#### **Asian Council on Contracting & Construction**

### **NEWSLETTER**



**Volume X - January 2024** 

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### Message from the Director General

#### My dear colleagues:

It is a pleasure to present to you the "Asian Council on Contracting & Construction" Newsletter, volume X of 2024. This publication is a compendium of relevant news, reports, and analyses on recent developments in the contracting and construction business in Asia Pacific countries.

This Newsletter shows reports about the expansion of Azerbaijan railways and irrigation system, and Cambodia's mixed construction landscape as Iran and Azerbaijan reported on the construction of a larger border bridge. Further east, Modi continued constructing projects in India.

North of India, the Nepalese are implementing hydropower projects to export electricity to Bangladeshi and Indian markets while President Marcos returned home with Japanese pledges to invest in infrastructure. Vietnam also received similar investment pledges.

I hope that these news and reports can provide you with a wider view of the construction and contracting market in Asia Pacific and its role in the national economy. Enjoy your reading!

David Hsu Director General CACCI

# Azerbaijani Railways reveals its green contribution projects

AzerNews, Nigar Hasanova, 26 December 2023



6 of the 10 new Stadler trains ordered by Azerbaijan Railways CJSC, 4 of which have already been delivered to our country, are electric, Azernews reports.

AZERBAIJAN - Thanks to these kinds of trains, the protection of the environment will increase further. In addition, to promote the use of bicycles, which is environmentally friendly and beneficial for human health, bicycle stands have been installed at railway stations.

Currently, Azerbaijan Railways contributes greatly to the prevention of carbon dioxide emissions by promoting green energy. For this purpose, during the renovation of the Yeni Bilajari locomotive depot, 307 solar panels were installed on the roofs of the buildings for energy supply, and 350 solar panels were installed in the Yeni Ganja locomotive depot.

Also, all necessary measures are taken to avoid damage to the environment during the construction of railways. In each new project, ESG principles are analysed and applied most effectively. Thus, in agreement with the Ministry of Ecology and Natural Resources, the location of those trees was sensibly changed in the 85th km of the Horadiz-Aghband line, near the

Minjivan station, in order not to damage the forest area. Maximum efforts are made to avoid damage to the environment during the construction of railways.

Planting trees along the railway track is kept in mind in every project of Azerbaijan Railways. Pine trees and other types of trees have already been planted as part of the Barda-Aghdam project.

Azerbaijan Railways uses innovative technological solutions to reduce the use of paper in internal documents. Also, since 2022, the sale of paper tickets on the Absheron circular route has been stopped.

### Azerbaijan sets up water treatment facility to improve irrigation system

#### Azernews, Abbas Ganbay, 27 December 2023



AZERBAIJAN - Advisor to the Chairman of the State Water Resources Agency, Asad Shirinov, said that during 2023 all crops in Azerbaijan were irrigated on average 3.4 times on an area of 1.5 mln hectares, **Azernews** reports.

"For this purpose, 7.5 bln m3 of water was provided to water users from all irrigation sources," the agency official said.

According to Asad Shirinov, the provision of rural populations with communal and domestic

water supplies, as well as irrigation of winter grain crops for 2024's harvest, is currently underway.

Shirinov said that 2023's implementation of relevant Presidential Orders "On measures to implement a pilot project on drinking water production through desalination of seawater" and "On measures to implement a pilot project on treatment and reuse of wastewater discharged from the Hovsan aeration plant in the Caspian Sea" has been started and a stock of drainage water has been determined.

He noted that in 2023, with the construction of a water treatment facility on the main Mugan collector, a tender was held on the project of water supply in certain volumes to irrigation canals in Saatli and Sabirabad districts, and work on the preparation of relevant feasibility studies and working design documentation was started.

"The operation regimes of the reservoirs were taken under strict control by the State Water Commission established by the order of the President of Azerbaijan dated April 15, 2020, and represented by the agency, and operational adjustments of the regimes were regularly carried

out. As a result of these measures, the reservoirs have 3.9 bln m3 more than in 2020 and 2.2 bln m3 more than in 2022. This also had a positive impact on water supply to crops in 2022 and gives grounds for more optimistic forecasts for 2024's irrigation season."

# Construction materials industry thriving on mega projects

The Daily Star, 3 September 2023

Cement and steel production saw significant growth in past decade



Dhaka Elevated Expressway (Photo: Naimur Rahman)

BANGLADESH - A major portion of the cement, steel and paint used in the construction of Dhaka Elevated Expressway was manufactured by 10 local companies. Local products in place of imported alternatives are also being used in around a dozen mega projects being implemented by the government at present. This is not only saving foreign currency but also building the capacity of the local companies. Exporters believe the Hazrat Shahjalal International Airport-Farmgate segment of the expressway, which was opened yesterday, would boost their sales through competitive advantages gained from time and energy savings.

The construction materials industry of Bangladesh has registered massive growth over the past decade as some mega projects are providing ample opportunity for capacity building and ensuring world-class products, according to industry insiders.

Local companies need to ensure quality products as well as display sufficient production capacity and operational efficiency to participate with international firms in implementing mega projects, they said.

At present, the government is implementing around a dozen mega projects using locally made construction materials instead of imported alternatives.

For example, at least 10 local companies are contributing materials, such as cement, steel and paint, for constructing the country's first elevated expressway in Dhaka.

And if the products being provided by these local companies were substandard in any way, then the international firm implementing the project would opt for imports, they added.

As such, a major portion of the Tk 8,940 crore project is being constructed using local materials.

Of the 10 local contributors, six are cement companies while two are steel makers and the others make paint and PVC products.

Sources say the cement makers are: Shah Cement Ltd, Crown Cement PLC, Bashundhara Industrial Complex Ltd, Heidelberg Cement, Seven Circle (Bangladesh) Ltd and Premier Cement Ltd.

The BSRM and GPH Ispat are providing steel for the project while two concerns of RFL Group -- RFL Pipe and Fittings, and Rainbow Paints -- are supplying the necessary pipes and road marking materials.

"It is a matter of pride that we are participating in building the elevated expressway. We provided a significant amount of cement for the project," said Mohammed Amirul Haque, founder managing director and CEO of Premier Cement.

According to him, local firms have long been contributing to the economy by improving the efficiency and quality of their products for use in mega development projects.

For example, local cement manufacturers have increased their production capacity to 58 lakh tonnes per annum while it was 20 lakh tonnes at best just 10 years ago.

"The public sector accounts for about 45 percent of the total consumption," he said, adding that cooperation between local and international firms is needed to ensure better quality products and increase supply.

As such, government mega projects and other development initiatives directly contribute to the growth of local manufacturers while also improving the environmental compliance and efficiency of their units.

"Besides, this cooperation opens an avenue for exports [by facilitating a relationship between local suppliers and international construction companies]," Haque said.

RN Paul, managing director of RFL Group, said they are providing soil, waste and rainwater pipes and fittings for the drainage system of the elevated expressway as well as road marking materials.

"So, we are providing two products for the entire project. We are proud to be a partner of the project," he added.

Paul also said if international firms involve local companies in their projects, then the latter would gain experience and confidence as well as a sense of responsibility.

"Participation with this type of international firm and mega project is not a matter of making business, rather it is an achievement of quality products," he added.

Paul explained that if local companies do not provide the required construction materials, then they would have to be imported at the cost of huge sums of foreign currency.

"So, local companies benefit and also help save foreign currency through such cooperation," he said.

Until this date, a total of 66,000 tonnes of steel has been used in the elevated expressway project, with BSRM contributing a majority 52,000 tonnes.

Tapan Sengupta, deputy managing director of BSRM, said foreign firms consider a supplier's product quality and production capacity before making them an official source.

"They first give product specifications and test the product quality randomly before selecting the supplier," he added.

Sengupta also said they have the capacity to supply the required quantity and quality of products.

"The implementing agency accepted our products and we contributed by providing around 80 percent of the steel requirement," he added.

Sengupta acknowledged that involvement in this type of large project helps local construction material companies grow their capacity and achieve global standards.

He also said timely delivery is another important factor for participation with international construction firms as delays in the supply of materials slows project implementation and increases costs.

Bangladesh's steel industry is getting stronger though thanks to a construction boom and implementation of mega infrastructure projects, industry people say.

Government projects account for 40 percent of the total steel consumed in Bangladesh, up from 15 percent 13 years. Total consumption stood at about 8 million tonnes in 2022.

Sheikh Masadul Alam Masud, founder chairman of the Bangladesh Steel Manufacturers Association, said the local steelmaking capacity has nearly doubled to about 90 lakh tonnes over the past decade.

He said development works, including large infrastructure projects taken by the government, encouraged millers to expand their production capacities.

Rupali Chowdhury, managing director of Berger Paints Bangladesh Limited, said local construction material companies are benefiting from government development projects as it propels their capacity building and efficiency.

She sees huge potential for the sector in Bangladesh as the country will continue to see infrastructure development in the days ahead.

However, local companies cannot contribute to projects being implemented under a government-to-government basis even if they provide international standard products.

With this backdrop, she demanded the government include a provision in contracts for mandatory use of local products even in government-to-government projects.

### New capital international airport construction passes 55%

#### The Phnom Penh Post, May Kunmakara, 22 November 2023



An illustration of Phnom Penh's planned international airport is displayed (Photo Supplied)

CAMBODIA - The construction of Techo International Airport (TIA) is over halfway complete, with expectations of concluding the project by the end of 2024 and commencing operations mid-2025, said a senior official of the State Secretariat of Civil Aviation (SSCA).

Sinn Chanserey Vutha, undersecretary of state at the SSCA, stated on November 21 that the first phase of the airport's construction had reached about 55% completion by mid-November. The first phase involved an expenditure of \$800 million.

Currently, the passenger terminal, managed by China Construction Third Engineering Bureau (CCTEB), is 47.4% complete; the power supply center is 73.7% finished and the parking lot, under the supervision of Shanghai Baoye (Cambodia) Co Ltd (CAIC), has achieved 52.2% completion.

The construction of the air traffic control tower, overseen by Cana Sino Construction Corporation (CSCC), has reached 90.8%.

"If nothing changes, the project is expected to be completed by the end of 2024," he stated.

"We anticipate the airport's opening in the first half of 2025, as we require pilot testing and certification for flights," he explained.

Thourn Sinan, president of the Pacific Asia Tourism Association (PATA) Cambodia Chapter, stated that developing international airports to meet standards and facilitate direct flights from distant countries is crucial for attracting more international tourists to the country.

"While the tourism sector is gradually recovering, the development of TIA will cater to the increasing number of international tourists in the coming years," he said. "We are also hopeful for the new airport to provide direct flights from ... countries worldwide," he added.

The construction of TIA, initially known as Techo Takhmao International Airport, began in 2019 and is scheduled to complete its first phase by mid-2024, according to CAIC's updated master schedule.

A collaboration between Overseas Cambodia Investment Corporation (OCIC) and the SSCA, CAIC operates on a 90:10 ownership basis, as stated on its website.

According to the SSCA, between January and September, the country's three international airports collectively welcomed 3,685,354 passengers, marking a 162% increase from 2022. Phnom Penh International Airport (PHN) accommodated 2,904,755 air arrivals, while Siem Reap International Airport (REP) and Sihanouk International Airport (KOS) reported 740,884 and 39,715 passengers, respectively.

PHN managed 40,436 tonnes of cargo, REP handled 143 tonnes and KOS's cargo volume remains undisclosed.

The Kingdom welcomed about 3.5 million foreign visitors from January to August 2023, a 250.8% rise compared to the same period in 2022. However, this figure is still 19.7% lower than the record-high foreign visitor numbers in the same period of 2019, before the pandemic.

The leading source of tourists was Thailand, with 1,186,999 arrivals, followed by Vietnam, China, Laos and other countries including the US, South Korea, Indonesia and France, as per the Ministry of Tourism.

### Construction approvals down, investment up

#### The Phnom Penh, Hin Pisei, 10 December 2023

CAMBODIA - Cambodia approved over 2,600 construction investment projects in the first three quarters of 2023, marking a 19% decrease compared to the same period in 2022. Investment capital and construction space, however, have surged by over 100%, as per the Ministry of Economy and Finance.

The ministry's report indicates that from January to September 2023, the Ministry of Land Management, Urban Planning and Construction sanctioned 2,598 projects, spanning 11.99 million square metres with a capital investment of \$4.960 billion.

This represents a decrease of 577 projects compared to the same period in 2022, but construction space and financing have increased by 146% and 153%, respectively.



For September 2023 alone, 231 projects were granted construction permits, encompassing 427,582sqm and a capital investment of \$202.3 million. In comparison with September 2022, there was a 36% decline in project numbers, a 46% decrease in construction space and a 32% reduction in investment.

Of the approved projects in September, 194 were housing projects (including 188 gated communities known locally as boreys), 18 industrial, 11 commercial and 7 tourism-related

buildings, three investments and one public construction project.

The ministry noted that economic activity during the month was relatively stagnant, influenced by global inflation, which adversely impacted construction activities.

Chiv Sivpheng, general manager of the Cambodia Constructors Association (CCA), said the quiet in the sector is due to the uncertainty of global economic growth and politics.

He noted that the industry's recovery is contingent on the revival of sectors like trade, tourism and real estate, and therefore generally takes longer to rebound.

Sivpheng highlighted that the construction sector is currently dominated by local residents, while large and high-rise building activity has been subdued since the onset of Covid-19 in early 2020.

"The construction sector still needs more time to recover. When [the economy] is active, the demand for office buildings, shopping malls and entertainment venues will increase, and then construction will increase," he said.

The current government has continued some measures from the sixth mandate to support the construction and real estate industry.

These include delaying the implementation of package tax payments, extending the period for remittance, postponing the execution of capital gains tax, exempting stamp duty on the transfer of ownership or possession of houses valued at or below \$70,000, prompting financial institutions to restructure loans and delaying decisions on the obligation to submit financial statements.

In 2022, the land management ministry approved 4,275 projects, a slight decrease of 28 from 2021, with a total capital investment of \$2.968 billion, a 46.8% decrease. Of these, 3,768 were housing projects, representing 88.1% of the total requests, an increase of 48 projects compared to 2021, and included commercial, industrial, tourism and other projects, as per the finance ministry.

# Under PM Modi, India emerging as economic superpower: Scindia

#### Hindustan Times, Ayodhya, 31 December 2023



Prime Minister Narendra Modi with Uttar Pradesh governor Anandiben Patel, chief minister Yogi Adityanath, deputy chief minister Keshav Prasad Maurya, Union civil aviation minister Jyotiraditya Scindia and others inaugurates Maharshi Valmiki International Airport in Ayodhya (PTI)

INDIA - Scindia said that the construction of the Maharishi Valmiki International Airport will increase Ayodhya's connectivity.

Civil aviation minister Jyotiraditya Scindia said that Prime Minister Narendra Modi was leading India towards an economic transformation while also celebrating its rich cultural and spiritual history.

Hailing the announcement of developmental projects worth ₹15,700 crore by Modi during his visit to Ayodhya, Scindia said: "India is emerging as an economic powerhouse under PM Narendra Modi, who is striving to make the world aware of India's spiritual strength."

Scindia said that the construction of the Maharishi Valmiki International Airport, which was among the projects unveiled by Modi, will increase Ayodhya's connectivity and cement its place on the world map.

"PM Modi's resolutions for Ayodhya are coming true, and Ayodhya is becoming prominent on the world map. Now, planes from Boeing and Airbus will also be able to land in Ayodhya, and flights

to Delhi and Ahmedabad will be operated from here. Ayodhya will be connected to every corner of India," he said.

The senior BJP leader added that the airport will get an additional infrastructural boost in the coming days, which will further improve Ayodhya's connectivity. "Phase II of the Maharishi Valmiki International Airport will include the expansion of the runway by 3700 metres along with the construction of a new terminal building of 50,000 square metres, which will have a capacity to handle 3,000 passengers during peak hours and 60 lakh [6 million] passengers annually, he said while addressing a gathering at a public rally.

The Union Minister accused the previous governments of not working towards Ayodhya's development and said that Modi was striving to revive the region's "lost glory."

"On one hand, Opposition governments neglected Ayodhya and denied the existence of Lord Shri Ram, while on the other, Prime Minister Modi has made efforts to revive Ayodhya's lost glory and has upheld the honour of Lord Shri Ram. This has been made possible due to Modi's guarantee," Scindia added.

Reacting to Scindia's remarks, Pawan Pandey, the former Ayodhya MLA and former minister in the Akhilesh Yadav government said: "It is absolutely wrong to say that the previous SP (Samajwadi Party) government did not do any work for Ayodhya. All the underground power cabling work in Ayodhya began in Akhilesh ji's government, and the work on sewage line laying also..."

"In our government, (construction of) many roads in and around Ayodhya began. Also changing rooms for women at the ghats were made in our government. As far as airport or railway station is concerned, they are central government subjects..." he said.

### Iran, Azerbaijan inaugurate new border bridge

#### ICCIMA, 31 December 2023



IRAN - A new vehicular bridge that connects Astara in northwestern Iran to the city of the same name in southeast of the Republic of Azerbaijan was brought into operation at the common border on Saturday December 30 2023.

The long-awaited vehicular bridge, built over the Astarachay River, was inaugurated at a ceremony attended by Iranian Roads Minister

Mehrdad Bazrpash and Deputy Prime Minister of Azerbaijan Shahin Mustafayev.

The border bridge has a width of 32 meters and is 89 meters long. It completes a major section of an international highway that connects Iran's Rasht to the Azeri capital of Baku.

The old bridge and terminal between the two countries at Astara border had created many problems in the travel of trucks, the minister said, adding that the new bridge will significantly cut traffic congestion at the border. Bazrpash noted that the road and rail transport between the two countries have increased by 40 and 47 percent respectively. The foundation of the new bridge over the Astarachay river was laid in January 2022.



Speaking in the inauguration ceremony, Bazrpash said the new bridge is the fifth border crossing between the two neighbors

### Missing pieces of the hydropower jigsaw

Nepal Times, Sonia Awale, 30 December 2023

Hydroelectricity supply will soon catch up with demand, and focus is shifting to reservoirs to store energy and regulate water



NEPAL - Seen from a vantage point high above the Seti River near Damauli, excavators and tipper trucks look like tiny insects clawing away at a cliff. Occasionally there is the sound of dynamite blasting at the rock face.

This is the Tanahu Hydropower Project, and it is an indication of how stagnant Nepal's energy planning has been that this is only the second reservoir scheme after the Kulekhani Dam was commissioned in 1982.

The workers have nearly completed drilling a tunnel to divert the Seti's turbid sediment-laden water so construction of the 140m high concrete dam can begin. When completed, the reservoir will be 7.25 sq km in area and store nearly 300 million m³ of monsoon runoff. And unlike Kulekhani, the Seti is a snow-fed river originating in the glacier below Annapurna 4.



The 3D modelling of the Dam in Tanahu (Tanahu Hydropower Ltd.)

A 420m head on the Seti will take water through 7.25m wide tunnels and penstock pipes to an underground powerhouse to give the scheme an installed capacity of 140MW and an annual energy generation of 587.7GWh. While this capacity is less than other projects like Tama Kosi, the stored water can be drained at peak hours and during the dry season to augment electricity supply and keep the water flowing downstream.

Also called Upper Seti, this project funded by the Japan International Cooperation Agency (JICA), Asian Development Bank (ADB), European Investment Bank (EIB) and Nepal Electricity Authority (NEA) is designed for at

least six hours of peak operation during the driest months of the year.

"Most of Nepal's hydropower projects are run-of-the-river projects which means we can't store water for winter months when domestic demand is highest," says engineer Raja Bhai Shilpakar, Tanahu's project manager. "We must shift our focus to reservoir projects now to ensure Nepal's energy security and to reduce power import."

Indeed, while Nepal has an installed capacity of around 2,800MW in the monsoon, and sold electricity worth Rs15 billion to India this summer, NEA is still importing power from Indian thermal plants to meet 30% of the winter demand.

Winter generation is low because the rivers are running low and this situation has been made worse by prolonged post-monsoon droughts. In 2022, NEA said power supply fell by 20% of the winter average because there was no precipitation and melting of snow.

In its new proposed draft, the National Planning Commission (NPC) has set a power generation target of 11,769MW in the next five years. The private sector, which generates nearly 80% of current electricity supply, is not so optimistic given the bureaucratic and financing hurdles.

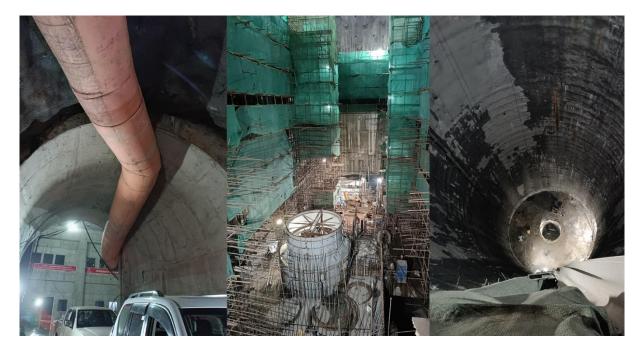
But even then, there will still be a supply shortfall unless more reservoir projects are built to even out the annual generation profile. Besides Tanahu, reservoir projects are planned on the Budi Gandaki, Tamor and Upper Arun, but those will not be ready for another ten years. Dams are also much more costly to build and will need government involvement.

Apart from local demands for compensation for submerged land, there are also concerns about the greater ecological impact of reservoir projects. Studies have shown that rampant dam construction leads to a decline in aquatic life, and livelihoods of people downstream.



GREEN ENERGY: Dam site of the under-construction Tanahu Hydropower Project with a 25km long reservoir which will be completed in May 2026. The concrete dam will be 140m in height and hold 295 million m³ of monsoon runoff (Tanahu Hydropower Ltd.)

The other challenge is increasing risk of climate change-induced disasters like cloudbursts and Glacial Lake Outburst Floods that can wipe out expensive dams like the Chungthang Dam disaster in Sikkim in October 2023.



This underground powerhouse (centre) will give installed capacity of 140MW and an annual energy generation of 587.7GWh

Nepal's own Kulekhani was supposed to have a lifespan of 100 years but a cloudburst in the catchment area in 1993 deposited so much debris into the lake that the cascade power plants that generate 106MW of electricity from it will now function only for another 30 years.

Shilpakar who was also involved in the Kulekhani project says lessons have been learnt, and Tanahu will have a flushing gate to drain sediment from the reservoir. It is considered too far downstream to be at risk from glacial lake bursts. The dam is also built to withstand earthquakes of much higher intensity than the 2015 event.

"Tanahu is a concrete gravity dam with a much larger catchment than Kulekhani," he explains. "But rainfall patterns have changed drastically. Thus, we have added two flushing gates, increasing the dam's lifespan to 120 years."

Despite the downside, most experts agree that reservoirs are crucial for flood control and dry season irrigation downstream, especially as water supply becomes scarcer with the climate crisis. Reservoirs also have other benefits like fisheries, inland navigation and tourism, as seen in Kulekhani.

"In many ways, reservoirs are not just clean energy projects but also climate adaptive initiatives," says Pushkar Manandhar of the ADB. "Storage hydropower serves as a buffer to cope with erratic rainfall and act as a shock absorber. They store water to augment lean season flow of rivers."

But water is a geopolitical hot potato in the region with India's increased involvement in building river schemes in Nepal, including Pancheswar Dam on the border Mahakali River, Arun III, West Seti reservoir, and other projects. Experts say India's real interest is in water supply and would not mind if it gets regulated water for free from reservoirs like Tanahu in Nepal.



Tanahu hydropower dam site

But India is playing hardball by refusing to buy electricity from projects it deems to have Chinese investment or involvement. In Tanahu, meanwhile, engineers are running out of explosives because of a ban on export of dynamite by India.

Says Shilpakar: "No contractor is getting an explosive permit from India and we cannot get any from the Chinese either, we need the government-to-government deals otherwise the project could be delayed."

Tanahu also includes the construction of a 220kV double circuit Damauli-Bharatpur

transmission line and is looking at a completion date of May 2026. There are also plans for a 126MW Lower Seti cascade project with a dam at Saranghat, and a powerhouse at Mugling to generate 520GWh.

Experts say that along with new reservoir projects, Nepal now needs to pay attention to transmission and distribution to streamline supply so that domestic consumption increases.

"We didn't develop all aspects of hydro schemes in parallel," says ADB's Manandhar. "We focused mostly on generation and now there is a real bottleneck in transmission and distribution."

Kathmandu is a load centre, but transmission lines do not have the capacity to bring the electricity from power plants in central and eastern Nepal.

"We have to build substations to future-proof supply, but there are issues with right of way and land acquisition," Manandhar adds.

Which is why NEA is working at speed to upgrade its substation in Siuchatar, with a state-of-theart Distribution System Control and Data Centre so that power supply to localities in the Valley can be monitored and controlled more efficiently.

"If there is a fault in distribution, we will be able to see it from here, we won't need locals to call us anymore," says electrical engineer Dhirendra Bajgain. "At the same time, we will be able to quickly restore the fault, in minutes instead of hours by just isolating that area."

But elsewhere, like in the Dana substation near Kushma of Parbat district, authorities are dealing with a different kind of power spill. Pritam Raj Bista of the Parbat Distribution Centre says that while there is 100% electrification, the total number of consumers is decreasing due to depopulation.

In contrast, nearly 170km south in Dhakdahi near Butwal, demand is peaking with local industries complaining about not getting dedicated feeder lines on time. Even when Nepal did away with power rationing, the area was still facing power cuts until Dhakdahi substation was set up a few years ago. The new substation shared the power load with the Butwal substation and the area has been getting improved voltage and power quality.

At the recently inaugurated Kushma-New Butwal 220kV substation to evacuate power from the Kali Gandaki Transmission Corridor, the NEA's Kulman Ghising said his main priority now was to invest in transmission and distribution infrastructure.

"Butwal is critical because it is at the intersection of the Kali Gandaki corridor in central Nepal and the East-West transmission artery," Ghising said. "It is a pooling hub for power transmission and distribution westwards and for export to India."



Transmission lines at the recently inaugurated Kushma-New Butwal 220kV substation which will evacuate power from the Kali Gandaki Transmission Corridor

Indeed, these transmission lines will dovetail with the Millennium Challenge Compact (MCC)-supported lines from Hetauda via Damauli. The challenge now, Ghising says, is local compensation demands to transmission lines which have delayed them.

"Our field staff spend 90% of their time dealing with local opposition, social and environmental regulations," he added.

Transmission lines under the MCC project are likely to face even stronger opposition because of political opposition to the US-funded initiative, and local belief that the project has lots of money.

If Nepal is to save its economy and meet net-zero targets by 2045, increasing domestic demand should be the priority, and for this, reservoir projects, transmission lines and distribution infrastructure are key.

Nepal could export more electricity but India is buying less than 700MW from Nepal because of Chinese involvement in projects. It is therefore in Nepal's own strategic interest to increase domestic demand as much as possible.



Even if Nepal could sell all its present electricity generation, it would amount to a mere Rs20 billion against an annual trade deficit with India at a staggering Rs840 billion.

Instead, if we reduce just 10% of our petroleum bill by electrifying industries, household use and transport, Nepal can save at least Rs30 billion a year. Improving public health and ecology will be a bonus.

"If we sell electricity, we just get cash benefits but if we were to make the maximum use of our power within the country, there will be

cascade impacts," says engineer Raja Bhai Shilpakar. "We can revolutionise our industries and manufacturing, create jobs and prevent young talented people from migrating."

# Rate of construction cost increases falls below 10 year average

#### Stuff, Miriam Bell, 11 October 2023

#### Hundreds of construction vehicles worth millions up for auction after company falls

NEW ZEALAND - Residential building cost increases have slowed to the lowest quarterly rate since late 2020, and that will give buyers and developers more confidence, CoreLogic says.

Costs were still going up, with the property data firm's latest Cordell Construction Cost Index showing they rose 0.5% nationally in the September quarter.

But it was the lowest quarterly figure since the end of 2020 and demonstrated the rate of increases had eased off.

It was down from 0.6% in the first six months of 2023 and was well below the average quarterly increases of 2% recorded in 2021 and 2022.

The cost of building a "standard" three-bedroom, two-bathroom, brick-and-tile single-storey home was up 3.4% annually, according to the index.

CoreLogic chief property economist Kelvin Davidson said the annual increase rate had dropped sharply from a peak of 10.4% in late 2022.

It meant the annual index figure had dipped below the 10-year average of 4.5%, he said.

"We've now entered a more subdued phase for construction cost inflation, reflecting the marked easing in materials supply chains, compared to the Covid-affected period over 2021 and 2022.



Kirk Hargfreaves/Stuff

The annual rate of construction cost increases has dropped to 3.4% from a peak of 10.4% in 2022.

"A fair proportion of building components prices remained flat across the three months to September, with scattered increases and decreases across metal and timber materials."

It was conceivable costs could have slowed further over the quarter had it not been for the new H1 insulation standards, he said.

The H1 standards, which potentially add 3% to 5% to the overall cost of a build, came into effect from May.

New home consents were down 17% annually to 42,110 in the year to August 2023, Stats NZ figures showed. That continued the downward trend from the peak of 51,015 in the year to May 2022.

But the number of new homes consented was still at a higher level than any 12-month period prior to 2021, Stats NZ said.

Davidson said consents remain elevated, with more than 40,000 on a 12-month rolling basis.

That was keeping builders relatively busy working through a pipeline of previously-approved homes, alongside work on alterations and additions, he said.

"Although building capacity pressures have eased, half of project costs stem from labour and continued growth in wages is keeping some pressure on overall construction costs."



1New builds will probably not get cheaper, CoreLogic chief property economist Kelvin Davidson says

It was likely new home consent volumes would fall further, with workloads and construction costs continuing to moderate over the next two to three years, he said.

"It wouldn't be a surprise to see the quarterly rate of change in the index continue in the vicinity of 0.5% for the next few quarters.

"While new builds probably won't get cheaper, a controlled annual growth rate of 2% to 3% gives confidence for buyers to invest and for developers to keep bringing projects forward."

There has been a slow-down in the residential construction sector over 2022, with demand for

new build homes in particular dropping off.

In August, the Master Builders annual State of the Sector survey found 48% of builders had experienced a decline in their pipeline of work, and that had left the sector worried about what the future held.

But Westpac senior economist Satish Ranchhod said recently that conditions in the housing market were changing.

While the bank was forecasting residential construction activity would fall by about 16% from its recent peaks, some recent developments would help to provide a floor under activity, he said.

"Notably, net migration has risen to a record high, pushing population growth over 2%. In addition, the fall in house prices and sales seen over 2022 was arrested."

### Japanese businessmen pledge P14B worth of investments - PBBM

#### Daily Tribune, Tiziana Celine Piatos, 18 December 2023



2Photo: Yummie Dingding/ PPA POOL

PHILIPPINES - President Ferdinand Marcos Jr. said his administration secured nine investment pledges from Japanese businesses totaling P14 billion after his trip to Tokyo.

In an interview with the Philippine media delegation in Japan before flying back to Manila, Marcos said his administration signed nine new memorandums of understanding (MOUs) covering the investment pledges.

Marcos said that nine companies from different areas, including semiconductors, healthcare, infrastructure development, security, and agriculture, were involved in these business partnerships.

"Some of these are extensions of already existing contracts. They are just expanding their operations," Marcos said. "But the more important part is (there will be) 200,000 plus new jobs," Marcos added.

He mentioned that he met with Japanese business leaders to follow up on the agreements he made in February 2023 before he flew back to Manila, adding that they were able to stay within the schedule.

Among the firms involved are Japan Overseas Infrastructure Investment Corp. for Transport and Urban Establishment and the Bases Conversion and Development Authority, which will work together on studies related to the establishment of New Clark City.

Additionally, the Manila Japanese School and the BCDA are working together to extend the school's 25-year lease on a four-hectare location in Bonifacio Global City.

Ibiden Co. Ltd. and Japan Aviation Electronics Industry Ltd. are two additional investors that will contribute foreign direct investments (FDIs) to the electronics manufacturing industry to modernize its Philippine facilities and boost production.

A few other businesses making FDIs are Tsuneishi Shipbuilding Co. Ltd., Medley Inc., Minebea Mitsumi Inc., and Nitori Holdings Co. Ltd. They are making investments for the operation of business process outsourcing (BPO), the extension of the furniture and home furnishing chain, the enhancement of production, and the replacement of outdated Philippine facilities.

Additionally, for real estate development projects, DMCI Project Developers Inc. and Marubeni Corp. of Japan are establishing a joint venture.

# SPNEC begins work on 'world's largest solar project'

#### Manila Bulletin, Chino S. Leyco, 1 January 2024

PHILIPPINES - In Bulacan and Nueva Ecija.

#### At a glance,

- SP New Energy Corp. (SPNEC) has begun construction preparations for Terra Solar Philippines, Inc.'s solar project in Nueva Ecija and Bulacan.
- The 3,500-hectare solar project, owned by SPNEC's subsidiary Terra Solar, aims to become the world's largest upon completion.
- The first phase is scheduled for completion by the first quarter of 2026.
- SPNEC is expediting site clearing and preparing for the project's interconnection with the national grid and the installation of over five million solar panels.
- Over 3,000 hectares have been secured for projects in Nueva Ecija and Bulacan, with a focus on industrial use.
- The Terra Solar project will repurpose pasturelands in the town of Peñaranda and has already completed one solar development in the area.
- The project plans to feature 3,500 megawatts of solar panels and 4,000 MW hours of battery storage, estimated to cost P200 billion.
- It is expected to generate over five billion kWh annually, contributing around five percent to the Philippine grid and 12 percent to its total demand.

SP New Energy Corp. (SPNEC) has commenced the construction preparations for Terra Solar Philippines, Inc.'s solar project in Nueva Ecija and Bulacan.

In a statement on Monday, Jan. 1, SPNEC said it began clearing the site for the 3,500-hectare solar project, which will be owned by its subsidiary Terra Solar.



Upon completion, SPNEC stated that it will become the "world's largest solar project."

The first phase of the project is set to be completed by the first quarter of 2026. To keep to this schedule, SPNEC is accelerating its site clearing efforts before constructing the project's connections to the national grid and installing over five million solar panels.

SPNEC earlier secured more than 3,000 hectares for its projects, mainly in Nueva Ecija

and Bulacan, with the majority already transformed into industrial areas. The Terra Solar project focuses on converting pasturelands in the town of Peñaranda.

Additionally, SPNEC has completed installing solar panels for the first of its Nueva Ecija solar developments in the same town.

The Terra Solar project is planned to consist of 3,500 megawatts of solar panels and 4,000 MW hours of battery storage and cost an estimated P200 billion.

The project is expected generate over five billion kWh annually, or an estimated five percent of the total volume of the Philippine grid and 12 percent of its total demand.

This would be larger than India's Bhadla Solar Park and China's Golmud Solar Park, currently the world's largest solar farms at over 2.2 gigawatts.

This would also exceed the capacity of all grid-connected solar projects operating in the Philippines combined at over 1.5 GW according to the Department of Energy's latest figures as of 2023.

Accelerated work on this project comes with the completion of the P15.9 billion investment of MGen Renewable Energy, Inc. (MGreen) in SPNEC on December 27 2023.

SPNEC disclosed the 3500 MW solar and 4000 MWh battery project to be the primary use of proceeds for the investment. Analysts have commented that MGreen's investment will help speed up the execution of SPNEC's projects.

MGreen is the renewable energy development arm of Meralco Powergen Corp., a wholly-owned subsidiary of the Manila Electric Co., the country's largest private sector electric distribution utility firm.

# The Russian Chamber of Commerce and Industry Presented Mechanism for Financing Industrial Projects in EAEU

#### CCIRF, 11 December 2023



On December 11 2023, Dmitry Kurochkin, Vice President of the Chamber of Commerce and Industry of the Russian Federation (CCIRF) moderated an open presentation of the mechanism for financial assistance to the development of joint cooperation projects in industry in the Eurasian Economic Union (EAEU) member states

RUSSIA - During the presentation, the President of the Chamber Sergey Katyrin, recalled that in October 2023, the Regulation on the selection of joint cooperation projects in industries and the provision of financial assistance in their implementation by the EAEU member states was approved. About 1.8 billion rubles will be allocated from the budget of the Eurasian Economic Commission (EEC) in 2024 for these purposes. "We were the initiators of the creation of such a mechanism of cooperation. I am very grateful to my colleagues who supported this idea, and it has found its logical conclusion," he said.

Sergey Katyrin recalled that there are important conditions for financing joint production projects: at least 3 countries should participate in each transaction, and the period of subsidization and implementation should not exceed 5 years. "In order to help our entrepreneurs organizationally, we agreed with our colleagues in the Chambers of Commerce and Industry and created a Project Office for Industrial Cooperation in the EAEU on the basis of the CCI RF.

His task is to assist in the creation of conglomerates of at least three business structures that could jointly engage in cooperative projects," the head of the Chamber explained. Earlier it was reported that in 2024, projects worth about 15 billion rubles may be supported. "But if we "choose" this financial resource, then it will be possible, as I believe, to apply to the EEC with a proposal to increase it in the future," Sergey Katyrin noted. Following the presentation, sales representatives, heads of business associations and entrepreneurs asked questions.

### Modi ends 2023 with \$2bn infrastructure push in sacred town

#### **RT, 31 December 2023**

INDIA - The Indian PM unveiled dozens of projects in Ayodhya, where the Ram temple is being built as his party's election promise.

Indian Prime Minister Narendra Modi launched projects worth 157 billion rupees (\$2 billion) in Ayodhya, a town considered sacred by Hindus, in the Uttar Pradesh state.

During his visit to the town, Modi laid the foundation stone for 46 projects, including those for the development of Ayodhya and its surrounding areas, and other projects worth about \$550 million across Uttar Pradesh, the Indian state-owned outlet DD News reported.

Ayodhya, where a massive project to build a temple dedicated to the Indian god Ram is underway, will now be linked to the rest of India through the Maharshi Valmiki airport, named after a Hindu saint. The airport can handle one million passengers annually. Furthermore, the Ayodhya railway station was redeveloped into a modern railway hub equipped with lifts, escalators, food plazas, shops, cloakrooms, child care rooms, and waiting halls.



This handout photograph taken on December 30, 2023 and released by Indian Press Information Bureau (PIB) shows India's Prime Minister Narendra Modi (2L) greeting people during a roadshow in Ayodhya (PIB/AFP)

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Construction of the temple itself could cost the Indian government around 18 billion rupees (\$216 million), officials of the trust responsible for the project told The Hindu newspaper recently.

Speaking to a massive gathering in Ayodhya, the Indian leader said that the 1.4 billion Indians should celebrate January 22, the day when the temple will be consecrated, similarly to Diwali, a Hindu festival during which people light earthen lamps outside their homes. Indians believe that Rama, the protagonist of the Hindu epic 'Ramayana', was born in Ayodhya. Diwali, which is celebrated every winter, celebrates the Indian god's eventual defeat of the demon Ravana, and his triumphant return home.

Modi urged people to visit the temple town, which has undergone a dramatic transformation in the past several years, but also reminded would-be visitors to avoid large crowds on the consecration day. Nearly 8,000 dignitaries have been invited to attend the ceremony, according to India media. Around 15% of the laborers working at the construction site will also get invites, the reports said.

The Ram temple in Ayodhya is being built after a lengthy legal tussle as a mosque had once stood at the site. The construction of the temple was a major issue for Modi heading into the last national election in 2019. 2024 will be crucial for Modi, as another round of national elections to determine the next prime minister will be held between April and May of 2024.

In 1992, the Babri Masjid mosque in Ayodhya, built in the 16th century, was destroyed by Hindu activists who believed that it was built on the ruins of a Ram temple, sparking massive communal riots, which left between 2,000 and 3,000 dead, according to various estimates. A trial began 18 years after the incident, centering on whether Hindus or Muslims were the rightful owners of the land, and proceeded at a snail's pace. In 2019, the Supreme Court of India sided with the Hindus, paving the way for a temple dedicated to the Hindu deity to be erected on the contested land.

### SMRT Trains Ltd: Providing More Reliable Train Services with SS ISO 55001

#### SMF, 15 November 2023

SINGAPORE - SMRT adopted SS ISO 55001 to support its mission to continuously improve its services so that commuters enjoy better journeys.



SS ISO 55001 supports SMRT Trains' mission to continuously improve its services so that commuters enjoy better journeys.

#### SS ISO 55001 – Asset Management – Management Systems

SS ISO 55001 specifies the requirements for the establishment, implementation, maintenance and improvement of a management system for asset management, which is the total management of physical assets – including machines and infrastructure – that are essential for operations and delivering performance outcomes.

#### **Quick List of Benefits**

Meet international regulatory standards

Improve the performance of assets to provide better services

Manage risks through proactive intervention and reducing financial losses

Improve financial performance by reducing costs from asset degradation or failure

Enhance the efficiency and effectiveness of the organisation by improving processes

#### **Company Profile**

As the first and largest train services provider in Singapore, SMRT Trains Ltd. (SMRT Trains) aims to provide safe, reliable and comfortable journeys for commuters. SMRT Trains is a subsidiary of SMRT Corporation Ltd (SMRT).

SMRT Trains manages and operates the North-South and East-West Lines (NSEWL), the Circle Line (CCL) and the new Thomson-East Coast Line of Singapore's Mass Rapid Transit (MRT) system, as well as the Bukit Panjang Light Rail Transit system. Before Covid-19, the daily MRT ridership was 3 million passenger journeys, out of which 2 million were for the NSEWL and CCL.

#### **Challenges**

In 2011, SMRT faced a significant setback when a series of train disruptions and breakdowns occurred, revealing vulnerabilities in the ageing rail infrastructure of the NSEWL. This marked a turning point for SMRT, prompting the need for a comprehensive review of its maintenance and renewal efforts on Singapore's oldest lines. The transformation of the NSEWL was a complex engineering effort and represented the first major line upgrade since operations began in 1987.

To address the disruptions and breakdowns, one of SMRT Trains' key priorities was to adopt the international standard ISO 55001 – Asset Management – Management Systems from 2014. SMRT Trains received its first ISO 55001 certification in 2016. [Singapore adopted ISO 55001 as a national standard, known as SS ISO 55001, in the same year.]

Why Adopt SS ISO 55001?

#### 1. SS ISO 55001 provides a framework to manage assets effectively



Mr Lam Sheau Kai, President, SMRT Trains, says: "Asset management is about optimising the relations between an asset's cost, risk and performance. With SS ISO 55001, we have a framework of global standard to manage these relations in a structured and efficient way. This helps us to optimise our assets' lifetime value."

The SS ISO 55001 framework's effectiveness comes down to its holistic approach in asset management, which covers policy and

planning to leadership, support, operations, evaluation and more. SMRT Trains mapped these key processes onto its strategic asset management plan (SAMP) to cover all bases and ensure best practice in asset management.

"Asset management requires a multi-disciplinary and holistic approach involving various stakeholders such as management, operators, suppliers and regulators. Hence, we need an allencompassing framework, which the SS ISO 55001 series of standards provides," Mr Lam explains.

### 2. SS ISO 55001 ensures asset management objectives align with organisational objectives

As part of its SS ISO 55001 journey, SMRT Trains developed an asset management policy that aligns its asset management objectives with the objectives of its parent company SMRT.

"SS ISO 55001 helps SMRT Trains to establish asset management practices that drive organisational strategic goals," says Mr Lam. "This means that asset management contributes significantly to the overall effectiveness of SMRT to deliver safe and reliable public transport services."

#### 3. SS ISO 55001 helps coordinate asset management functions to materialise the SAMP

In the SS ISO 55001 framework, clarity of roles and responsibilities is important to deliver the SAMP effectively. SMRT Trains has clearly assigned asset management functions: top management and the System Management Division oversee asset management policy and planning, while various specialised groups carry out asset monitoring and maintenance.

In addition, to prepare the resources and competence needed to implement the SAMP, SMRT Trains has a capability framework that includes enhancing employees' core and soft skills via training; strengthening compliance to regulations and international standards; and continuous learning and innovation through the principles of Kaizen and digital transformation.



Mr Lam (third from left) and staff of SMRT Trains at a track inspection.

Benefits of Adopting SS ISO 55001.

#### 1. Increased reliability of trains and services

SMRT Trains reports MRT reliability using the Mean Kilometres Between Failure (MKBF) as a key metric. MKBF tracks the average distance travelled by a train before it experiences a delay of more than five minutes.

In 2015, the MKBF of Singapore's MRT system in general was 130,000 train-km. This was below high performers such as the Taipei Metro at 800,000 train-km and the Hong Kong MTR at 500,000 train-km. After SMRT Trains implemented SS ISO 55001, the MKBF for its trains rose to above 1 million train-km in 2020, which is maintained till today. Going above 1 million train-km places Singapore's MRT system among the best performers globally.

#### 2. Improved cost efficiency

Between 2018 and 2022, SMRT Trains increased the MKBF performance of its trains by 12.5 times with no marked increase in repair and maintenance costs. In other words, since 2018, SMRT Trains has performed better year on year within the same repair and maintenance budget.

#### 3. Proactive intervention

SS ISO 55001 states the need for establishing processes to identify potential failures in asset performance and determining preventive action. To meet these goals, SMRT Trains taps digital transformation in the areas of data analytics and artificial intelligence (AI).

One of its latest AI initiatives is Project Overwatch, which detects train anomalies in real time, enabling the Operations Control Centre to respond swiftly and prevent train delays. Since the implementation of Project Overwatch on the Circle Line in 2023, there has been a 30% drop in train delays of up to five minutes.

#### 4. Framework of Continual Improvement

Mr Lam concludes: "Asset management remains a critical task for SMRT Trains. It improves the reliability, availability, maintainability and safety of the assets under our care. This allows us to provide quality train services to commuters in Singapore while reducing costs from downtime, waste and inefficiencies. By complying with SS ISO 55001, we do not just deliver quality train services but also have a framework for continual improvement."

# India's construction sector levels up as housing demand spurs economy

#### The Business Times, Reuters, 2 December 2023

INDIA - If India needed any more proof that it was in the midst of a huge housing boom, it got in December GDP data, heightening expectations that the industry will continue to power the economy for years to come.



The construction sector grew 13.3 percent from July to September compared to the same period in 2022, up from 7.9 percent in the previous quarter and its best performance in five quarters, the data released on November 30 2023 showed.

The long-awaited boom - which has created millions of jobs - comes after about six years of debt and pandemic-induced downturn before the construction sector began improving 2022 and hitting its stride in 2023. It has been driven by rising incomes for many Indians, a severe housing shortage in big cities and strong population growth.

The world's most populous nation had an urban housing shortage of around 19 million units in 2022 - and that is expected to double by 2030, according to government estimates.

"The robust growth in construction has significantly contributed to the economic growth - and is likely to play the same role in next couple of quarters," said Sunil Sinha, an economist at India Ratings and Research, an arm of rating agency Fitch.

Builders are bullish long-term with many saying the boom could last two to three years and some even more optimistic.

"The housing market could continue to perform well for another three to four years," Sanjeev Jain, managing director at Parsvnath Developers, a leading real estate company, noting that India is in the initial stages of a housing growth cycle.

Home sales in India's seven largest cities, including Mumbai, New Delhi and Bangalore, rocketed 36 percent in the July to September quarter when compared to same period in 2022 to more than 112,000 units, despite an 8 percent to 18 percent increase in prices, according to real estate consultancy Anarock.

There was also a 24 percent increase in new residential projects being launched, data from the consultancy showed.

"The home sales are driven by first-time buyers, and nearly 80 percent of the houses have been bought by end users," said Prashant Thakur, head of research at Anarock, adding that there was also strong demand from existing home owners to move to more spacious apartments.

In Mumbai, for example, demand has been strong despite an increase in interest rates of about two percentage points, according to Jayesh Rathod, director of Mumbai-based Guardian Real Estate Advisory.

His company has sold over 5,500 flats in Mumbai and on its outskirts in Thane so far in 2023, a jump of more than 50 percent compared to the same period in 2022, he said.

Underpinning demand has been salary hikes for workers in big cities. Average hikes for sectors such as e-commerce, healthcare, retail and logistics have remained above 10 percent for a second straight year, according to EY estimates.

Home prices in India are expected to rise faster than consumer inflation in 2024, according to a Reuters poll, with property analysts saying growth will be driven by higher earners snapping up newly built luxury residences in cities.

Housing demand has also picked up significantly in smaller cities in the southern states of Tamil Nadu, Karnataka and Prime Minister Narendra Modi's home state of Gujarat, according to construction companies who say demand has been spurred by increases in incomes and the migration of workers from rural areas.

The government is also trying to boost the availability of affordable housing by providing subsidies, which is encouraging construction in India's smaller towns and cities.

Shares in property companies have naturally surged. The Nifty realty index was up some 67 percent until December 2023 compared with a 12 percent gain for the blue-chip Nifty 50 index. Notable gainers include Prestige Estates Projects which jumped some 120 percent, DLF which climbed 67 percent and Godrej Properties which was up 52 percent.

### TSMC on track for 2-nanometer fab

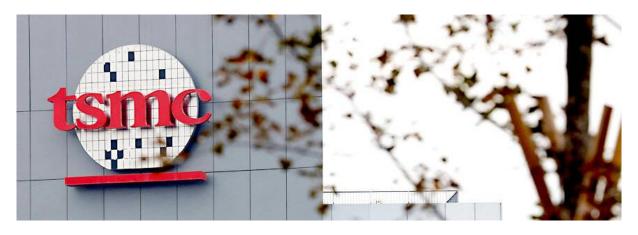
#### Taipei Times, Lisa Wang, 16 December 2023

TAIWAN - The contract chipmaker is set to move in equipment for the production of 2-nanometer chips in April, the Hsinchu Science Park's director-general said

Taiwan Semiconductor Manufacturing Co (TSMC) is expected to move in the first piece of manufacturing equipment for its first 2-nanometer fab in April, paving the way for the world's biggest contract chipmaker to start producing 2-nanometer chips in 2025, Hsinchu Science Park Bureau director-general Wayne Wang said.

TSMC's 2-nanometer fab is in Hsinchu County's Baoshan Township, where the science park administration is working on a second-phase development program, after it completes its first-phase program, where it houses TSMC's new research and development center, Wang said during a ceremony celebrating the science park's 43rd anniversary.

The infrastructure construction is proceeding smoothly, he said.



The logo of Taiwanese chipmaking giant TSMC Co is pictured at the Southern Taiwan Science Park in Tainan on December 29 2023 (Photo: Reuters, Ann Wang)

TSMC's new 2-nanometer fab construction progress, as Wang described it, indicates that TSMC might be on track to start engineering a pilot run for its 2-nanometer technology in 2024, before entering a production pilot run and volume production in 2025. The chipmaker said that it planned to start building a second 2-nanometer fab in 2024 in Taichung.

However, Taichung Mayor Lu Shiow-yen told reporters earlier this week that TSMC could change its mind and consider building a more advanced 1.4-nanometer fab in Taichung, as the chipmaker suffered a setback in securing land to build a 1.4-nanometer fab in the Longtan section of Hsinchu Science Park, amid local protests over government appropriation of privately owned land for industrial use.

TSMC did not comment on whether it has altered its new fab construction plan in Taichung.



Hsinchu Science Park Bureau director-general Wayne Wang makes his speech during the science park's 43rd anniversary in Hsinchu City yesterday (Photo: CAN)

Separately, Wang told reporters that the production value of manufacturers in Hsinchu Science Park is set to recover to its peak level starting 2024, following a tough period in 2023 when an economic slowdown and geopolitical tensions cut production value by 19 percent annually in the first half of 2023 to NT\$668.4 billion (US\$21.38 billion).

As demand returns, the decline has shrunk to about 10 percent, Wang said. He expects the recovery to extend into 2025, fueling explosive growth in production value to a new record high from companies in the park.

Additionally, the science park bureau said that the third building of the biological technology district within the science park would be completed in the second quarter of 2024. It cost more than NT\$3 billion, it said.

In addition, the first building of the "X" base is to be completed in the near future, Wang said. The "X" base is designed to be a hub for the development of emerging technologies such as precision healthcare and generative artificial intelligence.

# Russia to revamp Armenia's nuclear power plant

#### Eurasianet, Lilit Shahverdyan, 21 December 2023

RUSSIA - Amidst strained relations between Armenia and Russia, Russia's state atomic energy company will modernize Armenia's nuclear power plant and presumably build a new unit.

On December 15 2023, Armenia and Russia signed a contract on modernizing and extending the lifespan of Armenia's Metsamor Nuclear Power Plant (NPP) until 2036. The renovations will be carried out by Rustatom Service JSC, a subsidiary of Russia's state nuclear energy company Rosatom, and will cost the Armenian government \$65 million.

The deal is another reminder of the vast extent of Russia's influence over Armenia's infrastructure and economy amid Yerevan's efforts to politically distance itself from Moscow. Metsamor plays a significant role in Armenia's energy landscape, contributing an average of 31 percent of the country's yearly electricity output.



The Metsamor NPP (Armenpress)

It is the only nuclear power plant in the South Caucasus, located about 30 kilometers west of Yerevan. It consists of two units, Metsamor-1 and Metsamor-2, activated in 1976 and 1980, respectively. In 1989, the plant was shut down due to safety concerns after the devastating earthquake in Spitak in December 1988. In 1995, Unit 2 was reactivated due to energy shortages in Armenia, and since then has been the only nuclear unit in operation.

In 2021, Rosatom repaired and upgraded the NPP to operate until 2026. The modernization was implemented under a loan agreement signed between Armenia and Russia in 2015.

Under the new agreement, Rosatom will help to extend the lifespan of Unit-2 until 2036, after which it will be decommissioned.

The upgrading operations will be financed in the form of a "budgetary loan" provided by the Armenian government to the state-owned plant's management, which will subsequently enter into a contract with Rosatom. In 2023-2026, Rosatom will modernize Metsamor NPP in close cooperation with Armenian specialists.

As the reactor will be decommissioned in 2036, the Armenian government intends to build a new nuclear unit at Metsamor. Different estimates assert that the construction of a new nuclear power plant or unit will take 6-10 years, which means that construction works must be started in the next couple years.

It appears those construction works will be implemented by Rosatom, judging by Russian Deputy Prime Minister Alexey Overchuk's remark on December 15 that negotiations were underway regarding new nuclear power units.

#### Overwhelming energy dependence on Russia

The new Metsamor deal comes at a complicated time in Armenian-Russian relations. Resentment against Russia is high in Armenia Azerbaijan's military takeover - apparently with Moscow's blessing - of Nagorno-Karabakh in September.

Despite persistent efforts to diversify its political alliances and build closer ties with the West, Armenia's economy remains overwhelmingly dependent on Russia. Russia is Armenia's largest trade partner, and Armenia is a member of the Russian-led Eurasian Economic Union (EAEU) and Collective Security Treaty Organization (CSTO).

#### And then there's energy dependence.

Russia supplies 87.5 percent of Armenia's gas (the rest comes from Iran), and Gazprom Armenia, the local subsidiary of the Russian state gas company, owns all of the country's gas distribution infrastructure.

Armenia says it generates 98 percent of the electricity it needs but that claim hides even more dependence. That electricity is generated by hydropower and thermal plants and by the Metsamor NPP. Metsamor is entirely fueled by uranium imported from Russia while thermal power plants depend on (largely Russian) natural gas.

"Our self-sufficiency depends on the countries from which we import the gas and the uranium that operate our thermal and nuclear power plants. And when our government officials speak about our self-sufficiency, why do they forget to say how we maintain it?" energy expert Armen Manvelyan told the Institute of War and Peace Reporting (IWPR), stressing that over 70 percent of Armenia's electricity depends on Russia.

And Armenia's energy demands keep growing. In 2022, Armenia's imports of Russian natural gas increased by 6.1 percent from 2022, reaching 2.6 billion cubic meters.

Iran's ambassador to Armenia, Mehdi Sobhani, recently mused about the possibility of tripling or quadrupling Tehran's gas exports to Armenia. But such a move would require Russia's consent and facilitation, as Gazprom controls the gas pipeline to Iran.

Armenia is exploring the possibility of obtaining small modular nuclear reactors from the United States, France, and South Korea as part of its efforts to diversify its energy sector. But so far concrete progress on this front remains elusive.

Lilit Shahverdyan is a journalist based in Stepanakert.

# Central Asia: All roads seem to lead to Mongolia

#### **Eurasianet, China Central Asia Monitor, 24 November 2023**

CENTRAL ASIA - This is an update on recent developments in Chinese-Russian-Central Asian affairs.

#### **Central Asia**

A report published by Rossiyskaya Gazeta cites a Russian deputy prime minister, Marat Khusnullin, as saying Moscow wants to extend the M-12 highway to China via Mongolia.

Currently, the M-12 connects Russia to Kazakhstan. Expansion would facilitate growth in tourism and ground transport, Khusnullin said. Meanwhile, Uzbekistan and Mongolia are in the process of updating an agreement on road and air transport, striving to simplify transit from/to China, the Mongolian National News Agency reports. Uzbek and Mongolian officials agreed in a memorandum of understanding to facilitate the transit of goods not only between China and Europe, but also to Iran, Pakistan and India.



The M-12 highway currently connects Russia to Kazakhstan, but Moscow wants to extend it to China via Mongolia. (Photo: gov.ru)

#### Kazakhstan

The Kazakh government has launched construction of a rail bypass around the country's commercial hub, Almaty. At present, the Almaty bottleneck slows down freight transit times by up two days. Rail transportation volume between China and Kazakhstan in 2022 amounted to 23 million tons; and volume has grown by 20 percent by the end of 2023.

#### **Uzbekistan**

The Press Service of Uzbekistan's Transport Ministry reports that Deputy Minister Mamanbiy Omarov has signed an agreement with representatives of the Chinese firm Hichain Logistics Co to build transport hubs in a variety of locations across the Central Asian nation, including Andijan, Navoi and Karakalpakstan.

#### Kyrgyzstan

Kyrgyz officials continue to struggle in their efforts to secure financial backing for the Kyrgyz portion of China-Kyrgyzstan-Uzbekistan railway route. Deputy Kyrgyz Transport Minister Yrysbek Bariev, speaking at a trade event in Azerbaijan, sought to drum up interest in the project, saying it will "strengthen interregional ties" and increase "the competitiveness of the regions." Bariev's speech, however, did not move the needle on investor interest.

#### **Tajikistan**

Deputy Trade Minister Farhod Vosidiyon, while attending a trade event in the Chinese Xi'an, revealed that Chinese-Tajik trade increased by 10 percent during the January-September period of 2023, compared to the same timeframe in 2022. Over the past five years, bilateral trade has almost doubled, according to Trade Ministry's press service. The ministry did not provide information on the volume of trade, an indicator that commerce between the two states is modest.

#### **Turkmenistan**

Turkmen officials, participating in the 17th meeting of the Intergovernmental Turkmen-Iranian Commission on Economic Cooperation, voiced a desire to intensify the development of transit routes connecting Iran and China via Turkmenistan and Kazakhstan. Expansion of Turkmen transit infrastructure could save as much as two weeks in transit times for goods between China and Iran, according to unnamed experts cited by the Kazakh newspaper Ak Zhaiyk.

### From Black Sea gas flow to nuclear milestone: Turkiye's 2023 energy dossier

#### Daily Sabath, 31 December 2023



The Akkuyu Nuclear Power Plant construction site in southern Mersin province, Turkiye, November 4, 2023. (AA Photo)

TURKEY - 2023 was marked by multiple breakthroughs that place Turkiye a step closer on its path to eliminating its heavy external dependency on energy resources.

The advancements ranged from an increase in international cooperation between Turkiye and international players in natural gas, the first gas flow from the vast reserve in the Black Sea to a milestone in the country's first nuclear plant, which officially achieved nuclear status.

Turkiye began 2023 with a natural gas cooperation agreement with Bulgaria.

On January 3 2023, the two countries signed a 13-year gas agreement for the annual transfer of 1.5 billion cubic meters of gas to Bulgaria.

The first shipment under the deal, which is poised to contribute to Europe's natural gas security, began on April 12, 2023.

On May 18, Italian oil and natural gas infrastructure service company Saipem and Turkish Petroleum Corporation (TPAO) subsidiary TP-OTC signed an engineering, procurement, construction and installation contract within the framework of the second phase of Sakarya Gas Field.

Under the deal, Saipem pledged to build a 175-kilometer-long, 16-inch-diameter pipeline 2,200 meters (7,217 feet) under the sea in the Black Sea, where Turkiye made its biggest gas discovery to date. The project is scheduled to start in the summer of 2024.

On June 16, Turkish company Kalyon Holding emerged victorious in the Romanian Black Sea Coast-Podishor Natural Gas Pipeline tender, leaving strong international contenders behind.

Kalyon Holding and Romania's state-owned gas company, Transgaz, signed the agreement for gas transfer from Romania's Black Sea reserves to connection points in the country's interior through a pipeline that will be built between the Black Sea coast and Podishor.

In the second half of 2023, Turkiye signed natural gas export agreements with Hungary, Romania and Moldova.

On August 21, the export agreement with Hungarian state company MVM CEENergy was announced by Turkish Petroleum Pipeline Corporation (BOTAS) for the first export of natural gas via pipeline to a European country that does not border Turkiye. The agreement will come into force in 2024.

On September 27, an agreement was reached between BOTAS and OMV Petrom for the supply of up to 4 million cubic meters of natural gas per day to Romania. The deal, which came into effect on October 1, will run until March 31, 2025.

A day later, BOTAS announced an agreement with East Gas Energy Trading Company to export 2 million cubic meters of natural gas per day to Moldova from October 1, 2024, onward.

On September 28, Turkish Electricity Transmission Corporation (TEIAS) and AzerEnerji signed an agreement to establish electricity trade infrastructure between Azerbaijan and Turkiye in the form of a Turkiye-Azerbaijan Interconnection Project.

On November 16, Turkiye's Petrol Ofisi Group signed a share purchase agreement to purchase BP's fuel operations in Turkiye.

On November 21, the country extended the existing liquefied natural gas (LNG) import agreement by three years with Algeria which sees Turkiye purchase 4.4 billion cubic meters of LNG annually.

The country also expanded renewable energy cooperation.

On July 21, French oil and gas company TotalEnergies purchased 50% of the shares of Ronesans Enerji.

Ronesans Enerji, which will continue operations under the partnership umbrella of Ronesans Holding and TotalEnergies, aims to become one of the three largest green energy companies in Turkiye.

#### Black Sea gas flow

2023 witnessed the first time natural gas from the Sakarya Gas Field reached shore via a pipeline and was connected to the local transmission system.

On April 5 2023, underwater pipelaying was completed to carry Black Sea gas onshore.

On April 20, Turkiye revealed that Black Sea gas was recorded as the world's fastest offshore field development project, from the first discovery to production.

Once it reaches its full production capacity, the reserve will meet approximately 30% of Turkiye's current natural gas needs.

On April 20, President Recep Tayyip Erdogan announced that household gas would be free for up to 25 cubic meters per month for a year, with the cost deducted from bills.

On May 11, then-Energy and Natural Resources Minister Fatih Donmez disclosed the progress made during the first phase of the Sakarya Gas Project and added that once the second phase is completed within three years, daily production will increase from 10 million cubic meters to 40 million cubic meters.

On September 27, TPAO General Manager Melih Han Bilgin shared that gas production from the Sakarya Gas Field reached 4 million cubic meters.

#### Oil discovery

In a bid to increase domestic output and reduce foreign dependency on oil, the country added pace to exploration for its energy resources.

On May 2, Erdogan announced a new oil discovery in the southeastern region of Gabar with a daily production capacity of 100,000 barrels.

He also detailed that the oil discovered at a depth of 2,600 meters (8,530 feet) would be extracted from 100 wells and would meet one-tenth of the country's daily consumption.

Turkiye's oil discovery is estimated to increase the country's overall hydrocarbon production from 100,000 barrels per day (bpd) to 180,000 bpd, with an estimated annual financial contribution of around \$2.9 billion.

On May 21, TPAO started drilling activities in the Martyr Aybüke Yalcın-2 well in Gabar.

On December 11, it announced that oil production in the Gabar region exceeded 30,000 bpd, as it proceeded to end 2023 with an output of 35,000 bpd.,

The aim is to ramp up production to 100,000 bpd in 2024.

Turkiye held negotiations with Iraq to resume oil supplies. Following a decision made on March 23 by the International Chamber of Commerce (ICC) on oil shipments between Turkiye and Iraq, oil transmission from Iraq to the Ceyhan port on the Turkish Mediterranean coast was suspended.

On August 23, the two countries agreed to cooperate on the reconstruction of the 970-kilometerlong pipeline system on Iraqi territory, which had been damaged by the devastating earthquakes that struck Turkiye in February.

On October 2, Turkiye said the oil pipeline would resume operations and transmit 500,000 barrels of oil per day to global markets.

On December 13, Iraq said it had reached an understanding with Turkiye about resuming northern oil exports through the pipeline.

#### First nuclear plant

Construction is ongoing for the country's first nuclear power plant in the southern Mersin province.

On April 27, the Akkuyu Nuclear Power Plant gained official "nuclear facility" status, and the first nuclear fuel was sent from Russia to Turkiye, marking an important stage in the country's nuclear journey spanning more than half a century.

Energy and Natural Minister Alparslan Bayraktar confirmed on October 5 that the first reactor would start operations on October 29, 2024.

On December 12, Akkuyu Nuclear Company received permission from the Turkish Nuclear Regulatory Authority to operate the first power unit, having submitted its first batch of documents on March 17 2023 and its second on August 24 for commission authorization.

#### Renewables and electric vehicles

On April 8, Turkiye awarded the first pre-licenses for solar and wind energy with storage.

Mustafa Yılmaz, the head of the Energy Market Regulatory Authority (EMRA), said they anticipate realizing investments worth \$1.5 billion in these fields.

On May 2, the official opening ceremony of Europe's largest solar power plant, the Karapınar Solar Power Plant, was held.

On May 20, Turkiye's solar energy installed power exceeded the 10,000-megawatt mark, from power generation from plants across 78 provinces.

On October 11, Bayraktar announced the country's plans to increase installed solar and wind power by 5 gigawatts every year until 2035.

On November 7, Bayraktar confirmed that the Wind Energy Potential Atlas was updated to reveal wind potential of approximately 100,000 megawatts under current technological conditions but could reach up to 150,000 megawatts with developments in wind turbine technologies.

The country also raised its emphasis on financial support for electric vehicles (EVs). The number of EV charging points across Turkiye reached 12,067 in 5,614 stations as of December 25 2023.

### **Decline in home sales continued in October**

#### Daily News, 17 November 2023



TURKEY - The downward trend in the residential property markets continued in October 2023, with sales plunging 8.7 percent compared to 2022 to around 94,000, data from the Turkish Statistical Institute (TUIK) have shown.

In the previous month, 103,000 homes changed hands, and sales were down 9.5 percent year-on-year.

Mortgaged sales plunged 58 percent in October 2023 compared with October 2022 to around 5,600 units, accounting for only 5.6 percent of all residential property sales.

Istanbul was once again the hottest property market, taking the lead with 15,000 home sales. The capital Ankara ranked second at 7,400 sales, followed by İzmir, the country's third largest city, at 5,200.

TUIK also reported that home sales to foreign nationals nosedived 53 percent in October from 2022.

Foreigners bought a total of 2,535 properties in Turkiye in October 2023, corresponding to 2.7 percent of all home sales in the country.

Foreign nationals purchased 931 homes in the popular holiday destination Antalya, on the Mediterranean coast, which witnessed an influx of people from Russia and Ukraine after the war broke out. From January to June, more than 1,000 homes were sold to foreigners in the city, but sales slowed afterward.

Russians comprised the largest group of foreign homebuyers. They bought 713 residential properties in October and 9,400 homes in the first 10 months of 2023.

Iranians came second at 235, followed by Germans and Ukrainians at 152, and 138, respectively.

From January to October, 30,599 homes were sold to foreign nationals, 3.1 percent of all sales in Turkiye. In 2022, foreigners bought nearly 68,000 homes in the country.

Total home sales declined by 14.3 percent in the January-October period from 2022 to 993,835.

#### **Confidence improves**

TUIK reported earlier this month that confidence in the construction sector increased 0.9 percent in September, down from a 1 percent month-on-month rise recorded in August.

The index of activity in the past three months fell 0.5 percent after increasing 2.3 percent. However, the gauge of current orders inched up 0.2 percent against the 1.9 decline in August.

The index for sales price expectations over December 2023, January 2024 and February 2024 continued to fall, dropping 1.6 percent in September, which followed the 0.7 percent decline in August 2023.

Turnover in the construction industry leaped 91 percent in September from 2022, separate data from TUIK showed earlier in November 2023. On a monthly basis, the increase was 3.2 percent.

## Investing in the Future: Upgrading Kazakhstan's Heating and Power Infrastructure

#### The Times of Central Asia, Adil Abdrakhmanov, 30 December 2023



KAZAKHSTAN - As nations around the globe grapple with the urgency of climate change and the need for sustainable development, one country that stands out is Kazakhstan. With its vast natural resources and strategic location, Kazakhstan has the potential to become a leader in renewable energy and sustainable infrastructure. However, upgrading Kazakhstan's heating and power infrastructure

is a significant undertaking that requires substantial time and financial investment.

#### The Challenge

Kazakhstan is no stranger to the harsh realities of tough winters. With temperatures often dropping below -30 degrees Celsius and even reaching lows of -52 degrees Celsius in some northern regions, the capacity and resilience of the country's heating infrastructure is tested annually.

In a country where winter can last up to six months, maintaining a reliable heating supply isn't just a matter of comfort—it's a matter of survival. However, the extreme weather conditions put a considerable strain on Kazakhstan's heating infrastructure and lead to several challenges.

Many of Kazakhstan's heating systems, built during the Soviet era, are showing their age and inefficiency, necessitating an expensive overhaul. These outdated systems often break down, leading to extended periods without heat in the coldest months. A striking example was the 2022 incident in Ekibastuz, a city known for its harsh winters, where residents endured nearly three months without heat due to a power plant failure, which subsequently sparked a government-led corruption investigation.

Compounding these issues, Kazakhstan's heating sector heavily relies on fossil fuels, primarily coal. This reliance not only exacerbates environmental pollution but also leads to energy inefficiency. Due to poor insulation in buildings and obsolete heating systems, much of the produced heat is lost, demanding more energy and resources to maintain warmth in homes and businesses.

The cost of heating is a significant expense for many Kazakh households, particularly those in rural areas where incomes are lower. The government provides subsidies to help offset these costs, but with energy prices rising globally, this is becoming an increasingly heavy burden on the national budget.

The financial aspect of such upgrades is undoubtedly substantial. One source estimates that upgrading transmission and distribution infrastructure alone for all of Central Asia could cost between \$25 billion to \$49 billion.

Additionally, infrastructure projects of this magnitude can take several years to over a decade to implement. For instance, Denmark began its transition to district heating systems and combined heat and power plants in the 1970s, and is still implementing improvements today. Similarly, Germany started its Energiewende (energy transition) initiative in 2000, with goals set for 2050.

#### What Steps Have Been Taken?

Efforts are made to upgrade aging systems, improve energy efficiency, and transition to more sustainable sources of energy. In 2023, Kazakhstan significantly upgraded its energy infrastructure, as reported by the Astana Times. The launch of the second Beineu-Zhanaozen gas pipeline and a new distribution pipeline in Mangystau Region improved gas supply, while the completion of the Makat-North Caucasus pipeline met regional demands. The western zone's energy network was fortified with five new power transmission lines.

Renewable energy saw a boost with the operation of 16 facilities and a 5-year auction schedule. Agreements with foreign investors are set to build three wind power plants, and contracts were signed for the supply of natural uranium with companies from the UAE and China. Also, the government has launched a program to modernize the heat supply system in Astana, the capital city, aiming to reduce heat losses and improve the reliability of the heating supply.

Foreign finance and technology are essential to comprehensive development of the infrastructure. Kazakhstan's President Kassym-Jomart Tokayev has been active in enhancing the country's investment appeal. Following civil unrest in early 2022, Tokayev assured foreign investors that Kazakhstan would ensure a stable investment climate and honor its commitments.

By aligning Kazakhstan with Environmental, Social, and Corporate Governance (ESG) credentials, Tokayev has further boosted the country's investment appeal. At the COP 28 climate summit in Dubai in late 2023, President Tokayev underscored the nation's commitment to transitioning to a green economy. He pledged to reduce methane emissions, shift to renewable energy sources, and ensure water security and cooperation.

Kazakhstan is getting a treadmill of support internationally. The Asian Infrastructure Investment Bank (AIIB) has invested \$36 million into the country's wind power sector. SVEVIND Energy Group, a German-Swedish company, has promised a \$50 billion investment for producing green hydrogen and it plans to build one of the world's largest green hydrogen plants to start production by 2030. Several others – including the Climate Investment Funds, USAID, Plenitude (an Eni SpA subsidiary), and the Asian Development Bank with the EBRD – have invested in the country's solar power industry.

As winter's chill sets in, the outlook for brighter times may seem bleak. Yet, Kazakhstan is charting a course towards harnessing finance, technology, and trust that promises to benefit its people.

## Vietnamese Government, JICA signs \$292m ODA loan for Ben Thanh - Suoi Tien urban railway line

#### Viet Nam News, 2 January 2024

VIETNAM - The construction of the urban railway's line will alleviate traffic congestion and air pollution while encouraging regional economic development.



The Ben Thanh - Suoi Tien line, belonging to Ho Chi Minh City Urban Railway Construction Project (JICA Viet Nam)

HANOI - The Japan International Cooperation Agency (JICA) has signed a loan agreement with the Government of Viet Nam to provide more than JPY 41.2 billion (US\$292 million) for the Ben Thanh - Suoi Tien line, belonging to Ho Chi Minh City Urban Railway Construction Project.

#### This is the fourth ODA loan for the project.

The construction of the urban railway's line will alleviate traffic congestion and air pollution while promoting regional economic development.

This project will also contribute to the achievement of Sustainable Development Goal 9 (industry, innovation and infrastructure), Sustainable Development Goal 11 (sustainable cities and communities) and Sustainable Development Goal 13 (climate action).

Special Terms for Economic Partnership (STEP) will apply to the Japanese ODA loan of the project. Japanese technology used in the project includes underground civil engineering, rolling stocks, electricity-communication-signalling system and maintenance.

STEP refers to special assistance terms for promoting the visibility of Japanese aid through a transfer of outstanding Japanese technology and expertise to developing nations. The main contract is Japan tied and subcontracting is general untied. The main agreement partner must generally be a Japanese company, an overseas subsidiary of a Japanese company, or a joint venture between a Japanese company and the borrowing country where the Japanese company is the lead partner, although under certain conditions a joint venture between a Japanese company (which is the lead partner of the joint venture) and an affiliated company (as accounted under the equity method) of a Japanese company may be the main agreement partner.



A train takes part in a trial on the Ben Thanh - Suoi Tien line in HCM City (JICA Viet Nam)

The Ben Thanh - Suoi Tien line is one of eight metro lines approved by the Prime Minister to form a mass public transport system for large urban areas in the country. The project has four main bidding packages using ODA loans from the Japanese Government. This is the first urban railway project in HCM City.

The line is about 19.7km in length with three underground stations of Ben Thanh, HCM City Opera House and Ba Son, along with 11 flyover stations, consisting of Van Thanh, Tan Cang,

Thao Dien, An Phu, Rach Chiec, Phuoc Long, Bình Thai, Thu Duc, High-tech Zone, HCM City National University and Suoi Tien Terminal.

The first test ran on nine kilometres of elevated track between Suoi Tien Station and Binh Thai Station on December 21 in 2022. The elevated section is designed for trains to run at a speed of 110 kilometres per hour, but during the test run, the train ran at a speed of 40 kilometres per hour.

It completed a full-line trial-run from Ben Thanh Market in District 1 to Suoi Tien Theme Park in Thu Duc City for the first time on August 29, 2023. The line was constructed since 2012 and expected to be put into operation in 2024.

# Ministry to start construction on two priority sections of north-south high speed railway before 2030

#### Viet Nam News, 16 December 2023

VIETNAM - The Ministry of Transport (MoT) will complete the north-south high speed railway project's pre-feasibility study and strive to start construction of two priority sections before 2030.



The railway is upgraded in Ninh Thuan Province (VNA/VNS Photo Duong Giang)

HANOI - The Ministry of Transport (MoT) will complete the north-south high speed railway project's pre-feasibility study report and strive to start construction of two priority sections before 2030.

The project's pre-feasibility study report will be submitted to the National Assembly (NA) for approval, said the MoT's leaders.

The north-south high speed railway has a double track scale, a gauge of 1,435mm and length of about 1,545km, according to the National Master Plan for 2021-30, with a vision to 2050, and the Railway Network Plan.

The Politburo in February issued the Conclusion No 49-KL/TW on Viet Nam's railway development orientation, which required concerned agencies to research, analyse and evaluate international experience to choose a modern construction investment plan.

The plan must have a long-term vision, promote the country's advantages and potential, and be suitable for the country and the world's development trends.

Implementing the Politburo's conclusion, Prime Minister Pham Minh Chinh founded a steering committee to conduct the north-south high speed railway project.

The MoT, after collecting opinions from ministries and organisations, completed a plan for the project.

At a meeting on the project at the beginning of this month, Deputy PM Tran Hong Ha said that the project had great importance, contributing to the nation's socio-economic development, industrialisation and modernisation.

Therefore, he said, the project needed interdisciplinary consensus, contribution and participation.

The Deputy PM directed the MoT to base on socio-economic development requirements and international experience to research, select and propose a suitable plan.

The plan must ensure feasibility, safety, efficiency and be consistent with global development trends.

He also asked the MoT to preside over and work with other ministries and enterprises to have appropriate mechanisms, including mechanisms for calling for and using capital sources; for using land use revenues from localities; for training and employing officers and engineers; for railway industry development; for public-private partnership investment attraction; and cooperation and technology transfer through foreign direct investment.

Because the project has a large scale, is technically and technologically complex, and has a long implementation period of over 10 years, Deputy PM Hà directed to clarify that the preliminary investment calculation was only an initial estimate.

The accurate data must be updated in the next steps when eligible, avoiding misunderstandings in case the total project investment increases during the implementation.

#### **About CACCI:**

Founded in 1966, the Confederation of Asia-Pacific Chambers of Commerce and Industry (CACCI) is a regional non-governmental association principally composed of the national chambers or associations of commerce and industry in Asia and the Western Pacific. Its current membership of 27 countries and independent economies cuts across national boundaries to link businessmen and promote economic growth throughout the Asia-Pacific region. CACCI holds Consultative Status in the Roster Category of United Nations' Economic and Social Council (ECOSOC).

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