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Daily News on Innovation & Technology

16th December, 2025

India to push solar energy, agriculture and mining ties with Ethiopia during PM Modi's visit: Ambassador Anil Kumar Rai

By ANI, December 15, 2025

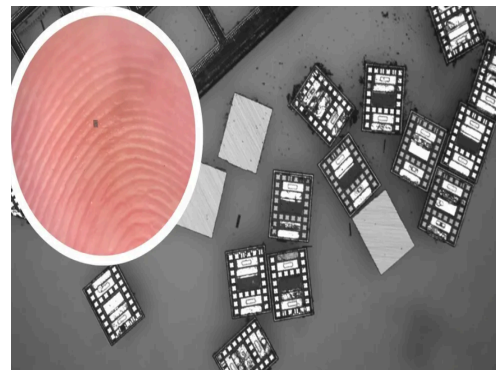
India plans solar energy projects to boost access and fight poverty. The Indian diaspora prepares a warm welcome. This visit strengthens India-Ethiopia ties as Global South partners.



World's smallest programmable robots think, swim, and sense temperature using light

By Neetika Walter, December 15, 2025

Researchers at the University of Pennsylvania have unveiled what they describe as the world's smallest fully programmable, autonomous robots, sporting a brain developed at the University of Michigan. These microscopic swimming machines can sense their surroundings, make decisions, and operate independently for months at a time.



Taiwan launches national cloud computing center to power sovereign AI under new major AI initiative

By Apple Lin, Taipei, December 15, 2025

Driven by the rise of generative artificial intelligence (GenAI), competition across computing power, data, and applications is intensifying, prompting countries to adjust their technology strategies in a bid to secure a leading position in industries.



[Trump enters AI talent war with US Tech Force hiring 1,000 engineers nationwide](#)

By Aamir Khollam, December 15, 2025

The Trump administration on Monday unveiled a new hiring initiative called the “U.S. Tech Force,” a two-year program aimed at pulling top technology and artificial intelligence talent into the federal government.



[Neocloud Providers Look to Network AI Data Centers](#)

By Shaun Sutner, December 15, 2025

Emerging GPU-as-a-service vendors, driven by demand for agentic AI applications and physical AI, such as robots, require increasing amounts of compute power. Some expect the agentic wave sweeping through the AI industry, which shows few signs of abating, to generate a trillion dollars in capital expenditures over the next few years.



[Codex Mortis: 'World's first' game built entirely with AI combines combat, dark magic](#)

By Atharva Gosavi, December 15, 2025

A developer named Grolaf, aka Crunch Fest, has released what he hails as the ‘world’s first’ game, built entirely with AI and vibe coding. Named as Codex Mortis and inspired by Vampire Survivors, the game’s assets, code, and background music were generated using AI.



[Tata Group to invest in EVs, solar energy, hotels and thermal power in UP](#)

By Statesman News Service, December 15, 2025

Uttar Pradesh Chief Minister Yogi Adityanath and Tata Group Chairman N Chandrasekaran on Monday discussed the Tata Group’s ongoing and future proposals in the state. Chandrasekaran informed the Chief Minister about Tata Motors’ plans to expand electric vehicle manufacturing in the state and develop new models.



[Humanoid robots to get real-world practice in China's droid-friendly city zone](#)

By Jijo Malayil, December 15, 2025

Shenzhen, in Guangdong Province, unveiled a framework for the zone during the 2025 Guangdong-Hong Kong-Macao Greater Bay Area Artificial Intelligence and Robotics Industry Conference that concluded on Dec 14, reports Chinese media outlets.



[World's smallest AI supercomputer can fit in your pocket, run without server or GPUs](#)

By Atharva Gosavi, December 15, 2025

US deep-tech startup Tiiny AI revealed the Tiiny AI Pocket Lab, which has been officially verified by Guinness World Records as the world's smallest personal AI supercomputer. Resembling a power bank with a pocket-sized design, the supercomputer can run 120 billion-parameter LLMs locally without relying on cloud connectivity, servers, or high-end GPUs.



News Articles

GenAI, optimism drive India's spending surge

INDIAN CONSUMERS ARE stepping into 2026 with buoyant confidence and strong spending intent. According to BCG's latest Global Consumer Radar Report, India leads globally in optimism, tech adoption, and spending appetite—even as inflation shapes purchasing patterns.
—Compiled by Biswajiban Sharma



CONFIDENCE IS RUNNING HIGH

60% of Indian consumers expect household spending to rise in the next six months — up from **50%** in Sept 2024

61% foresee continued good economic conditions

India's net optimism score: +27%, second only to China (vs global average of -12%)

17% believe geopolitics can slow India's growth (vs 60%+ in Europe)

GENAI GOES MAINSTREAM

62% of Indian consumers have used GenAI tools (up from **48%** in Feb 2025)

64% use GenAI for shopping guidance — higher than those using it for work (**63%**)

■ India ranks among the world's most advanced markets in AI-enabled consumption

Source: Financial Express Newspaper, 16-12-2025

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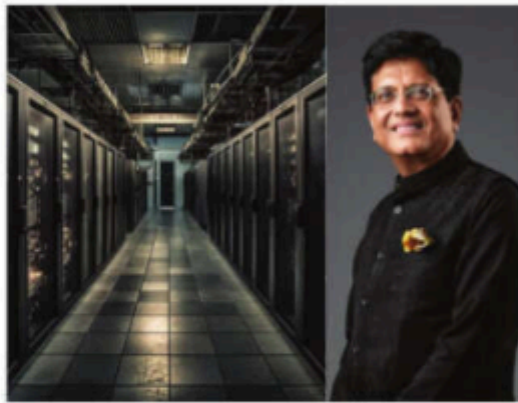
11 years of energy reforms make India a data centre hub: Goyal

STATESMAN NEWS SERVICE
New Delhi, 15 December

Union Commerce and Industry Minister Piyush Goyal on Monday said that the last 11 years of India's energy sector journey demonstrate how bold vision, honest intent, and relentless execution can transform the destiny of a nation.

Addressing a press conference on the energy sector, Minister Goyal said India is a preferred destination for data centres as the country has no dearth of electricity and its 500 GW national grid can take care of the surge in demand.

Calling the 500 GW grid one of the largest in the world, Minister Goyal said, "Europe does not have a national grid. Even the US does not have a national grid. But India has a national grid. So we are a



preferred destination for data centres, and they are planning growth in the years to come. There will be sufficient power available to make sure that we meet the needs of our people, farmers, industry and commercial establishments, including data centres and GCCs."

He noted that the country

recorded its highest-ever coal production of 1,048 million tonnes in FY 2024-25, while coal imports declined by around 8 per cent, and added that India's solar power capacity has increased 46 times in the last 11 years, making the country the third-largest globally, while wind power capacity has grown from 21

GW in 2014 to 53 GW in 2025. Minister Goyal further stated that India has emerged as the fourth-largest refining hub in the world and is working to increase its refining capacity by 20 per cent.

He informed that 34,238 km of natural gas pipeline has been authorised, of which 25,923 km is operational, and mentioned the *SHANTI* Bill, which seeks to allow private players to participate in the nuclear energy sector.

Goyal said that the country has moved towards surplus power generation, grid integration and leadership in renewable energy, and stated that this transformation was not accidental, but driven by a clear vision and consistent efforts.

He added that India has transitioned from power scarcity to power security and now, towards power sustainability.

Source: The Statesman Newspaper, 16-12-2025

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Link: https://drive.google.com/file/d/1_xw2ru2ZKtGq-no5l28sCnc5Dv5rjFEh/view

Connecting BBIN nations through power

India's evolving role in regional grids and OSOWOG



RAJIB K MISHRA

India is rapidly emerging as a regional hub for clean energy and is positioning itself to shape the future of international green-power cooperation through the One Sun One World One Grid (OSOWOG) initiative. Hosting the headquarters of the International Solar Alliance (ISA) in New Delhi further reinforces India's leadership. While OSOWOG often evokes images of long undersea cables connecting continents, the practical foundations of this vision are taking shape much closer to home. Over the past decade, India has developed a strong network of cross-border electricity links with Bhutan, Nepal, Bangladesh and to a smaller extent, Myanmar. Some of these corridors are mature, while others are expanding steadily, but together they form the real building blocks of the OSOWOG vision.

Among these partnerships, Bhutan stands out as the most successful example of regional clean-energy cooperation. India and Bhutan have jointly developed several hydropower projects, financed and executed largely with Indian support, while ensuring long-term economic benefits for Bhutan. Every year, over 2,000 MW of surplus hydropower flows into India through highly reliable transmission corridors, delivering several thousand gigawatt-hours of firm, clean energy. These hydropower imports are increasingly valuable as India's solar and wind capacities grow. In many ways, India's energy partnership with Bhutan mirrors what OSOWOG ultimately aims to achieve: clean energy generated in resource-rich regions flowing seamlessly to regions with higher demand.

Nepal is emerging as another important pillar of India's regional energy strategy. With vast untapped hydropower resources, Nepal is rapidly expanding its generation capacity. India and Nepal are working to enhance cross-border connectivity, particularly through 400 kV transmission corridors that will facilitate larger, two-way electricity flows. Nepal's seasonal generation profile complements India's



renewable mix. Nepal has a surplus during the monsoon months when India's solar output declines, while India can supply Nepal during its

Dr Rajib K Mishra is an energy policy specialist and Executive Director at IREDA, former Professor, MITI and CMD PFC India. He is known for his leadership in regional power cooperation, clean-energy diplomacy and strategic grid planning.

#mishra_r
Dr. Rajib K Mishra

dry season, especially in the high-solar months of March to May. This natural balancing effect reflects the very logic of interconnected green grids. For OSOWOG planners, Nepal is not just a neighbour but a long-term strategic partner whose role will expand as more hydropower stations and cross-border links are commissioned.

Bangladesh provides another successful example of dependable cross-border electricity cooperation. The India-Bangladesh power exchange has matured into a stable commercial arrangement. Multiple interconnections, including a 400 kV double-circuit line and an HVDC back-to-back system, support reliable flows ranging from about 600 MW to more than 1,100 MW. What makes this corridor noteworthy is the sophistication of its operational processes. Scheduling, settlements, billing, load management and dispute resolution

are carried out efficiently and transparently. Such institutional maturity is crucial because OSOWOG will ultimately require similar regional market mechanisms operating at a much larger scale. The Bangladesh partnership demonstrates that predictable, rule-based cross-border electricity trade is practical and sustainable.

Further east, India's power engagement with Myanmar is limited but strategically relevant. Myanmar is the only land route through which India could eventually link its grid with Southeast Asia. A proposed 500 MW HVDC link between Imphal and Tamu could, in the long run, serve as a gateway for broader South Asia-ASEAN energy cooperation.

However, Myanmar's internal situation has deteriorated significantly since the 2021 military takeover. Power generation has declined, infrastructure has suffered, investor confidence has collapsed and several thermal and renewable

plants operate well below capacity. At present, only a small supply from India to Tamu remains operational. Myanmar therefore remains a long-term prospect rather than an immediate contributor to OSOWOG.

Another important proposal is the India-Sri Lanka HVDC interconnection involving around 285 kilometres of overhead and undersea cable. If implemented, it would mark a major step in regional clean-energy integration, enabling exchange of renewable electricity between the two countries depending on seasonal availability and demand. However, undersea HVDC links require extensive environmental, technical, economic and regulatory assessments. While promising, this project remains a medium-term goal.

India's clean-energy vision under OSOWOG extends beyond South Asia, with exploratory plans for multi-gigawatt HVDC links to the Gulf region, especially the UAE. These long-distance corridors could enable India to export daytime surplus solar power and import firm power during evening peaks, making use of complementary resource profiles and time-zone differences. However, such projects demand strong political commitment, long-term coordination and significant investment.

Crucially, OSOWOG is not limited to physical transmission lines; it also relies on harmonised grid codes, transparent markets, trusted settlement systems and coordinated operational procedures. India's successful energy partnerships with Bhutan, Nepal and Bangladesh demonstrate how cross-border electricity trade can thrive on mutual confidence, even amid wider geopolitical or economic uncertainties.

Going forward, India's immediate focus should be on deepening power corridors with these three neighbours, creating a stable regional base of clean energy integration. In parallel, long-term efforts can progress on the Myanmar, Sri Lanka and Gulf links. Each incremental step strengthens India's technical and institutional capabilities while expanding its diplomatic reach. As the global energy transition accelerates, India's cross-border links are emerging as strategic assets, laying the practical groundwork for OSOWOG and reinforcing India's leadership in regional energy cooperation.

Source: The Pioneer Newspaper, 16-12-2025

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