

Scaling Up Clean Energy Financing

Priority Areas for Clean Energy in Indonesia
9 October 2015

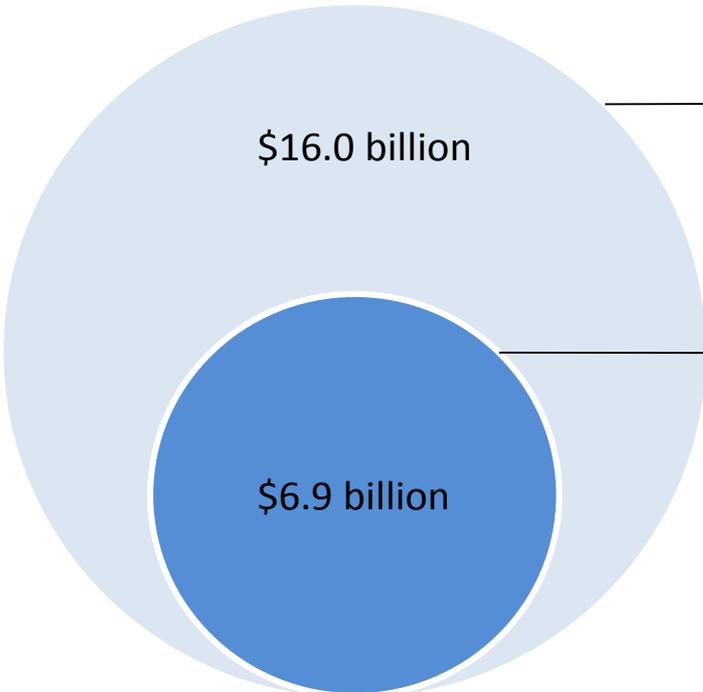
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Private Sector Operations

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ADB = public sector (sovereign) + private sector (non-sovereign)

2014 Approved Investments and Cofinancing



Public sector operations

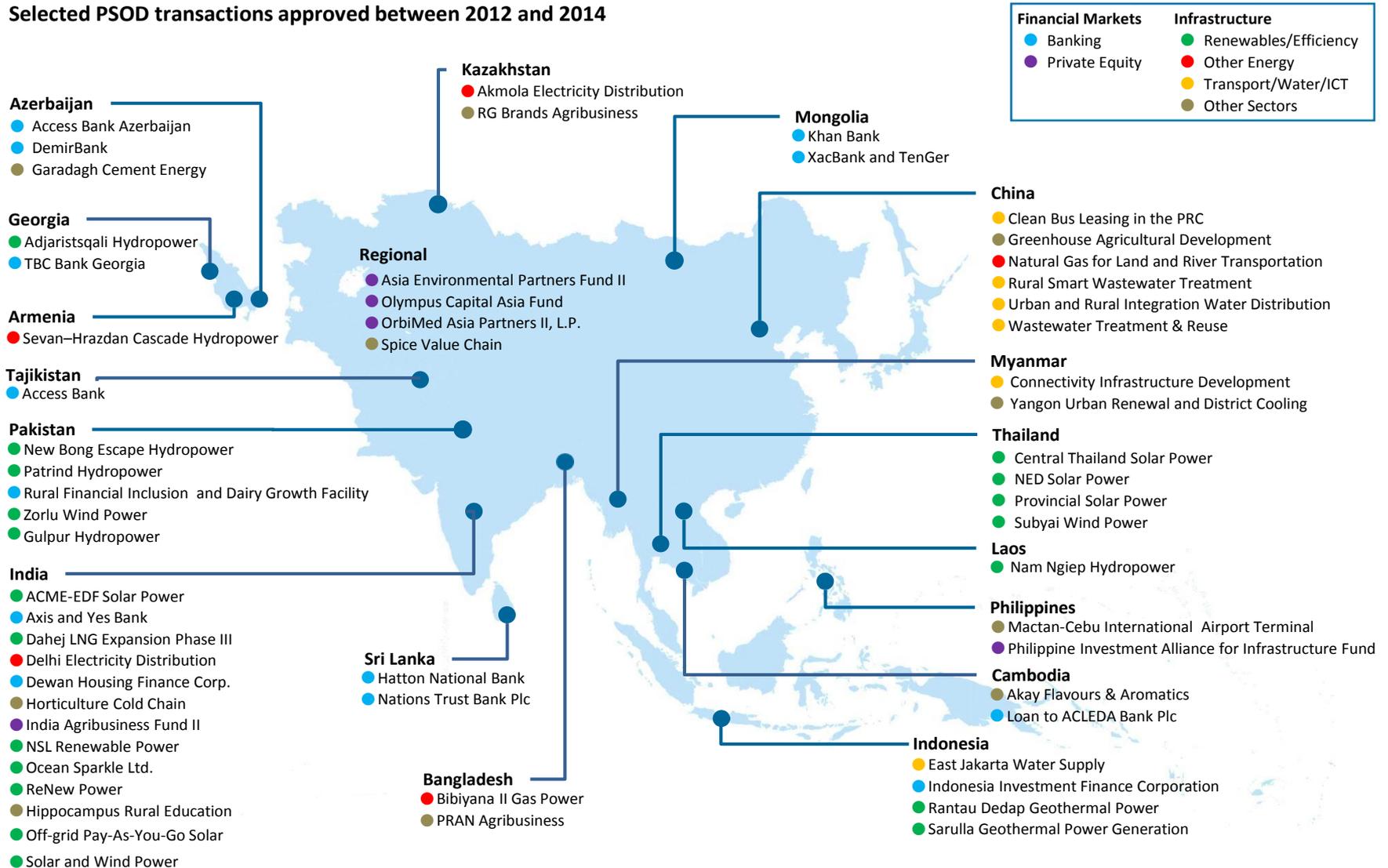
Lending to governments (i.e. Ministry of Finance)
\$16.0 billion financing approved in 2014

Private sector operations

Lending on commercial/market basis (i.e. corporates)
\$6.9 billion financing approved in 2014

ADB's PSOD has a lengthy history of investing in its core sectors across emerging Asia

Selected PSOD transactions approved between 2012 and 2014



STRICTLY CONFIDENTIAL

PSOD provides a range of financing solutions to meet its clients' needs

Debt

- Direct loans: market-based pricing in major international and/or local currencies
- B-loans: ADB acts as Lender of Record and administers the loan, but it is funded by 3rd-party financing
- Unfunded risk participations: fronting arrangement with IFIs and/or commercial banks / insurers

Equity

- Direct investments in enterprises and financial institutions through common shares, preferred stock, and/or convertibles
- Investments in private equity funds as a general partner (GP) or limited partner (LP)

Guarantees

- Political Risk Guarantee (PRG): protection against political risks, including foreign exchange restrictions, expropriation, political violence and contract dispute
- Partial Credit Guarantee (PCG): protection against credit risks, including non-payment by the borrower of the principal and interest due

Concessional Capital

- Attractively priced and structured capital via 3rd-party concessional sources for targeted industries / geographies

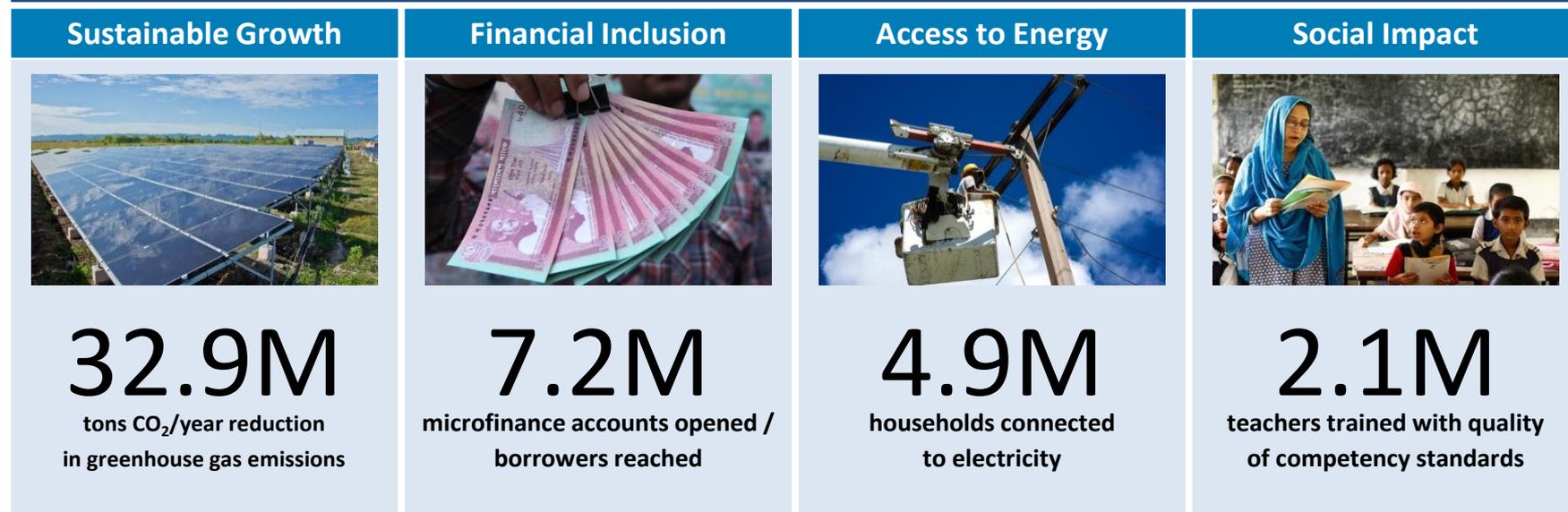
Technical Assistance

- Technical assistance funding for project preparation, capacity development, R&D, etc.

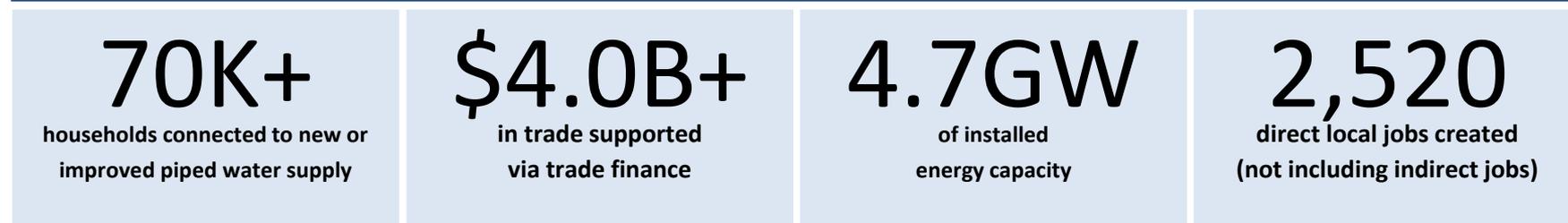
ADB consistently delivers projects with high development outputs

Each of ADB's projects across its sovereign and private sector portfolio is measured on its ability to address key development challenges that constrain sustainable growth in Asia

A Decade of Development Impact Results (2004–2013)



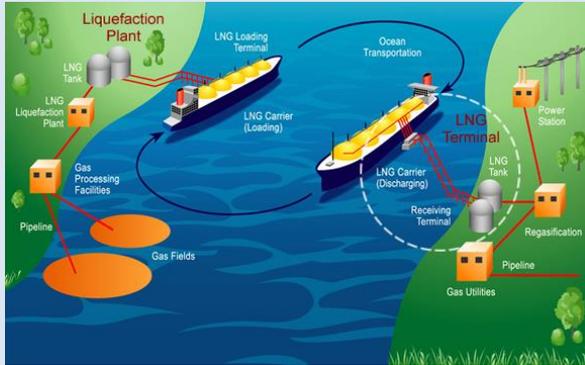
A snapshot of PSOD results (2013)⁽¹⁾



Note:

(1) These results reflect the impacts that were recorded in project completion reports that were submitted in 2013 and not the totality of PSOD operations in that same year.

PSOD Clean Energy Focus in Indonesia



Gas value chain

- Upstream
- Storage, Regasification, Distribution
- Power Generation

Examples: Tangguh LNG, PLN gas power plant expansions, Jawa 1



Scaling up renewable energy

- Geothermal
- Wind
- Solar
- Biogas, biomass, waste to energy

Examples: Sarulla, Rantau Dedap, West Timor

Case Studies: Indonesia

Tangguh LNG Project



Description:

- Tangguh LNG is operated by BP Berau Ltd, a subsidiary of British Petroleum (BP) and extracts and liquefies natural gas from gas fields in West Papua for shipping to domestic and export markets.
- Includes an offshore gas production facility, onshore liquified natural gas (LNG) facility, and gas transmission pipelines. The 2-train LNG facility produces 7.6 million tons per annum (Mtpa)

Total ADB assistance:

- \$350 million direct loan (equivalent to 10% of est. debt requirement) with a 12 year tenor, including grace period (guaranteed by BP Corporation North America Inc, rated A by S&P).

Key features:

- Supply and promote usage of natural gas to countries looking to reduce reliance on oil and diesel.
- Contribute to inclusive growth by creating thousands of jobs and work opportunities in one of the poorest Indonesian provinces.

Case Studies: Indonesia

Sarulla 320MW Geothermal Power⁽¹⁾



Description:

- Geothermal Independent Power Producer (IPP) with approx. 320 MW of installed capacity in N. Sumatra and 30-year power offtake with state-owned utility PLN. Total project cost of \$1.6 billion.
- Sponsors: Itochu Corporation, Kyushu Electric Power Company, Ormat International, Medco Power Indonesia.

Total ADB assistance:

- \$250 million ADB direct loan; \$80 million loan via ADB-managed Clean Technology Fund⁽²⁾; \$20 million loan via ADB-managed Canadian Climate Fund.⁽²⁾⁽³⁾
- 20 year tenor with 4 year grace period.

Key features:

- Accelerating development of the Indonesia geothermal sector via the financing, implementation, and commissioning of the first geothermal IPP in Indonesia in over 10 years.
- Avoiding the emission of 1.3 million tons of greenhouse gases (CO₂ equivalent) per annum.

\$: US dollars;

(1) Project Name: Sarulla Geothermal Power Development Project

(2) Mezzanine Finance

(3) Canadian Climate Fund for Private Sector in Asia

Case Studies: Indonesia

Rantau Dedap Geothermal Power (Phase 1)



Description:

- Given the high barriers to entry and capped returns facing geothermal projects, the relative absence of risk sharing solutions during the resource discovery phase has limited geothermal power expansion across the globe.
- Approx. Geothermal IPP development in S. Sumatra requiring early stage financing to support drilling exploration program.
- Sponsors: Supreme Energy, GDF Suez and Marubeni Corporation.

Total ADB assistance:

- \$50 million loan via ADB-managed Clean Technology Fund.
- Maximum 4 year loan with bullet repayment.

Key features:

- Bridging financing gap – It is the first significant non-recourse loan in which risks are shared with the private sector during the resource discovery phase of a geothermal project, setting new milestone for the Indonesian geothermal sector and the regional power market.
- Catalyzes more private investment in geothermal energy by demonstrating resource viability in Indonesia.

Key issues for financing

- ▶ Sponsor track record
- ▶ Bankable structure:
 - ▶ Tariff
 - ▶ Offtake (supported by BVGL for geothermal, or extended political risk guarantee for non-BVGL gas projects)
 - ▶ Funding: commercial/ECA/concessional fund participation (ADB = 25%)
- ▶ Stability of legal and regulatory framework
- ▶ Initial environmental and social baseline studies
 - ▶ Sponsor commitment to ADB SPS
- ▶ Third party confirmation of resource availability (geothermal, wind, solar etc) and technical design, or long term gas supply agreement

Key Challenges – Example of geothermal sector

- ▶ What's next?
 - ▶ MOE and MOF collaboration to standardize renegotiation process
 - ▶ **Maintain sector momentum**
- ▶ SOE participation – reaction of private sector developers
- ▶ Ongoing uncertainty of legal and regulatory framework

Thank you



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