

INFRA INSIGHTS

EDGE OF COGNIZANCE

MARCH | 2023 | VOLUME 1



TABLE OF CONTENT



• Green Energy

Siemens, Hitachi, Wabtec Among 10 Players Keen To Make Hydrogen Trains For Railways

• Inland Waterways

Tata Steel Transports 960 MT Steel Across Northeast Using Inland Waterways, A Major Step Towards Decarbonising Logistics

• Oil and Gas

State keen to build infrastructure eco-system to help production of commercial or passenger aircrafts

• Airport

Noida International Airport: 25 Per Cent Work Done, Phase 1 To Be Completed By September 2024

• Nuclear Power

Haryana To Host Northern India's First Nuclear Power Plant, 1,400 MW Facility Under Construction With Rs 20,000 Crore

News Bytes

- NHAI to Explore Use of Phosphor-Gypsum in National Highway Construction
- Tata Motors To Electrify Uber With 25,000 Electric Cars, EVs To Be Deployed In All Metro Cities
- TERI-CRRI Study Explores Avoidance Of CO2 Emission During Road Construction, Says Potential To Save 9.8 Billion Litres Of Fuel
- IOC to set up green hydrogen plants at all refineries; lines up Rs 2 lakh cr for net zero by 2046



GREEN ENERGY

Siemens, Hitachi, Wabtec Among 10 Players Keen To Make Hydrogen Trains For Railways

Siemens, Cummins and Bharat Heavy Electricals Limited (BHEL) are among 10 leading companies who have shown interest in manufacturing 35 hydrogen trains for the Railways. This comes as the move to introduce green energy-driven trains on heritage routes gains pace with the public transporter seeking the views of the industry. Besides, Medha, Wabtec, Hitachi and Alstom also participated in the meeting chaired by the Railway Board Member dealing with the rolling stock. Advocating zero carbon emission and doing away with fossil fuel with green energy, Indian Railways has decided to introduce 35 hydrogen trains at an estimated cost of Rs 2,800 crore in the country. All these hydrogen trains are slated to be pressed into service on heritage routes like Kalka-Shimla and Darjeeling-Ghum corridors.



Siemens, Tooltech, Cummins, BHEL, Medha and Greenco also presented their plans suggesting technology and solutions for the project. It was a fruitful meeting with the industry people and they presented their views, said a senior Railway Ministry official who was part of the meeting. The Railways is going a big way in reducing carbon emission and protecting the environment.

INLAND WATERWAYS

Tata Steel Transports 960 MT Steel Across Northeast Using Inland Waterways, A Major Step Towards Decarbonising Logistics

Tata Steel has completed the first multi-modal shipment of 960 tonnes of steel TMT bars from Haldia Port in West Bengal to Tripura's Agartala via the Indo-Bangladesh Protocol (IBP) route. The barge 'MV Bulker I' was flagged off from Haldia Port on January 8 and the first leg of the journey was through inland waterways using the IBP route, to the transfer point at Ashuganj port in Bangladesh.



Tata Martrade International Logistics Ltd (TMILL) was in charge of the entire logistics management for this maiden voyage. The entire transportation from flag-off to the receiving of material at the distributor's warehouse was completed in 17 days, a press statement issued by the company said. According to Peeyush Gupta, Vice-President, GSP and Supply Chain, Tata Steel, the Indo-Bangladesh Protocol route serves as a reliable integrated logistics solution for both Bangladesh and India to use inland waterways and will further help expand consumer reach to better serve the growing north-eastern market. The route exemplifies the efficient utilization of the river-sea combination, as a mode of transport and multimodal movement. This will also help lower the carbon footprint and will contribute to decarbonizing the steel sector. Earlier in 2022, the company had successfully shipped 1,800 tonnes of finished steel products from Haldia Port in West Bengal to Pandu Port in Assam using the IBP route via the Brahmaputra River.

What's Trending

The first hydrogen-powered train service is expected to start by December 2023 between Kalka and Shimla. Railways Minister Ashwini Vaishnaw has announced India's first hydrogen-powered train. It will be put into service on the Kalka-Shimla historic circuit by December 2023.

What's Trending

"The company hopes to shorten the timelines even further to serve its clients. The possibility of using this route to service additional, smaller-lot regions along the river is worth exploring. The Indo Bangladesh Protocol route is more economical as well as environmentally more responsible," Ranjan Sinha, Chief Group Shipping, Tata Steel, said in the statement.

OIL AND GAS

ONGC to invest \$2 billion to drill 103 wells in Arabian Sea, will raise oil, gas output by this much

Oil and gas producer ONGC said that it will put in over \$2 billion in drilling 103 wells in the Arabian Sea as it works on a turnaround plan that is aimed at adding 100 million tonnes to production, PTI reported citing the PSU's Director. ONGC has three main assets off the west coast: Mumbai High, Heera and Neelam, and Bassein and Satellite, which contributed the bulk of 21.7 million tonnes of oil and 21.68 billion cubic meters of gas it produced in 2021-22.

The government too has been pushing PSUs to step up efforts to increase domestic output which could help cut India's import bill of \$115 billion. Over the years, ONGC has reported gradual decline in output for over a decade primarily because its fields are old. But it is now working on a comprehensive asset base plan rather than a piecemeal field centric approach.



AIRPORT

Noida International Airport: 25 Per Cent Work Done, Phase 1 To Be Completed By September 2024

At least 25% of the work in the first phase of the Noida airport project is complete, officials told chief secretary DS Mishra during the board meeting of Noida International Airport Ltd (NIAL), the UP government's special purpose vehicle for the project, on Friday. In this meeting, the progress regarding the development of the airport was presented by NIAL CEO Arun Vir Singh. Officials said that the construction work of the first phase of Noida International Airport is going as per the development plan and it would be completed before September 2024.



YIAPL officials, while presenting the progress report, said the number of machinery and workforce has been increased at the airport site. YEIDA's OSD Shailendra Bhatia, who is also NIAL's nodal officer, said, "The matters related to CISF, customs, communications, navigation and surveillance systems for air traffic management (CNSATM) and security for the airport was discussed in which officials of the central agencies concern-ed participated."

NUCLEAR POWER

Haryana To Host Northern India's First Nuclear Power Plant, 1,400 MW Facility Under Construction With Rs 20,000 Crore

Haryana may soon become home to Northern India's first nuclear plant as a 1,400 MW nuclear power plant is under construction near Gorakhpur village, which is located about 150 km north-west of New Delhi. Disclosing the above information on Saturday (18 February), Union Minister of State for Atomic Energy, Dr Jitendra Singh said that during Prime Minister Narendra Modi's regime, one of the major achievements would be the installation of Nuclear Energy plants in other parts of the country, which were earlier confined mostly to the Southern and Western parts of India.

Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP), having two units of 700 MW capacity each of Pressurised Heavy Water Reactor (PHWR) of indigenous design, is under implementation near Gorakhpur village in Fatehabad district in Haryana.



What's Trending

ONGC produces two-third of the total oil and gas produced in India, and the incremental production from the development will help the country cut dependence on imports to meet its energy needs. India imports over 85 per cent of the crude oil, which is later converted into fuels such as petrol and diesel; and imports almost half of the natural gas that produces electricity, makes fertilisers and provides CNG.

What's Trending

The airport is jointly owned by the UP government, Noida Authority, Greater Noida Authority and the Yamuna Authority. Tata Project Limited has bagged the engineering and construction contract for the Jewar Airport.

What's Trending

Minister Jitendra Singh said the bulk installation of 10 nuclear reactors has Centre's approval. He also said that this is keeping in line with the priority to increase India's nuclear capacity, a number of path-breaking decisions were taken in the past eight years.

Union Budget 2023-24

HIGHLIGHTS



VISION FOR AMRIT KAAL

- Opportunities for citizens with focus on the Youth
- Growth and Job Creation
- Strong and Stable Macro- Economic Environment

SABKA SAATH SABKA VIKAS: INCLUSIVE DEVELOPMENT

- Building Digital Public Infrastructure
- Aatmanirbhar Bharat Horticulture Clean Plant Program to be launched
- Making India Global Hub for Millets "Sree Anna"
- Setting up Agriculture Accelerator Fund
- Rs. 20 lakh crore agricultural credit targeted at Animal Husbandry, Dairy and Fisheries sector
- Setting up of widely available storage capacity
- 157 New Nursing Colleges to be establishes
- Joint Public and Private Medical Research to be encouraged via select ICMR labs
- National Digital Library to be set up for children and adolescents

Saptarishi 7 priorities



Infrastructure & Union Budget 2023

INFRASTRUCTURE AND INVESTMENT

- Increased capital investment outlay by 33.4% to Rs. 10 lakh crore
- Continuation of 50 year interest free loan to State Governments to incentivize infrastructure investment
- Highest ever capital outlay of Rs. 2.4 lakh crore for Railways
- 100 transport infrastructure projects identifies for end-to-end connectivity for ports, coal, steel, fertilizer sectors
- Creating Urban infrastructure in Tier 2 and 3 cities via establishment in Urban Infrastructure Development Fund

GREEN GROWTH

- Green Credit Programme to be notified under Environment Protection Act to incentivize sustainable actions
- Mangrove Initiative For Shoreline Habitats and Tangible Incomes to be taken up for Mangrove plantation along the coastline
- Optimal Dharohar to be implemented for optimal usage of wetlands
- PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth will incentivize States/UTs to promote usage of alternative fertilizers
- 500 new "Waste to Wealth" plants to be established under GOBARdhan scheme for promoting circular economy

UNLEASHING THE POTENTIAL

- Three specialized AI centres to be set up in educational institutes
- National Data Governance Policy to be introduced
- Vivad se Vishwas I, less stringent contract execution for MSMEs
- Vivad se Vishwas II, easier and standardized settlement scheme
- Setting up of 100 labs for 5G services based application development
- Entity Digi Locker to be set up for use by business enterprises and charitable trusts

FINANCIAL SECTOR

- Setting up of Financial Information Registry to enable efficient lending, promote financial inclusion and enhance financial stability
- Setting up of a Central Data processing Centre for faster handling of administrative work under the Companies Act
- Credit Guarantee Scheme for MSMEs
- Mahila Samman Bachat Patra, one time new small savings scheme for a 2-year period with a deposit facility of up to Rs. 2 lakh for women
- Initiative to promote business activities in GIFT IFSC

AMRIT PEEDHI- YOUTH POWER

- PMKVY 4.0 will be launched covering new courses like coding, AI, Robotics, 3D printing etc.
- At least 50 destinations to be selected through challenge mode, to be developed as a complete package for domestic and foreign tourists
- States will be encouraged to set up Unity Malls for promotion and sale of One District- One Product, GI and handicraft products

ALLOCATION OF BUDGET TO MAJOR SCHEMES

- Development of Pharmaceutical Industry: Rs. 1250 Crores
- Jal Jeevan Mission: Rs. 70,000 crore
- Eklavya Model Residential Schools: Rs. 5943 Crores
- Pradhan Mantri Awas Yojana: Rs. 79,590 Crores
- Scheme for Foster Adoption and Manufacturing of EV's (FAME): Rs. 5172 Crores
- North East Special Infrastructure Development Scheme: Rs. 2491 Crores

REACHING THE LAST MILE

- Pradhan Mantri Particularly Vulnerable Tribal Groups Development Mission to be launched
- Financial assistance to be given for sustainable micro irrigation in drought prone regions of Karnataka
- More teachers to be recruited for 740 Eklavya Model Residential Schools
- Bharat Shared Repository of Inscriptions to be set up for digitization of ancient inscriptions