



WEBINAR PRESENTATION

INFRASTRUCTURE FINANCING TRENDS IN VIETNAM

29 September 2021

CONTEXT

Infrastructure Overview in Vietnam



4%

Estimated growth rate for infrastructure investment in Vietnam during 2021-2026



70%

Target for private partnership of the total investments in power sector till 2030



90%

of Vietnam's infrastructure is currently funded from public resources



\$133.3 Bn

Estimated investment in power sector needed in Vietnam till 2030



\$14 Bn

Cost of the largest road sector project to build a 1,372km north-south highway by 2030

Source: Publicly available information, BritCham Vietnam Report, IFC Report

Session 1



DAVID LANG
FOUNDER AND CEO, VIETTONKIN

About Viettonkin

FDI- focused Consulting

Founded in 2009, Viettonkin Consulting is a multi-disciplinary group of FDI-focused consulting firms aimed at facilitating intra-ASEAN investments and foreign direct investments into ASEAN following FDI intelligence approach.

We **offer a unique one-stop solution** catering to all professional corporate needs of domestic and foreign investors. Viettonkin as well has physical presence in Singapore, as well as an entity and people in the country.

3000+

Successful global consulting projects

7+

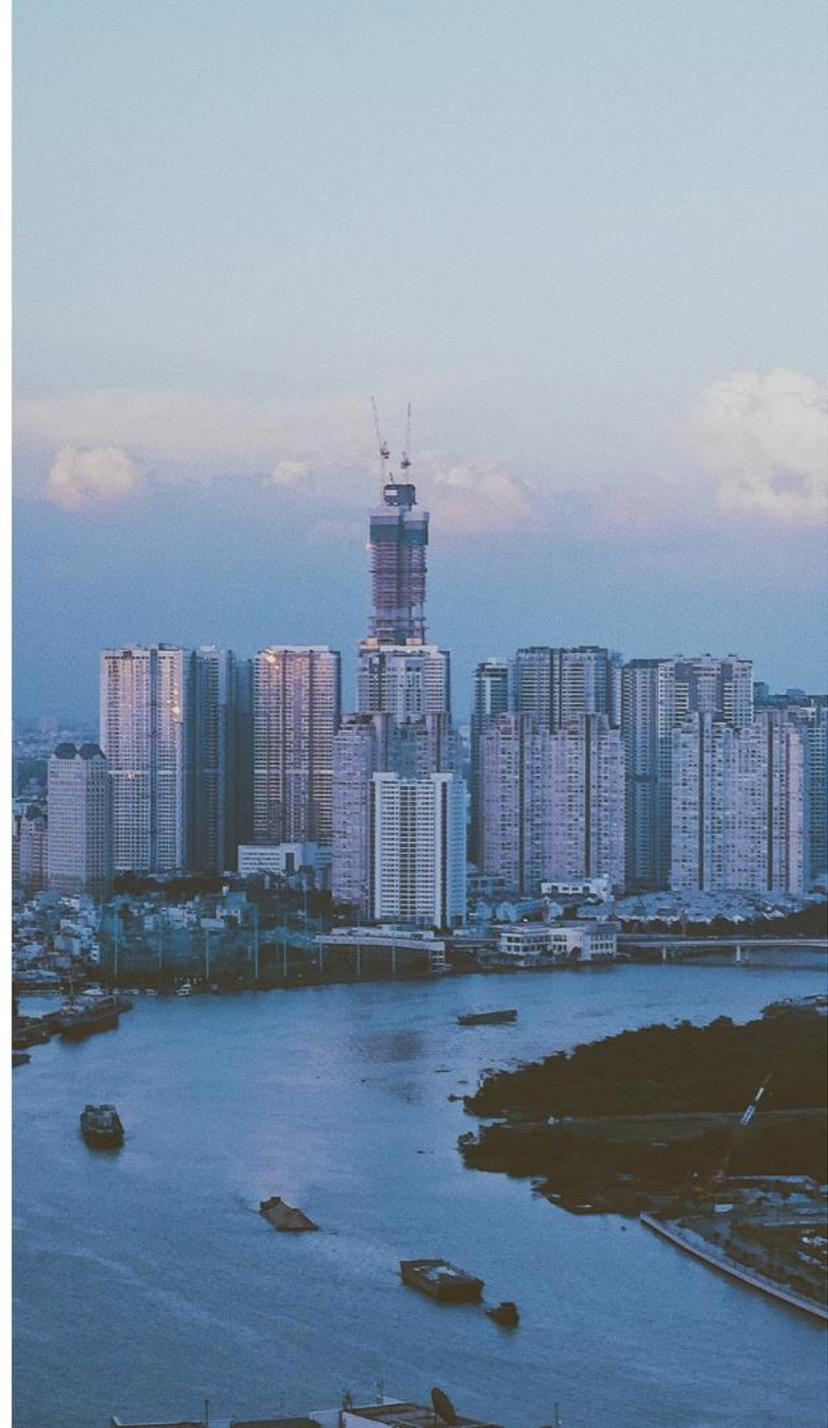
Countries with Viettonkin Offices

120+

Countries with Business Relationships

50+

Languages for Linguistic Solutions



Viettonkin Global Business Expansion (GBE)

PHASE 1: Market Readiness Assistance

Understand the country specific situation and stand prepared for the market entry.

Primary tasks:

- Market assessment/ validation
- Feasibility study
- Business plan development
- Market readiness activities such as business development, strategic partnerships etc.

PHASE 2: Initial Setups & Establishment of Operation

Incorporate the company and set up the business functions of the new company.

Primary tasks:

- Company Incorporation
- HR setup
- Accounting and tax initial setup
- Factory and production line setup
- IT and information system setup
- Distribution channels setup
- Other company setups

PHASE 3: Transition Assistance

Ensure the smooth transition period upon incorporation depending on the business requirements

Primary tasks:

- Project Management
- Risk advisory
- HR & mobility support
- Accounting & tax compliance
- Secretarial & compliance
- Corporate services trade & procurement consulting
- Quality control & assurance
- Administration support
- Other corporate support

PHASE 4: Excellence Operational & Optimization

Operational excellence & optimization

Primary tasks:

- Business transformation
- Risk advisory
- Audit & assurance
- Business continuity plan
- Accounting, tax, and legal services
- Project Management
- HR consultancy & Organizational capacity building
- Digital transformation/ IT advisory
- Quality control & assurance

PHASE 5: Business Expansion & Exit Strategy

Business expansion & exit strategy

Primary tasks:

- Business Valuation
- Audit & assurance
- M&A advisory
- Business strategy consulting
- Business matching
- Transactional services

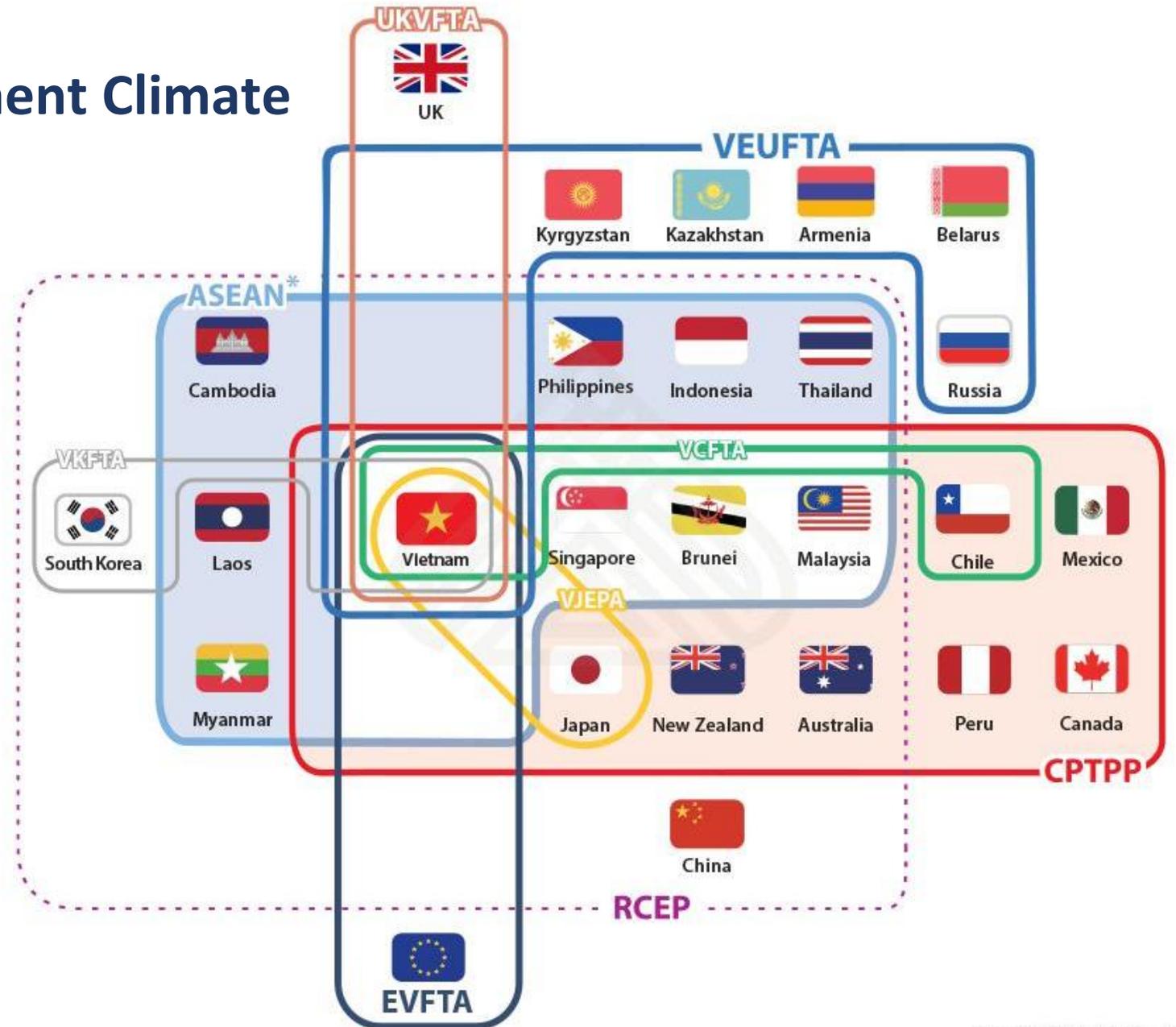
Country Snapshot and Investment Climate in Vietnam.

Infrastructure Financing Webinar

Country Snapshot and Investment Climate

1. Vietnam Snapshot

 GDP US\$271.2 billion (2020)	 GDP Growth % 2.9% (2020)	 Inflation 3.2% (2020)
 GDP per capita US\$2,779 (2020)	 Population 97.6 million (2020)	 56.0% is working age Average age 32
 Trading 2020 Import US\$262.7 billion Export US\$282.7 billion	 Integration to Global economy 14 FTAs joined + 2 FTAs negotiating 56 economies trading partners	



Country Snapshot and Investment Climate

2. Investment Climate for FDI 2021

Total FDI capital US\$28.5 billion (2020)
New FDI projects 2,523

Factors attracting FDI Recently-signed free trade agreements, political stability, ongoing economic reforms, a young and increasingly urbanized population, and competitive labor costs.

Foreign ownership limit issue The government has removed or eased FOLs for the whole industry sector rather than for a specific investment.

Investment incentives Investment incentives, including lower corporate income tax rates, exemption of some import tariffs, or favorable land rental rates, are available in several sectors

Investment forms **Direct:** new legal entity, capital contribution, BCCs
Indirect: shares or/and bonds purchase, investment funds, investment through intermediaries

Foreign exchange control The flow of foreign currencies into Vietnam is less constrained by the SBV compared to the outflow, which has been restricted to certain transactions

Capital transaction & profit remittance **Banking accounts** Direct Investment Capital Account (DICA) and indirect investment capital account (IICA)
Remittance abroad authorised credit institutions

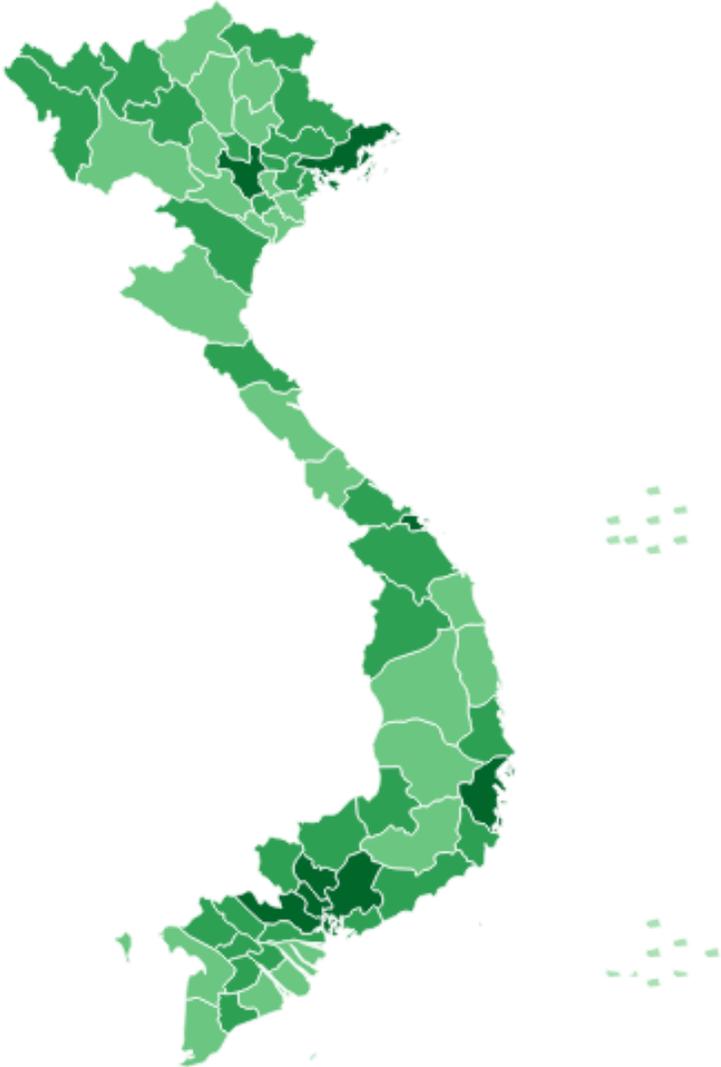
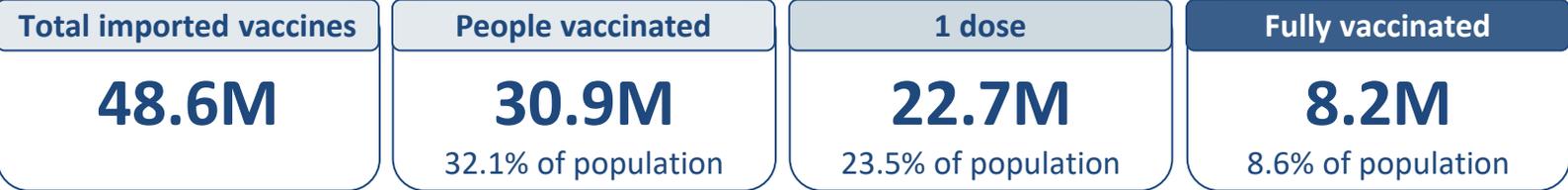
Current Context: Covid-19 Impacts & Responses

Infrastructure Financing Webinar

Current Context Covid-19

Vietnam Pandemic Background

- ❖ Vietnam is facing the fourth wave of covid-19. By the end of September 27, 2021, Vietnam has had 756.689 infections, ranked 154th out of 222 countries and territories.
- ❖ COVID-19 infections are decreasing in Vietnam, with 10,171 new infections reported on average each day. That’s 74% of the peak — the highest daily average reported on September 3.
- ❖ 5 provinces and cities with the highest number of cases: Ho Chi Minh City (371.660), Binh Duong (200.196), Dong Nai (45.667), Long An (31.789), Tien Giang (13.787).
- ❖ Vaccination: 27/09/2021



Policy Responses to the Covid-19 Epidemic

Medical Responses



Vaccination

Vaccinations commenced on 8 March 2021, and will continue throughout the year with the goal of vaccinating 80% of the population by June 2022

Plans to implement the "vaccine passport" and adjust the regulations on entry and exit, facilitating foreign experts, workers and investors to enter Vietnam.



Social distancing

HCMC and the south in general have the highest number of infections and are being applied to the strict social distance measures.

The provinces that basically control the epidemic will be allowed to loosen the social distancing, towards the opening of the whole economy in early 2022.



Medical treatment

Rapidly large-scale testing of people in the entire area to separate F0 cases from the community.

Managing people infected with COVID-19 at home. (home-based quarantine).

Calling for the recovered F0 to participate in disease prevention and control

Policy Responses to the Covid-19 Epidemic

Resolution No.105/NQ-CP: Guidance for business recovering

- » Implement measures for Covid-19 prevention and control while enabling enterprises to recover, maintain and develop business operation.
- » Assist the vast majority of enterprises, cooperatives and households which have temporarily suspended their business to re-operate.
- » Implement policies on tax/fee extension, exemption, or reduction along with policies to support employers and employees.

Notable solutions relating to labour and foreign experts

- » Easing regulations on the issuance, extension and certification of work permits for foreign labour in Vietnam
- » Requesting a consistent procedure for compulsory quarantine and medical surveillance among provinces
- » Pushing mutual agreement on recognition of “vaccine passport”
- » Temporarily suspending unnecessary audit.

Policy Responses to the Covid-19 Epidemic

Solution to recover the economy

- ❖ Developing a roadmap to facilitate economic recovery, ensuring no disruption to the production chain and circulation of goods.
- ❖ Establishing the Prime Minister's Special Working Group on solving difficulties for enterprises and people affected by COVID-19.
- ❖ Extending the payment of taxes and land rent.
- ❖ Temporarily suspending and reducing social insurance contributions.
- ❖ Reducing 30 types of fees and charges from 1 July to 31 December 2021.
- ❖ Guiding credit institutions and foreign bank branches to restructure repayment period, exempt; reducing interest and fees, and supporting borrowers affected by COVID-19.

Solution to recover supply chain

- ❖ Reducing interruptions in the transportation of goods: QR Code identification certificates for commodity-carrying vehicles
- ❖ Applying safe production models: “green zones”; “1 road, 2 destinations”, “3 on the spot”.
- ❖ Making plans for economic recovery: issues digital “vaccine passports” instead of other forms of management such as travel permits, negative test results, etc.

Infrastructure Investment Landscape in Vietnam

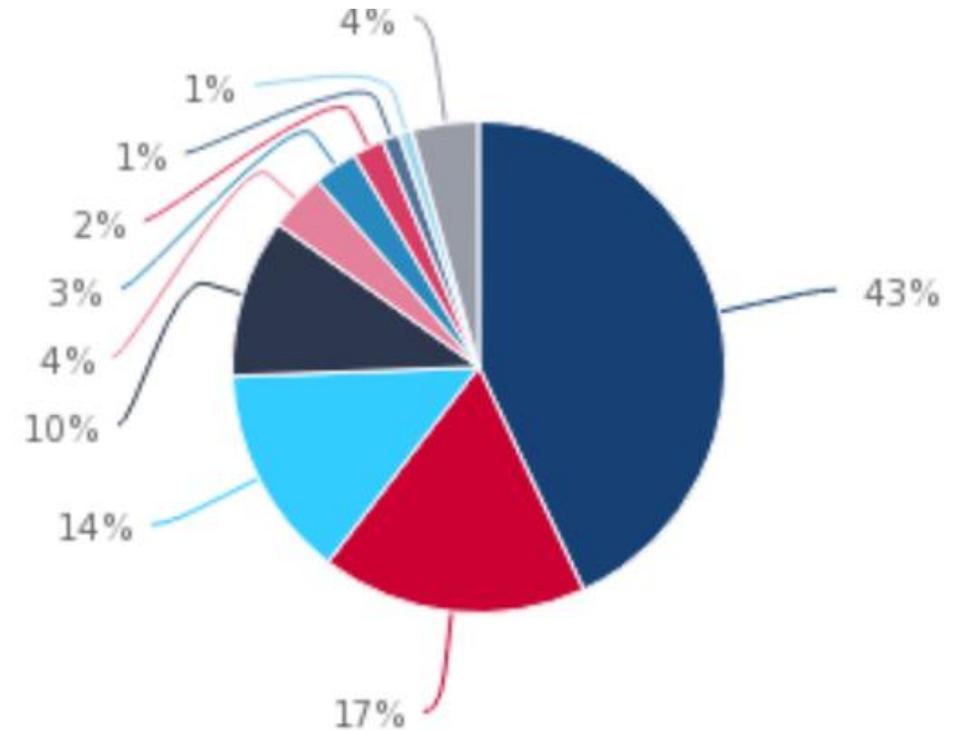
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Infrastructure Landscape in Vietnam

1. Overview about Infrastructure Landscape

Vietnam's infrastructure and construction market is among Southeast Asia's most diverse competitive landscapes, given the mix of nationalities of companies operating in the country.

The Asian Development Bank (ADB) reports that investment in infrastructure in both the public and private sectors of Vietnam has averaged over 5% of gross domestic product per year in recent years, ranking first in Southeast Asia and second only to China in the entire Asian region.



Source: Fitch Solutions Infrastructure Key Projects Database

Infrastructure Landscape in Vietnam

1. Overview about Infrastructure Landscape

From 2016 to 2020, the average investment demand in infrastructure in Vietnam was US\$25 billion, and is projected to reach US\$30 billion by 2030

Road sector will have the largest investment gap and will require an additional 70% funding. Investment gap is forecasted to be around US\$55 billion.

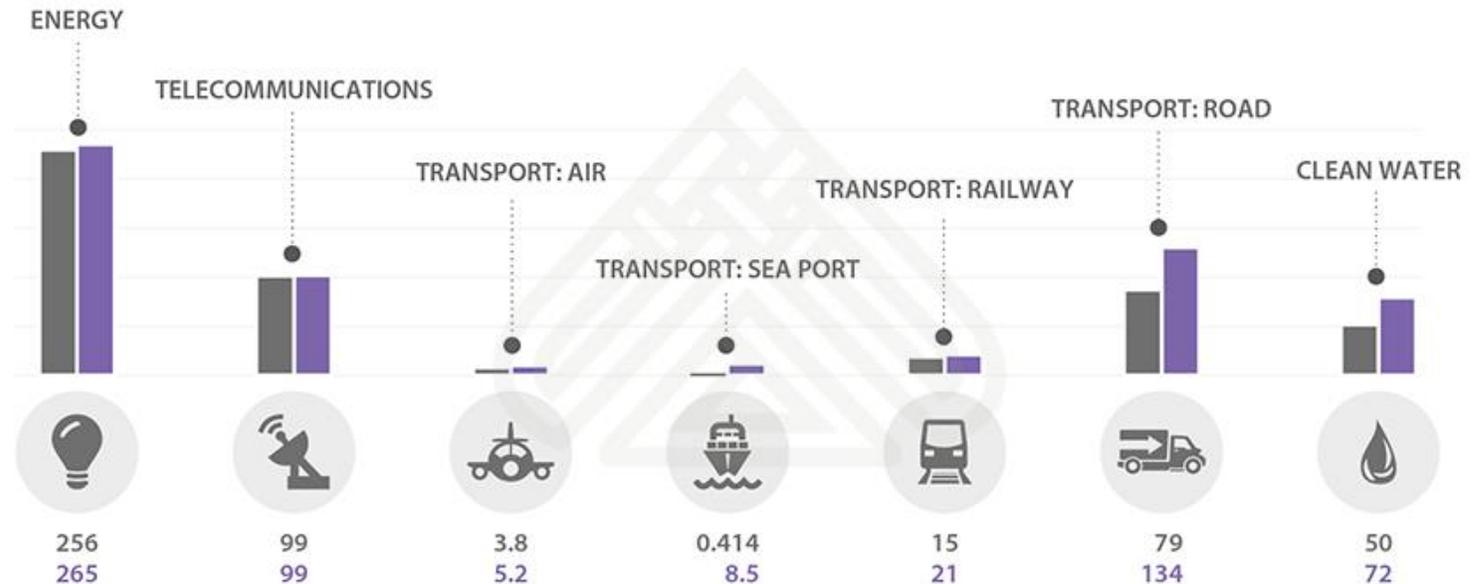
The allocation of public investment during the 2021-2025 period is revealed at approximately US\$119.3 billion, and additional investment capital should be mobilised via other financing approaches such as the official development assistance (ODA), PPP or provincial budget.

Infrastructure investment forecast 2016-2040 – Sector wise in terms of billion USD

Unit: Billion USD

■ Calculated in current investment

■ Calculated in investment demand



Source: Global Infrastructure Outlook 2017

Graphic©Asia Briefing Ltd.

Infrastructure Landscape in Vietnam

2. Updated PPP Law on Infrastructure Project

» Sectors eligible for PPP Projects

For the period of 2021-2030, the Government has issued a draft development strategy of synchronous infrastructure system period, with 3 core objectives:

- (i) promoting **comprehensive infrastructure** development with a number of key projects;
- (ii) investing in key national infrastructure projects, prioritizing **transportation, energy and digital infrastructure** to solve bottlenecks in socio-economic development; and
- (iii) developing a highly advanced expressway network, while also investing in the upgrade of national airports to strengthen cooperation within the region and with the world.



PPP in Infrastructure and Legal Framework Updates

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PPP in Infrastructure and Legal framework updates

2. Updated PPP Law on Infrastructure Project

» Investment Models

- BOT (Build - Operate - Transfer)
- BTO (Build - Transfer - Operate)
- BOO (Build - Own - Operate)
- O&M (Operate - Maintain)
- BTL (Build - Transfer - Lease)
- BLT (Build - Lease - Transfer)
- Mixed contracts combining
 - (a) BOT, BTO, BOO or O&M;
 - (b) BTL or BLT.

» Local contents

Investors commit to use domestic contractors, goods and materials are eligible for preferential treatment during the bid evaluation process.

» Investment Capital

Total investment capital is **at least VND 200 billion (US\$8.8 million); exception of at least VND 100 billion (US\$4.4 million)** for Healthcare, Education and Training projects and those executed in areas with extremely difficult socio-economic conditions.

No minimum investment capital is required for PPP projects implemented under (O&M) contracts.

» Capital Participation

State's investment **no more than 50%** of the total investment capital for permitted uses. Private investors' capital contribution must be **at least 15%** of the total investment capital.

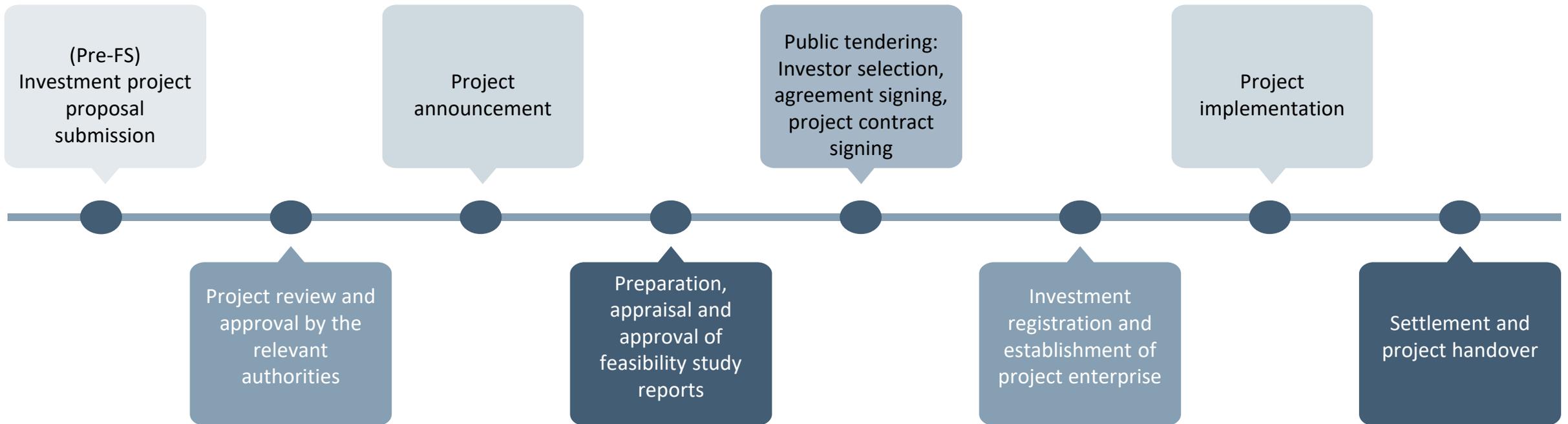
» Incentives & Guarantees

General	tax incentives, rights to mortgage project assets, rights to use land, rights to utilise public services, and rights relating to ownership of assets.
Foreign currency	A guarantee for capital transactions, loan repayments and transfer of profits. Such guarantees be limited to 30% of project revenue after subtracting project expenses
Risk-sharing Mechanism	If actual project revenue is less than 75% of the revenue forecasted as a result of changes in planning, policies or laws, and other measures such as concession extensions or tariff adjustments have not addressed the shortfall, the State will share 50% of the downside below the 75% threshold.

PPP in Infrastructure and Legal framework updates

2. Updated PPP Law on Infrastructure Project

» Process for PPP Projects



Note: for PPP projects applying high technologies (per the list of high technologies prioritized for investment and development under the regulations on high technologies) or new technologies, the implementation process varies.

PPP in Infrastructure and Legal framework updates

3a. Key Infrastructure: Transportation

» Overview and Potential

The Vietnamese Government has strongly asserted its direction to focus on transportation infrastructure for economic and social development for the period of 2021-2030.

A total budget of **US\$43-65 billion** is needed for the development of transportation infrastructure for the 10-year.

» PPP Implementation

PPP projects in transportation infrastructure in Vietnam have mainly been implemented under these types of contracts:

- ❖ BOT (Build - Operate - Transfer)
- ❖ BT (Build - Transfer) - *ceased to apply from January 1, 2021*
- ❖ BOO (Build - Own - Operate)
- ❖ **BLT (Build - Lease - Transfer)** - *especially well-suited for the appetite of international investors and lenders, help propel these development projects forward without excessive dependency on the limited capital of domestic banks.*
- ❖ A hybrid of these models

The capital investment must be at least **VND 1,500 billion (US\$ 65.7 million)** for permitted fields of road, rail, inland waterways, shipping and airlines.



PPP in Infrastructure and Legal framework updates

3b. Key Infrastructure: Energy and Power System

» Overview and Potential

Energy demand is predicted to increase by over 8% per annum during the 2021-2030 period.

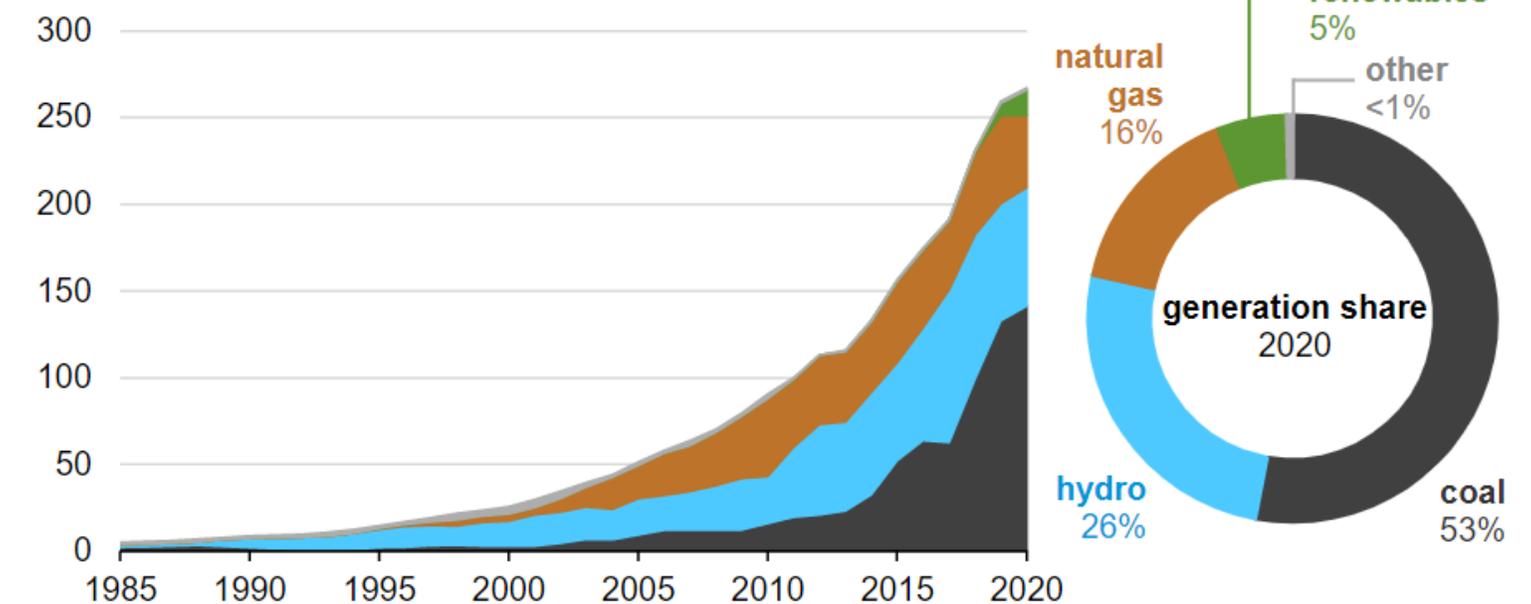
As for the renewable energy sector, the funding required would be around **US\$23.7 billion** by 2030.

Primary energy demand is expected to reach approximately 175-195 million TOE by 2030 and 320-350 million TOE by 2045.

Total capacity of power sources to reach 125-130 GW by 2030, and power output to reach 550-600 billion kWh by 2030.

The share of renewable energy sources in the total primary energy supply mix will reach approximately 15%-20% by 2030 and 25%-30% by 2045.

Vietnam annual electricity generation, by source (1985–2020)
billion kilowatthours



Source: Graph created by the U.S. Energy Information Administration, based on data from [Our World in Data—Vietnam](#), based on BP Statistical Review of World Energy and Ember

PPP in Infrastructure and Legal framework updates

3b. Key Infrastructure: Energy and Power System

» Strategy & PPP Implementation

Resolution No.55 by the Party

Outline Vietnam's energy policy to 2030 with a vision to 2045, encouraging private sector investment and participation in energy infrastructure, acknowledging that current infrastructure systems are incomplete and in need of improvement.

Resolution No. 140 by the Government

Promulgate the Government's Action Program which highlights the specific tasks and responsibilities of the energy development as earlier set forth in Resolution No. 55.

The PPP Law provides a more specific legal framework for private stakeholders to invest in energy infrastructure projects:

- Covers investments in both power generation assets (e.g. power plants) as well as power infrastructure assets (e.g. transmission lines or grid connected storage infrastructure).
- Power grids and power plants, except for hydroelectric plants and cases of state monopoly under the Electricity Law, are the fields that are invested under the PPP method.
- Power plants and power grids include: thermal power, renewable energy, transmission grid for connection between the power plant and the national power system, except in cases where the State has a monopoly under the provisions of the Electricity Law.
- The projects must be invested with a minimum of **VND 1,500 billion (US\$ 65.7 million)** in general, and **VND 500 billion (US\$ 22 million)** for renewable energy projects.
- In case of a project enterprise established by a joint venture investor, members have the right to transfer shares and contributed capital to each other which ensure the minimum equity ratio of each member as prescribed.

PPP in Infrastructure and Legal framework updates

3c. Key Infrastructure: Water supply; Drainage and Wastewater Treatment

» Overview and Potential

By 2025 most urban cities will have centralized municipal wastewater treatment and collection systems; 70-80% of municipal wastewater will be collected and treated properly. By 2050, all urban cities class IV and above will have storm water discharge and wastewater treatment systems

The river basins (the Red Thai Binh, Mekong, SERC and Dong Nai river) generating 80% of Viet Nam's GDP are all expected to face 'water stress' in the dry season by 2030. 10% of the Vietnamese population will suffer from water shortfall by 2050 (ADB).

» PPP Implementation

Encourage enterprises to research and develop science and technology, give priority to advanced and green technology, invest in specific areas such as water resource management, sustainable wastewater management, water service for industrial or civil.

Gradually shifting services from funding mechanism to ordering and bidding for public services.

The current concern is that the financial method in Vietnam is not really sustainable, water prices, operating costs and wastewater fees in Vietnam are currently lower than the world average.

PPP in Infrastructure and Legal framework updates

3d. Key Infrastructure: Healthcare

» Overview and Potential

Vietnam is undergoing major economics and demographics transformation, which brings about great potential for its healthcare industry:

- ❖ the nation has entered an “aging phase” since 2011: by 2038, 20% of population will likely be over 60 years old - major demand for high-quality healthcare services
- ❖ aggregate spending on healthcare in Vietnam is projected to skyrocket to 23 billion USD in 2022
- ❖ the state budget could only cover 64% of capital demand for health sector investment during the period 2010 - 2019

» PPP Implementation

05 categories of Healthcare PPP in Vietnam (descending order):

1. Integrated PPP
2. Healthcare Facility PPP:
3. Specialized clinical services PPP
4. Operation & Management Contracts
5. Equipment Management Service PPP

Hanoi: prefers for 100% foreign invested healthcare projects with the application of state-of-the-art technology and facilities.

Ho Chi Minh City: calls for private investments into local areas through 14 PPP projects with total investments of US\$ 652.17 million.

The Government continues to fund the construction of new hospitals. The health system also lacks qualified doctors, especially those in specialized fields. Vietnam is increasingly considering investments from the private sector and international companies through PPP and joint venture projects.

PPP in Infrastructure and Legal framework updates

3e. Key Infrastructure: Digital Infrastructure

» Overview and Potential

Development Orientation:

- ❖ Strongly develop a diversified international connection system, form an international interlinked information superhighway; Promote the application of ICT in the operation and management of the socio-economic infrastructure system and the economy.
- ❖ Develop Information Technology Central, making Vietnam the home to information and communication technology.
- ❖ Digital transformation has also been prioritized in eight sectors which include finance and banking, healthcare, education, agriculture, transport, logistics, energy, natural resources, and environment and manufacturing.

Objectives by 2025:

- ❖ ICT becomes an economic sector with fast and sustainable growth, high profitability and great export value;
- ❖ Be capable of developing and manufacturing ICT products and services to meet domestic and international market needs, creating a foundation for the development of ICT sectors, ensuring information security and national digital sovereignty.

To aid with this project the Asian Development Bank (ADB) will partner with the Ministry of Information and Communications (MIC), which will help in raising Vietnam's digital economy contribution to 20 percent of GDP by 2025.

» PPP Implementation

PPP law has expanded the Information communication technology (ICT) infrastructure sectors into:

- ❖ Digital information and digital economy infrastructure;
- ❖ Modernization of ICT in Communist Party and State agencies;
- ❖ Application and development of information technology, databases, data centers;
- ❖ Common national platforms, applications, services;
- ❖ Network security;
- ❖ System of applications and services serving the people and enterprises;
- ❖ Information and communication technology (ICT) infrastructure for smart cities.

PPP in Infrastructure and Legal framework updates

4. Other Infrastructure: Industrial parks/zones and clusters

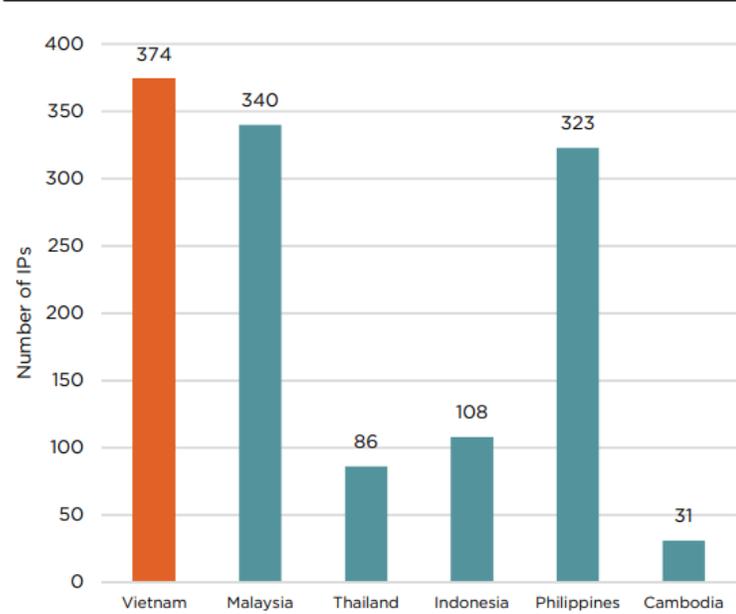
To 6M/2020 there were 374 established IZs nationwide with a total area over 114,000 ha, according to the Economic Zone Management Department (DEZM) in the Ministry of Planning and Investment (MOPI). The (DEZM) announced **a further 561 IZs** over a combined 201,000 ha are approved for master planning integration.

Global logistics and warehouse developers have entered despite the ongoing pandemic.

Infrastructure within the IPs: main truck system, internal traffic system, electricity and water network, backup power supply system, security system, wastewater treatment system, etc.

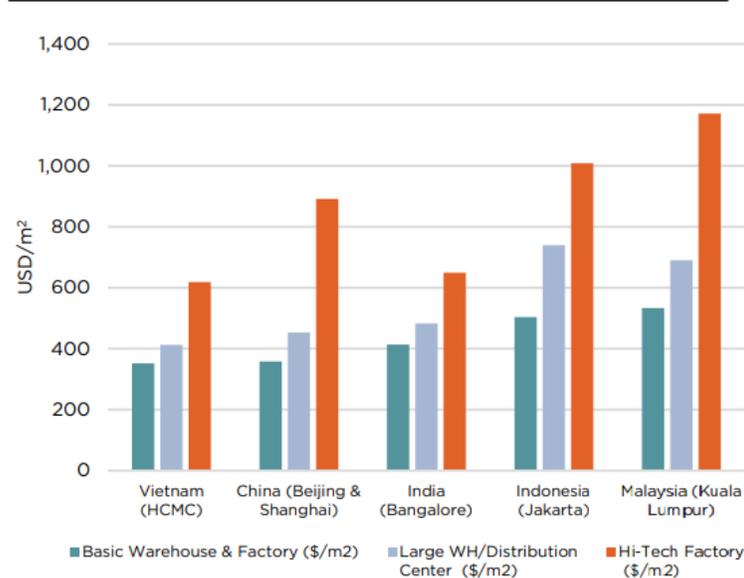
IPs is not spontaneous area, but established on the basis of government-approved plan. Investment procedures for IPs are the same in general, however, in some specific areas and development orientations, investors may be required to provide additional dossiers.

Established industrial parks, 2020



Source Invest Asia, Industrial Park Guide 2020

Average construction costs, 2019



Source Turner & Townsend, International Construction Market Survey. 2019

Limitations & Challenges Ahead

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Limitations & Challenges ahead



Regulatory landscape

Accounting systems are inconsistent with international norms, and this increases transaction costs for investors.

Lengthy and unclear administrative procedures need to be completed before investment and operation. This is now resolved with the new PPP law and the amended law on investment, other relevant regulations.



Obstacles of Vietnam Infrastructure development

Long period of building and completion lead to slow capital returns.

Government's regulatory policies on reducing public expenditure and controlling public debt.

Human resources quality issues.

Lack of Pipelines of investable projects.



Challenges from the State

The disbursement of state funds can be difficult, especially given that overlapping regulations in some legal documents can deter special-purpose entities from receiving investment capital from the government.



Shortage of capital resources

Extremely high demand for infrastructure with great amount of high-priority projects, while limited state budget. Huge requirement from various areas, however, major projects are first directly to get allocated state fund. Internal sources are prioritized, yet private firms remain reluctant.



Thank you for listening!

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Session 2



ABHINAV MITTAL, CFA
FOUNDER AND MANAGING DIRECTOR, YOG INFRA

YOG INFRA

About Us

Our objective is to drive economic growth and make positive social impact through sustainable infrastructure development.

YOG INFRA is an infrastructure focused financial advisory firm. We work with Developers and Development Finance Institutions (DFIs) and help them make informed investment decisions across infrastructure development lifecycle.

With our offices in Singapore and India, we work on projects globally, and the team brings strong experience in supporting development of infrastructure projects.

OUR SECTOR COVERAGE

The team members of YOG INFRA have experience in advisory services across below mentioned infrastructure sectors:



Renewable Energy (Solar, Wind, Hydro)



Energy Transition (storage, hybrids, EV)



Water and Waste Management



Transport (Road, Rail, Ports, Airports)



Urban Infra (Affordable Housing, Real Estate)



Social Infra (Health, Education, Sports)



INTERNATIONAL EXPERIENCE

We bring international experience across Asia, Middle East and Africa, which enables us to incorporate best industry practices in our services to help clients deliver sustainable infrastructure projects.



VARIED SECTOR KNOWLEDGE

We possess working knowledge of various infrastructure sectors to deliver sectoral learnings in our service offerings to clients and meet their specific objectives.



STRONG COUNTRY RELATIONSHIPS

We have developed strong relationships with local partners across Asia; which has proven valuable to get insight in the country specific context for our advisory services.



QUALIFIED PROFESSIONALS

All our team members are qualified and subject matter experts in their respective fields. We also have an expert panel with experienced professionals across multiple geographies.



ISO CERTIFICATION

We are ISO 9001:2015 certified company; an international standard that specifies requirements for a quality management system (QMS). We strive to consistently provide high quality deliverables.



VALUE-ADD SERVICES

We partner with other firms to provide complimentary value-add advisory services (technical, legal and tax) as per client requirements specific to the project/ transaction.

COMMERCIAL BANKS

1



COMMERCIAL BANKS

Key Institutions

Multilateral Banks



International Banks



Local Banks



COMMERCIAL BANKS

Typical Debt-Terms for PPP projects

Debt-terms for long-term loans for concession-based PPP projects in Vietnam

Availability of nonrecourse/limited recourse loan in hard currency

Maximum Tenor (Years)	15-18 Years
Up – Front Arrangement Fees	100-300 bps
Margin Rate	200-400 bps
Political risk cover premium	150-300 bps
Floor Rate	LIBOR (The London Interbank Offered Rate)

Availability of nonrecourse/limited recourse loan in Local currency

Maximum Tenor (Years)	10-15 Years
Floor Rate	6-month deposit rate

Availability of interest rate swaps

Forward duration of interest rate swap (year)	1.5-2.0 years
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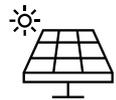
Availability of project financing from local public sector banks

%age of foreign debt out of total debt for project financing	>50%
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Source: Publicly available information, ADB PPP Monitor 2nd edition

COMMERCIAL BANKS

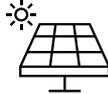
Recent debt-financed projects and terms

Key Projects	Key Debt Terms	Key Players	Location	Sector	Financial Close date
Phu Yen 257MW Solar Plant	Amount : USD 186 Mn D:E Ratio : 75:25 Tenor : 15-17 Years Facility type : Term Loan	<ul style="list-style-type: none"> • Bangkok Bank • Industrial and Commercial Bank of China (ICBC) • Kasikorn Bank • Kitankin Bank • Standard Chartered Bank 	Hoa Hoi, Phu Yen Province, Vietnam.	Renewables 	Oct 2020
BT20 National Highway 20 (NH 20)	Amount :USD 750 Mn D:E Ratio : 91:9 Tenor : 15 Years Facility type : Term Loan	<ul style="list-style-type: none"> • Bank of Yokohama • DBS Bank • Deutsche Bank (DB) • Goldman Sachs • Mitsubishi UFJ Financial Group (MUFG & BTMU) • NTT Finance Corporation • Shizuoka Bank • Société Générale (SocGen) • Sumitomo Mitsui Banking Corporation (SMBC) • Sumitomo Mitsui Trust Bank (SMTB) 	Dau Giay to Bao Loc city	Transport 	Sept 2013

Source: Publicly available information, YOG INFRA analysis

COMMERCIAL BANKS

Recent debt-financed projects and terms

Key Projects	Key Debt Terms	Key Players	Location	Sector	Financial Close Date
Van Phong 1 1320 MW Power Plant	Amount : USD 1,998 Mn D:E Ratio : 80:20 Tenor : 19.93 Years Facility type : Term Loan	<ul style="list-style-type: none"> • Bank Of China • DBS Bank • Japan Bank for International Cooperation (JBIC) • Mitsubishi UFJ Financial Group (MUFG & BTMU) • Mizuho Bank • Oversea-Chinese Banking Corporation (OCBC) • Sumitomo Mitsui Banking Corporation (SMBC) 	Khánh Hòa province, Vietnam	Coal Power Plant 	Aug 2019
Dam Nai 39.4MW Wind Project	Amount : USD 45 Mn D:E Ratio : 70:30 Tenor : 17 Years Facility type : Term Loan	<ul style="list-style-type: none"> • Bank for Investment and Development of Vietnam (BIDV) 	Ninh Thuan province, Vietnam	Renewables 	July 2018
Nghi Son 2 1200MW Coal-fired Power Plant	Amount : USD 1,868 Mn D:E Ratio : 80:20 Tenor : 20.25 Years Facility type : Term Loan	<ul style="list-style-type: none"> • DBS Bank • Maybank • Mitsubishi UFJ Financial Group (MUFG & BTMU) • Mizuho Bank 	Thanh Hoa province of Northern Vietnam.	Coal Power Plant 	April 2018

Source: Publicly available information, YOG INFRA analysis

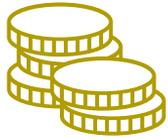
BONDS

2



BONDS

Market overview



VND c.1,637 trn

Total amount of outstanding bonds end-June 2021



36%

Outstanding Corporate bonds that were issued by commercial banks



15%

Outstanding Corporate bonds that were issued by Real Estate

Source: Asian Bond Online

GOVERNMENT BONDS

- issued by the Ministry of finance through state treasury

GOVERNMENT GUARANTEED BONDS

- bonds with a maturity of more than 1 year, issued by authorized entities to mobilize capital for investment projects

CORPORATE BONDS

- can be viewed as two components: i) private placement and ii) public offerings.

GREEN BONDS

- issued to mobilize funds for public environmental protection projects

BONDS

Typical terms for bond financing in Vietnam

	<i>Government Bonds</i>	<i>Government Guaranteed Bonds</i>	<i>Corporate Bonds</i>	<i>Green Bonds</i>
Tenor Range	2-50 years	5-15 Years	1-15 Years	1-10 Years
Coupon Rate	1-3%	1-3%	5-10%	5-7%
Key Sectors	Energy, infrastructure, Education projects, Urban Infrastructure	Transport , Social Infrastructure , Energy	Roads , Water and Real Estate	Affordable Housing
Key Players	<ul style="list-style-type: none"> Vietnam State Treasury Bond (The Ministry Of Finance, Vietnam) 	<ul style="list-style-type: none"> Vietnam Development Bank Vietnam Bank of social policies Vietnam expressway corporation 	<ul style="list-style-type: none"> Ho Chi Minh City Infrastructure Investment Joint Stock Company VinHomes Nam Long Investment Corporation (NLIC), Vietnam 	<ul style="list-style-type: none"> Ba Ria Vung Tau Province, Vietnam

Source: Publicly available information, YOG INFRA analysis

BONDS

Case Study – Bond Issuances in Vietnam

Government Bonds



Vietnam State Treasury Bond (The Ministry of Finance , Vietnam)

Placement amount	18,000,000,000,000 VND (USD 789 Mn)
Coupon Rate	2.9%
Bond Term	10 Years
Issue Date	Sept 2020
Investment Sector	Energy, infrastructure, and Education projects



HO CHI MINH CITY STATE FINANCIAL INVESTMENT COMPANY (HFIC) (The State-

Placement amount	800,000,000,000 VND (USD 35 Mn)
Coupon Rate	6.4%
Bond Term	30 Years
Issue Date	Dec 2018
Investment Sector	Housing Infrastructure

Source: Publicly available information, YOG INFRA analysis

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Government Guaranteed Bonds



The Vietnam Development Bank

Placement amount	5,000,000,000,000 VND (USD 220 Mn)
Coupon Rate	3.3%
Bond Term	15 Years
Issue Date	Dec 2020
Investment Sector	Transport and Social Infrastructure



Vietnam Bank for Social Policies

Placement amount	200,000,000,000 VND (USD 9 Mn)
Coupon Rate	8%
Bond Term	15 Years
Issue Date	Aug 2015
Investment Sector	Social Infrastructure and Energy

BONDS

Case Study – Bond Issuances in Vietnam (contd.)

Corporate Bonds



Ho Chi Minh City Infrastructure Investment Joint Stock Company

Placement amount	5,000,000,000,000 VND (USD 219 Mn)
Coupon Rate	10.3%
Bond Term	5 Years
Issue Date	March 2019
Investment Sector	Road, Bridges and Water



Vin Homes

Placement amount	5,000,000,000,000 VND (USD 219 Mn)
Coupon Rate	10%
Bond Term	2 Years
Issue Date	Sept 2018
Investment Sector	Urban Infrastructure Development

Green Bonds



Ba Ria Vung Tau Province Vietnam

Placement amount	500,000,000,000 VND (USD 22 Mn)
Coupon Rate	6.7%
Bond Term	5 Years
Issue Date	Sept 2016
Investment Sector	Affordable Housing

Source: Publicly available information, YOG INFRA analysis

INTERNATIONAL INVESTMENTS

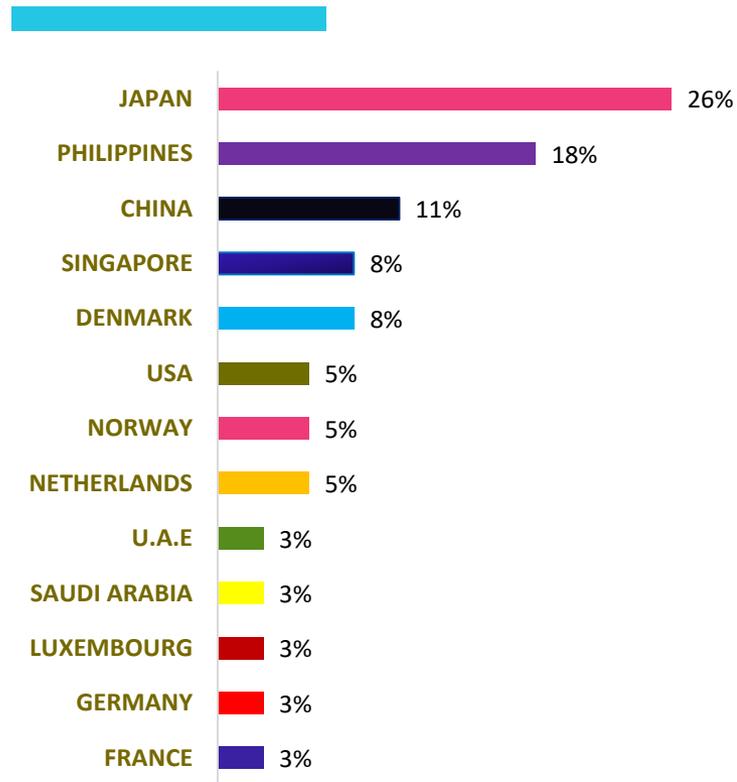
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INTERNATIONAL INVESTMENTS

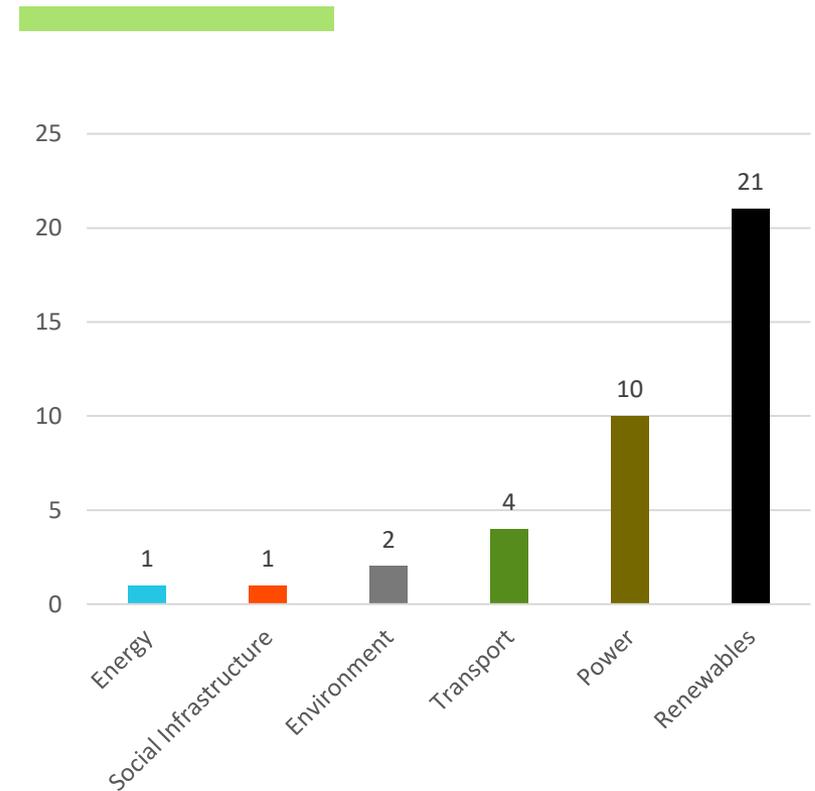
Market Overview

Investor Location (2018-21)



Source: Inframation, YOG INFRA analysis

Number of projects across sectors (2018-21)



Source: Inframation, YOG INFRA analysis

INFRASTRUCTURE FINANCING TRENDS IN VIETNAM

Recent Projects - Greenfield

Key Projects/Deal	Capex	Key Players, Location	Project Location	Project Sector	Transaction Launch Date
Quang Binh 352MW Wind Project	USD 493 Mn	<ul style="list-style-type: none"> AC Energy, Philippines 	Quang Binh province, Vietnam	Renewables	July 2021
Luc Nam 650MW Coal-Fired Power Plant	USD 957 Mn	<ul style="list-style-type: none"> China Energy Engineering Corporation (Energy China), China China Power Engineering Consulting Group Co Ltd (CPECC), China Shenzen, China 	Luc Nam district, Vietnam.	Power	June 2021
Municipal Water Treatment Projects	USD 37 Mn	<ul style="list-style-type: none"> Darco Water Technology, Singapore InfraCo Asia 	Ben Tre Province, Vietnam	Water	December 2019
Nghi Son 2 1200MW Coal-fired Power Plant	USD 1867 Mn	<ul style="list-style-type: none"> Marubeni, Japan Korea Electric Power Co (KEPCO), Korea 	Thanh Hoa province	Coal Fired Power	July 2018
CMX Renewable Vietnam 168MW Solar Plant	USD 160 Mn	<ul style="list-style-type: none"> Infra Co Asia Vietnam Electricity Holding Company (EVN) 	Ninh Thuan province.	Renewable	December 2018

Source: Publicly available information, YOG INFRA analysis

INFRASTRUCTURE FINANCING TRENDS IN VIETNAM

Merger & Acquisitions

Key Projects/Deal	Capex	Key Players , Location	Project Location	Project Sector	Transaction Launch Date
Phu My 330MW Solar PV Farm Sale (49% stake)	USD 269 Mn	• Leader Energy, Singapore	Binh Dinh province, Vietnam	Renewable	Mar 2021
Vinh Phuc ICD Logistics Center	USD 166 Mn	• YCH Group , Singapore	Vinh Phuc province, Vietnam	Transport	Nov 2020
Dam Nai 39.4MW Wind Farm Sale	USD 64.89 Mn	• Statkraft Norfund Power Invest AS , Norway	Ninh Thuan province, Vietnam	Renewable	Feb 2021
50MW Thinh Long Phu Yen Solar PV	USD 51 Mn	• Super Solar Energy, Thailand	Phu Yen Province, Vietnam.	Renewable	July 2020
60MW Tay Ninh Solar Portfolio Acquisition	USD 61 Mn	• Gunkul Engineering, Thailand	Tay Ninh Province, Vietnam	Renewable	May 2020
Phu Yen 257MW Solar Plant Acquisition (80% stake)	USD 35.20 Mn	• B. Grimm Group, Thailand	Phu Yen Province, Vietnam	Renewable	Aug 2018

Source: Publicly available information, YOG INFRA analysis

APPENDIX – FIRM PROFILE

A brief firm profile of YOG INFRA with an introduction to our service offerings and geographic experience of our team members.

YOG INFRA

About Us

Our objective is to drive economic growth and make positive social impact through sustainable infrastructure development.

YOG INFRA is an infrastructure focused financial advisory firm. We work with Developers and Development Finance Institutions (DFIs) and help them make informed investment decisions across infrastructure development lifecycle.

With our offices in Singapore and India, we work on projects globally, and the team brings strong experience in supporting development of infrastructure projects.

OUR SECTOR COVERAGE

The team members of YOG INFRA have experience in advisory services across below mentioned infrastructure sectors:



Renewable Energy (Solar, Wind, Hydro)



Energy Transition (storage, hybrids, EV)



Water and Waste Management



Transport (Road, Rail, Ports, Airports)



Urban Infra (Affordable Housing, Real Estate)



Social Infra (Health, Education, Sports)



INTERNATIONAL EXPERIENCE

We bring international experience across Asia, Middle East and Africa, which enables us to incorporate best industry practices in our services to help clients deliver sustainable infrastructure projects.



VARIED SECTOR KNOWLEDGE

We possess working knowledge of various infrastructure sectors to deliver sectoral learnings in our service offerings to clients and meet their specific objectives.



STRONG COUNTRY RELATIONSHIPS

We have developed strong relationships with local partners across Asia; which has proven valuable to get insight in the country specific context for our advisory services.



QUALIFIED PROFESSIONALS

All our team members are qualified and subject matter experts in their respective fields. We also have an expert panel with experienced professionals across multiple geographies.



ISO CERTIFICATION

We are ISO 9001:2015 certified company; an international standard that specifies requirements for a quality management system (QMS). We strive to consistently provide high quality deliverables.



VALUE-ADD SERVICES

We partner with other firms to provide complimentary value-add advisory services (technical, legal and tax) as per client requirements specific to the project/ transaction.

OUR SERVICE OFFERINGS

Infrastructure Advisory



PUBLIC PRIVATE PARTNERSHIPS (PPP)

- PPP Feasibility/ Options Assessment
- PPP Transaction Advisory



BUSINESS PLANS AND MARKET ENTRY STRATEGY

- Strategic Business Plans
- Country Assessments/ Market Entry Strategy



FINANCIAL MODELLING

- Development of Financial Models for infrastructure projects across sectors
- Model Reviews



DUE-DILIGENCE

- Commercial and Contractual due-diligence
- Review of transaction structure, project risk assessment and review of project agreements



PROJECT FINANCE

- Assessment of financing options
- Project Finance – Debt and Equity Raise for infrastructure projects



DEBT REFINANCING & RESTRUCTURING

- Debt refinancing
- Debt restructuring to improve or restore liquidity for infrastructure projects



TRAINING AND CAPACITY BUILDING

- Capacity Building for government agencies and private sector
- Training done by deal practitioners



RETAINERSHIP SERVICES

- Monthly retainer with our existing or new clients to help them meet their financial advisory needs across the board

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