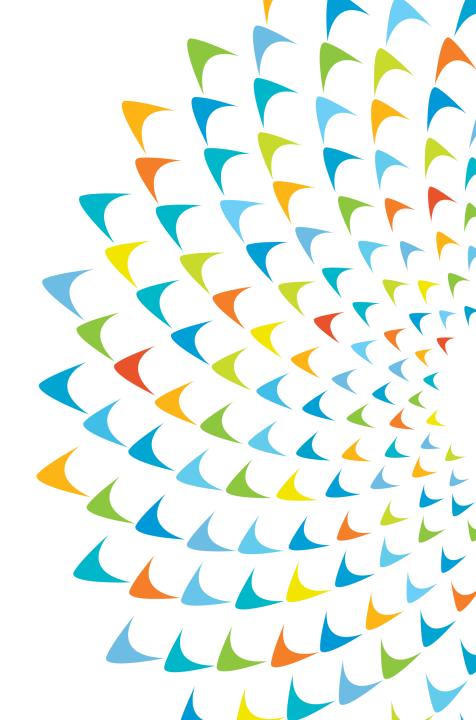


# ADB Financing Facilities for Energy Projects

Andrew Jeffries 2018 Energy Investment Forum 4 December 2018





## **Energy Policy (2009)**

To provide reliable, adequate, and affordable energy for inclusive growth in a socially, economically, and environmentally sustainable way





#### Three Pillars:

- Promoting energy efficiency and renewable energy
- 2. Maximizing access to energy for all
- 3. Promoting energy sector reform, capacity-building & governance





#### **Modes of Assistance**

## Public sector assistance

- Loans
- Grants
- Technical Assistance

#### Private sector finance

- Loans
- B-Loans
- Equity Investments
- Guarantees

#### Catalytic tools

- Clean Energy Financing Partnership Facility (\$102 m)
- Asia Pacific Carbon Fund (\$151 m), Future Carbon Fund (\$115 m)
- · Technical Support Facility
- Other initiatives: Clean Energy Program, Energy for All, Asia Solar Energy Initiative, Quantum Leap in Wind

Policy and knowledge management

- Policy dialogues with governments
- Research, training, conferences, publications, capacity building financed through technical assistance





## **ADB Operations Overview**

### Public Sector Assistance:

- Central and West Asia Department
- East Asia Department
- Pacific Department
- South Asia Department
- Southeast Asia Department

#### Private Sector Assistance:

Private Sector Operations Department

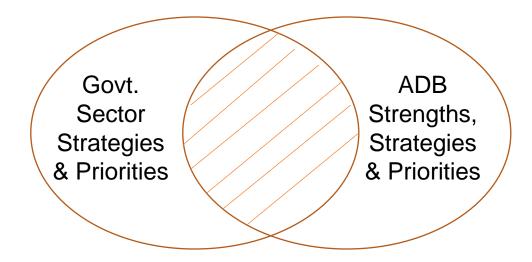




## **ADB Operations Overview**

#### Process for Public Sector Assistance:

ADB strategy closely coordinated with host country government Each country strategy unique to that particular country's needs and priorities



Country Programming



Rolling Loan & Technical Assistance Pipeline



Project / Technical
Assistance
Approval &
Emplementation





## **ADB Operations Overview**

#### Process for Private Sector Assistance:

Web links: <a href="https://www.adb.org/site/private-sector-financing/applying-assistance">https://www.adb.org/site/private-sector-financing/applying-assistance</a>

https://www.adb.org/site/private-sector-financing/contacts

#### **Required Information:**

- Executing Summary
- Project Description
- Feasibility Study
  - Technical, Financial, Economic, etc.
- Background on Sponsor(s)
- Project Ownership Structure
- Project Implementation Arrangements

- Project Operations
- The Market
- Environmental and Social Aspects
- Cost Estimates & Financing Plan
- Financial Model
- Risk Analysis
- Permits and Licenses



## Philippines Examples – Public Sector

Rural Community-Based Renewable Energy Development in Mindanao (Pilot micro-hydro plants)

- Plants: 25kW (3 phase) Barangay Dalupan & 30kW (1 phase) in Getsemane
- **Business Model:** Net-Metering Agreement first time for MHPP in Philippines
- **Energy Access:** Extension of power supply to previously unenergized households
- Strong partnership with government:
  Collaboration with National Electrification Administration,
  National Commission on Indigenous Peoples, Energy Regulation
  Commission, Department of Energy, Department of Environment
  and Natural Resources, and Mindanao Development Authority
- **Sustainability:** Establishment and capacity building of community-based organizations & locals for Operation and Maintenance of the projects
- Economic activity: development of livelihood enterprises, installation & operation of a Multipurpose Corn Mill Revolving fund grant/ micro-credit facility to cater financing needs of electricity-based household micro enterprises and farm production of members of CBOs









#### Philippines Examples – Public Sector

#### PILOT: Cobrador Solar PV Hybrid System

- Collaboration with National Electrification Administration and Romblon Electric Cooperative (ROMELCO) for replication of business model in other islands
- Hybridizing 15 kW diesel generator with 30 kW solar PV and 180 kWh energy storage system (lithium-ion batteries)
- Extension of power service from 8h to 24h per day; connecting all 244 households
- Power for households, productive uses (boat making, refrigeration for fishing, tourism, power tools) and community infrastructure



- Operation & maintenance by ROMELCO + access to government incentive schemes to lower electricity tariff
- Electricity load increased by three-fold since the start of operation in 2016





#### 150 MW Burgos Wind Farm Project

- Located in Ilocos Norte, municipality of Burgos.
- Covers approx. 686 hectares across 3 barangays (Saoit, Poblacion and Nagsurot).
- ADB loan alongside int'l & local lenders

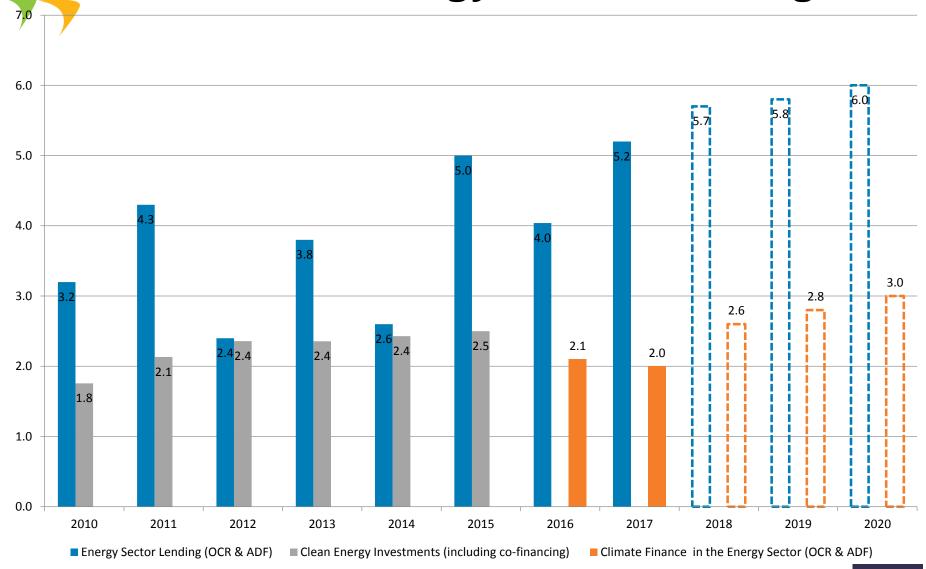
#### Tiwi and Makban Geothermal Power Green Bonds

- Plants: Tiwi in Albay (234 MW) and Makiling-Banahaw in Laguna/Batangas (442 MW) for total of 676 MW
- Project loan, plus a partial credit guarantee to support the issuance of the Philippines's first peso denominated green project bond.
- Recapitalizes purchased assets and rehabilitation costs



## 7,0

### **ADB-Wide Energy Sector Lending**







Thank you.

