



“Legal and Regulatory Issues”

Budapest, Hungary September 27, 2004

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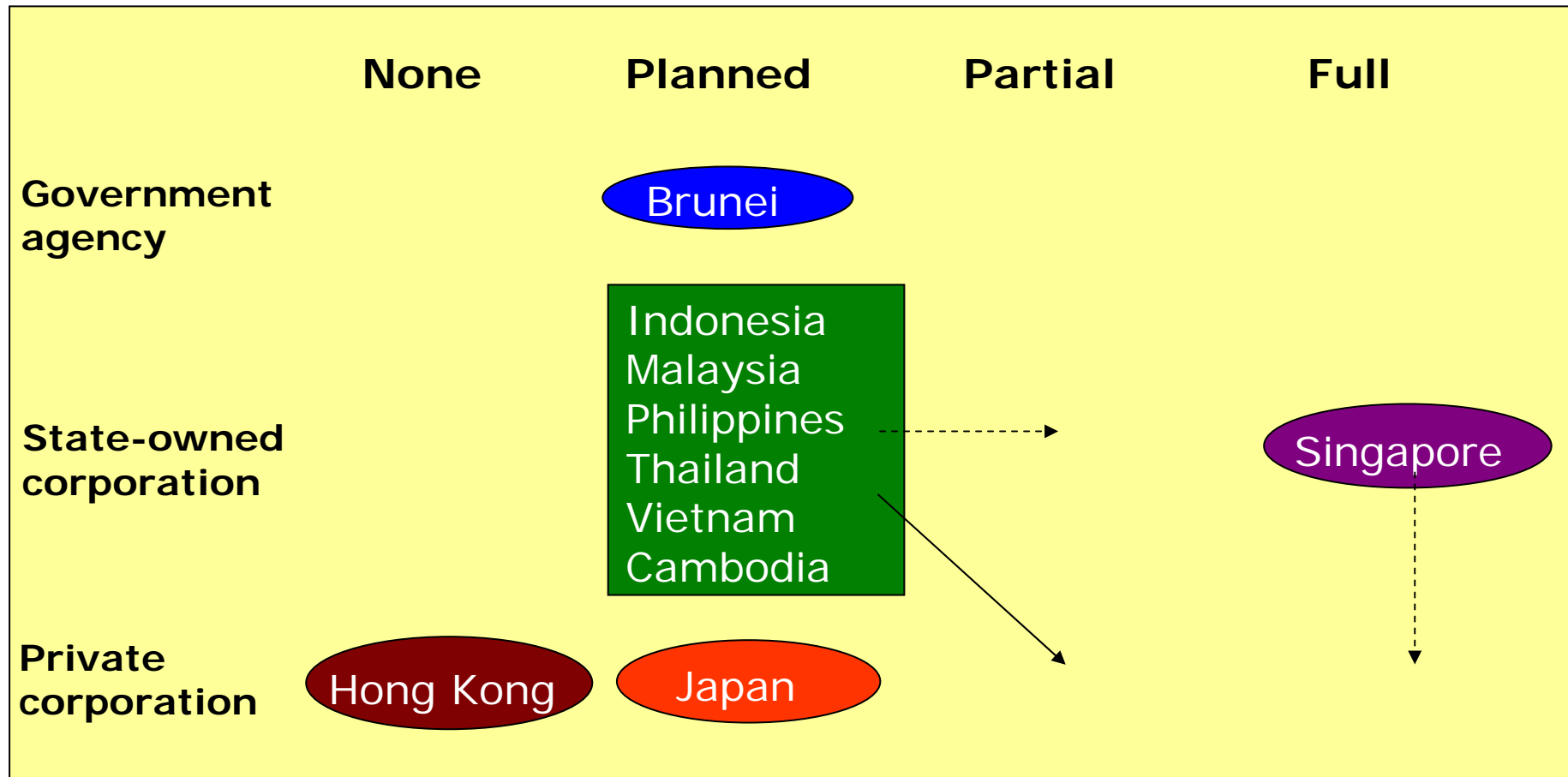
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ASEAN - Electricity Sector Reform





ASEAN – Policy Overview

| | Cogeneration Policy | Biomass policy | Fossil Fuel Policy | Small Producer Policy |
|-------------|---------------------|----------------|--------------------|-----------------------|
| Vietnam | No | No | Yes | No |
| Singapore | No | No | Yes | No |
| Cambodia | No | No | No | No |
| Philippines | No | Yes | Yes | Yes |
| Thailand | No | Yes | Yes | Yes |
| Malaysia | No | Yes | Yes | Yes |
| Laos | No | No | No | No |
| Indonesia | No | Yes | Yes | Yes |



Vietnam - Policies

- **NO cogeneration policy**
- **NO small producers policy**
- **NO biomass related policies**



Vietnam - Now

- **Installed capacity (electricity): 10 GW**
- **Annual growth rate: ~14%**
- **Annual electricity consumption per capita: ~400 kWh**



Vietnam - Now

- **Electricity tariff set by EVN (Electricity of Vietnam)**
- **Price for selling to the grid is set by EVN, case by case.**
- **Average price for private producer – 4 US cents/kWh**
- **Average tariff to consumer – 5,5 US cents/kWh**

Leads to low incentives for private initiatives



Vietnam - Trends

- Introducing “VN electricity development plan 2006-2010”
 - Estimated load demand 2010: ~90 TWh/year
 - New transmission lines: > 3000 km
 - New power generation capacity until 2010: >10 GW
where of ~2 GW from private actors



Vietnam - Trends

- Annual investment capital required: \$1,5 billion
- Identified need for private investors

Leads to

- Need for regulations to accommodate an environment for private investors



Vietnam - Trends

Policy issues to be addressed by Development Plan:

- **Diversify electricity supply with priority to domestic resources**
- **Subsidies for power projects in rural and mountainous areas**
- **Specific policies for a competitive energy tariff for establishment of energy market**
- **Policies for Energy Science and Technology**



Vietnam - Conclusion

A regulatory framework for Vietnam with policies addressing energy supply and competition will be implemented in a short view.

Participation of private investments is foreseen

Special policies for cogeneration is not foreseen



Cambodia - Policies

- **NO cogeneration policy**
- **NO small producers policy**
- **NO biomass related policies**



Cambodia - Now

- **Installed capacity (electricity): 150 MW**
- **Annual growth rate: ~10%**
- **Annual electricity consumption per capita: ~50 kWh**
- **About 15% of population have access to grid electricity**
- **Large element of local, private generation. To a large extent unregulated.**



Cambodia - Now

- **Electricity tariff, in EDC (Electricité du Cambodge) net, set by EAC (Electricity Authority of Cambodia)**
 - **Tariff to consumer – 9 to 12 US cents/kWh**
- **Electricity tariff, unregulated net, set locally**
 - **Large variations in tariff, up to 50 US cents/kWh**



Cambodia – Existing policies

- Rural electrification
- Fossil Fuel



Cambodia - Trends

- **“Cambodian Power Sector Strategy “, no official timeframe**
 - **Priorities for generation and transmission**
 - **Establishment of Regulatory Framework for Power sector**
 - **Commercialization of EDC**
 - **Private sector participation**
 - **Provincial and rural electrification**



Cambodia - Conclusion

A regulatory framework for Cambodia addressing energy supply and competition is planned. Implementation of policies will take place in a long perspective.

Large need for private initiatives, but regulatory uncertainties



For more information

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Thank You !