2017 International Aid Business Opportunity Seminar

Asian Development Bank (ADB) Sectoral Session: Energy

13 October 2017
AGENDA

• 2.00 pm – 2.10 pm  WELCOME
  Ms Elodie Journet, Senior Trade and Investment Commissioner to the Philippines & Micronesia, Austrade Manila
  Ms Ruth Keane, Team Leader (Energy), Resources & Energy Team, Austrade Perth

• 2.10 pm – 2.40 pm  ADB SECTORAL PRESENTATION
  Mr David Elzinga, Senior Energy Specialist, Sustainable Development & Climate Change Department, Asian Development Bank
  Sector Overview
  Opportunities
  Countries of Focus

• 2.40 pm – 2.55 pm  Q&A

• 2.55 pm – 3.00 pm  NEXT STEPS & CONTACT DETAILS
HOW TO ASK QUESTIONS

1. Select “Chat” function
2. Select “Host & Presenter”
3. Type your question here
3. Press ‘Send’
DAVID ELZINGA
SENIOR ENERGY SPECIALIST
SUSTAINABLE DEVELOPMENT & CLIMATE CHANGE DEPARTMENT
ASIAN DEVELOPMENT BANK
DAVID ELZINGA

David works across a range of energy system technologies to support ADB’s investments in the energy sector. Previously at the UN Economic Commission for Europe David's focus was on the role of gas and electricity in sustainable energy systems and at the International Energy Agency (IEA) was lead author for Energy Technology Perspectives publication. He also led the IEA’s work on electricity system technologies, such as Smart Grids.
Energy Sector Priorities
Asian Development Bank

David C. Elzinga, Senior Energy Specialist
Mega-trends affecting the Energy Sector

Sustainability:
- Financial
- Environmental
- Social

Technology:
- Distributed
- Digital
- Decarbonization

Development:
- Access
- Diversification
- Economic progress
**ADB Energy Policy Overview**

- **Prioritizes sustainable energy and low-carbon development:**
  - Promoting energy efficiency and renewable energy
  - Maximizing access to energy
  - Promoting energy sector reform, capacity building and good governance

- **Comprehensive and accommodates global developments in climate and energy sectors, notably:**
  - Paris Agreement on Climate Change
  - UN Sustainable Development Goals
FOUR STRATEGIC DIMENSIONS

Sustainable Development Goal 7 (Affordable and Clean Energy)

Country’s NDC under the Paris Agreement

ADB’s climate financing targets

ADB’s added value

(i) Sustainable energy mix considering cost trend of different sources of energy
(ii) Application of new and advance technologies in project design;
(iii) Developing innovative business models and financing instruments that create markets for clean energy.
Clean Energy and Climate Finance

- Set new climate change financing targets in July 2015, part of a long-term strategic climate response to 2030.
- Asia estimated to need $40 billion annually to adapt to climate change.
- Pledged to increase climate financing to $6 billion annually by 2020.

Phase 1: 2016 to 2020
(2x current financing levels)

- $4 billion for Mitigation
- $3 billion for Renewables
- $2 billion for Adaptation
- $1 billion for Sustainable Transport and Sustainable Cities

ADB
ENERGY SECTOR PORTFOLIO (2010-2016)

Other Energy Sector Projects (OCR & ADF, in $ billion)
Clean Energy Investments in the Energy Sector (OCR & ADF, in $ billion)
Non Energy Projects (OCR & ADF, in $ billion)
**Energy for All Program**

- $742 million invested in 2016
- $7.2 billion total ADB investment in energy access** (2008-2016)
- 22 million households will have improved energy access due to ADB investments since 2008

**Access to energy is defined as having access to modern fuels and new and improved electricity connections.**
REFORM AND CAPACITY DEVELOPMENT THROUGH TECHNICAL ASSISTANCE

• $42 M in Energy Sector Technical Assistance (TA) in 2016 provides support to DMCs:
  – capacity development,
  – research and
  – policy advisory.

• Current focus: policy reform, development and demonstration of new technologies, scaling up of renewable energy and project preparation.

• Cluster TA 0017: Promoting Sustainable Energy for All in Asia and the Pacific
  – 4 TA’s focusing on Mini Grids, Urban Access to Energy, Investment Facilitation and Support for UN SE4All
Funds, Facilities and Initiatives

Climate and Technology

Clean Energy Financing Partnership Facility

- $187 M has been allocated from total fund size of $272 M since 2008
- Provides support to DMCs to improve energy access and security and transition to low carbon economies through:
  - GHG reducing technology use
  - Policy, regulatory, and institutional reforms
  - Broad range of technologies including CCUS
- Allocated a total of $49.2 million in 2016 to leverage clean energy projects in energy, transport and other sectors.
- Donors include: Australia, Canada, Japan, Norway, Spain, Sweden, and the United Kingdom
Funds, Facilities and Initiatives

Climate and Technology

Canadian Climate Fund for the Private Sector in Asia II

- USD 150 million, stand alone, single-donor trust fund
- To catalyze investment in climate change mitigation and adaptation in low and lower-middle-income countries in ADB region
- Promote gender equality and empowerment of women and girls
- Loans (senior and subordinated), risk participation, mezzanine debt - no equity / convertibles
- Concessional finance (minimum concessionality) - softer terms, lower pricing, longer tenor, lower rank, reduced security

Asia Clean Energy Forum 2018 – June 4-8

- One of the premier events in Asia covering issues related to clean energy technology, policy, programs, and financing.
- Since 2006, provides platform for sharing knowledge and experiences on key issues and the latest developments in clean energy in Asia.
- Place to do business with ADB and actors on the region
Funds, Facilities and Initiatives

Climate and Technology

ADB Climate Change Fund
• Established in May 2008 to address the causes and consequences of climate change through TA and grant components of investment
• $60 M (approx. $15 M remaining)

High-Level Technology Fund
• Established in 2017 to provide grant financing to promote the integration of high level technology and innovative solutions into investments.
• $40 M per year from Japan across all sectors

High-Impact Innovation Initiative (H3I)
• Small initiative from the Energy Sector Group to accelerate technology use to address key development issues.
2017 Work Plan

Flagship projects in the Energy Sector – Advanced Technology Application

Central and West Asia

• UZB Solar II Project
  – $100 million investment
  – 100MW plant + utility-scale storage (demo) + efficient and solarized health clinics and schools

• AFG Solar Park Project
  – ($110 mil plus joint and parallel co-financing)
  – Installation of up to 5 x 20 MW modular plants with AITF and IDB co-financing and potential private sector participation for at least 20 MW
  – Feasibility studies for additional sites including for industrial solar park with storage, off-grid, and rooftop
2017 Work Plan
Flagship projects in the Energy Sector – Multi-sectoral impacts

East Asia (BTH Air Quality Improvement - $500 million)

• Promote high technology in major polluting sources in BTH
  – Part of the multi-sectoral, multi-year support program
  – Targets large industrial, urban and rural emitters to demonstrate advanced technologies – e.g. coke-oven flue gas to LNG, renewable energy-based heating, distributed renewable + smart micro grid etc.
  – Partners with city governments, technology institutes, financial institutions to de-risks high technology investments and leverage co-financing (1:>2)
  – Large co-benefits of CO₂ reduction
2017 Work Plan

Flagship projects in the Energy Sector – Innovative Projects

Pacific

- Pacific Renewable Energy Investment Facility ($750 million)
  - Innovative facility to finance a series of low-value renewable energy projects in the eleven smallest Pacific Island countries (total population less than 1.5 million) to fast track conversion of Pacific region to renewable energy.
  - Facility will streamline ADB approval procedures and enhance ADB’s ability to process small value projects faster with lower transaction costs.
  - Overall cost is estimated at $750 million equivalent to be financed by ADB ($200 million), co-financiers ($500 million), and governments ($50 million).
  - GCF has approved $12 million grant for the initial subproject, and will consider an estimated $300 million in co-financing for subsequent projects.
  - Facility is supported by initial $10 million TA for project preparation and capacity building.
2017 Work Plan

Flagship projects in the Energy Sector – Climate Financing

South Asia

- **IND: Solar Transmission Sector Project** ($175 million ADB loan and $50 million Clean Technology Fund loan)
  - Improved capacity of interstate transmission network for increasing electricity generated from new mega solar parks (4.2 gigawatt) to the national grid
  - Improved Power Grid’s autonomous management of safeguard and procurement systems, using the country systems at the agency level

- **SRI: Wind Power Generation Project** ($200 million loan)
  - Development of the first wind park (100 megawatt) in Sri Lanka
  - Improved capacity of Ceylon Electricity Board (CEB) to forecast, control and manage intermittent renewable energy in the power system
  - Building CEB capacity to act as a wind park developer to attract private sector in wind power generation through competitive bidding in the future
2017 Work Plan

Flagship projects in the Energy Sector – New Business and Advanced Technology Application

Southeast Asia

• INO: Sustainable Energy Access in Eastern Indonesia – Power Generation Program ($500 million)
  – Fuel switching from diesel to natural gas through the development of small scale LNG distribution networks (with the ADB funded portion primarily funding generation facilities).
  – At least two pilot-scale gas-solar PV hybrid units with battery storage and energy management system installation

• INO: Pilot Carbon Capture and Storage Activity in the Natural Gas Processing Sector ($16 million grant, CCS Pilot)
  – First CCS project in Southeast Asia
  – Construction of capture and injection facilities, transport links, and 2 years of operation for 20,000 tons CO2 injected into subsurface
2017 Work Plan
Flagship projects in the Energy Sector — Energy access

Non-sovereign operations

- **BAN: Reliance LNG and Power Project:**
  - Providing critical gas infrastructure to Bangladesh
  - **Other Key Features of the Project:**
    - Top-tier sponsor: Reliance Power Limited
    - Financing of the entire LNG-to-power value chain
    - ADB considering up to [$450M] in loans, guarantees, & co-financing
    - Co-financing includes private-sector commercial banks and DFIs

RBPL will provide critical imported LNG supply & power to BAN

CCPP = combined cycle power plant; FSU = floating storage unit; FSRU = floating storage regasification unit; LNG = liquefied natural gas; M = millions; mmscfd = million standard cubic feet of gas per day
THANK YOU!

ANY QUESTIONS?
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• ADB Focus Areas: Opportunities - www.adb.org/focus-areas
• ADB project details - www.adb.org/projects
• ADB’s Procurement Guidelines - www.adb.org/documents/procurement-guidelines
• Business intelligence can be collected through consultancy recruitment notices, country partnership strategies and operations business plans. Register in ADB’s Consultant Management System – www.cms.adb.org
2018 AUSTRALIAN CONSULTING SERVICES MISSION TO THE ADB BUSINESS OPPORTUNITIES FAIR, MANILA – MARCH 2018

- ADB BOF 2-day Educational conference and networking forum - ADB funded projects and procurement opportunities
- Over 600 international consultants, contractors, manufacturers and suppliers
- Additional Austrade sessions:
  - pre-departure briefing with ADB Executive Directors - Australian Constituency
  - one-on-one meetings and knowledge-sharing sessions with ADB officers
  - networking reception
  - briefings with other multilateral banks and aid agencies (e.g. World Bank, UN, USAID, GIZ, DFAT, Development platforms, executing agencies, local contractors)

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