increase export costs, Reduce price competitiveness, and affect MSMEs in metal value chains.

(b) Equity & Climate Justice

- India's argument:
 - ♦ CBAM ignores CBDR-RC principle (Common But Differentiated Responsibilities and Respective Capabilities)
 - ♦ Developed countries historically responsible for emissions
- **Seen as:**
 - ♦ A "green protectionist" measure
 - ♦ Climate becoming a non-tariff trade barrier

(c) Domestic Policy Pressure

- **Pushes India to:**
 - ♦ Improve emissions accounting
 - ♦ Invest in cleaner technologies
 - ♦ Develop domestic carbon markets

Why could the FTA be a "Bridge"?

1. Create mechanisms for mutual recognition of carbon standards and gradual adjustment timelines.
2. Provide for Technology transfer, Climate finance, and Capacity building for Indian industries.
3. Prevent CBAM from becoming a unilateral trade weapon

Thus, the FTA can balance climate ambition with trade fairness.

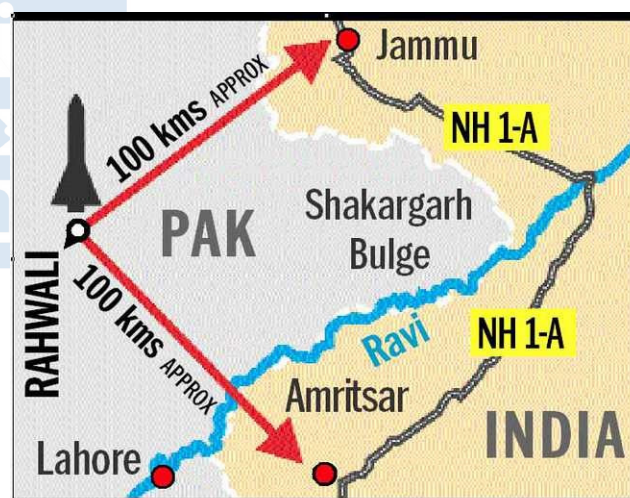
4. IKKIS: THE STORY OF 2ND LT ARUN KHETARPAL & THE BATTLE OF BASANTAR.

The piece recounts the story of **2nd Lieutenant Arun Khetarpal** and his role in the **Battle of Basantar** (Shakargarh Bulge) during the 1971 Indo-Pak war, focusing on his bravery, tactical importance of the battle, and its broader military significance.

Heroism of 2nd Lt Arun Khetarpal

- Arun Khetarpal was a young tank officer in the Indian Army.
- During the Battle of Basantar, despite his tank being hit and burning, he refused to abandon it. He continued fighting and destroyed multiple Pakistani Patton tanks.
- He was killed in action and later awarded the Param Vir Chakra, India's highest wartime gallantry award.
- He is remembered as one of the epitomes of courage from the 1971 war.

Battle of Basantar (1971)



Map not to scale

- Took place in the Shakargarh Bulge, a strategically critical area between the Ravi and Chenab rivers.
- Pakistan aimed to capture Pathankot, which would have threatened Indian supply routes from Punjab to Jammu.
- The battle is described as one of the most important defensive-offensive operations on the Western Front.

4. Indian military operations

- India crossed into Pakistani territory in December 1971.
- Engineers built a bridgehead across the Basantar River under heavy fire.

- Pakistani forces launched repeated counterattacks with armor.
- Indian forces:
 - ♦ Destroyed over 50 Pakistani tanks
 - ♦ Suffered heavy casualties but held their ground
- The success prevented Pakistan from exploiting the Shakargarh Bulge.

5. Role of 'Poona Horse' Regiment

- The Poona Horse, an armored regiment, played a decisive role.
- 2nd Lt Khetarpal belonged to this regiment.
- Their tanks repelled Pakistani counterattacks and secured the bridgehead.
- The regiment's actions ensured Indian forces could continue their advance.

5. PFRDA ALLOWS BANKS TO SET UP PENSION FUNDS TO MANAGE NPS.

The Pension Fund Regulatory and Development Authority (PFRDA) of India has allowed banks to set up pension funds to manage the National Pension System (NPS).

Until now, banks mainly acted as points of sale or service providers, but not as pension fund managers themselves.

Pension Fund Regulatory and Development Authority (PFRDA)

- It is a **statutory regulatory body** set up under the PFRDA Act (2014)
- Objective: To promote **old-age income security** by establishing, developing, and regulating pension funds and to protect the interests of subscribers to schemes of pension funds and related matters.
- It comes under the jurisdiction of the **Ministry of Finance**.
- PFRDA is **headquartered in New Delhi**, with regional offices located around the country.
- the PFRDA Act specifies that the Authority shall **consist of**:
 1. a Chairperson
 2. three whole-time members
 3. three part-time members (to be appointed by the Central Government from amongst persons of ability, integrity, and standing

and having knowledge and experience in economics or finance or law with at least one person from each discipline.)

National Pension System (NPS)

National Pension System is a **retirement benefit scheme** introduced by the Government of India to **facilitate regular income post-retirement** for all subscribers.

Key Facts:

1. NPS was launched on **1st January, 2004**.
2. Initially, NPS was introduced for the **new government recruits** (except the armed forces).
3. With effect from 1st May, 2009, NPS has been provided for all citizens of the country, including the **unorganised sector** workers.
4. It is a voluntary scheme for all **citizens of India**. People can invest **any amount** in their NPS account **at any time**.
5. Permanent Retirement Account Number (PRAN): It is based on a **unique PRAN**, which is allotted to every subscriber.
6. NPS accounts or PRAN will remain the same irrespective of changes in employment, city, or state.
7. PFRDA (Pension Fund Regulatory and Development Authority) is the **governing body** for NPS.
8. There is **no defined benefit** that would be available at the time of exit from the system, and the accumulated wealth depends on the contributions made and the income generated from the investment of such wealth.
9. Under NPS, individual savings are pooled into a **pension fund**, which is **invested by PFRDA**-regulated professional fund managers into diversified portfolios comprising Government Bonds, Bills, Corporate Debentures, and Shares.
10. Contributions made by individual subscribers are accumulated until retirement, and corpus growth continues via market-linked returns. Subscribers also have the **option to exit this plan before retirement** or opt for superannuation.

What exactly has changed?

PFRDA's proposal:

- Allows **banks** to become **pension fund managers (PFMs)**
- Reduces barriers to entry (capital and participation requirements)

- Aims to increase **competition** and **choice** in the NPS ecosystem

Why did PFRDA do this?

Key objectives:

1. **Increase competition** → better services and potentially better returns
2. **Expand NPS coverage** → banks have wide reach across India
3. **Improve financial inclusion** → banks can reach smaller cities and rural areas

4. **Strengthen trust** → banks are seen as stable, systemically important institutions

Why banks specifically?

- Already handle millions of customers
- Have strong distribution networks
- Are closely regulated and financially robust
- Can cross-sell NPS to existing account holders

This could make NPS **more accessible and mainstream**.

■■■■

