PRIVATE-PUBLIC PARTICIPATION in INDONESIA's POWER SECTOR: REALITY AND EXPECTATIONS

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Presentation Flow:

1. Important roles of private participation
2. Profile of Indonesia's power sector
   focus:
   need of investment,
   efficiency,
   reliability,
   access
3. Models of power sector
4. Regulation to encourage private participation
5. Issues that can be addressed to improve efficiency, reliability and acces.

Performance of electric utilities in developing countries

- Supplies unable to meet the market demand,
- unreliable
- not at least cost

Why?

1. Electric utilities faced no competition, no incentives to improve efficiencies.
    - full with subsidies, equity injections, and debt forgiveness.
    - no pressure to maintain efficiency.
2. Tariffs not adjusted properly to balance increasing costs

Results: financial deficits

Need a reform of the power sector

Includes to move away from state ownership and centralized organization to more private ownership, market oriented and better regulated

(Choynowski, 2004)

Electric Power Situation in Indonesia (WB, 2004)

1. Investment Needed

Estimated demand growth 6% per year; 2004-2012

To meet this demand, investment needed

US$16 - US$18 billion total

US$12 – US$12.5 billion for generation

US$2.5-3.5 billion for transmission and

US$1.7-US$2 billion for distribution

Possible sources of financing (especially for generation)

1. PLN (State Own Electricity) ? Less likely
2. Domestic / private Investor? Probably
3. International Investor (Private/Public)? Most likely

2. Obstacles of International Capital

1. Globally, investors have pulled back from the energy sector.
2. Investors insists on full Government Indonesia guarantee, which the government is reluctant to provide.

Suggestion

The government needs to create the regulatory agency and provide a clear future direction of the sector structure including for outside Java-Bali?

Not exist yet

3. Reliability

- shortages will persists, specially outside Java-Bali

- no long duration blackouts, unless investments stops completely

- insufficient physical infrastructure because of inability to meet financing needs.

- Supply of of natural gas to the power sector is on threat due to inappropriate price structure. Under this price structure, producers have disincentive to supply gas to the domestic market.

4. Efficiency

- Inefficiencies in PLN:US$600-$800 M a year

- PLN's losses about 12%, (India 27%, Australia 7.6%, Singapore 4.2%)

- To improve efficiency, 9/2002, Indonesia passes electricity legislation (Law no. 20) that provides for a market-based operation that takes into account environmental, energy conservation, safety and diversification issues within a competitive market.

5. Access

- electrificication rate 57% (90 million people have no access to electricity)
- Annual consumption per capita 380 kwh (lowest in the region).
- estimated Java-Bali's electrification 95%-98% in 13-15 years
- outside Java-Bali only 70% in 13-15 years

Models of the Power Sector (Choynowski, 2004)

1. **vertically integrated monopolies**

- no competition and no consumer choice
- all generating plants, transmission and distribution network are owned and operated by the monopoly electric utility.
- monoply supplies elctricicity to consumers and consumers have no choice of supplier.

2. single-buyer, monopsony framework

- a competition at the generation level
- private sector participation

3. wholesale competition

- no more single buyer
- distribution companies bid for electricity supply from electricity suppliers in wholesale market.
- consumers are still captive and no choice of supplier

4. full customer choice model

- competition in all l levels of industry, from the wholesale level to the individual consumer.
- any electricity consumer may purchase from any retail supplier.

Series of regulation to encourage private participation

Why

- rapid growth in the demand for electricity

- financial inability of State Owned Electricity Company (PT PLN) to invest in generation to meet the anticipated demand,

Action

-Issueing Presediential Decree No.37/1992

to persuade private to participate in the sector
-other regulations for the same purpose

Degree of seriousness of the GOI

can be seen as the degree of seriousness of the government in allowing private participation and in improving performance of power sector.

Issues that can be addressed to improve efficiency

1. Renegotiate contract with IPP

Price during crisis hit

- PLN bought electricity about US$7.5 cent per kwh

  sold it US$2.5 cent per kwh

Price after negotiation

purchase price at US$4.5 cents - diesel

between US$4.2 – US$4.93 cents for others

Result: cost reduction

Expected

Future contract, payment is in rupiah denomination

2. Use low cost production and new technology in power generation

Four alternatives of energy used

fuels, natural gas, hydro and geothermal

The primary energy used by th power sector influenced by Government policies,

In 2001, about 37% of PLN installed capacity was oil-fueled.

Rightnow: natural gas (34%), coal (31%),

oil (22%), hydro (10%),

geothermal and others (3%).

- oil price is volatile and tends to increase

- Indonesia will be net oil importer by 2010

- generation producers should change technology to use

  generations that use natural or gas to reduce cost of production.

3. Dilemma for tariff increase

-tarrif during crisis was about 2.5 cents/kwh.

-because of 10 consecutive quarterly increases,

-right now the tarrif is 7 cents/kwh.

- the tariff is set lower for low income residential
- set higher (above average rate) for high income residential and industries.

  Low: about 3.5 cents per kwh

  High: about 11 cents per kwh.

- It is not feasible to inrease tariff above 3.5 cents or above 11 cents
- at current tarrif, PLN suffering loss

Closing remarks.

No easy way to improve efficiency, reliability and access

In the short run, the key issue is efficiency.

1. Producing power at not least cost can be overcomed by switching technology and using different source of energy.
2. Reduce of power loss due to illegal users.
3. Avoid a high-cost economy in operating a state-owned electricity.
4. Go public and listed at Jakarta Stock Exchange to get fresh money after healthy financially

The money from capital market, can be used to expand generations, transmission, and distribution to a wider access and more reliable service