IEM
श्रद्धावान लभते ज्ञानम्
INSTITUTE OF ENGINEERING & MANAGEMENT
Good Education, Good Jobs

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SustainEdge

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Editor-In chief
Prof. (Dr.) Rahul Baidya
Email: rahul.baidya@iem.edu.in

Associate Editors
Dr. Somdipta Bagchi
Email: somdipta.bagchi@iem.edu.in
Mr. Anirban Mukherjee
Email: anirban.mukherjee@iem.edu.in

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India Highlights

Greener Finance and Regulation

SEBI Tightens Green Debt Rules

SEBI now mandates independent, conflict-free ESG experts to review green debt. They must verify compliance with SEBI's NCS Regulations, 2021. Issuers must disclose reviewer details and review scope in offer documents. Reviews must follow globally aligned ESG formats to curb greenwashing.

Bank of Baroda's Green Bonds

Bank of Baroda raised ₹10,000 crore via 7-year AAA-rated green infrastructure bonds at 7.10%, India's first such bank issue. The bonds were oversubscribed over 3x (₹16,415 crore), showing strong demand and a pricing "greenium". Proceeds will fund renewable energy and sustainable infrastructure under its Green Financing Framework. The landmark issue advances India's ESG-focused financing and climate goals.

SBI Green Loans

SBI plans to raise green advances from 1.56% to 7.5–10% of its loan book by 2030. It has launched CHAKRA, a Centre of Excellence to fund renewable energy, e-mobility, and green hydrogen, with 25% financed via green credit lines. SBI has also introduced the "Green Rupee Term Deposit" to mobilize funds for sustainable projects. These steps support its goals of carbon-neutral operations by 2030 and Net Zero by 2055.

GIFT City Emerges as a Green-Finance Hub

GIFT City has emerged as India’s top green finance hub, with ESG-labelled debt reaching a record $16.8 billion by January 2026—up 56% in two years. Offering 100% tax exemptions, lower withholding taxes, and a 5% green portfolio mandate, it attracts strong global investment. Regulated by IFSCA to meet global standards, the hub ensures credibility in sustainable and transition finance. Overall, total debt raised has soared to $69.7 billion.

Clean Energy and Technology Investments

L&T Vyoma Green AI Data Centre

The Gujarat government and L&T Vyoma have collaborated to develop a 250 MW green, AI-ready hyperscale data centre at Dholera SIR, with an investment of ₹25,000 crore. Designed for AI training, HPC, cloud, and analytics, the facility will run on renewable energy, supporting sustainability goals. Signed at the India AI Impact Summit 2026, the project’s first phase is set for 2028 and aims to make Dholera a major AI and digital infrastructure hub, generating significant employment.

Tata Steel’s Green Upgrade

Tata Steel and Tata Motors launched a Jamshedpur green initiative: ₹11,000 crore for HISARNA (80% CO_2 cut) and EASyMelt (50% emissions). Tata Motors adds hydrogen trucks for net-zero logistics by 2045, aligning with India’s climate goals. The project includes ₹1,500 crore Combi Mill expansion to boost low-carbon steel output.

Eversource Capital’s $700 Million Fund

Eversource Capital is raising $700M for its second green infrastructure fund targeting renewables, e-mobility, waste management, and energy efficiency in India/South Asia. Building on $741M GGEF, recent investments include Radiance

Renewables ($100M), GreenCell Mobility ($89M), with Ayana exit at $2.3B; backed by DFC, NIIF.

ADB’s $1.2 Billion Commitment

In 2026, ADB will lend $1.2 billion to India’s clean energy sector, matching last year. Funds include $650 million for PM Surya Ghar (10 million rooftop solar homes) and $200 million from the Green Climate Fund for hydrogen, grid, and BESS. Key projects: ReNew hybrid ($331 M), Assam solar ($434 M), and Fourth Partner ($100 M), aimed at boosting private investment and green jobs.

INOXGFL–Wind World Acquisition

The INOXGFL Group has won the ₹2,800 crore bid for Wind World India through NCLT. Its arm INOX Neo Energies will take over 600 MW of power projects worth ₹2,200 crore, while INOX Green will acquire 4.5 GW of O&M assets (₹550–600 crore) serving clients like Tata and ReNew. This deal will increase steady revenue and support INOX’s plan to reach 10 GW IPP and 11 GW solar capacity by FY2028 after a ₹3,100 crore funding round.

Electric Mobility and Sustainable Transport

Commercial EV Fleets Rising

India’s EV transition is being driven by fleet operators as electric vehicles reach TCO parity in high-use cases costing just ₹1.2–1.5/km compared to ₹6–9/km for ICE vehicles, with a 3–5 year payback. Companies like Amazon and Flipkart are deploying EVs in bulk, supported by $254 million in 2025 funding. Evera plans 4,500 EV cabs, Euler Motors saw 1,623% growth, and Revfin aims to finance 20 lakh EVs over the next five years.

JSW Greentech’s Electric Bus

In February 2026, JSW Greentech received ARAI CMVR Type Approval for its JSW 12M 51+D AC SDX electric bus (51 seats plus driver), allowing production and sales. Built at its Aurangabad plant with a capacity of 10,000 buses a year, the model targets urban and intercity transit and aims to compete in PM-eBus Sewa tenders, strengthening JSW’s EV commercial strategy.

OMC Power + Honda Partnership:

In February 2026, OMC Power and Honda launched India’s first distributed renewable UPS in Hardoi, Uttar Pradesh, using repurposed EV batteries from Honda’s Mobile Power Pack e. Following Honda’s 2025 investment, the system extends battery life from 3 to 10 years and serves telecom sites, schools, and MSMEs through an Energy-as-a-Service (EaaS) model. The partnership targets 1 GWp of clean energy capacity by 2030.

Himachal Pradesh Mandates EV Chargers

Himachal Pradesh now requires EV charging stations in all new public and commercial buildings—such as hotels, hospitals, and malls—for planning approval. The amendment to the H.P. Town & Country Planning Rules ensures all new structures are EV-ready. This supports the state’s EV Policy goals: developing 6 green corridors, fully electrifying HRTC buses, offering 50% subsidies, and enabling single-window licensing to promote eco-tourism.

Bounce Raises $5 Million:

Bounce raised $5 million (₹36 crore) from Accel, B Capital, and Qualcomm to shift toward B2B gig mobility. It plans to scale 10,000 e-scooters, enter new cities, and expand to 40,000+ battery swaps. As a Rajasthan-based OEM, Bounce offers daily rentals and rent-to-own options for delivery partners. In FY25, it earned ₹64.2 crore in revenue, cut losses to ₹28.6 crore, and is aiming to become EBITDA-positive this year.

PLI Scheme Concerns

Euler Motors and Ather Energy are pushing for changes to the PLI scheme for EVs. Current Champion OEM rules require ₹10,000 crore in revenue and ₹3,000 crore in assets, sidelining startups like Euler despite their ₹1,500–2,500 crore investments. They want R&D-inclusive, sales-based, tiered criteria. The PMO is considering adjustments or a new startup PLI, with SIAM discussions underway to prevent an "innovation tax."

Policy and Environmental Cooperation

India-Finland-EU Green Partnership:

In March 2026, India and Finland renewed their Environmental MoU and upgraded it to a Strategic Partnership focused on circular economy, waste-to-energy, pollution control, water management, and hosting the World Circular Economy Forum. The India-EU FTA includes a new Sustainable Food Systems chapter to cut fertilizer and pesticide use, promote eco-farming, and develop waste-to-hydrogen through the TTC.

Green Ammonia & Methanol Standards

MNRE has set 2026 standards for Green Ammonia and Green Methanol: ≤2.1 kg CO_2e/kg NH_3 (from green hydrogen) and ≤2.0 kg CO_2e/kg CH_3OH (green H_2 + biogenic/DAC CO_2). BEE will verify well-to-gate emissions under the National Green Hydrogen Mission and SIGHT programs. This supports use in shipping and fertilizers plus EU exports.

Carbon Trading Expansion:

MoP and MoEFCC launched the Indian Carbon Market (ICM) in March 2026. It includes mandatory GEI targets and CCC trading for steel (matching the Green Steel Policy and addressing EU CBAM), plus voluntary Phase I for cement, chloralkali, and refineries (excluding coal/steel) by converting ESCerts. BEE will manage it to establish domestic carbon pricing.

Hero Solar Energy Investment

IL&FS Mutual Fund invested ₹1.25 billion (~$13.6 million) in Hero Solar Energy (part of Hero Future Energies) through secured debentures for debt refinancing and expansion in March 2026. This raises total renewable energy commitments to ₹15 billion, with a portfolio including CleanMax, Ayana, Radiance, and INOX Wind, delivering average returns above 9.5%. The fund is managed by IIAML.

Jobs and Social Impact

Clean-Energy Employment Boom

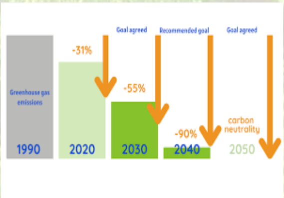
In early 2026, India's clean energy jobs grew 24% year-on-year. Delhi NCR led in policy and finance, while Ahmedabad, Jaipur, Indore, Nashik, and Aurangabad dominated engineering and O&M roles. Demand rose sharply for SCADA, BESS, EV powertrains (+35%), green hydrogen, and carbon auditing skills. The Suryamitra program trained 80,000+ workers, with salaries 15–20% higher than traditional sectors.

Gender and Climate Impacts:

March 2026 reports show women face greater climate risks: 50% rise in gender-based violence during heatwaves, 34% higher income losses, and 150 million workdays/year spent on water collection. India is responding with $200 million from ADB/GCF for green programs, 9.37% gender allocation in the Union Budget, Shakuntala Grants, and $45 million from UNDP for women farmers. Experts call for 50% direct funding to women-led projects.

Global Highlights

Green Policy and Market Trends



EU Developments:

EU proposes 90% GHG cut by 2040 (vs. 1990), bridging 2030 55% to 2050 neutrality via CCS, full power decarbonisation, 80% fossil fuel drop. Shelves green steel label over complexity prioritizes CBAM; eases CSRD reporting for SMEs, delays high-risk sectors by 2 years amid competitiveness concerns.

China's 15th Five-Year Plan

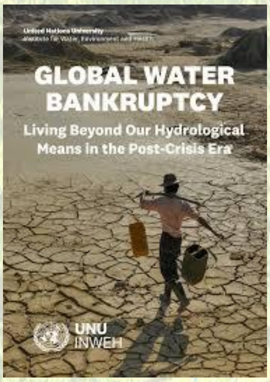
Unveiled on March 5, 2026, this plan outlines China's new priorities for decarbonisation and commodity markets, though it indicates a more "cautious" approach to climate steps as global energy markets fluctuate.

Brazil's Climate Investment Drive:

Brazil targets $48.4B sustainable investments by end of Lula's term via Ecological Transformation Plan: renewables, bioeconomy, industrial decarbonisation, circular economy, green infrastructure. Key: BIP platform, BNDES R$5B to unlock R$13B private, $4B green bonds, GCF fund ($1B+). COP30 host showcasing Global South model.

UN’s Paris-Accord Carbon Credits

UN issued first Article 6.4 Paris Agreement carbon credits (Feb 2026) to Myanmar clean-cooking project (efficient stoves), enabling Korea transfers; 40% fewer credits vs. old CDM. Pipeline: 165+ CDM transitions, new landfill methane methodology. Amid greenwashing fears, features strict baselines, 14-day appeals.



UN "Water Bankruptcy" Warning

UN scientists have formally declared a new era of "global water bankruptcy," highlighting a critical depletion of freshwater resources worldwide.

2025 SDG Rankings

In a March 2026 update, Finland was ranked first globally in the Sustainable Development Goals (SDG) Index, followed by Sweden and Denmark.

Corporate and Infrastructure Updates

World's Largest CAES Station:

China commissioned a record-breaking 600 MW/2,400 MWh Compressed Air Energy Storage (CAES) station on March 4, 2026.

Offshore Wind Milestones

In Denmark RWE installed the first turbine at the 1.1-GW Thor offshore wind site on March 4, 2026. In Japan, Vestas signed a Memorandum of Understanding with the Japanese government on March 9, 2026, to establish a nacelle assembly facility for offshore wind.

South African Solar:

Lyra Energy achieved financial close for a major 255-MW solar project in South Africa on March 9, 2026.

Tech Sector Energy Pledge

On March 4, 2026, tech giants including Google, Microsoft, Meta, and Amazon signed a White House pledge to fund and develop new electricity generation specifically to power their data centres.

Sustainable Aviation Fuel (SAF)

Global SAF capacity is projected to grow by a third in 2026, primarily led by expansion in Asia.

Scientific Research & Environmental Alerts

Boreal Wildfire "Carbon Leak"

New research published on March 4, 2026, warns that wildfires in boreal forests may be releasing far more ancient carbon from peat soils than current climate models account for.

Biodegradable Materials

Scientists at Flinders University announced on February 28, 2026, a new biodegradable packaging film made from milk protein that completely vanishes within 13 weeks.

World Bank Insights:

World Bank at World Sustainable Summit 2026 (Feb, New Delhi) views climate as "opportunity agenda" for growth/jobs. Ajay Banga links poverty eradication to resilient infrastructure/policies/private capital. Valerie Hickey: AI boosts spending efficiency, early warnings, RE optimization; net job creator. World Dev Report 2026 eyes AI risks/benefits.

Acceleration of Warming

A significant analysis by the Potsdam Institute for Climate Impact Research (March 9, 2026) confirmed that global warming has nearly doubled its pace in the last decade. By adjusting for natural variables like El Niño and volcanic activity, researchers found this acceleration meets a 98% confidence level.

Glacial Collapse

Scientists recorded the fastest glacier collapse ever at Antarctica’s Hektoria Glacier, which retreated eight kilometres in just two months due to a flat, underwater bedrock surface.

Methane Surge

Research published in February 2026 revealed that methane levels spiked unexpectedly in the early 2020s due to a complex mix of atmospheric chemistry and climate-driven slowdowns in natural removal processes.

Planetary Boundaries

The State of India's Environment 2026 report (February 27, 2026) warns that 7 of the 9 planetary boundaries have now been breached, with ocean acidification officially becoming the seventh.

Migratory Species Decline

An interim global update (March 2026) signalled an alarm for migratory wildlife, noting that nearly half of these populations are in decline due to habitat destruction and climate change.

Insect Heat Stress

A study of over 2,000 species (March 5, 2026) found that half of Amazonian insects face dangerous heat stress, as tropical species lack the biological flexibility to adapt to rising temperatures.

Forever Chemical Surge

A February 2026 study revealed that chemicals used to replace ozone-depleting CFCs are driving a global surge in "forever chemicals", which are now being detected in rainfall worldwide.


THANK YOU.