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InfraInsights

Blueprints for Tomorrow

Ampln Energy to build 1.3 GW solar cell, module factory in India

Ampln Energy Transition says it plans to invest \$372 million to set up more than 600 MW of renewable energy projects and an integrated 1.3 GW solar cell and module factory in eastern India. Ampln Energy Transition, formerly Ampln Energy India has announced plans to invest \$372 million in solar generation and manufacturing in eastern India. They are investing in establishing over 600 MW of renewable energy projects in various states and a 1.3 GW integrated solar cells and modules manufacturing facility in the state of Odisha. In October, Ampln Energy Transition announced a partnership with Jupiter International to set up a 1.3 GW per year solar cell and module factory under the government's production-linked incentives (PLI) scheme. The modules produced through the alliance will be used by Ampln & supplied to third-party developers in India. Ampln said it plans significant renewable-energy investments in West Bengal, Bihar, Odisha, Jharkhand, and Chhattisgarh.

InfraShorts

The Delhi Metro Rail Corporation (DMRC) has been engaged as the turn-key consultant for the inaugural phase of the Bhubaneswar Metro, spanning from the airport to Trishulia Square in Cuttack, formalised through a Memorandum of Understanding (MoU) between the Bhubaneswar Metro Rail Corporation and the DMRC, outlines the completion of the project within four years.

India, EU sign semiconductor pact to build robust supply chain

India and the European Union on Friday signed a Memorandum of Understanding on semiconductors that will help in building a "robust supply chain" and support innovation. The MoU was sealed during a "stock-taking call" between leaders of the EU-India Trade and Technology Council (TTC). The EU announced that the agreement will lead to sharing information on "granted public subsidies". Under this MoU, India and the EU are expected to "share experiences, best practices and information on our respective semiconductors ecosystems; identify areas of collaboration in research, development and innovation among universities, research organisations and businesses," a statement from the EU has announced. The semiconductors that drive the digital world have emerged as a strategic commodity, especially in the post-COVID period when diversifying away from China-dominant supply chains. This is expected to help India align more with EU and the U.S. on the future of the semiconductor industry. The Trade and Technology Council is expected to meet in India in early 2024.



Saudi Arabia planning to build ski resort in middle of desert.

The Saudi have now come up with building a futuristic ski resort named Trojena, it is planned to be a futuristic ski resort in Saudi Arabia that will be the first of its kind in the country. It's located in the Sarawat Mountains, about 50 kilometres from the Gulf of Aqaba coast. The resort will feature a ski area, climbing walls, hiking and biking trails, artificial lake.



Construction begins on Oman's first green hydrogen steel plant

Construction of Vulcan Green Steel's (VGS) plant - the Sultanate of Oman's first green-hydrogen-ready steel project - commenced yesterday, November 27, under the auspices of Dr. Ali bin Masoud al Sunaidy, Chairman of the Public Authority for Special Economic Zones and Free Zones (OPAZ). The plant, located in the Duqm Special Economic Zone.



China hits back at West's de-risking strategy at supply chain expo

China opposes protectionism and wants to strengthen supply chains with all countries, as a growing number of nations voice concern at how much their supply chains depend on the world's second largest economy. China "de-risk" their supply chains, as well as efforts to cut off Chinese enterprises from some advanced semiconductors.

World Bank Boosts Solar-Plus-Storage in Developing Nations

The World Bank Group today launched its seminal new report, "Unlocking the Energy Transition: Guidelines for Planning Solar-Plus-Storage (SPS) Projects", outlining a start-to-finish framework for developing countries to successfully plan, structure, and execute utility-scale solar photovoltaic projects integrated with battery energy storage. The new comprehensive guidelines aim to accelerate the transition from traditional fossil fuel-based power generation to cleaner, more reliable, and affordable solar-plus-storage systems in emerging economies. Battery storage systems are critically important in conjunction



with renewable energy generation as they guarantee continuous energy supply. Battery energy storage captures renewable energy when available and dispatches it when needed most. The report provides practical guidance to policymakers and project developers on

conducting feasibility assessments, selecting suitable business models, allocating risks appropriately, and navigating competitive procurement process for SPS projects. It examines real-world case studies from diverse geographies and distills critical lessons learned to empower stakeholders in scaling up SPS capacity. This seminal report offers comprehensive guidelines for governments to design policies that enable competitive procurement of SPS projects at scale with private sector participation. Over the past 3 years, the WB has mobilized approximately \$850 million in climate financing for battery storage projects globally

EU Proposals for Net-Zero Technologies Under \$4.3 Billion Fund



The European Commission has invited proposals for the Innovation Fund, with a record budget of €4 billion (\$4.3 billion) to support innovative decarbonization technologies. Funded by the European Union Emissions Trading System, the Commission has increased the available funds and doubled the budget allocated for cleantech manufacturing projects. A total of €1.4 billion (\$1.52 billion) has been earmarked to strengthen industrial manufacturing capacity, technology leadership, and supply chain resilience in Europe. These grants underpin the importance of carbon pricing for the green transition in the region. The fund aims to create financial incentives for companies and public authorities to invest in cutting-edge low-carbon technologies that will help Europe achieve its targets.

India launches global digital infrastructure repository

India's Ministry of Electronics and Information Technology (MeitY) has introduced the Global Digital Public Infrastructure Repository, housing government-created code freely accessible to other nations. This repository aligns with India's advocacy for open-sourcing government apps, promoting the reuse of existing code to expedite digital service creation globally.

Beyond altruism, India aims to bolster international relations by sharing successful projects like Aadhaar digital identity and Unified Payments Interface, known for serving billions of users.

Distinguished from China's focus on



physical infrastructure funding, India's approach emphasizes coded diplomacy. Under India's G20 presidency, a framework defining DPI and providing governance guidelines was established during

this year's summit. Prime Minister Narendra Modi launched the repository, concurrently announcing India's \$25 million contribution to a "Social Impact Fund," accelerating DPI implementation in developing nations. The Fund targets Sustainable Development Goals through DPIs, supporting their development and implementation, inclusive of India's major identity, payments, and cloud projects. India leads with 12 projects, followed by Oman (nine) and France (five). Russia's offerings, including the Unified Digital Platform and Unified Portal of Public and Municipal Services, could serve as tech models for interested governments.

WII pushes for railway infrastructure ensuring wildlife safety

The Wildlife Institute of India (WII), Dehradun, proposed overpasses and underpasses spanning 7 meters in height and 30 meters in width, suggesting wider structures for areas with dual or triple parallel railway lines to mitigate the impact on wildlife. Their recommendations for railway mitigation cover various strategies such as ramps in elephant habitats, rubber-surfaced level crossings aiding wildlife mobility, and intrusion monitoring systems using distributed acoustic sensing (DAS) in elephant habitats. A three-day session commenced at WII, focusing on reducing the impact of rly infra on elephants and other species. Indian Railways identified approximately 105 sites for mitigation structures, while 107 elephant observation points were discovered across multiple states. The workshop, orchestrated by MoEFCC's Project Elephant Division and WII's Elephant Cell, united diverse stakeholders seeking lasting solutions. WII Director Virendra Tiwari emphasized the need to balance railway operations with wildlife preservation.



Navi Mumbai Metro starts operations, other projects await

Navi Mumbai's metro services commenced operations in the presence of NMMC Municipal Commissioner Rajesh Narvekar. Despite the metro's opening, numerous potential life-altering infrastructure projects for Mumbaikars await formal inauguration for months. PM Narendra Modi was scheduled to inaugurate the Navi Mumbai metro on October 15 but faced cancellations due to a forecasted heat wave. Criticisms from Congress' Atul Londhe highlighted the government's delay for political purposes. Shiv Sena's Aaditya Thackeray took action, opening an uninaugurated bridge lane, while urging Governor Ramesh Bais to intervene due to infrastructure delays and administrative shortcomings.

India, ADB sign \$400-million loan pact to create urban infra

India signed a \$400 million loan deal with the Asian Development Bank (ADB) to enhance urban infra, governance, and service delivery. The program focuses on integrated planning reforms, controlling urban sprawls, and improving legal and regulatory frameworks. Sub-program 1 established national-level policies, while the latest sub-program 2 aids state and local bodies in investment planning and reforms. The initiative aligns with the government's urban sector strategy, aiming to create livable cities with resilient infrastructure. It supports the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0, encouraging cities to adopt innovative financing for infra development.

L&T sells its entire stake in L&T Infra Engineering

Larsen & Toubro (L&T) announced the sale of its entire stake in L&T Infrastructure Engineering Limited (LTIEL) to focus on its core business, with STUP Consultants Private Limited, a subsidiary of Assystem SA of France, acquiring the stake. D K Sen, advisor to L&T's chairman, highlighted the move's intent to exit non-core consulting engineering and concentrate on core operations. The transaction, expected to finalize by January 15, 2024, underscores L&T's commitment to core businesses. LTIEL, now part of Assystem, provides engineering consultancy for India's infrastructure. The acquisition amplifies Assystem's presence in India's various sectors, augmenting project design capabilities.



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Focusing on the Urban Indian

The theme for 'World Cities Day 2023' (October 31) was 'Financing sustainable urban future for all'. However, the focus on the quality of life of an urban Indian resident seems to be taking a back seat. According to the Energy Policy Institute of Chicago, of the 50 most polluted cities, 39 are in India. Medical researchers have pointed highlighted that pollution takes away life expectancy by 5.3 years. For residents of Delhi, the number goes as high as 11.9 years.

Delhi is also facing air pollution issues due to Parali (Paddy straw) Burning. However, this just escalates the problem, the main culprit is the unsustainable development of grey infrastructure which is being rapidly developed in the cities. Real estate development, widening of roads, fuel-guzzling vehicles plying on these roads, construction dust, and polluting industrial units are the main culprits. Motorized transport accounts for 60% of urban pollution. Further, the shrinking of urban forests which are the lungs of cities and water bodies in cities like Bengaluru also aggravate the suffering of urban residents.

To address these issues 'Sustainable & Ecological Urbanisation' should be the main focus. Alternative city building strategy with a focus on providing quality public transport – Delhi Metro should be considered. The pace of adoption of e-bike services like Yulu should be increased. Indian cities can also consider 'Congestion pricing' similar to Singapore which started levying tax on vehicles to reduce congestion in urban areas. This was adopted by Singapore in 1975.

A 'Graded Response Action Plan' (GRAP) and Standard Operating Procedures similar to Delhi should be developed by all the cities to tackle the problem of air pollution. The GRAP gets activated based on the quality of air. This short-term response should be complimented by development of Miyawaki forest in urban areas. Planting trees 50 KMs away from city doesnot help in curtailing pollution.

We stary in high rise buildings, work in air-conditioned offices, use air purifiers. However, it is the poor and marginalized who pay a huge price as they are most exposed to the pollution and yet remain the least contributors to the urban pollution.

GIFT City To Add Fun To Biz

Rs 5,000 Crore Plan Drawn To Host India's Largest Entertainment And Recreation Zone; 158-Metre Ferris Wheel To Be One Of The Attractions. The internationally renowned GIFT City, India's leading tech hub, is set to unveil an expansive entertainment, retail, and recreational zone. The proposed 20-acre site is slated to feature theme parks, gaming arcades, and various recreational facilities. A major highlight of the zone is the GIFT Eye—a giant Ferris wheel, reminiscent of the London Eye, soaring to a height of 158 meters. Additionally, the area will house a cultural zone, complete with art galleries, theaters, and performance spaces.

MTHL may open soon but hurdles remain on traffic dispersal at interchanges

Navi Mumbai Coastal Road to disperse traffic at Shivaji Nagar Ulwe interchange yet to be constructed, Sewri interchange traffic dispersal road just about 45% ready till date Even as the Mumbai Trans Harbour Link (MTHL), which is nearing completion, is likely to be open for public soon. The 21.8-kilometre six-lane access controlled bridge from Sewri in Mumbai to Chirle in Navi Mumbai has three interchanges. One interchange is at Sewri in South Mumbai, connecting MTHL to Eastern Freeway (Mumbai Side), second at Shivaji Nagar in Ulwe connecting MTHL to Navi Mumbai Coastal Road Project and the third at Chirle interchange – where one arm will connect the State Highway-54 and the second arm will connect NH4 Mumbai Pune Highway.

Hyundai Plans To Set Up Battery Plant In Tamil Nadu By 2025 To Drive Down Cost Of Electric Vehicles

Hyundai Motor India is placing a strategic bet on the localization of battery packs to drive down the prices of its electric vehicles (EVs) in the country, according to top company officials. Addressing global skepticism around EVs and concerns about affordability hindering their adoption, Tarun Garg, Chief Operating Officer of Hyundai Motor India Ltd, emphasized that achieving cost reduction is crucial for accelerating EV adoption in India. Garg stated, "Right now, EV penetration in the Indian market is less than 2 per cent but there will be a trigger and adoption will accelerate. The biggest trigger for EV adoption has to be the cost—EV costs should come down and localization is the biggest way for it to happen."



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