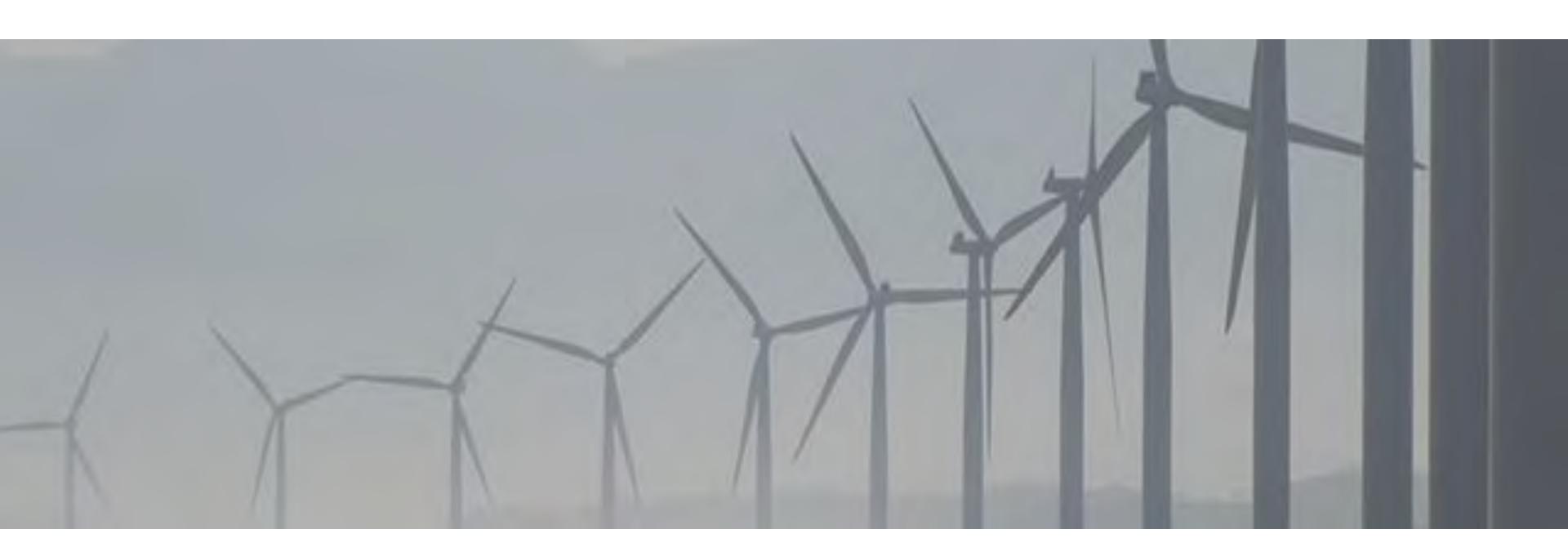


Enhancing Cost-Effective and Sustainable Power Supply through Clean Energy Public and Private Partnerships

Forum on Renewable Energy, PPP Center, 30 August 2019





About the Asian Development Bank



- A regional development bank established on 19 December 1966
- Committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific
- 68 country members from 49 regions; headquartered in Manila with
 31 field offices
- Projected commitments (2019-2021) \$61.8 billion, of which \$51.7 billion sovereign and \$10.1 billion non-sovereign





ADB Strategy 2030

- Strong commitment to environmental and social sustainability
- Objective to scale climate finance to \$6 billion per year by 2020, of which \$4 billion will target mitigation and \$2 billion adaptation





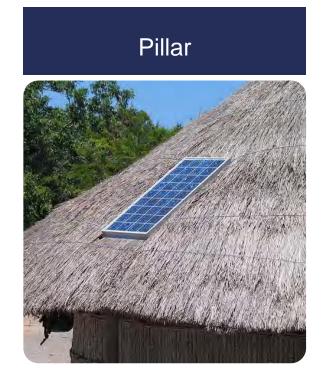


ADB Energy Program

- During 2009 2018 period, energy sector amounted to \$40 billion or 25% of the total ADB portfolio
- \$9.4 billion (23%) were approved for Southeast Asia



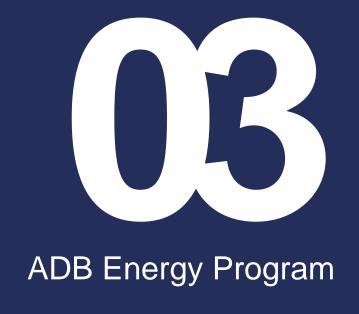
Promoting energy
efficiency and
renewable energy



Maximising access to energy for all



Promoting energy
sector reform,
capacity building,
and governance





ADB Supported Renewable Energy in Philippines



- Rural Community-Based Renewable
 Energy Development in Mindanao
- Mini-grids (hybrid technologies)
 Feasibilities for remote island
- Cobrador Solar PV Hybrid System
- Malalison Island Solar Hybrid / Pre-paid
 Metering System
- 150 MW Burgos Wind Farm Project
- Green bond investments (Tiwi and Makban Geothermal; AC Energy)





ADB Support Services for Public-Private Partnerships in the Energy Sector

Case Study: National Solar Park Cambodia





Key Concerns in Developing Solar Project

Key to a successful public-private partnership is risk sharing: Appropriate risk allocation among parties who are in best position to address the risk.

Public sector concerns:

- Private sector collaboration
- Least cost of delivered power in cents/kWh
- Managing the intermittency of renewable energy

Private sector concerns:

- Land acquisition, obtaining required permits
- Power grid strength
- Power purchase agreement, off-taker financial viability





ADB Scope of Support Services

ADB accompanies its clients during the whole cycle from concept to developing a bankable structure and until a private investor is selected.



Project conceptualization

Preparation and marketing

Bidding process

Placement and contractual close Supporting financial close

Power grid strength

Further upgrade and expansion of network

Battery storage system

EDC buys the land

EDC invests in pooling substation and transmission line to connect to the network

20 year power purchase agreement

Reverse
auction to
obtain
competitive
least cost for
delivered power

Private sector designs, finances, constructs, operates and maintains

Assist in bidevaluation

Support negotiation with preferred bidder

Assist in negotiation of Direct
 Agreement with lenders

ADB sovereign and non-sovereign financing

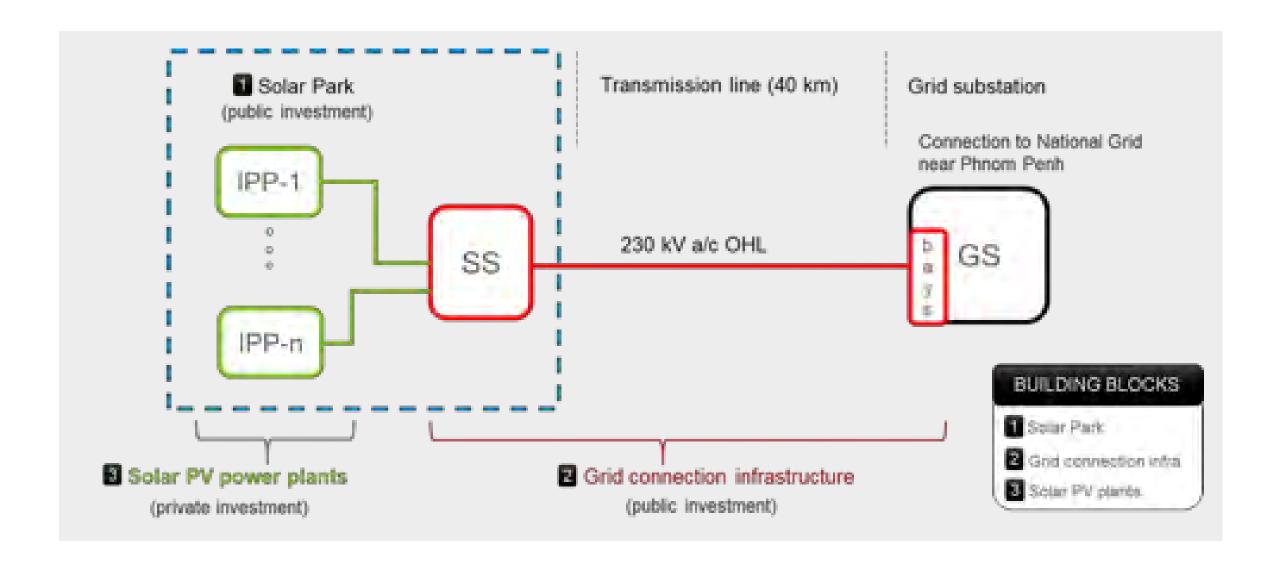
Grants and Guarantee



National Solar Park in Cambodia

 Support to EDC to build a 100 MW capacity national solar park and tender out a 60 MW (Phase 1) solar plant





ADB



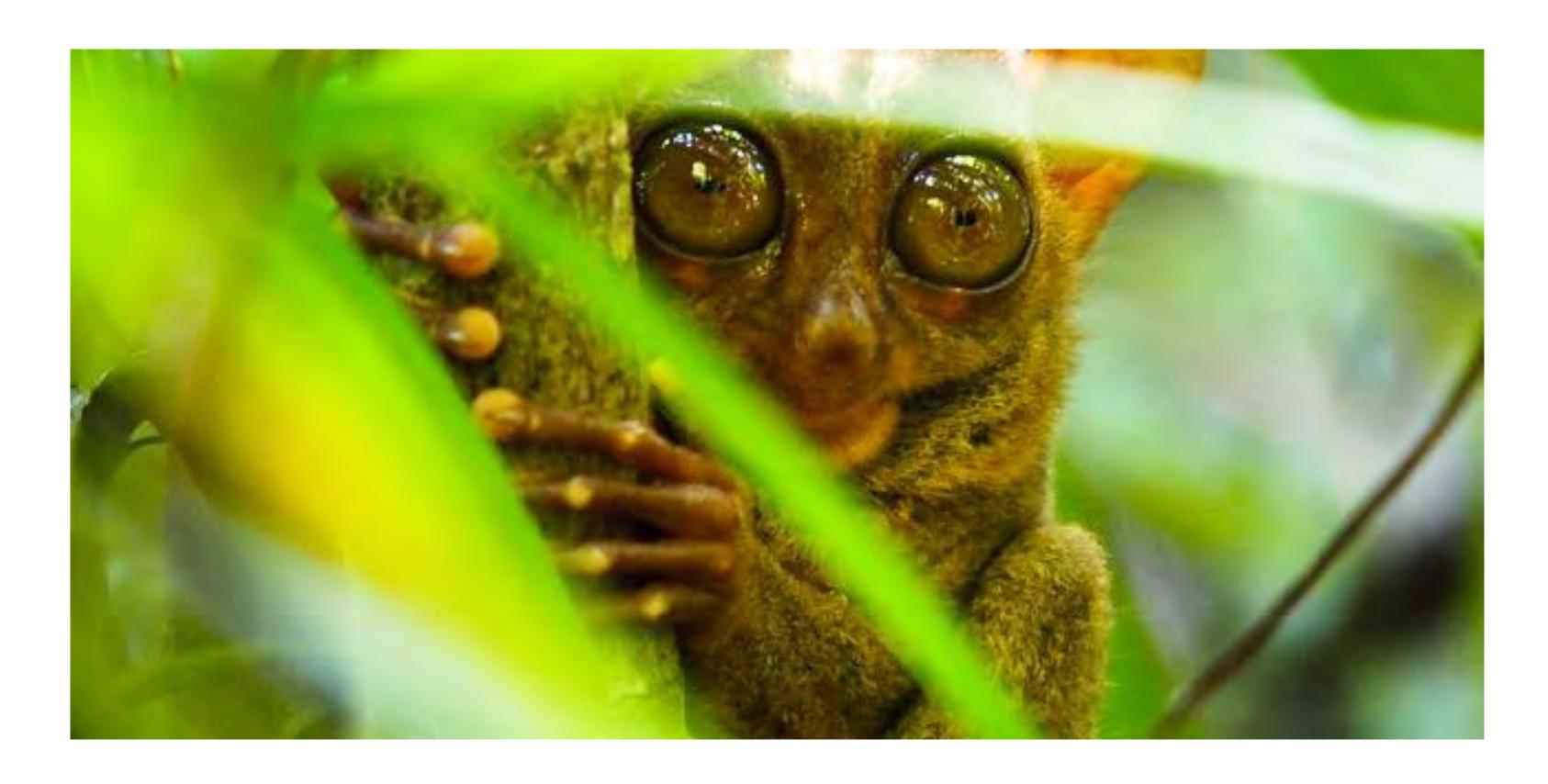


Key Messages

- Renewable energy lowers electricity costs as it reduces dependency on diesel imports
- Renewable energy **contributes to sustainability** as it improves quality of life (air, noise, health)
- Renewable energy enhances power reliability as it complements other sources of power well
- LGUs and ECs are very important and can develop their indigenous renewable energy sources through public-public-private partnerships



ADB



Renewable energy projects
that are well prepared in a transparent manner and supported by their public partners
will attract private parties

MARAMING SALAMAT

DANIELA SCHMIDT
ENERGY SPECIALIST



ENERGY DIVISION, SOUTHEAST ASIA DEPARTMENT ASIAN DEVELOPMENT BANK