Maximizing Finance for Development

World Bank’s Energy Infra-SAP: The Case of Vietnam

ESMAP Knowledge Exchange Forum, London November 30th 2017
Maximizing Finance for Development: Cascade Algorithm

Q1: Is there a sustainable private sector solution that limits public debt & contingent liabilities?
   - If yes, then promote such private solutions

Q2: If no, is it because of policy, regulatory gaps?
   - If so, provide WBG support for policy and regulatory reform

Q3: Or, is it because of risks?
   - If so, assess the risks and see whether WBG instruments can address them

Does the project require public funding?
   - If you conclude the project requires public funding, pursue that option

**Electric Power Act**
- Created Electricity Regulatory Board
- Restructured and commercialized KPLC, Kenya Power Company and TRDC

**Energy Act (2006)**
- Established single sector regulator (ERC) and Energy Tribunal
- Partially privatize KenGen through an IPO

**Electricity Transmission Company (KETRACO) and Geothermal Development company (GDC) established**

**New Energy Bill (in Parliament)**
- Role sharing b/w national and county govts. in planning and service delivery
- Transparent and Competitive licensing of renewable energy
- Open Access in T&D

**Power Generation**
- 1990: 723 MW
- 2000: 1,054 MW
- 2016: 2,299 MW

**Electricity Access**
- 1990: 10.9%
- 2000: 14.5%
- 2016: ~55%

**GoK policy reforms**
- IDA Activity $1.8 Billion
- GoK policy reforms
- IDA Activity $2.45 Billion

**Rural Electrification Authority (REA) established**

**Total private Investment: $2.45 Billion**
Infra-SAPs: leveraging private sector & optimizing use of scarce public resources
Vietnam Energy Infra-SAP

• Rapid electricity demand growth
  ➢ 13% pa since 2000
  ➢ 8% pa projected through 2035

• Need to shift energy mix
  ➢ Calls for renewable energy to reach in range of 12GW to 42GW by 2030
  ➢ Target to increase gas-fired generation from 7GW to 19GW by 2030

• Calls for growing investment in transmission and distribution
Historic approach to funding energy infrastructure is no longer tenable

HISTORIC APPROACH

• Most generation and all network investments funded by EVN SOE with state guarantees:
  ➢ Government on-lending of concessional finance from IFIs
  ➢ Government guarantees for commercial bank loans

• 30% of generation funded via IPPs
  ➢ 10GW of thermal projects funded by international investors under BOT
  ➢ 2GW of renewables projects funded by domestic investors via local banks

FUTURE PROSPECTS

• Fiscal crisis
  ➢ Vietnam close to statutory public debt limit of 65% of GDP (4% of which energy)
  ➢ Both traditional approaches to finance count towards statutory limit

• Graduation to MIC status
  ➢ Vietnam is losing eligibility for concessional finance from IFIs
Option 1: Raise unguaranteed corporate finance through SOE balance sheet

• EVN does not currently have a credit-rating but in process
  ➢ Sovereign credit-rating of BB-constrains SOE credit-rating

• EVN is an efficient company, but lacks a cost recovery tariff
  ➢ Tariffs are at approximately half the level needed to fund new investment

• Leads to weak financial performance
  ➢ Zero or negative profit margin
  ➢ Debt service coverage approaching 1.0

• Cost of debt has been falling from 9.3% to 6.1% from 2011-2015

![EVN Average Retail Tariff (US$/kWh)](chart.png)

*cost recovery tariff benchmark by 2020*
Option 2: Raise additional international capital through PPPs

• Legal framework
  ➢ New PPP Decree requires feasibility studies and competitive procurement
  ➢ Agencies circumvent by procuring under Investment Law

• Government supports
  ➢ Allowed by legal framework and do not count towards public debt limit
  ➢ Protracted bilateral negotiations and lack of a clear policy framework

• FOREX convertibility
  ➢ No controls on foreign exchange, but investors remain concerned about availability and request guarantees
Spotlight on renewable energy IPPs

• Vietnam aims to expand renewables
  ➢ from 2GW 2015 to 27 (or 12) GW by 2030
• Various incentive schemes
  ➢ Avoided Cost Tariff domestic small hydro
  ➢ Higher FIT for wind and solar but still not attractive to international investors due to concerns about bankability of PPA
  ➢ Recent decision to pilot auctions
• Distribution utilities face uneven disincentives to purchase renewables
• LCOE sensitive to financing cost
  ➢ US$ versus LCU financing reduces LCOE by as much as US$0.01/kWh
Option 3: Raise more domestic capital through local capital markets

- **Commercial banks (US$250bn.)**
  - Lack of long term deposits and flat yield curve by deposit duration limits lending mainly to short maturities (up to 3 yrs)
  - Lack of technical capacity to evaluate energy projects (e.g. renewables)
- **Stock exchange (US$72bn.)**
  - Liquidity low and dominated by SOEs
- **Bond markets (<US$1bn.)**
  - Nascent market, shortage of corporates
- **Institutional Investors (US$25 bn.)**
  - Limited capital directed to bonds
The biggest constraints to private solutions often lie outside the energy sector:

- **Macro fiscal level**
  - Limited fiscal space to provide further public guarantees of commercial borrowing
  - Limited availability of FOREX, convertibility guarantees, and risk hedging instruments

- **Domestic capital market level**
  - Limited capacity to appraise energy sector projects
  - Rapid exposure to Single Borrower Limits due to small scale
  - Shortage of long-term deposits to underpin lending with longer maturities
  - Under-developed stock exchange and corporate bond market

- **PPP/infrastructure policy level**
  - Lack of capacity/incentives to perform feasibility studies and competitive procurement
  - Lack of clear and systematic government policy on credit enhancements for PPPs

- **Energy sector policy level**
  - Tariffs kept below cost recovery level for socio-political reasons
Infra-SAPs are an exercise that integrates multiple perspectives

- Maximizing Finance for Development re-energizes a longstanding World Bank commitment to opening markets for private investment
- Infra-SAP is a new analytical and policy dialogue tool for identifying key bottlenecks to private solutions and commercial finance
- Infra-SAP calls for integrating perspectives across WBG and within WB
  - Joint teams encompass WB, IFC, MIGA
  - WB teams represent various Global Practices
    - Macro-Fiscal Management (MFM)
    - Financial Markets (FM)
    - Public Private Partnerships (PPP)
    - Energy (EEX)
- Several Energy Infra-SAPs are already close to finalization:
  - Egypt, Indonesia, Vietnam