ADB

Report and Recommendation of the President to the Board of Directors

Project Number: 51112-001
August 2018

Proposed Loan and Administration of Loan
PT. Jawa Satu Power
Jawa-1 Liquefied Natural Gas-to-Power Project (Indonesia)

Asian Development Bank

CURRENCY EQUIVALENTS
(as of 31 July 2018)

Currency unit	–	rupiah (Rp)
Rp1.00	=	$0.000069
$1.00	=	Rp14,390.00

ABBREVIATIONS

ADB	–	Asian Development Bank
BPP	–	Biaya Pokok Pembangkitan (cost of power generation)
EPC	–	engineering, procurement, and construction
ESIA	–	environmental and social impact assessment
GE	–	General Electric
IFC	–	International Finance Corporation
IPP	–	independent power producer
LEAP	–	Leading Asia's Private Infrastructure Fund
LNG	–	liquefied natural gas
MEMR	–	Ministry of Energy and Mineral Resources
NO_2	–	nitrogen dioxide
PLN	–	Perusahaan Listrik Negara (national electric utility)
PPA	–	power purchase agreement
RUPTL	–	Rencana Umum Penyediaan Tenaga Listrik (National Electricity Business Plan)
SPV	–	special purpose vehicle

WEIGHTS AND MEASURES

GW	–	gigawatt
ha	–	hectare
km	–	kilometer
m^3	–	cubic meter
MW	–	megawatt

NOTES

(i) The fiscal year (FY) of some sponsors ends on 31 March. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2018 ends on 31 March 2018.

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

Vice-President	Diwakar Gupta, Private Sector and Cofinancing Operations
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PROJECT AT A GLANCE

1. Basic Data — **Project Number:** 51112-001

Project Name	Jawa-1 Liquefied Natural Gas-to-Power Project
Country	Indonesia
Borrower	PT. Jawa Satu Power
Department /Division	PSOD/PSIF2

2. Sector	**Subsector(s)**	**Financing ($ million)**
✓ Energy	Conventional energy generation	250.00
	Total	**250.00**

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)	1,770,000
		Climate Change impact on the Project	Low

4. Drivers of Change	**Components**	**Gender Equity and Mainstreaming**	
Partnerships (PAR)	Commercial cofinancing 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	Urban	Medium
SDG Targeting	Yes		
SDG Goals	SDG7		

6. Nonsovereign Operation Risk Rating

Obligor Name	Final Project Rating	Facility Risk Rating
PT. Jawa Satu Power		

7. Safeguard Categorization **Environment:** A **Involuntary Resettlement:** B **Indigenous Peoples:** C

8. Financing

Modality and Sources	Amount ($ million)
ADB	**250.00**
Nonsovereign LIBOR Based Loan (Regular Loan): Ordinary capital resources	250.00
Cofinancing	**150.00**
Leading Asia's Private Infrastructure Fund (LEAP) (Full ADB Administration)	150.00
Others	0.00
Others [a]	**1,012.90**
Total	**1,412.90**

[a] Derived by deducting ADB financing and Cofinancing from Total Project Cost.

Source: Asian Development Bank

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan of up to $250,000,000 to PT. Jawa Satu Power for the development of the Jawa-1 Liquefied Natural Gas-to-Power Project in Indonesia. The report also describes the proposed administration of a loan of up to $150,000,000 to be provided by the Leading Asia's Private Infrastructure Fund[1] (LEAP), and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, approve the administration of the loan.

2. Under the proposed project, PT. Jawa Satu Power will build, operate, and maintain a combined-cycle, gas-fired power plant with a nominal capacity of 1,760 megawatts (MW) in Cilamaya, Karawang, West Jawa. The loans will support the development of one of the first and largest power projects using liquefied natural gas (LNG) in Indonesia, testifying to the commitment of the Government of Indonesia to reduce the country's dependency on coal while using cleaner domestic energy sources. The project will also provide an affordable power generation source that could increase the penetration capacity of renewable energy sources on the Jawa–Bali grid.

II. THE PROJECT

A. Project Identification and Description

1. Project Identification

3. Indonesia is the largest economy in Southeast Asia, with a gross domestic product of $1 trillion in 2017. Economic growth has averaged 5.0% from 2015 to 2017, but stronger growth is needed to drive poverty down to a single digit and reverse the situation of high inequality.[2] Growth remains below potential because of structural impediments such as deficient energy infrastructure. The Asian Development Bank (ADB) estimates Indonesia's infrastructure investment needs at $1.1 trillion for 2016–2030, or $1.3 trillion if climate adaptation measures are included.[3] Accelerating investment in affordable and sustainable energy is critical for achieving the country's economic and social development goals.

4. The Ministry of Energy and Mineral Resources (MEMR) anticipates power demand to exceed current forecasts, resulting in a shortage that could undermine the country's sustainable growth potential if not addressed adequately. Every year, MEMR issues a rolling 10-year plan prepared by Perusahaan Listrik Negara (PLN), the national electric utility, to prioritize new power investments. The National Electricity Business Plan—or Rencana Umum Penyediaan Tenaga Listrik (RUPTL), as it is known in Bahasa Indonesia—for 2018–2027[4] indicates that, during this period, 56 gigawatts (GW) will be added to PLN's network.[5]

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[1] The Japan International Cooperation Agency (JICA) is the financing partner.

[2] The proportion of people living in poverty has declined by more than half, from 24% in 1999 to 10.1% in 2017, but remains high for a lower middle-income country.

[3] ADB. 2017. *Meeting Asia's Infrastructure Needs*. Manila.

[4] Government of Indonesia, MEMR. 2018. *Rencana Usaha Penyediaan Tenaga Listrik 2018–2027*. Jakarta.

[5] In the RUPTL for 2018–2027, power demand was revised downward from 2015–2017 levels because economic growth was lower than expected. However, the required overall power capacity, including an adequate reserve margin, still exceeds the existing capacity.

5. **Supporting sustainable growth.** The RUPTL 2018–2027 stresses an increased use of LNG as a source of fuel.[6] It anticipates LNG as a share of total natural gas to increase from 33% in 2018 to almost 60% in 2027. The use of combined-cycle[7] gas-fired generation can improve the environmental sustainability of the current energy mix by displacing diesel and coal as fuels for electricity generation. Gas turbines can ramp up more quickly than coal or diesel units, and thus are better suited to respond rapidly to load fluctuations. In turn, this can enable greater use of intermittent renewable energy sources, such as wind and solar. Therefore, the increase in the use of natural gas will help the government reach the target of 23% for power generation from renewable energy sources.

6. **Increasing power affordability.** The Jawa-1 LNG-to-power project will also help lower the average power generation cost in Indonesia's largest power grid. From 2015 to 2017, the government has attempted to reduce the cost of electricity. The MEMR issued new regulations in January 2017 to set energy tariffs against the local and national grid price.[8] The cost of power generation (commonly referred to as BPP, which is short for Biaya Pokok Pembangkitan) is determined by the MEMR every year.[9]

2. Project Design

7. The project entails the construction, operation, and maintenance of a 1,760-MW load-following, combined-cycle, gas turbine (CCGT) power plant about 100 kilometers (km) east of Jakarta on the Javanese coastline. PLN is responsible for sourcing the LNG The project will be implemented under a 25-year power purchase agreement (PPA) with PLN.

3. Borrower and Sponsors

8. The project will be implemented through a special purpose vehicle (SPV), PT. Jawa Satu Power (the borrower). The SPV is owned by reputable sponsors: (i) a major Japanese trading house, Marubeni Corporation,; (ii) Sojitz Corporation, also a large Japanese trading house; and (iii) PT. Pertamina (Persero), an integrated national oil, gas, and geothermal company, wholly owned by the Government of Indonesia.

[CONFIDENTIAL INFORMATION DELETED]

9. Integrity due diligence[10] and enhanced tax due diligence[11] have been conducted on the borrower and related entities.

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[6] Of this new capacity, 57% is expected to be developed by independent power producers (IPPs). PLN. 2018. *RUPTL PT PLN (PERSERO) 2018–2027 pada acara Diseminasi RUPTL 2018–2027*. Jakarta.

[7] A combined-cycle power plant uses both a gas and a steam turbine together to produce more electricity from the same fuel than a traditional simple-cycle plant. The waste heat from the gas turbine is routed to the nearby steam turbine, which generates extra power.

[8] Sector Overview (accessible from the list of linked documents in Appendix 2).

[9] While the tariff ceilings apply to new and renewable energy, the BPP provides an indication of the average price of PLN's grid. Regulation No. 50 imposed caps on tariffs based on PLN's cost of generation. If the cost of generation in the area is less or equal to the national average (as is the case for Java, Sumatra, and Bali), the local area cost of generation applies as cap.

[10] ADB. 2003. *Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism*. Manila.

[11] ADB. 2016. *Anticorruption Policy: Enhancing the Role of the Asian Development Bank in relation to Tax Integrity*. Manila.

B. Development Impact, Outcome, and Outputs

10. **Impact.** The project will contribute to reestablish Indonesia's energy independence by redirecting energy resources from export markets to the domestic market. Over time Indonesia is transitioning from an export economy into one based on domestic consumption.

11. **Outcome.** The project outcome is: an increase in power generated from local energy sources. The project will generate 9,400 gigawatt-hours of energy annually and 120 local jobs during operations, of which at least 15 will be for women.

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12. **Outputs.** The project outputs are: (i) the installation of a 1,760 MW combined cycle gas-fired power plant and ancillary infrastructure; (ii) the generation of local employment with the creation of at least 4,000 jobs during construction, of which at least 240 will be for women; and (iii) support of local economic growth through domestic purchases during construction.

C. Alignment with ADB Strategy and Operations

13. **Consistency with ADB strategy and country strategy.** The project supports private sector participation in infrastructure, a core pillar of ADB's long-term strategy as affirmed by Strategy 2030.[12] The project is consistent with ADB's country partnership strategy, 2016–2019 for Indonesia in supporting the expansion of infrastructure and environment-friendly technologies for clean energy generation.[13] It also contributes to the objectives of Indonesia's National Energy Plan.[14]

14. **Consistency with sector strategy and relevant ADB operations.** The project is consistent with ADB's Energy Policy,[15] which states that support for power infrastructure using LNG is to be broadened. The project fully aligns with ADB's energy sector strategy for Indonesia, which aims at strengthening the reach, reliability, and efficiency of the nation's electricity grid; and enabling greater use of clean energy. It also complements recent ADB assistance programs to the MEMR and PLN for policy-based lending and direct investments.[16] The project builds on ADB's private sector experience and recent support to the LNG industry (footnote 12).

15. ADB is also the partner of choice for Indonesia's strategy to finance low-carbon power generation through private sector participation. ADB is supporting the country's efforts to strengthen the LNG supply chain, and to increase energy independence, while contributing to reduce power generation costs. ADB's contribution in support of the private sector in Indonesia's natural gas value chain dates back to 2005, when ADB provided a $350 million loan for the greenfield development of Tangguh LNG.[17] In 2016, ADB financed the expansion of the Tangguh

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[12] ADB. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific.* Manila.
[13] ADB. 2016. *Country Partnership Strategy: Indonesia, 2016–2019: Toward a Higher, More Inclusive, and Sustainable Growth Path.* Manila.
[14] Government of Indonesia. 2017. *National Energy Plan (Presidential Regulation No. 22/2017).* Jakarta.
[15] ADB. 2009. *Energy Policy.* Manila.
[16] 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. One of the three main thrusts of the policy matrix is private sector mobilization.
[17] ADB. 2016. *Report and Recommendation of the President to the Board of Directors: Republic of Indonesia: Tangguh Liquefied Natural Gas Project.* Manila.

LNG project (footnote 13). The proposed assistance will promote the use of domestic gas, likely to come from the Tangguh LNG expansion. Private sector operations complement sovereign operations in supporting natural gas generation in more remote areas of the country. Support to the expansion of LNG-to-power technology will also positively contribute to promoting access to power for the less-connected communities.[18]

D. Project Cost and Financing Plan

[CONFIDENTIAL INFORMATION DELETED]

E. Implementation Arrangements

16. Table 3 summarizes the implementation arrangements.[19]

Table 3: Summary of Implementation Arrangements

Aspects	Arrangements
Regulatory framework	The project is being implemented under the Electricity Law (30/2009), which sets out the framework for private sector participation in power. In addition, government regulation 14/2012, as amended by regulation 23/2014, sets out implementation guidelines for private electricity supply.
Management	The project will be owned by PT. Jawa Satu Power (the borrower), which is sponsored by Marubeni, Sojitz, and Pertamina. [CONFIDENTIAL INFORMATION DELETED]
Implementation period	The project is developed on a build, own, operate, and transfer basis under a 25-year power purchase agreement with PLN. [CONFIDENTIAL INFORMATION DELETED]
Construction arrangements	The power plant, pipeline, and transmission line will be built under offshore and onshore EPC contract arrangements. For the offshore EPC contract, the selected contractor is a joint venture of GE and Samsung C&T. For the onshore EPC contract, the contractor is a joint venture between GE Indonesia, Samsung C&T, and PT. Meindo Elang Indah, a local contractor. [CONFIDENTIAL INFORMATION DELETED]
Operations arrangements	The borrower will be responsible to operate and maintain the project. To do so, the borrower will enter into a long-term service agreement with GE to provide parts for and maintenance of the combustion turbines, steam turbines, and generators.
Supply arrangements	PLN will supply LNG. [CONFIDENTIAL INFORMATION DELETED]
Performance monitoring	Lenders will receive key performance indicators, including output and outcome indicators. The borrower will also submit (i) quarterly unaudited and annual audited financial statements, (ii) environmental and social monitoring reports, and (iii) development effectiveness reports to the ADB.

EPC = engineering, procurement, and construction; GE = General Electric; PLN = Perusahaan Listrik Negara (national power utility).

Source: Asian Development Bank.

[18] ADB. 2016. *Concept Paper: Sustainable Energy Access in Eastern Indonesia – Power Sector Generation Program.* Manila.

[19] Details of Implementation Arrangements (accessible from the list of linked documents in Appendix 2).

F. Projected Financial and Economic Performance

[CONFIDENTIAL INFORMATION DELETED]

III. THE PROPOSED ADB ASSISTANCE

A. The Assistance

17. ADB's assistance will have two components: (i) a direct loan of up to $250 million; and (ii) a parallel loan of up to $150 million to be provided by LEAP and administered by ADB; both to PT. Jawa Satu Power.

[CONFIDENTIAL INFORMATION DELETED]

B. Value Added by ADB Assistance

18. ADB is playing a critical role in ensuring implementation of environmental and social safeguards that exceed the requirement of Indonesia's standards. As a result of ADB's involvement in the project, expected emissions of air pollutants have been lowered, impact of construction noise and discharges is reduced compared to the original project proposal, and 20 vulnerable households that are expected to be affected by the project have been identified. A livelihood restoration program will ensure additional protections for the vulnerable households. In addition, ADB involvement is accelerating the borrower's adoption of an anti-corruption policy and code of conduct.

C. Risks

[CONFIDENTIAL INFORMATION DELETED]

IV. POLICY COMPLIANCE

A. Safeguards and Social Dimensions

19. ADB has categorized the investment as follows: environment category A, involuntary resettlement category B, and indigenous peoples category C.[20] To meet ADB requirements for an environment category A project, a draft environmental and social impact assessment (ESIA) was disclosed on ADB's website on 23 March 2018.[21] This includes an environmental and social management plan to manage and monitor impacts of the project during construction and operation. The sponsors will recruit experienced safeguards staff to ensure effective implementation.

20. **Environment.** The power plant, transmission line and onshore pipelines occupy modified agricultural land (paddy fields and fish farms). The jetty, seaward sections of the pipelines are located in the marine environment. The power plant is adjacent to an existing LNG processing facility, which includes a gas pipeline that runs parallel to the proposed pipelines. The coast features fishponds and sparse mangroves and is zoned as protected forest and an endemic bird area.[22] Impacts on the mangroves and bird habitat are potentially possible, so a precautionary

[20] ADB. Safeguard Categories.
[21] https://www.adb.org/projects/51112-001/main
[22] http://datazone.birdlife.org/eba/factsheet/161

approach was taken in the disclosed ESIA. On ADB's advice, a targeted survey was conducted by an avifauna specialist engaged by the environmental consultant. The survey confirmed that the project site does not provide suitable habitat for endangered bird species, and, therefore, it is not classified as critical habitat. The clearance of natural habitat consisting of 0.33 hectares (ha) of mangroves, for the project will be mitigated by the protection and restoration of remnant coastal vegetation to achieve no net loss in biodiversity. The 52-kilometer transmission line crosses paddy fields, watercourses, roads, and villages. Tower design, placement, and height minimize noise, electric magnetic fields, health and safety risks, and other environmental impacts as much as possible.

21. The project will use natural gas as fuel. The main air pollutant of potential concern is nitrogen dioxide (NO_2). The baseline level of NO_2 indicates that the airshed is non-degraded. Air dispersion modeling for operation of the plant shows that NO_2 emissions will comply with Indonesian air quality standards and World Health Organization guidelines.

[CONFIDENTIAL INFORMATION DELETED]

22. The Java Sea has degraded water quality. The project area has few sensitive marine species and does not support coral or sea grass. Seawater will be used for all water needs, including closed-loop cooling. Wastewater will be treated on site, and discharges will comply with IFC and Indonesian marine water guidelines. Modeling confirms that, after mixing, changes in temperature and salinity are within the range of natural variation at the site. Dredging volumes for the jetty and pipeline will be 45,981 m^3, less than the originally proposed 80,000 m^3. Dredged materials are to be disposed on the seabed adjacent to the works area. The impact on fisherfolks and potential risks were considered as part of the ESIA.

23. Ambient noise levels are above IFC residential criteria. Noise modelling for construction indicates localized exceedances in noise standards, therefore the sponsor has agreed to implement mitigation measures. This includes pre-boring of piles, use of dampers when impact piling, restricting noisy work to daytime hours and installation of a noise wall. Noise modeling was conducted for the operation phase, which predicts that elevated noise levels comply with IFC guidelines and do not result in perceptible increases of more than 3 A-weighted decibels (dBA).

24. Stakeholder consultation was undertaken during the local environmental approval process and during the preparation of the ESIA. A community grievance redress mechanism was developed and socialized.

[CONFIDENTIAL INFORMATION DELETED]

25. **Involuntary resettlement**. The project will require the acquisition of land for the power plant, onshore pipeline, jetty, pumphouse, transmission line tower footings, and the substation,. The land will be acquired through negotiation of voluntary sales (willing buyer–willing seller). In addition, land below the transmission line will be subject to land use restriction.

26. The transmission line tower footings and the substation were acquired between 2017 and 2018 on a purely willing seller–willing buyer basis,. All the landowners have received at least 80% of the compensation, while the remaining 20% will be paid when the land transfer is formally completed. The transmission line's right of way will impose land use restriction, such as maximum height of trees and structures. As the transmission line footings positions have been defined, people under the transmission line alignment will not have a choice to refuse. The land for the power plant, which is currently vacant, will be acquired from Pertamina Gas (Pertagas) through

transfer of land ownership. Pertagas, as part of its corporate social responsibility program, had given permission for people to temporarily cultivate the land. The program activity formally ended in November 2016. The vacant land is used for the time being as a goat grazing area by random goat owners from different villages.

27. The land for the onshore pipeline and access road will be partly acquired and partly leased. The area is being used for paddy and fishponds. The land belongs to the Ministry of Environment and Forestry and is categorized as a protected forest. However, the surrounding communities have cultivated the land for years, and some of them already obtained proof of ownership from the National Land Agency and from village authority. These landowners will still be receiving their compensation for the land. Land may also be leased for temporary use as laydown area during the construction of the transmission line, onshore pipeline, and access road, if the already acquired land is not sufficient.

28. The borrower has prepared a resettlement plan (RP)[23] to guide the negotiations for land acquisition through a willing seller-willing buyer approach and the negotiated settlement for the transmission line right of way. The RP also includes a livelihood restoration program for vulnerable affected land owners.

[CONFIDENTIAL INFORMATION DELETED]

29. **Indigenous people**. No recognized indigenous peoples reside in the vicinity of the proposed project sites in West Java. Java island dwellers are the largest ethnic group in Indonesia. Most of the landowners and people in the Karawang area, including Cilamaya, belong to the Sundanese ethnic group or a mixture of Sundanese and Javanese, while those in the Bekasi area are Sundanese and Betawi. These people do not display a collective attachment to the area. All groups speak their distinct local language but also communicate smoothly in Bahasa Indonesia for their day-to-day interaction. None of these ethnic groups has experienced discrimination based on their ethnic identity.

30. **Some gender elements.** The borrower commits to implement measures to promote opportunities for women empowerment in their activities following ADB's Policy on Gender and Development (1998). The project endeavors to (i) employ at least 240 women during construction; (ii) employ at least 15 women during operations; and (iii) ensure that at least 40% of those participating in and benefiting from training on livelihood and skills development are women, among others. The borrower will submit periodic reports on implementation of gender measures to ADB as part of their environmental and social monitoring reports.

31. PT. Jawa Satu Power will comply with national labor laws and, pursuant to ADB's Social Protection Strategy (2001), will take measures to comply with the internationally recognized core labor standards.[24] The borrower 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 follow ADB requirements.[25]

[23] Resettlement Plan (accessible from the list of linked documents in Appendix 2).
[24] ADB. 2003. *Social Protection.* Manila (adopted in 2001).
[25] Summary Poverty Reduction and Social Strategy; and Safeguards and Social Dimensions Summary (accessible from the list of linked documents in Appendix 2).

B. Anticorruption Policy

32. The borrower and the sponsors 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

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

D. Assurances

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

V. RECOMMENDATION

35. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank and recommend that the Board approve the loan of up to $250,000,000 from ADB's ordinary capital resources to PT. Jawa Satu Power for the Jawa-1 Liquefied Natural Gas-to-Power Project 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.

Takehiko Nakao
President

7 August 2018

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

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned with
Indonesia's energy independence reestablished by redirecting energy resources from export markets to the domestic market (National Energy Plan)[a]

Results Chain	**Performance Indicators with Targets and Baselines**	**Data Sources and Reporting Mechanisms**	**Risks**
Outcome Availability of power from local energy sources increased	By 2024: a. Electricity generated and delivered to offtaker increased to 9,400 GWh per year (2018 baseline: 0) b. 1.77 million tons of CO_2eq avoided annually (2018 baseline: 0)[b] c. Number of jobs provided during operation amount to at least 120 (2018 baseline: 0) d. Number of jobs provided to women during operation amount to at least 15 (2018 baseline: 0) e. Annual domestic purchase of goods and services amounts to more than $10 million during operation (2018 baseline: 0) f. Payments to the government during operations total at least $55 million (2018 baseline: 0)	a–f. Annual monitoring report submitted by the borrower	Changes in regulatory environment or power purchasing agreement Natural gas supply is delayed or disrupted
Outputs 1. Power plant and ancillary infrastructure installed 2. Local employment generated	By 2022: 1a. Total installed electricity generation capacity of project increased to 1,760 MW (2018 baseline: 0) 1b. Total installed length of pipeline increased to 27 km (2018 baseline: 0) 1c. Total installed length of transmission line increased to 52 km (2018 baseline: 0) 2a. Number of jobs provided during construction total at least 4,000 (2018 baseline: 0)	1–4. Annual monitoring report submitted by the borrower	Construction delays because of force-majeure events Cost overruns

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	2b. Number of jobs provided to women during construction total at least 240 (2018 baseline: 0)		
3. Growth of local economy supported	Total domestic purchases during construction total $22 million (2018 baseline: 0)		

Key Activities with Milestones
[CONFIDENTIAL INFORMATION DELETED]
Inputs
ADB: $250.0 million (loan) Leading Asia's Private Infrastructure Fund: $150.0 million (loan) [CONFIDENTIAL INFORMATION DELETED]
Assumptions for Partner Financing

ADB = Asian Development Bank, CO_2eq = carbon dioxide equivalent, GWh = gigawatt-hour, km = kilometer, m^3 = cubic meter, MW = megawatt, LNG = liquefied natural gas, Q = quarter.

[a] Government of Indonesia. 2017. *National Energy Plan (Presidential Regulation No. 22/2017)*. Jakarta.

[b] Contribution to the ADB Results Framework (accessible from the list of linked documents in Appendix 2).

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=51112-001-4

1. Contribution to the ADB Results Framework
2. Country Economic Indicators
3. Summary Poverty Reduction and Social Strategy
4. Safeguards and Social Dimensions Summary
5. Environmental and Social Impact Assessment
6. Resettlement Plan