

**PROGRAM INFORMATION DOCUMENT (PID)
CONCEPT STAGE**

Report No.: 107674

Project Name	Fourth Power Sector Reform Development Policy Operation
Region	East Asia Pacific
Sector	Energy and Extractives
Project ID	P157722
Borrower(s)	Socialist Republic of Vietnam
Implementing Agency	Ministry of Industry and Trade (MOIT)
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1. Key development issues and rationale for Bank involvement

The government’s development priorities are set out in its SEDS (2011–2020). The SEDS has a long-term growth strategy focused on structural reforms, environmental sustainability, social equity, and macroeconomic stability to minimize vulnerability to shocks. It identifies three areas of ‘strategic breakthrough’, namely, (a) improved market institutions and administrative reforms for a more competitive and equitable business environment; (b) development of human resources and investment in science and technology; and (c) improved infrastructure. Policy actions and programs to achieve the SEDS’s development goals are further elaborated in two SEDPs (2011–2015 and 2016–2020). The structural reform agenda specified by the SEDP 2011–2015 aims to achieve the first breakthrough and put emphasis on the restructuring of three areas of economic governance, namely, financial system, SOEs, and public investment. On SOEs, the government has prioritized the restructuring of state economic groups and general corporations, acceleration of equitization and divestment of SOEs from nonstrategic sectors, strengthening corporate governance including information disclosure, and improving regulatory environment for SOEs.

The impetus for power sector reform was the need to put the electricity sector on a sustainable footing to meet fast-growing demand driven by industrial expansion and increased household access. Power sector reform began in earnest with the approval of the 2004 Electricity Law. The law provides direction toward developing a competitive electricity market, requiring the unbundling of the power sector by breaking up the Electricity Vietnam (EVN) monopoly. The law also directs electricity tariff reforms to move prices toward cost-reflectiveness to attract private investment, reduce subsidies, and improve demand-side energy efficiency. It mandates the MOIT to govern the energy sector. The Electricity Regulatory Authority of Vietnam (ERAV) was set up in 2005 as an entity under the MOIT, responsible for the issuing of licenses; review of the power system’s expansion plans and financing needs; preparation, issuance, and enforcement of regulations; and review and recommendation of tariffs. In 2006, the PM issued a ‘20-year Roadmap’ for developing a competitive electricity market in three stages, including a competitive generation market, a competitive wholesale market, and a competitive retail market. The roadmap set out a deliberately careful approach to rolling out power sector reform—designing each stage of the process as a pilot to test, improve, followed by full implementation. This approach reflected the high priority given by the government of Vietnam (GoV) to gradual, consensus-driven change in order to avoid shocks to the economy and households.

The Government’s Power Sector Reform Roadmap defines a three-phase approach to implement competition in electricity supply to final consumers. The three phases are as follows:

- **Phase 1 (2005–2014).** Introduction of competition among state-owned generators through establishment of VCGM, in which generators compete to sell to the single buyer EPTC.

- **Phase 2 (2015–2022).** Expansion of competition at the wholesale level allowing generators to sell electricity to multiple wholesale purchasers including PCs and large consumers.
- **Phase 3 (from 2023).** Introduction of retail competition, with gradual phase out of PCs' monopoly in retail supply to small and medium-size consumers.

The Government's power sector restructuring plan envisages the equitization and divestiture of EVN's Gencos, as well as the establishment of an independent SMO.

The Government's electricity tariff reform agenda aims to improve the current tariff regime to promote efficiency in operations, as well as to enhance transparency in systematic application of processes for the determination and adjustment of electricity tariffs.

The Government's demand-side energy efficiency and QoS in electricity supply policy objectives include the implementation of demand side response (DSR) programs and regulations by all PCs, and the overall improvement of quality of service.

2. *Proposed objective(s)*

The four policy areas under the PSRDPO4 represent the core objectives of the next phase of the GoV's power sector reform, and are summarized below:

- **Development of competitive power market.** The Vietnam Competitive Generation Market (VCGM), the first phase of reform agenda in this area, became fully operational in July 2012, with EVN affiliate generation companies (Gencos) and independent power producers (IPPs) competing in a power pool to sell to the single buyer (SB)—the Electricity Power Trading Company (EPTC), a fully owned subsidiary under EVN. In 2013, the government updated the roadmap aiming to start the pilot phase of the WEM in 2015 and for the WEM to be fully operational in 2021.
- **Power sector restructuring.** EVN has fully unbundled and corporatized its three affiliate Gencos, the National Power Transmission Company (NPT), and five distribution companies ("power corporations"; PCs). The next phase of the reform agenda includes the equitization/privatization of the Gencos and the establishment of an independent system and market operator (SMO). NPT will remain under full public ownership, but up to 30 percent private sector participation in the PCs is allowed.
- **Electricity tariff reform.** The electricity tariff reform agenda started in 2009, and at present, the ERAV has established regulations that allow for market-based mechanisms to set full cost recovery generation, transmission and distribution tariffs, as well as to annually adjust regulated prices to reflect changes in uncontrollable costs (fuel prices, exchange rate, and so on). Vulnerable and poor electricity consumers are protected through an increasing block tariff (IBT) system with a subsidized lifeline block. Further developments are needed to consolidate the tariff reform and ensure its sustained application, by improving the procedures for setting average level of electricity tariffs allowing recovery of total costs of efficient service provision and their effective systematic application.
- **Demand-side energy efficiency and quality of service (QoS).** The Vietnam Energy Efficiency Program, approved in 2006, has created a comprehensive set of government-led activities to improve demand-side energy efficiency and conservation. In order to promote efficient use of electricity, the GoV has introduced time of use electricity tariffs for medium to large consumers and also developed an energy efficiency standard and labeling roadmap. Demand-side energy efficiency reform objectives in the power sector include the development and implementation of a roadmap comprising all PCs. To improve quality of electricity services provided to electricity consumers, GoV will require PCs to incorporate state-of-art management information systems to support efficient, transparent and accountable development of operations of PCs in key business, and provide real-time access to the records

of those systems to ERAV and other stakeholders. These arrangements will enable systematic monitoring of parameters characterizing electricity supply and customer service.

3. Preliminary description

The PSRDPO 4 will support four policy areas with distinctive overall objectives set out below.

Policy Area A: Development of Competitive Power Market

Actions in the first policy area aim to contribute to the implementation of a competitive power market in Vietnam. Two overarching objectives are expected to be achieved, namely, (a) implementation of the full VWEM, and (b) development of conceptual design and implementation of a mechanism to ensure long-term adequate electricity supply.

Policy Area B: Power Sector Restructuring

Actions in the second policy area aim to contribute to the implementation of a structure for the power sector that supports the development of a competitive WEM. Two overarching objectives expected to be achieved are: (a) definition and implementation of a suitable power sector restructuring plan; and (b) equitization of EVN's generation assets.

Policy Area C: Electricity Tariff Reform

Actions in the third policy area aim to further improve the power tariff regime and the transparency in its effective systematic application. Two overarching objectives are expected to be achieved, namely: (a) setting incentives for efficient performance and improving price signals in electricity tariff regulations; and (b) designing procedures to enhance transparency and predictability of processes for determination of electricity prices.

Policy Area D: Improving DSR and QoS in Electricity Supply

Actions in the fourth policy area aim to contribute to the development of demand-side energy efficiency and improved QoS in electricity supply to consumers. Two overarching objectives are expected to be achieved: (a) implementation of DSR programs for PCs; and (b) systematic monitoring of quality of electricity services and enforcement of applicable regulations.

4. Environment Aspects

The implementation of the programmatic policy operation series is not likely to have significant impacts on Vietnam's environment, forests, or other natural resources. The areas of policy intervention and associated environmental impacts are described in more detail below.

Development of a Competitive Power Market: Creating competition wherever possible in a sector historically developed under monopolistic arrangements is good for the economic welfare and development of a country. Competition promotes higher efficiency, lower electricity supply costs and better quality of service. The overall objective of an efficient and effective power sector is to provide reliable, affordable and sustainable energy to people and support economic growth and development. Introducing competition brings in co-benefits relating to lower pollution as well as reduced net GHG emissions through operational and efficiency gains, when compared to non-competitive markets. Specifically on coal, in a competitive power market, coal fired plants which are efficient will benefit and run more frequently; inefficient (and often also the higher polluting ones) will be shut down and exit the market.

Also, 70% of future coal generation in Vietnam will come from expensive imported high quality coal able to be burnt in critical and supercritical thermal plants. This expensive resource will compete with domestic gas, imported hydro and low quality/low efficiency domestic coal. In the longer run, a competitive power market and expensive imported coal will contribute to making renewable energy such as solar PV and wind, domestic gas, EE investments, imported hydro

become much more cost competitive over time; thus having a positive impact on pollution reduction and future GHG reductions in Vietnam.

Power Sector Restructuring: A key component of the power sector reform agenda is to equitize and divest EVN's generation assets to create multiple generators and a level playing field for competition in power generation, whose costs account for the lion share of end user tariffs. The Gencos, which hold both hydropower and thermal assets, will benefit from the equitization/divestitures as capital and expertise will come in to run the generation business more efficiently. From an environmental perspective, Gencos currently run old, inefficient, and more polluting, coal fired power generation units which urgently need upgrade and rehabilitation works to improve their reliability and efficiency. Implementation of these works brought about through the power sector restructuring will imply lowered pollution levels and reduced net GHG emissions.

Electricity Tariff Reform: Cost reflective tariff levels and elimination of subsidies to consumers able to pay cost reflective rates will provide economic signals to reduce consumption and for the efficient use of electricity (e.g. energy efficiency investments), leading to lower pollution and emissions and higher energy savings.

Demand Side Energy Efficiency and Quality of Service: Demand side energy efficiency measures by PCs promote lower peak demand, thereby reducing higher peak transmission and distribution losses and use of less efficient generation. Demand response programs and performance based tariff setting of PCs promote reduction of distribution network losses and lower energy consumption.

5. *Tentative financing*

Source: IBRD

	200(\$m.)
Total	200

6. *Contact point*

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