DuaneMorris

Energy Infrastructure Financing Options in Myanmar

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Financial Demand for Energy Infrastructure Development

- **Electricity shortage: A major hindrance to economic development**
- **Infrastructure investment, especially in energy sector: Key to the development of a stable and prosperous economy**
- **Spending an additional 1% of world GDP on infrastructure would increase global GDP by 2% and GDP in developing countries by almost 7%** (World Bank's estimate)
- **Insufficient capital to limit economy development**

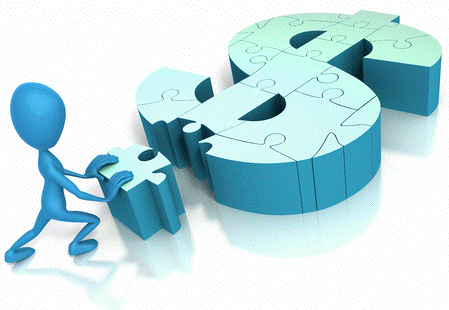
Financial Demand for Energy Infrastructure Development in Myanmar

- **Total investment of US$650 billion by 2030 needed to support Myanmar's growth potential** (McKinsey's report)
- **US$320 billion in infrastructure development alone** (McKinsey's report)
- **For the power generation sector: An investment of roughly US$50 billion** (Frost & Sullivan Report)

Energy Infrastructure Financing Options

Energy Infrastructure Financing Options

- **Financing Options for Energy Infrastructure:**
  - Government investment funding and preferential policies
  - Official Development Assistance (ODA)
  - Loan from commercial banks or financial institutions
  - Public Private Partnership (PPP)
  - Clean Development Mechanism (CDM)



Energy Infrastructure Financing Options

- **Government investment funding and preferential policies:**
  - Infrastructure investments account for high GDP percentage
  - State budget financing big investment projects
  - Preferential policies from Government:
    - ✓ Fiscal credibility
    - ✓ Price subsidies
    - ✓ Feed-in tariff (FIT)

Energy Infrastructure Financing Options

- **Government investment funding and preferential policies:**
  - **Tax reduction and exemption: Example from Vietnam**
    - ✓ CIT incentive rate of 10% applies for a period of 15 years to newly-established enterprises investing in power plant projects
    - ✓ If the projects are classified as large scale projects, using high or new technology and in special need of investment, the time for application of 10% preferential tax rate may be extended to less than 30 years in accordance with a Decision of the Prime Minister
    - ✓ Exemption of import duties for equipments and machinery imported to create fixed assets of the projects is applicable to renewable power project

Energy Infrastructure Financing Options

- **Government investment funding and preferential policies:**
- **Loan softening program: Example from India**
  - ✓ Indian Ministry of New and Renewable Energy has successfully used the loan softening program (which includes either and interest subsidy or a partial guarantee) to enable commercial banks to make risk assessment-based investment in green tech sectors on concessionary terms
- **FIT Mechanism:**

  A favorable price paid by power companies to purchase all electricity from eligible renewable energy (RE) producers in their service area over a long period of time for each unit of electricity fed into the grid. FIT system has been enacted in numerous Asian countries such as China, Korea, Mongolia, Thailand.

Energy Infrastructure Financing Options

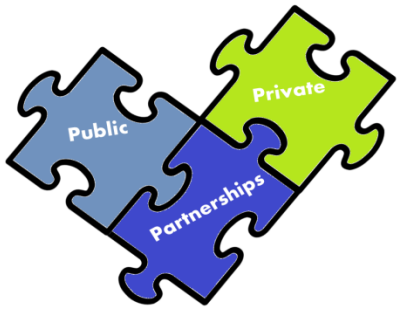
- **Official Development Assistance (ODA):** Financing Programs from World Bank; ADB; IMF; other countries' ODA funds (e.g. Japan, European Union, Sweden, Germany, France, USA, etc…)
  - **Non return ODA**
  - **Preferential loans**
- **International Assistance: Example from Vietnam**
  - Success story on rural electrification: Less than 50% in the late 1980s–early 1990s to 77% by 2001 and 96% by 2009
  - Funds mobilized from practically every possible source and in many different ways: Central government budget; Cross subsidies; Borrowing; and International donors
  - Finance supported by multilateral development institutions, including ADB; Global Environment Fund; Swedish International Development Cooperation Agency; and World Bank

Energy Infrastructure Financing Options

- **Loan from domestic and international commercial banks or financial institutions:**
  - **Traditional financing source;**
  - **Preferential policy to loan for RE projects**
- **Clean development fund of investment funds**
- **Example from US Eximbank :**
  - Commitment to finance a $ 1 billion loan for the development of wind-energy projects in the Mekong Delta region during the period 2011-2015
  - BUT no finance for dirty coal plant: Refused to finance for a coal fired power plant in Vietnam because of dirty and outmoded technology

Energy Infrastructure Financing Options

- **Public Private Partnertship (PPP):**
  - Alternative financing source
  - A means to enable the development or improvement of energy in infrastructure through the participation of private and government entities
- Why PPP is attractive as an off-budget mechanism for infrastructure development?
- Common type of PPP: Build Operation Transfer (BOT)



Energy Infrastructure Financing Options

- **Build Operation Transfer (BOT):**
  - ✓ A common PPP model: A private entity receives a franchise from the private or public sector organization to finance, design, construct, and operate a facility for a specified period of time, after which the ownership is transferred back to the funding entity.
  - ✓ Many other variants such as Build-Transfer-Operate (BTO), Build-Own-Operate-Transfer (BOOT) and Build-Rehabilitate-Operate-Transfer (BROT)
- **Government Guarantee in PPP projects**
- **Example from Vietnam: Financing Phu My 2.2 and Phu My 3 power plant**
  - ✓ Precedents for subsequent large-scale financing
  - ✓ First BOT power plant invested by foreign investors

Energy Infrastructure Financing Options

- **Clean Development Mechanism (CDM):**
  - **Certified Emissions Reductions (CERs) trading**
  - **Price subsidy for CDM project: Example from Vietnam**
    - ✓ **A CDM project which has the production cost greater than the contracting electricity selling price may file an application to the Environmental Protection Fund of Vietnam for price subsidy**

Recommendations for Myanmar

- To establish a strategy to promote the investment in the energy industry
- To attract investment by improving regulatory framework, promoting public private partnership and undertaking crucial sector reform
- To develop and implement a National Electricity Law is the first step to encourage energy industry and meet power need
- To provide the risk guarantee to the investors to help them obtain financing at competitive rate, speeding up project implementation
- To take advantages of international assistance and preferential policies for promoting energy infrastructure development

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Thank you!

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