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Vietnam's Energy Landscape in September 2022

Minh Ha-Duong, Vietnam Initiative for the Energy Transition

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Everybody knows now:
The State cannot protect us against this energy crisis forever.
Everybody knows now that the high prices of fossil fuels in international markets will impact the Vietnamese household energy bill.
The costs of importing coal are to blame for the blackouts in Hanoi in early July 2022.

What can we do about it, and how to navigate the global energy crisis?

The present global energy crisis is the fourth after 1973, 1979 and 2008. This time is different: electricity from solar and wind power generation capacities has become cheaper than electricity from equivalent coal- and gas-fired thermal capacity. Accounting for the social and environmental costs of greenhouse gas emissions further increases this differential. Energy storage is becoming affordable.

Two examples:

According to the IRENA, Europe's average production cost of electricity from fossil fuels will be around 23UScent/kWh this year. Adding the price of CO2 raises that to 27UScent/kWh. Electricity from gas was 4 to 6 times more expensive than Europe's new solar and onshore wind capacity last year.

The international carbon credits market allows the first industrial rooftop PV + storage projects to be profitable in Vietnam.

On May 30th, 2022, the National Assembly's *Oversight Delegation on the implementation of policies and laws on planning* pointed out that the progress of planning for the 2021-2030 period is slow: 104 out of 111 plans are late. These delays affect socioeconomic development in the energy sector. Many projects are on hold at the moment. Investors will not wait forever, and there is a risk of missing the policy goals, for example, in the offshore wind industry.

In my view, two fundamental tensions have shaped Vietnam's energy landscape these years:

- The first is the tension between the urgency of greenhouse gas emissions mitigation and the need to provide more cheap electricity. The carbon neutrality goal adopted at COP26 requires a change of mindset from a diversity of actors, which will take years. It is a radical reorientation of the country's socioeconomic development, like a Đổi Mới 2.0. The successive small hydro, solar, and wind energy booms demonstrate that Vietnam's energy landscape is capable of dynamic change. Carbon-neutral factories, industrial zones and waste-to-electricity incinerators are appearing these years.
- The second tension comes between market liberalization and state management. For example, national security and engineering constraints justify a centrally managed transmission network. Meanwhile, speed and financing justify private-sector investments in new energy generation projects.

Vietnam's energy sector is still very much State managed. State-owned enterprises dominate the coal, oil and gas, and electricity sectors. State management means using five-year Plans. The law defines planning as a rational engineering exercise. A power development plan starts by forecasting the electricity demand, establishes a list of power plants to be constructed, and then blueprints the necessary transmission lines and substations to build. It is an imperative plan: "EVN, build this !"

However, military says that no plan ever survives contact with the enemy. The executive Government must navigate the ever-changing technical, economic and political situation. For example, the Government modified the revised seventh power development plan after its publication by adding a wave of LNG-to-power projects. It is often a good idea to authorize billion dollars private investments. In the current energy crisis, investors are now reconsidering their projects – I am thinking about the Delta Offshore project in Bac Lieu, for example. The State cannot make the Final Investment Decision for private investors. Thus, in practice, a part of the Plan is not imperative but indicative.

Carbon neutrality vs. More electricity, State vs. Market: Policymakers need balanced solutions to resolve these tensions. Different energy system segments require different goals and organization modes.

In a market-oriented economy, the Plan is not like an architectural blueprint to build the system. The Plan should be more like a sailing plan: it sets the final destination. It proposes a route and mechanisms to adapt to the weather.

Vietnam’s energy landscape in 2022: Private investment capital is available to drive renewable capacity development. The Government is working towards a robust legal framework based on

market mechanisms such as auctions, direct power purchase agreements, and self-consumption. A balanced regulatory structure will attract private investors to new solar and wind projects.

Such variable electricity sources require investment in the power system to develop backup capacity and flexible solutions to ensure reliable supply and grid stability. These capital needs extend to critical investment in the transmission and distribution grid.

To attract investment into the Vietnam power sector, I propose five policy directions:

1. Reduce electricity peak loads by (i) promoting energy efficiency through the application of industry standards, appliances labelling, and other well-known policies and programs, (ii) prioritizing decentralized power generation such as solar rooftops with storage, and (iii) stressing demand side management with smart meters, smart charging and internet of things.

2. Finalize the development of Block B offshore gas field gas-to-power value chain project. Block B provides significant fiscal revenues to the State. Its production costs are stable and predictable, unlike the spot LNG market. Yes, the price of electricity produced from Block B's gas will be high for base-load power generation. Nevertheless, the project can provide the flexibility and capacity needed to support the scale-up of renewable electricity sources in the South.

3. Accelerate the installation of renewable power sources. While the Government can provide incentives for development, its primary focus should be to ensure a legal and regulatory framework that supports an efficient market.
   To minimize system costs, drive renewable energy projects to the Northern region, where the electricity demand is high and more grid capacity is available.
   Continue to expand the near-shore wind farms. Learn from the financial and technical knowledge of qualified international offshore wind developers to develop the domestic market for offshore wind power and take a position in the global supply chain. Promote a strategic reorientation of the national oil and gas companies to the new energy industry landscape.

4. Increase the retail price of electricity to reflect the total cost of generation and transmission. Allow EVN to receive the income needed to invest in the infrastructure deemed strategic and critical to the nation, as reflected in its governance charter.
   Take measures to lessen the load on the average consumer and shift the burden of the energy bill to high-income households and the economic sector. Ensure that decentralized electricity production remains profitable in the commercial and industrial sectors. Keep energy-intensive industries competitive, accounting for carbon taxes levied by trade partners by border adjustment mechanisms.

5. Allow State-owned enterprises to access financial markets to raise capital and debt for sustainable investments. Corporate finance based on bonds is cheaper and more scalable than project finance based on commercial debt. Green bonds and, more generally, green finance is developing already, regardless of the political uncertainties about development assistance and climate finance mechanisms in the Paris Agreement.

In conclusion, Vietnam has everything it takes to achieve its low-carbon goal and remain a model case of socioeconomic development.

About the Author:

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