ADB

Report and Recommendation of the President to the Board of Directors

Project Number: 51209-002
March 2018

Proposed Loan and Administration of Loans Special Purpose Vehicles owned by Equis Energy Eastern Indonesia Renewable Energy Project (Phase 2) (Indonesia)

This is an abbreviated version of the document approved by ADB's Board of Directors that excludes information that is subject to exceptions to disclosure in accordance with paragraph 97 (v) and (viii) of ADB's Public Communication Policy 2011.

Asian Development Bank

CURRENCY EQUIVALENTS
(as of 19 February 2018)

Currency unit	–	rupiah (Rp)
Rp1.00	=	$0.000070
$1.00	=	Rp13,537.50

ABBREVIATIONS

ADB	–	Asian Development Bank
CFPS II	–	Canadian Climate Fund for the Private Sector in Asia II
DSCR	–	debt service coverage ratio
LTA	–	lender's technical advisor
MEMR	–	Ministry of Energy and Mineral Resources
O&M	–	operation and maintenance
PLN	–	Perusahaan Listrik Negara (national power utility)
PPA	–	power purchase agreement
PSOD	–	Private Sector Operations Department
RUPTL	–	Rencana Usaha Penyediaan Tenaga Listrik (National Electricity Business Plan)
SPV	–	special purpose vehicle

WEIGHTS AND MEASURES

GW	–	gigawatt
ha	–	hectare
m^2	–	square meter
MW	–	megawatt

NOTE

In this report, "$" refers to United States dollars.

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PROJECT AT A GLANCE

1. Basic Data **Project Number:** 51209-002

Project Name	Eastern Indonesia Renewable Energy Project (Phase 2)	**Department /Division**	PSOD/PSIF2
Country	Indonesia		
Borrowers	PT Infrastruktur Terbarukan Adhiguna PT Infrastruktur Terbarukan Buana PT Infrastruktur Terbarukan Cemerlang PT Infrastruktur Terbarukan Lestari		

2. Sector **Subsector(s)**

✓ Energy	Renewable energy generation - solar

3. Strategic Agenda **Subcomponents** **Climate Change Information**

Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	CO_2 reduction (tons per annum)	41,400
		Climate Change impact on the Project	Medium
Environmentally sustainable growth (ESG)	Eco-efficiency Global and regional transboundary environmental concerns		

4. Drivers of Change **Components** **Gender Equity and Mainstreaming**

Partnerships (PAR)	Official cofinancing Private Sector	Some gender elements (SGE)	✓
Private sector development (PSD)	Promotion of private sector investment		

5. Poverty and SDG Targeting **Location Impact**

Geographic Targeting	No	Rural	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG7, SDG13		

6. Nonsovereign Operation Risk Rating

Obligor Name	Final Project Rating	Facility Risk Rating
PT Infrastruktur Terbarukan Buana		
PT Infrastruktur Terbarukan Cemerlang		
PT Infrastruktur Terbarukan Lestari		
PT Infrastruktur Terbarukan Adhiguna		

7. Safeguard Categorization **Environment:** **Involuntary Resettlement:** **Indigenous Peoples:**

8. Financing

Modality and Sources	Amount ($ million)
Total	**40.17**

Source: Asian Development Bank

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed combined loan of up to $40,170,000, in aggregate, to four special purpose vehicles[1] (SPVs) owned and controlled by Equis Energy for the Eastern Indonesia Renewable Energy Project (Phase 2) in Indonesia. The report also describes (i) the proposed administration of a loan to be provided by the Leading Asia's Private Infrastructure Fund;[2] and (ii) the proposed administration of a loan to be provided by the Canadian Climate Fund for the Private Sector in Asia II[3] (CFPS II), and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the administration of the loans.

[CONFIDENTIAL INFORMATION DELETED]

2. This transaction follows phase 1 of the project where the Asian Development Bank (ADB) provided financing to Equis Energy for a 72-megawatt (MW) wind power plant.[4] Phase 2 consists of a 21 MW solar power plant in Likupang, North Sulawesi, and three 7 MW solar power plants in Lombok, West Nusa Tenggara. These power plants will supply power to Perusahaan Listrik Negara (PLN), the national power utility. Delivery of the country's first utility-scale solar power projects will demonstrate the viability of solar power projects by the private sector. The project will help reduce the country's dependence on fossil fuels and promote renewable energy development.

II. THE PROJECT

A. Project Identification and Description

1. Project Identification

3. Indonesia is the largest economy in Southeast Asia, with gross domestic product of about $932.3 billion (current United States dollars) in 2016.[5] The economy improved steadily after the Asian financial crisis in 1997, growing by an average of 5.3% during 2012–2016, down from 6.0% in 2012. Improved access to affordable and sustainable forms of energy is critical to enhancing the competitiveness of Indonesia's power infrastructure, which has been struggling to keep up with the country's strong economic performance. The Ministry of Energy and Mineral Resources (MEMR) anticipates power demand to increase under current forecasts, resulting in a shortage that could undermine the country's sustainable growth potential if not addressed adequately.

4. Indonesia has an abundance of renewable energy sources, with an estimated potential of 29.5 gigawatts (GW) of geothermal energy resources (the largest in the world), 75.0 GW of potential hydro power, 532.6 GW of potential solar power, 32.6 GW of potential biomass and biogas, and 113.5 GW of potential wind power.[6] However, as of 2016, only 12.9 MW of solar

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[1] The four SPVs are all Indonesian limited liability companies: (i) PT Infrastruktur Terbarukan Adhiguna (Pringgabaya), (ii) PT Infrastruktur Terbarukan Buana (Selong), (iii) PT Infrastruktur Terbarukan Cemerlang (Sengkol), and (iv) PT Infrastruktur Terbarukan Lestari (Likupang).

[2] Financing partner: the Japan International Cooperation Agency.

[3] Financing partner: the Government of Canada.

[4] ADB. 2017. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Loans to PT Energi Bayu Jeneponto for the Eastern Indonesia Renewable Energy Project (Phase 1) (Indonesia)*. Manila.

[5] World Bank. 2017. *World Development Indicators*. Washington, DC.

[6] Government of Indonesia, MEMR. 2016. *Mainstreaming Renewable Energy and Energy Conservation*. Paper presented at the Sustainable and Inclusive Energy Program Policy Coordination Team Kick-Off Workshop. Jakarta.

power (less than 0.003% of the country's total potential) had been installed as on-grid power generation.[7]

5. To cope with the predicted electricity shortages over the medium term, the Government of Indonesia introduced fast-track programs to accelerate the development of power generation. In its national power development plans for 2015–2024, the government introduced a third fast-track program targeting the addition of 10–12 GW of power by 2019. In early 2017, pursuant to the National Electricity Business Plan (RUPTL), 2017–2026, the government adjusted the target completion dates and capacities under this program to 29 GW by the end of 2019 and 35 GW by the end of 2021.[8] While the largest share of generated energy is still expected to come from fossil fuels such as coal, the government is encouraging the greater use of renewable energy sources in the generation mix. The government has set ambitious targets to increase the share of energy supplied from renewable sources from 12% in 2013 to 23% in 2025.[9] By 2025, the MEMR plans to increase the capacity of power generation connected to the grid through new and renewable energy to 45.0 GW, about 6.4 GW of which will come from solar energy.

6. Simultaneously, the government aims to bring down the cost of electricity generation. The MEMR issued new regulations in January 2017 to set renewable energy tariffs against the local and national grid price, to regulate the procurement process, and more generally to reallocate some risks under PPAs.[10] PPAs for wind and solar projects signed after 2017 will be subject to a tariff cap. Tariffs will be capped at 85% of the cost of the grid in regions where regional grid costs are higher than the national average. In areas where the cost of the regional grid is lower than that of the national grid, the tariff will be agreed with PLN by negotiation, although it is understood that the national average is set as a cap. Against this backdrop, Equis Energy has asked ADB to catalyze funding for the first utility-scale commercial solar projects in Indonesia.

2. Project Design

7. The project involves the construction, operation, and maintenance of projects by Equis Energy in Eastern Indonesia. The portfolio consists of (i) a 72 MW wind power plant in Jeneponto, South Sulawesi, which ADB financed as phase 1; (ii) a 21 MW solar power plant and associated infrastructure in Likupang, North Sulawesi; and (iii) three 7 MW solar power plants and associated infrastructure, in Pringgabaya, Selong, and Sengkol in Lombok, West Nusa Tenggara. Phase 2 comprises (ii) and (iii), totaling 42 MW. Equis Energy will develop and implement phase 2 under four 20-year build–own–operate PPAs with PLN.

8. ADB approved phase 1 on 2 November 2017 and signed the financing documents in December 2017.

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3 August. Quoted in ADB. 2017. Sector Assessment (Summary): Energy in *Report and Recommendation of the President to the Board of Directors: Proposed Results-Based Loan to Perusahaan Listrik Negara for the Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program (Guaranteed by the Republic of Indonesia)*. Manila.

7 PLN. 2017. *Statistik 2016*. Jakarta.

8 Government of Indonesia, MEMR. 2017. *Pengesahan Rencana Usaha Penyediaan Tenaga Listrik: PT Perusahaan Listrik Negara (Persero) Tahun 2017 S.D. 2026*. Decree No. 1415 K/20/MEM/2017. Jakarta (RUPTL, 2017–2026); and Sector Overview: Energy (accessible from the list of linked documents in Appendix 2).

9 ADB. 2016. *Indonesia: Energy Sector Assessment, Strategy, and Road Map*. Manila.

10 Government of Indonesia, MEMR. 2017. *MEMR Regulation No. 10 of 2017 Concerning Principles of Power Purchase Agreements*. Jakarta (amended by MEMR Regulation No. 49 of 2017); Government of Indonesia, MEMR. 2017. *MEMR Regulation No. 11 of 2017 Concerning Utilization of Natural Gas by Power Plants*. Jakarta; and Government of Indonesia, MEMR. 2017. *MEMR Regulation No. 12 of 2017 Concerning the Utilization of Renewable Energy Resources for Electricity Supply*. Jakarta (revoked and replaced by MEMR Regulation No. 50 of 2017).

3. Borrower and Sponsors

9. The borrower of each phase 2 subproject will be an SPV owned by Redaya Energi Solar Private Limited, a subsidiary of Equis Energy. Based in Singapore, Equis Energy is one of Asia's largest independent infrastructure private equity fund managers with a strong focus on developing renewable energy. Since its inception in 2010, the group has developed and is operating 4.7 GW of solar, wind, and hydro power energy generation assets in Asia, and is the largest renewable energy independent power producer in the region. Global Infrastructure Partners and its co-investors acquired Equis Energy's infrastructure and energy assets in January 2018, but management of Equis Energy's projects in Indonesia will remain the same.[11]

[CONFIDENTIAL INFORMATION DELETED]

10. ADB conducted integrity and enhanced tax integrity due diligence.[12] ADB's review of the relevant entities do not give ADB cause to believe that such entities have been established for, or are being used for, money laundering or terrorism financing in the jurisdiction involved in the project, nor does it give ADB cause to believe that the transaction is being used for cross-border tax evasion.

B. Development Impacts, Outcome, and Outputs

11. **Impacts.** ADB financing will help the government achieve its sustainable development targets through private sector investment in the energy sector. The government aims to increase the share of renewable energy in the total primary energy supply to 23% by 2025.[13] Overall, this will support Indonesia's climate commitment to curb greenhouse gas emissions by 29% by 2030 and promote more sustainable economic growth.[14] Further, using sustainable electricity as a key driver of increased economic activity will enhance quality of life in Indonesia.

12. **Outcome.** The outcome will be 61 gigawatt-hours of solar power contributed annually to satisfy increasing electricity demand. Providing this solar energy will avoid carbon dioxide emissions equivalent to 41,400 tons per year.

13. **Outputs.** The outputs will be (i) 42 MW in solar power capacity installed and operated by the private sector, (ii) local employment generated by the construction and operation of the solar power plants, (iii) local and national economic growth stimulated, and (iv) entrepreneurial capacity and skills of women in the local community improved.

C. Alignment with ADB Strategy and Operations

14. **Consistency with ADB strategy and country strategy.** The project supports private sector infrastructure and environment, two of the five core pillars of ADB's long-term strategy as reaffirmed by the Midterm Review of Strategy 2020.[15] The project is consistent with ADB's country

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[11] Details of Client Information (accessible from the list of linked documents in Appendix 2).

[12] ADB. 2003. *Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism*. Manila; and ADB. 2016. *Anticorruption Policy: Enhancing the Role of the Asian Development Bank in Relation to Tax Integrity.* Manila. Further information is provided in Integrity and Tax Due Diligence Disclosure (accessible from Linked Document 10)

[13] Government of Indonesia. 2014. *National Energy Plan*. Government Regulation No. 79/2014. Jakarta.

[14] United Nations Framework Convention on Climate Change. 2015. *Intended Nationally Determined Contribution: Republic of Indonesia*.

[15] ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific.* Manila.

partnership strategy for Indonesia, 2016–2019 in supporting the expansion of infrastructure and environmentally friendly technologies for clean energy generation.[16] It contributes to the objectives of Indonesia's National Energy Policy (2014) and to the 2015 commitment to the Paris Agreement under the United Nations Framework Convention on Climate Change, and is included in the RUPTL, 2017–2026 PLN project pipeline for North Sulawesi and Lombok.

15. **Consistency with sector strategy and ADB operations.** The project is consistent with ADB's Energy Policy, which states that support for renewable energy projects will be prioritized and broadened.[17] The project fully aligns with ADB's energy sector strategy for Indonesia, which has the following main pillars: (i) undertake sector policy reform to make access to energy more sustainable and inclusive; (ii) strengthen the reach, reliability, and efficiency of the nation's electricity grid; and (iii) enable the greater use of clean energy. Further, the project complements ADB assistance programs to the MEMR and PLN for policy-based lending and direct investments.[18] The project benefits from ADB support to strengthen and expand the power distribution network in eastern Indonesia, which is pilot testing smart grid projects in Sulawesi and Nusa Tenggara to help PLN absorb more power from renewable sources.[19] The project also further broadens the exposure of PSOD to the Indonesian energy sector, which so far is concentrated in geothermal generation and gas-related infrastructure projects.

16. **Lessons from previous operations.** The project will benefit from ADB's exposure to Indonesia's energy sector and experience gained from structuring and implementing energy projects in Indonesia. ADB's experience indicates that successful project implementation depends on the sponsors' strength, experience, and ability to understand the regulatory environment, as well as the terms and conditions governing the financing of such projects.

D. Project Cost and Financing Plan

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E. Implementation Arrangements

17. Table 3 summarizes the implementation arrangements.[20]

Table 3: Summary of Implementation Arrangements

Aspects	Arrangements
Regulatory framework	Equis Energy will develop the project under Indonesia's Electricity Law (2009). PLN awarded the project to the sponsors through a direct negotiation process in 2017.
Management	The sponsor has a valuable combination of technical skills; renewable energy expertise, including in solar power; and IPP development experience in Asia's energy sector, with a proven record of developing and operating about 4.7 GW of renewable energy projects.

[16] ADB. 2016. *Country Partnership Strategy: Indonesia, 2016–2019: Towards a Higher, More Inclusive and Sustainable Growth Path.* Manila.
[17] ADB. 2009. *Energy Policy.* Manila.
[18] ADB. 2017. *Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Loans for Subprogram 2 and Administration of Technical Assistance Grant to the Republic of Indonesia for the Sustainable and Inclusive Energy Program.* Manila.
[19] ADB. 2017. *Report and Recommendation of the President to the Board of Directors: Proposed Results-Based Loan to Perusahaan Listrik Negara for the Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program (Guaranteed by the Republic of Indonesia).* Manila.
[20] Implementation Arrangements (accessible from the list of linked documents in Appendix 2).

Aspects	Arrangements
Implementation period	The project will subsequently operate under a 20-year offtake contract. [CONFIDENTIAL INFORMATION DELETED]
Construction arrangements	
Type of arrangement	[CONFIDENTIAL INFORMATION DELETED]
Contractors	[CONFIDENTIAL INFORMATION DELETED]
Operations arrangements	
Revenue structure	Equis Energy is developing the project under four 20-year, BOO PPAs with PLN starting from the COD. [CONFIDENTIAL INFORMATION DELETED]
Major cost structure	Solar power plants have relatively high up-front capital costs, minimal operating costs, and no fuel expense. Interest from debt financing is the only material expense, and this drives the economics and viability of solar power projects.
Operation and maintenance	The project has executed a 5-year O&M contract. [CONFIDENTIAL INFORMATION DELETED]
Performance monitoring	Key performance indicators, including output and outcome indicators, will be reported by SPVs and monitored by ADB. SPVs will submit (i) quarterly unaudited and annual audited financial statements, (ii) annual environmental and social monitoring reports, and (iii) annual development effectiveness reports to ADB. During the construction phase, ADB will appoint an independent technical advisor to monitor progress, attend performance testing, and certify the COD.

ADB = Asian Development Bank; BOO = build–own–operate; COD = commercial operation date; EPC = engineering, procurement, and construction; GW = gigawatt; IPP = independent power producer; kWh = kilowatt-hour; MW = megawatt, O&M = operation and maintenance; PLN = Perusahaan Listrik Negara (national power utility); PPA = power purchase agreement; PT PP = PT Pembangunan Perumahan; SPV = special purpose vehicle.
Sources: ADB and Equis Energy.

F. Projected Financial and Economic Performance

[CONFIDENTIAL INFORMATION DELETED]

III. THE PROPOSED ADB ASSISTANCE

A. The Assistance

18. The ADB assistance will have three components: (i) a direct loan; (ii) a loan to be provided by the Leading Asia's Private Infrastructure Fund and administered by ADB; and (iii) a loan to be provided by the Canadian Climate Fund for Private Sector in Asia II (CFPS II) and administered by ADB; for a combined total amount of $40,170,000.

[CONFIDENTIAL INFORMATION DELETED]

B. Value Added by ADB Assistance

19. ADB adds value by mobilizing a substantial financing package to a project being developed by a leading regional private sector renewable energy developer which is entering a frontier market by developing the first utility-scale solar projects by the private sector in the country. To date, only 12.9 MW of solar power plants provide electricity to PLN and there are no privately owned solar power plants in Indonesia (footnote 6). Commercial electricity production based on renewable energy has been struggling in Indonesia for decades, largely because of the absence of a transparent regulatory framework, clear support mechanisms, and financial

incentives. The successful financing and completion of this project will have a positive demonstration effect for the country's nascent renewable energy industry.

The project's sustainability depends on its ability to amortize its high up-front capital costs over a longer period to reduce annual debt service and mitigate volatility from intermittent revenues, which is especially important in countries with few operational solar power plants and a lack of actual performance data.

[CONFIDENTIAL INFORMATION DELETED]

20. The project supports the government's objective of accelerating and expanding private sector investment in clean energy infrastructure in Indonesia. ADB is playing a catalytic role by mobilizing the CFPS II loan to build first-generation renewable energy projects in Indonesia.

C. Risks

[CONFIDENTIAL INFORMATION DELETED]

IV. POLICY COMPLIANCE

A. Safeguards and Social Dimensions

21. In compliance with ADB's Safeguard Policy Statement (2009), the project is classified category B for the environment and category C for involuntary resettlement and indigenous peoples. To meet the Safeguard Policy Statement requirements for an environment category B project, the SPVs have prepared environmental and social impact assessments for the solar power plants and the power transmission line and submitted these to ADB for review prior to disclosure. Most project components, such as solar panels and transmission towers, will be situated on rain-fed dry agricultural land historically planted with corn, cassava, and beans. None of the four solar power plants and their surrounding areas are located in or near an environmentally sensitive area. Equis Energy designed the transmission line route to avoid sensitive areas and minimize disruption and inconvenience to the community. Equis Energy has identified the project's potential environmental and social impacts, and incorporated measures to avoid, minimize, mitigate, and compensate for any adverse impacts in the safeguard reports and plans. Equis Energy's institutional capacity and commitment to manage the project's social and environmental impacts are deemed adequate by ADB. The project's environmental impact and mitigation measures are discussed in detail in the safeguards and social dimensions summary.[21]

22. The project will have a footprint of about 58 hectares (ha): 30 ha in Likupang, 11 ha in Pringgabaya, 8 ha in Selong, and 9 ha in Sengkol. It is not situated in and does not overlap with any traditionally owned land or land with customary rights. To expedite the project, the SPVs procured project land using a willing buyer, willing seller process without availing themselves of the provisions of the National Land Agency Law No. 2/2012 on land procurement for development in the public interest. Land acquisition did not result in involuntary resettlement because of physical or economic displacement.

[CONFIDENTIAL INFORMATION DELETED]

[21] Safeguards and Social Dimensions Summary (accessible from the list of linked documents in Appendix 2).

23. Measures to benefit women or facilitate their involvement in construction and operation of the project have been incorporated in project design in accordance with ADB's Policy on Gender and Development (1998). The SPVs will comply with national labor laws and, pursuant to ADB's Social Protection Strategy, will take measures to comply with internationally recognized core labor standards.[22] The SPVs will report regularly to ADB on (i) their (and their contractors') compliance with such laws; and (ii) the measures taken. Information disclosure and consultation with affected people will be conducted in accordance with ADB requirements.[23] The project is classified as having some gender elements and will target employment of at least 30 women during construction and 10 during operation and support the development of entrepreneurial capacity and technical skills on renewable energy of women's groups in the project area.

B. Anticorruption Policy

24. The SPVs were advised of ADB's policy of implementing best international practice relating to combating corruption, money laundering, and the financing of terrorism. ADB will ensure that the investment documentation includes appropriate provisions prohibiting corruption, money laundering, and the financing of terrorism, and remedies for ADB in the event of noncompliance.

C. Investment Limitations

25. The proposed loan is within the medium-term, country, industry, group, and single exposure limits for non-sovereign investments.

D. Assurances

26. Consistent with the Agreement Establishing the Asian Development Bank (the Charter),[24] ADB will proceed with the proposed assistance upon establishing that the Government of Indonesia has no objection to the proposed assistance to the SPVs. ADB will enter into suitable finance documentation, in form and substance satisfactory to ADB, following approval of the proposed assistance by the Board of Directors.

V. RECOMMENDATION

27. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan from ADB's ordinary capital resources to special purpose vehicles owned by Equis Energy for the Eastern Indonesia Renewable Energy Project (Phase 2) in Indonesia, with such terms and conditions as are substantially in accordance with those set forth in this report, and as may be reported to the Board.

28.

[CONFIDENTIAL INFORMATION DELETED]

Takehiko Nakao
President

19 March 2018

[22] ADB. 2003. *Social Protection.* Manila (adopted in 2001).

[23] Summary Poverty Reduction and Social Strategy, and Safeguards and Social Dimensions Summary (accessible from the list of linked documents in Appendix 2).

[24] ADB. 1966. *Agreement Establishing the Asian Development Bank.* Manila.

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with

Quality of life in Indonesia enhanced by using sustainable electricity as a key driver of increased economic activity (PLN's rolling 10-year development plan)[a]

Share of primary energy generated through renewable energy sources reached 23% by 2025 (National Energy Plan)[b]

Greenhouse gas emissions reduced by 29% relative to business-as-usual scenario by 2030 (Indonesia's commitment under the United Nations Framework Convention on Climate Change)[c]

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Solar power generated in a sustainable way to satisfy increasing electricity demand	By 2022 a. 61 GWh of electricity generated and delivered to PLN annually (2017 baseline: 0) b. 41,400 tCO_2-equiv/year avoided (2017 baseline: 0) c. At least 60 jobs provided during operation (2017 baseline: 0) d. At least 10 jobs provided to women during operation (2017 baseline: 0) e. Annual domestic purchases of goods and services exceeded $1.5 million during operation (2017 baseline: 0)	a–e. Equis Energy SPVs' annual monitoring report	Changes in the regulatory environment or power purchase agreement Climate and/or weather risk
Outputs 1. Power plants installed 2. Local employment generated 3. Growth of the local and national economy supported 4. Entrepreneurial capacity and skills of women in the	By 2022 1. Total installed solar electricity generation capacity reached 42 MW (2017 baseline: 0) 2a. At least 800 jobs provided during the construction phase (2017 baseline: 0) 2b. At least 30 jobs provided to women during the construction phase (2017 baseline: 0) 3a. Payments to the Government of Indonesia during construction and early operation reached $1.15 million (2017 baseline: 0) 3b. Domestic purchases during construction and early operation reached $14.2 million (2017 baseline: 0) 4a. One capacity-building training on renewable energy and entrepreneurial skills targeting women entrepreneurs conducted	1–3. Equis Energy SPVs' annual monitoring report	Construction delays because of force majeure Cost overruns Delays or stoppage because of missing permits Solar photovoltaic technology unsuitable for this location and usage

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
local community improved	annually for the first 4 years (2017 baseline: 0) 4b. At least five training participants given technical support in starting small businesses (2017 baseline: 0) 4c. At least five training participants employed by the services sector (2017 baseline: 0)		
Key Activities with Milestones [CONFIDENTIAL INFORMATION DELETED]			
Inputs [CONFIDENTIAL INFORMATION DELETED]			
Assumptions for Partner Financing Not Applicable			

ADB = Asian Development Bank, CO_2 = carbon dioxide, GWh = gigawatt-hour, MW = megawatt, PLN = Perusahaan Listrik Negara (national power utility).

[a] Government of Indonesia, Ministry of Energy and Mineral Resources. 2017. *Pengesahan Rencana Usaha Penyediaan Tenaga Listrik: PT Perusahaan Listrik Negara (Persero) Tahun 2017 S.D. 2026.* Decree No. 1415 K/20/MEM/2017. Jakarta (RUPTL, 2017–2026).

[b] Government of Indonesia. 2014. *National Energy Plan*. Government Regulation No. 79/2014. Jakarta.

[c] United Nations Framework Convention on Climate Change. 2015. *Intended Nationally Determined Contribution: Republic of Indonesia*.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

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1. Sector Overview
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Supplementary Document

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