MoEFCC Issued Draft Emission Targets Rules for Industries Under Carbon Credit Trading Scheme (CCTS)

Draft Greenhouse Gas (GHG) Emission Intensity Target Rules, 2025 are issued under the compliance mechanism of CCTS.

About Draft Rules

- Defines Greenhouse gas emission intensity (GEI) as tonnes of CO₂ equivalent emitted per unit of output or product.
- Proposes legally binding GHG emission targets for over 400 industrial units.
- Bureau of Energy Efficiency (BEE) will determine the emission targets.
- Applies to sectors such as aluminium, iron and steel, petroleum refining, petrochemicals, and textiles.
- Failure to comply will result in financial penalties under the Environment (Protection) Act, 1986 (EPA 1986).

About CCTS

- Goal: Lower GHG emissions by promoting carbon pricing (i.e., imposes a cost on GHG emissions)
- Legal Backing: Energy Conservation Amendment Act (ECA), 2022 empowers the Central Government, in consultation with BEE, to specify the CCTS.
- **Key elements:**
 - Compliance Mechanism (For Obligated Entities): Obligated entities that emit less than their target get Carbon Credit Certificates.
 - Voluntary Offset Mechanism: Enables other sectors to register their projects for GHG emission reduction, removal, or avoidance, in exchange for the issuance of Carbon Credit Certificates.
- Administrator: BEE
- Regulator of Carbon Trading: Central Electricity Regulatory Commission (CERC)
- Significance: Stepping stones for Indian Carbon Market (refer to the infographic) and aligns with India's obligations under UNFCCC and Paris Agreement.

World Bank's "State and Trends of Carbon Pricing 2025" report has recognized India's growing role in shaping global climate finance and carbon pricing frameworks.

India's Experience with Carbon Markets

Four Key Market Mechanisms for Emission



Performance Achieve and Trade (PAT)

Reduces Specific Energy Consumption (SEC) in energy-intensive industries Key Feature:

- Issues Energy Savings Certificates (ESCerts) for efficiency improvements
- Targets energy-intensive sectors like steel, cement, aluminum, and power



Renewable Energy Certificates (REC) Trading certificates to help meet Renewable Purchase Obligation (RPO)

Key Feature: Facilitates renewable energy trading to

- meet state-level RPO requirements
- Separates renewable energy generation from its environmental attributes



Rate-based Emissions Trading System

India's transition towards performancebased emissions trading with CCTS adoption

Key Feature:

- Total emissions are NOT capped (unlike absolute cap - and - trade systems)
 - Individual entities get performance benchmarks as emission intensity limits
 - Focuses on improving emission intensity rather than absolute reductions
- Clean Development Mechanism (CDM)



Part of Kyoto Protocol (adopted 1997) International carbon credit mechanism Key Feature:

- Allows industrialized countries to invest in emission-reduction projects in developing countries
 Generates Certified Emission Reduction
- (CER) credits for trading
- · Promotes sustainable development while addressing climate change

Finance Minister Nirmala Sitharaman proposes Seven-Point Strategy to mobilise private capital for sustainable development

Seven Point Strategy was proposed by the Finance Minister while addressing the 4th International Conference on Financing for Development (FFD4) organised by the United Nations in Seville, Spain.

Seven-Point Strategy to Mobilise Private Capital

- Strong domestic financial markets: Strengthen banking system and deepen capital markets to finance infrastructure and industry.
- Address perceived risk through Institutional Reforms: Establishing independent regulators, implementing transparent bidding processes, and improving ease of doing business.
- Create scale in investment opportunities: Establish well-prepared, de-risked and investment-ready project pipeline.
- Scale up blended finance: Leverage public and concessional finance to de-risk private investment and use innovative tools like sovereign green bonds, impact investment instruments etc.
- Enabling Role of Multilateral Development Banks and Development Finance Institutions.
- Evolution of International Credit Rating Methodologies to reflect long-term resilience of Emerging Markets and Developing Economies.
- Unlocking capital at Grassroots Level that supports Micro, Small and Medium Enterprises (MSMEs).

Significance of Private Capital in Sustainable Development

- Catalytic force: Unlocking capital, boosting productivity, fostering innovation and driving demand.
- Closing finance gap: UNCTAD estimates an annual investment gap of US\$2.5 trillion in critical sectors of education, health, climate change etc.
- Improving Inclusion: Access to finance for underserved groups including women-led MSMEs and rural communities.







United Nations Conference on Trade And Development (UNCTAD) released A World of Debt Report 2025

Report highlights the **surge in global public debt**, aggravated by cascading crises in recent years and its **disproportionate burden on developing countries**.

Global Public Debt (GPD)

- High Public Debt: GPD reached a record high of \$102 trillion in 2024.
 - GPD could increase to 100% of GDP by end of decade if current trends continue.
- Disproportionate Debt Growth: Although developing countries accounted for less than one third - \$31 trillion - it has grown twice as fast as in developed economies since 2010.
 - In stark contrast among developing economies, Asia and Oceania hold 24% of global public debt, followed by Latin America and the Caribbean (5%), and Africa (2%).

Importance of Public Debt



Finance Development Expenditure



External debt complements domestic savings and provide foreign exchange



Stimulate
Economic
Growth and
Manage
Economic
Downturns

- ▶ **High Borrowing Costs:** Developing countries face higher borrowing costs two to four times higher than those for USA.
 - A record 61 developing countries allocated 10% or more of government revenues to interest payments.
- Impact: Widening development financing gaps, declines in aid flows, constraining spending in critical areas like education and health.

Recommendations for Debt Management and Sustainable Financing

UN Secretary General's Expert Group on Public Debt recommends following measures:

- **Multilateral reforms:** Normalise debt service pauses during crises; Reform the G20 Common Framework; Re-channel SDR through IMF's Resilience and Sustainability Trust.
- **Cooperation between Countries:** Establish a shared information hub to provide technical assistance on innovative financial instruments.
- **National Measures:** Strengthen institutional capacities to address liquidity risks, currency mismatches, improve quality of investment project pipeline, and increase impact of debt swaps.

RBI highlights Indian economy's resilience in its Biannual Financial Stability Report (FSR)

FSR presents the **Sub-Committee of the Financial Stability and Development Council's (FSDC) assessment** of the strength of India's financial system and risks to its stability.

- The FSDC, established in 2010, is chaired by Finance Minister and includes heads of regulators like RBI, SEBI, PFRDA, and IRDA.
- > It is responsible for ensuring financial stability and coordination among regulators.

Key highlights of the report

- India still driver of Global Growth
 - Resilience of the Indian Economy: India's real GDP is projected to grow at 6.5% in 2025–26, driven by strong domestic demand which shields economy from global shock).
- Strong Financial Institutions: E.g., the gross non-performing asset ratio (GNPA) ratio and Net NPA (NNPA) of the Scheduled Commercial Banks (SCBs) declining to multi-decadal lows of 2.3% and 0.5% respectively
 - Till 2025, the capital to risk weighted assets ratio (CRAR) of SCBs increased to a record high of 17.3%.
 - Strong corporate sector performance: The large borrower cohort's GNPA ratio declined from 3.8 per cent in September 2023 to 1.9% in March 2025
- Inflation Trends
 - Domestic inflation: CPI inflation dropped to a six-year low of 2.8% in May 2025.
 - Imported Inflation: Slower global growth may ease commodity and oil prices, though tensions in the Middle East add some uncertainty.
- Global Macrofinancial Risks
 - Emerging markets face rising risks from global trade tensions, ongoing geopolitical conflicts, rising Global public debt and spillovers from advanced economies.
 - Uncertainty over U.S. trade and economic policies has led to market volatility, tighter financial conditions.
- Climate-related shocks have the potential to disrupt business operations through the materialisation of physical hazards, Elevated economic and trade policy uncertainties are testing the resilience of the global economy and the financial system

Key Regulatory Initiatives in the Financial Sector

- Global Initiatives
 - Banking: Basel Committee on Banking Supervision assess the impact of Basel III norms on banks.
 - Financial Markets: International Organisation of Securities Commission (IOSCO) works on strengthening global market regulations.
 - Cyber Resilience: The FIRE framework by the Financial Stability Board (FSB) covers operational and cyber incidents, including those involving third-party service providers.
- Domestic Initiatives

 - **⊙** New **RBI Digital Lending Guidelines**, 2025



Ministry of Statistics and **Programme Implementation** launched the **National** Indicator Framework (NIF) Progress Report

The NIF reflects India's commitment to the Sustainable Development Goals (SDGs) and serves as the backbone for monitoring SDGs at the national level.

Key Progress Highlighted in the Report	
Zero Hunger (SDG 2)	• Agriculture productivity improved, income per worker rose from ₹61,247 (2015–16) to ₹94,110 (2024–25).
Clean Water and Sanitation (SDG 6)	Rural access to safe drinking water increased from 94.57% (2015-16) to 99.62% (2024-25).
Clean Energy (SDG 7)	Renewable energy in the total installed electricity generation rose from 16.02% (2015–16) to 22.13% (2024–25). Renewable energy generation capacity grew from 64.04 (2014–15) to 156.31 watts per capita (2024–25).
Decent Work and Economic Growth (SDG 8)	Social protection coverage expanded from 22% in 2016 to 64.3% in 2025.
Industry and Innovation (SDG 9)	Emission intensity of GDP reduced by 36% from 2005 to 2020, showing greener growth.
Reduced Inequality (SDG 10)	From 2011-12 to 2023-24, Gini coefficient of household expenditure has decreased from 0.283 to 0.237 in rural areas and from 0.363 to 0.284 in urban areas.
Responsible Consumption (SDG 12)	Percentage of waste processed has increased from 17.97% in 2015-16 to 80.7% in 2024-25
Life on Land (SDG 15)	• Forest cover rose from 21.34% (2015) to 21.76% (2023).

Rising Adolescent birth rate in girls, rise in road accident fatalities, decline in issuance of Soil health cards, reduction in Primary government expenditures as a proportion of the original approved budget, etc. are the key issues highlighted.





















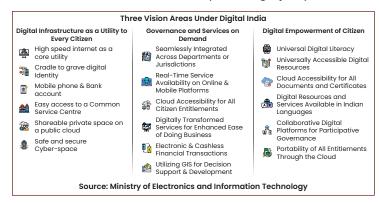




Digital India Mission marks 10 years

Launched in 2015, Digital India Mission aimed to transform India into digital empowered society and knowledge economy.

- ➤ It is an **umbrella programme** covering multiple Government Ministries and Departments, with overall coordination by the Ministry of Electronics and Information Technology (MeitY).
- It identifies three vision areas (see infographic).



Major Achievements under Digital India

- Digital Economy: Contributing 11.74% to national income in 2022-23 and expected to reach **13.42**% by 2024-25.
 - India now ranks third in the world for digitalisation of economy (State of India's Digital Economy Report 2024).
- Connectivity and Infrastructure: Internet connections increased from 25.15 crore (2014) to 96.96 crore (2024) and BharatNet connected 2.18 lakh Gram Panchayats with high speed internet.
- **Digital Finance & Financial Inclusion:**
 - Digital Payments: India accounts for 49% of global realtime digital payments in 2023 with UPI being live in over seven countries.
 - eliminating fake beneficiaries.
- Advancing Strategic Tech Capabilities: Through IndiaAl Mission, India Semiconductor Mission (six projects approved), and SEMICON INDIA 2025.
- **E-Governance:** Training of civil servants under **Karmayogi** Bharat iGOT platform, and improving access to central and state government services through **UMANG**.

Also In News



Wilmington Declaration

The Coast Guards of India, Japan, the U.S., and Australia (QUAD members) have launched the first 'QUAD at Sea Ship Observer Mission' under the Wilmington Declaration.

The mission will strengthen maritime cooperation, security, and interoperability among QUAD coast guards in the Indo-Pacific and support India's maritime vision of SAGAR (Security and Growth for All in the Region).

Wilmington Declaration (2024)

- Issued by QUAD leaders in Wilmington, USA.
- Reaffirms commitment to a free, open, inclusive, and resilient Indo-Pacific, respecting rule of law, democracy, and territorial integrity.
- Other Key Initiatives Launched:
 - Quad Cancer Moonshot (focus: cervical cancer)
 - MAITRI Maritime training in the Indo-Pacific
 - Ports of the Future Partnership for support for digital infrastructure, including undersea cables



WaveX

Ministry of Information & Broadcasting (Mol&B) has launched the WAVEX Startup Challenge 2025 under its flagship startup accelerator program. WaveX.

Challenge Titled BhashaSetu - Real-Time Language Tech for Bharat, is a national hackathon to develop an Al-powered multilingual translation solution across at least 12 major Indian languages.

About WaveX

- It is dedicated startup accelerator platform launched under the Mol&B's WAVES initiative, aimed at nurturing innovation in the media, entertainment, and language technology sectors.
- WaveX continues to support breakthrough ideas through targeted hackathons, incubation, mentorship, and integration with national platforms.









Disaster Alert Systems

The National Disaster Management Authority (NDMA) operationalised the Integrated Alert System (SACHET), and a testing of the Cell Broadcast (CB) system is being conducted to ascertain the efficacy.

About SACHET (India's SMS-Based Alert System)

- Developed by Centre of Development of Telematics C-DOT using the Common Alerting Protocol (CAP), recommended by the International Telecommunication Union (ITU).
- Active in all 36 States and UTs.
- Sends geo-targeted SMS alerts during disasters like cyclones, floods, and storms.

About Cell Broadcast (Near Real-Time Emergency Alerts)

- **C-DOT** is developing it.
- **CB alerts** are broadcast directly to **all mobile phones** in the affected area.
- Much faster than SMS—ideal for urgent disasters like tsunamis, earthquakes, lightning, and gas leaks.



Mahabodhi temple

Supreme Court declined to hear a plea challenging the Bodh Gaya Temple Act, which governs the management of the Mahabodhi Temple Complex in Bihar.

Mahabodhi Temple Complex

- **Historical Background:**
 - First temple was built by **Emperor Ashoka** in the **3**rd **century B.C.**
 - Present structure dates to the 5th−6th century, late Gupta period.
- **Architectural Features**
 - Features a curvilinear shikhara, topped by an amalaka and kalasha.
 - However, the design of the temple is neither Dravidian nor Nagara.
 - It is narrow like a **Nagara** temple, but it rises without curving like a Dravida one.
- Key Components: Main temple, Vajrasana (Diamond Throne), Sacred Bodhi Tree, holy sites of Buddha's enlightenment, surrounded by votive stupas and three protective boundaries (inner, middle, outer).
- Global recognition: UNESCO World Heritage Site.



Andaman Sea

Andaman Sea, which falls within Seismic Zone (highest earthquake risk zone), experienced three earthquakes in a day.

About Andaman Sea

- It is a semi-enclosed marginal sea in the northeastern Indian Ocean.
- **Bounded by** Myanmar (North), Thailand and Malaysia (East), Indonesia and Strait of
- Malacca (South), and Andaman and Nicobar Islands (West). Geologically active with features like the Andaman Trench, formed
- by subduction of the Indian Plate beneath the Eurasian Plate.
- Marine Biodiversity:

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- Part of the Coral Triangle, known for high marine biodiversity.
- Important for migratory birds along the East Asian-Australasian Flyway.



Santhal Rebellion

170th years of Santhal rebellion is celebrated as Hul (revolution) Diwas.. **About Santhal Rebellion** (1855-56)

- Tribal uprising: Santhal rebellion was one of the first expressions of revolt against the British colonial regime.
 - It is also considered to be the inspiration for the 1857 rebellion.
- Region: It was organised in Damin-i-Koh region in Rajmahal Hills of Jharkhand.
- **Leadership:** it was initaitved mainly led by four brothers **Sidhu**, Kanhu, Chand-Bhairav, Phulo & Jhano Murmu against British rule and exploitation.
- Reason: It is attributed to Permanent Settlement Act of 1790 that led to their displacement from Birbhum and Manbhum regions (present day Bengal) and subsequent exploitation by Zamindars, police and British.



Altermagnets

Scientists from S.N. Bose National Centre for Basic Sciences (SNBNCBS) discovered a unique duality in alternemagnets using chromium antimonide (CrSb).

About Altermagnets

- **Definition: Altermagnets** are a **new type of magnetic material** that combine the best features of ferromagnets and antiferromagnets.
 - **Ferromagnets:** Spins align in the same direction, resulting in strong magnetism.
 - Antiferromagnets: Spins alternate, thus cancelling each other out, resulting in no external magnetism.
- Features:
 - ⊕ Like antiferromagnets, they exhibit alternating spins and therefore have no net magnetism.
 - But due to their unique crystal symmetry, they show intense internal spin polarisation, similar to ferromagnets.
- CrSb (Chromium Antimonide) Shows the strongest spin-splitting among known altermagnets.



Reservation in Supreme Court

For the first time, the Supreme Court has introduced a formal policy of reservation in the direct appointment and promotion for Scheduled Caste (SC) and Scheduled Tribe (ST) staff in court's internal administration.

- The policy covers many posts, including registrars, senior personal assistants, assistant librarians, junior court assistants and chamber
- However, this policy is **not applicable on judges**.
- SC employees will receive a 15% quota and ST employees a 7.5% quota in promotions, aligning with central government's reservation norms.

Place in News



Namibia (Capital: Windhoek)

Prime Minister Narendra Modi's trip to Namibia will help boost bilateral cooperation on diamond trade.

Namibia boasts of the world's richest marine diamond deposits.

Political Features

- Located on the Southwestern Coast of Africa.
- Bordering Countries: Angola (North), Zambia (Northeast), Botswana (East), South Africa (South).
- Bordering Water Bodies: Atlantic Ocean.

Geographic Features

- Rivers: Kunene (Cunene), Okavango, Zambezi, Orange etc.
- Desert: Namib Desert, Kalahari Desert.
- The Great Escarpment also extends into Namibia.
- **Sossusvlei Sand Dunes** are some of the highest in the world.
- **Fish River Canyon** is the world's second largest canyon.

























SOUTH





AHMEDABAD

BENGALURU

BHOPAL

DELHI

GUWAHATI

HYDERABAD

JODHPUR

LUCKNOW

PRAYAGRAJ