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## Infrastructure Development to Support Vietnam's Growth

We are frequently asked about Vietnam's infrastructure development progress and plans because the country's infrastructure is still underdeveloped<sup>1</sup>, and because urbanization and FDI inflows - two of Vietnam's most powerful growth drivers - require major infrastructure upgrades in the years ahead.

Recent developments illustrate the Government's intensified focus on infrastructure, following years of modest progress:

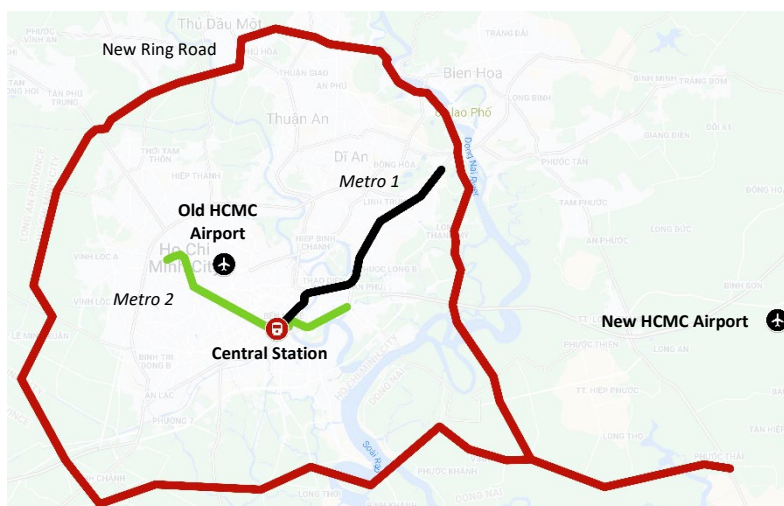
- Infrastructure spending surged by 35% in 2020 to USD20 billion (or 6% of GDP), and likely grew by a further 16% yoy in the first half of 2021.
- Next month, the Government is set to formalize a plan to increase its infrastructure spending over the next five years by 38% (to USD120 billion), compared with its aggregate infrastructure spending over 2016-2020.
- Vietnam's new Prime Minister rose to prominence by developing the infrastructure of Quang Ninh province<sup>2</sup>, and demonstrated a strong resolve to accelerate Vietnam's infrastructure development going forward. For example, a new provincial airport project was announced on his first day in office in April.

The World Bank expects Vietnam to spend USD25 billion/year on infrastructure over the next five years, with about 20% of that spending coming from the private sector. In the past, the private sector accounted for around 10% of Vietnam's infrastructure spending. A new Public Private Partnership (PPP) law came into effect at the beginning of this year, which is discussed [here](#) and which targets improved conditions for foreign investors in a variety of ways (by adopting revenue sharing instead of profit sharing, for example). However, the new law still has room for improvement, so a major increase in infrastructure investment by foreigners is probably not imminent.

### The Top Priorities are Transportation & Electricity

The majority of Vietnam's planned infrastructure spending is earmarked for improving the country's transportation network and boosting its electricity generation and distribution capacity.

HCMC Planned Transportation Projects



Hanoi Planned Transportation Projects



<sup>1</sup> Vietnam placed 47<sup>th</sup> out of 160 countries in the World Bank's most recent infrastructure rankings, and 103<sup>rd</sup> on the World Economic Forum's Road Quality rankings.

<sup>2</sup> When Vietnam's new Prime Minister, Pham Minh Chinh, ran Quang Ninh province in 2011-15, he focused on developing the province's infrastructure, including the PPP-financed construction of a new airport. Quang Ninh subsequently became one of the country's most prosperous, non-urban provinces (i.e., not a suburb of HCMC or Hanoi).

Vietnam's high priority, major transportation projects include: 1) a new HCMC airport (USD15 billion)<sup>3</sup>, 2) new HCMC & Hanoi subway systems (USD10 billion), and 3) the North-South highway (USD5 billion), which will connect HCMC and Hanoi<sup>4</sup>.

Construction on the new Long Thanh airport broke ground in January 2021, and the Government is committed to completing the first phase by 2025. The first subway line of Hanoi's metro system is already completed, and the second line is nearly complete, so the first two lines in the city's 8-line metro system should open later this year, after COVID subsides. HCMC's first subway line should open next year, and the Government is continuing to acquire the land required to complete the second line of its 6-line metro system. Note that both cities' urban transportation systems are planned to be constructed over the next 30 years and will also include light rail systems in addition to the subways mentioned above.

### **New Roads**

The Government is still acquiring the land required to build the 1,800km North-South highway, and recently scaled back its ambition to finance a significant proportion of the project with private sector money. Consequently, completion of this highway, which would double the total amount of highways in Vietnam, may be delayed past the planned 2024 completion date. We believe this new road will facilitate FDI inflows by enabling FDI companies to locate their factories in a wider range of geographic areas in order to access a deeper labor pool.

In addition to the North-South highway, a plethora of smaller-scale projects are being planned – or actually being constructed. We believe the Government should prioritize: 1) completing the ring-road around greater HCMC (i.e., similar to the M25 around London or Route 128 around Boston), which is only about 20% constructed, and 2) fast-tracking improvements of the roads to Vietnam's two major ocean ports, which can accommodate 160,000 DWT ships. Note that nearly two-thirds of Vietnam's containers are still shipped from in-land, river ports that can only handle 60,000 DWT ships since trucks are unable to easily access the two deep water ports that are relatively close to HCMC and Haiphong/Hanoi.

### **Increased Electricity Capacity**

The draft version of Vietnam's 10-yearly Power Development Plan (PDP8) was released in February, and assumes circa 10% CAGR growth in Vietnam's electricity usage for the foreseeable future, which is a realistic assumption based on actual, prior growth rates. The Government plans to spend nearly USD130 billion (or nearly USD13 billion/year) over the next 10 years to expand Vietnam's electricity generation and transmission capacity by 8% CAGR over 2020-25, and to grow capacity 15% CAGR by 2030.

The Government is focused on boosting Vietnam's generation capacity with renewable energy and LNG, which is perceived as relatively ESG friendly. We are aware of nine major LNG electricity generation projects that are likely to come on-line within the next five years, including a USD3.2 billion project in which VinaCapital is involved, and we note that purchasing LNG from the US would also help shrink Vietnam's 25%/GDP trade surplus with the US.

#### **Planned Growth in Vietnam's Electricity Generation Capacity (Government's "PDP8" Plan)**

	2020	2030F	Planned Growth
Gas & LNG	9.0	28.9	19.9
Hydropower	20.6	26.0	5.4
Wind Power	0.6	18.0	17.4
Solar Power	16.6	18.6	2.0
Coal	20.4	37.3	16.9
<b>Total Capacity (GW)</b>	<b>69.3</b>	<b>137.6</b>	<b>68.3</b>

Finally, Vietnam already maximized its hydropower usage years ago, so the Government's renewable energy plans are focused on increasing wind power generation capacity, as can be seen in the table above.<sup>5</sup> However, VinaCapital's energy investment team expects Vietnam's wind power generation capacity to reach 39GW by 2030, and for the country's solar capacity, to reach 61GW (following a surge in capacity over the last two years), given Vietnam's natural advantages in both.

<sup>3</sup> HCMC's existing Tan Son Nhat airport is located well within city limits and handled 40m people per year (pre-COVID), well above its 28m/year capacity. However, a new terminal currently being built will add another 20m pax/year capacity within two years.

<sup>4</sup> Over ¾ of freight transported in Vietnam travels by road (and a significant portion is internally shipped via in-land waterways), which helps explain why this project is so important for Vietnam's future economic development.

<sup>5</sup> Source: Freshfields Bruckhaus Derringer, HCMC

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