

# **Program Implementation Document**

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**Perusahaan Listrik Negara**

**Sustainable Energy Access in Eastern Indonesia—  
Electricity Grid Development Program Phase 2  
(Guaranteed by the Republic of Indonesia)**

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### **PURPOSE OF THE PROGRAM IMPLEMENTATION DOCUMENT**

The developing member country (DMC) is wholly responsible for implementing the program supported by results-based lending (RBL). The Asian Development Bank (ADB) staff support the results based lending program design and implementation.

The program administration document (PID) consolidates the essential program implementation information. The PID is a management tool which supports effective program implementation, monitoring, and reporting. It is developed throughout the program processing, and should be discussed with the DMC at Loan Negotiations. It is a living document that should be refined and kept up to date during program implementation.

## Abbreviations

ACEF	=	Asian Clean Energy Fund
ADB	=	Asian Development Bank
ckm	=	circuit-kilometer
DLIs	=	disbursement-linked indicators
DMC	=	developing member country
EGDP	=	Electricity Grid Development Program
EPC	=	engineering, procurement, and construction
GW	=	gigawatts
GWh	=	gigawatt-hours
IVA	=	independent verification agency
JFPR	=	Japan Fund for Poverty Reduction
km	=	kilometer
kV	=	kilovolt
kW	=	kilowatt
M&E	=	monitoring and evaluation
MOF	=	Ministry of Finance
MSOE	=	Ministry of State-Owned Enterprises
MVA	=	megavolt-ampere
MW	=	megawatt
MWh	=	megawatt-hour
PAP	=	program action plan
PID	=	program implementation document
PLN	=	Perusahaan Listrik Negara (State Electricity Corporation)
RBL	=	results-based lending
RPJMN	=	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
RPJPN	=	<i>Rencana</i> Pembangunan Jangka Panjang Nasional (National Long-Term Development Plan)
RRP	=	report and recommendation of the President
RUPTL	=	Rencana Usaha Penyediaan Tenaga Listrik (Electricity Power Supply Business Plan)
SILM	=	Sistem Informasi Laporan Manajemen (Management Reporting Information System)
SPKK	=	Satuan Pengendalian Kinerja Korporat (Corporate Performance Control)



## I. PROGRAM DESCRIPTION

1. Indonesia's economy, the world's eighth largest in terms of purchasing power parity, has doubled since 2000. The decline in the poverty rate (19.1% in 2000 to 9.7% in 2018) has been remarkable, with 13.1 million people lifted out of poverty in 18 years. However, growth is largely centered around Java, and regional disparities remain stark.<sup>1</sup> In Eastern Indonesia, poor infrastructure for electricity services, transport, and communications constrains its enormous potential for growth.

2. Expanded electrification, with priority to regions outside Java, is a pillar of the government's infrastructure investment plan. The plan includes increasing the electrification ratio from 89% in 2016 to near 100% by 2024, the power generation capacity from 56.5 gigawatts (GW) in 2018 to 112.2 GW in 2028, and the share of renewable energy in the national energy mix from 13% in 2016 to 23% in 2025.<sup>2</sup> ADB's sector assessment and the government's sector strategy emphasizes energy security, nationwide electrification, and priority to Eastern Indonesia, which poses the biggest challenge to electrification due to its isolated and weak power grids.<sup>3</sup>

3. ADB's programmatic support to Eastern Indonesia includes: (i) policy support through the Sustainable and Inclusive Energy Program policy-based loan, (ii) a results-based lending (RBL) program for electricity grid development in Sulawesi-Nusa Tenggara, (iii) a sector project for small- to mid-scale natural gas-fired power plants and, (iv) other complementary sector projects and RBL programs (2019–2021).<sup>4</sup> The proposed RBL program includes incentives to scale up the use of intermittent renewable sources, and the series of loans combined will help enhance access to sustainable energy services, consistent with Sustainable Development Goal 7 of affordable, reliable, sustainable and modern energy for all, and the Paris Agreement on climate change.<sup>5</sup>

4. The proposed program focuses on nine provinces in Kalimantan, Maluku, and Papua.<sup>6</sup> Papua is the poorest and least developed, with around one-quarter of population living below the poverty line of \$35 per person per month.<sup>7</sup> Kalimantan, despite a high provincial GDP per capita, has many remote subdistricts where up to a fifth of the population are poor.<sup>8</sup> Electrification lags behind: households not electrified or only poorly electrified account for 56% and 15% in Papua and West Papua, 20% in both Maluku and North Maluku, and 28%, 18% and 21% in Central, North and West Kalimantan, respectively.<sup>9</sup> The nine provinces are characterized by poor development outcomes and poor gender indicators. Papua, West Papua, and West Kalimantan have among the lowest human development indices in Indonesia. All provinces, except Maluku, have low gender development indices (GDI), with Papua, West Papua, and East, North, and West Kalimantan having the lowest GDIs in Indonesia. Women's share of income is low in all provinces, with the lowest share in East and North Kalimantan (23% and 26% respectively) against a national average of 37%.<sup>10</sup>

<sup>1</sup> For example, Jakarta's 2017 nominal per capita gross regional domestic product (\$17,374) was more than 10 times higher than that of Maluku (\$1,708).

<sup>2</sup> Ministry of Energy and Mineral Resources. 2017. National Energy Master Plan (RUEN). Jakarta; and the State Electricity Corporation (PLN). 2019. Electric Power Supply Business Plan (RUPTL) 2019–2028. Jakarta.

<sup>3</sup> ADB. 2016. *Indonesia: Energy sector assessment, strategy, and road map*. Manila.

<sup>4</sup> ADB. 2016. *Country Operations Business Plan: Indonesia, 2017–2019*. Manila.

<sup>5</sup> United Nations General Assembly. 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York; The Paris Agreement under the United Nations Framework Convention on Climate Change.

<sup>6</sup> Central, East, North, South, and West Kalimantan; Maluku and North Maluku; and Papua and West Papua.

<sup>7</sup> All data are from BPS-Indonesia and refer to the year 2017, unless otherwise stated. <https://www.bps.go.id/>

<sup>8</sup> Statistics from the National Team for Acceleration of Poverty Reduction. <http://www.tnp2k.go.id/>

<sup>9</sup> 2017 data provided by PLN in October 2018. Poorly electrified households are those who receive intermittent power from small diesel gensets and poorly maintained solar plants.

<sup>10</sup> Ministry of Women's Empowerment & Child Protection and BPS, 2018. *Pembangunan Manusia Berbasis Gender 2018*. Jakarta. Data updates from BPS-Indonesia. <https://www.bps.go.id/>

5. The proposed RBL program will enhance sustainable, equitable, and reliable access to electricity for the population in nine provinces. The RBL will finance a slice of the broader program in the Electric Power Supply Business Plan (RUPTL) 2019–2028 of the State Electricity Corporation (*Perusahaan Listrik Negara* or PLN). PLN has a financing gap for power delivery, including community-level renewable energy development, for which it is seeking ADB support.

6. **The RBL modality** is suitable as it would (i) reduce high transaction costs associated with scattered small investments; (ii) increase accountability and incentives for delivering and sustaining results, for example, ensuring that community-level solar installations are functioning; (iii) incentivize PLN to consolidate gains in institutional strengthening from earlier RBL programs, including on safeguards; (iv) fit with the government's fast-expanding electrification strategy; and (v) stimulate financing and harmonization with other development partners. The proposed program incorporates lessons learned from ongoing RBL program experience. For example, grant support is proposed to cover the incremental costs of connection for poor households and enhance consumer understanding on safe and productive electricity use.

7. **ADB's value addition to the sector** comes from being the first partner to support extensive efforts to enhance sustainable energy access through the RBL modality, which is able to leverage institutional improvements such as in asset and waste management, operation and maintenance of remote renewable energy systems, procurement and inventory management, and social impact monitoring. These efforts will help ensure the sustainability of operations beyond the program's implementation period and strengthen PLN's capacity beyond the program's regional boundary. Previous RBL programs are cofinanced with the World Bank and KfW, and possible collaboration will be pursued for the proposed program with Japan International Cooperation Agency, and the governments of Australia and New Zealand.

8. **Program Scope.** PLN and ADB have agreed on a RBL program size of \$2,275 million dedicated to the nine provinces across Kalimantan, Maluku, and Papua, of which the proposed loan will finance \$600 million and grant cofinancing will finance a total of \$6 million. Table 1 summarizes the RBL program scope.

**Table 1: Program Scope**

Item	Broader PLN Program	Results-Based Lending Program
Outcome	Electricity access in Kalimantan, Maluku, and Papua enhanced	Sustainable, equitable and reliable access to electricity for the population in Kalimantan, Maluku, and Papua enhanced.
Key outputs	(i) Power generation capacity added; (ii) Power transmission and distribution systems strengthened and expanded; (iii) Share of renewable energy increased.	(i) Power distribution network strengthened and expanded; (ii) Renewable energy use increased, (iii) Institutional capacity strengthened and social monitoring enhanced.
Expenditure size	\$5,128 million	Total: \$2,275 million From PLN: \$1,669 million (73.4%) From ADB: \$600 million (26.4%) Cofinancing: \$6 million (0.2%) poverty reduction and clean energy grants administered by ADB <sup>11</sup>
Geographic coverage	All provinces of Kalimantan, Maluku and Papua	All provinces of Kalimantan, Maluku and Papua

<sup>11</sup> The Japan Fund for Poverty Reduction and the Asian Clean Energy Fund are possible funding sources subject to the approval of the Government of Japan.



Item	Broader PLN Program	Results-Based Lending Program
Implementation period	Jan 2020–Dec 2025	Jan 2020–Dec 2025

ADB = Asian Development Bank, PLN = State Electricity Corporation.

Source: PLN and ADB staff estimates.

## II. RESULTS AND DISBURSEMENT

### A. The RBL Program's Overall Results

9. At the impact level, the RBL program is aligned with the RUPTL's goal of enhancing the quality of life in Indonesian society by the sustainable use of electricity. The outcome aims to enhance sustainable, equitable and reliable access to electricity for the population in Kalimantan, Maluku, and Papua. Three disbursement-linked indicators (DLIs) at the outcome level focus on (i) the number of customers (DLI 1); (ii) the number of poor households electrified (DLI 2), with at least 10% female-headed households in the total,<sup>12</sup> and (iii) the reliability of electricity supply, as measured by the reduction in feeder line permanent interruptions (DLI 3). A baseline study and impact evaluation will measure social outcome indicators separately for women and men, especially on time use. The social outcome indicators are not DLIs, being outside of PLN's control. Three output level results contribute to the outcomes:

- (i) **Output 1. Power distribution network strengthened and expanded.** This will be tracked by the installed length of medium-voltage distribution lines (DLI 4).
- (ii) **Output 2. Renewable energy use increased.** Electricity provided to communities in the target areas will be from a mix of power sources, including small diesel generators which is the most common for remote grids. Output 2, supported by the ACEF grant, explicitly focuses on increasing power generation from solar photovoltaic (PV), mini- and micro-hydro, and small biogas power plants (DLI 5).
- (iii) **Output 3. Institutional capacity and social monitoring enhanced.** Output 3 focuses on improving asset and waste management (DLI 6) and on enhancing social and gender aspects through PLN workshops on safe and productive energy use, with at least 30% female participation (DLI 7). Electronic procurement and contract payment systems will be integrated and rolled out to improve reporting and monitoring (DLI 8).<sup>13</sup>

#### 1. Program Results Framework

10. Table 2 shows the Program Results Framework. Progress towards the achievement of results will be monitored using Appendix 4.

<sup>12</sup> Local government officials apply the term only when the woman is widowed or divorced. The proportion of females among household heads is variable and may be as low as 3% in some villages.

<sup>13</sup> The design and monitoring framework is in Appendix 1.

**Table 2: RBL Program Results Framework**

Results Indicator	DLI (Yes/No)	Baseline year and value	2020	2021	2022	2023	2024	2025
<b>Outcome: Sustainable, equitable and reliable access to electricity for the population in Kalimantan, Maluku, and Papua enhanced.</b>								
<b>1. Expanded access to electricity services:</b> Number of PLN customers in Kalimantan, Maluku and Papua increased to reach at least 6.77 million customers by 2024.	Yes <b>DLI 1</b>	2018 baseline: 5.22 million customers	At least 5.94 million customers (cumulative) connected	At least 6.12 million customers (cumulative) connected	At least 6.38 million customers (cumulative) connected	At least 6.58 million customers (cumulative) connected	At least 6.77 million customers (cumulative) connected	
<b>2. Pro-poor and gender focus:</b> An additional 112,428 poor HHs provided with PLN electricity by 2024, with data disaggregated by female/male-headed household; at least 10% of households to be headed by women:  2.1. All poor households  2.2. Poor female-headed households.	Yes <b>DLI 2</b>	2018 baseline: 0 additional poor households provided with PLN electricity  <b>Prior results:</b> An interface module transfers the most recent TNP2K data on  2.1. All poor households  2.2. Female- and male-headed households to PLN for PLN's use.	Additional poor HHs provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 29,414 poor HHs  2.2 At least 2,941 poor female-headed HHS	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 51,808 poor HHs  2.2 At least 5,181 poor female-headed HHs	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 73,368 poor HHs  2.2 At least 7,337 poor female-headed HHs	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 92,866 poor HHs  2.2 At least 9,287 poor female-headed HHs	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 112,428 poor HHs  2.2 At least 11,243 poor female-headed HHs	





Results Indicator	DLI (Yes/No)	Baseline year and value	2020	2021	2022	2023	2024	2025
<b>8. Asset and waste management</b> improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024	Yes <b>DLI 6</b>	Baseline (2018): 0% disposal rate 0 additional warehouses with permit from DLH	(i) Inventory of used equipment for disposal as of end of 2019 prepared by UIWs (ii) 5 additional warehouses have secured the environment permit from DLH	(i) 20% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 10 (cumulative) additional warehouses have secured the environment permit from DLH	(i) 40% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 20% of 2019 inventory safely disposed (iii) 15 (cumulative) additional warehouses have secured the environment permit from DLH	(i) 65% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 40% of 2019 inventory safely disposed (iii) 20 (cumulative) additional warehouses have secured the environment permit from DLH	(i) 90% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 65% of 2019 inventory safely disposed (iii) 25 (cumulative) additional warehouses have secured the environment permit from the DLH	(i) 100% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 90% of 2019 inventory safely disposed
<b>9. Consumer education:</b> By 2024, consumer education workshops on safe and productive energy use implemented by 5 UIW and 29 UP3 offices, with a minimum of 30% female participation for each workshop based on a scoring system to promote female participation	Yes <b>DLI 7</b>	2018 baseline: 0 workshop, 0 points.	(i) Consumer training materials for safe & productive energy use developed and shared with UIW offices. (ii) One workshop in each of the 5 UIW with minimum 30% female participation. <i>Minimum points required for disbursement: 5</i>	Consumer education workshops held at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 34</i>	Consumer education workshops held at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 63</i>	Consumer education workshops held at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 92</i>	Consumer education workshops held at UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 121.</i>	

Results Indicator	DLI (Yes/No)	Baseline year and value	2020	2021	2022	2023	2024	2025
<b>10. Capacity for social monitoring:</b> Annual report on social impact of electrification with data disaggregated by sex published by end of 2022	No	2018 baseline: No annual report yet on social impact of electrification			Report on social impact of electrification published	Report on social impact of electrification published	Report on social impact of electrification published	Report on social impact of electrification published
<b>11. E-Procurement and SAP systems</b> are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement–SAP integrated system by 2024.	Yes <b>DLI 8</b>	2018 baseline: E-Proc and SAP systems are separate.  <b>Prior results:</b> E-Proc and SAP are integrated.	E-Proc and SAP integrated system is rolled out.	At least 50% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	At least 60% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	At least 70% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	At least 80% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	

ACEF = Asian Clean Energy Fund, ADB = Asian Development Bank, ckm = circuit kilometer, DLH = Provincial/District Environmental Agency (*Dinas Lingkungan Hidup*), DLI = disbursement-linked indicator; HH = household, EBTKE = Directorate General of New and Renewable Energy and Energy Conservation, JFPR = Japan Fund for Poverty Reduction, KSO = Memorandum of Understanding (*Kontrak Kerjasama Operasi*), kW = kilowatt, MEMR = Ministry of Energy and Mineral Resources, MSOE = Ministry of State Owned Enterprises, MV = medium voltage, MW = ,megawatt, MWh = megawatt hour, PEMDA = local government (province, district or subdistrict), PLN = State Electricity Corporation, PV = photovoltaic (system), SAP = Systems, Applications, Products in Data Processing (an integrated business software), TNP2K = National Team for Accelerating Poverty Reduction (*Tim Nasional Percepatan Penanggulangan Kemiskinan*), UIW = Wilayah (PLN administrative region), UP3 = Area (PLN administrative unit).

Note: The JFPR funds will be used to support a subset of the results framework (Outcome indicators 2 (DLI 2) and 3, Output indicator 9 (DLI 7) and the initial framework for the first report in Output indicator 10. The grant will be disbursed against DLI 2 due to the importance of this DLI to cofinancing.

The ACEF grant will support Output indicator 9 (DLI 7) and indicator 10.

Source: ADB and PLN staff estimates.

## B. Disbursement-Linked Indicators

### 1. Description of Disbursement-Linked Indicators

11. Eight disbursement-linked indicators (DLIs) have been identified. DLI 1 and DLI 2 measure enhanced and equitable access to electricity for all customers [DLI 1], with attention to poor households [DLI 2]), while DLI 3 measures the reliability of the electricity supply. Achieving this outcome requires physical components (outputs 1 and 2), as well as institutional improvements (output 3). The progress toward each of these outputs is tracked by five DLIs (paragraph 9).

12. Overall, the DLIs and other performance indicators provide ambitious yet achievable measures of progress toward the program outputs and outcome. The DLI targets have been developed in consultation with experienced system planners in PLN and are as close as possible to the government-driven RUPTL targets, while carefully considering PLN's actual performance during 2012–2018.

All indicators are in the design and monitoring framework (Appendix 1) and the program results framework. Table 3 summarizes the disbursement allocations. The largest allocation is for DLI 1, as this program's main objective is to enhance people's access to electricity services. DLI 2 includes a sub-target that requires female-headed households to account for at least 10% of the poor households provided with PLN electricity. The results chain also includes three indicators not linked to disbursement: the first indicator on the RBL program's social and gender impact (paragraph 9), the second on enhancing PLN's capacity for gender-sensitive social monitoring, and the third on pilot community-based training on solar PV maintenance. These indicators will be monitored through the program action plan (PAP).<sup>14</sup>

**Table 3: Disbursement-Linked Indicators**

	Disbursement Linked Indicators	ADB Financing (\$ million)	Share of ADB Financing (%)
Outcome			
DLI 1	Number of PLN customers in Kalimantan, Maluku, and Papua increased to reach at least 6.77 million customers by 2024.	150	25.0
DLI 2	An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male-headed household; at least 10% of households to be headed by women: 2.1. All poor households <sup>a</sup> 2.2. Poor female-headed households	60 15	10.0 2.5
DLI 3	Feeder line permanent interruptions <sup>b</sup> in the distribution system reduced to less than 17.12 per 100 ckm by 2024.	90	15.0
Outputs			
DLI 4	Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.	120	20.0
DLI 5	Power generation from solar PVs (<10 MW), mini/micro-hydro (<1 MW), and small biogas plants (<100 kW) increased by 5.1. An additional 40,000 MWh annually by 2025 <sup>c</sup> 5.2. A further additional 48,000 MWh annually by 2025	30 20	5.0 3.3
DLI 6	Asset and waste management improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of the end of 2019 safely disposed by 2025; and (ii) 25 additional warehouses holding environmental permits <sup>d</sup> by 2024	65	10.8
DLI 7	By 2024, consumer education workshops on safe and productive energy use implemented by 5 UIW and 29 UP3 offices, with a minimum of 30% female participation for each workshop based on a scoring system to promote female participation.	30	5.0

<sup>14</sup> Program Action Plan (accessible from the list of linked documents in Appendix 2).

DLI 8	E-Procurement and SAP systems are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement–SAP system by 2024.	20	3.3
	<b>Total</b>	<b>600</b>	<b>100<sup>e</sup></b>

ckm = circuit-kilometer, DLH = Provincial/District Environmental Agency, DLI = disbursement-linked indicator, MWh = megawatt-hour, MW = megawatt, PLN = State Electricity Corporation, UIW = PLN administrative region (*Wilayah*), UP3 = PLN administrative unit (*Area*).

<sup>a</sup> Supported by a grant of \$3 million from the Japan Fund for Poverty Reduction.

<sup>b</sup> PLN defines permanent interruptions as those over 5 minutes in duration.

<sup>c</sup> Supported by a grant of \$3 million from the Asian Clean Energy Fund.

<sup>d</sup> Environmental Permit and License to Operate Hazardous Waste Disposal.

<sup>e</sup> Numbers may not sum precisely due to rounding.

Sources: Asian Development Bank estimates, PLN management reporting information system, and Electricity Power Supply Business Plan (RUPTL), 2019–2028.

## C. Disbursement Linked Indicator Verification Protocols

### Description of the Verification Protocols

13. Tables 4a provides the DLIs and Table 4b indicates the verification protocols for the DLIs. The progress towards the achievements of the DLIs and the verification status will be tracked by using reports from PLN and the verification agency, which will be summarized in a monitoring table such as in Appendix 5.



Table 4a: Disbursement-Linked Indicators

Disbursement-Linked Indicator	Baseline and Year	2020	2021	2022	2023	2024	2025
<b>Outcome: Sustainable, equitable and reliable access to electricity for the population in Kalimantan, Maluku, and Papua enhanced.</b>							
<b>DLI 1. Expanded access to electricity services:</b> Number of PLN customers in Kalimantan, Maluku and Papua increased to reach at least 6.77 million customers by 2024.	2018 baseline: 5.22 million customers	At least 5.94 million customers (cumulative) connected	At least 6.12 million customers (cumulative) connected	At least 6.38 million customers (cumulative) connected	At least 6.58 million customers (cumulative) connected	At least 6.77 million customers (cumulative) connected	
<b>DLI 2. Pro-poor and gender focus:</b> An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male-headed household; at least 10% of households are headed by women:  2.1. All poor households  2.2. Poor female-headed households	2018 baseline: 0 additional poor households provided with PLN electricity. <i>Prior results:</i> An interface module transfers the most recent TNP2K data on 2.1. All poor households 2.2. Female- and male-headed households to PLN for PLN's use.	Additional poor HHs provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 29,414 poor HHs  2.2 At least 2,941 poor female-headed HHS	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 51,808 poor HHs  2.2 At least 5,181 poor female-headed HHs	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 73,368 poor HHs  2.2 At least 7,337 poor female-headed HHs	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 92,866 poor HHs  2.2 At least 9,287 poor female-headed HHs	Additional poor HHs (cumulative) provided with PLN electricity, disaggregated by female/male-headed households:  2.1 At least 112,428 poor HHs  2.2 At least 11,243 poor female-headed HHs	
<b>DLI 3. Improved reliability of services:</b> Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024	2018 baseline: MV feeder permanent interruptions 23.29/ 100 ckm	MV feeder permanent interruptions less than 20.58 per 100 ckm	MV feeder permanent interruptions less than 19.55 per 100 ckm	MV feeder permanent interruptions less than 18.57 per 100 ckm	MV feeder permanent interruptions less than 17.83 per 100 ckm	MV feeder permanent interruptions less than 17.12 per 100 ckm	
<b>Output 1. Power distribution network strengthened and expanded</b>							
<b>DLI 4.</b> Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.	2018 baseline: 47,639 ckm of MV distribution lines installed	At least 53,885 ckm (cumulative) of	At least 56,685 ckm (cumulative) of	At least 58,792 ckm (cumulative) of MV distribution lines installed	At least 61,229 ckm (cumulative) of MV distribution lines installed	At least 63,692 ckm (cumulative) of MV distribution lines installed	

Disbursement-Linked Indicator	Baseline and Year	2020	2021	2022	2023	2024	2025
		MV distribution lines installed	MV distribution lines installed				
<b>Output 2: Renewable energy use increased.</b>							
<b>DLI 5. Green energy promotion.</b> Power generation from solar PVs (<10 MW), mini/micro-hydro (<1 MW) and small biogas plants (<100 kW) increased by  5.1. An additional 40,000 MWh annually by 2025.  5.2. A further additional 48,000 MWh annually by 2025	2018 baseline: zero additional MWh generated from solar PV, mini/micro-hydro, and small biogas plants.	(i) List of EBTKE assets to be transferred to PLN cleared by PLN.  (ii) Model KSO or another legal instrument with PEMDA approved by relevant authority within PLN	5.1. Additional 9,600 MWh generated from solar PV, mini/micro-hydro and small biogas plants  5.2. Another 4,000 MWh generated from solar PV, mini/micro-hydro and small biogas plants	5.1. Additional 16,800 MWh generated from solar PV, mini/micro-hydro, and small biogas plants  5.2. Another 12,000 MWh generated from solar PV, mini/micro-hydro and small biogas plants	5.1. Additional 25,600 MWh generated from solar PV, mini/micro-hydro, and small biogas plants  5.2. Another 24,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants	5.1. Additional 35,200 MWh generated from solar PV, mini/micro-hydro and small biogas plants  5.2. Another 40,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants	5.1. Additional 40,000 MWh generated from solar PV, mini/micro-hydro. and small biogas plants  5.2. Another 48,000 MWh generated from solar PV, mini/micro-hydro and small biogas plants
<b>Output 3: Institutional capacity strengthened and social monitoring enhanced.</b>							
<b>DLI 6. Asset and waste management</b> improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of the end of 2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024	2018 baseline: 0% disposal rate  0 additional warehouses with permit from DLH	(i) Inventory of used equipment for disposal as of end-2019 prepared by UIWs  (ii) 5 additional warehouses have secured the environment permit from DLH	(i) 20% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 10 (cumulative) additional warehouses have secured the environment permit from DLH	(i) 40% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 20% of 2019 inventory safely disposed (iii) 15 (cumulative) additional warehouses have secured the environment permit from DLH	(i) 65% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 40% of 2019 inventory safely disposed (iii) 20 (cumulative) additional warehouses have secured the environment permit from DLH	(i) 90% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 65% of 2019 inventory safely disposed (iii) 25 (cumulative) additional warehouses have secured the environment permit from the DLH	(i) 100% of inventory of used equipment for disposal as of end-2019 approved by MSOE (ii) 90% of 2019 inventory safely disposed
<b>DLI 7. Consumer education:</b> By 2024, consumer education workshops on safe and productive	2019 baseline: 0 workshop, 0 points.	(i) Consumer training materials for	Consumer education workshops held	Consumer education workshops held	Consumer education workshops held	Consumer education workshops held at	

Disbursement-Linked Indicator	Baseline and Year	2020	2021	2022	2023	2024	2025
energy use implemented by 5 UIW and 29 UP3 offices, with a minimum of 30% female participation for each workshop, based on a scoring system to promote female participation.		safe & productive energy use developed and shared with UIW offices. (ii) One workshop in each of the 5 UIW with minimum 30% female participation. <i>Minimum points required for disbursement: 5</i>	at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 34</i>	at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 63</i>	at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 92</i>	UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 121.</i>	
<b>DLI 8. E-Procurement and SAP systems</b> are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement–SAP integrated system by 2024.	2018 baseline: E-Proc and SAP systems are separate. <i>Prior results:</i> E-Proc and SAP are integrated.	E-Proc and SAP integrated system is rolled out.	At least 50% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	At least 60% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	At least 70% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	At least 80% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system	

ACEF = Asian Clean Energy Fund, ADB = Asian Development Bank, ckm = circuit kilometer, DLH = Provincial/District Environmental Agency (*Dinas Lingkungan Hidup*), DLI = disbursement-linked indicator; HH = household, EBTKE = Directorate General of New and Renewable Energy and Energy Conservation, JFPR = Japan Fund for Poverty Reduction, KSO = Memorandum of Understanding (*Kontrak Kerjasama Operasi*), kW = kilowatt, MEMR = Ministry of Energy and Mineral Resources, MSOE = Ministry of State Owned Enterprises, MV = medium voltage, MW = ,megawatt, MWh = megawatt hour, PEMDA = local government (province, district or subdistrict), PLN = State Electricity Corporation, PV = photovoltaic (system), SAP = Systems, Applications, Products in Data Processing (an integrated business software), TNP2K = National Team for Accelerating Poverty Reduction (*Tim Nasional Percepatan Penanggulangan Kemiskinan*), UIW = *Wilayah* (PLN administrative region), UP3 = *Area* (PLN administrative unit)

Note: The JFPR funds will be used to support a subset of the results framework (notably, DLIs 2 and 7) and will be disbursed against DLI 2 due to the importance of this DLI to cofinancing. The ACEF grant will support Output 2 and DLI 5.

Table 4b: Disbursement-Linked Indicator Verification Protocols

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<b>Outcome: Sustainable, equitable and reliable access to electricity for the population in Kalimantan, Maluku, and Papua enhanced.</b>			
<b>DLI 1: Expanded access to electricity services: Number of PLN customers in Kalimantan, Maluku and Papua increased to reach at least 6.77 million customers by 2024.</b>			
<b>2018 Baseline:</b> 5.22 million customers 2020: At least 5.94 million customers (cumulative) connected 2021: At least 6.12 million customers (cumulative) connected 2022: At least 6.38 million customers (cumulative) connected 2023: At least 6.58 million customers (cumulative) connected 2024: At least 6.77 million customers (cumulative) connected	<p><b>Definition</b> of DLI 1 is the number of customers served by PLN in Kalimantan, Maluku, and Papua as recorded in PLN distribution systems for a given year. Customers include residential, commercial, industrial, and other customers.</p> <p><b>Conditions for disbursement</b> are met if the number of cumulative PLN customers for a given year reaches or exceeds the target number specified for that year (first column).</p> <p><b>Partial disbursement.</b> The DLI is scalable and partial disbursement is allowed. If the target is not fully achieved, then disbursement can be proportional to the increase made from the previous year's targeted achievement. The following formula will be applied:</p> <p><i>Partial DLI disbursement = planned DLI disbursement for the period × (actual achievement of the current period–targeted achievement of the previous period)/ (targeted achievement of the current period–targeted achievement of the previous period).</i></p> <p>Disbursements are allowed for early or late achievement of the DLI. This means that the planned disbursement amount for a given year can be released when the set target is fully achieved, even if the achievement is late, as long as the achievement is during the program's duration. Early payment is also allowed when achievement is earlier than scheduled.</p>	<p>PLN databases and annual statistics.</p> <p>Required frequency for reporting will be annual, and PLN and ADB may agree each year on interim reporting arrangements as appropriate. Monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit(s) in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year in the concerned UIW offices, DIV PR-KAL, and DIV PR-MP. The IVA will also verify the results by spot checks of the system at district and province level.</p> <p>The IVA will refer to the verification protocols and other relevant guidelines prepared for the program. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>
<b>DLI 2. Pro-poor and gender focus: Poor households provided with PLN electricity by 2024, with data disaggregated by female/male-headed household:</b> <b>2.1. An additional 112,428 households, of which:</b> <b>2.2. at least 10% of households to be headed by women</b>			
<b>2018 baseline:</b> 0 additional poor households provided with PLN electricity <b>2019 Prior Results:</b> Prior results: An interface module transfers the most recent TNP2K data on 2.1.All poor households	<p><b>Definition</b> of DLI 2 is the number of poor households connected to electricity by PLN, disaggregated by male- and female headed households. The definition of "poor household" and "female-headed household" is that of the local government, as reported and updated in the central database of TNP2K, which PLN also uses for identifying households eligible for electricity tariff subsidies.</p> <p>The interface module stated under 2019 Prior Results is executed satisfactorily when PLN is able to use the data in 2020 for identifying</p>	<p>PLN databases and annual statistics.</p> <p>Required frequency for reporting will be annual, and PLN and ADB may agree each year on interim reporting arrangements as</p>	<p>Each year, the focal unit in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year in DIV PKK and in local government records, including for the targeting of poor households and female headed households. The IVA will also verify the</p>

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p>2.2. Female- and male-headed households to PLN for PLN's use.</p> <p><b>Annual-Targets:</b> Minimum number of poor households provided with PLN electricity and disaggregated by female/male-headed households:</p> <p><b>2020:</b>  <b>2.1.</b> 29,414 additional poor HHs of which  <b>2.2.</b> 2,941 female headed households</p> <p><b>2021:</b>  <b>2.1.</b> 51,808 additional poor HHs (cumulative), of which  <b>2.2.</b> 5,181 female headed households</p> <p><b>2022:</b>  <b>2.1.</b> 73,368 additional poor HHs (cumulative) of which  <b>2.2.</b> 7,337 female headed households</p> <p><b>2023:</b>  <b>2.1.</b> 92,866 additional poor HHs (cumulative) of which  <b>2.2.</b> 9,287 female headed households</p> <p><b>2024:</b>  <b>2.1.</b> 112,428 additional poor HHs (cumulative) of which  <b>2.2.</b> 11,243 female headed households</p>	<p>poor households, male-headed and female-headed poor households for the purpose of household connections in Kalimantan, Papua and Maluku.</p> <p><b>Conditions for loan disbursement</b> are met if, for a given year, the targets and sub-targets specified for that year are met (first column). The grant will be used to support loan targets and sub-targets.</p> <p><b>Partial disbursement.</b> The DLI is scalable and partial disbursement is allowed for both target and sub-targets in accordance with the allocations for each in Table A3.3. If the target/sub-target is not fully achieved, then disbursement can be proportional to the increase made from the previous year's targeted achievement. The following formula will be applied:</p> <p><i>Partial DLI disbursement = planned DLI disbursement for the period × (actual achievement of the current period – targeted achievement of the previous period) / (targeted achievement of the current period – targeted achievement of the previous period).</i></p> <p>Disbursements are allowed for early or late achievement of the DLI. This means that the planned disbursement amount for a given year can be released when the set targets are fully achieved even if the achievement is late, as long as the achievement is during the program's duration. Early payment is also allowed when achievement is earlier than scheduled.</p>	<p>appropriate. Monitoring may be as frequent as PLN wishes.</p>	<p>results by spot checks and interviews as needed at district, subdistrict (camat) and village level. The IVA will refer to the verification guidelines prepared for the program. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>
<b>DLI 3. Improved reliability of services: Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024</b>			

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p><b>2018 baseline:</b> MV feeder permanent interruptions 23.29/ 100 ckm</p> <p><b>2020:</b> MV feeder permanent interruptions less than 20.58 per 100 ckm</p> <p><b>2021:</b> MV feeder permanent interruptions less than 19.55 per 100 ckm</p> <p><b>2022:</b> MV feeder permanent interruptions less than 18.57 per 100 ckm</p> <p><b>2023:</b> MV feeder permanent interruptions less than 17.83 per 100 ckm</p> <p><b>2024:</b> MV feeder permanent interruptions less than 17.12 per 100 ckm</p>	<p><b>Definition.</b> This is defined as the number of 20 kV feeder permanent interruptions per 100 ckm of lines within the distribution system. Permanent interruptions are defined by PLN as those longer than 5 minutes. The interruptions related to generation and transmission faults are excluded.</p> <p><b>Conditions for disbursement</b> are met for a given year, if the yearly permanent interruptions are below the target value specified for that year (first column).</p> <p><b>Partial disbursement.</b> The DLI is scalable and partial disbursement is allowed. If the target is not fully achieved, then disbursement can be proportional to the reduction made from the previous year's targeted achievement. The following formula will be applied:</p> $\text{Partial DLI disbursement} = \text{planned DLI disbursement for the period} \times (\text{actual reduction achieved of the current period} - \text{targeted reduction of the previous period}) / (\text{targeted reduction of the current period} - \text{targeted reduction of the previous period}).$ <p>Early achievement of this DLI is not possible as these are annual targets (not cumulative). Late achievement is possible, when PLN makes up for the excess in the number of feeder line interruptions in past years by overachieving, i.e. being below, the annual target in subsequent years by an equivalent amount.</p>	<p>The number of permanent interruptions on each feeder is available from the trip counter and is recorded at the substations. These figures are already being retrieved and computed, along with feeder lengths, by DIV PKK.</p> <p>Required frequency for reporting will be annual. Monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit(s) in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year in DIV PKK, DIVPR-KAL, and DIVPR-MP. The IVA will also verify the results by spot checks of the system at UP3, UIW, district and province level.</p> <p>The IVA will refer to the verification protocols and other relevant guidelines prepared for the program. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>
<b>Output 1. Power distribution network strengthened and expanded</b>			
<b>DLI 4. Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.</b>			
<p><b>2018 baseline:</b> 47,639 ckm of MV distribution lines installed</p> <p><b>2020:</b> At least 53,885 ckm (cumulative) of MV distribution lines installed</p> <p><b>2021:</b> At least 56,685 ckm (cumulative) of MV distribution lines installed</p> <p><b>2022:</b> At least 58,792 ckm (cumulative) of MV distribution lines installed</p> <p><b>2023:</b> At least 61,229 ckm (cumulative) of MV distribution lines installed</p>	<p><b>Definition.</b> Medium-voltage lines are the 20 kV lines transferring electricity from electrical substations to distribution transformers. This is calculated by adding each year's additional lines installed (in ckm) to the previous year's installed lines, to obtain the cumulative total.</p> <p><b>Conditions for disbursement</b> are met for a specific year when the cumulative total of PLN's medium-voltage distribution lines installed meets or exceeds the given target specified for that year (first column).</p> <p><b>Partial disbursement.</b> The DLI is scalable and partial disbursement is allowed. If the target is not fully achieved, then disbursement can be proportional to the increase made from the previous year's targeted achievement. The following formula will be applied:</p> $\text{Partial DLI disbursement} = \text{planned DLI disbursement for the period} \times (\text{actual achievement of the current period} - \text{targeted achievement of the previous period}) / (\text{targeted achievement of the current period} - \text{targeted achievement of the previous period}).$	<p>PLN databases and annual statistics.</p> <p>Required frequency for reporting will be annual, and PLN and ADB may agree each year on interim reporting arrangements as appropriate.</p> <p>Monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit(s) in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year in DIV PKK, DIVPR-KAL, and DIVPR-MP. The IVA will also verify the results by spot checks of the system at UP3, UIW, district, and province level.</p> <p>The IVA will refer to the verification protocols and other relevant guidelines prepared for the program. The IVA report is then attached to the PLN report.</p>

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<b>2024:</b> At least 63,692 ckm (cumulative) of MV distribution lines installed	<p><i>targeted achievement of the previous period)/( targeted achievement of the current period–targeted achievement of the previous period).</i></p> <p>Disbursements are allowed for early or late achievement of the DLI. This means that the planned disbursement amount for a given year can be released when the set target is fully achieved even if the achievement is late, as long as the achievement is during the program's duration. Early payment is also allowed when achievement is earlier than scheduled.</p>		<p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>
<b>Output 2: Renewable energy use increased.</b>			
<b>DLI 5. Green energy promotion: Power generation from solar PVs (&lt;10 MW), mini/micro-hydro (&lt;1 MW) and small biogas plants (&lt;100 kW) increased by:</b>			
<b>5.1. An additional 40,000 MWh annually by 2025,</b>			
<b>5.2. A further additional 48,000 MWh annually by 2025.</b>			
<p><b>2018 baseline:</b> zero additional MWh generated from solar PV, mini/micro-hydro and small biogas plants</p> <p><b>2020:</b> (i) List of EBTKE assets to be transferred to PLN cleared by PLN.</p> <p>(ii) Model KSO or another legal instrument with PEMDA approved by relevant authority within PLN.</p> <p><b>2021:</b></p> <p><b>5.1.</b> Additional 9,600 MWh generated from solar PV, mini/micro-hydro, and small biogas plants.</p> <p><b>5.2.</b> A further additional 4,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants</p> <p><b>2022:</b></p> <p><b>5.1.</b> Additional 16,800 MWh generated from solar</p>	<p><b>Definition.</b> DLI 5 measures power generation from solar PVs (&lt;10 MW), mini/micro-hydro sources (&lt;1 MW) and small biogas plants (&lt;100 kW) in MWh. The MWh information is available in SILM.</p> <p>The MWh from solar PVs, mini/micro-hydro, and small biogas plants will be counted as long as this is obtained through the following modes:</p> <p>(i) PLN continued to maintain and operate PLN-owned solar PVs, mini/micro-hydro power plants and small biogas plants.</p> <p>(ii) PLN makes non-functioning or poorly functioning solar PVs operationally functional, and connects these to villages and households. The solar PVs may have been originally installed by the community themselves, or by local government, by an independent power producer, by EBTKE, or by PLN.</p> <p>(iii) PLN purchases power from solar PVs, mini/micro-hydro and small biogas independent power producers.</p> <p>“Approval” of the KSO/MOUs in 2020 means official endorsement and signing off by the relevant authority within PLN.</p> <p><b>Conditions for disbursement</b> are met for a specific year when the annual MWh output generated from solar PVs, mini/micro-hydro sources and small biogas plants meets or exceeds the given target specified for that year (first column).</p> <p><b>Partial disbursement.</b> For the quantitative targets in MWh (2021, 2022, 2023, 2024), the DLI is scalable and partial disbursement is allowed. If the target is not fully achieved, then disbursement can be</p>	<p>PLN databases and annual statistics.</p> <p>Required frequency for reporting will be annual, and PLN and ADB may agree each year on interim reporting arrangements as appropriate.</p> <p>Monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit(s) in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year in DIV PKK, DIV PR-KAL, and DIV PR-MP. The IVA will also verify the results by spot checks of the system at village, district and province level.</p> <p>The IVA will refer to the verification protocols and other relevant guidelines prepared for the program. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p>PV, mini/micro-hydro, and small biogas plants.  <b>5.2.</b> A further additional 12,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants  <b>2023:</b>  <b>5.1.</b> Additional 25,600 MWh generated from solar PV, mini/micro-hydro, and small biogas plants.  <b>5.2.</b> A further additional 24,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants  <b>2024:</b>  <b>5.1.</b> Additional 35,200 MWh generated from solar PV, mini/micro-hydro, and small biogas plants.  <b>5.2.</b> A further additional 40,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants  <b>2025:</b>  <b>5.1.</b> Additional 40,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants.  <b>5.2.</b> A further additional 48,000 MWh generated from solar PV, mini/micro-hydro, and small biogas plants.</p>	<p>proportional to the increase made from the previous year's targeted achievement. The following formula will be applied:</p> $\text{Partial DLI disbursement} = \text{planned DLI disbursement for the period} \times (\text{actual achievement of the current period} - \text{targeted achievement of the previous period}) / (\text{targeted achievement of the current period} - \text{targeted achievement of the previous period}).$ <p>For 2020, the targets are two institutional actions, each of which represents 50% of the disbursement allocation for that year. Disbursement is allowed only upon the completion of the specific action, meaning that for a given action, no partial disbursement is allowed.</p> <p>Early payment is allowed when achievement is earlier than scheduled. For late achievement of the DLI, the planned disbursement amount for a given year can be released only when the cumulative MWh for that year is achieved and the achievement is during the program's duration.</p>		
<b>Output 3: Institutional capacity strengthened and social monitoring enhanced.</b>			
<b>DLI 6. Asset and waste management improved, with (i) 90% of used PLN-owned equipment in UIW of Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024</b>			



Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p><b>2018 baseline:</b> 0% disposal rate. 0 additional warehouses with permit from DLH</p> <p><b>2020:</b> (i) 2019 inventory prepared by UIWs. (ii) 5 additional warehouses obtain permit from DLH</p> <p><b>2021:</b> (i) 20% of inventory of used equipment for disposal as of end-2019 approved by the MSOE. (ii) 10 additional warehouses (cumulative) obtain permit from DLH</p> <p><b>2022:</b> (i) 40% of inventory of used equipment for disposal as of end-2019 approved by MSOE. (ii) 20% of 2019 inventory safely disposed. (iii) 15 additional warehouses (cumulative) obtain permit from DLH</p> <p><b>2023:</b> (i) 65% of inventory of used equipment for disposal as of end-2019 approved by MSOE. (ii) 40% of 2019 inventory safely disposed. (iii) 20 additional warehouses (cumulative) obtain permit from DLH</p> <p><b>2024:</b> (i) 90% of inventory of used equipment for disposal as of end-2019 approved by MSOE. (ii) 65% of 2019 inventory safely disposed. (iii) 25</p>	<p><b>Definitions:</b> The percentage of “the used equipment safely disposed” will be calculated on the basis of the original value of assets which are stocked at PLN warehouse sites in Kalimantan, Maluku, and Papua. The “disposal inventory” is a nationwide inventory of all PLN used equipment that are intended for disposal.</p> <p>The “permit from DLH” refers to the Environmental Permit (<i>Ijin Lingkungan</i>), which has to be obtained for each warehouse from the provincial or district environmental agency (<i>Dinas Lingkungan Hidup</i>).</p> <p>“<i>Used PLN equipment</i>” means PLN’s assets and wastes (such as poles, cables, transformers and meters) that are out of use, which have been discharged from distribution operations. “<i>Assets</i>” and “<i>wastes</i>” are the same in nature, but “<i>assets</i>” become “<i>wastes</i>” once these are approved as “<i>waste</i>” by the relevant authorities.</p> <p>“<i>Safe disposal</i>” means disposing of equipment through the following process:</p> <p><i>Used equipment</i>, still considered as Government assets, are required to go through internal audit and verification within PLN involving the MSOE.</p> <p><i>Broken materials of less than 5 years economic life</i> can be disposed through auction at the discretion of PLN headquarters, after approval of the Board of Commissioners.</p> <p><i>Used assets of more than 5 years of economic life</i> are disposed after approval by MSOE.</p> <p>The process of inventory, review, audit, and verification by different units is further subject to legal requirements for the relevant authority to sign accountability statements.</p> <p><b>Conditions for disbursement</b> are met for a specific year when the institutional actions and/or percentage targets set for that year (first column) are achieved.</p> <p><b>Partial disbursement.</b> Partial disbursements are allowed as follows. For 2020, 2021, and 2025, each year has two institutional actions (each representing 50% of the disbursement allocation for that year), while 2022, 2023 and 2024 require three actions (each representing 33% of the disbursement allocation for that year). Partial disbursement can therefore be made for a given year proportional to the number of actions completed.</p> <p>Partial disbursement is also permitted within a single institutional action. For example, within the component relating to percentage of</p>	<p>PLN UIW records and PLN central records.</p> <p>Required frequency for reporting will be annual, and PLN and ADB may agree each year on interim reporting arrangements as appropriate. Monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit(s) in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year. The IVA will refer to the government guidance for asset management and the verification protocols. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p>additional warehouses (cumulative) obtain permit from DLH</p> <p><b>2025:</b> (i) 100% inventory of used equipment for disposal as of end of 2019 approved by MSOE. (ii) 90% of 2019 inventory safely disposed.</p>	<p>waste disposal, and the component relating to number of warehouses having obtained permits from DLH, partial disbursement can be made for each component following the formula.</p> <p><i>Partial DLI disbursement = planned DLI disbursement for the period × (actual achievement of the current period – targeted achievement of the previous period) / (targeted achievement of the current period – targeted achievement of the previous period).</i></p> <p>However, partial disbursement cannot be made for the action relating to the approval by MSOE of the 2019 inventory of used equipment for disposal.</p> <p>Disbursements are allowed for early or late achievement of the DLI, including the institutional actions mentioned above. This means that the planned disbursement amount for a given year can be released when the set target is fully achieved even if the achievement is late, as long as the achievement is during the program's duration. Early payment is also allowed when achievement is earlier than scheduled.</p>		
<p><b>DLI 7. Consumer education: By 2024, consumer education workshops on safe and productive energy use are implemented by 5 UIW and 29 UP3 offices, with a minimum of 30% female participation for each workshop, based on a scoring system to promote female participation</b></p>			
<p><b>2018 baseline:</b> 0 consumer education workshops on safe and productive energy use.</p> <p><b>2020:</b> (i) Consumer training materials for safe &amp; productive energy use developed and shared with UIW offices. (ii) One workshop in each of the 5 UIW with minimum 30% female participation. <i>Minimum points required for disbursement: 5</i></p> <p><b>2021:</b> Consumer education workshops held at each of 29 UP3 with minimum 30% female participation among</p>	<p><b>Definitions:</b> The consumer education workshops are defined as those held by PLN for consumers/customers who are connected, planning to be connected or in the process of connection, with the workshop curriculum on safe and productive energy use agreed to by PLN and ADB. "Female participation" is calculated as the percentage of women consumers among total consumers participating in the workshop, and not the authorities officiating at the workshop.</p> <p><b>Counting the workshops:</b> The workshop(s) will be counted as 1 workshop only when the number of participants from the community reaches or exceeds 100 persons. This 100 person threshold may be reached by (i) having a single workshop with at least 100 participants from the community, or (ii) holding a number of smaller workshops where the participants from the communities add up to at least 100 persons across these workshops (example: 3 workshops with respectively 20, 40 and 40 community participants – in this case, these 3 smaller workshops combined count as 1 workshop).</p> <p><b>"Scoring system":</b> 1 workshop with 30% female participation counts as 1 point, while 1 workshop with female participation 50% and above counts as 1.25 points. Workshops with less than 30% female participation will not earn any points. This means that having</p>	<p>PLN Wilayah records and PLN central records. Frequency for reporting will be annual. However, monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year with Wilayah and Area Office records, participant lists, and with the social resource person(s) The IVA will refer to the verification guidelines prepared for the program. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p>consumers. <i>Cumulative points required for disbursement: 34</i></p> <p><b>2022:</b> Consumer education workshops held at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 63</i></p> <p><b>2023:</b> Consumer education workshops held at each of 29 UP3 with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 92</i></p> <p><b>2024:</b> Consumer education workshops held at UP3 level with minimum 30% female participation among consumers. <i>Cumulative points required for disbursement: 121.</i></p>	<p>workshops with 50% female participation will earn more points, leading to less workshops in the last year.</p> <p><b>Conditions for disbursement</b> are met for a specific year when the required number of points for that year (first column) is achieved with not less than 30% female participation.</p> <p>For 2020, completion of (i) is required and cannot be partially disbursed, while (ii) is scalable, meaning that partial disbursement is allowed. For disbursement of allocated amounts (Table A3.3) in 2021, 2022, and 2023, the following are required: (i) a minimum of 29 points each year, (ii) workshops held at each of the 29 UP3 (iii) each workshop having at least 30% female participation.</p> <p>The corresponding number of required cumulative points are stated in column 1. For 2024, disbursement is allowed when the cumulative number of points achieved (2021-2024) reaches or exceeds 121 points.</p> <p><b>Partial disbursement.</b> Much of the DLI is scalable and partial disbursement is allowed according to the number of points accrued. If the target is not fully achieved, then disbursement can be proportional to the increase made from the previous year's targeted achievement. The following formula will be applied:</p> <p style="text-align: center;"><i>Partial DLI disbursement = planned DLI disbursement for the period × (actual achievement of the current period – targeted achievement of the previous period) / (targeted achievement of the current period – targeted achievement of the previous period).</i></p> <p>However, with regard to the 30% female participation, the DLI is not scalable and full disbursement is made only when female participation is not less than 30%.</p> <p>Disbursements are allowed for late achievement of the DLI. This means that the planned disbursement amount for a given year can be released when the set target number of points is fully achieved even if the achievement is late, as long as the achievement is during the program's duration. However, within a given year, training has to cover a certain number of UP3 levels, and therefore, early achievement cannot be made more than a year in advance.</p>		
<p><b>DLI 8. E-Procurement and SAP systems are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement-SAP integrated system by 2024.</b></p>			

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
<p><b>2018 baseline:</b> E-Procurement (E-Proc) and SAP systems are separate.</p> <p><b>Prior results 2019:</b> E-Proc and SAP are integrated.</p> <p><b>2020:</b> E-Proc+SAP integrated system is rolled out.</p> <p><b>2021:</b> At least 50% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system.</p> <p><b>2022:</b> At least 60% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system</p> <p><b>2023:</b> At least 70% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system</p> <p><b>2024:</b> At least 80% of contracts in financial value executed by UIW (including units under them) recorded in E-</p>	<p><b>Definitions:</b></p> <p>The baseline situation in 2018 is that (i) only a small proportion of contracts are recorded in E-Proc, and (ii) E-Proc system and SAP system are separate systems, not integrated.</p> <p><i>Integration of the two systems</i> means that one report is generated by an E-Proc+SAP system for a given procurement transaction. An internal letter is sent by PLN headquarters to the regions instructing them the system is ready for use.</p> <p><i>Rolled out</i> means that the access has been granted to UIWs and units under them, and that the relevant staff (e.g., for the first year of roll-out) have been trained in the use of the system.</p> <p><i>Contracts executed</i> means contracts that have been awarded, with corresponding legal commitments signed by both parties.</p> <p>For disbursement trigger points in 2021, 2022, 2023 and 2024, the percentages relate to the following denominator and numerator:</p> <p>Denominator: Total value of procurement contracts executed by UIW and units under them.</p> <p>Numerator: Total value of procurement contracts <i>recorded</i> in the E-Proc+SAP system. “Recorded” means a procurement contract is recorded in the E-Proc+SAP system, whether e-procurement was used for the actual tendering process, or whether the procurement contract was recorded in the e-procurement system only after the contract award/tendering.</p> <p><b>Conditions for disbursement</b> are met for a specific year when the required conditions for that year (first column) is achieved.</p> <p><b>Partial disbursement.</b> For 2020, completion of systems integration is required and cannot be partially disbursed.</p> <p>The rest of the DLI is scalable and partial disbursement is allowed according to the percentage of total contracts executed that have been recorded in the integrated E-Proc+SAP system in financial value.</p> <p>If the target is not fully achieved, then disbursement can be proportional to the increase made from the previous year’s targeted achievement. The following formula will be applied:</p> <p style="text-align: center;"><i>Partial DLI disbursement = planned DLI disbursement for the period × (actual achievement of the current period – targeted achievement of the previous period) / (targeted</i></p>	<p>PLN UIW (Wilayah) records and PLN central records.</p> <p>Frequency for reporting will be annual. However, monitoring may be as frequent as PLN wishes.</p>	<p>Each year, the focal unit in PLN prepares an attestation that the DLI is met and attaches the relevant report.</p> <p>The IVA will verify the results each year with Wilayah and Area Office records and the E-Proc+SAP system records. The IVA will refer to the verification guidelines prepared for the program. The IVA report is then attached to the PLN report.</p> <p>Within one month of receiving the validated report, ADB will confirm that the target has been met.</p>

Disbursement-Linked Indicator	Definition and Description of Achievement and Verification	Information Source and Frequency	Verification Agency and Procedure
Proc+SAP integrated system	<p><i>achievement of the current period–targeted achievement of the previous period).</i></p> <p>Disbursements are allowed for early or late achievement of the DLI, including the institutional actions mentioned above... This means that the planned disbursement amount for a given year can be released when the set target is fully achieved even if the achievement is late, as long as the achievement is during the program's duration. Early payment is also allowed when achievement is earlier than scheduled.</p>		

ADB = Asian Development Bank, ckm = circuit kilometer, DLI = disbursement-linked indicator; DIV COM = DIV COM = Division of Communication and Corporate Social Responsibility, DIV PKK = Corporate Performance Control Unit, DIV PR-KAL = Division of Regional Development for Kalimantan, DIV PR-MP = Division of Regional Development for Maluku-Papua, EBTKE = Directorate General of New Renewable Energy and Energy Conservation, Ministry of Energy and Mineral Resources, IVA = independent verification agency, KSO = *Kontrak Kerjasama Operasi* or Memorandum of Understanding, kW = kilowatt, MEMR = Ministry of Energy and Mineral Resources, MSOE = Ministry of State Owned Enterprises, MV = medium voltage, MWh = megawatt hour, PLN = State Electricity Corporation, PV = photovoltaic (system), RBL = Results-Based Lending, Electricity Power Supply Business Plan (*Rencana Usaha Penyediaan Tenaga Listrik*), SILM = PLN's Management Reporting Information System (*Sistem Informasi Laporan Manajemen*), UIW = *Wilayah* (PLN administrative region), UP3 = *Area* (PLN administrative unit).

Sources: Asian Development Bank estimates, PLN management information systems, and Electricity Power Supply Business Plan (RUPTL), 2019-2028

## D. Disbursement Allocation and Status

14. The loan and grant proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and detailed arrangements agreed upon between the borrower and ADB. Up to 25% of the loan and grants will be made available for advance financing upon loan effectiveness. Financing for prior results will also be made available for amount up to 20% of the loan and JFPR grant amounts, with the combined outstanding advance financing and financing for prior results not exceeding 30% of total loan/JFPR grant amounts.<sup>15</sup> Financing for prior results will not be applicable for the ACEF grant. PLN will submit a withdrawal application reporting on the achievement of the DLIs, and disbursement will be made subject to verification by an independent verification agent (IVA) in accordance with the agreed DLIs and verification protocols. Financing under the ADB loan will be disbursed over a period of six years (January 2020 to December 2025) subject to the achievement and verification of the agreed DLIs. For each DLI, PLN may submit a withdrawal application along with the evidence verifying its achievement. Disbursements may be made for early or late achievement. Amounts not disbursed for an unmet DLI may be disbursed once the DLI has been achieved following the verification protocols (paragraph 18).

15. Before the submission of the first withdrawal application, PLN will submit to ADB the evidence of achievement for such disbursement based on the verification protocols, and evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of PLN, together with the authenticated specimen signatures of each authorized person. ADB will then arrange for an independent verification agent (IVA) to verify and submit its independent report.

16. **Allocation of disbursements by DLI and year.** Under ADB's RBL modality, ADB financing need not be evenly allocated across DLIs. Table 5 shows the disbursement allocation across the eight DLIs. Most of the DLIs are scalable which implies that if a DLI is only partially achieved for a given year, the disbursement will be proportional to the progress achieved.

17. Loan proceeds will be disbursed to PLN's general account with a commercial bank. Grant proceeds will be disbursed to two separate accounts set up by PLN exclusively for each grant. Further advance financing will also be allowed to address financing requirements as needed within the RBL policy limits.<sup>16</sup> PLN will refund any advance financing amount outstanding if the DLIs are not achieved. Advances can be considered for initial and subsequent DLIs during the implementation period. The amount of advances will be recovered from subsequent disbursements when DLIs are achieved. Additional advances can be made once an earlier advance has been recovered or partially recovered. The recovered advance is then available, as needed, for additional advances ("revolving advances"), but the outstanding advance should not at any time exceed the ceiling of 25% of ADB financing. PLN will refund any advances (or portions of advances) if the DLIs have not been met or fully met by program completion no later than six months after program completion.

### Expected Disbursement Allocation and Schedule

18. Table 5 shows the expected disbursement allocation and schedule. Disbursement status will be monitored using the table in Appendix 6.

<sup>15</sup> Grant advanced financing and financing for prior results are to be confirmed.

<sup>16</sup> Ceilings are 25% for advance financing and 20% for financing for prior results. The combined outstanding balance of advance financing and amount of financing for prior results should not exceed 30%.

**Table 5: Disbursement Schedule (\$ million)**

Disbursement-Linked Indicator	Total ADB Financing Allocation	Share of Loan (%)	Prior Results	2020	2021	2022	2023	2024	2025
<b>Outcome</b>									
<b>DLI 1:</b> Number of PLN customers in Kalimantan, Maluku and Papua increased to reach at least 6.77 million customers by 2024.	150.0	25.0		30	30	30	30	30	-
<b>DLI 2:</b> An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male headed household; at least 10% of households to be headed by women:	75	12.5	30	9	9	9	9	9	-
<i>2.1. All poor households</i>	60	10.0	25	7	7	7	7	7	-
<i>2.1. All poor households (JFPR Grant)</i>	3.0	-	0.6	1.0	1.0	0.4	-	-	-
<i>2.2. Poor female-headed households</i>	15	2.5	5	2	2	2	2	2	-
<b>DLI 3:</b> Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024.	90	15.0		18	18	18	18	18	-
<b>Outputs</b>									
<b>DLI 4:</b> Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.	120	20.0		24	24	24	24	24	-
<b>DLI 5:</b> Power generation from solar PVs (<10 MW), mini/micro-hydro (<1 MW), and small biogas plants (<100 kW) increased by	50	8.3		5	9	9	9	9	9
<i>5.1. Additional 40,000 MWh annually by 2025 based on RUPTL 2019</i>	30	5.0		5	5	5	5	5	5
<i>5.1. Additional 40,000 MWh annually by 2025 (ACEF Grant)</i>	3.0	-		1.0	1.0	1.0	-	-	-
<i>5.2 A further additional 48,000 MWh annually by 2025</i>	20	3.3		-	4	4	4	4	4
<b>DLI 6:</b> Asset and waste management improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024	65	10.8		11	11	11	11	11	10
<b>DLI 7:</b> By 2024, consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level, with a minimum of 30% female participation for each workshop, based on a scoring system to promote female participation	30	5.0		6	6	6	6	6	-
<b>DLI 8:</b> E-Procurement and SAP systems are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement-SAP integrated system by 2024.	20	3.3	4	-	4	4	4	4	-
<b>TOTAL (Loan only)</b>	<b>600</b>	<b>100</b>	<b>34</b>	<b>103</b>	<b>111</b>	<b>111</b>	<b>111</b>	<b>111</b>	<b>19</b>
<b>TOTAL (Grant)</b>	<b>6.0</b>	<b>-</b>	<b>0.6</b>	<b>2.0</b>	<b>2.0</b>	<b>1.4</b>	<b>-</b>	<b>-</b>	<b>-</b>

ACEF = Asian Clean Energy Fund, ADB = Asian Development Bank, ckm = circuit-kilometer, DLH = Province/District Environmental Agency, DLI = disbursement-linked indicator, JFPR = Japan Fund for Poverty Reduction, kW = kilowatt, MV = medium voltage, MW = megawatt, MWh = megawatt-hour, PLN = Perusahaan Listrik Negara (State Electricity Corporation), PV = photovoltaic (system), UIW = PLN administrative region (Unit Induk Wilayah), UP3 = PLN administrative area (Unit Pelaksana Pelayanan Pelanggan).

Notes: (i) Totals may not sum up due to rounding. (ii) Table A3.2. provides further details on disbursement allocations for different components making up a single DLI. (iii) The JFPR funds will be used to support a subset of the results framework and will be disbursed against DLI 2 due to the importance of this DLI to cofinancing. (iv) DLI 5 will be supported by a grant from the ACEF.

Source: Estimates by ADB and PLN staff.

### III. EXPENDITURE FRAMEWORK AND FINANCING

#### A. Expenditure Framework

##### 1. Expected Expenditure Framework

19. PLN will be the borrower with a sovereign guarantee from the Republic of Indonesia. The total capital expenditure of the RBL program is estimated to be \$2,275 million (Table 6). This amount includes the engineering, procurement, and construction (EPC) costs. Program Expenditures will be monitored using the table in Appendix 7.

**Table 6: Summary of Program Expenditure Framework, 2020–2025**  
(\$ million)

Item	RBL Program	
	Amount	Share of Total (%)
<b>Distribution</b>		
A. Capacity Expansion	660	29.0
B. Capacity Strengthening	502	22.1
Renewable Generation <sup>a</sup>	450	19.8
Corporate Social Responsibility Budget	3	0.1
Monitoring and supervision	8	0.4
Environmental management	6	0.3
Interest during construction	287	12.6
<b>Subtotal</b>	<b>1,916</b>	<b>84.2</b>
Physical contingencies <sup>b</sup>	163	7.1
Price contingencies <sup>c</sup>	196	8.6
<b>Total</b>	<b>2,275</b>	<b>100.0</b>

CSR = Corporate Social responsibility

Note: numbers may not sum precisely because of rounding.

<sup>a</sup> Solar photovoltaic plants < 10 megawatts, mini/micro-hydro plants < 1 megawatt, and small biogas plants < 100 kilowatts

<sup>b</sup> Based on 10% estimated physical contingencies (typical for this type of project).

<sup>c</sup> Based on ADB forecast domestic and international cost escalation factors.

Source: ADB and PLN estimates

#### B. Program Financing

##### 1. Expected Financing Plan

20. PLN has requested ADB to provide a direct loan of \$600 million from ADB's ordinary capital resources and grant funds of \$6 million consisting of \$3 million each from ACEF and JFPR.<sup>17</sup> The loan will be guaranteed by the Republic of Indonesia and will support PLN's total program expenditure for the strengthening and development of power transmission, generation and distribution systems in Kalimantan, Maluku and Papua between 2020-2025. The ADB loan represents 26.4% of the RBL expenditure requirements. The ADB loan and grant proceeds are not linked to certain expenditure items but are an integral part of the program's overall financing plan. The financing plan for the total program and the RBL program is shown in Table 7. The

<sup>17</sup> ACEF and JFPR are possible funding sources subject to approval of the Government of Japan.



status of program financing will be monitored closely using the table in Appendix 8.

**Table 7: Program Financing Plan**

Source	PLN Total Program		RBL Program	
	Amount (\$ million)	Share of Total (%)	Amount (\$ million)	Share of Total (%)
PLN <sup>a</sup>	2,889	56.3	1,669	73.4
Development partners				
Asian Development Bank				
Ordinary capital resources	950 <sup>b</sup>	18.5	600	26.4
JFPR <sup>c</sup>	3	0.1	3	0.1
ACEF <sup>c</sup>	3	0.1	3	0.1
Others <sup>d</sup>	1,283	25.0	0	-
<b>Total</b>	<b>5,128</b>	<b>100.0</b>	<b>2,275</b>	<b>100.0<sup>e</sup></b>

ACEF = Asian Clean Energy Fund, ADB = Asian Development Bank, JFPR = Japan Fund for Poverty Reduction, PLN = State Electricity Corporation (*Perusahaan Listrik Negara*), RBL = results-based lending

<sup>a</sup> From PLN's internal cash flows and equity injections from the Government of Indonesia.

<sup>b</sup> Includes funding for power generation in Kalimantan under the proposed power generation sector project.

<sup>c</sup> Trust fund established by the Government of Japan and administered by the ADB.

<sup>d</sup> Includes funding from other bilateral and multilateral financial institutions, including ACEF and JFPR.

<sup>e</sup> Numbers may not sum precisely due to rounding.

Sources: ADB and PLN estimates.

#### IV. PROGRAM SYSTEMS AND IMPLEMENTATION ARRANGEMENTS

21. The executing agency will be PLN. PLN's regional (*Wilayah*) offices in Kalimantan, Maluku and Papua will implement the program with overall oversight by PLN headquarters. The relevant PLN headquarters divisions have developed better capacity to plan and manage RBL programs due to their experience over the past 3 years for the Sumatra RBL program with ADB and Program-for-Results with the World Bank, and the Sulawesi and Nusa Tenggara RBL program with ADB. Program implementation is from January 2020 to December 2025.

##### A. Monitoring and Evaluation System

##### 1. Summary of Monitoring and Evaluation System and Actions

22. **Overview.** PLN is committed to continuous and comprehensive monitoring and evaluation (M&E). Assessment of its existing M&E systems, processes and procedures indicate extensive data generation, the ability to monitor transmission and distribution in real time, and a regular reporting system. The Management Reporting Information System (SILM) contains data on critical dimensions such as performance, electricity generation, energy sales, transmission and distribution, and projects and construction. This information will facilitate the monitoring of the DLIs for the program. SILM provides accurate, real-time, online data, generating a monthly summary report. Based on this report, each division provides feedback on the condition of the field, addresses problems, or develops strategies to make forward progress.

23. **An M&E systems assessment** was conducted for this RBL, building on an earlier assessment in 2015 to prepare the Sumatra RBL. PLN's corporate M&E system has the capacity to track all DLIs as well as other indicators. Of the seven DLIs, PLN's Management Reporting Information System (*Sistem Informasi Laporan Manajemen* [SILM]) already monitors DLIs 1, 3, 4 and 5, while other systems can complement and/or monitor DLIs 5 and 6. The remaining indicators (DLIs 2 and 7) monitor the gender and social dimensions of the RBL program, and PLN is introducing special procedures to strengthen its information systems at field and central level to report properly on these dimensions, for the first time.

24. **Reporting and verification.** Monthly reports provide comprehensive data on all aspects of PLN work, and are reviewed at monthly consultations between PLN headquarters staff and staff from regional offices *Unit Induk Wilayah* [UIW]). To complement PLN's M&E procedures, ADB will engage an IVA to verify information related to DLIs (paragraph 88). IVA reports from the previous two RBL programs are being used to strengthen M&E systems.

25. **Institutional arrangements for M&E.** The specific role of DIV-PKK is to manage performance; therefore it has the mandate to monitor, evaluate, and remove any obstacles that may arise during the implementation of tasks and business processes in the corporation. KPIs, which are monitored monthly, set out the company's performance targets for economic, social, environment, and occupational safety and health impacts, as well as parameters such as customer service, perceptions of PLN, and compliance with laws and regulations. The DIV-PKK coordinates with all PLN divisions and units to obtain current data, which it processes and evaluates into information to facilitate decision-making by BOD. In addition, each division is responsible for monitoring duties in accordance with its mandate, and reports through IT systems appropriate to their respective areas. A table of program-relevant IT applications and type of data collected is provided with the M&E framework (Table 8). Each regional division, including DIV-PKK, has specific staff members responsible for M&E processes. DIV-PKK organizes monthly meetings with each division and its units to monitor current actual conditions and action plans to solve any problems. For distribution-related projects implemented by the UIW, relevant sections at the wilayah level carry out technical verification and payments.<sup>18</sup>

26. **Monitoring and evaluation of operations.** The overall PLN program is concerned with generation, transmission, distribution, and operational and performance management. The Operations Division is responsible for the M&E of generation, transmission, and distribution; while the Projects Division, Primary Energy Division, and Logistics Division provide data to and support the Operations Division. The Construction Division, along with contract administration staff within the Project Management Office, develop the M&E plans for use during construction. Internal procedures are in place for M&E during operations, with divisions monitoring the progress of projects or loans after construction completion.

27. **Availability and quality of data.** Data indicators and targets have been established for most of the data collection applications. The units responsible provide the necessary data for indicators designated as KPIs. Units that do not fill in complete and accurate data will themselves receive a low KPI score. This mechanism ensures the availability and quality of the data. Quantitative data regarding PLN performance includes data from PLN as well as data managed by subsidiaries. PLN also maintains historical data for analysis, annual reports, and 5-year development plans. Technical power subsector definitions and calculations used by PLN are standard definitions in international use and are consistent with those adopted by others, including ADB.

28. **Information sharing and reporting.** All PLN divisions and units have access to the data collected via IT applications. This ensures proper information sharing. All units also report directly to their division, and provide monthly, quarterly, semiannual, and annual reports on operations to DIV-PKK. Progress reports on the achievement of KPIs, progress reports for construction projects, and information about any problems are reported monthly through the SILM. Written summary progress reports, which are submitted to the BOD and heads of divisions, contain information based on detailed data for each indicator for the regional distribution and construction units, and set out implementation progress (in terms of percentage completed) for each project, as well as the status of current problems.<sup>19</sup>

<sup>18</sup> Monitoring and Evaluation Framework (accessible from the list of linked documents in Appendix 2).

<sup>19</sup> Monitoring and Evaluation Framework (accessible from the list of linked documents in Appendix 2).

**Table 8: Monitoring and Evaluation Responsibilities and Expanded Data Sources with DLIs and Other Indicators**

Performance Targets and Indicators with Baselines		Responsible Division	Data collected	Monitoring Frequency	System	Reporting means
<b>Outcome: Sustainable, equitable and reliable access to electricity enhanced for the population in Kalimantan, Maluku, and Papua.</b>						
1	DLI 1. Number of PLN customers in Kalimantan, Maluku and Papua increased to reach at least 6.77 million customers by 2024	Concerned UIW, DIV PR-KAL, DIV PR-MP	<ul style="list-style-type: none"> <li>Numbers of customers connected</li> <li>Type of customer</li> <li>Location</li> </ul>	Monthly SILM  AP2T real time	AP2T FTP SILM	SILM
2	DLI 2. An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male headed household; at least 10% of the households to be headed by women: 2.1. Poor households 2.2. Poor female-headed households	Concerned UIW, DIV PR-KAL, DIV PR-MP	<ul style="list-style-type: none"> <li>Numbers of customers connected</li> <li>Type of customer</li> <li>Location</li> <li>Subsidy status of customer</li> <li>Gender of household head**</li> </ul>	Quarterly  AP2T real time	AP2T MOSA's TNP2K through MEMR	SILM (proposed)
3	Improved time use reported by women and men as a result of electricity access, measured in hours/ week on <ul style="list-style-type: none"> <li>household work and care activities (women/men)</li> <li>productive activities (women/men)</li> <li>on social/community activities (women/men)</li> </ul>	DIV-RKO	Measured through a baseline study and impact evaluation			
4	DLI 3. Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024.	Concerned UIW, DIV PR-KAL, DIV PR-MP	<ul style="list-style-type: none"> <li>Duration</li> <li>Frequency</li> <li>Internal or external cause only</li> <li>Region/branch office</li> </ul>	Monthly SILM  FTP files at Wilayah and DIV-PKK	FTP SILM	SILM
<b>Output 1: Power Distribution network strengthened and expanded.</b>						
4	DLI 4. Installed length of MV distribution lines increased to t least 63,692 ckm by 2024.	Concerned UIW, DIV PR-KAL, DIV PR-MP	Length of distribution line installed	Monthly SILM  FTP files at Wilayah and DIV-PKK	FTP SILM	SILM
<b>Output 2: Clean energy use increased.</b>						
6	DLI 5. Power generation from solar PVs (<10 MW) and micro hydro (<1 MW) increased by 5.1. An additional 40,000 MWh annually by 2025 5.2. A further additional 48,000 MWh annually by 2025	Concerned UIW, DIVPR-KAL,	New installation of solar PVs and micro hydro plants Procurement for installation	As needed	Wilayah (<10MW) EBT (≥10MW)	Progress of installation: manual E-PROC
			Rehabilitation of PVs	As needed	Manual by Wilayah	Wilayah, as needed

Performance Targets and Indicators with Baselines		Responsible Division	Data collected	Monitoring Frequency	System	Reporting means
			– MWh generated	Real time (meter) Monthly SILM (FTP files at UIW & DIV-PKK)	KWh meter (energy meter)	SILM
7.	At least one pilot community-based training on solar PV maintenance delivered with minimum 30% female participation, and training module developed for future scale up of community trainings by PLN	Concerned UIW, DIV PR-KAL,	– Training modules development – Number of trainings – Number of male and female participants	Quarterly	Dedicated monitoring system required	Manual
<b>Output 3: Institutional capacity strengthened and social monitoring enhanced.</b>						
8	DLI 6: Asset and waste management improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 warehouses holding environmental permits by 2024	DIV-AKT, DIV-HSSE, Concerned UIW, DIV PR-KAL, DIV PR-MP	– Data from Screening form of DIV-HSSE – Progress on guidelines/regulations/approvals – Progress of waste disposal – Progress of warehouse permit	Quarterly	Dedicated monitoring system required	DIV-HSSE, DIV-AKT
9	DLI 7. By 2024, consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level, with a minimum of 30% female participation for each workshop.	Concerned UIW, DIV PR-KAL, DIV PR-MP	– Progress on training materials – Progress on training of trainers – Number of workshops – Progress on UIWs, UP3 coverage – Participants trained: women/men	Quarterly	Dedicated monitoring system proposed at UIW level, tracking UP3 implementation	Manual  (Aplikasi Absensee Undangan) (currently only used for national workshops)
10	Annual report on social impact of electrification with data disaggregated by sex published by end of 2022	DIV-COM DIV-RKO	– Report published or not	Annual	Monitoring system required	Manual
11	E-Procurement and SAP systems are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement-SAP system by 2024.	DIV-SCM, DIV-DAS, DIV-STI, DIV PR-KAL, DIV PR-MP	– Procurement contracts – Financial values	Quarterly	E-Proc+SAP integrated system	E-Proc+SAP integrated system

Performance Targets and Indicators with Baselines	Responsible Division	Data collected	Monitoring Frequency	System	Reporting means
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AP2T = Centralized Customer Service Application, DIV-AKT= Accounts Division, DIV-COM = Division of Corporate Communication and Corporate Social Responsibility, DIV-DAS = Procurement Division, DIV-EBT = New and Renewable Energy Division, DIV-HSSE = Health, Safety and Environment Division, DIV-PKK = Corporate Performance Control Division, DIV PR-KAL = Regional Development Division for Kalimantan, DIV PR-MP = Regional Development Division for Maluku and Papua, DIV-RKO = Corporate Planning Division, DIV-SCM = Supply Chain Management Division, DIV-STI = Division of System and Information Technology, DLH = Provincial/District Environmental Agency, DLI = disbursement-linked indicator, FTP = File Transfer Protocol, M&E = monitoring and evaluation, MEMR = Ministry of Energy and Mineral Resources, MoSA = Ministry of Social Affairs, MWh = megawatt-hour, MW = megawatt, PLN = State Electricity Corporation, SILM = Information System for Management Reporting, UIW = PLN administrative region (*Wilayah*), UP3 = PLN administrative unit (*Area*).

Sources: Asian Development Bank estimates, PLN management reporting information system, and Electricity Power Supply Business Plan (RUPTL), 2019–2028.

29. Independent verification of DLIs will be undertaken semi-annually. Interim verifications will be undertaken on the 3<sup>rd</sup> quarter of each year (for DLI achievements from January to June) while annual verifications will be undertaken within the 1<sup>st</sup> quarter of each following year. Loan review missions will be fielded within 2 months after each independent verification to confirm DLI achievements. A midterm review will be undertaken within the 1<sup>st</sup> quarter of 2023 to assess overall program achievements. Within 12 months of loan and grant closing, PLN will produce a program completion report which will be shared with ADB. A Program Completion Report (PCR) mission will be fielded by ADB upon receipt of PLN's completion report or upon completion of the program, the timing of which will be coordinated and agreed with PLN.

## **B. Fiduciary Systems**

### **1. Financial Management System**

#### **a. Summary of the Financial Management System and Actions**

30. The proposed RBL program will use PLN's existing financial management (FM) system and procedures, which ADB considers adequate and will allow PLN to implement the proposed program effectively. PLN has significant experience in implementing development partner-financed projects and programs, including for ADB, other international organizations and commercial banks. Related procedures have generally been well-implemented, and the funds flow and disbursement arrangements for ADB-funded programs have been satisfactorily employed by PLN.

31. Indonesia has a relatively well-functioning public financial management (PFM) system, as evidenced by the PFM assessment performed in 2018. This assessment determined adequate systems and processes in key areas, including a well-defined performance-based budgeting process and classification system aligned with international standards, segregation of duties, and external scrutiny and audit. However, areas identified for improvement are timely budget execution, the government's ability to manage contingent obligations, lengthy and time-consuming project approval process, accuracy and reliability of forecasts for ministries, implementation of risk-based audits and the full adoption of international best-practice accounting standards. The Government of Indonesia has been carrying out PFM reforms with development partner support for several years.

32. Indonesia's SOEs are not part of the PFM system, as they are governed by boards and follow private sector legislation and regulations. However, PLN and other large SOEs are fully government-owned, implying financial accountability with the government, as significant subsidies are allocated via the budget and Parliament approves subsidiary loan agreements as separate budget lines. SOEs are required to submit quarterly financial statements to the Ministry of State-Owned Enterprises and to publish annual audited financial statements. They must also undertake regular government audits and comply with additional reporting requirements.

33. A description of PLN's financial management systems is presented in Program Fiduciary Systems Assessment.<sup>20</sup> The actions recommended to be undertaken in order to address identified financial management challenges and related fiduciary risks are in Section VI. The plan will be regularly reviewed for progress and updated, if and when required. This will include addressing any new issues that are identified.

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<sup>20</sup> Accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President.

34. The financial management assessment indicates a moderate level of fiduciary risk. While some FM weaknesses and shortcomings have been identified for PLN, these are, as such, relatively minor and can be effectively addressed through the proposed mitigation measures and actions. The financial management arrangements are considered adequate.

35. Program accounting and reporting procedures and responsibilities will follow PLN's ordinary approach for program implementation. PLN management is responsible for the preparation and fair presentation of project financial statements, and for maintaining sufficient controls to ensure the financial statements are free from material misstatement. A private firm will audit PLN's annual consolidated financial statements in accordance with the Standards on Auditing established by the Indonesian Institute of Certified Public Accountants. The external auditor will prepare a separate program disclosure to certify the actual program expenditure and the procurement eligibility computation. PLN will submit the annual audited financial statements, management letter and program disclosure to ADB within 1 month of approval by the relevant authority. PLN publishes its consolidated financial statements and the independent auditor's report in its annual report. The program financial statements will be disclosed on the ADB website in accordance with ADB's Public Communications Policy (2011).

36. The audited accounts, auditor's opinion and management letter will be submitted in the English language to ADB within 6 months after the close of the Government of the Republic of Indonesia's fiscal year. Audited project financial statements (APFS) must include an auditor's opinion on whether the project financial statements present fairly, in all material respects. A specific auditor's opinion is also required on the compliance with financial covenants. ADB reserves the right to require a change in the auditor (in a manner consistent with the laws and regulation of the Government of the Republic of Indonesia), or require additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed.

## **b. Financial Management Actions**

37. PLN's overall financial management systems are considered adequate. However, ADB financial management assessment found that consolidated financial reporting and budgeting improvements were required, and that increased automation would reduce the likelihood of operational errors. These system deficiencies will be addressed through the PAP with the implementation of MAXICO for consolidated quarterly financial statements, and e-budget for improved financial management in the program target regions. Staff in the relevant divisions will be required to attend training for the efficient use of these new systems.

### **1. Procurement System**

#### **a. Summary of the Procurement System and Actions**

38. The in-depth procurement assessment of PLN is an update of the assessments carried out for the Electricity Grid Strengthening—Sumatra Program (Loan 3339/8297) and Energy Access in Eastern Indonesia - Electricity Grid Development Program (Loan 3560-INO) and was guided by the Supplementary Appendix No. 5 of the RBL Guidelines, which presents indicative questions for assessing RBL program fiduciary systems, to ensure that an adequate procurement system exists to support a principle-based program.

39. The procurement for the program will include equipment for distribution networks as well as civil works and installation services. PLN will use a variety of procurement methods, which

include open competitive bidding, framework contracts and direct contracting for very small contracts.<sup>21</sup>

40. The procuring entities for the Program are the following: the PLN Division of Strategic Procurement (DIV DAS), the PLN Regional Planning Divisions for Kalimantan, Maluku and Papua (DIV PRSNT), the PLN Division of Supply Chain Management (SCM), and the PLN Wilayah (regional offices along with their respective area offices) in the covered regions. Below is the description of indicative procurement profile of the program:

- Main distribution materials (referred to as “MDU”) by SCM, which can be grouped as follows: (a) Materials for Medium Voltage Overhead Network (for up to 20 kV such as: conductors, isolators, transformers, lightning arresters, polls, etc., (b) distribution Switchgear, which could include the LBS and recloser, (c) materials for Low Voltage Network, such as: polls, cables, energy meters, MCB, etc, (d) house Connection, Meter and Limiter Device.
- Civil Works (which includes the erection and installation of MDU, as well as the services for other small refurbishment. The procurement will be done by the PLN Wilayah, with individual contract amount of less than USD 5 million per contract. The work location is scattered and it is simple in nature, and no foreign bidders are anticipated to be interested in the contracts.
- Installation services including in-house wiring for the poorest household. Procurement will be carried out by the PLN Area offices.
- Consulting services: One contract for international consulting services and several consulting services for national consulting services, which may include individual consulting services. Procurement of consulting services will be carried out by DIV DAS. It has further been agreed that the ToRs and shortlists will be agreed with ADB.
- EPC contracts for small solar power plants (<10 MW) and small hydro power plants (<1 MW), which will be procured by DIV DAS for solar power and Wiliyahs for the hydro power plants. The solar PV systems will include remote monitoring and hybridization using energy management systems. As these high-level technologies are not readily available locally PLN will remove any restrictions for international participation.

41. The assessment confirms that the procurement framework as expressed in PLN’s Board of Directors (BOD) Decree N° 0620.K/DIR/2013 on PT PLN (Persero) General Guidelines for Procurement is appropriate and follows good practices used by utility companies around the world. The framework provides the overall principles for procurement, a procurement strategy as well as detailed procedures. The overall objective of the procurement strategy is to increase value for money (VfM) for the organization, which are identified as the correct balance of the six Rights (Rs) - quality, quantity, location, time, social-economic impact, and price. The right price is only considered once the other 5 Rs have been complied with. The social economic goals of the procurement process may include social, environmental or other strategic objectives and can also include building national capacity to supply PLN by utilizing domestic products, suppliers and contractors. The applicable procurement methods for the program can be defined as follows:

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<sup>21</sup> PLN procurement regulations allows direct contracting for contracts below Rp 500 million in PLN headquarters and Rp 300 million in district offices.



42. The default procurement method for MDU equipment under the program is called “limited bidding”, where bids are solicited to a number of prequalified bidders, after going through an open prequalification process. The prequalified bidders are maintained in the list (referred to as “DPT List”) under framework contract agreements for certain period of time (could be 6 months or a year, and some with possible extensions). This method is applicable for the procurement of MDU as well as for the procurement of civil works.

43. Open competitive bidding is likely to be applicable for the procurement of engineering, procurement, and construction (EPC) services for small solar power and small hydro power plants. For consulting services, PLN will use open competitive bidding following a shortlist process. The shortlist may be open for international firms or restricted to national consultants only.

44. Purchases of small parts in very small volume (particularly for emergency items, which are immediately required for addressing emergency circumstances to maintain the power distribution services to customers) may also be awarded through direct contracting.

45. PLN conducts extensive market research to identify appropriate sourcing strategies depending on the supply market, the overall expenditure for different spending categories and the importance of those goods and services to PLN operations. As an analytical framework PLN uses the Kraljic Portfolio Purchasing Model to categorize spend and classifies its procurements in Strategic, Bottleneck, Leverage and Routine categories to develop the appropriate sourcing strategy. PLN have implemented a number of framework contracts for equipment to improve efficiency, security of supply and achieve better value for money through fostering economies of scale. For works and engineering, procurement, and construction (EPC) contracts open competitive bidding is the default procurement method. To ensure quality of supply and of contractors, PLN has a list of preapproved vendors, which meet the financial and technical requirements set out by PLN.

## 1. Procurement System Related Program Actions

46. While PLN's overall procurement framework is appropriate, PLN will face a number of risks in managing procurement under this program. ADB's procurement assessment has identified the following procurement issues and risks:

**Requirement for local content requirements.** It is recommended that ADB accept the condition when deciding to use the RBL modality. RBL policy clearly states that implementation rely on country systems not ADB Procurement regulations. More specifically, the requirement for local content for equipment effectively means that only suppliers with manufacturing facilities in Indonesia are eligible to bid for and receive contracts. It should be noted that several multinational firms do have manufacturing facilities in Indonesia and PLN is actively encouraging foreign firms to either open facilities or expand the line of equipment they manufacture in Indonesia. For high-level technologies such as remote monitoring systems for Solar PV, PLN agrees to carry out competitive bidding without any restrictions on participation of international bidders. This is included in the program actions.

**Procurement and market capacity.** As the investment in distribution and transmission will be significantly increased in the implementation period, it may strain the capacity both internally in PLN as well in the supply markets. Not only is ADB processing a RBL, other partners are likely to support the distribution and transmission program and PLN is investing heavily to meet the ambitious goals of the power subsector development program. The absorptive capacity of PLN and perhaps more importantly the private sector

capacity to deliver needs to be carefully monitored. The increase in investment in distribution may result in (1) lack of qualified contractors to carry out installation and works contracts and (2) supply risk for equipment categories especially where only limited suppliers exist. A procurement monitoring and spending pattern system should be actively used by PLN to identify capacity issues (whether internally or externally) and to develop mitigating measures and action plans should capacity issues arise.

**Anti-corruption measures.** All large-scale procurements must include suitable safeguards against fraud and corruption. PLN has, over the last couple of years, has taken a number of important initiatives to curb corruption within the organization and has significantly strengthened internal controls. Furthermore, PLN will carry out procurement audits covering 10 % of all contracts and procurement audits is part of the program actions.

47. To manage identified procurement risks all procurement should be monitored at a corporate level. PLN's procurement guidelines require that PLN introduce a procurement monitoring system, including an expenditure analysis of their procurement. Procurement monitoring is a program action and a reporting framework is included in Supplementary Document 21 of the RRP. PLN's procurement monitoring reports will be based on the e-procurement system, which will be more precise than the reporting under the two previous RBLs where a separate system was used for reporting. E-Procurement and SAP systems integration and roll out is set as one of the disbursement-linked indicators (DLI 8) of the program, which accounts for \$20 million (3.30%) of the disbursement.

48. The procurement risks and mitigation measures are summarized in Table 10. Program actions on procurement are detailed in Section VII and will be continuously monitored and updated during the implementation as needed.

## **2. Anticorruption System**

### **a. Summary of Anticorruption System**

49. Since the program is part of PLN's overall overarching generation expansion program, it will be implemented in accordance with the legal framework and through institutions designed to protect PLN from corruption risks whilst aiming to become a continuously growing and competitive state-owned enterprise. PLN has developed a structure and system of good corporate governance (GCG) by adhering to its principles in accordance with the rules and the regulations, as well as the best practices. The background to GCG implementation is a follow-up to Decree of the Minister of State-Owned Enterprise BUMN No. KEP- 117/M-MBU/2002 dated 31 July 2002 which was subsequently amended by Regulation of the Minister of State-Owned Enterprise No. PER-01/MBU/2011 dated 1 August 2011 concerning the Implementation of Good Corporate Governance in State-Owned Enterprises, which states, "SOE shall carry out its operations by adhering to GCG principles of transparency, accountability, responsibility, independence, and fairness".

50. The inclusion of GCG in its daily operations is PLN's determination to become a company that continues to grow and improve with quality services and working processes and a strong code of conduct. The objectives of GCG include:

- (i) Controlling and directing the relationship between the structures of the company, employees, customers, business partners, as well as the community and environment properly in which the interest of all parties are fulfilled.
- (ii) Encouraging and supporting the development of PLN.
- (iii) Managing the resources with strong fiduciary oversight.

- (iv) Managing the risks better.
- (v) Enhancing accountability to the stakeholders.
- (vi) Preventing any deviations in the management of PLN.
- (vii) Improving the working culture of PLN.
- (viii) Improving PLN's image to become better.

51. PLN is fully committed to realizing these objectives. It is, therefore, consistent in enforcing GCG implementation and the following regulations are the basis of GCG implementation in PLN:

- (i) Law 31/1999 on the Eradication of the Criminal Act of Corruption and Law 20/2001 on the Amendment to Law 31/1999.
- (ii) Law 19/2003 concerning SOEs.
- (iii) Regulation of N° PER-01/MBU/2011 concerning the Implementation of Good Corporate Governance in SOEs as amended by Decree of MSPE N° PER-09/MBU/2012 dated 6 July 2012 which states:
  - (i) Transparency is openness in decision making process and disclosing material and relevant information about the company.
  - (ii) Accountability is clarity of function, implementation, and responsibility of the company so that corporate governance shall be implemented effectively.
  - (iii) Responsibility is the suitability of corporate governance against laws and regulations as well as principles of a healthy corporation.
  - (iv) Independence is condition in which the company is professionally managed without any conflict of interests and influence/pressure from any parties that is not in accordance with the laws and principles of a healthy corporation.
  - (v) Fairness is justice and equality in fulfilling the rights of stakeholders that are based on agreements and laws.
- (iv) Decree of the Secretary of MSOE N° SK-16/S.MBU/2012 dated 6 June 2012 concerning Indicator/Parameter for Assessment and Evaluation of Good Corporate Governance Implementation in State-owned Enterprises.
- (v) Laws N° 1/1995 concerning Limited Liability Company as amended by Law No. 40/2007 dated August 16, 2007.
- (vi) PLN Board Manual of December 2010 outlining the relationship and working framework between the Board of Commissioners and the Board of Directors signed by all members.

52. ADB has a fiduciary responsibility to ensure that its loans and other forms of financing are used only for the purposes for which they were granted, in accordance with the Agreement Establishing the Asian Development Bank. To uphold that obligation, ADB developed guidelines to prevent or mitigate fraud, corruption, and other prohibited activities in RBL operations financed in whole or in part by ADB (Appendix 3). These guidelines have been discussed with PLN.

#### **b. Anticorruption System Related Program Actions**

53. No program actions specifically related to anticorruption have been identified.

#### **B. Satisfying Procurement Member Country Eligibility Restrictions**

54. It is confirmed that, given the program's expenditure and procurement profiles, it is unlikely that the ADB's member country procurement eligibility restrictions (as referred to in paras. 130-132 of the RBL policy) will be breached, and the regular procurement monitoring report will assure this.

## C. Safeguard Systems

### 1. Summary of Safeguard Systems

55. **Environment.** The program safeguard system assessment (PSSA) confirmed category B for environment. The program is anticipated to generate significant positive environmental and social benefits from substitution of household kerosene and woodfire, and promotion of renewable energy sources that will lead to greenhouse gas (GHG) emission reductions. Activities located in key biodiversity areas<sup>22</sup> or national protected areas—including wildlife sanctuaries or reserves, animal refuges, and cultural heritage sites—will be excluded from the program scope at screening stage.<sup>23</sup> The adverse environmental impacts of eligible activities under the program, including expansion of mid- (MV, i.e. 20kV) to low-voltage (LV, i.e. 400V) distribution lines, the construction and/or rehabilitation of low-capacity communal PV systems, hydropower and biogas plants, and diesel gensets<sup>24</sup> are anticipated to be minimal to minor, site-specific, reversible and can be mitigated to acceptable levels through good construction practices.<sup>25</sup> No impact is anticipated to result in irreversible and permanent damage. A concern during operation is on the generation of wastes such as damaged transformers and batteries<sup>26</sup> as well as the lack of community awareness on electrical safety.

56. **Involuntary resettlement.** The PSSA confirmed category B for involuntary resettlement as the impacts are not deemed significant. Land required for the program is very small. The distribution lines are mostly built along public roads or close to the border between public and private land. Any loss of productive trees/crops can be minimized by changing pole locations and alignment. The expansion of MV- and LV distribution lines will require (i) the use of no more than 0.2 m<sup>2</sup> of land for installation of concrete poles;<sup>27</sup> (ii) either 4.5 m<sup>2</sup> (pole mounted) or 24 m<sup>2</sup> (pad mounted, on ground) of land for the installation of distribution transformers;<sup>28</sup> and (iii) possible removal or trimming of trees (or other non-land assets) of height more 4 m, along a 3-m wide Right of Way (ROW) for the stringing of conductors. The installation of village-level solar PV systems will require 1,600 - 2,500 m<sup>2</sup> of land. Mini/micro hydropower and small biogas plants may require 2,500 m<sup>2</sup> - 10,000 m<sup>2</sup> of land. The installation of diesel gensets will have a relatively small footprint (less than 2,500 m<sup>2</sup>). Recognizing the potential adverse impacts of mini/micro-hydropower and small biogas facilities, only those with capacities equal or less than 1MW and 100kW, respectively, will be eligible under the program. Mini/micro-hydro, small biogas, solar PV, and diesel genset systems are generally built in remote areas and on unproductive land. Some of lands to be used for the program may be owned by customary communities. Significant impacts

<sup>22</sup> Key biodiversity areas are sites of international importance for the conservation of biodiversity through protected areas and other governance mechanisms. They are identified nationally using simple standard criteria, based on their importance for maintaining species populations, and informed by the International Union for Conservation of Nature.

<sup>23</sup> Activities excluded from the RBL program may remain included in the broader government program. ADB. 2013. *Piloting Results-Based Lending for Programs*. Manila (notes of Figure 3).

<sup>24</sup> The capacity of village-level PV systems, micro-hydro power plants and diesel gensets typically ranges from 20-100 kW, 10-200 kW, and 20-200 kW, respectively.

<sup>25</sup> Site visits conducted in Kalimantan, Papua and Maluku confirm that construction practices of contractors are generally satisfactory. No major environmental concern was observed at all sites visited. A concern is on the management of used equipment including transformers at warehouses and the disposal of damaged batteries at PV systems.

<sup>26</sup> Transformers produced before 1985 may potentially contain polychlorinated biphenyls (PCBs). Damaged batteries may contain hazardous elements such as lead, nickel, cadmium, and acids which are to be managed properly to avoid contamination of soil and water.

<sup>27</sup> The diameter of poles is 40 cm for MV distribution lines and 20 cm for LV distribution lines.

<sup>28</sup> Pad-mounted transformers are installed on concrete pads and locked in steel cases no larger than 9 m<sup>2</sup>, whereas pole-mounted transformers are installed high above ground level on a utility pole.

on productive trees/crops and physical displacement is not expected. Program activities that would be classified as Category A under ADB SPS will be excluded from the program.<sup>29</sup>

**57. Indigenous Peoples.** The Government of Indonesia recognizes 1,128 ethnic groups and isolated indigenous peoples or customary communities (*komunitas adat terpencil*) that live in 263 districts.<sup>30</sup> In Kalimantan, Maluku and Papua, customary communities make up most of the provinces' populations. Pockets or groups of remote or isolated indigenous communities (in the highlands, coastal areas and protected forests) tend to be marginalized from social facilities and overall development processes. Most of the rural land in Kalimantan, Maluku and Papua is subject to customary law and managed as customary land (*tanah adat* or *tanah ulayat*).

**58.** Program impacts are not deemed significant - land losses will be minor, and no relocation of people is envisaged. The program will avoid ancestral customary lands with sacred (*keramat*) significance. The program will enhance access of customary communities to village electrification and improve understanding of electricity benefit and safety concerns. As such, the program confirmed categorization for Indigenous Peoples is B. Activities triggering category A will not be included in the program.<sup>31</sup>

**59. Safeguard Policy Principles Triggered.** The program will trigger all 11 environmental principles of ADB's SPS for those activities with potential adverse environmental impacts. The program will screen out any high-risk activity requiring AMDAL or Category A as per ADB SPS on the basis of a safeguard screening guidance issued by PLN in August 2018 for PLN *Unit Induk Wilayahs* (UIW) which follows Appendix 1 of MOEF Regulation No. 05/2012 (*Type of Activities Requiring AMDAL*).

**60.** Eight of the SPS's twelve involuntary resettlement principles will be triggered (principles 1, 2, 6, 7, 8, 9, 11 and 12). Key gaps identified between PLN system and practices and ADB' SPS principles include screening for impacts, participation of vulnerable groups in consultations, transparent and consistent procedure for negotiated land acquisition and donation; and monitoring of impacts on the living standards of displaced persons.

**61.** Six of the SPS's nine Indigenous Peoples principles will be triggered (principles 1, 2, 3, 6, 7, and 9).<sup>32</sup> Key gaps identified between PLN's system and ADB principles include; Screening for indigenous/customary communities is not systematically undertaken, no comprehensive impact assessment and Indigenous Peoples' Plans are not prepared, customary members are less involved in the decision-making process in compensation and land donation, participation of indigenous women and youth is still limited, frequent complaints raised by the customary members for the donations and land purchasing in Papua.

**62. Institutional Strengthening.** PLN's Health, Safety, Security and Environment Division

<sup>29</sup> Program activities are considered category A if the activities would severely affect 200 or more persons defined as (i) being physically displaced, or (ii) losing 10% or more of their productive assets.

<sup>30</sup> The national indigenous peoples' organization, Indigenous People Alliance of Archipelago (*Aliansi Masyarakat Adat Nusantara-AMAN*), estimates that the number of indigenous peoples in Indonesia falls between 50 and 70 million people.

<sup>31</sup> Program activities classified as Category A may have significant impact on customary communities, when the program (i) acquires a huge land area or forest that makes customary communities unable to continue their existing traditional livelihood system; (ii) changes the status of customary communities from self-subsistence farmers and forest products gatherers to factory workers; (iii) results in physically displacing a sub-community far away from its wider community of origin; (iv) restricts forest-dependent customary communities from accessing forest products.

<sup>32</sup> Refer to ADB SPS 2009 for clarification of triggered involuntary resettlement and indigenous peoples principles. The Appendix to the PSSA also provides a matrix where all the above principles are listed and applicability to the program assessed.

(DIV HSSE) and the Division on Land and Permit (DIV PPT) are the units responsible for environment and social safeguards at the PLN Headquarters and both divisions demonstrate strong capacity to manage safeguards in various energy projects, including the ongoing RBL. There is ongoing hiring and training of EHS specialists at the UIW, UP3, and ULP levels but there is no dedicated staff assigned to social safeguards tasks within UP3 and UP2K offices. Institutional capacity of PLN in managing safeguards have been assessed and institutional strengthening will also be promoted.

## **2. Safeguard System Related Program Actions**

63. Improved asset and waste management is set as one of the disbursement-linked indicators (DLI 6) of the program, which accounts for \$65 million (10.8%) of the disbursement.

64. Considering the assessment and the scope and scale of the impacts and risks, 5 program actions are proposed to address the identified gaps and weaknesses (refer to the safeguards actions in Table 10). Detailed safeguard program actions, with their indicators, targets, responsibilities, timeframes, are presented in Additional Information to the PSSA (Supplementary Document 23 of the RRP). These actions were developed in coordination with PLN. The implementation of the action plan will be periodically reported and submitted by PLN HQ (HSSE and PPT) to ADB for review. The reports will be verified by the IVA responsible for verification of the achievement of disbursement linked indicators and program action plan related to verification for voluntary land donation and land use using random sampling method. ADB will conduct regular review missions during program implementation with participation of safeguards specialists to monitor the status of these actions.

## **D. Gender and Social Dimensions**

65. The Summary Poverty Reduction and Social Strategy (SPRSS) provides key gender and social issues. Program actions and targets include the following: (i) 893,700 poor households provided with PLN electricity, disaggregated by female/male headed households (supported by JFPR grant), of which at least 10% are female headed households; (ii) consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level, with a minimum of 30% female participation for each workshop (supported by grant); (iii) at least 1 training on solar PVs maintenance, with a focus on women's involvement (supported by ACEF grant); and (iv) a baseline study and impact evaluation (supported by grant) will measure social outcome indicators separately for women and men, especially on time use.

66. A procedure will be established to collect sex-disaggregated data. Training materials will be consulted to the working group which will include a gender specialist. Regular monitoring of program actions will be undertaken and included in progress reports submitted to ADB. ADB will conduct regular review missions during program implementation with participation of gender specialist to monitor the status of these actions.

## **E. Communication and Information Disclosure Arrangements**

67. ADB's Public Communication Policy has been shared and ADB disclosure requirements have been discussed with PLN.<sup>33</sup> PLN has consulted with stakeholders, including government officials, during program design and preparation stage. As one of the PAP, meaningful consultation with affected peoples and indigenous peoples will be strengthened. Local communities will be consulted by PLN as part of the social and environmental study to gather

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<sup>33</sup> ADB. 2011. Public Communication Policy. Manila.

their views on the proposed projects under the program. Open communication at all levels will continue during program implementation. The communication and disclosure actions under the program will include consultation meetings with stakeholder communities, media, and websites.

## F. Development Coordination

68. Cooperation and harmonization of development partner's activities in the energy sector have been generally fluid, with regular invitations from each of the key development partners including the AFD, JICA, KfW, and World Bank to participate in meetings or missions and exchanges of information and documents. ADB also joined the above key development partners in holding policy dialogue with the government on several occasions, which was well received by the government. The portfolio and sector work of the ADB is well coordinated in Indonesia through the active involvement of the Indonesia Resident Mission. Ongoing RBL programs are cofinanced with the World Bank and KfW, and possible collaboration will be pursued for the proposed EGDP2 program with Agence Française de Développement (cofinancing with focus on clean energy), Japan International Cooperation Agency (fisheries in Maluku and Papua), and the governments of Australia (program implementation support and results verification) and New Zealand (clean energy in Maluku).

## V. INTEGRATED RISKS AND MITIGATING MEASURES

### A. Key Risks and Mitigating Measures

69. The program is the third energy sector RBL program in Indonesia. While counterparts are now more familiar with the approach, the focus of the Program on Kalimantan and more remote areas in eastern Indonesia introduces some new elements and some additional risks. Major risks and mitigating measures are summarized in Table 9. The overall benefits and impacts are expected to outweigh the risks and costs.

**Table 9: Summary of Integrated Risk Assessment and Mitigating Measures**

Risks	Ratings	Key Mitigating Measures
<b>Development.</b> Institutional pressure to achieve established targets lead to inconsistent reporting.	Substantial	ADB will mobilize an independent verification agent to crosscheck the reported results, such as by comparing them with tariff collection data.
<b>Program Scope.</b> A significant proportion of poor households, including female-headed households, may be unable to connect mainly due to depth of poverty and remoteness.	Substantial	PLN will utilize the poverty-focused grant to support in-house wiring costs for poor households. The loan and clean energy grant will support PLN to connect remote villages using small/mini grids with distributed renewable energy and hybrid systems.
Insufficient commitment and government support to increase small renewable energy use in the RUPTL.	Substantial	PLN will propose additional community-scale renewable energy investments in future RUPTL updates. PLN, with support from ADB, will engage with MEMR throughout the program.
<b>Financial sustainability.</b> PLN's free cash flow decreases from forecasted levels, resulting in a delay to its capital expenditure program.	Substantial	PLN will provide quarterly financial reporting and rolling 3-year financial projections to identify early indicators of heightened credit stress. PLN will also report on key internal initiatives to reduce the cost of electricity supply. ADB and PLN, in close coordination with the Ministry of Finance (MOF), will discuss budget support requirements during program implementation.
<b>Fiduciary.</b> PLN struggles with initiatives to strengthen internal controls.	Substantial	The e-procurement system will be used to track contract awards and detect any red flags. Any issues identified will be discussed with PLN's management team, and relevant government authorities as appropriate.

Risks	Ratings	Key Mitigating Measures
Market Capacity/ Supply Risk	Moderate	The procurement monitoring and spending profile should be used actively to assess the market. Determine which items have few participating suppliers and undertake deeper analysis in order to improve the supplier base for the particular items.
Institutional procurement capacity	Moderate	PLN should undertake regular procurement assessments within the procurement directorate. Although audits are periodically done, an assessment from the procurement perspective would have more focus on the systems, processes, management of contracts, and feedback from stakeholders.
Fraud and Corruption	Substantial	Audit findings should be taken together with procurement assessments and analyzed vis a vis the procurement and contracts monitoring documents. Specifically, spending analysis could lead to detecting red flags.
<b>Safeguards.</b> The issuance of government approvals for the disposal of assets and wastes and licensing of warehouses are delayed.	Substantial	PLN and ADB will have close coordination with the Ministry of State-Owned Enterprises (MSOE) and Ministry of Environment and Forestry (MOEF) during program implementation.
Used equipment may be contaminated with PCB <sup>34</sup> and may need to be stored at warehouses beyond the allowable storage period given the absence of PCB identification and destruction capacities.	Moderate	PLN will seek UNIDO's support to train relevant staff in Kalimantan, Papua, and Maluku on PCB screening and sampling of transformers. PLN will coordinate with UNIDO on use of the PCB destruction facility, expected to become operational in 2020. Meanwhile, PLN was advised by MOEF to temporarily and safely store hazardous waste at its facilities.
Environmental permits for proposed activities are not secured due to low awareness of PLN units on preparation of UKL/UPL and DLH requirements.	Low	PLN will hire EHS staff at PLN UIWs, UP3, and UP2K and provide training on preparation of UKL/UPL. ADB will support PLN in preparing templates of UKL/UPL for distribution lines, solar PV, and biogas facilities for PLN guidance.
Ability of vulnerable groups (poor households, women, children/youth, and customary communities) to access/participate in the programs is relatively weak	Moderate	PLN will strengthen meaningful consultations with affected persons and pay special attention to vulnerable groups. Provide information on cost estimates for electricity connection and procedure of accessing free electricity program in consultations since at planning stage
Voluntary land donation (ownership), land use permission, and negotiated land acquisition for the program may raise potential complaints from land owners including customary communities in the future	Moderate	PLN will improve transparency for negotiated land acquisition and voluntary donation. Secure written agreements on land donation and land use from the land owners, engage independent party to confirm that the negotiated land acquisition and donation do not severely affect to the income and livelihood of affected persons. Improve grievance redress mechanism and strengthen participation of women and youth customary communities in consultations
Capacity of staff at regions (UIW, UP3, UP2K, ULP) in managing safeguards is relatively weak	Low	PLN will appoint environment and social safeguard focal person respectively at PPT, HSSE, and regions (UIW, UP2K, UP3). Train the focal persons and other staff dealing with safeguards, and provide briefing to contractor
Public health and safety. People are unfamiliar with safe practices with electricity and new customers are injured.	Moderate	DLI 7 supports safe electrification by facilitating education workshops, and the poverty-focused grant supports instructive materials for consumer's in-home safety precautions.
<b>Monitoring &amp; Evaluation Systems.</b> PLN does not yet have the means to monitor DLI 2, notably the connection	Substantial	(i) PLN will need to establish a procedure between MoSA, MEMR and PLN to include data on female headed households in MEMR's annual updates sent to PLN, (ii)

<sup>34</sup> PCB refers to polychlorinated biphenyls, one of the persistent organic pollutants (POPs) which has been banned under the Stockholm Convention on POPs. Indonesia is a signatory to the said international convention and the Government has developed a program towards the elimination of PCBs in the country. PCB Management Guidelines have been developed by MOEF with assistance from UNIDO and are under legal review prior to becoming a ministerial regulation.



Risks	Ratings	Key Mitigating Measures
of poor- and female-headed households. Information exists on poor households in the system but not on female heads of household. Both have to be integrated within PLN's regular information flow systems.		PLN will add the data field for female- and male-headed households in an interface module between the TNP2K database and AP2T application. PLN should consider eventually integrating the reporting on DLI 2 into PLN systems, so that future PLN work will benefit from this institutional change.
PLN's real time M&E systems are not yet fully automated for the regions outside Java-Bali, thus exposing the system to risks of manual errors and time lag in data updates	Moderate	PLN should strengthen the coordination between the Regional Offices and Headquarters, by establishing clear roles and accountabilities for regular quarterly reviews of RBL program implementation, DLIs, other indicators and PAP action points, including a comparison of KPIs between SILM and UIW data.
PLN does not have a dedicated system for fully monitoring DLIs 6 and 7.	Low	PLN should establish procedures and accountabilities within DIV PR-KAL, DIV PR-MP and UIW offices in the field to track these indicators.
<b>Technical performance.</b> Long lengths of distribution lines could cause reduction of service quality. (voltage drop and reduction of reliability)	Moderate	PLN will increase regular maintenance patrol in each UIW, conduct proactive operation and maintenance, and prepare voltage drop reduction measures, including review of use of auto/step voltage regulator.
Institutional Capacities. New technologies are not able to be absorbed into operations.	Moderate	Grant financing is available to support PLN's adoption of new solar PV components, including technical design, implementation, and co-development of procedures for operations and maintenance.
<b>Operating environment.</b> Earthquakes, volcanic eruptions, tsunamis, and extreme weather events, including those related to climate change, in the Kalimantan, Maluku and Papua area could negatively impact the progress of the program and the energy infrastructure.	Low	Natural disaster management procedures will be discussed with PLN and improved if necessary before infrastructure work begins for the program.
<b>Overall RBL program risk</b>	<b>Moderate</b>	

ADB = Asian Development Bank, AP2T = centralized customer services application (*Aplikasi Pelayanan Pelanggan Terpusat*), DIV PR-KAL = Kalimantan regional planning division, DIV PR-MP = Maluku and Papua regional planning division, DLH = Provincial/District Environmental Agency (*Dinas Lingkungan Hidup*), DLI = disbursement-linked indicator, HSSE = Health, Safety and Environmental Division, KPI = key performance indicators, MEMR = Ministry of Energy and Mineral Resources, M&E = Monitoring and Evaluation, PAP = program action plan, PCB = polychlorinated biphenyls, PLN = State Electricity Corporation (*Perusahaan Listrik Negara*), MoSA = Ministry of Social Affairs, PPT = Land and Permit Division, RBL = results-based lending, RUPTL = PLN Electricity Power Supply Business Plan (*Rencana Usaha Penyediaan Tenaga Listrik*), SILM = PLN's Management Reporting Information System (*Sistem Informasi Laporan Manajemen*), TNP2K = National Team for the Acceleration of Poverty Reduction, UIW = PLN administrative region (*Wilayah*), UNIDO = United Nations Industrial Development Organization, UP2K = PLN electrification project implementation unit (*Unit Pelaksana Provek Ketanagalistrikan*), UP3 = PLN administrative unit (*Area*).

Note: Risk factors are assessed against two dimensions: (i) the likelihood that the risk will occur, and (ii) the impact of the risk on the outcome. Rating scale: low = low likelihood and low impact; moderate = substantial to high likelihood, but low to moderate impact; substantial = low to moderate likelihood, but substantial to high impact; high = high likelihood and high impact.

Source: ADB.

## VI. PROGRAM ACTION PLAN

### A. Status of Program Action Plan

70. The PAP includes key actions in program scope, investment site selection, technical areas, program results, monitoring and evaluation, financial management, procurement, safeguards, and risk mitigation measures developed to enhance PLN's capacity and strengthen its systems to help achieve the DLIs and make the program results more sustainable. The PAP focuses on implementation capacity, which will complement physical investments under the program and contribute to PLN's overall efforts to increase staff capacities and improve institutional monitoring and reporting systems. The PAP also includes risk mitigation measures, and program management, including grant management. The PAP is set out in Table 10. The actions included in the PAP will be reflected in PLN's progress reports.

**Table 10: Program Action Plan**

Actions	Responsible Unit	Indicators	Timeframe
<b>Program scope</b>			
1. Plan and finalize the selection of locations and components for the strengthening and expansion of the distribution system, and criteria for sequencing related interventions under the program. For Maluku-Papua, take into consideration the results from the least cost electrification study conducted in 2017-2018, any further geospatial analyses, and ongoing efforts on cold storage chain development.	PR-KAL PR-MP Wilayah/ Area office RKO	i) Annual plan established for expansion of distribution system and renewable energy development, in consideration of least cost options analyses and ongoing efforts on cold storage chain development ii) Technical designs prepared for distribution lines expansion and renewable energy installation including cost estimation and bill of quantities iii) Safety training conducted for PLN staff and contractors prior/during construction. iv) Completion report/record prepared	Annually from 2020
<b>Technical design</b>			
2. Develop guidance to regulate voltage at feeder lines including the use of auto/step voltage regulators for MV lines.	RKO (PUSLITB ANG) PR-KAL PR-MP	i) Review report of current voltage regulation measures for distribution lines including application for auto/step voltage regulators for MV lines. ii) Technical guidance developed for auto/step voltage regulators.	i) By 2022 ii) By 2023
3. Conduct a study with draft standards for single-phase distribution systems, including consideration of SWER.	RKO (PUSLITB ANG) PR-KAL PR-MP	i) Study conducted for review of current three-phase distribution system and single-phase distribution system. ii) If applicable, technical recommendation submitted to BOD for SPL and/or SWER.	i) By 2022 ii) By 2023
<b>Program results</b>			
4. Report on implementation status of poverty-focused grant on (i) household connections for the poor, (ii) PLN trainings and community materials on safe and productive energy use, and (iii) impact assessments*.	PR-MP PR-KAL PLN Univ. RKO DIV DAS	Report on grant achievements against indicative targets of: (a) additional 16,000 poor HHs provided with PLN electricity, with results disaggregated by female/male-headed households, (b) an e-module developed and two training-of-trainers sessions on conducting community workshops for safe and productive energy use conducted with participation by a total of at least 58 PLN staff, including female staff, consisting of two staff who are responsible for socialization workshops from each of the 29 UP3 office and other relevant PLN staff; (c) culturally-sensitive materials (e.g. language and literacy, among others) for safe and productive energy use provided to each of the 29 UP3 offices for community education workshops; Conduct recruitment using international competitive bidding for a firm to conduct a socio-economic and gender baseline study and convene an expert working group, including ADB	From 2021

Actions	Responsible Unit	Indicators	Timeframe
		experts, on impact assessment, to review and approve the firm's outputs; (iii) Conduct a socio-economic and gender impact assessment with a query-able database of the program in Maluku and Papua, with inputs from the expert working group for endorsement by PLN management. <sup>35</sup>	
5. Report on grant implementation status for ACEF on (i) additional power generation from community scale solar PLTS and connection to households, (ii) piloting of remote monitoring projects, (iii) piloting of hybrid units using EMS, and (iv) community training on solar PV maintenance where remote monitoring is used, ensuring female participation in such training*.	EBT PR-MP PR-KAL RKO	(i) Report on grant achievements against indicative target: (a) power generation from solar PVs (<10 MW) increased by an additional 4,020 MWh annually; (b) 17,500 HHs have access to PLN electricity from improved PLTS; (ii) 10 PLN PLTS upgraded and operational with remote monitoring; (iii) 10 PLN PLTS upgraded and operational with hybridization utilizing energy management systems; and (iv) At least one pilot community training delivered on basic PLTS maintenance where remote monitoring is used with at least 30% women's participation.	From 2021
<b>Monitoring and evaluation</b>			
6. Strengthen PLN's monitoring and evaluation systems		(i) Regular quarterly reviews of RBL program implementation established at the coordination meetings between PLN headquarters and UIW. (ii) See 7(i) under Gender.	From 2020
<b>Gender</b>			
7. Enhance PLN's capacity to mainstream gender into its work.		(i) An interface module between PLN's AP2T and National TNP2K database developed and applied to enable identification and tracking of female/male-headed households. (ii) Training module on livelihood opportunities for women included in consumer education trainings on safe and productive energy use. (iii) See 4 (iii) on impact assessment, including impact on gender. (iv) See 5 (iv) on pilot community training on basic PLTS maintenance.	(i) From 2020  (ii) From 2020  (iii) By 2025  (iv) By 2025
<b>Financial Management</b>			
8. Automated production of consolidated financial statements with variance reporting against budget.	DIV AKT DIV ANG	(i) Consolidated quarterly financial statements produced automatically by MAXICO. (ii) E-Budget implemented in the program target regions. (iii) Staff in all relevant divisions trained in the use of MAXICO and E-Budget systems.	From 2020
9. Establish regular reporting of key internal initiatives to reduce costs and strengthen financial sustainability.	DIV KEU DIV RKO DIV ANG	High level summary of key internal initiatives and their impacts included in the 2 <sup>nd</sup> quarter and annual RBL progress reports.	From 2020
<b>Procurement</b>			
10. Accurate procurement monitoring report prepared and submitted quarterly, based on data in the E-procurement plus SAP integrated system.	DIV SCM, REG-KAL, REG-MP, All UIW	Report submitted following procurement Monitoring Framework	Quarterly reports from 2021. For 2020 a yearly report shall be submitted
11. Competitive bidding with international participation for application of new technologies and expertise.	DIV EBT DIV DAS	Recruit consultants through international competitive bidding to support PLN in PLTS (a) failures analysis, (b) design, procurement, and commissioning of PLTS upgrades with remote monitoring and hybridization using EMS, and (c)	From 2021

<sup>35</sup> The baseline study will measure the situation of households (women, men and children) before electrification, while the impact evaluation will provide sound evidence of the changes that electrification has brought to these communities in terms of time use, education, and livelihood opportunities for women, men and children.

Actions	Responsible Unit	Indicators	Timeframe
		implementation of sustainable operations and maintenance procedures for remote monitoring and EMS operations.	
12. Procurement audits each year of 10% of all contracts at Wilayah/Area offices.	DIV SCM, PR-KAL, PR-MP, UIW, SPI	Procurement audits conducted and information sheet shared with ADB	From 2021 (audit of 2020 procurement transactions)
<b>Safeguards</b>			
13. Strengthen institutional capacity on environmental and social safeguards, respectively, by: (i) appointing safeguards focal persons in each UIW, UP3 and UP2K office; (ii) issuing a technical guidance and training PLN personnel on the implementation of the PSSA and PAP; (iii) developing an environmental and social safeguards code of practice for solar PV, mini/micro-hydro, and small biogas plants that will include criteria for selecting sites, pollution control, environmental monitoring, sustainable sourcing and management of biomass fuels, and community consultations as well as templates for UKL/UPL.	DIV HSSE, DIV PPT, UIW	i) Safeguards focal persons appointed at HSSE, PPT, each UIW, UP3 and UP2K office. ii) Technical Guidance including training materials on safeguards for EGDP I (SNT) is updated to include program actions for EGDP II. iii) Annual training conducted for Environmental and Social Safeguards Focal Persons, representatives from each UIW, UP3 and UP2K office, and representatives from ULP office as needed, through PLN's Corporate University. iv) Briefing brochure on safeguards requirements prepared for and disseminated (through briefing sessions) to contracted vendors / contractors on environmental and social safeguards. v) Safeguards code of practice developed for solar PV, mini/micro-hydro, and small biogas facilities	i) From 2020 ii) 2020 iii) Every year from 2020 iv) 2020 onwards v) 2020
14. Strengthen safeguards screening and assessment: (i) screen annual work plans to ensure category A activities for environment, involuntary resettlement and Indigenous Peoples (Customary Communities) are not included in the program; (ii) prepare the UKL/UPL of UIW annual activities and submit to DLH for approval.	UIW, DIV HSSE UIW, DIV HSSE UIW, DIV PPT UIW, DIV HSSE	i) Distribution line, solar PV, mini/micro-hydro, and biogas plant development plans internally screened for environmental safeguards by UIW based on list of villages in key biodiversity areas, and monitored by HSSE. ii) UIW annual workplan is screened and categorized by DLH and Forestry Department. iii) Involuntary resettlement and Indigenous Peoples (Customary Communities) screening and categorization reports prepared by UIW and reviewed by PPT. iv) UKL/UPL of annual activities prepared in accordance with screening results and submitted to relevant DLH. Executive summaries of UKL/UPL disclosed on PLN website. Full reports made available upon request.	Every year from 2020
15. Strengthen meaningful consultation with affected persons including customary communities and vulnerable groups. Improve grievance redress mechanism	UIW, UP3, UP2K, DIV PPT	(i) Vulnerable groups (poor households, customary communities, women, and children/youth) invited to consultations. (ii) Topics of consultations include selection of sites and implications of distribution lines, solar PV, micro-hydro, and biogas plants, cost estimates for electricity connection and installation, procedure of accessing free electricity program to the poor, and awareness on safe usage and economic benefit of electricity. (iii) Consultation records on issues discussed and agreements reached with participants completed with attendance list segregated by gender and customary (indigenous) status. (iv) All complaints/grievances and remedial measures recorded and compiled.	2020 onwards
16. Improve transparency and fair compensation for negotiated land acquisition and voluntary land donation to ensure that people will maintain the same or	(i), (ii): UIW, UP3, UP2K, DIV PPT (iii): IVA	i) Written agreements on the land use for the installation of distribution transformers. ii) Written agreement regarding voluntary land donation for construction of micro-hydro and biogas power plants and village-level solar PV from land owners or clan members	(i) Written agreement (private land) for

Actions	Responsible Unit	Indicators	Timeframe
better level of income or livelihood.	(iv) UIW, UP3, UP2K	of customary communities with communal access rights prior to the construction commencement. iii) Semi-annual verification (sample) by an independent party to ensure that the negotiated land acquisition and voluntary land donation were conducted through proper consultations. Voluntary donation did not severely affect the living standards of affected persons (donor is not poor and does not lose more than 5% of total land owned; donated land is not ancestral land and in sacred areas). iv) Proper mitigation (compensation for lost non-land assets or income and income restoration program) for land users affected by the program.	distribution transformers Dec 2021: 40%; Dec 2022: 55% Dec 2023: 70% Dec 2024: 80% Dec. 2025: 90% (ii) Written agreement for construction of hydropower plants and solar PV: 2021 onwards: 100%
17. Monitor and report on compliance with safeguards program actions and program impacts on income/ livelihoods of affected households. Prepare and implement corrective actions if adverse impacts on income/livelihood are identified	DIV HSSE, DIV PPT	i) Q2 and Q4 RBL implementation reports submitted to ADB include consolidated results of safeguards screening and safeguards program actions. ii) Impacts of program activities on the income / livelihood of affected persons monitored by DIV PPT through review of complaint handling and compensation records. Corrective actions implemented and documented if adverse impacts on income/livelihood are identified. iii) Assessment of whether customary communities' access to electricity has increased by the Mid Term Review and end of the Program.	From 2021 onwards

ADB = Asian Development Bank, ACEF = Asia Clean Energy Fund, AP2T = centralized customer services application (*Aplikasi Pelayanan Pelanggan Terpusat*), DIV AKT = Accounting Division, DIV ANG = Budget Division, DIV DAS = Strategic Procurement Division, DIV EBT = New and Renewable Energy Division, DIV HSSE = Health, Safety and Environment Division, DIV SCM = Supply Chain Management Division, DIV PPT = Permits and Land Acquisition Division, EBTKE = Directorate General of New Renewable Energy and Energy ; Conservation, Ministry of Energy and Mineral Resources, NP2K = MV = medium voltage, PAP = Program Action Plan, PLN = State Electricity Corporation, PLTS = Photovoltaic Plants, PR-KAL = Division of Regional Development for Kalimantan, PR-MP = Division of Regional Development for Maluku-Papua, PSSA = Program Safeguard Systems Assessment, RKO = Corporate Planning Division, SPL = Single Phase Line, SWER = Single Wire Earth Return, UP3 = Area (PLN administrative unit), UIW = PLN administrative division (*Wilayah*), Wilayah = PLN regional office

\*For all actions related to grant financed components, comply with grant eligibility and grant donor visibility requirements as further described in the Grant Agreement and PID.

Sources: ADB and PLN.

## B. Issues and Changes

71. Major issues encountered during implementation and changes made to the PAP and reasons for doing so, if any, will be summarized and reported in Tables 11 and 12.

## VII. GRANTS

### A. Summary

72. To further support the program, PLN has requested a grant from the Japan Fund for

Poverty Reduction (JFPR) in the amount of \$3 million and a grant from the Asian Clean Energy Fund (ACEF) in the amount of \$3 million.<sup>36</sup> The two grants will support the program's outcome and outputs and enhance achievements under the program's DLI and results framework in Tables 2 and 4 and explained below.

73. **JFPR Grant.** A \$3 million poverty-focused grant aims to increase equitable and sustainable access to electricity, primarily in Maluku and Papua, as well as in Kalimantan. The grant will contribute to the program's Results Framework and DLI achievements by supporting: (i) full and safe household connections for poor HHs (ii) measurement of outcome D (social and outcomes enhanced in target communities) through a socio-economic and gender impact evaluation; and DLI 7 for consumer education workshops on safe and productive energy use by financing training-of-trainer modules for PLN staff responsible for socialization as well as consumer materials to reinforce workshop messages.

74. The indicative targets of the JFPR grant are:

- (i) **Target 1.** An additional 16,000 poor HHs households provided with PLN electricity by 2024, with results disaggregated by female/male-headed households (2019 baseline: 0 additional poor households).<sup>37</sup>
- (ii) **Target 2.**
  - (a) An e-module developed and two training-of-trainers sessions on conducting community workshops for safe and productive energy use conducted with participation by at least 58 PLN staff, including female staff, consisting of two staff who are responsible for socialization workshops from each of the 29 UP3 offices and other relevant PLN staff by 2022. (2019 baseline 0 workshops held and 0 PLN staff trained); and
  - (b) Culturally-sensitive materials (e.g. language and literacy, among others) for safe and productive energy use provided to each of the 29 UP3 offices for community education workshops by 2021. (2019 baseline 0 UP3 offices with community education materials).
- (iii) **Target 3.** A baseline socio-economic and gender assessment conducted in 2021 and a follow-up socio-economic and gender impact evaluation with inputs from the expert working group, as well as query-able database finalized with endorsement by PLN management by 2025.<sup>38</sup> (2019 baseline 0 studies and 0 databases).

75. Implementation Arrangement: PR-MP in PLN will be the focal unit for the JFPR grant, with the following output specific arrangements:

- (i) for target 1, CSR will coordinate with PR-MP and PR-KAL and directly with relevant unit staff in the Wilayahs (UIW) to plan and implement HH connections. Wilayahs will propose to CSR a list of HHs for connections. CSR will approve internal disbursements to relevant Wilayahs as well as consolidate the reporting of achievement from implementation of connections with regional units for inclusion in the Program quarterly reports. Note that the target includes all HH connections that utilize any amount of grant financing (for example, if a PEMDA program

<sup>36</sup> ACEF and JFPR are possible funding sources subject to the approval of the Government of Japan.

<sup>37</sup> In principle, these are the households receiving electricity tariff subsidies and other benefits from poverty reduction programs. These are identified from the databases of the Ministry of Social Affairs and its district offices, to which PLN is provided with access.

<sup>38</sup> The baseline study will measure the situation of HHs (women, men and children) before electrification, while the impact evaluation will provide sound evidence of the changes that electrification has brought to these communities in terms of time use, education, and livelihood opportunities for women, men and children.

finances in-house wiring, the grant could be used for the PLN metered connection).

- (ii) for target 2, PLN University will support PR-MP with the execution of the training and materials development by providing its expertise, staff time, and facilities, including the Maskassar training facility. ADB will provide concurrence on the following components financed by the grant: (i) the terms of reference (TOR) used to recruit expert support for module and materials content, (ii) the short list of firms selected for expert support; (iii) PLN staff training modules, including e-module, (iv) community materials on safe and productive energy use, and (v) a summary report on the training implementation, to be shared with Talent (TLN).
- (iii) for target 3, Corporate Planning (RKO) will support PR-MP with the socio-economic impact study, including advanced recruitment of a consulting firm to conduct the socio-economic and gender baseline study and impact assessment so that the recruited firm can initiate baseline sampling immediately following grant effectiveness. ADB will review and issue concurrence on the (i) consulting services TORs used in PLN's open competitive bidding procedures, allowing international bidders to participate, for the impact assessment, (ii) the short list for the selected consulting firm, and (iii) each of the firm's outputs. An external expert provided by ADB will participate as a tender agent on the Selection Committee for recruitment of a firm to conduct the impact evaluation. PLN will establish and convene a working group, led by RKO, consisting of the following PLN divisions: RKO, Tariff and Subsidy, Marketing and Customer Service, PR-MP, CSR, and impact evaluation specialists from ADB. The working group will convene to review and provide inputs to each of the consultant's outputs. ADB will source an external impact evaluation expert, outside of the grant, to support the consulting firm's day-to-day requirements during field missions and data processing.

76. Eligible expenditures include: (i) consulting services that directly support the grant's outputs; (ii) costs directly associated with HH connections; (iv) costs associated with developing training materials, including an e-module; and (v) travel related expenditures incurred by PLN University and external experts for the PLN trainings and attendance at socialization workshops in the field that inform training program improvements.

77. **Asian Clean Energy Fund (ACEF) Grant.** A \$3 million clean energy-focused grant aims to promote the shift towards renewable energy and reduce operational costs for PLN through reduced diesel consumption with focus in Kalimantan. The grant will contribute to the program's outcome for clean energy use increased, as described in Table 2 and below. It directly supports achievements under DLI 5 through power generation from community-scale solar PVs. The grant will increase the output of solar PV generation and introduce new efficient technologies into solar PV operations through the: (i) rehabilitation and sustainable maintenance and operation of non-PLN PLTS that are either to be transferred to PLN from EBTKE or owned by PEMDA but to be operated and maintained by PLN under an agreement between PLN and each of the relevant PEMDA, (ii) rehabilitation and upgrading of PLN's PLTS with new technologies for remote monitoring and/or hybridization using energy management systems, and (iii) development of a community training module for basic solar-PV maintenance and at least 1 pilot training with at least 30% women's participation, where PLTS are remotely monitored.

78. The indicative targets of the ACEF grant are:

- (i) **Target 1**

- (a) Additional power generation from solar PVs (<10 MW) increased by an additional 4,020 MWh annually by 2024. (2019 baseline 0 MWh).
  - (b) 17,500 HHs have access to PLN electricity from improved PLTS by 2024. (2019 baseline 0 HHs).
- (ii) **Target 2**
  - (a) 10 PLN PLTS upgraded and made operational with remote monitoring by 2024. (2019 baseline 0 PLTS upgraded).
  - (b) 10 PLN PLTS upgraded and made operational with hybridization utilizing energy management systems by 2024. (2019 baseline 0 PLTS upgraded).
- (iii) **Target 3:** One pilot community training conducted on basic PLTS maintenance where remote monitoring is used with at least 30% women's participation by 2024. (2019 baseline 0 community PLTS maintenance trainings).

79. Implementation Arrangement: EBT in PLN will be the focal unit for the clean energy-focused grant. EBT will coordinate with PR-MP and PR-KAL on all three targets under the grant, with the following specific arrangements:

- a. for target 1: RKO will support EBT on: (i) the coordination with EBTKE and MOF to facilitate the PLTS asset transfer process; (ii) the drafting of an MOU template for operations and maintenance for PEMDA-owned PLTS; and (iii) facilitating EBTKE's support in outreach with each relevant PEMDA with EBTKE-built PLTS. The final list of EBTKE/ESDM-owned PLTS that PLN has agreed to receive should be reviewed and concurred with by ADB. Also, a template agreement between PLN and PEMDA that includes component replacement for operation and maintenance of PLTS, with compensation, is to be reviewed and concurred with by ADB following EBTKE director's approval.
- b. for target 2: EBT will coordinate with PR-KAL and PR-MP to identify and propose PLN-owned PLTS upgrade projects. An initial list of upgrade proposals, including their preliminary designs, are to be reviewed and concurred with by ADB. The final TOR for consulting support under the grant will be reviewed and concurred with by ADB as well as the short list of firms. An external expert provided by ADB will participate as a tender agent on the Selection Committee for recruitment of a firm to conduct the support. The procurement for the new technology elements, such as remote monitoring and hybridization using energy management systems will be carried out following PLN's open competitive bidding procedures allowing international bidders to participate.
- c. for target 3: EBT will work with PLN University to develop the basic community training content and structure as well as procedural materials for the community. EBT will work with PR-KAL (or PR-MP) to pilot at least one community training on basic solar PV maintenance, where remote monitoring is used, with at least 30% female community participation. The final training materials are to be reviewed and concurred with by ADB.

80. Eligible expenditures include: (i) consulting services that directly support the grant's outputs; (ii) PLTS rehabilitation and upgrade components, including: Inverters, batteries (not lead acid), solar panel replacements, interconnections, weather modules, EMS components, routers, modems, and cloud-supported software for remote monitoring; (iii) small civil works for PLTS; and (iv) costs associated with developing training materials, including HSSE procedures for community-scale renewables. All new battery purchase contracts will include requirements for suppliers to take-back and recycle spent batteries on-site subject to PLN's waste classification.



81. **Following sections are applicable to both grants.**

82. **Disbursement Arrangements.** The grants will be disbursed according to achievements under each relevant DLI as shown in Table 5, following ADB's Loan Disbursement Handbook (2017, as amended from time to time). Up to 25% of each of the grants may be made available for advance financing and up to 20% of each of the grants may be made available for financing prior results, upon grant effectiveness, as summarized in Tables 4a and 4b.<sup>39</sup> At no time however the combined outstanding balance of advance financing and financing for prior results can exceed 30% of each of the grant. Grant proceeds will be disbursed to two separate accounts set up by PLN exclusively for each grant.

83. **Expenditures.** The grants will support the subset of the expenditure framework (Table 7) that are directly related to each grant's indicative target achievement, which are renewable generation (ACEF) and CSR Budget (JFPR). A minimum of 80% of ACEF and 55% of JFPR financing is to be used on goods and works. Monitoring and evaluation (section A), audit (paragraphs 32-37), and verification protocols (section C)] are fully integrated with the program, as are fiduciary (section B), procurement (section B.2), safeguards (section D), and anticorruption (section B.3) systems.

84. **Government of Japan Visibility.** All publications, training programs, and any equipment or facility funded by the poverty-focused grant must bear the JFPR and Government of Japan Official Development Assistance (ODA) logos; and the clean energy grant must bear the Japan ODA logo, including all collaterals used (i.e. training materials, banners, posters, flyers, etc.). The Guidance Note on Japanese Visibility and Guidance Note on Coordination with Japanese Embassy and JICA are in Appendixes 9 and 10, respectively.

85. **Reporting Requirements.** Progress reports on the grants will be integrated with the loan program reporting through the quarterly and annual reports submitted by PLN. The reports will include specific chapters for each grant with achievements against the indicative targets.

86. The Program Completion Report (PCR) will include specific sections for each grant that documents cumulative outputs and outcomes, and lessons learned through the grant implementation period. A record of Japanese visibility measures is to be included in the PCR's grant sections.

## VIII. TECHNICAL ASSISTANCE

87. Independent verification will be carried out by an independent verification agent under a separate technical assistance project supported by the Government of Australia.<sup>40</sup>

## IX. MONITORING OF KEY PROGRAM COVENANTS

88. The loan agreement will include covenants related to Procurement and Safeguard

<sup>39</sup> ACEF and JFPR are possible funding sources subject to approval of the Government of Japan.

<sup>40</sup> The IVA arrangements for the Sumatra and Sulawesi-Nusa Tenggara RBL programs are supported by TA 9113-INO: *Strengthening Verification in Results-Based Programs in Indonesia's Power Sector* under the cluster technical assistance C-TA0013-INO: *Sustainable Infrastructure Assistance Program* financed by the Government of Australia through the Department of Foreign Affairs and Trade and administered by ADB. A subsequent technical assistance project has been approved to extend the same arrangement to Kalimantan, Maluku, and Papua, subject to the Board's approval of the proposed loan. As is the case between ADB and the World Bank for the Sumatra program and between ADB and KfW for the Sulawesi-Nusa Tenggara program, the IVA arrangement may be shared with other development partners when and where similar verifications are required.

restrictions.<sup>41</sup> It will also include covenants on the requirements to submit quarterly reports on the program action plan and accomplishments of DLIs and other items agreed during the loan negotiations. Monitoring of key program covenants will take place through missions and meetings.

## X. SUMMARY OF KEY OUTSTANDING ISSUES

89. The key outstanding issues and actions during program implementation and corrective actions taken will be summarized in Table 11.

**Table 11: Key Outstanding Issues and Actions**  
(As of xxxx)

Number	Key Issues	Status in Addressing the Issues	Next Steps	Responsible Agencies and People	Timeframe for Implementation

Sources: Asian Development Bank and PLN.

## XI. ACCOUNTABILITY MECHANISM

90. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted operations can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures.<sup>42</sup> People who are, or may in the future be, adversely affected by a program supported by RBL may submit complaints to ADB's Accountability Mechanism (2012).

91. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to resolve their problems and/or issues by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, they approach the Accountability Mechanism.

## XII. CHANGES IN PROGRAM SCOPE AND IMPLEMENTATION ARRANGEMENTS

92. Changes of scope and implementation arrangement during the course of implementation (including both major and minor changes) are to be recorded in Table 12 to provide a chronological history of changes in scope and implementation arrangement for the program.

**Table 12: Changes in Scope and Implementation Arrangements**  
(As of xxxx)

Number	Changes and Key reasons	Date	Names of Documents
1			
2			

<sup>41</sup> In compliance with RBL policy restrictions in ADB (2013) *Piloting Results-Based Lending for Programs*.

<sup>42</sup> ADB. 2012. *Review of the Accountability Mechanism Policy*. Manila.

Number	Changes and Key reasons	Date	Names of Documents
3			
4			
5			
6			

Source: Asian Development Bank.

### XIII. PROGRAM ORGANIZATIONAL STRUCTURE AND FOCAL STAFF

#### A. Organizational Structure

93. Overall responsibility for the development and mainstreaming of the program rests with PLN and therefore PLN's head office, operating units, subsidiaries, and field level personnel responsible for implementing the program will also be responsible for achieving results associated with it. The program will be implemented from January 2020 to December 2025. PLN will be both the executing and implementing agency, which will implement this program through its head office as well as its regional offices and divisional offices. PLN will assign staff to oversee implementation of the program. It will set policy guidelines and strategic directions for the program, be headed by the PLN Director for Corporate Planning, and members from the divisions under the directorate. The SPKK unit of PLN will monitor and report on progress in achieving the DLIs.

94. Actions to advance government-wide reforms to mitigate fiduciary risks in an incremental and sustainable manner are included in the PAP. This PAP is a living document that can be refined, improved, and updated during implementation, as needed.

#### B. Program Officers and Focal Persons

##### 1. Initial Arrangements

**Table 13: Program Officers and Focal Persons**  
(As of December 2019)

Number	Key Government Staff and Positions	Key ADB Staff and Positions
1	Ms. Syofvi F. Roekman Director of Corporate Planning	Andrew Jeffries Director, Southeast Asia Energy Division
2	R. Rawan Insani Executive Vice President Corporate Planning Division	Toru Kubo Principal Energy and Climate Change Specialist Southeast Asia Energy Division
3	Anasthasia Nurdiana Vice President Corporate Planning Division	Takako Morita Senior Counsel Office of the General Counsel
4	Noor Rahmania Manager	Diana Connett Energy Specialist

Number	Key Government Staff and Positions	Key ADB Staff and Positions
	Corporate Planning Division	Southeast Asia Energy Division
5		
6		

## 2. Changes during Implementation

**Table 14: Changes in Key Executing Agency Staff and ADB Mission Leader**  
(As of xxxx)

Number	Changes	Date	Reasons for the Change
1			
2			
3			
4			
5			
6			

Sources: Asian Development Bank and PLN.

## Appendix 1: Design and Monitoring Framework

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<b>Outcome</b> Sustainable, equitable, and reliable access to electricity for the population in Kalimantan, Maluku, and Papua enhanced	<p>a. Number of PLN customers in Kalimantan, Maluku, and Papua increased to at least 6.77 million by 2024 (2018 baseline: 5.22 million) DLI 1.</p> <p>b. Additional poor households provided with PLN electricity increased to 112,428 households by 2024, with data disaggregated by female/male-headed household, with at least 10% of households to be headed by women<sup>b</sup> (2018 baseline: 0 additional poor households provided with PLN electricity) DLI 2.<sup>c</sup></p> <p>c. Reliability of electricity supply improved: Feeder line permanent interruptions in the distribution system reduced to 17.12 per 100 ckm by 2024<sup>d</sup> (2018 baseline: 23.29 interruptions/100 ckm). DLI 3.</p> <p>d. By 2026, improved time use reported by women and men as a result of electricity access, measured in hours per week expended by women and men on: (i) household work and care activities, (ii) productive activities, and (iii) social and community activities (2020 baselines: To be measured)</p>	<p>a.–c. PLN UIW records, PLN SILM, RBL program reports based on quarterly reviews, and IVA reports</p> <p>d. Social and gender impact evaluation, including baseline survey</p>	<p>Lack of central and local government funding support to poor households unable to connect, including households-headed by women</p>
<b>Outputs</b> 1. Power distribution network strengthened and expanded	<p>1a. Installed length of medium-voltage distribution lines increased to reach at least 63,692 ckm by 2024. (2018 baseline: 47.639 ckm) DLI 4</p>	<p>1a. PLN UIW records, PLN SILM, RBL program reports based on quarterly reviews, and IVA reports</p>	
2. Renewable energy use increased	<p>2a. Power generation from solar photovoltaics (&lt;10 MW), mini/ micro hydro (&lt;1 MW), and small biogas (&lt;100 kW) plants increased by (i) an additional 40,000 MWh annually by 2025; and (ii) an additional 48,000 MWh annually by 2025 (2018 baseline 0 additional MWh) DLI 5.</p> <p>2b. At least one pilot community-based training on solar photovoltaic maintenance delivered by 2024 with a minimum of 30% female participation, and a training module developed for expansion of community training by PLN (2018 baseline: Training not yet offered)</p>	<p>2a. PLN UIW, and EBT records and IVA reports</p>	<p>Insufficient commitment and government support to increase small renewable energy use in the RUPTL</p>
3. Institutional capacity strengthened and social monitoring enhanced	<p>3a. Asset and waste management improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku, and Papua included in the disposal inventory as of the end of 2019 safely disposed by 2025 and (ii) 25 additional warehouses holding environmental permit by 2024<sup>e</sup> (2018 baseline: 0% disposal rate; 0 additional warehouses with environmental permit) DLI 6</p>	<p>3a. Records from PLN's UIW and HSSE, and IVA reports</p>	<p>Undue delays in government approval processes hold up the required institutional actions</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	<p>3b. By 2024, consumer education workshops on safe and productive energy use implemented by 5 UIW and 29 UP3 offices, with a minimum of 30% female participation<sup>f</sup> for each workshop, based on a scoring system to promote higher female participation. (2018 baseline: 0 workshops) DLI 7<sup>g</sup></p> <p>3c. E-procurement and SAP systems are integrated and implemented by 2020, and at least 80% of contracts in financial value are recorded in the e-procurement–SAP integrated system by 2024. (2018 baseline: E-procurement and SAP systems are separate) DLI 8</p> <p>3d. Annual report on social impact of electrification with data disaggregated by sex published by the end of 2022 (2018 baseline: No annual reporting)<sup>h</sup></p>	<p>3b. PLN UIW records, and IVA reports</p> <p>3c. E-procurement plus SAP integrated system</p> <p>3d. PLN DIV COM and IVA reports, social and gender impact evaluation and baseline survey</p>	

### Key Program Actions

- 1. Program scope.** Plan and finalize the selection of locations, components, and criteria for sequencing interventions for strengthening and expanding the distribution system.
- 2. Technical design.** (i) Develop guidance to regulate voltage at feeder lines; and (ii) conduct a study with draft standards for single-phase distribution systems, including consideration of Single Wire Earth Return.
- 3. Program results.** (i) Report implementation status of the Japan Fund for Poverty Reduction grant on poor household connections, PLN trainings, community training materials, and social and gender impact assessments; and (ii) report implementation status for the Asian Clean Energy Fund grant on community-scale solar photovoltaics, remote monitoring, hybrid units, and community training on solar photovoltaic maintenance.
- 4. Monitoring and evaluation.** Strengthen PLN's existing monitoring and evaluation systems through regular quarterly reviews and improved data collection on poverty and gender.
- 5. Gender.** Enhance PLN's capacity to mainstream gender, through enabling the tracking of households headed by men and women, managing gender impact assessments, and promoting female participation in trainings.
- 6. Financial management.** Strengthen financial management through (i) automated production of consolidated financial statements with variance reporting against budget and (ii) regular reporting on initiatives to reduce electricity supply costs.
- 7. Procurement.** Strengthen procurement through (i) reports based on the E-procurement-SAP integrated system, (ii) competitive bidding with international participation for new technologies/expertise; and (iii) annual procurement audits.
- 8. Safeguards.** (i) Strengthen institutional capacity on environmental and social safeguards, (ii) strengthen safeguards screening and assessment, (iii) strengthen community consultations and grievance redress mechanisms, (iv) improve transparency and fairness on land issues, and (v) monitor compliance with safeguards program actions.

### Financing Plan

Total financing program from 2020 to 2025: \$2,275 million  
 Perusahaan Listrik Negara (State Electricity Corporation): \$1,669 million  
 Asian Development Bank: \$600 million (loan)  
 Japan Fund for Poverty Reduction: \$3 million (grant)<sup>i</sup>  
 Asian Clean Energy Fund: \$3 million (grant)<sup>j</sup>

### Assumptions for Partner Financing

Not applicable

ckm = circuit kilometer; DIV COM = Division of Communication and Corporate Social Responsibility; DLI = disbursement-linked indicator; HSSE = Health, Safety and Environmental Division; IVA = independent verification agent; MW = megawatt; MWh = megawatt-hour; PLN = Perusahaan Listrik Negara (State Electricity Corporation); RBL = results-based lending; RUPTL = Rencana Usaha Penyediaan Tenaga Listrik (Electricity Power Supply Business Plan); SAP = Systems, Applications, Products in Data Processing (an integrated business software); SILM = Sistem Informasi Laporan Manajemen (PLN's Management Reporting Information System); UIW = Unit Induk Wilayah (Regional Administrative Unit); UP3 = Unit Pelaksana Pelayanan Pelanggan (Customer Service Implementation Unit).

<sup>a</sup> PLN. 2018. *Electricity Power Supply Business Plan, 2019–2028*. Jakarta.

- <sup>b</sup> A conservative target needs to be established regarding the share of female-headed households. While the Indonesian Central Statistical Office defines a female-headed household as one where a woman is the family breadwinner or considered the head of the family, local governments classify a household as female-headed only when the woman is widowed or divorced. The RBL program will use the local government definition, as this is the only data that is regularly available at the local level.
  - <sup>c</sup> PLN and local governments identify poor households through a database updated yearly. The updates by the local governments are provided to PLN, as poor households are entitled to receive subsidies for electricity tariffs.
  - <sup>d</sup> PLN defines permanent interruptions as those over 5 minutes in duration.
  - <sup>e</sup> Environmental Permit and License to Operate Hazardous Waste Disposal.
  - <sup>f</sup> Female participation is at a minimum of 30% because (i) village and district officials must be included in the workshops and they are mostly men, and (ii) most workshops are held at the UP3 level (not at the village level) and will require women to travel away from their homes, which is difficult for women with young children.
  - <sup>g</sup> Scoring system: one workshop with 30% female participation will count as 1.0 point, while one workshop with 50% female participation will count as 1.25 points.
  - <sup>h</sup> The output indicator 3d is not related to the outcome indicator d. The output indicator 3d strengthens PLN's capacity to report on social dimensions and impact of its work, while the outcome indicator d measures social and gender impact by an independent evaluation.
  - <sup>i</sup> The Japan Fund for Poverty Reduction (JFPR) grant will support outcome indicator b (DLI 2) and outcome indicator d; output indicator 3b(DLI 7); and the initial framework for the first report for output indicator 3d. The JFPR grant will be disbursed against DLI 2 because of the importance of this DLI to JFPR.
  - <sup>j</sup> The Asian Clean Energy Fund grant will support output indicator 2a (DLI 5) and output indicator 2b.
- Sources: Asian Development Bank and PLN.

## **Appendix 2: List of RRP Linked Documents**

1. Loan Agreement: Ordinary Operations
2. Grant Agreement: JFPR
3. Grant Agreement: ACEF
4. Guarantee Agreement
5. Country Economic Indicators
6. Sector Assessment (Summary): Energy
7. Program Soundness Assessment
8. Program Results Framework and Assessment
9. Program Expenditure and Financing Assessment
10. Program Monitoring and Evaluation System Assessment
11. Program Fiduciary Systems Assessment
12. Program Safeguard Systems Assessment
13. Integrated Risk Assessment
14. Program Action Plan
15. Program Information Document
16. Contribution to the ADB Results Framework
17. Development Coordination
18. Summary Poverty Reduction and Social Strategy
19. Japan Fund for Poverty Reduction Grant

### **Supplementary Documents**

20. Program Scope of Work
21. Monitoring and Evaluation Framework
22. Procurement Monitoring Framework
23. Additional Information to Program Safeguard Systems Assessment
24. Procurement Assessment of PLN
25. Integrity Disclosure
26. Financial Analysis of PLN



### Appendix 3: Proposed Guidelines to Prevent or Mitigate Fraud, Corruption and Other Prohibited Activities in Results-Based Lending for Program

#### A. Purpose and General Principles

1. The developing member country (DMC) is responsible for the implementation of programs supported by results-based lending (RBL). The Asian Development Bank (ADB) has a fiduciary responsibility to ensure that its loans and other forms of financing are used only for the purposes for which they were granted, in accordance with the Agreement Establishing the Asian Development Bank (the Charter).<sup>1</sup> To uphold that obligation, ADB presents these guidelines to prevent or mitigate fraud, corruption, and other prohibited activities in RBL operations financed in whole or in part by ADB. These guidelines build upon the legal obligations presented in the loan agreement and apply to operations funded by the RBL (the programs).<sup>2</sup>
2. These guidelines do not limit any other rights, remedies, or obligations of ADB or the DMC under the loan agreement or any other agreement to which the ADB and the DMC are both parties.
3. All persons and entities participating in the programs must observe the highest ethical standards; take all appropriate measures to prevent or mitigate fraud, corruption, and other prohibited activities; and refrain from engaging in actions described in these guidelines in connection with such programs.

#### B. Definitions

4. These guidelines address the following practices as defined by ADB:
  - (i) A “corrupt practice” is the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party.
  - (ii) A “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit, or to avoid an obligation.<sup>3</sup>
  - (iii) A “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to improperly influencing the actions of another party.
  - (iv) A “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
5. In addition, ADB may investigate conflicts of interest, obstruction, and retaliation:
  - (i) A “conflict of interest” is a situation in which a party has interests that could improperly influence a party’s performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations. To

<sup>1</sup> ADB. 1966. *Agreement Establishing the Asian Development Bank*. Manila.

<sup>2</sup> ADB may support a part (or a slice) of a government program or the entire government program through RBL. The program or the part that is supported by the RBL is the RBL operation. The term “program” in these guidelines refers to the RBL operation as defined unless otherwise specified.

<sup>3</sup> To act “knowingly or recklessly,” the fraudulent actor must either know that the information or impression being conveyed is false, or be recklessly indifferent as to whether it is true or false. The inaccuracy of such information or impression, committed through negligence, is not enough to constitute a fraudulent practice.

the extent that conflicts of interest may provide an unfair competitive advantage or compromise the integrity of financial and governance systems, conflicted persons and entities must be excluded from participating in relevant program activities.

- (ii) An “obstructive practice” includes deliberately destroying, falsifying, altering, or concealing evidence material to an investigation; making false statements to investigators in order to materially impede an investigation; threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or materially impeding ADB’s contractual rights of audit or access to information.
- (iii) Retaliation against whistleblowers or witnesses is any detrimental act, direct or indirect, recommended, threatened or taken against a whistleblower or witness or person associated with a whistleblower or witness in a manner material to a complaint because of the report or cooperation with an investigation by the whistleblower or witness.

**C. Developing Member Country’s Actions to Prevent Fraud, Corruption, and Other Prohibited Activities in Results-Based Lending for Programs**

6. Unless otherwise agreed in writing by the DMC and ADB, the DMC will take timely and appropriate measures to

- (i) ensure that the program is carried out in accordance with these guidelines;
- (ii) avoid conflicts of interest in the program;
- (iii) prevent fraud, corruption, and other prohibited activities from occurring in the program, including adopting, implementing, and enforcing appropriate fiduciary and administrative practices and institutional arrangements to ensure that the proceeds of the loan are used only for the purposes for which the loan was granted;
- (iv) promptly inform ADB of allegations of fraud, corruption, and other prohibited activities found or alleged related to a program;
- (v) investigate allegations of fraud, corruption, and other prohibited activities and report preliminary and final findings of investigations to ADB;
- (vi) respond to, mitigate, and remedy fraud, corruption, or other prohibited activities that are found to have occurred in a program and prevent its occurrence;
- (vii) cooperate fully with ADB in any ADB investigation into allegations of fraud, corruption, and other prohibited activities related to the program, and take all appropriate measures to ensure the full cooperation of relevant persons and entities subject to the DMC’s jurisdiction in such investigation, including, in each case, allowing ADB to meet with relevant persons and to inspect all of their relevant accounts, records and other documents and have them audited by or on behalf of ADB; and
- (viii) ensure that persons or entities sanctioned by ADB do not participate in RBL supported activities in violation of their sanction.

**D. ADB’s Actions to Prevent Fraud, Corruption, and Other Prohibited Activities in Results-Based Lending for Programs**

7. Unless otherwise agreed in writing by the DMC and ADB, ADB will

- (i) inform the DMC of credible and material allegations or other indications of fraud, corruption, and other prohibited activities related to a program, consistent with ADB’s policies and procedures;

- (ii) have the right to investigate allegations independently or in collaboration with the DMC;
- (iii) inform the DMC of the outcome of any investigation, consistent with ADB policies and procedures;
- (iv) have the right to sanction any individual or entity for engaging in practices defined above in accordance with ADB's prevailing sanctions policies and procedures; sanctions may result in that party's exclusion from participating in an RBL-financed activity indefinitely or for a stated period of time;<sup>4</sup> and
- (v) recognize sanctions determined by other multilateral development banks (MDB) in accordance with the agreement for the mutual enforcement of debarment.

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<sup>4</sup> Participation does not include the performance under contracts entered into or other engagements begun before the date of the loan agreement.

**Appendix 4: Status of the Results Framework**  
(as of xxxx)

Disbursement-Linked Indicator	DLI (Yes/ No)	Baseline value/Unit of measurement	Baseline Year	Target value (Year)	Actual achievement (Year)
<b>Outcome: Sustainable, equitable, and reliable access to electricity enhanced</b>					
<b>1. Expanded access to electricity services:</b> Number of PLN customers in KMP increased to reach at least 6.77 million customers by 2024.	Yes <b>DLI 1</b>	5.22 million customers	2018		
<b>2. Pro-poor and gender focus:</b> Pro-poor and gender focus: An additional 112,428 poor HHs provided with PLN electricity by 2024, with data disaggregated by female/male-headed households;; at least 10% of the households to be headed by women households:  2.1. All poor households  2.2. Poor female-headed households	Yes <b>DLI 2</b>	0 additional poor households provided with PLN electricity  <i>Prior results:</i> An interface module transfers the most recent TNP2K data on  2.1. All poor households 2.2. Female- and male-headed households to PLN for PLN's use.	2018		
<b>3. Time use improved, especially for women,</b> measured in: hours/week on <ul style="list-style-type: none"> <li>household work and care activities (women/men)</li> <li>hours/week on productive activities (women/men)</li> <li>hours/week on social/community activities; (women/men)</li> </ul>	No	Baseline data to be collected	2020		
<b>Improved reliability of services:</b> <b>4.</b> Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024'	Yes <b>DLI 3</b>	MV feeder permanent interruptions 23.29/ 100 ckm	2018		
<b>Output 1: Power distribution network strengthened and expanded</b>					
<b>5.</b> Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.	Yes, <b>DLI 4</b>	47,639 ckm of MV distribution lines installed	2018		
<b>Output 2: Clean energy use increased.</b>					
<b>6. Green energy promotion.</b> Power generation from solar PVs (<10 MW), mini/micro hydro (<1 MW), and small biogas (<100 kW) increased by 5.1. An additional 40,000 MWh annually by 2025. 5.2. An additional 48,000 MWh annually by 2025	Yes <b>DLI 5</b>	zero additional MWh generated from solar PV, mini/micro hydro and small biogas plants	2018		
<b>7. At least one pilot community-based training</b> on solar PV maintenance delivered with minimum 30% female participation, and training module developed for future scale up of community trainings by PLN	No	training not yet taken place	2018		

Disbursement-Linked Indicator	DLI (Yes/ No)	Baseline value/Unit of measurement	Baseline Year	Target value (Year)	Actual achievement (Year)
<b>Output 3: Institutional capacity strengthened and social monitoring enhanced.</b>					
<b>8. Asset and waste management</b> improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024	Yes <b>DLI 6</b>	0% disposal rate  0 additional warehouses with permit from DLH	2018		
<b>9. Consumer education:</b> By 2024, consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level, with a minimum of 30% female participation for each workshop, based on a scoring system to promote female participation	Yes <b>DLI 7</b>	0 workshop, 0 points.	2018		
<b>10. Capacity for social monitoring:</b> Annual report on social impact of electrification with data disaggregated by sex published by end of 2022	No	No annual report yet on social impact of electrification	2018		
<b>11. E-Procurement and SAP systems</b> are integrated and rolled out by 2020, and 80% of contracts in financial value are recorded in the E-Procurement+SAP integrated system by 2024.	Yes <b>DLI 8</b>	E-Proc and SAP systems are separate.  <i><b>Prior results:</b></i> E-Proc and SAP are integrated	2018		

**Appendix 5: Progress in Disbursement-Linked Indicator Verification**  
(as of XXXX)

	Disbursement Linked Indicators	Progress in Verification	Issues and Changes <sup>a</sup>
<b>Outcome</b>			
DLI 1	Number of PLN customers in KMP increased to reach at least 6.77 million customers by 2024.		
DLI 2	An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male headed household; at least 10% of the households to be headed by women 2.1 All poor households 2.2 Female headed households		
DLI 3	Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024.		
<b>Outputs</b>			
DLI 4	Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.		
DLI 5	Power generation from solar PVs (<10 MW), mini/micro hydro (<1 MW) and small biogas plants (<100 kW) increased by 5.1. An additional 40,000 MWh annually by 2025 5.2. A further additional 48,000 MWh annually by 2025		
DLI 6	Asset and waste management improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024		
DLI 7	By 2024, consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level, with a minimum of 30% female participation for each workshop, based on a scoring system to promote female participation.		
DLI 8	E-Procurement and SAP systems are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement +SAP integrated system by 2024.		

## Appendix 6: Disbursement Status Monitoring

Disbursement-Linked Indicator	Total ADB Financing Allocation	Share of ADB Financing (%)	Expected Disbursement by {month and year} (\$ million)	Actual Disbursement by {month and year} (\$ million)	Share of Total ADB Financing Disbursed (%)
<b>Outcome</b>					
DLI 1: Expanded access: Number of PLN customers in KMP to reach at least 6.77 million customers by 2024	150	25.0			
DLI 2: An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male headed household; at least 10% of households are to be headed by women:	75	12.5			
2.1. All poor households	60	10.0			
2.1. All poor households (JFPR grant)	3				
2.2. Poor Female headed households	15	2.5			
DLI 3: Feeder line permanent interruptions in the distribution system reduced to less than 17.12 per 100 ckm by 2024.	90	15.0			
<b>Outputs</b>					
DLI 4: Installed length of MV distribution lines increased to at least 63,692 ckm by 2024.	120	20.0			
DLI 5: Power generation from solar PVs (<10 MW), mini/micro hydro (<1 MW) and small biogas plants (<100 kW) increased by	50	8.3			
5.1. Additional 40,000 MWh annually by 2025 based on RUPTL 2019	30	5.0			
5.1. Additional 40,000 MWh annually by 2025 (ACEF grant)	3				
5.2. A further additional 48,000 MWh annually by 2025	20	3.3			
DLI 6: Asset and waste management improved, with (i) 90% of used PLN-owned equipment in Kalimantan, Maluku and Papua included in the disposal inventory as of end-2019 safely disposed by 2025, and (ii) 25 additional warehouses holding environmental permits by 2024	65	10.8			
DLI 7: By 2024, consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level, with a minimum of 30% female participation for each workshop, based on scoring system to promote female	30	5.0			

<b>Disbursement-Linked Indicator</b>	<b>Total ADB Financing Allocation</b>	<b>Share of ADB Financing (%)</b>	<b>Expected Disbursement by {month and year} (\$ million)</b>	<b>Actual Disbursement by {month and year} (\$ million)</b>	<b>Share of Total ADB Financing Disbursed (%)</b>
participation					
DLI 8: E-Procurement and SAP systems are integrated and rolled out by 2020, and at least 80% of contracts in financial value are recorded in the E-Procurement+SAP integrated system by 2024.	20	3.3			
<b>Total (Loan only)</b>	<b>600</b>	<b>100</b>			
<b>Total (Grant)</b>	<b>6</b>				



**Appendix 7: Estimated Program Expenditure**  
(as of XXXX)

<b>Items</b>	<b>Estimated Expenditures Over the Past Year (xxxx–xxxx) (\$ million)</b>	<b>Share of Total Expenditures of the Past year (%)</b>	<b>Cumulative Expenditures to Date (xxxx–xxxx) (\$ million)</b>	<b>Share of Total Cumulative Expenditures to Date (%)</b>
1. Item A	0.0		0.0	
2. Item B	0.0		0.0	
3. Item C	0.0		0.0	
<b>Total</b>	0.0		0.0	100.0

**Appendix 8: Status of Program Financing Plan**  
(as of XXXX)

<b>Source</b>	<b>Financing over the Past Year (xxxx-xxxx) (\$ million)</b>	<b>Share of Total Financing of the Past year (%)</b>	<b>Cumulative Amount of Financing to Date (xxxx-xxxx) (\$ million)</b>	<b>Share of Total Cumulative Financing to Date (%)</b>
PLN				
(Including PMN)				
ADB				
Others				
Total		100.0		

Source: Government's Planning Documents

## Appendix 9: Guidance Note on Japanese Visibility

### JAPAN FUND FOR POVERTY REDUCTION GUIDANCE NOTE ON JAPANESE VISIBILITY

#### I. Introduction

1. The Revised Operating Framework for the Japan Fund for Poverty Reduction (JFPR) was approved on 6 October 2009, combining Japan's project grant and technical assistance support under one umbrella, and paving the way for a more comprehensive approach to the use of these funds towards addressing poverty, building up human resources, and empowering institutions and communities in the region. Japan has been making generous contributions for technical assistance activities through the Japan Special Fund, and for poverty reduction projects through JFPR, since they were established in 1988 and 2000, respectively. It is but fitting and proper that said contributions are acknowledged and the recipients and general public are informed of the source of the funding assistance both at the Fund level and at the level of the individual TA and project grants. The purpose of this note is to provide guidance on measures to ensure that the contribution of Japan in supporting JFPR is widely recognized.<sup>1</sup>

#### II. Statement on Japanese Visibility

2. Project teams are required to help promote the visibility and local awareness of JFPR in recipient countries through the following:
  - (a) All press releases issued by ADB with respect to JFPR should refer to the financial contribution from the Government of Japan (GOJ)<sup>2</sup>;
  - (b) Signing ceremonies and other publicity events should be encouraged, inviting Japan embassy officials, JICA staff, local and international press<sup>3</sup>;
  - (c) Civil works, project billboards/signages, vehicles, and equipment must carry the JFPR and Japan ODA logos (see below). Likewise, all publications and training programs must bear the said logos, including all collaterals used (i.e. training materials, banners, posters, flyers, etc.) that are financed by JFPR; these logos are available in the OCO-JFPR website;<sup>4</sup>



Japan  
Fund for  
Poverty  
Reduction



<sup>1</sup> A copy of the Guidance Note on Japanese Visibility is appended to the Project Administration Manual as guide to the project team and the government, during project implementation.

<sup>2</sup> Staff may coordinate with the Department of Communications.

<sup>3</sup> Coordination with resident missions are necessary.

<sup>4</sup> <https://lnadbg1.adb.org/oco0006p.nsf/0/EEE594E105EAC26A482576C7002240AB/?OpenDocument>

- (d) Publications, reports, training programs, seminars and workshops financed by JFPR should acknowledge receipt of funding from GOJ;
- (e) Recipients should be encouraged to ensure that JFPR-financed activities are well covered by local print and electronic media, and that all related publicity materials, and official notices explicitly acknowledge funding from GOJ. Below is the suggested standard text to be used by those who prepare publicity materials:  
*"The grant fund for (project name/activity) was received from the Japan Fund for Poverty Reduction financed by the Government of Japan through the Asian Development Bank".*

### III. Participation of Japanese Entities in Implementation

- 3. It is also important to generate visibility of the project within Japan. Involvement or cooperation with Japanese experts, financial resources and technologies are encouraged; occasional information sessions on JFPR for Japanese organizations may also be conducted. It is also highly recommended that ADB involve and cooperate with Japanese organizations including NGOs, civil society organizations, aid agencies in particular JICA and JBIC, the private sector enterprises or academic institutions.

### IV. Reporting

- 4. At the end of the project, the completion report submitted by the project team should include evidences of Japanese visibility such as photos (preferably high resolution), press releases, articles or write-ups, and testimonials from project recipients and/or implementers. Sample products generated from the project grant are requested to be made available to OCO for inclusion in future exhibits. Copies of publications<sup>5</sup> that are outputs of the project should also be provided to OCO.

### V. Visibility Support by ADB

- 5. OCO promotes visibility of JFPR by: (i) informing Office and Department Heads of the importance of achieving high visibility in order to garner support for JFPR from Japanese officials and taxpayers; (ii) informing Country Directors of the importance of signing ceremonies to Japanese officials and the public to ensure recognition and support for JFPR funding; and (iii) continuing widespread distribution of the JFPR Annual Report, inclusion of JFPR information in relevant ADB documents, and occasional information sessions for Japanese organizations.
- 6. Resident Mission staff are requested to forward copies of all visibility materials, such as press releases, newspaper and magazine articles, and photographs (including descriptive captions) to OCO's assigned focal staff for JFPR or e-mail to ([jfpr@adb.org](mailto:jfpr@adb.org)).

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<sup>5</sup> This particularly applies to knowledge and support TAs. Links to publication available online may be provided in lieu of print copy.



**ASIAN CLEAN ENERGY FUND (ACEF)**  
**under CLEAN ENERGY FINANCING PARTNERSHIP FACILITY (CEFPF)**  
 GUIDANCE NOTE ON VISIBILITY OF JAPAN

1. **Introduction.** The Asian Clean Energy Fund (ACEF) was established on 24 January 2008 through Arrangement Letters between ADB and Government of Japan (GOJ) under the ADB's Clean Energy Financing Partnership Facility (CEFPF). It aims to improve energy security and transition to low carbon economies through cost effective investments in technologies and practices that result in greenhouse gas mitigation. The Government of Japan has provided a steady source of funding to ACEF activities since then. It is but fitting and proper that said contributions are acknowledged and the recipients and general public are informed of the source of the funding assistance both at the financing partnership facility's level and at the level of the individual TA and project grants. The purpose of this note is to provide guidance on measures to ensure that the contribution of Japan in supporting ACEF is widely recognized.

2. **Statement on Visibility of Japanese Funding Support.** Project teams are encouraged to help promote the visibility and local awareness of ACEF in recipient countries through the following:

(a) Publications, training programs, seminars and workshops financed by ACEF TAs and Grant Component of Investments should clearly indicate that the activities in question have received funding from the Government of Japan (GOJ) through the ACEF;

(b) The Japan Official Development Assistance (ODA) logo (see below) should be used in publications financed by ACEF, and in banners and any other materials used in seminars and training programs financed by ACEF.

(c) All press releases issued by ADB with respect to ACEF should refer to the financial contribution from the Government of Japan;

(d) Recipient developing member countries (DMCs) should be encouraged to ensure that ACEF-financed activities are well covered by local print and electronic media, and that all related publicity materials, official notices, reports and publications explicitly acknowledge Japan as the source of funding received;

(e) Public events, such as signing ceremonies, launching ceremonies, workshops, dissemination activities, and the like are strongly encouraged, with the Recipients being encouraged to include Japanese embassy officials and to invite local and international press to these ceremonies; and

(f) Civil works, project billboards/signages, vehicles, and equipment should carry the Japan ODA logo (see below).

3. In addition, OCO may promote visibility of ACEF by: (i) informing Country Directors of the importance of signing ceremonies to Japanese officials and the public to ensure recognition and support for Japanese funding; and, (ii) continuing widespread distribution of the CEFPF Annual Reports, as appropriate, inclusion of ACEF information in relevant ADB documents, and occasional



information sessions for Japanese organizations. Below are examples of other ways to improve visibility.

4. **Japan ODA Logo.** The Japan ODA logo will be used on all ACEF-related website. All ACEF approval notifications will include this guidance note and a printout of the logo. Soft copies (a pdf version and an Adobe Illustrator version) may be downloaded from the OCO Website for use by the ADB and transmission to recipients. The ADB will make every effort to ensure that: (i) publications, training programs, seminars, workshops, financed by ACEF clearly indicate that the activities in question have received funding from the Government of Japan; (ii) all press releases issued by the ADB with respect to ACEF support refer to the financial contribution of Government of Japan; and (iii) the logo is used in publications financed by ACEF program, banners and any other materials used in seminars and training programs financed by ACEF assistance; as well as on civil works projects, vehicles, equipment, etc.

**Japan ODA Logo (for all ACEF-supported activities):**



5. **Local Publicity Opportunities.** In addition to the use of the logo, ADB staff are urged to take all appropriate measures to encourage Recipients to ensure that ACEF-financed activities are well covered by local print, electronic and other media, and that all related publicity materials, official notices, reports and publications explicitly acknowledge Japan as the source of funding received. Below is a standard text suggested for use by those who prepare publicity materials: ***"The grant which financed this (name of activity) was received under the Asian Clean Energy Fund (ACEF) which is financed by the Government of Japan."***

6. Many ADB Resident Missions periodically publish newsletters. New ACEF approvals, signing ceremonies, and major project activities should be publicized in these newsletters. Most country offices have External Relations staff. Project/TA teams are encouraged to consult with them on ways to increase the visibility of Japan regarding ACEF support. Opportunities to publish articles on high visibility projects/TAs prepared with the ACEF support should be explored and utilized. Project/TA teams are advised to brief the Country Directors about the implementation status of ACEF-financed projects. Such information will help the Resident Missions highlight Japan's contribution, where relevant, in their meetings and presentations in seminars and workshops.

7. **Ceremonial Events.** Country Directors, Division Directors and the project/TA officers will receive notification of GOJ concurrence and will be informed of the importance of signing ceremonies to Japanese officials and the public. At grant signing ceremonies and other public events, the ADB's country-based staff are expected to foster the attendance and participation of country-based officials of the Embassy of Japan in a manner that provides due recognition of their donor status. ACEF-supported recipients should issue the formal invitation to attend. Such ceremonial events should also be alerted to the media and publicity outlets referred to above.

8. **Participation of Japanese Entities in Implementation.** To promote GOJ's continued support for JFPR, it is also important to generate visibility for the project within Japan. OCO will promote the visibility of ACEF by: (i) informing Office and Department Heads of the importance of achieving high visibility in order to garner support for ACEF from Japanese officials and taxpayers; (ii) encouraging TA components that involve or cooperate with Japanese experts, expertise, financial resources and technologies; and (iii) continuing widespread distribution of CEFPP Annual Report, inclusion of ACEF information in relevant ADB documents, and occasional information sessions on ACEF for Japanese organizations. In terms of enhancing the visibility of Japan, it is highly recommended that ADB involve and cooperate with Japanese organizations including NGOs, civil society organizations, aid agencies in particular JBIC and JICA, private sector enterprises or academic institutions.

9. **Visibility from ADB Headquarters.** OCO should ensure that ACEF funding from the Government of Japan is properly indicated in TA papers, RRP's and other loan, grant and TA documents and other ADB reports. Country-based ADB staff are requested to forward copies of all visibility material, such as press releases, newspaper and magazine articles, and photographs (including descriptive captions) to the following address:

**Office of Cofinancing Operations – Japan Funds Team**  
**Rm. 7728 East**  
**Asian Development Bank**  
**6 ADB Avenue, Ortigas Center**  
**Mandaluyong City 1550**  
**Philippines**

## Appendix 10: Guidance Note on Coordination with the Embassy of Japan and JICA

### JAPAN FUND FOR POVERTY REDUCTION GUIDANCE NOTE ON COORDINATION WITH THE EMBASSY OF JAPAN AND JICA

#### I. INTRODUCTION

1. The Final Report on the Review of Japanese Official Development Assistance<sup>1</sup> (ODA) underscores the need for strategic and effective aid. One way to ensure alignment of Japan Fund for Poverty Reduction (JFPR) projects and technical assistance (TA) with Government of Japan's (GOJ) bilateral assistance strategy for a particular developing member country (DMC) is by bringing on board the comments and suggestions of the Embassy of Japan (EoJ) and the Japan International Cooperation Agency (JICA).<sup>2</sup> Thus, the summary of consultations with EoJ and JICA (to include, date of consultation, name and position of staff met, and EoJ and JICA's response) should be included in the proposal submitted to OCO.<sup>3</sup> This Guidance Note provides detailed instructions regarding coordination activities with EoJ and JICA.<sup>4</sup>

#### II. EOJ AND JICA CONTACT PERSONS

2. As soon as project officer informs OCO of the intent to apply for JFPR funding,<sup>5</sup> OCO will identify the appropriate contact persons in EoJ and JICA. The contact persons' information<sup>6</sup> will be provided by OCO to the project officer to start consultation.

#### III. CONSULTATION WITH EOJ AND JICA – PROPOSAL PREPARATION

3. At concept stage, project officer should consult with EoJ and JICA<sup>7</sup> through e-mail the proposed project to, (i) seek if it is in line with Japan ODA priorities, (ii) ensure no duplication, and (iii) present the concept itself, with copy to OCO.
4. Upon OCO's confirmation to proceed with proposal preparation, the project officer may arrange the project design meeting with EoJ and JICA. This meeting intends to explain and discuss the actual project design. This is ideally conducted during the fact-finding mission.<sup>8</sup> The proposal,<sup>9</sup> should be provided to EoJ and JICA with copy to OCO at least 5 working days before the meeting to give ample time for review and consideration. After the meeting, if needed, OCO in coordination with the project officer, may follow-up with EoJ and JICA, and respond to requests for clarification.
5. In the case of regional TAs, the draft TA Summary and Report should be sent by email to EoJ and JICA contact persons on no-objection basis.

<sup>1</sup> Ministry of Foreign Affairs of Japan. 2010. ODA Review - Summary of the Final Report. Tokyo.

<sup>2</sup> Incorporated administrative agency in charge of administering Japan's ODA.

<sup>3</sup> GOJ gives importance on the inputs provided EoJ and JICA during the internal approval process.

<sup>4</sup> A copy of the Guidance Note on Coordination with Embassy of Japan and JICA is appended to the Project Administration Manual as guide to the project team and the government, during project implementation.

<sup>5</sup> Project name and brief outline of proposal should be provided to OCO.

<sup>6</sup> Name, status, telephone number and email address

<sup>7</sup> Please refer to the contact persons provided by OCO.

<sup>8</sup> If a meeting with EoJ and/or JICA is not possible, email exchange, telephone discussion or any other form of communication may be used.

<sup>9</sup> Draft Grant assistance report (for project grants) and draft TA Summary and Report (for TAs).



#### **IV. ROLE OF THE RESIDENT MISSION AND OCO**

6. Project officer's communications with EoJ and JICA should be done in coordination with the resident mission<sup>10</sup> with copy to OCO. If needed, OCO supports to identify the appropriate staff to be consulted.
7. Resident mission also arrange the Grant Agreement/TA letter signing event (section V) and in the overall coordination/relationship management with EoJ and JICA.
8. OCO's role are as follows: (i) provide contact details of relevant staff from EoJ and JICA for project consultation; (ii) liaise any need for clarification by EoJ and JICA in coordination with the project officer, during project consultation; (iii) inform EoJ and JICA when there is withdrawal or cancellation of a project; and (iv) forward all completion reports to both agencies.

#### **V. COORDINATION WITH EOJ AND JICA – UPON APPROVAL OF THE PROPOSAL**

9. Project officer should inform EoJ and JICA about ADB's approval. Project officers are strongly encouraged to conduct signing or launching ceremonies with the attendance of EoJ officials.<sup>11</sup>
10. In coordination with the resident mission, the project officer should inform EoJ and OCO of the signing ceremony– at least 10 working days in advance. OCO then informs GOJ of this activity. The project officer should also draft news release in consultation with the Department of communications and coordinate arrangements with the resident mission. Local and international press are invited to these ceremonies.

#### **VI. COORDINATION WITH EOJ AND JICA – DURING PROJECT IMPLEMENTATION AND UPON PROJECT COMPLETION**

11. Throughout implementation, the project officer should inform EoJ about project progress, milestones, and outcomes, and discuss when major changes in scope and objectives are required. Progress and outcomes of JFPR projects are also requested to be shared with JICA. From time to time, EoJ and JICA may also wish to join completion review missions in order to see project results and to interact first-hand with project recipients. Lessons from the JFPR projects are also requested to be shared to enable both sides to explore and seek potential collaboration. Completion reports are required to be submitted by the project officer to OCO for forwarding to EoJ and JICA.<sup>12</sup>

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<sup>10</sup> Please inquire respective resident missions on their protocols or coordination arrangements with EoJ and JICA.

<sup>11</sup> Please refer to the Guidance Note on Japanese Visibility for details on visibility requirements under JFPR.

<sup>12</sup> Links to the completion reports will suffice.