

Enhancing ASEAN Connectivity

Updated ASEAN Infrastructure Pipeline



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Enhancing ASEAN Connectivity: Updated ASEAN Infrastructure Pipeline

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1. ASEAN – Connectivity – Pipeline
2. Infrastructure Project – Pipeline Projects

ASEAN: A Community of Opportunities for All

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Enhancing ASEAN Connectivity: Updated ASEAN Infrastructure Pipeline

The ASEAN Secretariat

2026

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A construction site featuring a grid of rebar on a concrete slab. In the background, a worker is visible, and a red hard hat is perched on a rebar. The scene is set against a clear blue sky.

1 Background and Objectives

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Meeting infrastructure needs is one of ASEAN's priorities for building economic resilience and developing a future-ready ASEAN. In 2019, ASEAN developed the Initial Rolling Priority Pipeline of ASEAN Infrastructure Projects (the "Pipeline") for improving access and increasing connectivity in and among the ASEAN Member States.

ASEAN, through the ASEAN Committee on Sustainable Infrastructure (ACSI), previously known as the Lead Implementing Body for Sustainable Infrastructure (LIB-SI),¹ is updating the Pipeline to accelerate investment into infrastructure, supporting the movement of people, services, goods and innovation, with due consideration to emerging trends and priorities on connectivity.

With the support from the Government of Australia through the Australia for ASEAN Futures Initiative ("Aus4ASEAN Futures"), the Sumitomo Mitsui Banking Corporation (SMBC) Singapore Branch has been engaged as consultant (hereinafter referred to as the "Consultant" or "SMBC") through a tender process to assist in this Pipeline updating process through the Project on the Advancing and Updating the Initial Rolling Priority Pipeline of ASEAN Infrastructure Projects through Innovative Financial Approaches (the "Project").

The primary objectives of the Project were as follows:

- Advancing and updating the Pipeline of ASEAN infrastructure projects
- Identifying appropriate financing approaches for selected projects
- Garnering market interest in the selected projects

The updating of the Pipeline is a follow-up from the "Assessment of Future Sustainable Infrastructure Trends and Priorities in a Post-Pandemic ASEAN" ("The Assessment") undertaken by ASEAN from 2021–2022. The Assessment recommended new priority areas to promote sustainable infrastructure.

These include connectivity, sustainability, inclusion, energy transition, digitalisation, and supply chain resilience. In this context, "inclusion" refers to ensuring that infrastructure development benefits all groups across ASEAN by improving accessibility for remote, rural, and underserved communities, reducing development gaps among ASEAN Member States, and addressing the needs of diverse infrastructure users—including women, youth, elderly persons, persons with disabilities, and marginalised groups. This approach supports more equitable access to economic opportunities and public services across the region.

Through this Project, selected additional projects have been shortlisted and added to the Pipeline, building on existing projects that ASEAN Member States have confirmed would continue to be part of the Pipeline, while completed projects have been rolled-off the Pipeline.

1. The updated Terms of Reference (TOR) for LIB-SI / TOR for ACSI, which includes the renaming of LIB-SI to ACSI, was endorsed at the 37th ASEAN Coordinating Council (ACC) Meeting on 25 October 2025 in Kuala Lumpur, Malaysia. Accordingly, all references to LIB-SI have been updated to ACSI, except where the text specifically refers to previous LIB-SI or ACSI Meetings.

This initiative directly supports the aspirations set out in the ASEAN Community Vision 2045, which envisions a “Resilient, Innovative, Dynamic, and People-Centred ASEAN.” By strengthening regional connectivity and advancing sustainable, inclusive, and future-ready infrastructure, the updated Pipeline contributes to ASEAN’s long-term priorities of enhancing economic integration, improving mobility of people and goods, fostering innovation-driven growth, and building resilience against emerging challenges such as climate change and digital disruption. The Pipeline also reinforces ASEAN’s commitment to deeper regional cooperation and connectivity as core enablers of a more cohesive and forward-looking ASEAN Community by 2045.

It is acknowledged that each ASEAN Member State has its own priority list of Infrastructure projects. The Pipeline provides an avenue to strengthen regional cooperation among ASEAN Member States in advancing these projects, leveraging the ASEAN mechanism as an effective multilateral platform to

supplement the efforts of individual ASEAN Member State to tap international interest (particularly in investment and financing). Beyond financing considerations, the Pipeline also serves as a platform to enhance project visibility and facilitate access to capacity-building and advisory opportunities to support project development, as reiterated by ASEAN Member States during the 16th LIB-SI Meeting in October 2025 in which they appreciated that the Pipeline has been a strategic tool to engage various stakeholders from both the public and private sectors on ASEAN’s infrastructure priorities, and has provided an avenue to identify relevant investment and capacity building opportunities for ASEAN and ASEAN Member States.²

2. The 16th LIB-SI Meeting also agreed that the continuous updating of the Pipeline is critical to ensure that projects therein remain relevant and aligned with national and regional priorities, particularly in addressing emerging trends to enhance ASEAN Connectivity in the long term.

The use of the map is for illustrative purposes only



Credit: Shutterstock (NADA Graphics)

A group of people are gathered around a table, working on a project. They are looking at various documents, including a large one with a grid of green and yellow squares. Several yellow and purple sticky notes are placed on the documents. One person is holding a pencil, another a pen, and a third is pointing at a document. The scene is dimly lit, with a blue tint.

2 Screening and Shortlisting Criteria

Credit: Shutterstock (PaeGAG)

In the process of updating the Pipeline, new project submissions from various ASEAN Member States were received. Project submissions received were filtered through a two-stage process. First the projects were screened to determine whether they were suitable for consideration for inclusion in the Pipeline. The screening criteria serve as a pass-fail mechanism to ensure that project meets the minimum essential requirement of a connectivity project, with potential for regional impact, before the project is evaluated further.

For the projects that passed the screening phase, these projects were then scored based on the scoring criteria which were designed to ensure a consistent and transparent assessment of the suitability of projects being proposed for inclusion in the Pipeline.

The criteria for the Stage 2 – Project selection, after the Project passed the screening phase, were as follows:

1. Strategic Relevance: This criterion assessed the alignment of the project with the ASEAN Member State-endorsed regional plan, government master plans, and national priorities. Consideration was also given to letters of support from senior government officials or ministries, as well as the demonstrated necessity and demand for the project.

2. Regional Connectivity: The evaluation determined how the proposed project would enhance regional connectivity and whether discussions related to the project had been held among the involved countries. For instance, for transport projects, the projects are assessed through how they contribute to regional connectivity by strengthening national transport corridors that serve as key arteries within transnational logistics and travel networks, enabling smoother linkages between national and regional transport.

3. Resilience: Projects were scored based on each's capacity to withstand natural hazards and potential environmental or social adversities. The assessment included an analysis of the proposed mitigation strategies.

4. Economic, Environmental, and Social

Benefits: The evaluation gauged the project's potential to generate positive economic, social, and environmental outcomes in the region of implementation. Furthermore, impacts were assessed through a gender lens to ensure inclusivity, accessibility, safety and beneficial for all including disadvantage women and marginalised groups.

5. Project Feasibility: This criterion examined the funding and financing structures proposed for the project, including the acquisition of government budgetary support, interest from both private and public investors, projected cash flows, and the intention to proceed through competitive tendering.

6. Implementation Capacity: The assessment identified any potential barriers to implementation, including legal, policy, or regulatory challenges. Additionally, the experience and capacity of contracting agencies to manage the projects were evaluated, along with any other bserved challenges.

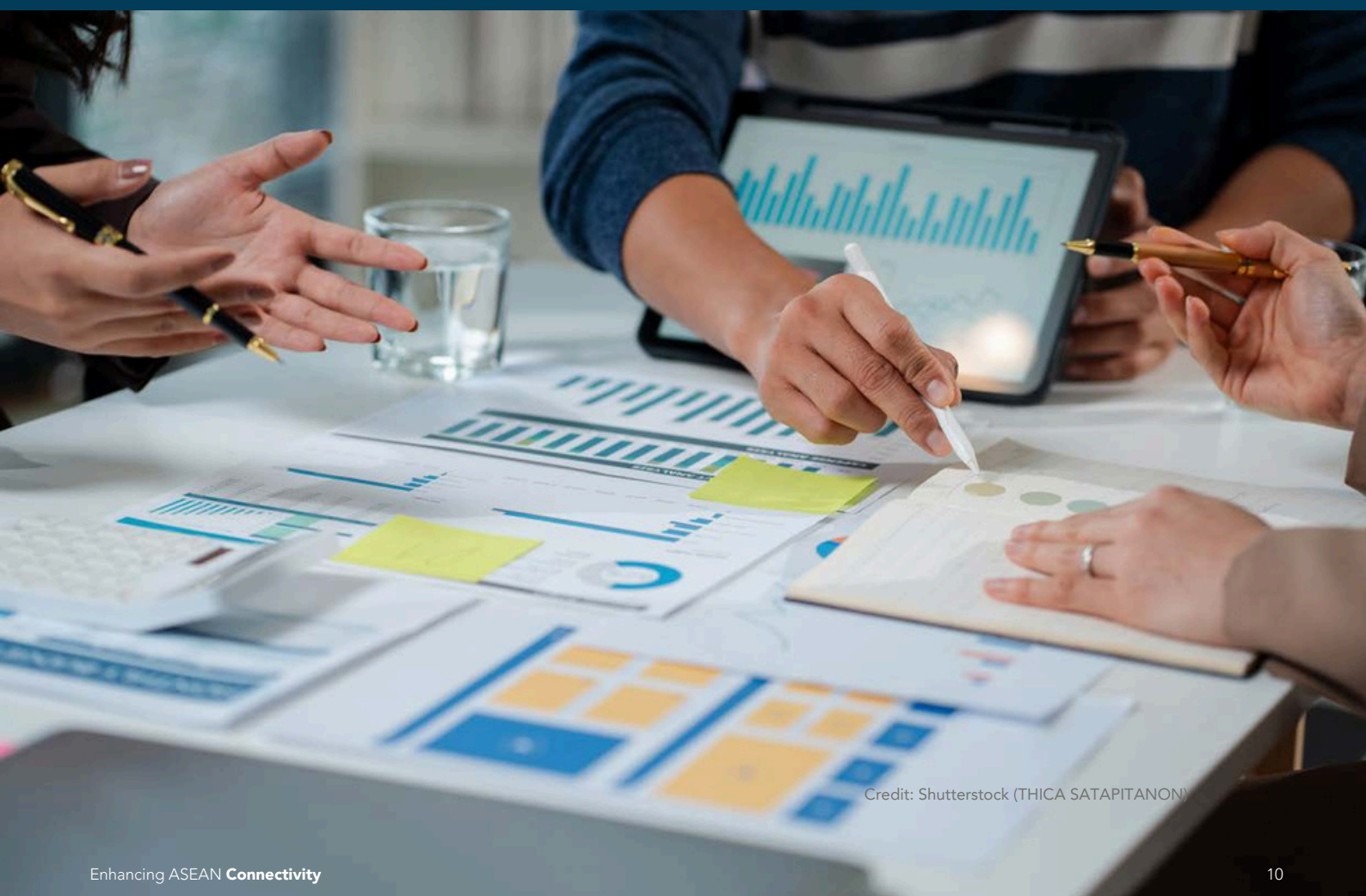


Credit: Shutterstock (Suphakant)

Table 1: Screening and Shortlisting Criteria

Activity	Criteria	Work Product
Stage1 – project screening	• Connectivity infrastructure • Pre-procurement stage of development • Regional impact • Identified as a priority by at least one ASEAN Member State • Sufficient information	Pass/fail evaluation. Only projects that pass the initial screening will be evaluated further in detail.
Stage2 – project selection	• Strategic Relevance • Regional Connectivity • Resilience • Economic Environmental & Social Benefits • Project Feasibility • Implementation Capacity	Each project that clears the initial screening will be evaluated in detail and projects will be evaluated further for inclusion in the Pipeline.

Each of the scoring criteria has been carefully applied to best determine how well each project aligns with the ASEAN Connectivity Master Plan and country priorities, and its potential impact on the economic, environmental, and social welfare of stakeholders.



Credit: Shutterstock (THICA SATAPITANON)



3 The Pipeline Projects

During the information gathering stage of the Pipeline updating process, which occurred from Jan 2024 to May 2025, a total of 20 new project submissions were received from five ASEAN Member States. The 20 new project submissions have been screened and evaluated based on the pre-agreed screening and shortlisting criteria and nine projects were selected for inclusion into the updated ASEAN Infrastructure Pipeline in May 2025. These nine

projects have been added to the 12 remaining projects in the initial ASEAN Infrastructure Pipeline from 2019 to form the updated Pipeline projects as shown in the table below. The ASEAN Infrastructure Pipeline projects will continue to be updated in an ongoing process to remove projects that have been successfully completed and include new projects in the Pipeline, when the projects are ready to be prioritised.



No.	Project Name	Sector	Type	Country Name	Source
1	Siem Reap to Ratanakiri Road Upgrading	Transport – Road	Brownfield	Cambodia	Initial Pipeline
2	Development of Kijing Port	Transport – Port	Greenfield	Indonesia	Initial Pipeline
3	Kuala Tanjung International Hub Port and Industrial Estates – Phase II	Transport – Port	Brownfield	Indonesia	Initial Pipeline
4	Lao PDR - Myanmar Power Interconnector (Lao PDR section)*	Energy – Transmission	Greenfield	Lao PDR	Initial Pipeline
5	Lao PDR National Road No. 2 Upgrading	Transport – Road	Brownfield	Lao PDR	Initial Pipeline
6	Lao PDR National Road No. 8 Upgrading	Transport – Road	Brownfield	Lao PDR	Initial Pipeline
7	Lao PDR–Viet Nam Power Interconnector	Energy – Transmission	Greenfield	Lao PDR	Initial Pipeline
8	Northern Corridor Highway	Transport – Road	Greenfield	Malaysia	New Addition
9	Myanmar–Lao PDR Power Interconnector (Myanmar section)*	Energy – Transmission	Greenfield	Myanmar	Initial Pipeline
10	Upgradation of Meiktila–Taungy–Keng Tung–Tachileik Road	Transport – Road	Brownfield	Myanmar	New Addition
11	Yangon–Mandalay Expressway	Transport – Road	Brownfield	Myanmar	Initial Pipeline
12	Cagayan Valley High Standard Highway 1	Transport – Road	Greenfield	Philippines	New Addition
13	Development of an ASEAN Space Data Infrastructure	Digital Infrastructure – ICT / Space	Greenfield	Philippines	New Addition
14	North Mindanao High Standard Highway II – 1	Transport – Road	Greenfield	Philippines	New Addition
15	ASEAN Digital Hub	Digital Infrastructure – ICT	Greenfield	Thailand	Initial Pipeline
16	Bangkok–Nong Khai HSR – Phase II	Transport – Rail	Greenfield	Thailand	Initial Pipeline
17	Don Mueang Development Project Phase 3	Transport – Airport	Brownfield	Thailand	New Addition
18	Hat Yai–Sadao Motorway	Transport – Road	Brownfield	Thailand	Initial Pipeline
19	Highway connecting Udon Thani–Bueng Kan	Transport – Road	Brownfield	Thailand	New Addition
20	Landbridge Project	Transport – Port and Road	Greenfield	Thailand	New Addition
21	Construction of Inter-regional Road –Tong Duc Thang Bridge	Transport – Road	Greenfield	Vietnam	New Addition

* The project briefs for the Lao PDR–Myanmar Interconnector Project (Lao PDR section) and the Myanmar–Lao PDR Interconnector Project (Myanmar section) are consolidated in Section 5.4.

A background image showing a business meeting. In the foreground, a person's hand is pointing at a laptop screen. Another person's hand is holding a pen over a document. A calculator and other papers are visible on the desk. The image has a blue tint.

4 Next Steps

The ASEAN Infrastructure Pipeline reinforces ASEAN's commitment to inclusive, resilient, and sustainable connectivity, fully aligned with the ASEAN Connectivity Strategic Plan. It also contributes directly to the aspirations of the ASEAN Community Vision 2045, which envisions a resilient, innovative, dynamic, and people-centred ASEAN. By strengthening regional linkages and advancing sustainable, future-ready infrastructure, the Pipeline supports ASEAN's long-term objectives of deeper integration, improved mobility, and enhanced regional resilience. As the majority of the projects are in the early stages of development, bankability considerations will be crucial, especially if private financing is contemplated.

The possible next steps for the projects in the ASEAN Infrastructure Pipeline will include:

- Conducting funded feasibility studies to validate technical and financial viability. In this regard, project sponsors need to build on the work done in the pre-market sounding exercise and engage with all relevant parties (developers, multi-laterals, and development finance institutions) during this step to secure support where available.
- Project-level market sounding to align risk allocation and revenue models with investor expectations and ensure bankability of the project.

Projects must deliver both social value and commercial viability. Investors look for transparency, consistency, and clear processes that reduce uncertainty. When returns are limited, especially in socially driven projects, public sector support through funding or guarantees—is often necessary. Credible offtakers like state-owned enterprises can significantly improve bankability by reducing counterparty risk. Regional collaboration and alignment among governments also play a key role in accelerating implementation and enhancing project credibility.

Further engaging with Export Credit Agencies and other financial institutions during this stage will enable innovative financing solutions like blended finance to be incorporated where appropriate.

- Structured procurement process in line with relevant ASEAN Member State procurement policies.

Bankability is the critical enabler for sustainable development of infrastructure projects. Even in the case of public financed projects, improving bankability is helpful to provide an option to refinance these projects and recycle capital for other strategic new projects. By ensuring robust feasibility studies, clear risk-sharing frameworks, and innovative financing structures, the ASEAN Infrastructure Pipeline can be developed into an implementable, investment-ready pipeline of projects, delivering sustainable infrastructure that drives long-term growth and resilience across the region.





5 Project Brief

5.1 Siem Reap to Ratanakiri Road Upgrading



Country:
Cambodia



Sector:
Transport – Road



Type:
Brownfield



Estimated Cost (USD):
463 million (2019)



Intended Procurement Method:
Public

Implementing Agency:
Ministry of Public Works and Transport

Project Overview:
The project includes the rehabilitation and upgrading of an existing 390 km road between Siem Reap and Ratanakiri that crosses four provinces: Siem Reap, Preah Vihear, Stueng Treng, and Ratanakiri.

Project Background: The current road condition is poor, resulting in increased travel times and road accidents. The upgrading work is expected to include road quality enhancement and surface treatment, maintenance works of bridges, improvements of drains, as well as installation of road signs and markings and selected climate change features such as slope protection and storm water dissipation.

The project aligns with the national sectoral priorities set out in the Logistics System Improvement Master Plan Cambodia, and the Sufficient capacity and variety by Multi-modality and Advanced Technology for Reliable Transport (SMART) Logistics 2025 Plan. At the regional level, the project is endorsed under Master Plan on ASEAN Connectivity (MPAC) 2025.

Status of the Project: Ongoing upgrades along Asian Highway 21 and the Greater Mekong Subregion (GMS) Southern Economic Corridor are being supported by the Asian Development Bank (ADB) and the Japan International Cooperation Agency (JICA)

The 60-kilometer Northern Ring Road feasibility study was completed in 2022, with an update planned for 2026, and implementation expected to be financed through a USD70 million ADB loan. The Korea Economic Development Cooperation Fund (EDCF) has completed the feasibility study for the Southern Ring Road, which is anticipated to be financed under Korea's USD 700 million loan commitment. The Government of Cambodia aims to finalise additional financing agreements by 2025, including potential World Bank support for the section connecting to Viet Nam.

There is also a related project to upgrade about 106 km of Siem Reap city roads with an estimated cost of USD 150 million, completed in early 2022. The city roads upgrading aims to boost national economic growth and prepare Siem Reap for higher tourist arrivals post-pandemic.

Connectivity Benefits: This road segment connects the Stueong Bot border crossing with Thailand to Ratanakiri near the Viet Nam border and forms part of the GMS Southern East–West Corridor. Sections of the corridor—especially around Siem Reap—are currently being upgraded with support from ADB and JICA, which is expected to enhance regional connectivity and trade between Cambodia, Thailand, and Viet Nam.

Economic activity along the corridor is currently dominated by agriculture, so significant increases in traffic are likely only if planned SEZs in Siem Reap, Preah Vihear, Stung Treng, and Ratanakiri are successfully developed, supported by adequate power, water, and related infrastructure. The project's impact will also depend on establishing an efficient cross-border facility with Viet Nam, including soft infrastructure for smoother trade flows.

Overall, the project is expected to improve connectivity in Cambodia's northern and northeastern provinces, which remain relatively underdeveloped.

Project Bankability: While a Public – Private Partnership (PPP) has the potential to generate value for money outcomes, the low level of traffic on the road, combined with MPWT's lack of experience of procuring PPP projects (particularly on an availability payment basis), suggests that this project may be best taken forward using public funding. However,

MPWT is encouraged to consider using an Output Based Performance Contract, which combines the lower costs of finance of public procurement with potentially higher value for money through a transfer of certain and proportionate performance risks to the private sector.

Economic, Environmental & Social Impacts:

The upgrading will provide significant economic benefits as it may reduce traffic congestion around Siem Reap and support the projected increase in tourists visiting Siem Reap, which provide a significant economic contribution to Cambodia's GDP. Environmentally, the project introduces climate-resilient design features—including improved drainage systems, slope protection, and storm-water management—to reduce vulnerability to flooding and road degradation. Socially, the improved corridor will enhance mobility and safety for communities across Siem Reap, Preah Vihear, Stung Treng, and Ratanakiri, including rural and underserved populations who rely on the route for access to essential services, markets, and employment opportunities. Upgraded road surfaces, clearer signage, and safer alignments are also expected to reduce accidents and improve overall road safety conditions.

Recommendation for Project Implementation:

The project should be closely aligned with the strategy and timing of planned SEZs, including the types of industries they aim to attract, while maintaining proactive stakeholder engagement throughout its. A structured procurement process consistent with relevant ASEAN Member States procurement policies will also be critical to ensure accountability and investor confidence.

Disclaimer:

* This project forms part of the ASEAN Infrastructure Pipeline and has been prepared based on (a) Project Briefs on the Initial Pipeline of ASEAN Infrastructure Projects; and (b) updated information provided by the relevant ministries and implementing agencies in each country. All map sources are based on Google Satellite Images, with project routes/locations outlined using information provided by the implementing agency, project owner, or the Project Briefs on the Initial Pipeline of ASEAN Infrastructure Projects.

** The consultant has not independently verified the accuracy, reliability, or completeness of the information received. Accordingly, no assurance is given regarding the information contained herein. Any changes to the underlying assumptions or project-related information may result in corresponding changes to the analysis or recommendations presented in this project brief.

5.2 Development of Kijing Port



Country:
Indonesia



Sector:
Transport – Port



Type:
Greenfield



Estimated Cost (USD):
400 million (2019)



Intended Procurement Method:
Private

Implementing Agency:
PT Pelindo II/ Indonesia Port Corporation

Project Overview:

Kijing Port is a new deep-water port to replace Pontianak Dwikora Port and improve connectivity between islands. It is designed to handle the growing demand for cargo in West Kalimantan and is expected to accommodate processed mineral products and plantation commodities, such as CPO and rubber.

Project Background: Pelindo II, a state-owned port operator, was assigned responsibility for the development and operation of the port under Presidential Decree No. 43/2017. Kijing Port will be the gateway port for the region, handling both container and bulk cargoes and stimulating local industries. The project will be developed with the capacity to handle projected throughput demand of over 50 million tons by 2030, which is substantially above the volumes currently being handled by the existing Pontianak Port. Construction will include the establishment of container, multipurpose, liquid bulk and dry bulk terminals. A two-phase development plan has been adopted to construct the port to balance overhead costs and economies of scale.

The project is endorsed in the National Medium-Term Development Plans (2015–2019 and 2020–2024) and KPPIP National Strategic Projects nationally and in the MPAC 2025 regionally.

Status of the Project: Pelindo II has secured core project financing through a bond issuance and is now seeking private sector participation for the port's logistics and industrial development components. Opportunities under consideration include development of a 200-hectare industrial area and potential pier expansion, which has attracted interest from crude palm oil (CPO) producers and container operators.

In February 2023, Pelindo partnered with Pacific Bio Industry (PBI) to advance logistics and hinterland development. The Government of Indonesia is also progressing related infrastructure plans, including the Kijing Economic Zone and the West Kalimantan Toll Road (Singkawang–Mempawah–Pontianak, 115 km). The toll road feasibility study has been completed by the Toll Road Regulatory Agency (BPJT), with tendering expected in due course.

Connectivity Benefits: Kijing is located along international shipping corridors and will be well positioned to enhance Indonesia's connectivity to other countries. In addition, the port will strengthen connectivity between the islands of Indonesia and support the government's drive to develop a maritime axis. In terms of supporting infrastructure, a permit has already been obtained for the construction of a new road and there are also plans to develop a new airport (Singkawang Airport), which will only be 60 km (an hour's drive) from Kijing Port. It is understood that studies on the need for rail transport and toll roads from Pontianak to Singkawang, have already been undertaken by the Ministry of Transport (MOT) to inform future potential development requirements.

Project Bankability: The project has already been awarded to Pelindo II and it has secured the necessary financing through a bond issuance. However, Pelindo II has indicated that it would like to see the private sector involved in the logistics and industrial development components of the port.

Economic, Environmental & Social Impacts: The project's strategic location and its proximity to mining and plantation industries in Kalimantan will help connect Indonesia's trade better with its

neighbouring countries. It will provide a faster direct shipping route to and from the region rather than the current two-step process through the existing Tanjung Priok and Pontianak Ports, the latter being too shallow for larger vessels and lacking land for expansion. Environmentally, the greenfield port and offshore works are associated with high E&S sensitivity, including proximity to biodiversity-rich protected areas and risks of marine and coastal habitat loss (e.g. mangrove, river, and wetland habitats), as well as dredging-related impacts; cumulative effects from the adjoining industrial zone and transport corridors also need to be managed. Socially, the project entails planned land acquisition and resettlement, with potential economic displacement—for example, constraints on access to fishing grounds—and therefore requires robust mitigation and stakeholder engagement (including fit-for-purpose resettlement and livelihood restoration measures).

Recommendation for Project Implementation:

Although Pelindo II will lead the Kijing Port expansion and has already secured financing for the initial phases, there remains scope to explore private sector participation in port operations. The current approach aligns with a Landlord Port model, whereby Pelindo II would sublease designated areas to third parties for the development of core and ancillary activities. For future expansion phases, Pelindo II could also consider Build–Operate–Transfer (BOT) arrangements to share demand and traffic risks with private operators, who would be allowed to levy and collect port user fees.

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5.3 Kuala Tanjung International Hub Port and Industrial Estates – Phase II



Country:
Indonesia



Sector:
Transport – Port



Type:
Brownfield



Estimated Cost (USD):
**265 million,
Phase II only (2019)**



Intended Procurement Method:
Public

Implementing Agency:
PT Pelindo II/ Indonesia Port Corporation

Project Overview:
Kuala Tanjung is envisioned to be a fully integrated port and industrial estate with industrial clusters covering an area of about 3,000 ha and, when all phases are completed, have an annual throughput capacity of 200 million metric tons of cargo & 10 million TEUs in container traffic.

Project Background: Phase I of the port was completed in 2019 and comprises a multi-purpose terminal to handle container and crude palm oil (CPO) cargoes. The Phase II scope includes construction of a thermal power plant, cement factory, and a 50 m wide breakwater. It would also involve the acquisition of 350 ha of land and development of 10–15 ha for logistics facilities.

The project is prioritised across multiple planning frameworks, including the MPAC 2025 at the regional level, the IMT-GT Implementation Blueprint at the sub-regional level, and Indonesia's National Medium-Term Development Plans (2015–2019 and 2020–2024) as well as the KPPIP National Strategic Projects at the national level.

Status of the Project: Indonesia has assigned the Phase II development to state-owned enterprise (SOE) PT Pelindo/Indonesia Port Corporation (IPC), which has been exploring collaboration with other Indonesian SOEs for the project.

Pelindo is in discussions with several SOEs—including PT Pos Indonesia and PT Kereta Api Indonesia—to develop supporting railway and logistics infrastructure. It is also working with PT Pertamina and PT Perkebunan Nusantara III (PTPN III) on the development and management of bunkering facilities and fuel terminals. These partnerships aim to position the port as one of Indonesia's key Logistics and Supply Chain Hubs.

The Kuala Tanjung Port will be directly integrated with the 1,128-hectare Kuala Tanjung Industrial Area (KIKT), which is currently under construction. The KIKT is managed by IPC/Pelindo's subsidiary, PT Pelindo Solusi Logistik (SPSL), through its sub-subsidiary PT Prima Pengembangan Kawasan (PPK). As of January 2024, PT PPK has cleared 57 ha of land for development.

Connectivity Benefits: Kuala Tanjung's location on the northeastern coast of Sumatra, near the Strait of Malacca—one of the world's busiest maritime corridors, carrying roughly 30 percent of global trade and 15 percent of crude oil and petroleum products—positions it as a strategic gateway connecting Western Indonesia with neighbouring countries such as Malaysia, Myanmar, Singapore, and Thailand. The port functions as an industrial hub for exporting Sumatran commodities to regional and global markets and is central to North Sumatra's broader gateway strategy. Its multimodal connectivity further strengthens its role, with the Trans-Sumatra toll road (currently under construction) providing approximately one hour of access to Medan, and a 40-kilometer rail link connecting the port to the Sei Mangkei Special Economic Zone.

Project Bankability: High level cashflow analysis³ has indicated that the project will generate insufficient revenues to pursue a privately financed PPP with user fees,⁴ unless there is a significant increase in demand or there is a very significant viability gap funding contribution from the government. Therefore, at current estimated demand levels, it is likely that public funding will be needed to support the development of Phase II and future phases of this port.

Economic, Environmental & Social Impacts:

Kuala Tanjung has been designated a national priority project and is one of the important links of Indonesia's 'Maritime Highway' program, a government-led program to reduce logistics costs by improving port infrastructure and enhancing connectivity between Indonesian ports. While its proximity to biodiversity-rich protected areas and sensitive marine and coastal habitats requires careful management, early identification of these risks enables the project to integrate strong environmental safeguards, including detailed biodiversity assessments and application of the mitigation hierarchy to minimise or offset potential impacts. Socially, planned land acquisition and potential economic displacement—such as restricted access to fishing grounds—can be constructively addressed through proactive engagement, well-designed resettlement planning, and livelihood restoration measures, helping ensure affected communities' benefit from the port's long-term economic opportunities.

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3. As referenced from analysis of the Project Briefs Project Briefs on the Initial Pipeline of ASEAN Infrastructure Projects
 4. Ports are typically not financed on an availability payment basis.

Recommendation for Project Implementation:

Pelindo I should continue to assess the need and demand for the project to determine whether, based on the level of need and demand for Phase II of the project, the project is economically and financially viable. It is recommended that Pelindo I:

- a) Continues to monitor the utilisation of the current Kuala Tanjung and Belawan ports to validate the timing of future development phases;
- b) Regularly engages in market consultations with both domestic and international companies in order to validate and update demand projections;
- c) Engages with various government stakeholders to address the need for the development of viable value chains, from producers to end consumers, that will be enabled by this project;
- d) Reviews the feasibility and viability of the project in the absence of any additional government support, once a robust economic case for Phase II based on validated demand projections has been established; and
- e) Engages with the Government of Indonesia on plans for the future closure, capping or repurposing of Belawan Port.

Disclaimer:

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5.4 Lao PDR–Myanmar Power Interconnector / Myanmar–Lao PDR Power Interconnector*



Country:
Lao PDR/Myanmar



Sector:
Energy – Transmission



Type:
Greenfield



Estimated Cost (USD):
16.5 million
(Lao PDR side) and
50 million
(Myanmar side) (2019)



Intended Procurement Method:
Public or PPP

Implementing Agency:
Ministry of Energy and Mines of Lao PDR;
Ministry of Electricity and Energy
of Myanmar

Project Overview:
The Lao PDR - Myanmar Interconnector
is a 300 MW power transmission line,
connecting the northern part of Lao PDR
and Shan State in Myanmar.

Project Background: Most of the 230 kV line (approximately 120 km) is expected to be in Myanmar, with just a short section of line (20 km – 30 km) in Lao PDR. This is because the Nam Pha Hydropower Plant (HPP) in Lao PDR, that has been tentatively identified to export power to Myanmar, is very close to the Myanmar border. Two phases to power trade would be expected. For the first phase, the power from Lao PDR would be distributed to Tachileik area. For the second phase, Lao PDR 230 kV power transmission line would be connected to 230 kV Kengtung substation.

The project is a part of the National Project Bank of Myanmar. Sub-regionally, this project is endorsed in the Greater Mekong Sub-region (GMS) Regional Investment Framework and regionally, is endorsed in the MPAC 2025.

* There were two separate project applications submitted respectively by Lao PDR and Myanmar during the development of the Initial Pipeline in 2019.

Status of the Project: ADB supported the pre-feasibility study on the technical aspects of the two 230 kV transmission lines—Tachileik–Kengtung and Tachileik–Kenglatt. The study results were presented to both Lao PDR and Myanmar in March 2020.

The consultant team, under ADB’s assistance, submitted the final feasibility study report for the 230 kV Kengtung–Tachileik–Kenglatt transmission line in May 2020.

Connectivity Benefits: Connecting Myanmar and Lao PDR’s power grids has a strong regional integration argument, as it could help pave the way towards the longer-term objective of full system-to-system integration in the ASEAN region. On the Lao PDR side, the planned Nam Pha HPP is very close to the Myanmar border and could be a potential source of power for this project. However, construction has not yet started on this hydro project. In Myanmar, the project can be connected to the planned transmission line from Tachileik to Kengtaung (planned to be completed by 2024–2025 according to the current Master Plan). A transmission line from Kengtaung to Namsan (where it connects to the Myanmar national grid) is currently under construction. At Tachileik, there is an existing 33 kV transmission line that connects Myanmar with Thailand, with plans for it to be upgraded to 230 kV. The 33 kV line continues to Kyauinglat at the border with Lao PDR.

Project Bankability: The preferred financing option will depend on whether the project proceeds as a Government-to-Government (G2G) or Business-to-Government (B2G) initiative. As project options advance and are further evaluated, the transmission infrastructure component should continue to be considered for delivery through a PPP.

Economic, Environmental & Social Impacts:

Connecting the powergrids of Lao PDR and Myanmar would not only support the longer-term

goal of system-to-system integration within ASEAN, as noted in the connectivity benefits section, but also generate meaningful environmental gains. By enabling the use of clean energy imports from Lao PDR, the interconnection could help reduce emissions through the displacement of diesel-based generation currently used in Myanmar’s off-grid areas. While the project traverses areas with potential biodiversity interest, Indigenous Peoples presence, and cultural heritage sensitivity, these considerations can be effectively managed through early scoping and targeted surveys during route selection. By integrating these findings into a full ESIA, along with Biodiversity Action Plans, Offset Plans, and robust community engagement—including appropriate compensation and resettlement planning—the project can responsibly mitigate risks while supporting broader social and regional development objectives.

Recommendation for Project Implementation:

It will be important for both governments to agree on the alignment and the electricity tariff to be paid by Myanmar. Should a PPP option be the preferred procurement route, the relevant agencies in both countries should conduct market sounding sessions with potential investors to assess the appetite of private investors/developers to participate in the project and better understand their views on the project.

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5.5 Lao PDR National Road No. 2 Upgrading



Country:
Lao PDR



Sector:
Transport – Road



Type:
Brownfield



Estimated Cost (USD):
272 million (2019)



Intended Procurement Method:
Public

Implementing Agency:
Ministry of Public Works and Transport

Project Overview:
The project involves the widening and reconstruction of the existing National Road 2E.

Project Background: NR2E stretches from Muang Xay district (Oudomxay) to Khoua district (Phongsaly) with a length of approximately 100 km. NR2W runs from Pakbeng district (Oudomxay) to Muang Xay district (Oudomxay) with a length of approximately 130 km. The project works include road alignment improvement by applying ASEAN Highway Class II standard, adding extra lanes, and reconstructing bridges along the road.

NR2 was originally constructed with support from China in the 1970s and later upgraded with World Bank financing in 2003–2004. However, the road was not designed for today's traffic volumes and remains one of the few Asian Highway routes below ASEAN Highway Standards. Flooding, difficult terrain, and natural disasters have accelerated deterioration, leaving some sections impassable during the wet season. Increasing heavy-truck movements from Thailand and Viet Nam have further worsened road conditions. This decline has had direct impacts on

communities in Oudomxay who depend on NR2 for daily mobility, underscoring the need for a major upgrade and reconstruction to meet current and future traffic demands.

The project is endorsed in the National Socio-Economic Development Plan and MPWT Strategic Development Plan of Lao PDR and the MPAC 2025.

Status of the Project: For NR2W, construction of Packages 1 and 2 is currently in progress, while bidding documents for Package 3 are being finalised. Package 3 has already been awarded, with the Letter of Acceptance issued and the contract is expected to be signed shortly. The EIB is parallel-financing upgrades for NR2E, where two packages have been awarded and roadworks are underway.

Progress on local roads across the five northern provinces has reached 62.58%. Border facility upgrades are advancing, with Pang Hok at 55.50% completion and Nam Ngeun recording overall progress of 18.51% as of September 2025.

In addition to hard infrastructure development, soft measures are progressing well. These include regulatory reforms, trade facilitation, agricultural SPS compliance and implementation of the Multimodal Transport Framework. Road safety measures have been introduced, cross-sectoral collaboration is ongoing and a series of capacity-building activities covering multiple topics have been conducted.

Connectivity Benefits: The road links eastwards to Viet Nam via NR2E and southwestwards to Thailand via NR4A. As such, NR2 is a critical link in improving cross-border connectivity and trade and logistics between these ASEAN countries. Furthermore, the road crosses Muang Xay, which is Oudomxay Province's capital and one of the main stations on the Lao PDR–China High Speed Railway (HSR). A dry port in Oudomxay has also been earmarked for development. To benefit from the economic growth brought about by these key infrastructure projects,

improvements in the province's road transportation (including NR2) will be critical. Post upgrade, NR2 is expected to provide enhanced connectivity for businesses and increased labor productivity. With the expected influx of people and freight from the Lao PDR–China HSR and dry port, there is the potential for Oudomxay to substantially develop its manufacturing industries, logistics, real estate, and tourism sectors. A robust local road network will be required to support such economic development.

Project Bankability: The NR2 upgrading is a component of the Lao Climate Resilient Economic Corridor Development Project. The work is expected to be co-financed by several parties, including the World Bank, European Investment Bank (EIB), Nordic Development Fund, and the Australia, and Lao PDR governments using an Output-and Performance-Based Contract (OPBC) with a 10-year period.

The World Bank has approved USD132 million to support the implementation of the project, particularly the west segment of the road (NR2W). Australia is providing parallel financing of around AUD 10 million mainly for the improvement of the border crossing facilities. The project has been launched in September 2022. The tender process for selection of civil works contractor is progressing in the first half of 2024.

For the east segment (NR2E) that links Viet Nam, In September 2024, EIB announced its support for further upgrades aimed at enhancing the road's resilience to climate change, with EIB financing around EUR 50 million.

Economic, Environmental & Social Impacts:

The project is expected to promote sustainable and shared economic growth along the economic corridors. It will strengthen the ASEAN Highway Network (AH13), enhance border-processing efficiency, support Mekong corridor development, and improve climate resilience through durable infrastructure solutions. These outcomes will be

supported through blended financing from the World Bank, the European Union (EU), the European Investment Bank (EIB), Nordic development fund, and other parties. While the upgrading works may require land acquisition and resettlement—especially where new right-of-way is needed or where greenfield bypass sections are introduced—the project can responsibly manage these impacts through early assessment of land, biodiversity, and Indigenous Peoples considerations, followed by preparation of a full ESIA, an Environmental and Social Management Plan (ESMP), and a Resettlement Action Plan with livelihood restoration and grievance mechanisms.

Recommendation for Project Implementation:

To enhance the bankability and long-term sustainability of the NR2 upgrading project, implementation should prioritise maintaining strong investor confidence through transparent governance, disciplined OPBC contract management, and predictable long term performance obligations. Establishing a robust multi-donor coordination platform will be essential to align financing conditions across the World Bank, EIB, NDF, and government resources, ensuring that disbursement, safeguard compliance, and monitoring frameworks remain harmonised and efficient. Regular market

sounding with regional and international contractors should be continued to validate cost structures, risk allocation, and private sector appetite which are critical for both bid competitiveness and long-term performance under the 10 year OPBC. Strengthening climate resilient engineering standards, timely land acquisition, and safeguard implementation will further mitigate delivery risks that can affect the bankability and project cash flows.

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5.6 Lao PDR National Road No. 8 Upgrading



Country:
Lao PDR



Sector:
Transport – Road



Type:
Brownfield



Estimated Cost (USD):
207 million (2019)



Intended Procurement Method:
PPP

Implementing Agency:
Ministry of Public Works and Transport

Project Overview:
National Road No. 8 (NR8) is a 132 km, two-lane road that crosses the central region of Lao PDR at its narrowest point. It connects National Road 13 in the west to the Nam Phao international checkpoint on the Lao PDR–Viet Nam border, passing through Borikhamxay and Khammuane Provinces.

Project Background: The current road is in poor condition, leading to longer travel times and higher accident risks. The latest feasibility study, supported by the Government of Korea, proposes improving the road alignment and widening it to meet ASEAN Highway Standard Class II requirements—a 12-metre-wide, two-lane highway with a design speed of 40–60 km/h. The improved alignment is expected to reduce the total length from 132 km to 123.9 km. The project also includes repairing 29 bridges and building two new tunnels.

The project is endorsed in the National Socio-Economic Development Plan and MPWT Strategic Development Plan of Lao PDR and the MPAC 2025.

Status of the Project: A feasibility study was funded by Korea International Cooperation Agency (KOICA) and design were completed in 2017. Additionally, KOICA secured grant financing in 2023 for bridge and safety upgrades, with groundbreaking beginning

in late 2024. Japan has also shown interest in supporting ADB's assessment of NR8 as a potential economic corridor to Viet Nam. The study's terms of reference have been agreed by Lao PDR and Viet Nam, ADB's appraisal mission was completed in early 2022, and the study is expected to conclude in 2024. The project currently faces capital-mobilisation challenges and is prioritising technical assistance to structure its financing.

Connectivity Benefits: NR8 is a key section of both the Asian Highway Network and the GMS East–West Economic Corridor, providing the fastest link between Vientiane and the Viet Nam border. On the Viet Nam side, connecting roads and new border facilities were upgraded in 2018, strengthening cross-border connectivity. Lao PDR and Viet Nam are also discussing the JICA-supported Vientiane–Hanoi Expressway, whose alignment could either complement or compete with NR8; one proposed route directly connects to NR8, strengthening the case for its upgrade. Additional connectivity gains are expected from the Lao–Thai Friendship Bridge No. 5 in Paksan and the planned improvement of 300 km of NR13 South, both of which would further enhance access to and from NR8.

Project Bankability: The project will be done under a hybrid model where the private contractor is hired under Output- and Performance-Based Contract ("OPBC") terms for rehabilitation and maintenance and the government will collect tolls from users. The contractor receives availability payments from the government (regular payments based on road availability and condition).

Economic, Environmental & Social Impacts:

The project positions Lao PDR as a sustainable regional connector within ASEAN by strengthening its integration with major transport corridors, reducing flooding risks, and unlocking cross-border supply chain opportunities. By linking to ASEAN's AH15 route and the GMS East–West Economic Corridor through the 5th Lao–Thai Friendship Bridge (Bolikhamsay–Buengkan), it supports Laos' transition into a fully land-linked nation, while its alignment with the Belt and Road Initiative—through

integration with the Laos–China Railway—further enhances transnational logistics and trade. Overall, the planned upgrades are expected to reduce regional trade-related travel time by around 30%, improving efficiency, competitiveness, and connectivity across the broader region. While the alignment passes through biodiversity-rich national conservation areas and may involve land acquisition and resettlement, these impacts can be effectively managed through early biodiversity field surveys, comprehensive ESIA preparation, and development of an Environmental and Social Management Plan (ESMP), alongside a Resettlement Action Plan with livelihood restoration and a grievance mechanism.

Recommendation for Project Implementation:

It is recommended that the government and development partners prioritise a clear financing and risk-allocation framework to strengthen the project's bankability under the hybrid OPBC model. Given the existing capital-mobilisation challenges, early engagement with potential financiers, leveraging KOICA's completed feasibility work and upcoming infrastructure upgrades, as well as Japan's interest in developing NR8 as a regional economic corridor, will be essential. Streamlining technical assistance to finalise the project structure, confirm availability-payment mechanisms, and align cross-border economic-corridor objectives with Lao PDR and Viet Nam will help accelerate investor confidence and ensure smooth transition from design readiness to implementation.

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5.7 Lao PDR–Viet Nam Power Interconnector



Country:
Lao PDR



Sector:
Energy – Transmission



Type:
Greenfield



Estimated Cost (USD):
50-130 million (2019)



Intended Procurement Method:
Public or PPP

Implementing Agency:
Ministry of Energy and Mines (MEM)

Intended Procurement Method:
Public or Public-private funding

Project Overview:
The project is a power transmission line between the southern part of Lao PDR (Attapeu and Xekong Provinces) and Viet Nam (Pleiku and Thanh My Provinces).

Project Background: The project is expected to facilitate export of 680 MW of electricity (2,900 GWh per year) from Lao PDR (abundant in hydropower supply) to meet Viet Nam's needs for clean power alternatives to coal.

The project is a part of the National Socio-Economic Development Plan and Energy Sector Development Plan of Lao PDR as well as endorsed in the MPAC 2025.

Status of the Project: On the Lao PDR side, the project is heavily reliant on Independent Power Producers (IPPs), as most generation facilities are privately developed. With domestic electricity demand growing only moderately, new concession agreements for IPPs are typically not issued unless Electricité du Laos (EDL) secures an export market.

According to the Lao MEM, the World Bank will support studies on the Lao PDR side of the project. Key challenges include the need to establish a unified and comprehensive technical and commercial framework to enable cross-border power trade between Lao PDR and Viet Nam.

On the Viet Nam side, further analysis is required to confirm whether the transmission network has sufficient capacity from the proposed interconnection points to deliver power into central and southern Viet Nam, where the main demand centers are located.

Connectivity Benefits: Connecting Viet Nam's and Lao PDR's power grids has a strong regional integration argument, as it could pave the way toward the longer-term objective of full system-to-system integration in the ASEAN region. On the Lao PDR side, the project is very dependent on Independent Power Producers (IPPs), because generation facilities are predominantly developed by the private sector and, given the moderate growth in the domestic demand for electricity, new concessional agreements are generally not being granted to IPPs, unless EDL has an export market.

Project Bankability: The selection of the preferred financing option will very much depend on whether the project is being pursued as a Government-to-Government (G2G) or a Business-to Government (B2G) initiative. As the different project options progress and continue to be assessed, it is recommended that the necessary transmission infrastructure remains under consideration for a PPP.

Economic, Environmental & Social Impacts: The project will facilitate power trade between the two countries, with excess electricity from Lao PDR being exported to Viet Nam, thereby strengthening regional power connectivity and supporting the shift toward cleaner, renewable energy use. While the transmission line may intersect areas with

potential biodiversity sensitivity, Indigenous Peoples presence, and cultural heritage considerations, these risks can be effectively managed through early scoping and targeted surveys, so that alignment decisions incorporate E&S findings from the outset. By integrating results into a full ESIA, supported by Biodiversity Action Plans, Offset Plans, and well-designed compensation and resettlement measures where necessary, the project can responsibly mitigate impacts while contributing to broader regional development and energy security objectives.

Recommendation for Project Implementation:

Lao PDR needs to enter into tariff negotiations with Viet Nam, as the level of tariff paid by Viet Nam will determine the project's feasibility. On the Viet Nam side, further analysis is required to check for adequate transmission capacity from the connection points to the grid towards central Viet Nam and southern Viet Nam, where the main system demand exists.

Should a PPP option be selected as the preferred procurement route, MEM/EDL should conduct market sounding sessions with potential investors to assesses their appetite to participate in the project and better understand their views.

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5.8 Northern Corridor Highway



Country:
Malaysia



Sector:
Transport – Road



Type:
Greenfield



Estimated Cost (USD):
1.89 billion (2025)



Intended Procurement Method:
PPP

Implementing Agency:
Ministry of Works, Malaysia

Project Overview:

The proposed project is to construct a new expressway in the Northern Corridor Economic Region (NCER).

Project Background: The expressway is approximately 330.73 km and aligned to connect new development area and logistics hubs in Perlis, Kedah, Penang, Perak. Begins near Padang Besar, (Perlis) and proceeds southward through Changlun, Sungai Petani, Karangan, Serdang (Kedah), Jawi, Second Penang Bridge (Penang), Selama, and Changkat Jering (Perak) with strategic interchanges to connect with Penang Port, industrial parks, and rail terminals.

The project is endorsed in Highway Network Development Plan (HNDP)—a Master Plan Document for Road Network Development in Malaysia.

Status of the Project: The project has passed feasibility stage and is currently looking for funding.

Connectivity Benefits: The project is aimed at enhancing inter-regional connectivity, stimulating economic growth, and alleviating traffic congestion along the northern region of Peninsular Malaysia. The proposed expressway will serve as a high-capacity alternative to existing federal routes, improving travel time, freight efficiency, and regional accessibility.

Project Bankability: The project completed its feasibility studies by the Ministry of Works in 2017. The study confirms its strong economic viability.

Economic, Environmental & Social Impacts:

The feasibility study conducted in 2017 incorporated clear environmental mitigation strategies, including refining the alignment to avoid sensitive areas such as natural forests, paddy fields, and water-catchment zones, and optimising engineering design to minimise earthworks and preserve existing soil conditions. Socially, the study emphasised reducing resettlement needs through strategic land-use planning, supported by strong community backing—85.3% of surveyed respondents agreed with land acquisition for the project. These measures, together with a recommended Social Impact Management Plan (SIMP) to address community concerns, position the project to enhance regional connectivity while managing environmental and social impacts

Recommendation for Project Implementation: The project is relatively well-progressed, with feasibility studies completed and clear cost estimates established. However, given its substantial size, it is very important for decision on the financing method, whether public or private. If private financing and investment is contemplated, given the experience with greenfield projects, a PPP approach with an availability-based payment structure would be the most bankable.

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5.9 Upgradation of Meiktila–Taunggyi–Keng Tung–Tachileik Road



Country:
Myanmar



Sector:
Transport – Road



Type:
Brownfield



Estimated
Cost (USD):
331 million (2025)



Intended
Procurement Method:
Public or PPP

Implementing Agency:
Ministry of Construction, Department
of Highways, Republic of the Union of Myanmar

Project Overview:
The project aims to upgrade the existing 331 km road segment between Namsang and Keng Tung. This road segment relates to the ASEAN Network, ASEAN Highway (AH) 2, connecting Yangon, Mandalay, Tachileik (business city in Eastern Shan State) as well as to Mae Sai in Thailand.

Project Background: The road connects Yangon, Mandalay, Tachileik (business city in Eastern Shan State) as well as to Mae Sai in Thailand. The project will connect with other highways in Thailand, Lao PDR, and Viet Nam to create the first transportation corridor to cover the majority of mainland SEA.

The project is endorsed regionally under ASEAN Transport Strategic Plan (2016 – 2025) and nationally prioritised under Arterial Road Network Master Plan, National Transport Master Plan, Integrated Master Plan 2030 of Ministry of Construction.

Status of the Project: The project is at early concept stage.

Connectivity Benefits: The project will connect with other highways in Thailand, Lao PDR, and Viet Nam to create first transportation corridor to cover the majority of mainland SEA. Located near the Myanmar–China border, this upgrade has the potential to enhance border trade economics through the development of the project. It could serve as an alternative route to China, particularly as the existing Muse entrance faces limitations in expanding the current right-of-way in certain areas, such as Gokehtaik.

Project Bankability: The project is proposed to be implemented through a BOT scheme with a two-stage EOI process. Financing is being sought from multilateral and development financial institutions, with priority sections (85.2 km and 245.81 km) targeted for initial investment. Grants for feasibility studies and detailed project reports are planned under the GMS framework for fiscal years 2026–2028.

Economic, Environmental & Social Impacts:

The project aims to strengthen gender inclusion by ensuring that women have greater opportunities to participate across all levels of project delivery. Building on the requirement for a gender equality and social inclusion (GESI) analysis as part of the ESIA, the project intends to structure its processes

to enhance female access to project roles, including not only administrative and office-based functions, but also opportunities in technical, engineering and construction-related activities. This approach supports the project’s goal of generating positive gender impacts, as recognised in the application’s gender-benefit assessment.

Recommendation for Project Implementation:

The project contemplates adopting a PPP structure, with an intention to attract international investors and financial institutions. Since the project is at early concept stage, it should move forward to conduct commercial feasibility study as a next step. In addition, the project should consider exploring a financing structure that includes some level of government funding.

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5.10 Yangon–Mandalay Expressway



Country:
Myanmar



Sector:
Transport – Road



Type:
Brownfield



Estimated Cost (USD):
935 million (2019)



Intended Procurement Method:
Public or PPP

Implementing Agency:
Ministry of Construction, Myanmar

Project Overview:
The project involves the upgrading of the existing 588 km two-lane expressway between Yangon and Mandalay, with a design speed of 100 km/h.

Project Background: The project is expected to upgrade the expressway to a sufficient standard that would allow trucks to use the expressway as well as improve road safety, with the expectation that this will help promote national economic development and materially reduce the number of traffic accidents. The proposed upgrade consists of the following components: (a) horizontal alignment upgrades, (b) addition of shoulders to at-grade and bridge sections of the road, (c) improvements of median drainage and access protection; d) pavement upgrades, and (e) road safety improvements.

The project is endorsed nationally in Myanmar National Transport Master Plan (MSDP) and regionally in Belt and Road Initiative and the MPAC 2025.

Status of the Project: A Project Discussion Webinar was held in May 2020 to facilitate knowledge-sharing and dialogue between the project owner and private-sector stakeholders, as well as to highlight opportunities for infrastructure investment.

The first 64 km section from Yangon to Bago is expected to undergo rehabilitation with assistance from ADB. The feasibility study for the remaining 524 km section—from Bago through Phyu, Naypyitaw, Meikhtila, and Mandalay—has been completed. Myanmar is now seeking potential investors for these subsequent segments under a PPP scheme.

Connectivity Benefits: The expressway connects to the broader road network linking Myanmar with China and serves as a core component of the country's transport system. The Yangon–Mandalay corridor accounts for 64 percent of all passenger trips and 67 percent of freight movements nationwide, covering both the Yangon–Nay Pyi Taw–Mandalay corridor and the parallel Yangon–Pyay–Magway–Mandalay route. Along the North–South Economic Corridor (NSEC), two competing transport modes currently operate: National Highway 1 (NH1), which runs on a similar alignment under a build-operate-transfer (BOT) arrangement but passes through several small towns, and the Yangon–Mandalay railway line, which is being upgraded to increase freight capacity with financing from the Japan International Cooperation Agency (JICA).

Project Bankability: Based on a high level cashflow and value for money analysis, this project has the potential for PPP. However, the viability of any PPP option ultimately depends on a commercially acceptable tolling policy being implemented and the level of traffic demand.

Economic, Environmental & Social Impacts:

Upgrading the expressway will unlock major transport efficiency gains by shifting freight traffic onto a safer, faster, and more direct route. As one of Myanmar's most important transport corridors and a key segment of the North–South Economic Corridor (NSEC), the improved expressway is expected to enhance national connectivity, reduce logistics

costs, and generate wider economic and social benefits by supporting trade, mobility, and regional development. Although some land acquisition and resettlement may be required—particularly where encroachment into existing rights-of-way or curve-straightening is necessary—these impacts can be effectively managed through robust ESIA processes, development of an Environmental and Social Management Plan (ESMP), and implementation of a Resettlement Action Plan with livelihood restoration and a grievance mechanism.

Recommendation for Project Implementation:

It is recommended that Ministry of Construction (“MOC”): (a) updates the traffic forecast based on updated actual usage, willingness to pay and induced freight usage from NH1 (taking into account that some of the freight may use the upgraded Yangon–Mandalay Railway); (b) updates the capital and operating cost estimates and economic analysis and conducts a robust options analysis of technical options; (c) identifies all risks relevant to this project and prepares and maintains a risk register for the project; and (d) engages with the relevant authorities including local stakeholders throughout the process.

Should a PPP option be selected, MOC needs to determine a tolling policy which is acceptable to both investors and end users, noting that some past BOT projects in Myanmar have not proven to be financially viable based in part on the level of tolls. If MOC decides to pursue a PPP option, it should conduct market sounding sessions with potential investors to assess the appetite of private investors/ developers to participate in the project and better understand their views on the project.

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5.11 Cagayan Valley High Standard Highway 1



Country:
The Philippines



Sector:
Transport – Road



Type:
Greenfield



Estimated Cost (USD):
1,139 million (2025)



Intended Procurement Method:
Public

Implementing Agency:
Department of Public Works and Highways,
The Philippines

Project Overview:
The proposed project is to build a High Standard Highway in Cagayan Valley. This will serve as the arterial road for middle to long trip length traffic. The highway is expected to cater 10,274 vehicles per day.

Project Background: The Philippines has one of the highest road transport costs among ASEAN countries, largely driven by worsening traffic congestion in major urban centers through which freight vehicles must pass to reach their destinations. Many urban and rural areas rely on a single road as the primary thoroughfare for inter-urban movement, resulting in the mixing of local and long-distance traffic. This situation further increases logistics and transport costs. To address these challenges, the implementing agency has proposed the development of a high standard project in the Cagayan Valley region.

Status of the Project: The project is at early concept stage looking for funding for pre-project preparation activities.

Connectivity Benefits: The project aims to relieve high traffic congestion for inter-urban areas (that connects rural and urban) and in a way, increase the country's logistics reliability through providing highly functional roads that would link the different logistics facilities.

Project Bankability: The project recently confirmed the proposed funding scheme through Official Development Assistance (ODA). The confirmation is the result of close coordination with the concerned offices within the Department of Public Works and Highways (DPWH), who have collectively contributed to the identification of prioritisation for potential inclusion in the ASEAN Infrastructure Pipeline.

Economic, Environmental & Social Impacts:

The project supports inclusive growth by reducing poverty level within the provinces and region through integration of leading and lagging areas, delivering lower transport costs, travel-time savings, and improved access to services for isolated communities. Environmentally, the High Standard Highway program indicates that smoother traffic flow and reduced congestion will help lower greenhouse-gas emissions, while hazard-mapping and redundancy principles strengthen resilience to natural disasters. Socially, extensive consultations, a grievance redress mechanism, and an entitlement based land acquisition framework help manage impacts on vulnerable groups, alongside efforts to promote gender fairness by prioritising women's employment in project roles.

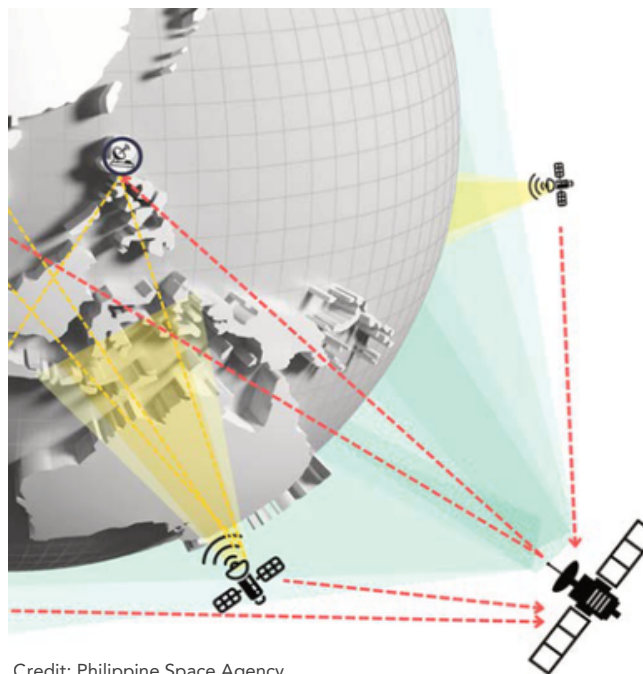
Recommendation for Project Implementation:

Given the project is currently in early concept stage, feasibility study would be critical in the next stage of the project development to conduct appropriate risk assessment and determine viability of the project and appropriate funding decisions.

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5.12 Development of an ASEAN Space Data Infrastructure



Credit: Philippine Space Agency



Country:
The Philippines



Sector:
Space



Type:
Greenfield



Estimated Cost (USD):
1,110 million (2025)



Intended Procurement Method:
PPP

Implementing Agency:
Philippine Space Agency

Project Overview:

The project plans to develop three high-resolution Earth observation satellites using a flight-proven design available to the Philippine Space Agency and to develop a geostationary telecommunications satellite to augment existing terrestrial communication systems to better facilitate the exchange and utilisation of space data in the region.

Project Background: The project integrates two components: a constellation of Earth Observation satellites as the main data source, and a Geostationary satellite with dual function of data relay and broadband connectivity.

The project aims to establish critical space infrastructure systems that will improve capacity of ASEAN Member States to generate, exchange, and utilise vital space data to address common issues in the region.

The project is currently supported by the Government of Philippines (Department of Economy, Planning, and Development (DEPDev) and the Philippine Space Council (PSC)). The project directly reports to the Office of the President of the Philippines who currently serves as the Chair of PSC. Moreover, it is endorsed in the MPAC 2025.

Status of the Project: Pre-feasibility study has been done. Project will be structured as PPP and the PPP Centre of the Philippines will be funding the feasibility study.

Connectivity Benefits: The project is expected to boost regional connectivity among all ASEAN Member States through data connectivity. This will allow ASEAN to leverage respective member states' space agencies in developing wider application for space data across the region. Moreover, it will also support greater coordination for space activities in ASEAN.

Project Bankability: The Philippines has developed capabilities across the segments of Space Value Chain, providing a strong foundation for the ASEAN Space Data Infrastructure Program. The components of the project are envisioned to be implemented under a PPP arrangement, compliant with the country's PPP Code (Republic Act No. 11966), with BOT, BOO, and hybrid concession models as potential structuring options. This approach is intended to mobilise private sector financing, innovation, and advanced technical expertise, while leveraging government support through anchor contracts for a portion of satellite capacity. This structure is designed to enhance project bankability, promote efficient and sustainable operations, and ensure balanced risk-sharing between the public and private sectors.

Economic, Environmental & Social Impacts: The project aims to integrate satellite imagery and connectivity to drive economic growth, improve service delivery, and support ASEAN's science and technology integration for environmental management. It will enable data-driven decisions on natural resources, strengthen disaster response

through damage assessments and flood mapping, and build stakeholder capacity. Additionally, it promotes gender equality by increasing women's participation, addressing safety needs in infrastructure design, embedding gender-balanced processes, and expanding women's technical skills and economic opportunities.

Recommendation for Project Implementation: Given the economic advantages and potential for connectivity and the government support through structuring as PPP, the project will attract private sector participation. The next stage for the project is completing the feasibility study which will be funded by the PPP Centre of the Philippines. In this stage, it is important to identify and optimise revenue streams that can enhance commercial viability and investor confidence.

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5.13 North Mindanao High Standard Highway II – 1



Country:
The Philippines



Sector:
Transport – Road



Type:
Greenfield



Estimated Cost (USD):
859 million (2025)



Intended Procurement Method:
Public

Implementing Agency:
Department of Public Works and Highways,
The Philippines

Project Overview:
The proposed project is to build a High Standard Highway in North Mindanao. This will serve as the arterial road for middle to long trip length traffic. The highway is expected to cater 19,700 vehicles per day.

Project Background: Aside from having one of the highest road transport costs among ASEAN countries, the Philippines continues to lag behind the other major ASEAN economies in expressway network length, even when accounting for their differences in GDP per capita. Economic activities and freight movements are concentrated along a limited number of arterial roads that serve both local and long-distance travel, resulting in congestion and reduced travel reliability. To address these systemic constraints and support more efficient inter-regional connectivity, the development of a high standard highway in Northern Mindanao is being proposed.

Status of the Project: The project is at early concept stage and is looking for funding for pre-project preparation activities.

Connectivity Benefits: Project aims to relief high traffic congestion for inter-urban areas (that connects rural and urban) and in a way, increase the country's logistic reliability through providing highly functional roads that would link the different logistics facilities.

Project Bankability: The project recently confirmed the proposed funding scheme through ODA. The confirmation is the result of close coordination with the concerned offices within the Department of Public Works and Highways (DPWH), who have collectively contributed to the identification of prioritisation for potential inclusion in the ASEAN Infrastructure Pipeline.

Economic, Environmental & Social Impacts: The project aims to reduce poverty level in Mindanao by improving the economic competitive environment through integration of leading and lagging areas to address socio-economic inequality. Environmentally, the High Standard Highway framework indicates that improved mobility and reduced congestion can help lower greenhouse-gas emissions and enhance disaster resilience through hazard-responsive alignment planning. Socially, the project adopts structured safeguards—including consultations, risk assessments and an entitlement-based resettlement framework—to protect vulnerable groups, while also promoting fairness in opportunities by prioritising women's employment, supporting gender equality and broader inclusion in the project workforce.

Recommendation for Project Implementation:

Given the project is currently in early concept stage, feasibility study would be critical in the next stage of the project development to conduct appropriate risk assessment and determine viability of the project and appropriate funding decisions.

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5.14 ASEAN Digital Hub



Credit: Ministry of Digital Economy and Society, Thailand



Country:
Thailand



Sector:
Digital Infrastructure – ICT



Type:
Greenfield



Estimated Cost (USD):
152 million (2019)



Intended Procurement Method:
Public

Implementing Agency:
Ministry of Digital Economy and Society

Project Overview:
The ASEAN Digital Hub project proposes to increase bandwidth on existing terrestrial domestic and submarine international communications cable connections and create new cable routes and links.

Project Background: The project aims at enhancing Thailand international telecommunication network to support the increasing demand of internet usage in Thailand and ASEAN countries, through three components:

- **Component 1:** Increasing domestic network bandwidth to support connectivity with neighbouring countries;
- **Component 2:** Increasing existing international cable systems' bandwidth;
- **Component 3:** Constructing a new international submarine cable system connecting Thailand to several Pacific region countries.

The project is endorsed in National Master Plan for Digital Development (2018-2037), ASEAN ICT Masterplan (AIM) (2015), and Master Plan on ASEAN Connectivity (2025).

Status of the Project: Thailand has appointed National Telecom Public Company Limited (NT), a state-owned enterprise (SOE), to lead the project. Domestic network upgrades and expanded international cable bandwidth have been completed. Construction of the new ADC (Asia Direct Cable) international submarine cable system, contracted in 2020 with international consortium partners, is ongoing and targeted for completion in 2024.

Connectivity Benefits: Thailand and ASEAN countries will be able to have sufficient international telecommunications networks that are stable, diverse, and sufficient to support the increasing demand of interconnectivity and will further persuade/influence International Content providers to be established in Thailand.

The project will serve as one of the region's digital hubs. It will form part of the ASEAN Broadband Corridor and supports ASEAN's Internet Exchange Network (aIX) project which aim to expand broadband access, improve internet speed and performance, and lower the cost of regional internet connectivity.

Project Bankability: Thailand has assigned the state-owned National Telecom Public Company Limited (NT) to oversee the project. NT has already completed the upgrades to domestic network capacity and the expansion of bandwidth on existing international cable systems to strengthen regional connectivity. The remaining component—the construction of the new ADC (Asia Direct Cable) international submarine cable system, contracted in 2020 with international consortium partners and suppliers—is still in progress. The ADC system is targeted for completion in 2024.

Economic, Environmental & Social Impacts:

The project is expected to drive Thailand towards the goal to become one of the digital hubs in the ASEAN region. This project will also form part of the ASEAN Broadband Corridor, a project that aims to promote greater broadband penetration, affordability and universal access throughout ASEAN. While the enhancement and development of terrestrial and subsea cable systems require careful management of environmental and social risks—particularly as associated infrastructures such as data centres and cable landing facilities may generate localised impacts—these can be effectively addressed through appropriate

Environmental & Social Management Framework (ESMF), which can be used to establish principles, guidelines, and procedures for mitigating risks throughout the project life cycle. This structured approach helps ensure that environmental considerations, stakeholder engagement, and social safeguards are integrated into planning and implementation, supporting a responsible expansion of regional digital connectivity.

Recommendation for Project Implementation:

Although the project is currently publicly funded, the government may explore private sector involvement in future phases, including

- PPP arrangements for expansions,
- Concession-based privatisation of existing ASEAN Digital Hub infrastructure, or
- Private participation through O&M contracts.

Regardless of the procurement approach, the project's success depends on a strong enabling ICT environment to enhance infrastructure benefits, attract private investment, and ensure fair distribution of ICT gains. Key requirements include fair and open bandwidth distribution, cost-reflective pricing, and maintaining service affordability without undermining service delivery incentives. Additionally, the planning, construction, and operation of related infrastructure—such as data centres and subsea cables—will require detailed assessment and ongoing management of environmental and social risks. This may involve developing an Environmental & Social Management Framework (ESMF) to guide risk assessment, mitigation measures, and compliance with Thai regulations and the World Bank's E&S Framework.

Disclaimer:

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5.15 Bangkok – Nong Khai HSR – Phase II



Country:
Thailand



Sector:
Transport – Rail



Type:
Greenfield



Estimated Cost (USD):
10,157 million (2021)



Intended Procurement Method:
Public

Implementing Agency:
Ministry of Transport, Thailand

Project Overview:

The project involves the greenfield construction of a 357 km standard gauge double-track, passenger high speed rail (HSR) line connecting Nakhon Ratchasima (220km northeast of Bangkok) and Nong Khai on the Thailand–Lao PDR border.

Project Background: The project is Phase II of the wider Bangkok to Nong Khai HSR project within Thailand, complementing the Phase I HSR project from Bangkok to Nakhon Ratchasima and connecting to the Lao PDR-China HSR at the border in Nong Khai. Nong Khai has been designated by the government as a Special Economic Zone (SEZ), as part of national efforts to boost investment and trade in border provinces.

Nationally, the project is a part of Thailand's Rail Transport Infrastructure Development Strategy 2015–2022 and Logistics Action Plan 2023–2027. Regionally the project is currently in the MPAC 2025.

Status of the Project: For the planned extension of the high-speed rail (HSR) network connecting to Lao PDR and China, further consideration is required regarding the precise route and construction

schedule. At the national level, strategic decisions must also be made on project prioritisation should budget constraints prevent full implementation of Thailand's broader and more ambitious rail development plan.

Under the current investment scheme, Thailand side will finance the project and undertake all civil works, while the Chinese side will be responsible for system design, construction supervision consultancy (CSC), and railway system installation; detailed civil works arrangements have already been completed.

The second phase of the project is currently under review by the Thai Cabinet, with construction expected to commence in 2024⁵ and operations targeted for 2031. Following Cabinet approval, a study on potential PPP investment models will be conducted, with private sector bidder selection anticipated by mid 2026.

Connectivity Benefits: The project will connect to the Lao PDR–China high-speed rail (HSR), a 414 km line from the Thai–Lao border through Vientiane to the China–Lao border, which is around 60% complete. This line links further into China's HSR network toward Kunming. In the long term, the Bangkok–Nong Khai HSR will form part of the larger Singapore–Kunming HSR network, envisioned to strengthen economic ties and facilitate movement across China, Lao PDR, Thailand, Malaysia, and Singapore. However, progress on the Singapore–Bangkok sections has been limited, and the Singapore–Kuala Lumpur HSR remains on hold pending cost revisions and further planning.

Project Bankability: It is understood that the government is looking to publicly fund the project, as revenues are likely to be insufficient to cover capital and operating costs. However, there is the potential for some elements of the operations and maintenance of the track and stations to be tendered to the private sector.

Economic, Environmental & Social Impacts:

The project is expected to improve the public transport network and enable the development of regional cities along the route, supporting the

economic development in the less developed regions of northern Thailand. Although the project may require additional land acquisition and resettlement, as well as careful screening for biodiversity, Indigenous Peoples, cultural heritage, and cumulative impacts, these considerations can be effectively managed through development of a robust Environmental and Social Management Plan (ESMP), and preparation of a Resettlement Action Plan with livelihood restoration and a grievance mechanism. These measures can help to ensure that environmental and social risks are responsibly mitigated as the HSR strengthens long-term regional connectivity and mobility.

Recommendation for Project Implementation:

Although the government has decided that the project will be publicly procured, specific funding sources are yet to be confirmed. It is understood that the options under consideration are domestic bank loans and/or sovereign loans from China. In preparing the funding plan, the government should consider the impact on its fiscal position and any potential contingent liabilities due to the large investment value of this project.

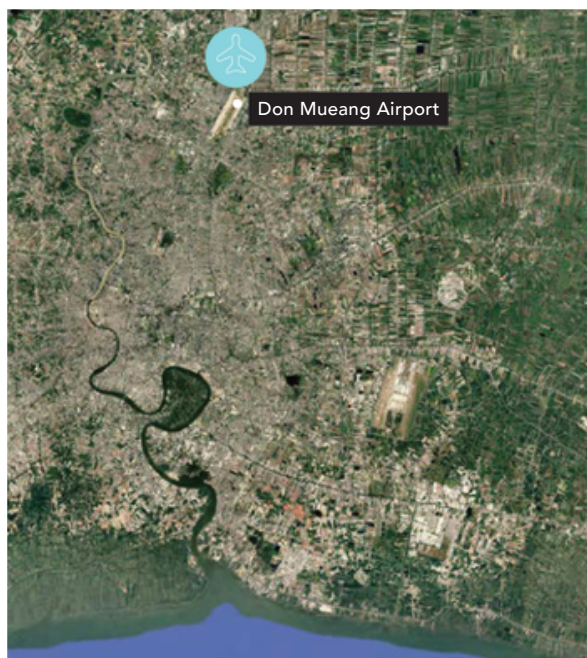
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5. As of the time of writing this report, the consultant team has not yet been informed if construction commenced in 2024.

5.16 Don Mueang Development Project Phase 3



Country:
Thailand



Sector:
Transport – Airport



Type:
Brownfield



Estimated Cost (USD):
1,116 million (2025)



Intended Procurement Method:
Private (with Public Support)

Implementing Agency:
Airport of Thailand Public Company Limited

Project Overview:
The proposed project is to demolish, expand, and renovate old and new terminals at the Don Mueang Airport.

Project Background: The project is expected to add 10 million passengers per year and endorsed in Twenty-Year National Strategic Plan (2018–2037) and the 12th National Economic and Social Development Plan (2017–2021).

Status of the Project: The project is underway to identify funding and financing for the project costs/ the procurement approach is being finalised.

Connectivity Benefits: This airport project has a high impact on connectivity among all ASEAN countries as it has the potential to promote regional transport.

Project Bankability: The project involves a brownfield expansion, upgrading an already operational airport terminal with existing traffic flows. Additionally, the government's support for land acquisition further strengthens the project's bankability.

Economic, Environmental & Social Impacts:

Expansion in the airport will also aid in generating economic benefits, especially in the tourism related industries. The project will contribute to increased revenue from tourism, higher income for service sectors supporting tourism, greater output from the manufacturing industry, improved employment rates, and higher household spending.

It is also noted that the project will upgrade the existing drainage system, which currently has insufficient capacity to drain rainfall, leading to flooding incidents at the airport.

Recommendation for Project Implementation:

Given the brownfield aspect of this project, project has available traffic demand and strong economic case for the expansion plans. Government support such as providing the land for the project, also aids to enhance project bankability. The project is well placed to seek out competitive funding sources in the financing market.

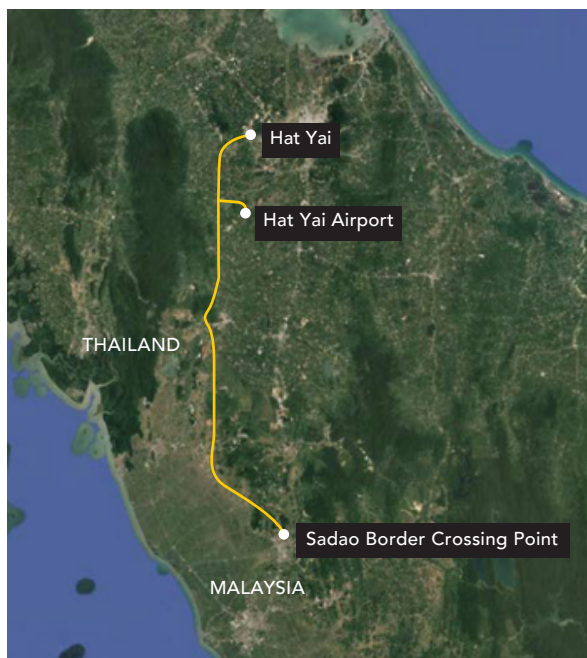
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Credit: Shutterstock (Milkovasa)

5.17 Hat Yai–Sadao Motorway



Country:
Thailand



Sector:
Transport – Road



Type:
Brownfield



Estimated Cost (USD):
**903 million (2025,
construction cost only)**



Intended Procurement Method:
PPP

Implementing Agency:
Department of Highways, Thailand

Project Overview:
The proposed project is to expand the existing road to 4-lane fully control access to highway connecting Hat Yai, Thailand, to Thai–Malaysia border.

Project Background: This motorway serves as the primary route connecting Hat Yai District to the Thai–Malaysian border at the Sadao Checkpoint. It begins in Hat Yai, runs through key local districts, and terminates at the border checkpoint near Bukit Kayu Hitam, covering approximately 71 km. The project scope includes the construction of the roadway, interchanges, toll plazas, and drainage systems, as well as necessary land acquisition.

The project is endorsed in the MPAC 2025, Motorway Development Plan of Department of Highway, Thailand, 2022, and PPP Project Development Plan 2020 of Thailand

Status of the Project: The project is currently undergoing the feasibility study, and efforts are underway to identify funding and financing for the project costs/the procurement approach is being finalised.

Connectivity Benefits: The motorway will strengthen connectivity between Hat Yai and the Sadao border, enhancing cross-border trade with Malaysia and supporting wider ASEAN integration.

Project Bankability: While demand-related risks exist, they are mitigable and can be partially offset through government support mechanisms and operational advantages. The project is expected to be bankable if the availability payment framework is clearly defined, the tolling strategy is appropriately calibrated, and demand risks are prudently incorporated into the financial model.

Economic, Environmental & Social Impacts:

Improved transport efficiency is expected to spur investment in logistics, manufacturing, and tourism while reducing travel time and operating costs for businesses. The project will generate both direct and indirect jobs and relieve congestion on existing routes, improving residents' access to essential services and overall quality of life.

Moreover, the project features environmentally friendly designs, with route alignment carefully planned to avoid sensitive ecosystems and reduce deforestation. To manage stormwater runoff, green infrastructure elements like bioswales and rain gardens have been integrated.

Recommendation for Project Implementation:

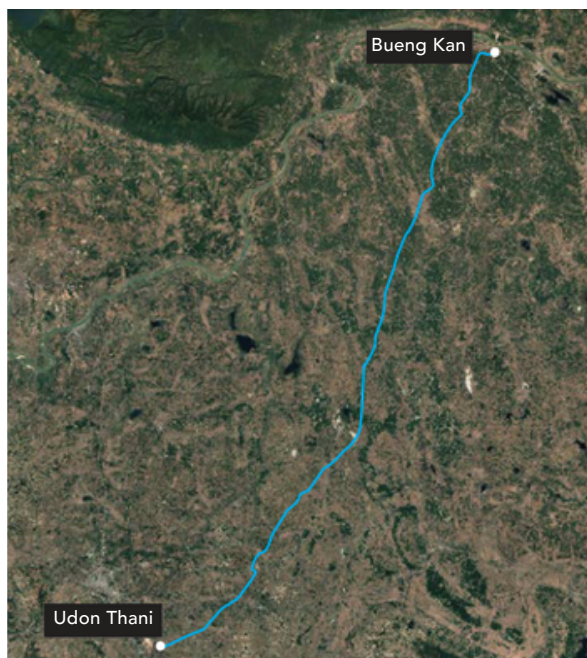
The project is considering PPP structure, with availability payment. This is in line with the Consultant's recommendation for such greenfield road projects. Given the cross-border nature of the project, it is noted that the project has garnered interest from firms including Malaysian entities, for co-investing or collaboration. A key consideration would be on the potential demand for the project. Given competing routes available, demand analysis will be crucial for the project to set an appropriate level of toll rates for the project.

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5.18 Highway Connecting Udon Thani–Bueng Kan



Country:
Thailand



Sector:
Transport – Road



Type:
Brownfield



Estimated Cost (USD):
**577 million (2025,
construction cost only)**



Intended Procurement Method:
Public or PPP

Implementing Agency:
Department of Highways, Thailand

Project Overview:
The proposed project is to expand the two-lane local roads into a four-lane divided highway accommodating 30,000–40,000 vehicles per day.

Project Background: The project aims to significantly improve transportation efficiency, enhance regional economic integration, and contribute to the broader development of northeastern Thailand including, connect between Thailand and Lao PDR through the 5th Friendship bridge that is expected to complete in 2025.

Project is endorsed in The Greater Mekong Subregion (GMS), Border Special Economic Zone Development Plan, the broader East-West Economic Corridor (EWEC), Highway Development Plan Strategy for Integrated Transportation Linkage 2017 to 2026, Highway Development Strategy Plan to Support, and the Entry into the ASEAN Economic Community.

Status of the Project: The project is underway to identify funding and financing for the project costs/ the procurement approach is being finalised.

Connectivity Benefits: The project has potential connectivity benefits between Thailand and Lao PDR.

Project Bankability: The project has ongoing discussion with multilateral for potential support. This will enhance the project's bankability.

Economic, Environmental & Social Impacts: The project is expected to provide clear socio-economic benefits by improving regional mobility, lowering transport costs, and supporting trade between the two provinces. The enhanced connectivity will strengthen links to national and cross-border markets, particularly along the East-West Economic Corridor, promoting regional integration and economic activity. The project also aligns with Thailand's broader development goals by improving logistics efficiency and supporting inclusive, sustainable growth.

Socially, the project incorporates plans for structured measures to manage land acquisition and economic displacement—including compensation determined jointly with local authorities, development of a Resettlement Action Plan, livelihood restoration

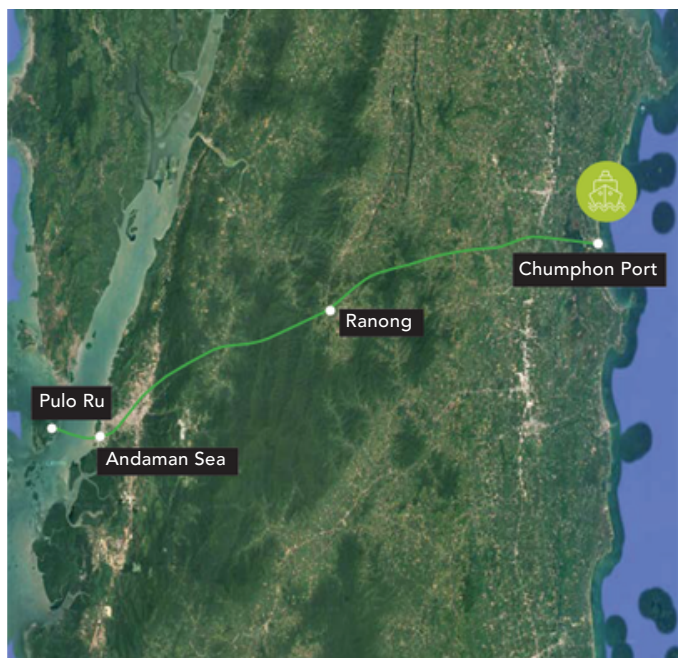
support, and safeguards for small businesses along the corridor—to ensure communities benefit equitably. Community welfare is further supported through planned stakeholder engagement and mitigation of potential disruptions. Moreover, climate resilient and adaptation has been included in the design stage, with a comprehensive disaster risk reduction strategy integrated into the planning and design process.

Recommendation for Project Implementation: The project is considering to be fully funded by the government, with potential considerations for PPP scheme and support from multilateral development banks. If private financing and investment is contemplated, given the experience with greenfield projects, a PPP approach with an availability-based payment structure would be the most bankable.

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5.19 Landbridge Project



Country:
Thailand



Sector:
**Transport – Port
and Road**



Type:
Greenfield



Estimated Cost (USD):
27.8 billion (2025)



Intended Procurement Method:
PPP

Implementing Agency:
Office of Transport and Traffic Policy and Planning

Intended Procurement Method: Public-private funding

Project Overview:
The proposed project is to develop a fully automated port, enabling the considerable saving in container handling time and cost. The project includes developing two ports—Laem Rio, Chumphon Province and Laem Ao Ang, Ranong Province, and developing motorway, railway and service road including at-grade and elevated sections and tunnel through mountainous areas with distance approximately 89.35 km.

Project Background: The project aims to support World's Supply Chain Connectivity with Market Attractiveness, which are Future Green Value Chain, ESG (Environmental, Social, and Governance) criteria and UN's SDG Goal. Moreover, the project incorporates a green concept in the development phase, where some spaces along land link are provided for green energy production such as solar panel installation.

The project is endorsed as a Government Priority Project.

Status of the Project: The project is at feasibility study stage.

Connectivity Benefits: This project has a high impact on improving connectivity between ASEAN countries as well as ASEAN to the world.

Project Bankability: The project's bankability is supported by early private-sector interest and the potential adoption of a PPP structure, which enables balanced risk sharing. Expected government support for land acquisition further enhances feasibility. However, the size and complexity of the project will add additional coordination, funding, and execution challenges that must be carefully managed in structuring and implementation.

Economic, Environmental & Social Impacts:

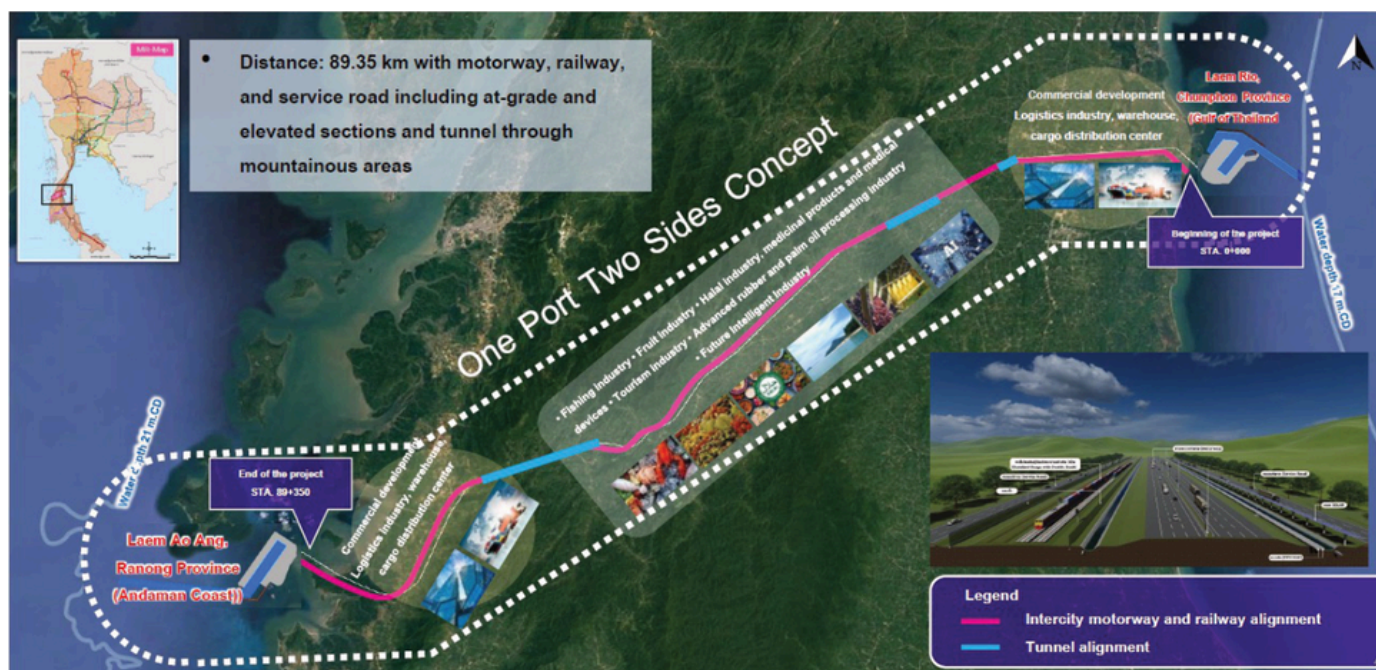
The project is expected to create over 280,000 job opportunities in the region and support a national GDP increase from 4% to 5.5%, underscoring its significant contribution to Thailand's long-term economic expansion. As a fully integrated deep-sea port, motorway, and railway development linking the Andaman Sea and Gulf of Thailand, the Landbridge will reshape regional logistics efficiency—providing a cheaper, faster, and safer alternative to the congested Strait of Malacca and strengthening Thailand's position as a strategic trade gateway within ASEAN. Socially, the development of new logistics hubs, commercial zones, and multi-purpose areas around the ports is expected to stimulate local economic activity, create downstream employment, and support community-level development. The project is also designed in alignment with global sustainability standards, integrating ESG principles and UN SDG goals to ensure that economic benefits are achieved alongside socially and environmentally responsible development.

Recommendation for Project Implementation:

The project is considering a PPP scheme and aims to launch RFP for potential investors in 2026. It is noted that the project may receive various forms of support from the Thai government in areas such as land acquisition and compensation, tax incentives etc, which would be beneficial for the project's bankability. Nonetheless, the size and complexity of the project will require the project owners to conduct further comprehensive assessments, including determining level of market interest and identifying implementation roadblocks at an early stage. The project essentially combines multiple segments involving ports, motorways, railways and service roads in one integrated package. The project owners may consider developing the project in phases, to breakdown the complexity of the development. Bankability for each component of the project needs to be evaluated, to ensure that each will be able to operate on a standalone basis.

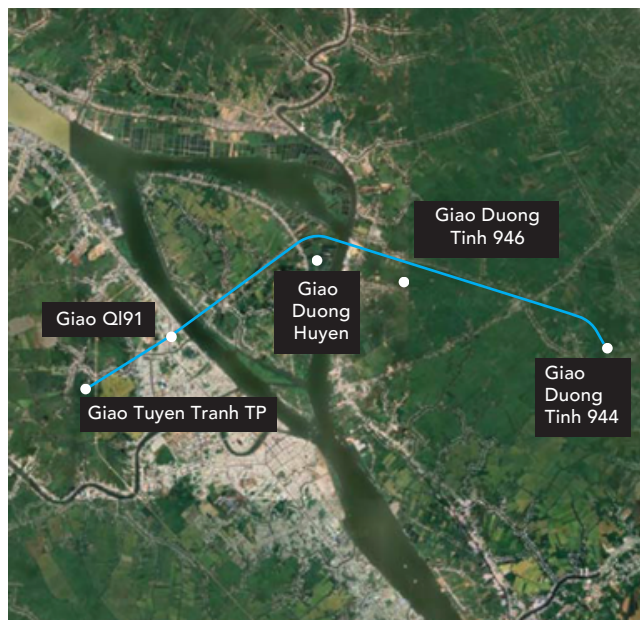
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Source: Office of Transport and Traffic Policy and Planning, Thailand

5.20 Construction of Inter-regional Road–Tong Duc Thang Bridge



Country:
Viet Nam



Sector:
Transport – Road



Type:
Greenfield



Estimated Cost (USD):
233 million (2025)



Intended Procurement Method:
Public or PPP

Implementing Agency:
People's Committee of An Giang Province

Project Overview:
The project is to develop the construction of the Ton Duc Thang bridge and the road leading to both ends of the bridge.

Project Background: The project aims to connect My Hoa Hung Islet with Long Xuyen City and Cho Moi District, connect Provincial Road 944 with Long Xuyen City bypass.

Connectivity Benefits: The project enhances regional connectivity by providing people with a reliable way to travel—overcoming the barriers created by large rivers—and helping to uplift local communities.

Status of the Project: The project is currently in the technical-economic feasibility study phase, with investment approval expected in Q4 2025, feasibility study completion by Q1 2026, detailed design from Q2 2026 to Q3 2027, construction bidding in Q4 2027, and full operation targeted for 2029–2030.

Project Bankability: The project is expected to mobilise financing through public investment (state budget), ODA, and PPP modalities, including BOT and BT contract structures. Bankability should be further analysed upon completion of the detailed feasibility study.

Economic, Environmental & Social Impacts:

The project aims to enhance traffic connectivity, break the separation caused by large rivers to meet the travel needs of the people, the needs of economic development, tourism, create a driving force for the development of My Hoa Hung Commune, contributing to promoting the socio-economic development of An Giang Province. The project is expected to save at least 30–40 minutes for each trip, while enhancing safety and stability for travel in the region.

Moreover, the project is in an area affected by climate change, especially the phenomenon of high tides causing more severe flooding and prolonged flooding. The next designs of the project will consider the latest climate change scenario announced by the Ministry of Natural Resources and Environment, integrating into the design study the hydrological issues, flooding due to rising water and high tides to propose solutions to meet the requirements of adaptation to climate change and sea level rise.

On social impacts, approximately 35.56 hectares of land will be acquired, including residential and agricultural land, requiring resettlement and livelihood support for affected households. A dedicated compensation and resettlement budget—accounting for about 22% of total project costs—covers land compensation, asset compensation, relocation assistance, and construction of resettlement areas. The resettlement process will involve close coordination with local authorities and full consultation with affected communities to ensure transparent procedures and stable living conditions post-relocation. A detailed environmental impact assessment will also be carried out in the next project phase.

Recommendation for Project Implementation: The project is considering funding through ODA or through the PPP scheme if it meets the criteria of investor attraction, financial and economic efficiency and support mechanism from the state budget. Given the experience with greenfield projects, an availability-based payment structure would be the most bankable if PPP scheme is chosen.

Disclaimer:

- * All map sources are based on Google Satellite Images, with project routes/locations outlined using information provided by the implementing agency, project owner, or the Project Briefs on the Initial Pipeline of ASEAN Infrastructure Projects.
- ** The consultant has not independently verified the accuracy, reliability, or completeness of the information received. Accordingly, no assurance is given regarding the information contained herein. Any changes to the underlying assumptions or project-related information may result in corresponding changes to the analysis or recommendations presented in this project brief.

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