ISSUE: 332 DECEMBER

2023

MDIAFOCUS

Whole world is looking at India in a new light (in new world order)

NARENDRA MODI,
Prime Minister of India

Our youth are now recognising their inner strength and eliminating inner doubts

RAJNATH SINGH, Defence Minister of India



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Latest GDP number puts Indian economy on rising trajectory

India's economy grew at a much faster pace than expected in the July-September quarter, helped by government spending and manufacturing, raising expectations that Asia's third-largest economy will outperform its own estimates for the full year, said a Reuters report.

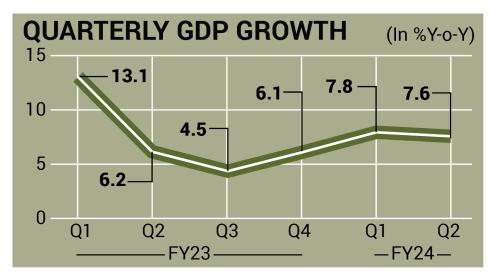
The 7.6% expansion in the economy in the September quarter is faster than the 6.8% forecast in a Reuters poll of economists and the Reserve Bank of India's estimate of 6.5%.

The manufacturing sector, which for the past decade has accounted for just 17% of the economy, expanded 13.9% year-on-year in the September quarter, compared with a revised 4.7% in the previous three months. Government spending rose 12.4% year-on-year in the July-September quarter compared to 0.7% contraction in the previous quarter. Growth in capital formation, an indicator of investment, picked up pace to 11% year-on-year from 8% in

Based on current trends, it is possible that India may be underestimating its GDP growth and not overestimating it. We retain the FY24 GDP growth forecast of 6.5%, but we will rework the numbers to see if the July-September

growth data adds an upside to the forecast

- V ANANTHA NAGESWARAN Chief Economic Advisor



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the previous three months, Reuters reported.

Chief Economic Advisor V Anantha Nageswaran said strong tax collection suggests the economy might be doing better than what is being currently measured. "Based on current trends, it is possible that India may be underestimating its GDP growth and not overestimating it. We retain the FY24 GDP growth forecast of 6.5%, but we will rework the numbers to see if the July-September growth data adds an upside to the forecast."

The latest GDP number validates comments of Finance Minister Nirmala Sitharaman and analysts about the country's growth.

While addressing the Indo-Pacific Regional Dialogue in Delhi, the minister had said India's economy continues to remain growing despite external headwinds and the country is heading towards a "bright future". Amid supply-chain disruptions and economic turbulence due to contemporary conflicts that impact the Indo-Pacific, irrespective of whether they are occurring in relatively distant Ukraine or in relatively-proximate Israel or Yemen, and despite the palpable tensions prevalent in the Southand East China Sea, the Indian economy stands out as a bright spot, she said.

Several analysts had also made comments on similar lines in November.

Rating agency ICRA said the Indian economy is expected to grow by 7% in the second quarter, surpassing the central bank's estimate of a 6.5% uptick. Improved industrial performance will overshadow a weak monsoon hitting the farm sector.

Moody's, an international rating agency, said strong domestic demand is likely to sustain India's economy in the near term. It has kept the country's growth forecast for 2023 and 2024 unchanged at 6.7% and 6.1%. "Robust goods and services tax collections, surging auto sales, rising consumer optimism and double-digit

"We seek to position India as a hub in new and diversified supply chains and value chains across the Indo-Pacific and, indeed, across the world. Towards this end, I am happy to inform you that all sectors of the government are responding exceedingly positively to our new financial policies"

NIRMALA SITHARAMAN, Finance Minister of India

credit growth suggest urban consumption demand will likely remain resilient amid the ongoing festive season," said the agency's Global Macro Outlook 2024 report.

Moody's said that on the supply side, expanding manufacturing and services and core industries growth add to the evidence of solid economic momentum. Compared with the other South Asian economies, India appears to be in a better position to deepen its integration in global value chains, attract FDI and increase exports with better macroeconomic fundamentals, more stable politics and a more developed export sector, the credit ratings agency said in its South Asia report.

Fitch Ratings has raised its mid-term potential growth estimate for India by 0.7 percentage points to 6.2% for 2019–2027, citing higher employment, larger working-age population and increased labour productivity expected during the period.

According to an RBI Bulletin released on November 13, the momentum for India's GDP growth is sequentially expected to be higher in Q3 of 2023–24, "with festival demand remaining ebullient", even as the global economy shows signs of slowing down. Investment demand

LOOKING UP

MORGAN STANLEY

2.4% in Q4 FY17 to **4.2%** in Q1 of FY23 is India's share of global inflow FDI

ICRA

7% GDP growth in the second quarter of FY24

GOLDMAN SACHS

Domestic demand, money flow, likely shift of supply chain from China are positives

MOODY'S

Growth forecast of **6.7%** for 2023 and **6.1%** for 2024

FITCH

6.2% for 2019-2027 is mid-term potential growth estimate

Source: Analysts and news agencies

MACRO BOOSTER

India's core sector output grows 12.1% in October

Written using agency reports

he combined index of eight core industries rose to 12.1% in October 2023, driven by robust growth in cement, coal production and electricity generation. All sectors part of the index reported positive growth in the month under review.

The growth in India's eight key infrastructure industries – coal, crude oil, steel, cement, electricity, fertilisers, refinery products and natural gas – is well above the 8.1% recorded in September. The commerce ministry had revised this figure to 9.2%.

"This is a good sign as it reflects higher levels of activity in the infra space, which has been supported by the central government and some state governments," said Madan Sabnavis, chief economist, Bank of Baroda, in a report in the Business Standard.

Aditi Nayar, chief economist, head research and outreach at ICRA, said that the rebound in core sector output must be viewed in the context of early onset of the festival season in 2022. "This shift in the festive calendar obfuscates year-on-year comparisons in October and November, thereby making it more meaningful to look at the average year-on-year growth performance for these months," she said, according to the Business Standard report.

appears to be resilient with the government's infrastructure spending, an uptick in private capex, automation, digitalisation and indigenisation providing a boost. The authors of the article include Deputy Governor Michael Patra and other senior officials of the central bank. However, the views expressed are those of the authors and do not reflect the RBI's official stand.

Analysts at Barclays said India's GDP in Q2FY24 expanded by 6.8% year-on-year, slower than the 7.8% print in Q1FY24, but still showing robust sequential growth. "Underlying growth trends continue to look robust in India, with activity underpinned by domestic consumption, high levels of state-led capex, and strong growth in the utilities sectors," Barclays said in a report. Services will continue to be the largest contributor to growth in Q2, despite slower expected growth in the financial services and "trade hotels and transport" categories, Barclays said.

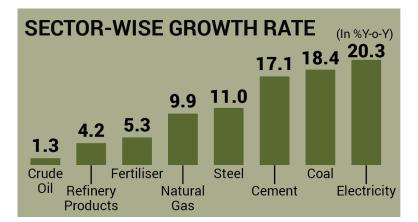
Goldman Sachs expects GDP to grow at 6.5% in 2023 and a tad lower rate of 6.3% in 2024. Its analysts said that India offers the "most promising long-term growth opportunities in the region". They expect a "largely domestic-oriented growth".

Written using agency reports

Mining and electricity saw higher growth, and this was because of the low base effect, said experts.

While cement production rose 17.1% year-on-year in October from 4.6% in September, growth in electricity generation more than doubled to 20.3% YoY from 9.9% in September. The other sectors to post double-digit growth in production in October were coal (18.4%) and steel (11.0%), while natural gas output rose 9.9%.

An improvement in core sector growth in October likely means industrial growth, as per the Index of Industrial Production (IIP), will also see an increase. Data released on November 10 by the statistics ministry showed India's IIP growth fell to a three-month low of 5.8% in September, well below expectations of 7.4%. With the eight core industries making up more than 40% of the weight of the IIP, the former is seen as a lead indicator of industrial growth.



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ECONOMIC CONFIDENCE

Indian stocks hit market capitalisation of \$4 trillion

Written using agency reports

India joined an exclusive group of countries that includes the US, China, and Japan after its market capitalisation (mcap) hit the \$4 trillion mark on Wednesday, Business Standard reported.

Total market value of all companies listed on the BSE during the day increased by Rs 2.24 trillion, or 0.7%, to Rs 333.3 trillion (or \$4 trillion at a conversion rate of 83.31). The 30-share Sensex jumped 727.71 points or 1.10 per cent to settle at 66,901.91; the broader Nifty50 climbed 206.90 points or 1.04% to reclaim the 20,000 mark after a gap of over two months and ended at 20,096.60, said the report.

The optimism on Dalal Street has its roots in the way India is uniquely placed among global economies. At a time when the global economy is facing the twin problems of high inflation and slowing growth, with even the world's growth engine China not showing a sign of recovery, India has taken the centre stage. Many global agencies have upped FY24 GDP forecast for India and several global brokerages retained India "overweight" in their model portfolios despite strong gains.

Global financial sector powerhouse Goldman Sachs had on November 13 joined a growing list of major brokerages that upgraded India to the "overweight" category. Over the past fewweeks, global brokerages such as JPMorgan, Morgan Stanley, CLSA, and Nomura have recommended higher exposure to domestic equities.

CLSA talked about the "Bharat story", saying India is moving up in the world. Earlier, Morgan Stanley said in its 2024 Asia strategy that China is likely to continue struggling with debt and deflation challenges while India would do well.

FISCAL STRENGTH

India's GST collection records 15% increase to Rs 1.68 trn in November

Written using agency reports

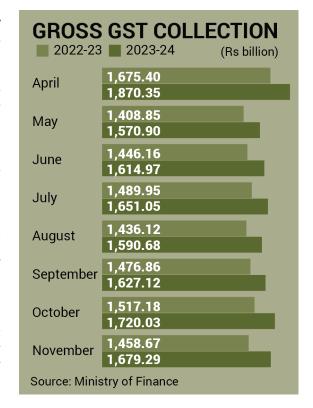
The goods and services tax (GST) collections jumped 15% to nearly Rs 1.68 trillion in November on increased domestic activity and festive season buying, the Finance Ministry said on December 1.

GST mop-up was over Rs 1.45 trillion in November 2022.

"The gross GST revenue collected in the month of November 2023 is Rs 1,679.29 billion, out of

which central GST is Rs 304.20 billion, state GST is Rs 382.26 billion, integrated GST is Rs 870.09 billion and cess is Rs 122.74 billion," the ministry said in a statement.

The November 2023 collections are, however, lower than Rs 1.72 trillion mopped up in October, the second-highest collection since the GST roll-out.



Revenues for November 2023 are 15% higher than the GST revenues in the corresponding month last year and the highest for any month year-on-year during 2023-24, up to November 2023, the ministry said.

The gross GST collection till November in the current financial year is Rs 13.32 trillion, averaging Rs 1.66 trillion a month. The collection is 11.9% higher than the gross GST collection in the corresponding period last year.

EYTax Partner Saurabh Agarwal said the higher GST revenues are primarily due to increased domestic activity, the festive season last month and increased tax administration. "The numbers can be said to be an indicator of a stable Indian economy as we see a 20% increase in domestic transactions compared to the same month last year," he said.

Increased GST collections in Arunachal Pradesh, Nagaland, Mizoram, Tripura and Ladakh, among others, indicate a rise in consumption in these parts of the country, Agarwal added.

During the month, revenues from domestic transactions (including import of services) are 20% higher than revenues from these sources during the corresponding month last year.

Icra Chief Economist Aditi Nayar said, "We expect CGST collections to modestly exceed the budget estimates."

AUTO INC

Tesla close to agreement with India for \$2-bn investment

Written using agency reports

India is reportedly closing in on an agreement with Tesla that would allow the US automaker to ship its electric cars to the country from next year and set up a factory within two years.

Reports stated that the US electric car manufacturing giant plans to invest \$2 billion in India. In 2021, the Austin-based EV manufacturer had sought duty cuts on the import of electric vehicles. It hoped to have the rates reduced to 40% from the current range of 70%-100% for its vehicles, depending on their import value.

Another report stated that India is considering tax cuts on the imports of completely-built units of electric vehicles, for a period of up to five years, as it tries to entice the likes of Tesla to sell and eventually make its cars in the country.

The government is working on an electric vehicle policy that would allow international car manufacturers to import battery-powered vehicles on concessional duty rates if they commit to eventually building them in India, people familiar with the matter said.



RIGHT CALL

Tata group to soon start making iPhones in India

Written using agency reports

The Tata group will soon start production of iPhones in India. Union Minister of State for Electronics and Technology Rajeev Chandrasekhar said within two and a half years, Tata will start making iPhones from India for domestic and global markets. The company has taken over an iPhone assembly unit in Kolar, near Bengaluru, from Wistron.

The Wistron board approved the sale of Wis-

tron InfoComm Manufacturing India Private Limited to Tata Electronics Private Limited for an estimated \$125 million, according to a statement from the Taiwan-based supplier shared by the minister.

PUBLIC INFRA

US to partner with India in accelerating e-mobility adoption

Written using agency reports

India and the US are set to partner to accelerate New Delhi's transition to electric public transport systems to meet its net zero goals, signalling the growing trade and political ties between the two countries as they seek to counter China's influence on the global stage, according to a media report.

The US will reportedly extend \$150 million (about Rs 12.5 billion) to set up a fund as a payment guarantee for companies supplying electric buses to ailing state transport undertakings. The two sides are in talks to finalise the modalities of the financial mechanism. The move is aimed at hastening the adoption of e-mobility in India, home to some polluted cities. Once the proposal is cleared by the Cabinet, the government will float a series of tenders for a total of about 50,000 electric buses. The government aims to deploy these buses over five years under the National Electric Bus Programme as part of a broader strategy to contain costly crude oil imports and bring down vehicular pollution.

MOBILITY POWER

India likely to be major battery manufacturing hub: Minister

Written using agency reports

ndia will become a major battery manufacturing hub in the coming years. Lithium deposits were founded in Jammu and Kashmir, and the government is making efforts to make India competitive in every field without delay, said Mahendra Nath Pandey, Union Minister of Heavy Industries, at an event hosted by the Society of Indian Automobile Manufacturers (SIAM). The outcomes of the PLI scheme in battery development and supporting domestic manufacturing are reducing our dependence on others, and making us self-reliant, he said. EVs have grown from 0.13% in 2019-20 to 4.3% now, and SIAM has made significant contributions in leading this change. I extend my congratulations to the team. We must work together to achieve our sustainability objectives and promote the green mobility movement.'



Union Minister of Heavy Industries Mahendra Nath Pandey flags off a rally for electric vehicles in Delhi on October 18

Vinod Aggarwal, President of SIAM and Managing Director & CEO of Volvo Eicher Commercial Vehicles Ltd, said in his address that over the last couple of years, the Indian automobile industry has made significant progress towards sustainability to meet the decarbonisation targets set by the government. The country has made rapid strides, supported by proactive actions. India's transition to e-mobility is well underway, and as the economy continues to grow, electric vehicle adoption will also increase. Strong support is needed in terms of policy and infrastructure.

GLOBAL TRADE

Exports from India grew by 9% in October 2023

Written using agency reports

India's exports (merchandise and services combined) in October 2023 was estimated to be \$62.26 billion, exhibiting a growth of 9.43% over October 2022. Overall imports in October 2023 is estimated to be \$79.35 billion, exhibiting a growth of 11.10% over October 2022.

Merchandise exports in October 2023 were \$33.57 billion, as compared to \$31.60 billion in October 2022, and imports in October 2023 were \$65.03 billion, as compared to \$57.91 billion in October 2022.

Non-petroleum and non-gems & jewellery exports in October 2023 were \$24.57 billion as compared to \$21.99 billion in October 2022. Non-petroleum, non-gems & jewellery (gold, silver & precious metals) imports in October 2023 were \$36.87 billion, compared to \$35.12 billion in October 2022.

The estimated value of services export for October 2023 is \$28.70 billion, as compared to \$25.30 billion in October 2022.

Services exports are projected to grow at 6.22% during April-October 2023 over April-October 2022.

FLYING HIGH

HAL & Safran to make aircraft engine parts in Bengaluru

Written using agency reports

I industan Aeronautics Ltd (HAL) and Safran Aircraft Engines of France have signed a memorandum of understanding to develop industrial cooperation in manufacturing ring forgings for commercial aircraft engines.

"HAL will produce LEAP (Leading Edge Aviation Propulsion) engine forgings at its foundry and forge facility in Bengaluru as part of the MoU," HAL said.

"We are delighted to expand our collaboration with HAL, which is already part of the LEAP supply chain through our joint-venture in Bengaluru," said Safran Chief Executive Officer Jean-Paul Alary.

The products that HAL and Safran will jointly produce in Bengaluru will power the Airbus A320 Neo family and the Boeing 737 Max single-aisle airliners.

The Shakti engine, co-developed and co-manufactured in Bengaluru by HAL and Safran, is one of the few power plants with the thrust required to propel HAL's family of indigenous helicopters to the challenging heights of Kargil and the Saltoro Ridge, where the Indian Army is deployed at altitudes exceeding 20,000 feet.



Officials of HAL and Safran at the MoU signing event in Bengaluru

FISCAL WATCH

India's tax receipts likely to exceed Budget Estimates in FY24

Written using agency reports

The government's tax mop-up will likely meet budget estimates for FY2024, with the expected shortfall in excise duty revenue offset by higher income tax collection, SBI Capital Markets has said.

In its budget for FY24, the government had set a tax collection target of Rs 33.61 trillion for FY24, which is about 10.1% higher year-on-year.

The SBICap report said that it anticipated a moderation in direct tax growth in October due to an uptick in tax refunds, with robust tax collections alleviating concerns regarding revenue falling short of budget estimates. According to the latest data, the Centre's net direct tax collection between April 1 and September 16 stood at Rs 8.65 trillion, up 23.5% on an annual basis.

Goods and services tax collected by the government during the same period stood at Rs 9.93 trillion, up 11% on year.

SBICaps said that it expects an increased dividend received by the government from the Reserve Bank of India (RBI) and public sector banks to offset any deficit from divestment proceeds. Capital expenditure has been front-loaded, exhibiting a substantial 48% annual growth during the April-August period, the report said.

CASH FLOW

PE/VC investments up by 60% in July-September

Written using agency reports

Private equity (PE) and venture capital (VC) investments have registered a 60% year-on-year growth in the July-September quarter to touch \$13.6 billion, according to the latest EY-IVCA monthly PE/VC roundup. The

third quarter of this year recorded investments across 209 deals, 60% higher than the investments in the third quarter (3Q) of 2022.

"A pickup in purepay PE/VC investments of around 88% bolstered the growth in total PE/VC investments in 3Q2023, which recorded 31 large deals aggregat-



\$13.6 bn: PE/VC investments in July-September quarter across 209 deals

ing \$10.7 billion compared to 15 large deals worth \$4.8 billion in 3Q2022," Vivek Soni, Partner and National Leader, Private Equity Services at EY India, said.

According to the report, since 2018, the life sciences sector has attracted a significant sum of \$22.1 billion in PE/VC investments, almost equally divided between pharmaceutical and healthcare.

Private investment in public equity (PIPE) investments in 2023 are at an all-time high of \$7.5 billion. The buoyant equity markets have allowed a revival in the PE-backed IPO market

which is adding to the improving investment sentiment.

"Looking at the strong deal pipeline, not-withstanding the increasingly uncertain global macro, we remain hopeful that Indian PE/VC investments in 2023 will surpass 2022 levels," he noted.

GREENER SEAS

Rs 80 trillion by 2047: PM Modi's blueprint for maritime infra

Written using agency reports

Prime Minister Narendra Modi announced a target to develop India's maritime sector by improving ports and reducing shipping emissions: A proposal that will need investments worth Rs 80 trillion by 2047.

The plan called Maritime Amrit Kaal – Vision 2047 includes a strategy to make major ports carbon–neutral and push for domestic hydrogen production and distribution. It aims to quadruple port capacity to 10,000 million tonnes per annum (mtpa) by 2047, aiming to get 100% public private partnership (PPP) for 12 major ports.

According to the vision document, investments worth Rs 75–80 trillion over the next 25 years will be used to achieve the following goals: carbon neutrality at all major ports, attaining the highest rank in cruise tourism, development of 25 cruise terminals, increasing operational waterways more than twofold and 500 million tonne (mt) of cargo, development of two new major ports, and becoming the leading nation in ship recycling.

These investments will lead to creation of 35-40 million additional jobs, according to the ministry of ports, shipping and waterways.

"In the post-corona (Covid-19) era, the world needs reliable and resilient supply chains," Modi said during his address at the Global Maritime India Summit (GMIS) in Mumbai.



MILLET MARKET

APEDA inks MoU with Lulu for export promotion of agri-products

Written using agency reports

To boost exports of agricultural products to the Gulf Cooperation Countries (GCCs), the Agricultural and Processed Food Products Export Development Authority (APEDA) has signed a memorandum of understanding with global retail major Lulu Hypermarket LLC.

The MoU, which is aimed at promoting Brand India globally was signed in the presence of Chairman, APEDA, Abhishek Dev, and Chairman-cum-Managing Director of LuLu Group, Yusuf Ali MA, at the World India Food (WIF) 2023 on November 3 in New Delhi.

APEDA would promote Indian agricultural products, including millets across the GCC through the LuLu Group's stores in the Middle East and Asia.

The MoU will also facilitate promotional activities for APEDA's scheduled products with the LuLu Hyper market retail chain. As per the MoU document, Lulu Group will actively promote and showcase a wide range of products in APEDA basket of agricultural and processed food products in their retail outlets.

DEFENCE BLOCK

MoD releases list of 98 items barred for imports

Written using agency reports

The Ministry of Defence (MoD) recently released the fifth positive indigenisation list of 98 items, such as certain categories of combat vehicles and drones, sensors, weapons and ammunition, to give more exposure to domestic industry and reduce dependence on imports of the military hardware.

The latest indigenisation list, prepared by the Department of Military Affairs, lays special focus on import substitution of components of major systems which are being developed and is likely to translate into firm orders in the next five to 10 years, the MoD officially stated. Prominent items include futuristic infantry combat vehicle, articulated all-terrain vehicles, remotely piloted air borne vehicles up to 25 km with 2kg payload for Army, naval shipborne unmanned aerial system, medium upgrade low endurance class tactical drone, electric light vehicle for Army, medium range precision kill system for artillery, and next generation low-level light radar for Army.

Meanwhile, Defence Minister Rajnath Singh launched 76 challenges for the industry under 10th Defence India Start-up Challenges (DISC



10) and DISC 10 PRIME of Innovations for Defence Excellence (iDEX) and five problem statements under iDEX for Fauji at Swavlamban seminar 2023.

DOMESTIC ARMS

India set to begin ambitious defence projects worth Rs 1.4 trillion

Written using agency reports

India is poised to grant preliminary approval for three major indigenous projects, including the construction of another aircraft carrier, 97 additional Tejas fighters, and 156 Prachand light combat helicopters, with a combined value of approximately Rs 1.4 trillion, according to a report by The Times of India.

These projects include the 97 Tejas Mark-1A fighters, which is estimated to cost around Rs 550 billion. These fighters will complement the 83 jets already ordered under a contract with Hindustan Aeronautics (HAL). These additions are vital for increasing the Indian Air Force's fighter squadrons addressing the current shortfall.

The second indigenous aircraft carrier is expected to be built at the Cochin Shipyard for approximately Rs 400 billion, following a "repeat order" of INS Vikrant.

The 156 Prachand helicopters, costing around



Rs 450 billion, will be used for offensive operations in high-altitude areas like Siachen Glacier and eastern Ladakh. These helicopters, armed with various weaponry, will complement the existing fleet already inducted under a previous contract

CORPORATE SHIELD

Corporate Affairs Ministry to revamp company law rules

Written using agency reports

he Corporate Affairs Ministry (MCA) plans to revamp its company law rules, and seek public input in alignment with the finance minister's budget announcement, according to media reports.

The initiative aims to improve regulation in the areas overseen by MCA and simplify compliance. The MCA intends to complete these stakeholder consultations by this fiscal year-end, utilising both online feedback and in-person stakeholder events in various cities. Additionally, other financial sector regulators have already started similar public consultation exercises.

India had enacted a new comprehensive company law in 2013, and it had replaced the earlier one that was enacted in 1956. MCA, which is the regulator for companies, especially the unlisted ones, is hoping to complete the public consultations for rules revamp before the end of this fiscal, sources added in the report.

The proposed MCA move to go in for public consultations is in line with the Finance and Corporate Affairs Minister Nirmala Sitharaman's budget speech this year wherein she announced that public consultation, as necessary and feasible, will be brought to the process of regulation making and issuing subsidiary directions.

Sitharaman had also said that financial sector regulators will be requested to carry out a comprehensive review of existing regulations so as to simplify, ease and reduce cost of compliance

ALLIANCE FOR STRENGTH

IPEF members give nod for resilience pact

Written using agency reports

India, the US and 12 other members of the Indo-Pacific Economic Framework (IPEF) have signed a supply chain resilience agreement that is aimed at helping reduce dependence on China, and shifting production of critical sectors and key goods to member countries.

The IPEF has 14 members, including India,

Australia, the US, Japan, Fiji, South Korea, New Zealand, Singapore and Thailand, representing 40% of the global gross domestic product and 28% of the global trade in goods and services.

"India joins US and 12 other Indo-Pacific Economic Framework for Prosperity partners to ink the #IPEF Supply Chain Resilience Agreement, a first-of-its-kind international agreement that will fortify and strengthen global supply chains, foster adaptability, stability and sustainability," Commerce and Industry Minister Piyush Goyal said in a post on social networking platform X.

RIGHT PRESCRIPTION

Indian pharma industry can grow to \$450 bn by 2047: Report

Written using agency reports

The Indian pharmaceutical industry is expected to reach \$450 billion in size by 2047 on the back of transformative innovation, fortification of manufacturing and quality standards, and the pursuit of sustainable and equitable healthcare, according an EY Parthenon-Organisation of Pharmaceutical Producers of India (OPPI) report. It underlined the need for collaboration and alignment between the industry, academia and government to advance research and innovation capabilities.

"The industry aims to achieve \$130 billion by 2030 and \$450 billion by 2047, by expansion within the domestic market, spurred by the nation's economic growth and the heightened adoption of healthcare services, largely influenced by government initiatives like Ayushman Bharat and Ayushman Bharat Digital Mission," the report stated.



Speaking on the launch of the report, Suresh Subramanian, Partner and National Life Sciences Leader, EY Parthenon India, said the report examines the industry's potential to be an innovation powerhouse, how it can play a crucial role in the global pharma supply chain, and ensure sustainable access to healthcare, with digitalisation as a force multiplier.

The report involves interactions with 40 chief experience officers from leading Indian and global pharmaceutical companies, with 30% of respondents highlighting the need for a robust research and innovation system in place.

POWER GAMES

'Net zero will remain only a goal unless we diversify solar manufacturing'

Written using agency reports

The Union Minister for Power and New & Renewable Energy and President of International Solar Alliance RK Singh said that net zero will remain only a goal unless the world gets together to solve the problems of lack of diversification of solar manufacturing capacity and associated supply chains. Singh said this while addressing the inaugural session of the one-day High-Level Conference on New Technologies for Clean Energy Transition, being organised in New Delhi.

The ISA President also said that storage remains critical for greater utilisation and round-theclock provision of renewable energy. "Storage is a problem. Though the developed world kept talking about the need for energy transition, they did not do anything about it, they did not add storage and did not make progress on existing technologies. Most importantly, manufacturing capacity was not added. Today, about 90% of the solar manufacturing capacity is in one country, mostly dependent on one chemistry, i.e., lithium ion. This thus raises supply chain challenges, which came to the fore during the Covid-19 pandemic," the minister said, adding that round-the-clock renewable energy is not possible without storage.

The ISA President said that while India has thus emerged as a country with one of the fastest rates of energy transition, the country has been facing challenges, arising due to shortfalls in manufacturing capacity.



Net zero will remain only a goal unless the world gets together to solve the problems of lack of diversification of solar manufacturing capacity and associated supply chains

– RK SINGH Union Minister for Power and New & Renewable Energy and President of International Solar Alliance

GOING GREEN

India set to add 5.8 mt of green ammonia manufacturing capacity: Minister

Written using agency reports

Tnion Power and New & Renewable Energy Minister RK Singh said India is planning to establish about 5.8 million tonnes of green ammonia manufacturing capacity across various regions.

During a session of the ISA conference recently, he highlighted India's commitment to decarbonising its economy. The minister stated that the push isn't solely focused on renewables. "This is about other technologies like green hydrogen and green ammonia," he said. Emphasising India's progress in the sector, he added, "We are on our way to becoming one of the major global manufacturers of green green hydrogen and green ammonia."

The minister underlined plans to enforce mandates across departments to adopt green hydrogen and green ammonia, suggesting potential applications in spheres like fertilisers and refining, replacing the dependency on fossil fuels.

Singh expressed confidence in India surpassing its decarbonization goals set for 2030.

MAKE IN INDIA

27 manufacturers get nod for PLI 2.0 under IT hardware

Written using agency reports

he Cabinet had approved 27 applications under the PLI Scheme-2.0 for IT hardware that covers laptops, tablets, all-in-one PCs, servers and ultra small form factor devices. IT hardware of well-known brands such as Acer, Asus, Dell, HP and Lenovo are on the list.

The expected outcomes of this approval are employment to about 200,000 people and IT hardware production value of around Rs 3.50 trillion (around \$42 billion). Investments of around Rs 30 billion (around \$360 million) is expected.

Indian in space by 2025, in moon by 2040

Written using agency reports

n a significant development for India's space endeavours, the PMO said Prime Minister Narendra Modi chaired a high-level meeting to review the progress of the Gaganyaan — India's first human spaceflight mission — and

to chart the future course of the country's space exploration ambitions.

"The meeting evaluated the mission's readiness, affirming its launch in 2025," the PMO said, adding that the PM also set more ambitious goals, building on the successes of previous Indian space initiatives, including Chandrayaan-3 and the Aditya L1 Missions.

He directed the department of science to work toward establishing an Indian space station by 2035 and sending the first Indian astronaut to the Moon by 2040.

CHIP VICTORY

India designs Google's Tensor chip for the world

Written using agency reports

oogle is set to start making its flagship Pixel 8 phones in India from early 2024. At the heart of the flagship device is the latest iteration of the Tensor chip, designed in India for the world.

"Our portfolio of Pixel products is brought to life thanks to our foundational technology, AI, Android and Google Tensor," CEO Sundar Pichai said during a recent earnings call. "We introduced our new Pixel 8, Pixel 8 Pro and Pixel Watch 2 to very positive customer feedback and reviews." The launches took place early last month, according to a report in the Economic Times.

Tensor chips made their debut in 2021, along with the launch of the Google Pixel 6. While these "system-on-chip" processors were conceptualised by the company in 2016, they took five years to develop for use. The latest is the third generation of the Tensor chip.



Our portfolio of Pixel products is brought to life thanks to our foundational technology, AI, Android and Google Tensor. We introduced our new Pixel 8, Pixel 8 Pro and Pixel Watch 2 to very positive customer feedback and reviews

SUNDAR PICHAI
 CEO @Google and Alphabet

Unlike other smartphone manufacturers, Google decided to design a customised processor for its phone to augment the device's machine-learning capacities. While debuting the chipset in 2021, Google said that it wanted the Tensor's capabilities to focus on where artificial intelligence (AI) and machine learning (ML) models were headed, and not where they were at that time. The 5-nanometre chips are designed in-house by Google and made by Samsung.

MEDICAL RECORD

Digital OPD scheme sees over 10 mn registrations since inception

Written using agency reports

India's National Health Authority (NHA) has said that it has seen more than 10 million out-patient department (OPD) registrations under the Ayushman Bharat Digital Mission since its inception. The service is currently available at 2,600 health centres across 419 districts in 33 states and Union Territories.

Media reports quoted RS Sharma, chief executive officer (CEO), NHA, saying that the mission aims to add ease and efficiency to healthcare delivery. The scan and share service at OPD counters is a simple tech intervention, which is helping close to 100,000 patients save time spent in hospital queues on a daily basis

This service, launched in October 2022, is a paperless one, which helps patients scan QR codes placed at OPD registration counters and share their Ayushman Bharat Health Account (ABHA) profile for instant registration.

Uttar Pradesh, with 3.74 million tokens generated, is the top state in implementing the digital OPD service for patients. It is followed by Karnataka (1.85 million tokens) and Jammu and Kashmir (1.19 million tokens). Data for October 2023 shows that the highest usage of the token service was by the All India Institute of Medical Sciences (AIIMS), New Delhi. It was followed by AIIMS Raipur and AIIMS Bhopal.

MAKE IN INDIA

Another PLI Scheme for batteries on cards

Written using agency reports

The government will bring out another production-linked incentive scheme for batteries to bring down cost and boost the adoption of electric vehicles in India, Union Minister RK Singh has said. Speaking at the EV (electric vehicles) Ready India Dashboard of OMI Foundation, the Union Power and New &

ISSUE: 332

Renewable Energy Minister said the price of storage will come down with higher volumes of battery production.

"Price of storage will come down only if you add volumes. That is why there is a production-linked incentive (PLI) for storage," he said. He pointed towards limited battery manufacturing capacity in the world and termed it as a reason for high prices. The minister opined that higher cost and lower driving range are issues in adopting EVs.

The central government had approved the (PLI) scheme for manufacturing advanced chemistry cell (ACC) batteries at an estimated outlay of Rs 181 billion in May 2021, with an objective to attract foreign and domestic investment of Rs 450 billion. The scheme was aimed to achieve manufacturing of 50GW of battery storage.

"For us as a country switching to electric mobility is of absolute importance. One rider to emerge as a power (economy) is that you cannot be energy dependent. That is our primary reason to push towards EV," the minister said. Singh pointed out that transition to EVs will reduce emissions in India.

Al firm BRAIIN Holdings plans to invest \$100 mn

Written using agency reports

ew York-based artificial intelligence and robotics firm BRAIIN Holdings is entering the Indian market and has acquired prominent CXaaS (customer experience-as-a-service) company Exato.ai, which serves as a strategic foundation for its operations in India.

With this acquisition, the company has bol-

stered its presence in the customer and employee experience as a service sector along with increasing its revenue. It did not reveal the value of the transaction.

"We think India is a huge market for this. We've committed about \$100 million towards expansion into the Indian market over the first eight months," said Natraj Balasubramanian, chief executive officer, BRAIIN Holdings. "India is a great market. It's been doing really well as far as the GDP (gross domestic product) is concerned."

Balasubramanian said the firm sees a lot of potential in the Asia-Pacific region, and India is a critical market for innovation in the fields of artificial intelligence, Internet of Things (IoT), and data analytics.

In the near future, BRAIIN intends to make a number of acquisitions in order to provide cutting-edge technologies in areas such as agriculture, telecommunications, and services sectors, he said. "The (capital) would be used towards mergers and acquisitions and creating new jobs. As the market continues to experience rapid growth, we are even looking to expand our presence into adjacent markets, such as marketing technology, automated processes, and CRM," he added.

The AI firm is in conversations with the Indian government to introduce such technologies in the area of agriculture on a large scale. It is also looking to tap into the areas of tea and rubber plantations.

STRENGTHENING DEFENCE

Integrated Defence Staff & CSIR signs MoU for R&D in defence tech

Written using agency reports

memorandum of understanding between the Headquarters, Integrated Defence Staff, and the Council of Scientific and Industrial Research (CSIR) was signed in New Delhi for technical collaboration and joint research and development in the field of defence technology. The MoU aims to provide an umbrella framework for initiating collaborative interaction between CSIR Labs, HQ IDS and Armed Forces, namely Indian Army, Indian Navy and Indian Air Force, for enhancing scientific understanding of technologies related to defence and undertaking joint research and development in dual use technologies.

The HQ IDS and CSIR both share a common interest to undertake joint research and development in defence technologies for mutual benefit, in the true spirit of "scientific cooperation in support of Indian Armed Forces". This partnership will also accelerate the indigenisation efforts of Armed Forces for achieving "Atma Nirbhar Bharat".



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- NATRAJ BALASUBRAMANIAN CEO, BRAIIN Holdings

CHIP IN INDIA

Sahasra Semiconductors becomes first domestic firm to produce memory chips in India

Written using agency reports

Rajasthan-based Sahasra Semiconductors has started the commercial production of the first made-in-India memory chips, surpassing even Micron. The company reportedly kicked off production at its semiconductor assembly, testing, and packaging unit in Rajasthan's Bhiwadi district in November.

Early this June, US-based memory chip giant Micron Technology announced its plans to set up a semiconductor assembly and testing facility in Gujarat, with an estimated total investment of nearly Rs 225 billion.

Amrit Manwani, Sahasra Group's Managing Director, said that the company achieved the distinction of being the first to sell "made-in-India" micro-SD cards, and the products have received outstanding responses on e-commerce platforms, cited an Economic Times report.

Sahasra's Bhiwadi unit is set to gradually increase its capacity to 30% by the end of this year and the company plans to fully realise its potential in the next phase, which is expected to start in early 2024. In the second phase, the company will initiate advanced packaging of products, including internal memory chips, expanding its semiconductor production capabilities further.

MOBILE DATA

India becoming a leader in 6G, says PM

Written using agency reports

Prime Minister Narendra Modi, while inaugurating the 7th Edition of the India Mobile Congress 2023 at Bharat Mandapam in New Delhi, said this event has the power to change the lives of billions of people.

Talking about 6G, AI, cyber security, semiconductors, drone or space sectors, deep sea and green tech sectors, he said: "The future is going to be entirely different and it is a matter of happiness that our young generation is leading the tech revolution."

He recalled that the 5G rollout that took place last year in India came as a surprise for the rest of the world. "India moved from the 5G rollout stage to 5G reach out stage," he said. Now India is laying emphasis on becoming a leader in 6G, he said, adding that improvement in internet connectivity and speed can lead to enhanced ease of living. He narrated the benefits of improved





connectivity and speed in education, medicine, tourism, and agriculture.

TRADE BOOSTER

US move to withdraw some digital trade proposals at WTO to benefit India

Written using agency reports

he United States' move to withdraw some proposals at the World Trade Organization (WTO), including allowing free cross-border data flows, would benefit India.

The withdrawals were made in Geneva, where officials from the US said that they were reviewing its approach to trade rules in sensitive areas such as data and source code. These proposals were made four years ago during former US President Donald Trump's regime.

Media reports quoting a Delhi-based think tank, Global Trade Research Initiative (GTRI), stated the new US stand on digital trade validates India's approach. "India had long ago foreseen potential challenges with unregulated digital trade and thus refrained from participating in the WTO e-commerce negotiations and has a conservative stand in FTAs," GTRI said in its report.

India has also not joined the Indo-Pacific Economic Framework's (IPEF) trade pillar, which includes taking "onerous" commitments on digital trade, it said.

India has avoided participating in the WTO e-commerce negotiations, mainly driven by

factors such as an absence of data protection legislation and dominance of a few e-commerce companies. Besides, India has been wanting to have some flexibility in this policy space, considering the rapidly evolving nature of this space.

TRADE BOOSTER

E-commerce companies to focus on exports from districts

Written using agency reports

he Directorate General of Foreign Trade (DGFT) has signed a memorandum of understanding with Amazon India to enable micro, small and medium enterprises (MSMEs) and boost e-commerce exports from the country. The DGFT is collaborating with the various e-commerce players to leverage the Districts as Export Hubs initiative and promote e-commerce exports from the country.

Amazon and DGFT will co-create capacity building sessions, training and workshops for MSMEs in certain districts in a phased manner. The initiative seeks to link producers in rural and remote districts with global supply chains. The collaboration aims to enable exporters/MSMEs to sell their made-in-India products to customers internationally.

The partnership aligns with the Foreign Trade Policy 2023, which identifies e-commerce as a focus area for amplifying India's exports.

DGFT is in discussion with various e-commerce platforms like Flipkart/Walmart, E-bay, Rivexa, Shopclues, Shiprocket and DHL Express for similar collaboration in other districts.



STARTUP LADDER

Government plans 25,000 GPUs cluster to support Al startups

Written using agency reports

The Indian government is considering a proposal to build a 25,000 GPU cluster to support AI startups. GPU or graphics processing unit is a high-powered version of the CPU, and used to create AI models and applications. There is a worldwide shortage of such GPUs owing to the high demand from the AI industry.

The proposed GPU cluster will cost around Rs 100 billion. The project will likely be built through a public-private partnership. "We will create in the first phase a 25,000 GPU cluster of AI compute capacity," an official told Economic Times. "It will be done as a PPP and the AI compute capacity will be offered as a service to startup." The proposal may be finalised as early as December this year, the person added.

GPUs are the innovation that have powered much of the recent AI revolution. They were initially built to allow advanced computer games to run on personal machines, but AI researchers found that they were very useful for computing large amounts of data, which are vital for AI applications. This has meant that there's currently a shortage of such GPUs.

AI FOR EASE OF BIZ

Uniphore launches its Al innovation hub in Chennai

Written using agency reports

niphore, one of the world's largest AI-native companies incubated in IIT Madras, has inaugurated its India AI Innovation Hub at IIT Madras Research Park in Chennai.

The centre will focus on areas such as enterprise artificial intelligence (AI), emotional AI and generative AI across voice, video, textual and tonal data. The aim is to make enterprises more human.

According to a release, Uniphore's AI application can be used in a telecom operator's call centre. If a customer calls to complain about a variation in their bill amount, the agent usually puts the call on hold, checks the system, and tells the customer that the variation was due to delayed payment. However, the agent also assures the customer that being a loyal customer means the variation will be reversed. In case of an issue with Uniphore's Co-Pilot application, instead of having to explain their complaint to the agent and wait for a resolution, the AI would have immediately understood the problem,

searched the system for the cause, and reversed the amount in question. The agent would have been notified of the resolution, resulting in a conversation that would have taken 8-9 minutes being resolved in less than three minutes using AI. Such a quick resolution would have resulted in a positive experience for the customer and enabled the agent to handle more calls in a day. In India, the demand for AI comes from across

In India, the demand for AI comes from across many sectors, including government.

Uniphore currently offers its services to more than 1,500 enterprise customers across 20 countries.

DEAL ACROSS BORDERS

TVS to collaborate with Singaporebased startup in Indonesia

Written using agency reports

VS Motor has deepened its strategic collaboration with Singapore-based technology startup ION Mobility to tap the Indonesian market. ION Mobility said that it would enter the sports scooter market segment in Indonesia by unveiling Project Dynamo at the Indonesia Motorcycle Show 2023.

Project Dynamo is ION Mobility's conceptual adaptation of the TVS X, TVS Motor's premium flagship crossover EV (electric vehicle), which was launched earlier this year.

In February 2023, TVS Motor had led ION Mobility's Series A funding of \$18.7 million as its strategic investor.

ION Mobility said that, through Project Dynamo, the company aims to capture the needs of Indonesian riders who prioritise performance and speed while improving upon the advantages of efficient and environmentally friendly electric vehicles.



TECH OF TOMORROW

'Biotech startups have grown 100 times in 8 years'

Written using agency reports

The Minister of State (Independent Charge) Science & Technology, MoS PMO, Personnel, Public Grievances, Pensions, Atomic

Energy and Space, Jitendra Singh, said biotech start-Ups are crucial to India's future. "Biotech startups have grown 100 times in the last 8 years from 52-odd startups in 2014 to 6,300-plus presently. Every day, threebiotechstartups



are getting incorporated in India with aspirations to provide viable technological solutions," he said.

Biotechnology is the technology of tomorrow as IT has already reached its saturation point, the minister said. "Biotechnology provides you with a milieu, an environment which will be clean, greener and more compatible with your well-being, then your stake gets linked. And as time passes by, it also generates lucrative sources of livelihood, also the alternatives to the petrochemicals-based manufacturing, like bio-based products like food additives, bioengineering ties, animal feed products."

ROBOTS MADE IN INDIA

IIT Guwahati incubated startup builds robotic solution to clean petroleum tanks

Written using agency reports

n Indian Institute of Technology Guwahati (IITG) incubated startup has developed two robotic solutions for maintenance of petroleum tanks. One of the robots developed by the team can clean crude oil tank bottom sludge. The second robot can wash and strip retail outlet petrol pump tanks. IIT Guwahati said the robots will eliminate the need for human entry for hazardous tasks.

BetaTank Robotics was incubated at IITG-Technology Incubation Centre (IITG-TIC) in 2019. It was funded under the Startup India Fund of Oil India Limited. The robots are undergoing stringent safety inspections to work in IECX/ATEX Zone o – the most stringent standard of the petroleum industry, IIT Guwahati said.

Bilateral Developments

India Pavilion @ Singapore Fintech Festival 2023

The eighth edition of the Singapore FinTech Festival (SFF) was held in Singapore from November 14-17, 2023, convening leaders and experts from around the world in finance, technology and public policy. The focus this year was on the growth and adoption of artificial intelligence and how this technology can potentially be used in financial services. The event was organised by the Monetary Authority of Singapore, Elevandi and Constellar and in collaboration with The Association of Banks in Singapore. H.E. Dr. Shilpak Ambule, High Commissioner of India to Singapore, inaugurated the India Pavilion at the Singapore Fintech Festival 2023 set up by the Trade Promotion Council of India, and supported by the Ministry of Commerce and Industry. More than 60 Indian entrepreneurs showcased their fintech solutions and products to the global audience at the venue.





Interactive Session with IFSCA Delegation

A high-level delegation of the International Financial Services Centres Authority (IFSCA) led by its Chairperson K. Rajaraman visited Singapore from November 15-17, 2023, to participate in the Singapore Fintech Festival and spread awareness about GIFT IFSC, India's maiden international financial centre. H.E. Dr.

Shilpak Ambule, High Commissioner of India to Singapore, hosted an interaction on November 16, 2023, at Shangri-La Hotel, Singapore, between IFSCA Chairman and prominent CEOs and personnel from the financial services industry. The event saw interesting and insightful discussions.



Raksha Mantri visits Singapore on Nov 18

After completing his tour of Indonesia, Raksha Mantri Rajnath Singh, on his way back home, paid a brief visit to Singapore on November 18, 2023. He paid tributes to Netaji Subhas Chandra Bose by laying a wreath at the Indian National Army (INA) marker.

The Raksha Mantri also offered prayers at the Sri Srinivasa Perumal temple dedicated to Lord Vishnu, which is among the oldest Hindu temples in Singapore, dating back to 1855. He also visited the Indian Heritage Centre in Little India. The centre was set up under the National Heritage Board in 2015 to document the story of the journey of Singaporean Indians. It houses five permanent galleries.



Singaporean PM attends the virtual G20 Summit

The virtual G20 Leaders' Summit was held on November 22, 2023, under the chairmanship of Indian Prime Minister Narendra Modi. Singaporean Prime Minister Lee Hsien Loong the event.



First World Ayurhealth Summit held

The First World Ayurhealth Summit was organised in Singapore on November 21 and 22, 2023, by SIFA Ayurved in collaboration with the High Commission of India in Singapore. The event saw the participation of over 100 teachers, researchers and doctors from all over the world.

INS Kadmatt berths at Singapore

The High Commissioner of India to Singapore, Dr. Shilpak Ambule, interacted with the Commanding Officer of INS Kadmatt during the ship's port call at Changi Port. During the visit, the crew had engaging interactions at the IFC & RHCC at C2 centre. The Commanding Officer also paid his respects and laid a wreath at Kranji War Memorial.



Team Singapore wins the G20ThINQ Competition



The Indian Navy in association with NWWA conducted an international quiz for schoolchildren called G2oThINQ. Thinq - Singapore, represented by 2 students from Global Indian International School, won the final round of the contest on November 23. The winning team was felicitated by the Vice President of India, Jagdeep Dhankhar.

Asean India Millet Festival in Jakarta

The Asean-India Millet Festival was organised in Jakarta from November 22–26, 2023, by the Indian Mission to ASEAN to celebrate the International Year of Millets 2023 and to further increase awareness about the millet products and policy initiatives in ASEAN and India. From Singapore, Mustafa Centre, a local retail giant and an iconic shopping hub, attended the millet festival in Jakarta. Mustafa Centre called it a valuable learning experience.





Forthcoming Events In India

I. BHARAT TEX 2024

Date & Venue: February 26-29, 2024;

Bharat Mandapam and

Yashoboomi, New Delhi, India

Organizer: A consortium of 11 Textile

Export Promotion Councils, with the support of the

Ministry of Textiles
Contact: event@bharat-tex.co

: event@bharat-tex.com; Ms. Priyanka Pawar,

> Group Exhibition Head, Messe Frankfurt India Pvt Ltd

Details: A global textile mega event being organised by a consortium of 11 Textile Export Promotion Councils and supported by the Ministry of Textiles is scheduled from

February 26-29 in New Delhi. With a focus on sustainability and resilient supply chains, it promises to be a tapestry of tradition and technology attracting the best and the brightest from the textile world. Bharat Tex 2024 is a prominent international industry platform, featuring exhibitions, knowledge sessions, thematic discussions, governmentto-government (G2G) meetings, businessto-business (B2B) networks, the signing of memoranda of understanding (MoUs), product launches, thematic and interactive pavilions and various other activities. The event has been designed to attract multiple stakeholders including top policymakers. global CEOs, international exhibitors and global buyers.

Website: www.bharat-tex.com

II. AI, IoT & Automation Pavilion - EXCON 2023

Date & Venue: December 12-16, 2023;

Bangalore International

Exhibition Centre

(BIEC),

Bengaluru, India

Organizer: Government of

Karnataka

Contact: excon@cii.in

Details: The 12th edition of Excon 2023 is scheduled to be held from December 12–16, 2023, at Bangalore International Exhibition Centre (BIEC), Bengaluru. It will feature more than 1,400 companies from India and abroad and host six country pavilions. Excon would cover 32,00,000 sq ft of display area. Excon 2023 is South Asia's largest event for construction equipment and will showcase the best of equipment and technology available for modern infrastructure creation.

Website: www.excon.in

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