







ENERGY TRANSITION IN VIET NAM KEY POLICY LEVERS

ENERGY TRANSITION IN VIET NAM – OPPORTUNITIES AND CHALLENGES

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Implemented by



Energy Transition

The concept of energy transition refers to a structural transformation from a fossil fuel-based energy system with high carbon emissions to a clean energy system with a growing share of renewable energy.

Low-carbon development strategy as part of the energy transition strategy is the international commitment that many countries have been focusing on. Conventional wisdom has it that emerging economies like Viet Nam must pursue a carbon-intensive development pathway before transitioning to a low-carbon future.

This is a flawed thinking because today, there is growing evidence that a low-carbon development strategy constitutes a faster, cheaper, and smarter pathway toward improved economic development.

Theoretical and practical basis

Building on both theory and practices, the report has developed orientations and strategies for sustainable energy infrastructure development in Viet Nam, providing basics for making decision on future energy transition strategy of Viet Nam.

This study is expected to help strengthen longterm socio-economic development and promote multi-stakeholder dialogues between state agencies on socio-economic and technical issues in energy transition. Energy
Security:
Ensure safe and
reliable energy
supply for all
consumers

Affordability:
Ensure
acceptable
energy prices to
promote
economic
development

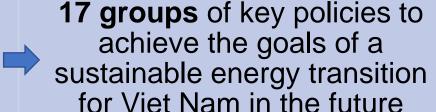
Consensus:
Implement
mutually
accepted
energy solutions

Sustainability: Implement low emission, climate change resilient solutions

Summary of policy proposals for Viet Nam

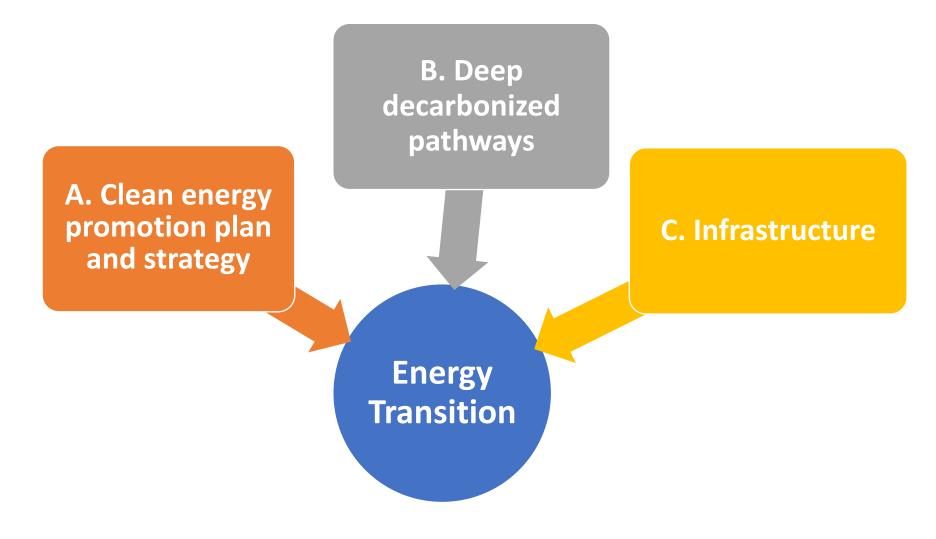
Through the analysis of global trends and international experiences in energy transition as well as Viet Nam's energy development context, the consulting team has proposed

87 specific policies

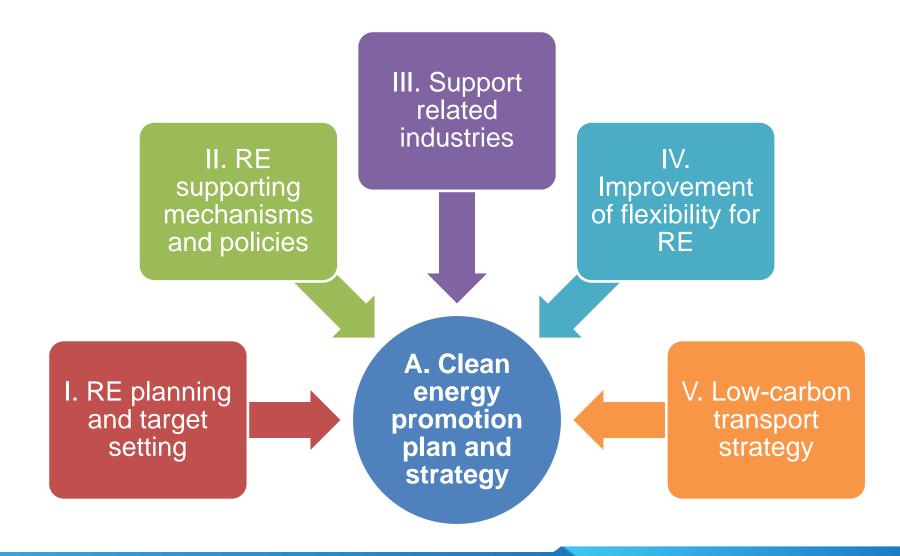


3 policy levers
underpinning the promotion
of Viet Nam's energy
transition, summarized as
below

Three policy levers for energy transition in Viet Nam.



Lever A – Clean energy promotion plan and strategy



Key short and long-term policies for lever A

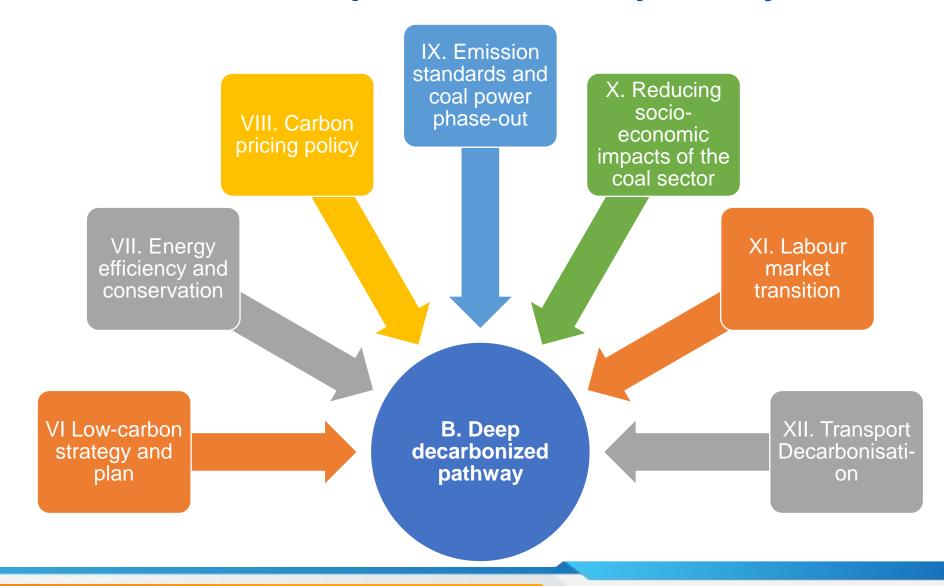
Short-term

- <u>Localization</u> requirements or incentives for localization should be part of the future auction design (e.g., establish multi-criteria evaluation of bids, no "price-only" assessment). In addition, <u>maintaining Feed-in tariff</u> for medium-sized projects (e.g., up to 10 MW) can create a market segment for national stakeholders.
- Encourage the shift to cleaner modes of transport, including electric vehicles and two-and-threewheeled electric vehicles. To achieve these targets in the medium term, we policy development should start now.

Medium and long term

- Set higher current RE targets than current ones to ensure that the energy transition in Viet Nam remains consistent with the objectives of the Paris Agreement, compatible with other countries in the region, and in line with the Vietnamese Government's COP26 goals.
- Expand the goals for renewable energy to both transport and heating and cooling sectors.
- Introduce <u>localization requirements</u> or incentives, which is typically expressed as a percentage of total project costs (per unit of installed capacity) and typically increases over time (for example, increasing from 30% to 70%).

Lever B – Deep decarbonized pathways



Key short and long-term policies for lever B

Short-term

- Enhance energy efficiency (EE) measures through increasing public investment in EE in public buildings. This can be done, for example, in partnership with energy service companies, or public-private partnership where risks are shared with the private sector.
- Stop purchasing new internal combustion engine vehicles for administrative sector by a certain date (e.g. by 2022).

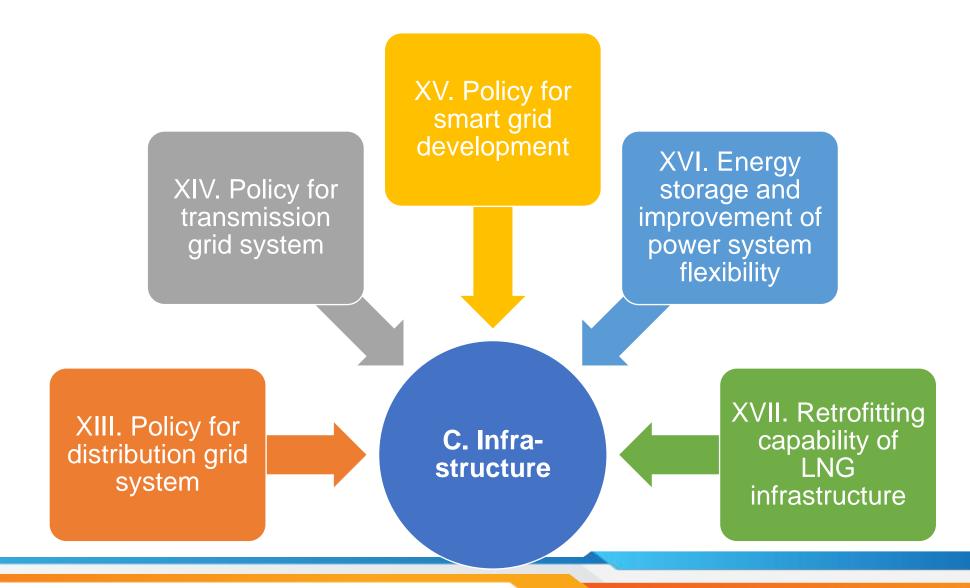
Mid-term

- Set a relatively low <u>carbon tax</u> (e.g. \$10/tCO2e), focusing on the power and transport sectors.
- Determine a clear phase out plan for all coal fired power plants in order to increase financial foresight for power plant operators and to indicating a clear trajectory towards deep decarbonization in line with the objectives of the Paris Agreement.

Long-term

- Expand the Power Development Plan to make it an Integrated Resource Plan, as has been adopted widely around the world
- Define a clear road map for <u>carbon tax increases over time</u> to align the price levels to the goals set by the Paris Agreement.

Lever C – Infrastructure



Key short and long-term policies for lever C

Short-term

- Further <u>standardize connection application procedures</u> for small-scale PV systems and electric vehicle charging stations. Ensure appropriate data collection through a national registry of renewable power plant installations and electric vehicle charging stations.
- Form and finalize <u>LNG development plans</u> in line with the long-term carbon emission reduction strategy.

Mid-term

- Incorporate the risk of stranded asset and the repurposing of LNG infrastructure (e.g. to liquified hydrogen) in these long-term planning studies.
- Introduce regulations to ensure the capability of repurposing LNG related infrastructure in the future to reduce the risk of stranded assets.

Conclusions and recommendations

A low-carbon development strategy is needed to ensure Viet Nam's energy security. Viet Nam is currently a major importer of oil and coal and is poised to become a major importer of natural gas. These trends further weaken Viet Nam's energy security and make it vulnerable to external factors beyond its control.

Viet Nam needs to realign investment away from carbon intensive sectors to a cleaner energy paradigm.

There are no inherent technological barriers or limitations to achieve deep carbon emission reduction. Viet Nam's ability to deeply reduce carbon emissions depends on the government's energy strategies, policies and investment frameworks.

There is growing evidence that the global energy transition will create more jobs and opportunities than the carbon intensive pathway, improve human health through reducing harmful air pollution, and promote economic growth and development.

In the process, a successful energy transition will help maintain a more sustainable global climate for all, particularly in vulnerable regions such as the Mekong Delta.

Countries that pursue a low-carbon development strategy are better positioned to thrive in the new economy of the 21st century. A well implemented in Viet Nam can enable Viet Nam to achieve economic development, energy and environmental objectives as part of the country's holistic long-term vision.