CASE STUDY

POWER SECTOR REFORM IN VIETNAM

Implemented by: Energy Alliance

Hanoi

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**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFTA</td>
<td>ASEAN Free Trade Agreement</td>
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<tr>
<td>BOT</td>
<td>Build – Operate – Transfer</td>
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<tr>
<td>BOO</td>
<td>Build – Own – Operate</td>
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<td>CPI</td>
<td>Consumer Price Index</td>
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<td>ERAV</td>
<td>Electricity Regulatory Authority of Vietnam</td>
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<td>EVN</td>
<td>Electricity Vietnam Group</td>
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<td>GENCOs</td>
<td>Power Generation Corporations</td>
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<td>GreenID</td>
<td>Green Innovation and Development Centre</td>
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<tr>
<td>IEA</td>
<td>International Energy Agency</td>
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<td>IPP</td>
<td>Independent power producer</td>
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<td>MOF</td>
<td>Ministry of Finance</td>
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<tr>
<td>MOIT</td>
<td>Ministry of Industry and Trade</td>
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<tr>
<td>MPI</td>
<td>Ministry of Planning and Investment</td>
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<tr>
<td>NA</td>
<td>National Assembly of Vietnam</td>
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<td>PDP</td>
<td>Power Development Plan</td>
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<tr>
<td>PPA</td>
<td>Power Purchase Agreement</td>
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<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
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<tr>
<td>UNDP</td>
<td>United Nation Development Program</td>
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<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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<tr>
<td>Vinacomin</td>
<td>Vietnam National Coal – Mineral Industries Holding Corporation Limited</td>
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1. INTRODUCTION

According to the International Energy Agency (IEA) fossil fuel consumption subsidies amounted to an estimated USD 2.93 billion (equivalent to 2.83% of GDP) in Viet Nam in 2010\(^1\). Subsidies have serious fiscal, economic and environmental ramifications, encourage inefficiencies and represent an obstacle towards the expansion of renewable energy sources. Reducing or eliminating fossil fuel subsidies would liberate scarce financial resources that could be redirected to fund other national priorities including the implementation of climate change adaptation, and modernization of production technology, transport and buildings with potentially less pollution and greenhouse gas emissions. Such a policy change could also represent an important contribution to Viet Nam's move towards a more competitive and greener growth model.

As fossil fuel subsidies are regressive, the impact on the poor is considered to be limited if properly mitigated through targeted interventions. While fossil fuel subsidies are often considered to be in the interests of poorer populations, they typically benefit more medium to high-income households or lead to diversion. According to the IMF, on average, over 80 percent of fuel subsidies benefit the wealthiest 60 percent of the population\(^2\).

The Government has already embarked on modest steps towards reform. The Law on Electricity that was passed by the National Assembly (NA) in 2004 started the process of developing an electricity market in Vietnam. Prime Ministerial Decision 21 of 2009 initiated the Government’s electricity tariff reform, which aims to move towards full recovery of costs and market-based pricing. The Government is also gradually removing price caps on petroleum products and is looking for other policy instruments to cope with global price volatility, notably a fund from a small surcharge on fuels that is used to stabilize domestic prices at times of sudden global price hikes. With global economic recovery a medium to long-term increase in global prices for petrol, diesel and kerosene is expected, whilst domestic supply will fall short of increasing domestic demand. Without phasing-out regulated prices there is a risk of very substantial indirect subsidies.

While market-based pricing is an important step, the removal of subsidies is far more comprehensive and complex. However, from fiscal and energy efficiency perspective the full removal of subsidies would have a much greater impact. Initial discussions with policy makers suggest that there is support for more comprehensive, far reaching reform. The main concern at this stage seems to be the fear of inflationary pressures and concerns about social impacts.

In 2011, UNDP commissioned three research studies examining fossil fuel pricing policies and the potential economic, distributional and environmental impact of reducing subsidies and introducing environmental taxation on fossil fuels in Viet Nam, which led to a policy discussion paper on fossil fuel fiscal policies (phase I)\(^3\). UNDP is now embarking on phase II, which builds on the work undertaken during phase I. The objective of phase II is to develop and agree a

\(^1\) UNDP (2012)


\(^3\) UNDP (2012)
roadmap with key policy makers in Viet Nam on fiscal reforms in the energy markets. The roadmap will highlight progress to date, contextualize fossil fuel fiscal issues and identify political economy and other challenges to reform. This roadmap will complement the roadmap of reform for the power sector and ongoing efforts to move towards commercial and stable prices for refined petroleum products. As Viet Nam has been facing serious macroeconomic instability, a rise in fossil fuel prices will pose additional challenges including high inflation and its impact on the poor and vulnerable and therefore requires careful timing and sequencing, and putting in place complementary policies to mitigate adverse effects.

Under the framework of phase II, UNDP commissioned a case study of the power sector reform process in Vietnam. The Energy Alliance of non-state actors has been engaged to conduct the case study led by the Green Innovation and Development Centre (GreenID). The case study will focus on the following research questions

- What is the power sector reform in Vietnam now? How is it being conducted?
- What are driving forces for the reform?
- What are successes and achievements?
- What are difficulties and obstacles?
- Lessons learnt so far and how are they are used to inform the reform process in the future?
- What have been the reactions of various stakeholders to the reform process?

The team conducted a literature review; followed by group discussions and consultation with experts.

One of the main purposes of the case study is to draw general lessons for reform efforts in other parts of the energy sector in Vietnam and for other governments which may consider a similar reform. It will present the economic and industry context of the reform before describing and analyzing key reform steps, roadmap and progress. It will then analyze achievements and obstacles, “winners and losers” and reactions to the reform. A review of media coverage and government communications about the reform follows. The latest developments of several key electricity-related issues are described in the ongoing reform chapter. The conclusion suggests some general lessons drawn from the reform so far, which base on our alliance judgements of the authors rather than presenting opinions or suggestions of UNDP.

2. LOCAL CONTEXT

Until the late 1980s, electricity was a luxury to the majority of the Vietnamese population, particularly in rural areas. It was mainly used for lighting because of short supply and availability of only a few electrical equipments. In 1985, the annual electricity consumption was 84 kWh/person.

Energy Alliance is a cooperation between Vietnamese and international NGOs working to promote sustainable energy policies in Vietnam and the Mekong region. Founding members of Energy Alliance include GreenID, CEWAREC, SSNC, SE and WWF Vietnam.

GreenID is a non-profit organization established in 2011 under Vietnam Union of Science and Technology Associations (VUSTA)
The electricity industry was organized in a vertical order as offices under the Ministry of Electricity in the 1980s, and the Ministry of Energy in the 1990s. There were no non-State investors. Electricity was only produced by around two dozen State-owned coal-fired and hydro power plants and distributed by electricity administrations. The national North – South 500kV transmission grid only started operation in 1994, before that time, the transmission took place through regional 220kV grids.

The electricity price was regulated by the Government with heavy subsidies for inputs, mostly coal, and for various consumer groups. The price was not set in order to recover investments and making profits for the State – the only investor in the sector - but was a tool for social welfare and to support industries and consumers. Electricity administrations acted both as business entities selling electricity to consumers and as authority governing the sector. In general, this model of the State being responsible for everything was common in Vietnam’s “subsidy economy”.

Initial elements and ideas for the on-going reform in the electricity sector emerged after the launch of DoiMoi (Renovation) in 1986. This chapter will present the context of the electricity reform with three key issues, including State-owned enterprise (SOE) reform, pressures of meeting soaring electricity demand and support from international organizations. The chapter analyses the direct influence of the context on decision makers in starting the electricity reform.

2.1 DoiMoi& SOE reform

The reform of the electricity sector in Vietnam started when the Vietnam Communist Party and the Vietnamese Government were introducing DoiMoi (Renovation) to develop a market economy and further open doors for international economic integration. One of the core components of DoiMoi is the reform of State-owned enterprises (SOEs) which have been holding the monopoly position in all major industries, and more general, the overall role of the State sector in the economy. The Party recognized that to realize its high economic growth targets, the economy needed more non-State actors, particularly investors.

“...mobilizing all resources at maximum level, creating a new motivation for production and business development of all economic sectors with different forms of ownership.”(Vietnam Communist Party 2001)

That means state monopolies must be gradually reduced to facilitate investments and businesses of non-State sectors. Those reform ideas were further invigorated by Vietnam’s international integration commitments6 and national laws, particularly the Enterprise Law (2005), pushing SOEs to transform and operate as per enterprise type. Moreover, big SOEs have to be audited by the State Audit. Although these audits do not fully conform to international standards, which means that lots of debts are not reported, this is progress compared to the past when SOEs’ operation were less systematically checked.

6 Including Vietnam –U.S Bilateral Trade Agreement, AFTA fulfilment and WTO accession
Electricity of Vietnam (EVN) was established as a State-owned Corporation combining electricity offices which had previously belonged to the Ministry of Energy in 1994. It was then the only enterprise in the electricity sector and was also responsible for governance of the sector. As part of the SOE reform, EVN also has to gradually make its organization and operation more transparent and conform to regulations in the Enterprise Law (effective from 2005).

### 2.2 Pressures of meeting soaring demand

The initiative for reform in the electricity sector also comes from pressures of meeting soaring power demand of the growing economy. The economy has experienced an average annual GDP growth rate of 6% - 7% since the middle of 1990s, and some years over 8%. Electricity consumption growth outpaced and is also forecasted to outpace economic growth, at around 13% - 15% per year. This is especially because of the proliferation of industries and consumption. The 5th National Master Plan for Power Development in 2001 estimated that Vietnam’s electricity consumption in 2005 would double that in the year 2000 to reach 50 billion kWh and 80 billion kWh in 2010 (Prime Minister 2001).

The Party determined that “electricity must be one step ahead, meeting demands of socio-economic development, ensuring national energy security” (Vietnam Communist Party 2001). That means massive investment had to be channelled into building new power plants and grids to meet the soaring demand. EVN estimated that the sector would need an average investment of USD2.78 billion each year in the period of 2001 – 2010 (EVN 2004). The 5th Master Plan already incorporated the idea of encouraging non-State investments in power works in the form of BOT, IPP and joint ventures (Prime Minister 2001).

The Party and the Government knew that to attract non-State investments in the electricity sector, many conditions had to be put in place to build confidence of investors in the feasibility of profit making opportunities and sustainability. There must be a law regulating the sector. Governance of the sector had to be removed from EVN and be handled by a ministerial or independent body. Electricity prices should be gradually reformed with a clear roadmap to reach

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By the end of 2000, total generation capacity in Vietnam was 6,234MW, including 5,690MW managed by EVN (EVN 2004).
a satisfactory level for private investments. Mechanisms for investment and operation in the sector had to become transparent. As the sector grows, expands and incorporates non-State actors, it becomes both impossible and unjustifiable for the State budget to continue heavy subsidies for the sector and electricity prices, and subsidies should be reduced with a clear roadmap. All of those requirements were key factors for starting power sector reform.

### 2.3 Roles of international organizations

In implementing DoiMoi, the Government has actively asked for support from international organizations. The electricity sector reform is also supported internationally. International organizations have been a significant force pushing and supporting the Party and the Government to reform the electricity sector. Donors have been supporting the electricity reform in Vietnam both in financial and technical assistance. The key donors include the World Bank and Asian Development Bank (ADB).

The World Bank has funded two Power Sector Reform Development Policy Operation Projects with a combined budget of USD511.8 million since 2010\(^8\). The key objectives of the projects include supporting the Government in developing a competitive power market, restructuring power sector, reforming electricity tariff, and improving demand side energy efficiency. The projects have provided the Vietnamese Government with supportive funding and technical assistance to design and conduct the reform.

ADB has provided technical assistance to State-owned electricity entities directly related to the reform objectives, particularly the National Transmission Corporation and EVN. In 2005, ADB funded a project to provide technical assistance to the Government in designing the first phase of the electricity market and establishing the market rules and institutions needed for running the market\(^9\).

Donor support has been important for the Government to conduct and progress the reform. They have not only brought about supportive funding but also international experience and expertise for designing and conducting the reform. Their opinions are considered by the Vietnamese Government in its reform decisions.

### 3. STEPS, ROADMAP & PROGRESS

This chapter presents key steps in implementing the reform, including Electricity Law, Competitive Electricity Market Development Roadmap, and Government decisions in reforming electricity prices and organizational restructuring in the electricity sector. Each section includes descriptions on how the decisions are made and analyses on how they have change the sector.

\(^8\)http://www.worldbank.org/en/country/vietnam/projects

3.1 Electricity Law

Electricity Law started the sector reform in 2004 with the direction of developing the electricity sector with market principles. It regulates fundamental rights and responsibilities of actors in the sector and states directions of restructuring the sector and EVN, diversification of investment in the sector, price reform and reducing and refining the State subsidy for the sector and the direction of building a competitive electricity market. It sets the highest legal framework for operation, business and investment in the sector, which is one of the key conditions needed for business people’s confidence in considering their investments in the sector.

The Law was approved by the NA in December 2004 and became effective from January 2005. It was drafted by the Government, in which Ministry of Industry was the key drafting body and other ministries and social organizations contributed their opinions. The NA Standing Committee was the key reviewing and examining body of the draft law before it was presented to the NA for voting. The law was voted for approval by 76.36% NA deputies on November 10, 2004 (HaNoiMoi Online 2004, November 10).

One important point of the Law is that the authority governing the sector is the Ministry of Industry (now the Ministry of Industry and Trade, MOIT). Electricity regulating body is an office under MOIT. Decisions on electricity price adjustment must be drafted by MOIT and approved by the Prime Minister. Consequently, EVN’s role is reduced to a State owned enterprise in the sector, although it takes time for its monopoly position to be eliminated.

Issued by Prime Minister Phan Van Khai just before the Electricity Law was approved, Decision 176/2004/QD-TTg stated more specific ideas of the electricity reform.

“To step by step form a domestic competitive electricity market, diversify modes of electricity investment and trading, encourage various economic sectors to participate therein and not change State monopoly into enterprise monopoly. The State shall only hold monopoly in electricity transmission as well as in construction and operation of large hydroelectric power plants and nuclear power plants. To take initiative in linking electric grids as well as in selling and purchasing electricity with regional countries.

To set electricity prices for the objectives of promoting investment for development of the electricity industry and raising the competitiveness of electricity prices as compared with regional countries, especially the prices of electricity for production, separating electricity prices from social policies. To work out appropriate policies on electricity use in rural and mountainous areas.”(Prime Minister 2004 p2)

The Decision, approving the Power Sector Development Plan for 2004-2010 period, also stated the direction of calling for non-State investments in building power plants in various forms, including BOT, BOO and joint ventures and buying shares of existing power plants which would be equitized.
The Strategy was drafted by the Ministry of Industry with contributions from other ministries in 2002 – 2004. The Politburo, the highest office of the Party, considered the draft and gave its opinions in 2003 before it was revised and approved by the Prime Minister on October 5, 2004.

The Law and the Decision helped build fundamental conditions for market actors in considering their investment in the sector. The number of non-EVN investors in building power plants has increased significantly since then. After 7 years of implementation, the Law is being considered for revisions by the NA.

### 3.2 Competitive Electricity Market Development Roadmap

Less than 2 years after the Law became effective, the Prime Minister issued Decision 26/2006/QD-TTg regulating a specific roadmap to develop Vietnam’s competitive electricity market. The market is planned to be formed and developed through three levels:

- **Phase 1 (2005-2014):** Establishment of a competitive electricity generation market. This will also address the conflict of interests associated with cross-ownership.

Power distribution companies and provincial power companies are to be reorganized as independent State-owned companies. Big power plants are to be changed into State-owned independent power producers (IPPs) while smaller power plants are to be equitized.

EVN is the Single Buyer in the competitive electricity generation market. EVN’s power plants and non-EVN IPPs can participate in the competitive electricity generation market. Electricity Regulatory Authority of Vietnam (ERAV) will regulate the ratios of electricity outputs of IPPs to be sold as per auctioned price on the competitive market and as per the fixed price in their power purchasing agreements (PPA) signed with EVN.

- **Phase 2 (2015-2022):** The competitive electricity wholesale market.

When preconditions for the competitive electricity wholesale market are in place, like having sufficient backup generation capacity and effective software systems for managing wholesale transactions, the market is to be launched.

New electricity supply companies can be established to increase competition in the wholesale market. Transmission companies are to be merged to the sole National Transmission Company belonging to EVN. Distribution companies belonging to EVN are to be changed into State-owned or equitized independent distribution companies. Distribution companies will directly buy electricity from electricity generation companies and power plants and sell to distribution units and big customers in the competitive markets.

- **Phase 3 (after 2022):** The competitive electricity retail market.

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Electricity retail function is to be separated from distribution network management function of distribution companies. Organizations and individuals are to be permitted to establish electricity retail units to increase competition in the electricity retail markets. Retail units are to compete in purchasing electricity from electricity generation units or the electricity market and selling to customers. Electricity consumers can select electricity sellers or buy electricity directly from the electricity market. (Prime Minister 2006 p2)

The roadmap states more specifically how the market is to be developed in a specific timeframe. It helps stakeholders in the sector in planning their operation as well as participating and supervising the market reform.

The roadmap was drafted by the MOIT with contributions from EVN and other ministries before it was approved by the Prime Minister. One Deputy Prime Minister was specifically assigned to direct and supervise the roadmap implementation. He had several meetings with a board of representatives from the MOIT, Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), Office of the Government (OOG), EVN, the State-owned PetroVietnam Oil and Gas Group, and Vietnam National Coal – Mineral Industries Holding Corporation Limited (Vinacomin), which have become big State-owned investors in power plant projects, to discuss roadmap implementation and emerging issues and the Deputy Prime Minister gave instructions for further progress.

A competitive power generation market was officially launched on July 1, 2012, 3 years late when compared to the roadmap. EVN is the Single Buyer in the market while power plants compete to offer prices for their electricity on a daily basis. Three Power Generation Corporations (GENCOs) were organized on the basis of reforming three generation companies under EVN. They are still 100% owned by EVN instead of being independent as planned in the roadmap.

From July 1, 2012, 29 out of 83 power plants with combined capacity of 9,035MW or 38.2% of the total system capacity participate in daily auctioning price on the generation market. Of the 29 plants, EVN owned 18 plants with total capacity of 8,073 MW (VietnamNet 2012 July 10). Among the 29 power plants, only 5% of their electricity output could be sold through price auctioning. The remaining 95% of their output is still sold at the prices fixed in their PPA signed with EVN.

Figure 1- The competitive electricity generation market Phase 1 (2005-2014) - Roadmap & Actual Progress

Source: Figure drawn up by the Energy Alliance

The 3-year delay in the launch of the electricity generation market was caused by many obstacles. These included developing and issuing new regulations on power prices on the competitive generation market, converting PPA between EVN and power plants and generation companies to include an auctioned price scheme besides fixed price scheme and developing IT infrastructure for the operation and supervision of the competitive generation market (Vietnam Plus May 9, 2012). These processes were lengthy mainly due to various stakeholder interests being at play that had to be negotiated and settled before decisions could be made.

It is questionable whether the Phase 2 - the competitive electricity wholesale market – could be launched as per the roadmap timeframe because many conditions are not in place yet and there are only 2 years left. These include having sufficient backup generation capacity, effective IT infrastructure for the wholesale market operation and supervision and a clear ownership model for the national system operation entity and the electricity market transaction entity, which are now played by the National Dispatch Center (A0) under EVN.

3.3 Price reform

The key idea is to make the price reflect real costs and changes in upstream and downstream markets and gradually reduce the State subsidies to electricity costs and prices.

In 2009, Prime Minister Nguyen Tan Dung issued Decision 21/2009/QD-TTg initiating electricity price reform. The price was planned to move towards cost recovery, increasing average electricity prices and transparency in price setting. The Decision also regulated the phase out of cross subsidies in prices for different consumer groups.

The 7th National Power Development Plan (PDP), approved by the Prime Minister in 2011, sets a specific target of increasing the electricity price to “meet the long-run marginal cost of the
electricity system by 2020, equal 8-9 cents per kWh\(^{12}\) The 7\(^{\text{th}}\)PDP was drafted by the Institute of Energy under MOIT. EVN and other ministries contributed opinions before it was approved by the Prime Minister.

Following the PDP7 approval, the Prime Minister issued Decision 24/2011/QD-TTg regulating electricity sale price adjustments on market scheme. The sale prices would be adjusted within a fiscal year as per changes in fundamental input indexes, including fuel price, foreign exchange rate and the structure of electricity generation outputs. The minimum time between two consecutive adjustments is three months. The State can use the Electricity Price Stabilization Fund and other methods to intervene with the price. However, there is limited information about the fund’s actual scale and operation\(^{13}\).MOIT then issued Circular 31/2011/TT-BCT regulating electricity price adjustment as per fundamental inputs, including foreign exchange rate, electricity generation structure and fuel price. For the first time, electricity price adjustment calculations are specifically regulated and openly announced. This is one step toward enhancing transparency in electricity prices.

Two other Prime Ministerial Decisions were issued in 2011 to regulate price caps on electricity for sale to households and industries and allow EVN to increase electricity prices by 20% per year without seeking government approval and increase prices up to 5% on a quarterly basis without approval from the MOF (UNDP, 2012, p.17). Those decisions gave EVN more flexibility in deciding electricity prices to better reflect its costs and profits.

At the same time, the Prime Minister issued Decision 268/QD-TTg regulating price subsidy for low-income households. This direct subsidy charges poor and low-income households only VND993 (4.7 cents) per kWh for their first 50kWh each month, which is 20% lower than the charge for non-poor households in 2011 and 22.6% lower in 2012. The Decision is one step toward separating an expense for social welfare from electricity price.

\(^{12}\) The long-run marginal cost of electricity system in Vietnam in 2011 was 9.5 cents per kWh (Nguyen, Q. K. 2012 p254)

\(^{13}\) “Source for the Electricity Price Stabilization Fund is to be extracted from electricity price and calculated into input costs for electricity generation and trade” (Prime Minister’s Decision 24/2011/QD-TTg issued on April 15, 2012)

“The Electricity Price Stabilization Fund is to contributed when the average electricity sale price difference is less than 0 (ΔG <0) and costs for electricity generation and trade have not totally calculated into the electricity price; EVN will extract fund for, manage and use the Electricity Price Stabilization Fund as per regulated in an inter-ministerial instruction of MoF and MOIT” (MOIT’s Circular 31/2011/TT-BCT issued on August 19, 2011). The mentioned ‘inter-ministerial instruction of MoF and MOIT’ for the fund has not yet been issued.

MoF is drafting a governmental decree regulating the implementation of the Law on Price, effective from January 1, 2013. In which, electricity is one of commodities whose prices are stabilized by the Government (VIB Online 2012 October 16).

There is not yet more detailed official information on the Fund’s source, scale, management and operation.
Table 3 - Vietnam Incremental Block Tariff Structure 2009 – 2011

<table>
<thead>
<tr>
<th>Block (kWh)</th>
<th>2008</th>
<th>2009</th>
<th>% of average</th>
<th>2010</th>
<th>% of average</th>
<th>2011</th>
<th>% of average</th>
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<tbody>
<tr>
<td></td>
<td>VND/kWh</td>
<td>VND/kWh</td>
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<td>VND/kWh</td>
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<td>VND/kWh</td>
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<tr>
<td>Lifeline Tariff for Registered and Low-consuming Residential Consumers</td>
<td></td>
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<td></td>
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<tr>
<td>1</td>
<td>50</td>
<td>550</td>
<td>600</td>
<td>600</td>
<td>56.7%</td>
<td>993</td>
<td>80.0%</td>
</tr>
<tr>
<td>IBT for other Residential Consumers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>101</td>
<td>150</td>
<td>1110</td>
<td>1,135</td>
<td>1,214</td>
<td>114.7%</td>
<td>1,304</td>
<td>105.0%</td>
</tr>
<tr>
<td>151</td>
<td>200</td>
<td>1,470</td>
<td>1,495</td>
<td>1,594</td>
<td>150.7%</td>
<td>1,651</td>
<td>132.9%</td>
</tr>
<tr>
<td>201</td>
<td>300</td>
<td>1,600</td>
<td>1,620</td>
<td>1,722</td>
<td>162.8%</td>
<td>1,788</td>
<td>144.0%</td>
</tr>
<tr>
<td>301</td>
<td>400</td>
<td>1,720</td>
<td>1,740</td>
<td>1,844</td>
<td>174.3%</td>
<td>1,912</td>
<td>153.9%</td>
</tr>
<tr>
<td>401</td>
<td>1,780</td>
<td>1,790</td>
<td>188.7%</td>
<td>1,890</td>
<td>178.6%</td>
<td>1,962</td>
<td>158.0%</td>
</tr>
</tbody>
</table>

Source: World Bank 2012 p37

The Prime Minister’s decisions on electricity prices were based on MOIT’s recommendations and opinions from other ministries. Each electricity price adjustment was drafted by MOIT and circulated to other ministries to collect opinions prior to submission to the Prime Minister. In recent years, local media and civil society organizations, like Vietnam Energy Association, are active in discussing the draft price adjustment. However, there is little available evidence on how much the public discussions actually affect the price adjustment decisions.

Within less than 1.5 year since the Decisions were issued, electricity retail prices have increased three times. The average electricity retail price counted in VND increased 27%, from VND1077 per kWh in 2010 to VND1369 per kWh from July 2012 (not including value-added tax). However, the price increase looked less dramatic if the prices were converted into USD at the exchange rates by the time that the prices became effective. Prices converted in USD only increased by 8.3%, from 6 cents per kWh in 2010 to 6.5 cents from July 1, 2012. At the same time, the country experienced high inflation rates of 9.19% in 2010 and 18.58% in 2011. So, the real electricity price actually decreased.

The government still holds strong control over the electricity price, evidenced by Prime Minister and MOIT’s decisions on electricity prices instead of electricity investors’ decisions or EVN as the retailer. Several domestic experts and economists agree with this control and argue that only


15 EVN calculates the average electricity retail price by dividing the total cost of electricity generation of the system to the total electricity output in one year before the new price plan.

16 VND/USD exchange rate on December 31, 2009 was 17,941 (Source: State Bank of Vietnam)

17 VND/USD exchange rate on July 2, 2012 was 20,828 (Source: State Bank of Vietnam)
when there is a really competitive electricity retail market, should the price be decided by the market. For now, when EVN still holds the monopoly position in the electricity industry, the government should continue to regulate the electricity price to navigate social and other goals and prevent price manipulation by the monopoly (VietnamNet 2012 May 28, VnExpress 2012 May 28, Nguoi Lao Dong 2012 June 1).

Table 3 - Average electricity retail prices in 1999 - 2012

<table>
<thead>
<tr>
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<td>Total number of</td>
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<td>44</td>
<td>50</td>
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<td>retail prices</td>
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<tr>
<td>Industry</td>
<td>894</td>
<td>901.2</td>
<td>994.1</td>
<td>1061.2</td>
<td>1117.2</td>
<td>1242.4</td>
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<td>Water Production</td>
<td>870.8</td>
<td>846.2</td>
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<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<td>&amp; Other priority</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Agriculture</td>
<td>639.1</td>
<td>611.6</td>
<td>676.6</td>
<td>722.5</td>
<td>763.3</td>
<td>979.5</td>
<td>1101.5</td>
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<td>Commerce &amp; Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(VND/kWh)</td>
<td>1477.6</td>
<td>1435</td>
<td>1695</td>
<td>1841.6</td>
<td>1936.4</td>
<td>1981.2</td>
<td>2203</td>
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<td>Residential</td>
<td>944.8</td>
<td>1212.7</td>
<td>1371.6</td>
<td>1320.7</td>
<td>1409.7</td>
<td>1550.2</td>
<td>1700.4</td>
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<td>Public lighting,</td>
<td>846.3</td>
<td>860</td>
<td>964.1</td>
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<td>&amp; State offices</td>
<td></td>
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<tr>
<td>(VND/kWh)</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Foreigner</td>
<td>1466.6</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Calculations of author

Table 2 shows that there are different prices for different groups of customers, which means the Government is still including the implementation of its social welfare target in regulating the price. Specifically, the differences between retail electricity prices for State offices, residential households and commercial buildings are significant although the costs for generation and

18 Prices in Table 1 are calculated by the author on the basis of governmental and ministerial documents listed in Source. Calculation method: Average price = Sum of all retail prices in the sector divides by the number of prices in the sector. This method and its results aims to give readers an idea of how many retail electricity prices are being implemented in Vietnam and how much they are on average. Electricity retail prices being really in effect are regulated in the listed documents.
distribution to those customer groups are almost the same. The scheme of cross-subsidy in the electricity retail price remains.

Subsidies for fossil fuel for electricity generation and many operational costs of the sector in electricity prices also remain, although they are now better announced by the Government. The domestic coal price for power plants in 2011 was kept at around USD30 (Circular 05/2011/TT-BCT Annex), and since September 15, 2012, it has been increased by between 28% and 41.93%, while the average Australian coal price was much higher at around USD130 per metric ton in 2011. The Vietnam National Coal – Mineral Industries Holding Corporation Limited (Vinacomin), the State monopoly group in coal mining and trading, stated that it is likely to make a loss of USD900 million in 2012 by selling 13.5 million tons of coal to domestic power plants instead of exporting them (VnExpress 2012, June 9).

“IEA estimates with the ‘price-gap approach’ that (indirect) fossil fuel consumption subsidies in Viet Nam in 2007, 2008, 2009 and 2010 were USD 2.1, 3.56, 1.2 and 2.93 billion respectively, and were allocated especially to electricity, i.e. fluctuating between about 1 and 4 percent of GDP in current USD.” (UNDP 2012 p2)

“The policy overviews demonstrate that electricity prices are still highly regulated, i.e. capped and differentiated for different users, although market reform has been set in motion by the Electricity Law of 2004. Domestic coal prices are set well below world market prices in order to enable cheap electricity production and manufacturing. There are also price ceilings in the refined petroleum markets, and there are various taxes and tax waivers. Direct subsidies are exceptions though they have happened, but most subsidies are indirect, e.g. through bail-outs of state owned enterprises (SOEs) that are loss-making because of price caps.” (UNDP 2012 p16)

Though EVN keeps complaining that it has been making losses by selling electricity at low prices regulated by the Government, it is still unclear how the losses are recorded and dealt with. Sometimes they were claimed to be partly calculated into electricity price increases. Sometimes they were planned to be partly covered by the State-funded Electricity Price Stabilization Fund which is still unclear to be existing or not. Ultimately losses of SOEs are covered by the Government.

The electricity price reform has started but it is still far from realizing the target of reaching market prices. The Government highlights the ‘sensitivity and complexity’ of the sector as the main reason for the roadmap of 17 years to bring the electricity retail price to market level (Vietnam Economic Forum 2012, July 10).

3.4 Institutional reforms

Power sector institutional restructuring has been conducted in parallel with the above mentioned reforms. It includes transferring the State management authority in the sector from EVN to MOIT and restructuring EVN to create competition among its affiliates which are seeds for future competitors in the electricity market.

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19 [http://www.indexmundi.com/commodities/?commodity=coal-australian&months=60](http://www.indexmundi.com/commodities/?commodity=coal-australian&months=60)

20 Circular 05/2011/TT-BTC stated a total expense of VND12,306 billion (USD590 million) of the electricity sector in 2011 have not been counted into electricity price.
In 2005 the Electricity Regulatory Authority of Vietnam (ERAV) was established as an office under the Ministry of Industry (now MOIT). Its main tasks include developing and regulating the electricity market, regulating the electricity price, developing National Power Development Plan (once every 5 years), supervising demand-supply balance of electricity, and licensing and examining power activities. Most of those functions used to be held by EVN. As they were moved to ERAV the EVN is left with business tasks as a service supplier.

In 2010, the Prime Minister issued Document 60/TTg-DMDN agreeing the establishment of 5 regional power holding corporations belonging to EVN, including corporations for the North, the Central Region, the South, Hanoi and Ho Chi Minh City. They represent State-ownership and supervise operations of provincial power companies in their region. They are planned to compete from 2015 in purchasing electricity from power plants to sell to provincial power companies.

In June 2012, three GENCOs were established as holdings on the basis of reorganizing thermal power plant companies of Uong Bi, Can Tho and Phu My and their affiliates. The 3 GENCOs are managing 23 power generation installations (VGPNEWS 2012, June 5). Though EVN holds 100% of the GENCOs’ capital for now, they will need to be equitized, but we donot know when this will happen. They are expected to compete in the competitive power generation market.

Five provincial power companies in Hai Phong, NinhBinh, Hai Duong, Dong Nai and Da Nang have been reformed to operate as State-owned one-member limited liability companies. The Khanh Hoa provincial power company in has been equitized. Although they are operating under the supervision and direction of the regional power holding corporations, they have more independence than other provincial power companies in how to conduct their business. This can also be seen as an experimental step to develop retail power companies which are planned to compete in the electricity retail market after 2022.

The restructured EVN and its corporations and companies have incorporated and adapted many common practices of independent enterprises, including regular financial audits (although by State Auditor, not yet by independent auditors). They are expected to become more transparent. EVN’s monopoly position is better framed and regulated.

However, the power sector restructuring has not yet enabled real competition in the sector. The key barrier is that the national transmission company and competitive market operation body are still in the hands of EVN, which makes non-EVN power plants feel disadvantaged. (See also Annex 2)

The Government has taken a cautious approach in conducting electricity reform. The legal framework and a roadmap were developed before more radical changes in the price and institutions. The progress of implementation so far is slow compared to the initial roadmap. Various subsidies remain in the sector, particularly subsidies for fossil fuel used to electricity generation and cross subsidies in electricity prices.

4. ACHIEVEMENTS & OBSTACLES

Key achievements of the reform so far include separating the State management authority from EVN and having more investors and more electricity production, and the recently established wholesale market. However, obstacles to reform progress remain, which are mainly related to the
monopoly position of EVN and the Government’s strong control and continued involvement in the sector. High inflation makes the Government consider carefully electricity price increases, as they would add to the pressures instead of help fight inflation as is currently the case. This chapter will present the achievements together with obstacles because they are intertwined.

4.1 **Separating State management authority from EVN**

The separation of the State management authority from EVN is an outstanding achievement of the reform so far, which was mainly conducted by the Ministry of Industry (now MOIT) backed by two consecutive Prime Ministers. As mentioned above, management authority in the sector is now in MOIT, particularly ERAV while EVN now operates as an enterprise.

This was achieved despite EVN resistance to losing part of its power. Although its monopoly position still has serious influence in the sector, EVN no longer has the ultimate authority. This has encouraged investments in the sector and is giving consumer groups more power in their relationship with EVN.

However, EVN still holds power on many key issues in the sector, including electricity prices, developing and managing the transmission system and dealing with investors in its position as the Single Buyer in the wholesale market. That causes opposition and questions to its decisions of increasing electricity prices and buying electricity from non-EVN power plants. There are no satisfactory recommendations yet from either EVN or the Government for the problems because they are imbedded in the sector and EVN’s structures and mechanisms which take time to be fully reformed.

4.2 **More investors and more electricity, a market is shaping**

The reform has facilitated and attracted many investors to the sector and quickly increased the total generation capacity in Vietnam. Besides EVN, the 7th PDP in 2011 named 37 domestic and international companies (including those already involved and expected to be) investing in power plant projects until 2020 in various forms including IPP, BOT and joint ventures, compared to zero non-EVN investors in the 5th PDP of 2001.

The total power generating capacity in 2010 reached 19,735 MW compared to 9,989 MW in 2004. Of which, EVN owned 68.2% in 2010, compared to 85% in 2004 (World Bank, 2012, p.56). The presence of many non-EVN power plants is one key condition for the development of a competitive electricity generation market which is only feasible if having more than one player.

Table 4 - On-going BOT Power Plant Projects

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21 For instance, EVN’s decisions in buying or not buying electricity from one power plant in one specific day in a year cannot just base on the auction price. All considerations about losses in transmission (how far the plant is from the most needed area), transmission capacity, operations of hydro power plants which not only work as power plants but also key actors in irrigation and flood management., etc. Or EVN’s decisions in electricity price are not yet absolutely transparent because there are still big expenses in social welfare works being included in the inputs, particularly expenses for building and managing power network to rural and remote areas which must be funded by the State as no investor want to bear the losses in this operation.
<table>
<thead>
<tr>
<th>BOT Power Plant Project</th>
<th>Generation Capacity (MW)</th>
<th>Foreign Investors</th>
<th>Real/Planned Launch (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phu My 2.2</td>
<td>714</td>
<td>EDF (France)</td>
<td>2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sumitomo (Japan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TEPCO (Japan)</td>
<td></td>
</tr>
<tr>
<td>Phu My 3</td>
<td>730</td>
<td>BP (UK)</td>
<td>2004</td>
</tr>
<tr>
<td>Mong Duong 2</td>
<td>1240</td>
<td>AES (US)</td>
<td>2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Posco (South Korea)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CIC (China)</td>
<td></td>
</tr>
<tr>
<td>Hai Duong</td>
<td>1200</td>
<td>Jaks Resources Bhd (Malaysia)</td>
<td>2016</td>
</tr>
<tr>
<td>Duyen Hai 2</td>
<td>1200</td>
<td>JanakasaSdnBhd (Malaysia)</td>
<td>2014</td>
</tr>
<tr>
<td>Vinh Tan 1</td>
<td>1200</td>
<td>Phuong Nam – CSG (China)</td>
<td>??</td>
</tr>
<tr>
<td>Vinh Tan 3</td>
<td>2000</td>
<td>One Energy Venture Limited (Hong Kong)</td>
<td>??</td>
</tr>
<tr>
<td>Vung Ang 2</td>
<td>1200</td>
<td>One Energy Venture Limited (Hong Kong)</td>
<td>2013</td>
</tr>
<tr>
<td>Van Phong 1</td>
<td>1320</td>
<td>Sumitomo (Japan)</td>
<td>2014</td>
</tr>
<tr>
<td>Nam Dinh</td>
<td>2400</td>
<td>Teakwang (South Korea)</td>
<td>2018</td>
</tr>
</tbody>
</table>

Source: Table drawn up by the Energy Alliance

From July 2012, a competitive generation market has started operating in Vietnam, with 29 power plants directly offering electricity wholesale prices and 44 others indirectly participating in the competition. Twenty other power plants are to participate in the market once they start their commercial operation. After one month, EVN reported its total expense in purchasing electricity significantly reduced against prices written in its agreements with power plants (ERAV 2012, July 17).

EVN’s position as the monopoly wholesale buyer and retail seller in the market is one of the key obstacles discouraging investors in this sector. Many non-EVN power plants keep complaining that EVN refused to buy their electricity though the country still suffer from supply shortage or EVN only buys their electricity at very low prices (Thanhnien Online 26 July 2012, and Dien Dan Doanh Nghiep 1 August 2012). They point out that they are in a vulnerable position because EVN still owns the majority of power plants, the National Dispatch Center (A0) which makes purchase decisions in the market, and the national grid network. Another historical disadvantage for non-EVN power plants is the fact that many EVN-owned power plants have finished their investment recovery period, which allows them to offer more competitive prices. Meanwhile, EVN keeps reasoning that it is making big losses as the government regulates retail electricity prices at low level (VTC News, 20 July 2012).

Retail electricity prices are being kept at a low level which remains an obstacle to investors. Several researches have pointed out that the electricity price in Vietnam is lower than the real production and distribution costs (Nguyen, T. 2010, Dapice, D. 2008). Mr Hoang Tien Dung, Director of the Institute of Energy (under MOIT), said in the media that the electricity price must increase 50% - 60% to provide “reasonable profit” to attract investors (Kien Thuc, 2 August 2011).

“The use of price controls and State investment in the electricity sector makes real-cost estimates difficult, but clearly electricity tariffs are below the long run marginal cost of supply, and EVN cannot achieve financial sustainability without increases in tariffs and reform of investment policy. It has been estimated that the price will need to rise to 8-9 USc/KWh to allow the sector to operate on a sustainable financial
In short, a market has been shaping but competition in the market is still limited because of the monopoly position of EVN. More reforms and time are needed for the monopoly to be reduced.

**4.3 Inflation pressure**

One big pressure that the Government has to deal with in progressing the reform, particularly electricity price reform, is the threat of high inflation. The consumption price index (CPI) in Vietnam is directly and indirectly affected by changes in electricity retail price, which accounts for 3% of the price basket for calculating the CPI (Dan Tri 2011 Dec 20). As a key input for many basic products and services, including food production, electricity price increases often trigger increases in other prices, leading to higher CPI. Every 1% of electricity price increase will lead to 0.0246% increase in CPI as direct effect and 0.0492% as an indirect effect, according to a message of Finance Minister Vuong Dinh Hue (Vietbao, 18 January 2012).

**Table 5 - GDP growth and CPI in 2004 - 2011**

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP growth (%)</th>
<th>CPI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>7.69</td>
<td>7.7</td>
</tr>
<tr>
<td>2005</td>
<td>8.4</td>
<td>8.3</td>
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<tr>
<td>2006</td>
<td>8.23</td>
<td>7.5</td>
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<tr>
<td>2007</td>
<td>8.48</td>
<td>8.3</td>
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<tr>
<td>2008</td>
<td>6.23</td>
<td>22.97</td>
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<tr>
<td>2009</td>
<td>5.32</td>
<td>6.88</td>
</tr>
<tr>
<td>2010</td>
<td>6.78</td>
<td>9.19</td>
</tr>
<tr>
<td>2011</td>
<td>5.89</td>
<td>18.58</td>
</tr>
</tbody>
</table>


The inflation pressure makes the Government more careful in choosing the timing and the pace of electricity price increase because high inflation may lead to disorder in the economy and society and the Government may face public opposition. Sometimes, only the lowest price increase option out of several plans proposed by EVN was chosen by the Government, particularly in the current economic crisis, to minimize inflation effects of price increases. Examples are the two latest electricity price increases of 5% in January and July 2012. Though EVN proposed higher options of increasing the price, the Government decided the lowest increase option.\(^22\)

**5. “WINNERS & LOSERS”**

Each stakeholder has benefits and challenges as a result of the reform. The following parts will analyze benefits and pressures of key stakeholders in the reform, including the Government, consumer groups, power investors and EVN.

\(^{22}\) The Minister of MOIT explained to the media that the increase showed EVN’s responsibility spirit to the public in this difficult economic situation (VOV Online 6 January 2012).
5.1 Government

The Government has to gain on several fronts including better electricity security, a better investment environment in the sector, less fiscal burden for the State for investment, and no disorder caused by the reform. Currently the losses of energy SOEs such as EVN must be covered by the Government in one way or another. Reform will reduce losses and hence fiscal pressures.

Figure 2 shows a significant increase in the electricity generation capacity of the country in the 1996 – 2010 period. However, electricity supply is just about equal to the demand in 2011 – 2012, due to the current economic downturn and reduction in business activities. There is still some way to go before the national electricity security is ensured. Figure 4 shows the diversity of investors in electricity production as a result of better investment environment in the sector and also an evidence of shared burden in investment in building electricity generation capacity.

Figure 2 - Electricity generation capacity in 1996 – 2010 period

Source: EVN

Figure 3 - Generation sources by key investors in 2004

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Figure 4 - Generation sources by key investors in 2010

The key complaint among the public, from key investors and the national Assembly (NA) is that the Government is not progressing the reform fast enough. They focus on attacking the monopoly of EVN and the non-transparency in calculating the electricity price. Many suggest that the Government should accelerate the reform. The NA has supported the reform from the beginning by approving the Electricity Law and it kept pushing the reform progress. Many NA deputies expressed their eagerness to push for progress of electricity reform at the 3rd Session of the 13th NA in May-June 2012. They said that the roadmap to build a competitive retail electricity market and to reduce EVN’s monopoly in retail should be cut shorter than the official goal of

2012 (Vietnam Economic Forum 2012, June 15). At the same time, the Vietnam Energy Association, a civil society organization gathering experts and representatives of energy enterprises, also submitted to the Party and Government a suggestion of cutting the roadmap to 5 years instead of 17 years. Although it is still unclear how much those opinions may affect reform progress, they show a consensus to support for the reform.

However, the Government seems to be firm in its cautious approach and considerations of each reform step. Some key issues include ensuring national electricity security when starting the competitive electricity market and the Government’s intention to protect the poor and those living in rural and disadvantaged areas. Discussions on whether these considerations are reasonable and how much of these considerations are enough for the reform progress while maintaining socio-economic stability are still going on without specific conclusions.

### 5.2 Consumer Groups

Consumer groups benefit from having their growing demand for electricity better satisfied by the significant increase of the total power generation capacity facilitated by the reform. Vietnam’s electricity consumption in 2010 was 85.6 billion kWh compared to 39.7 billion kWh in 2004 (World Bank 2012, p59). On average, a Vietnamese person’s electricity consumption was 965 kWh in 2010, up 97.8% against that in 2004.

However, power price increase is one key subject for complaints from consumer groups. Many complaints relate to EVN's investments in non-core business and the economy is in a difficult time. One main question is how much of EVN's losses are due to regulated prices or how much concerns false claims to cover losses in other business.

#### Residential Users:

Urban residences and a big part of rural residences prefer electricity price increase to blackouts (of course, no blackout while prices stay the same or decrease is considered even better). Getting used to more electrical equipment, people find it harder and harder to live and work during blackouts (VnEconomy 2010, June 17).

Low-income groups are most likely affected by the price increases, but indirectly rather than directly. As the Government regulated a special electricity price for low-income households and provides them with an explicit subsidy of VND30,000 (USD1.44) per household per month for their electricity bills, direct effect of electricity price increases on them is likely to be rather modest and bearable. The main and bigger effects may come from the increases of other prices, like foods, transport and housing, which usually accompany electricity price increases. There is no social protection provision yet to support the poorest in case of price rises.

#### Industries:

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26 Vietnam’s population was 88.7 million in 2010 and 81.4 in 2004. (Statistics from Vietnam General Office for Population and Family Planning http://www.gopfp.gov.vn/so-lieu;jsessionid=A09157BFDAD0400779329CC35F503282)
Many industrial units have complained about continuous power cuts which affect their businesses. Their complaints about electricity price increase are rather weak, noting that the electricity retail price for industrial sector counted in USD did not significantly change in the 2011 – 2012 period, with only 0.6%

27 One study in 2012 measured that even if the electricity price increased to the long run marginal cost of 9.5 cents, the total impacts on industrial products would not be significant. The top five industries that would experience the highest price increase include water processing (11.15%), gas (7.36%), paper & paper products (4.82%), chemical & chemical products (4.73%) and entertainment & sport (4.3%) (Nguyen, Q. K. 2012; p263). And if having to choose between electricity price increase and blackouts, industries definitely choose the former because they can mitigate it by increasing product prices while damages by power cuts may be large and incurable (VietnamNet 2005, June 16, TienPhong 2005, May 24).

Steel and cement producers complain about the price increase in the local media and other forums (KinhTe Do Thi 2012, July 16, ThoiBaoKinhTeSaiGon 2010, February 25). However, the above-mentioned study showed that if electricity price increased to 9.5 cents per kWh, domestic cement price would increase by only 2.05% and basic metals & fabricate metal products 2.91% (Nguyen, Q. K. 2012 p262). Vietnam's steel and cement producers are highly energy inefficient and there is a high production capacity and serious over-supply against domestic consumption. 28 The domestic economic crisis in the period of 2011 – 2012 also led to decreased steel and cement consumptions and prices 29. There was no increase in the real electricity price in the past 2 years, yet increases in electricity price prompted industries to lobby the Government to continue or increase various support measures.

**Table 6 - Electricity costs of steel billet and cement production in Vietnam in 2011 - 2012**

<table>
<thead>
<tr>
<th></th>
<th>Steel billet</th>
<th>Cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity consumption for producing one ton of product (kWh) 30</td>
<td>600</td>
<td>44</td>
</tr>
<tr>
<td>Product sale price in 2011 (USD/ton)</td>
<td>584 31 (Jan 10, 2011)</td>
<td>71.8 (Aug 2011) 32</td>
</tr>
<tr>
<td>Average electricity cost for producing one ton of product in 2011 (USD)</td>
<td>39.36</td>
<td>2.88</td>
</tr>
</tbody>
</table>

---

27 Specifically, the average electricity retail price for industry in 2011 was VND1242.4, equal 6.56 cents (VND/USD exchange rate on January 10, 2011 was 18,832, according to State Bank of Vietnam). In 2012, the figures are VND1388 per kWh or 6.6 cents (VND/USD exchange rate on July 1, 2012 was 20,828, according to State Bank of Vietnam). So, counted in USD, the electricity retail price for electricity increased on 0.6% in the period.


29 Most steel and cement factories have been built in the 1996 – 2006 period to take advantage of many investment incentives of the central and provincial governments. Of which, cheap electricity was one factor for the investment considerations.

30 Thoi Bao Kinh Te Sai Gon 2010, February 25

31 http://www.lme.com/steel/steel_price_graphs.asp

32 http://www.vnca.org.vn/vn/?page=news&id=117
| Percentage of electricity cost against product sale price in 2011 (%) | 6.7 | 4 |
| Product sale price in 2012 (USD/ton) | 350 (Sep 25, 2012) | 69.6 (Jun 2012) |
| Average electricity cost for producing one ton of product in 2012 (USD) | 39.6 | 2.9 |
| Percentage of electricity cost against product sale price in 2012 | 11.3 | 4.1 |
| Electricity cost increase in 2011 – 2012 period (USD) | 0.24 (0.6%) | 0.024 (0.83%) |
| Sale price change in 2011 – 2012 period (USD) | -234 (-40%) | -2.2 (-3.06%) |

Source: Table drawn up by Energy Alliance from various source as per footnoted

Electricity price increase is an important part, or effect of the reform. This is not favoured by consumers, but residential users and industries prefer better supply and might be ready to make extra payments for that. Although the recent electricity price increases have been loudly discussed by local media and has been opposed, the overall sentiment in society is better than during the period of constant power cuts in 2005, 2008 and 2009.

Consumer complaints are mainly related to concerns over higher inflation while the economy has experienced a difficult period, and unanswered questions about real costs and profits of EVN which has invested in banking, real estate, telecommunication and other sectors. EVN, MOIT and the Office of the Government (OOG) have defended price increases in the media. It appears that opposition does not really affect the implementation of price increases as planned in PDP 7.

5.3 Investors in the Power sector

Electricity investors benefit from having more opportunities and better conditions to invest in the sector after price reform, though they still complain a lot about the monopoly of EVN and low level of electricity prices. The increasing number of investors in the sector is however evidence of the better investment environment.

Table 7 - Vietnam’s Power Generating Capacity in 2004 - 2010

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVN owned</td>
<td>MW</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of total</td>
<td>85.0</td>
<td>77.2</td>
<td>76.2</td>
<td>72.8</td>
<td>68.2</td>
<td>67.7</td>
<td>68.2</td>
</tr>
<tr>
<td>Owned by others</td>
<td>MW</td>
<td>1.502</td>
<td>2.518</td>
<td>2.939</td>
<td>3.668</td>
<td>5.045</td>
<td>5.424</td>
</tr>
<tr>
<td>% of total</td>
<td>15.0</td>
<td>22.8</td>
<td>23.8</td>
<td>27.2</td>
<td>31.8</td>
<td>32.3</td>
<td>31.8</td>
</tr>
<tr>
<td>Total</td>
<td>MW</td>
<td>9,989</td>
<td>11,055</td>
<td>12,357</td>
<td>13,508</td>
<td>15,864</td>
<td>16,813</td>
</tr>
</tbody>
</table>

Source: World Bank 2012 p56

33 http://www.lme.com/steel/index.asp
34 http://www.vnca.org.vn/vn/?page=news&id=117
Investors keep requesting the Government to proceed with reform, particularly in addressing electricity prices and the EVN monopoly. They are unsatisfied with reform progress and want the Government to conduct the reform better and faster.

“Only higher but realistic prices will enable businesses to generate operating surpluses to finance capital expenditure, and thus allow these to operate on a commercially viable and sustainable level… Vietnam should further promote these market mechanisms and reduce the dominance of Electricity of Vietnam (EVN) by allowing other players in the market, and building up a fully competitive electricity market by 2015 (instead of 2024).” (World Bank et al., 2011 – EuroCham Position Paper p4)

“We note with great concern the projected shortfalls in electrical power supplies, and the financial viability of the state electricity company EVN that prohibits further investments in much needed additional power supply. Decision 1604, which recently limited foreign exchange guarantees for power projects at only 30 percent, brings into question the bankability of any power project in Vietnam. AmCham reiterates the need for the Government to address the vital issue of electricity pricing as it lies at the heart of future economic growth.” (World Bank et al., 2011 – AmCham Statement p2)

The Government listens to investors’ opinions but its actions to address their opinions are not as swift as expected.

5.4 EVN

EVN is experiencing significant changes in its operation and business during the reform. The authority of managing the sector is moved from EVN to ERAV and MOIT. Its monopoly position is being regulated and reduced. Its affiliates are being separated from the mother group. It has to comply step by step with transparency principles. EVN has used several arguments to protect its position (Dan Tri, 21 July 2012).

But in the long-run, EVN has less burdens in being the only entity responsible for ensuring electricity security and better operational practices. Back in 2008, EVN returned 13 power plant projects to the Government with the reason that it could not find enough funding for their construction (VnExpress 2008, September 20). That is an example of the overload of EVN’s role as the main electricity supplier in Vietnam. With more investors in building power plants, its task has been reduced. At the same time, the reform process has made EVN comply better with transparency principles, which is a good for its competitiveness and growth in the future.

The reform so far has not solely rewarded any stakeholder without pressures. Some may have gained more than their lost. Support for the reforms seems more prevalent than discontent. The fact that the reform has kept going for 8 years without causing major disorder in society is evidence for that. All sides have better understanding of an expanding and better sector caused by the overall development of the economy and facilitated by power sector reform.

6. MEDIA COVERAGE & GOVERNMENT COMMUNICATIONS

Power sector reform is conducted in the period of media proliferation and more open dialogues between the Government and the public. Public media has been an effective channel for public discussions about reform decisions and progress, which brings feedback to the Government about its plans of each reform step and results of its decisions.
The Government actively uses media as a channel for communicating with the public, before, during and after making any reform decision, particularly in sensitive issues like electricity price increases. It has become common practice that once EVN submits a proposal for price increase to MOIT, it is published in local media, which ignites public discussions. Then MOIT’s opinions about the draft plan are also published, and the discussions include industry experts and researchers. Such public discussions may last for one or two months, and when some level of public consensus is reached on the issue, the Government issues its official decision on the price increase. Upon that usually some high-ranking officials from MOIT and the OOG appear on television and in newspapers to explain the decision, which will then receive further comments from various groups through the media.

There is evidence of the Government’s actively listening to and discussing with the public about electricity price issues (Box 1). The OOG and MOIT organize monthly press conferences to discuss the month’s issues and the electricity price is usually a hot topic. Information including speeches of government officials on prices are published on official websites. Government officials also appear frequently on television, radio and online discussions to discuss price issues.

However, there is not an overall strategy of the Government communicating with the public on the reform in general and on electricity price increases in particular. There is no single specific Government spokes-person to explain decisions to the public; instead different people are assigned at different times. Therefore messages are sometimes not consistent with each other.

One industry expert commented that the communication learning is on-going because all those communications are still new practices to the State scheme having operated for long time in the monopoly manner. It is motivated and demanded by the fast proliferation of the domestic media, Internet and higher level of public education.

**Box 1 Analysis of the Government’s communication strategy on electricity price increase, effective from July 1, 2012**

Annex 3 shows the chronology of how the Government conducted communication with the public through media regarding the latest electricity price increase, which was effective from July 1, 2012. One Minister, two ministerial Heads of Department and two EVN Vice Directors talked to the domestic media on the price increase to explain the rationale, so not simply informing the price increase only. This is evidence that the Government does consider the importance of society’s support and agreement with its decision, as the electricity price is a matter that seriously affects society. Notably, the website of the Communist Party suggested that the price increase should be reconsidered in the context of the general economic difficulty.

On the other hand, a more thorough reading of the speeches in the media also shows that the Government is in the process of learning and figuring out how to effectively communicate with the public on this issue. It is disconcerting when EVN rejected the information leaked to the

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media about its price increase plan just before it submitted it to MOIT. It was noteworthy that it was the Head of the OOG and the Minister of Information and Communication were the first Government leaders talking to the media about the price increase and publicly correcting EVN and MOIT about their way of communicating the price increase. It was also noteworthy that the Government did not plan well in advance a communication strategy about this price increase. It acted on ad-hoc understanding and situation (State officials talked to the media to correct or cover communication mistakes of the ones talking or not talking before).

Local media have followed every step of the reform with wide coverage. A move by a key stakeholder is immediately reported and discussed. Electricity price increase and insights of EVN’s operation and expenses are particularly hot topics and they receive special attention of the public. Consumers, industry experts and researchers use the media to present their position. As a result, price reform is well covered in terms of public communication with hundreds of articles, talks and discussions.

However, in-depth analyses and discussions about the reform are still in shortage. This can be explained by the fact that there are only few journalists who have specialized in the sector long enough to make in-depth coverage.

Public media has played an active role as an effective communications among key stakeholders in the reform. It helps keeping the reform on track and any social discontent against the reform are released and dealt with.

7. ON-GOING REFORMS

The reform is on going with the latest progress in revising the Electricity Law of 2004, issuing the Law on Energy Efficiency and Conservation and increasing investment in renewable energy, and the recently approved Green Growth Strategy (September 25, 2012).

After 7 years of implementing the Electricity Law, MOIT has drafted a revision of the Law, gathered opinions and consulted on the draft with 16 ministries, provincial authorities and major businesses and submitted the draft revised law to the NA for consideration. Several civil society organizations have also actively raised opinions about the draft. The NA reviewed the draft in its May – June 2012 session and expects more revisions at its session in Oct 2012. The key points being considered in the Electricity Law revision include the electricity price scheme, electricity market, licensing for electricity businesses, electricity planning, State management and electricity safety. It is expected to be approved by the end of 2012.

In 2010, the Law on Energy Conservation and Efficient Use was approved by the NA and became effective. It makes energy conservation and efficient use a mandate to big consumers with specific responsibilities and tasks. The Government continues implementing the National

Target Program on Energy Efficiency which started in 2006 with the 2011 – 2015 period’s target of saving 5% - 8% of the total energy consumption by 2015, up from a 3% - 5% target in the 2006 – 2010 period. The implementation of the Law and the National Target Program is expected to affect electricity consumption and investment in Vietnam, and thus the progress of the electricity sector reform.

Many investors have shown interest in investing in renewable energy in Vietnam, particularly wind energy. Several wind energy projects have been announced, although only one project is fully operating. Some solar energy project ideas are also being explored and piloted. Discussions about feed in tariffs for wind power, investment priorities and special treatment given to renewable energy projects and including renewable energy in provincial 5-year power development plans are still continuing. The Government is considering an option of drafting a new law on renewable energy. Also in this emerging trend of investment in renewable energy, the Government also takes a very cautious approach because it relates to many stakeholders and complicated issues, such as land, safety, price and system management.

On September 25, 2012, the Prime Minister approved the National Green Growth Strategy which emphasizes on making socio-economic activities more efficiently in using resources, including electricity. “Reducing the elasticity rate of electricity/GDP from 2.0 now to 1.0 by 2020” (Prime Minister 2012 p7). This is an ambitious target of making the whole country become double efficient in using electricity within only 8 years.

The new developments of legal frameworks and investment situation related to electricity will further diversify considerations and affect progress of the electricity sector reform. It is suggestible to conduct a more thorough research on how and how much the new developments affect the reform.

8. CONCLUSION

The on-going electricity reform has been successfully started and progressed with some achievements in Vietnam, although many obstacles remain and a lot need to be done for the reform to realize its goal. Some general lessons can be drawn from the reform experience so far. Firstly, the general consensus among the authority, society and international supports about the necessity and goals of the reform is the first key for successful start and progress of the reform. Secondly, strong leadership of the Government, particularly Prime Minister, is critical for the reform progress which will affect interests and benefits of many groups. Thirdly, a cautious approach in complicated issues like electricity price reform, market reform and institutional reform can slow down the whole sector reform on one hand while contributing to maintaining overall stability in socio-economic situation on the other hand. The key is to find out the balance between the two extremes with special attention being paid to the majority of the population being in rural and difficult areas. Finally, good communications among key stakeholders are important to develop the reform plan and decide steps, particularly there are high demand on transparency of the sector and EVN’s operation, so that stakeholders can accept difficult issues like price increase.

Vietnam’s electricity consumption is forecast to reach 194 – 210 billion kWh in 2015 and 330 – 362 billion MWh in 2020 (7th Master Plan). The country needs more investors in building power
plants. It is suggestive for the Government to progress the reform faster as most key stakeholders support and want to have a fully competitive electricity market earlier than 2022. Group interests related to maintaining EVN’s monopoly in the sector should not be kept by costs for the whole society, economy and environment.
ANNEX 1: ROLES OF KEY STAKEHOLDERS IN KEY REFORM DECISIONS

1. ELECTRICITY LAW

- National Assembly: Reviewing and questioning draft law; Approving the Law; Supervising the Law implementation

- Government, particularly MOIT: Drafting the Law; Raising opinions about the draft law among other ministries and civil society organizations; Submitting the draft law to the NA; Issuing specific under-law regulations and decisions for the Law implementation.

- EVN: Participating in drafting the law

- Civil society organizations: Reviewing and giving opinions on the draft law.

2. ELECTRICITY MARKET ROADMAP

- Government and Prime Minister: Approving and issuing the electricity market roadmap; Instructing and supervising the roadmap implementation.

- MOIT: Drafting the roadmap and regulations for the roadmap implementation; Submitting the draft roadmap to the Prime Minister for consideration; Key office organizing and directing the roadmap implementation.

- ERAV: Key office in MOIT drafting the roadmap; Supervise and intervene in the market to ensure fair competition.


3. PRICE REFORM

- Prime Minister: Reviewing retail electricity price draft submitted by Minister of Industry and Trade; Approving and issuing electricity retail price frame.

- MOIT: Reviewing the draft retail power price submitted by ERAV; Minister submit the draft retail power price to Prime Minister; Issuing Circular regulating the electricity retail price after the Prime Minister approving and issuing electricity retail price frame.

- ERAV: Review price adjustment suggestion by EVN and giving its opinions; Drafting and submitting draft retail power prices to the Minister of Industry and Trade.

- EVN: Suggesting electricity price adjustment to ERAV

4. ORGANIZATIONAL REFORM
- Government and Prime Minister: Giving opinions to approve or reject organizational reform activities; Assigning one Deputy Prime Minister directly supervise and instruct the activities.

- MOIT: One key body directly supervising and implementing organizational reform activities.

- EVN: Giving opinions on organizational reform in the electricity sector, especially within EVN; implementing and manage the implementation of organizational reforms within EVN as per instructed by Prime Minister and MOIT.
ANNEX 2: ELECTRICITY MARKET 2012

Source: Figure drawn up by the Energy Alliance
ANNEX 3: GOVERNMENT'S COMMUNICATION TO MEDIA ON ELECTRICITY PRICE INCREASE EFFECTIVE FROM JULY 1, 2012

May 10, 2012: MoF – Head of Price Management Dept Nguyen Tien Thoa

“Electricity inputs have increased by 3.3%, equal VND42.9 per kWh (because of the increases in the VND/USD rate, gas price and FO oil price).” (CafeF 2012 May 12)

May 12, 2012: Local media reported that EVN has submitted 3 plans for electricity price increase to MOIT with suggested increases of 5%, 10% and 5% - 10%. (SaigonNews 2012 May 12)

May 14, 2012: EVN Vice Director Dinh Quang Tri

“I am very surprised with the information that EVN has submitted 3 plans for electricity price increase. EVN has not yet submitted any electricity price increase.” (VCCI 2012 May 16)

May 23, 2012: Website of the Communist Party

“It is necessary to publicize the electricity price increase plan in advance to facilitate pro-active preparations of enterprises and people… If EVN increase electricity price at this point of time, it is too sensitive and the price increase should be reconsidered... The increase should follow gradual steps to avoid shocks for people and enterprises” (Dangcongsan 2012 May 23)

June 30, 2012: EVN published a press release on an electricity price increase effective from July 1, 2012. Accordingly, the average electricity price is to be increased to VND1,369/kWh (not yet including value added tax), up 5% against the existing price of VND1304/kWh. (EVN News 2012 June 30)

July 3, 2012: Government Office – Minister, Head of the Government Office Vu Duc Dam

“We have asked MOIT and EVN to learn from this experience because electricity price affects the mass population, they must communicate better to make people and enterprises understand the increase.” (VTC News July 3, report on the Government’s press conference on the latest electricity price increase)

July 9, 2012: ERAV Director Dang Huy Cuong

“EVN’s price adjustment from July 1 fully followed conditions regulated by the Government on adjusting electricity price as per market changes of input index. Prior the price adjustment, MOIT and MoF strictly scrutinized EVN’s suggestion.” (VTC News 2012 July 10, report on monthly press conference organized by MOIT on issues in June 2012)

July 10, 2012: EVN Vice Director Duong Quang Thanh
“The current electricity market structure is decided by the Government basing on the strategy of step-by-step introducing competition in electricity generation to ensure the stability in the transition progress.” (VietnamNet 2012 July 10, report on the interview with the Vice Director about the conduct of the competition market of electricity generation)

*July 20, 2012: EVN Vice Director Dinh Quang Tri*

“The latest electricity price increase (while fossil fuel prices decrease) cannot be seen in separated pictures. The hanging loss of VND26 trillion (caused by changes in exchange rates prior 2011) would become a burden if not being solved.” (VTC News 2012 July 20, report on EVN’s press conference on scheme for electricity price adjustment on July 20, 2012)

*August 5, 2012: Government Office – Minister, Head of Government Office Vu Duc Dam*

“Electricity price increase is a very normal business.” (VnEconomy 2012 August 6, report on the Minister’s talk on the national television on August 5, 2012)

*August 7, 2012: MOIT – Head of Domestic Market DeptVo Van Quyen*

“There is no conflict between increasing prices of petroleum, electricity, water and gas and implementing solutions to support enterprises”. (Dan Tri 2012 August 7, report on monthly press conference organized by MOIT on issues in July)
REFERENCES


