Cambodia's Energy Sector and China's Belt and Road Initiative: For Growth and Mutual Benefit

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Current Economic Growth

Energy Development and Economic rowth

- Population: 15 million
- The GDP growth
 - 7.6% (2013), 7.3% (2012) and 7.1% (2011)
 - per capita income increased from below US\$500 in the 2000s to US\$1,269 in 2016
 - Bilateral trade Cambodia and China rose to \$4.8 billion, Chinese's investment was reaching US\$5.1 billion in 2017 as well.
- Petroleum demand growths 5-6% annually
- Power demand growths around 9% annually
- Investment in power industry from China rose up about us\$ 5 billion .

I. Current Economic Growth



2014

2017

II. Energy Sector Review

1. Petroleum



(Imported Petroleum Products Data (By Customs in Ton) 5/31/2018

II. Energy Sector Review

2. Power



III. Energy Sector and China's Belt and Road Initiative



Progress of Development of Power Sources during past 15 years

III. Energy Sector and China's Belt and Road Initiative

Growth of Household's Connections for Past 15 Years



IV. Benefit and Challenges

- Benefit
 - Increase electricity capacity produced
 - 7 Hydropower plants and 3 coal power plants already put in operation with total electricity capacity 1328MW.
 - 1957 Km of High voltage National transmission line and 30 distribution stations were installed.
 - The price of electricity decreased from 3,000 Riels to 970 Riels in 2017

IV. Benefits and Challenges

- Challenges
 - Environmental issue
 - Technical issue
 - Heavy dependence on imported fossil fuels and still import electricity.
 - High price of petroleum products is still an issue
 - Popular power generation options such as hydropower and coal-fired stations can have high environmental impact.
 - Some of grid-connected households face frequent unpredictable power shortages
 - grid-connected households experience appliance damage due to voltage fluctuation
 - need improve the adequate reliability, quality, affordability and safety in dry season.

IV. National Energy Policy and Strategy

Energy demand by source projection



IV. NationalEnergy Policy and Strategy

- Electricity demand projection by 2030



IV. Cambodia's National Energy Policy and Strategy

- Policy



To attract foreign investor for increasing oil and gas exploration activity, electricity distribution line and LNG business.

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IV. Energy Policy and Strategy

- Power Strategy

A-Development of Generation	B-Development of Transmission lines	C-Development of Rural Electrification
Increasing diversify of power supply such as Hydro, Coal power, Importing electricity, biomass and others renewable energies to meet the electricity demand and reduce fuel oil for power generation.	Develop the national transmission line, GMS & ASEAN power grid, maximize mini-grid to rural areas, upgrading the HV, MV & LV.	Supply from the National Grid, Mini-grid, Grid extension and stand-alone system (BCS, SHS, Micro Hydropower, biomass, etc.

- Petroleum
 - Commit to produce first crude oil in late 2019
 - Improve the quality and safety in downstream business
 - Cosider to establish National Oil Copany
 - Attract investment in oil and gas exploration activity

IV. Energy Policy and Strategy

- 11 transmission and and distribution station project is under construction.
- 1957 Km of HV national transmission line was constructed.
- 1,672 Km of distribution line (115 Kv, 230 Kv, 500 Kv is under constructed



IV. Energy Policy and Strategy



Conclusion

- Affordable energy products price
- Net petroleum products imported
- Continue to import electricity
- Alternative of domestic supply source
- Improve distribution network
- Investment from China in energy sector is cover about 80% of total investment.
- More foreign investment still needed

Thank You