



# PT PLN (Persero)

## **Annually Report 2020**

Sustainable Energy Access in Eastern  
Indonesia - Electricity Grid Development  
Program Phase 2

Result Based Lending (RBL) – ADB

14 April 2021

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## Abbreviations

ADB	=	Asian Development Bank
PLN	=	Perusahaan Listrik Negara (State Electricity Company)
WKB	=	Wilayah Kalimantan Barat (West Kalimantan Region)
WKSKT	=	Wilayah Kalimantan Selatan dan Kalimantan Tengah (South and Central Kalimantan Region)
WKTU	=	Wilayah Kalimantan Timur dan Kalimantan Utara (East and North Kalimantan Region)
WMMU	=	Wilayah Maluku dan Maluku Utara (Maluku and North Maluku Region)
WP2B	=	Wilayah Papua dan Papua Barat (Papua and West Papua Region)
AP2T	=	Aplikasi Pelayanan Pelanggan Terpusat (Centralized Customer Service Application)
APKT	=	Aplikasi Pengaduan dan Keluhan Terpadu (Integrated Complaints Management Application)
ckm	=	Circuit kilometre
COD	=	Commercial Operation Date
DLI	=	Disbursement-Linked Indicator
ERP	=	Enterprise Resource Planning
FPR	=	Financing for Prior Results
GIS	=	Geographic Information System
GWh	=	Gigawatt-hour
IVA	=	Independent Verification Agent
KPI	=	Key Performance Indicator
kV	=	Kilovolt
MVA	=	Megavolt-ampere
PAP	=	Program Action Plan
PID	=	Project Implementation Document (ADB)
PLN	=	Perusahaan Listrik Negara (State-Owned Electricity Company)
PMU	=	Program Management Unit
PPA	=	Power Purchase Agreement

RBL	=	Results Based Lending (ADB)
RUPTL	=	Rencana Usaha Penyediaan Tenaga Listrik (Electricity Power Supply Business Plan)
SAIDI	=	System Average Interruption Duration Index
SAIFI	=	System Average Interruption Frequency Index
SILM	=	Sistem Informasi Laporan Manajemen (Management Reporting Information System)
KMP	=	Kalimantan, Maluku and Papua
SPKK	=	Satuan Pemantau Kinerja Korporat (PLN internal performance management unit)

## 1. INTRODUCTION

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### 1.1 Background

On December 8th, 2020, PT PLN (Persero) signed the loan agreements with ADB, worth US\$600 million (period 2020-2025). The ADB loans will support Sustainable Energy Access in Eastern Indonesia - Electricity Grid Development Program Phase 2.

The program is dedicated to the nine provinces across Kalimantan, Maluku, and Papua (KMP) in Eastern Indonesia namely West Kalimantan, South Kalimantan, Central Kalimantan, East Kalimantan, North Kalimantan, Maluku, North Maluku, Papua, and West Papua.

The goal of the program is to support the development of electricity distribution networks in order to connect business and households and to enhance the quality of life in Eastern Indonesia by the sustainable use electricity as a key driver of increased economic activity. This will contribute to the overall objective of a sustainable economic and social development in the Eastern regions of Indonesia.

The program follows a Results-Based Loan structure, in which funds are disbursed in tranches and only released to PLN when mutually agreed Disbursement-Linked Indicators (DLIs) are met (with provision for pro-rata disbursements for partial fulfilment of DLIs). The DLIs are results-oriented as opposed to process-oriented, thus allowing PLN the discretion to use its own processes and systems for managing funds and achieving program results.

In addition to the DLIs, PLN has agreed to implement a series of actions set out in Program Action Plans (PAPs), which are also included as loan covenants in the ADB loan agreements.

### 1.2 Program Scope of Work

The scope of work for the ADB can be detailed as follows:

ADB RBL
<b>Output 1: Power Distribution Network strengthened and expanded.</b> The Program shall be tracked by the installed length of medium-voltage distribution lines (DLI 4).
<b>Output 2: Renewable energy use increased</b> Electricity provided to communities in the largest areas will be from a mix of power sources, including small diesel generators which is the most common for remote grid. 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).
<b>Output 3: Institutional capacity and social monitoring enhanced.</b> Output 3 focuses on improving asset and waste management (DLI 6) and on enhancing social and gender aspects through PLN workshop on safe and productive energy use, with

<b>ADB RBL</b>
at least 30 % female participation (DLI 7). Electronic procurement and contract payment system will be integrated and rolled out to improve reporting and monitoring (DLI8).

### **1.3 Scope of this Annually Report**

This Annually Report is intended to provide periodic progress updates to ADB regarding (i) the achievements of overall program results; (ii) status of the DLIs and DLI verification protocols; (iii) the status of covenants in the loan and grant agreements; and (iv) the outcomes of the PAP implementation program.

This Annulally Report covers reporting periods from **January 1<sup>st</sup>, 2020 until Dec 31<sup>st</sup>, 2020.**

## 2. PROGRAM STRUCTURE, MANAGEMENT AND IMPLEMENTATION

### 2.1 ADB Results Based Lending Program

The ADB Results Based Lending (RBL) program focuses on sustainable energy access in Eastern Indonesia – Electricity Grid Development Program.

These are the key milestones of ADB L4009-INO :

- a. ADB Approval : Nov 24<sup>th</sup>, 2020
- b. Loan Signing : Dec 8<sup>th</sup>, 2020
- c. Guarantee Signing : Dec 16<sup>th</sup>, 2020
- d. Loan Effectiveness : Jan 14<sup>th</sup>, 2021
- e. Implementation Period : Jan 2020 – Dec 2025 (5 years)
- f. Program Completion : Dec 31<sup>st</sup>, 2025
- g. Loan closing : Jun 30<sup>th</sup>, 2026

An allocation and withdrawal of Loan Proceeds and the breakdown of the ADB RBL disbursement allocations for Kalimantan, Maluku, and Papua (KMP) according disbursement schedule for 2020-2025 on Aide Memoire Loan Inception Mission February 2021 is shown below in Table 1.

**Table 1: Disbursement Schedule on \$ million (Source: ADB)**

Disbursement-Linked Indicator (DLI)	Total ADB Financing Allocation	Share of Loan (%)	Prior Results	2020	2021	2022	2023	2024	2025
<b>DLI 1</b>	150	25,0		30	30	30	30	30	-
<b>DLI 2</b>	75	12,5	30	9	9	9	9	9	-
JFPR Grant	3	-	0,6	1,0	1,0	0,4	-	-	-
<b>DLI 3</b>	90	15,0		18	18	18	18	18	-
<b>DLI 4</b>	120	20,0		24	24	24	24	24	-
<b>DLI 5</b>	50	8,3		5	9	9	9	9	9
ACEF Grant	3	-		1,0	1,0	1,0	-	-	-
<b>DLI 6</b>	65	10,8		11	11	11	11	11	10
<b>DLI 7</b>	30	5,0		6	6	6	6	6	-
<b>DLI 8</b>	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</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>

The monitoring target values for each of the results indicators over the loan period (2020 to 2025) are shown in Table 2. These indicators will be monitored through the Program Action Plan (PAP).

**Table 2: ADB RBL Disbursement Allocations (Source: ADB)**

No	Metric	Definition of Indicators	Units	Disbursement Allocated (\$ million)
<b>Outcome</b>				
1	Increase number of total PLN KMP customers	Minimum target of increased customer is 6,77	Million customers	150
2	Increase number poor households provided with PLN electricity	Minimum target of increased customer 112.428 include 10% female-headed households	poor household	75
	<i>JFPR Grant</i>	<i>All poor households</i>		3
3	Feeder line permanent interruptions in the distribution system.	Maximum annual rate increased allowed for feederline is 14,37	Interruption per 100 ckm	90
<b>Outputs</b>				
4	Increased number of Installed length of MV distribution lines	Minimum rate of cumulative installed length of MV lines is 63.692	ckm	120
5	Additional Power generation from Renewable Energy	Minimum rate of additional MWh annually is 40.000 MWh and further 48.000 MWh by 2025	MWh	50
	<i>ACEF Grant)</i>	<i>additional MWh annually is 40.000 MWh by 2025</i>	<i>MWh</i>	3
6	Improvement 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	Used PLN equipment is safely disposed at least 90% from the 2019	%	65
7	Consumer education workshops on safe and productive energy use	PLN holds workshop each of the 5 UIWs and 29 UP3 with minimum 30% female participation (1,0 point) or minimum 50% female participation (1,25 points), total 121 points by 2024	point	30
8	Integrating E-Procurement and SAP systems	Both of systems integrated at least 80% of contracts in financial value by 2024		20
	<b>TOTAL (Loan only)</b>			<b>600</b>
	<b>TOTAL (Grant)</b>			<b>6</b>

PLN will implement and also supervise, monitor, and report the progress in this ADB RBL program that has eight disbursement-linked indicators (DLIs), three non-disbursement linked indicators (non-DLIs), Loan and Grant Compliance, and Program Action Plan (PAP).



## 2.2 PLN Program Management and Implementation

PLN formed a Project Management Unit (PMU) and Project Implementing Unit (PIU) specifically for the ADB RBL programs in PLN Kalimantan, Maluku, and Papua. The PMU consists of internal PLN staff drawn from various divisions within PLN Head Office (e.g. Regional Sumkal, Regional Sulmapana, DIV RKO, DIV MRP, DIV K3L, etc). The organisational structure of the PMU and PIU is shown in Figure 1 below.

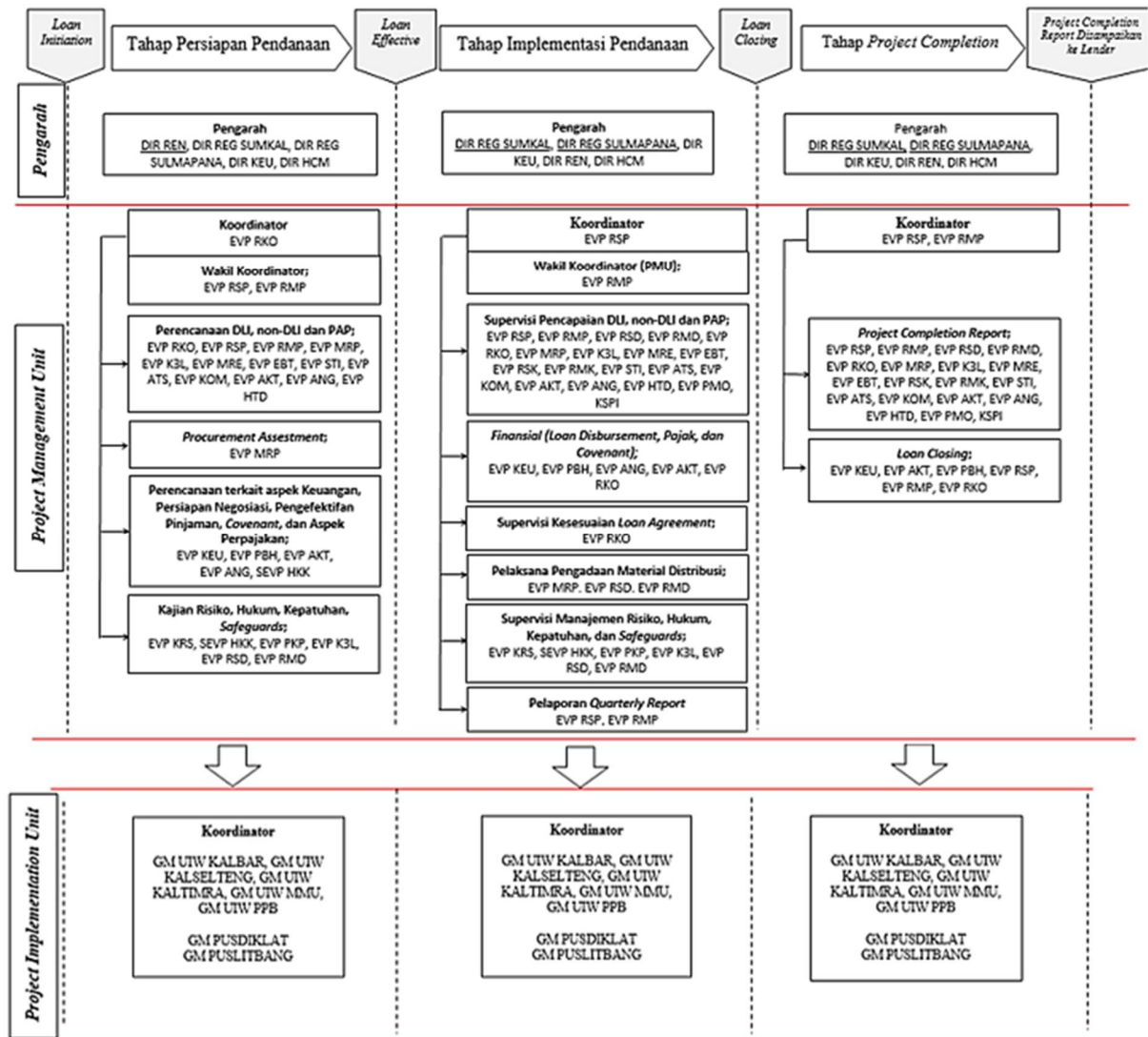


Figure 1: PMU/PIU Organisational Structure (Source : PLN)

### 3. **ADB RBL PROGRAM IMPLEMENTATION STATUS**

#### 3.1 **Summary of DLI Achievements as of Reporting Period**

Table 3 shows the summary of DLI Achievements as of Reporting Period Annual I in 2020 from the results of the IVA and ADB reviews on 21 – 28 July 2021

**Table 4: Summary of DLI Achievements in Year I 2020 RBL-ADB**

DLI No.	2020 Target	IVA-ADB Reviewed (as of 31 Dec 2020)	Achieved/ Not Achieved
1	5,94 Million customers	5,90 Million (data TUL 309 dan AP2T)	Partial Achieved
2.1	29.414 poor households	0 poor households (Data from Service Desk) but the data has not been received because it does not match the format	Not Achieved
2.2	2.941 poor female-hoseholds	0 poor households (Data from Service Desk) but the data has not been received because it does not match the format	Not Achieved
3	17,27/100 ckm permanent interruptions	10,91 / 100 ckm	Achieved
4	53.885 ckm MV lines for KMP	53.988 ckm	Achieved
5(i)	List of EBTKE assets to be transferred to PLN cleared by PLN	Not confirmed to EBTKE yet	Not Achieved
5(ii)	Model KSO or another legal instrument with PEMDA approved by relevant authority within PLN	PLN has a model KSO that is signed by PLN and local government. But need legal opinion from Legal PLN	Not Achieved
6(i)	Inventory of used equipment for disposal as of end-2019 ("2019 inventory") prepared by UIW	UIW in Kalimantan has submitted a proposal document, but MP has not submitted it in 2020	Not Achieved
6(ii)	5 warehouses holding environmental permits	3 warehouses have 3 SPPL without warehouse checklist	Not Achieved
7	5 Consumer Education Workshop at the UIW level, Equivalent 5 points (minimum 30% female participation for each workshop)	0 Workshops	Not Achieved
8	E-Procurement and SAP systems are integrated and rolled out by 2020	E-Proc & SAP system had been integrated	Achieved
Non-DLI 1	Assessment from PLN on Increased use of time reported by women and men as a result of access to electricity.	-	Not Achieved

DLI No.	2020 Target	IVA-ADB Reviewed (as of 31 Dec 2020)	Achieved/ Not Achieved
Non-DLI 2	One pilot community-based training on solar PV maintenance delivered with minimum 30% female participation	0 Pilot community training	2020-2022
Non-DLI 3	Annual report on social impact of electrification	0 Annual report	Start from 2022

### 3.2 2020 Performance Disbursement Eligibility (Million USD)

Based on the results of the achievement of DLI performance in 2020, the total disbursement eligibility for loans is 75.22 million USD, equivalent to 1.1 trillion IDR with the following details:

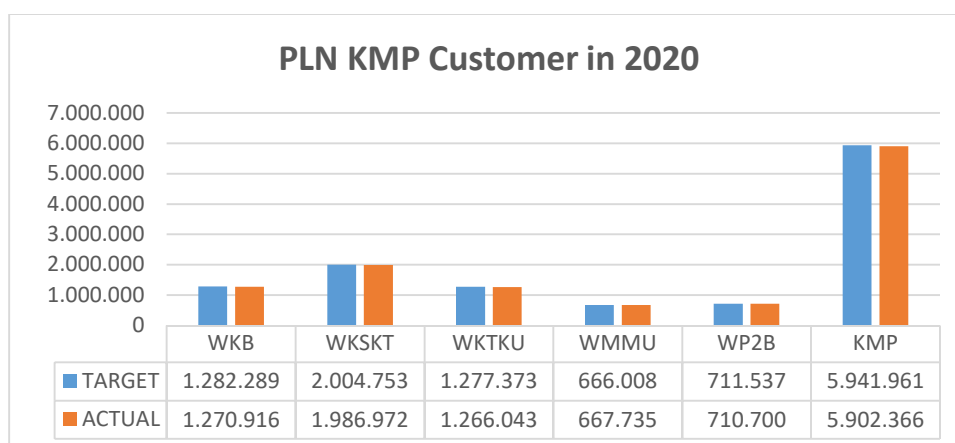
**Table 4: Summary Performance Disbursement Eligibility (Source: ADB)**

Disbursement-Linked Indicator	Total Allocation	Prior Results	2020 Achievement
<b>DLI 1:</b> Number of PLN customers in Kalimantan, Maluku and Papua	150.0	-	<b>28.33</b> (partial)
<b>DLI 2:</b> An additional 112,428 poor households provided with PLN electricity by 2024, with data disaggregated by female/male headed household	75	30	<b>0</b>
2.1. All poor households	60	25	<b>0</b>
2.1. All poor households (JFPR Grant)	3.0	0.6	<b>0</b>
2.2. Poor female-headed households	15	5	<b>0</b>
<b>DLI 3:</b> Feeder line permanent interruptions in the distribution system reduced	90	-	<b>18</b>
<b>DLI 4:</b> Installed length of MV distribution lines increased	120	-	<b>24.89</b>
<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	-	<b>0</b>
5.1. Additional 40,000 MWh annually by 2025 based on RUPTL 2019	30	-	<b>0</b>
5.1. Additional 40,000 MWh annually by 2025 (ACEF Grant)	3.0	-	<b>0</b>
5.2 A further additional 48,000 MWh annually by 2025	20	-	<b>-</b>
<b>DLI 6:</b> Asset and waste management improved	65	-	<b>0</b>
<b>DLI 7:</b> By 2024, consumer education workshops on safe and productive energy use implemented in 5 UIWs and at UP3 level	30	-	<b>0</b>
<b>DLI 8:</b> E-Procurement and SAP systems are integrated	20	4	<b>4</b>
<b>TOTAL (Loan only)</b>	600	34	<b>\$ 75.22 M</b>
<b>TOTAL (Grant)</b>	6.0	0.6	<b>0</b>

### 3.3 Disbursement Linked Indicators (DLIs)

#### 3.3.1 RBL DLI 1: Increased numbers of total PLN Customers

As at Dec 2020, PLN has a total number approximately 5,90 M customers in Kalimantan, Maluku and Papua, which of the ADB RBL target of 5,94 M for 2020. Data for this indicator are extracted from the SILM system, which has an integrated link to PLN's customer database (AP2T).



**Figure 2: Number of PLN KMP Customers in 2020**

The achievement in 2020 is around 94% if we compare it to the full target in 2020.

#### 3.3.2 RBL DLI 2: Increased number poor household

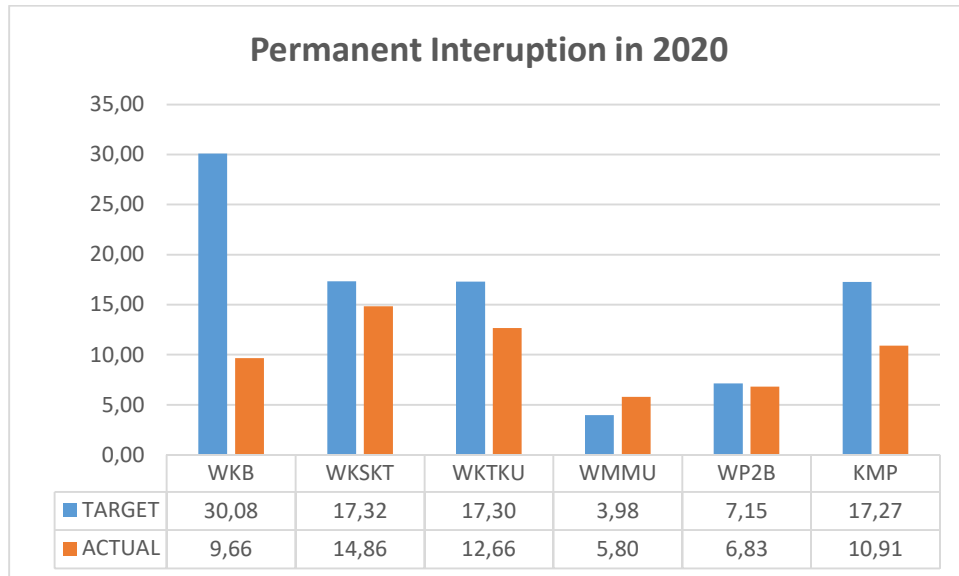
Data for ADB RBL DLI 2 are extracted from the AP2T system, which has obtained from the PLN Service Desk and data matching was carried out with TNP2K data.

PLN has not submitted the data required to verify the baseline and has not achieved prior results. The baseline data is required to calculate the achievement of the DLI, and so no achievements will be possible until an interface module that transfers the most recent TNP2K data on poor and female-headed households is completed

#### 3.3.3 RBL DLI 3: MV Feeder Permanent Interruptions

The number of MV feeder permanent interruptions reported in KMP over the period January – Dec 2020 was 10,87 interruptions per 100 ckm, which of the ADB RBL target of 17,27 interruptions per 100 ckm for the 2020. The achievement in Quarter 4 2020 is around 63,2% (negative polarity). However, IVA found data differences between FTP SILM and the SILM Application at UIW Central Kalimantan so IVA decided to use the largest number to be 10,91 interruptions per 100 ckm.

Data for this DLI is extracted from SILM, though the source data is filled from Distribution Control Center from each of the PLN Wilayahs.

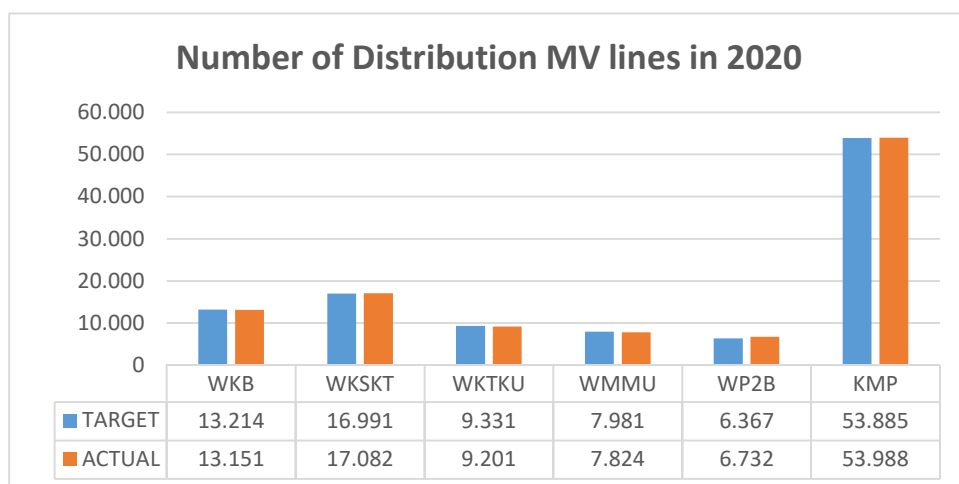


**Figure 3: Permanent Interruption in 2020**

### 3.3.4 RBL DLI 4: Additional length of medium voltage (MV) distribution lines

The number of additional length of medium voltage (MV) distribution lines installed over the year 2020 was 53.988 ckm, which of the ADB RBL 2020 full year target of 53.885 ckm. The achievement in Quarter 4 2020 compare with the full target is around 100,19%.

Data for this DLI is extracted from SILM, though the source data is filled in manually with input from each of the PLN Wilayahs.



**Figure 5: Number of Distribution MV Lines in 2020**

### 3.3.5 RBL DLI 5: Green Energy Promotion

The target of green energy promotion in 2020 was List of EBTKE assets to be transferred to PLN cleared by PLN and Model KSO or another legal instrument with PEMDA approved by relevant authority within PLN. KAL and MP has confirmed to DIV EBT about list assets to be

transferred. From DIVEBT it hasn't submitted to EBTKE. PLN will re-discuss who is authorized to submit confirmation of asset transfer in KMP to EBTKE.

PLN has an example of the KSO Document. This document is signed by PLN and Local Government and available in Papua Province and Bengkulu Province. However, the document requires a legal review from the DIV HKK PLN before it becomes a template signed by the authorities at PLN .

### 3.3.6 RBL DLI 6: Asset and Waste Management

The target of Asset and Waste Management in 2020 was UIW proposal regarding used equipment inventory for disposal by the end of 2019 and 3 warehouses holding environmental permits from DLH (SPPL).

For asset and waste management improved of used PLN equipment from the 2019 disposal inventory, the total identification as December 31, 2019 was 81,8 million rupiah (for whole part in PLN UIWs: Power Plant, Transmission and Distribution).

**Table 5: 2019 Inventory of Used Equipment For Disposal**

ATTB UNTUK DIHAPUS PER JENIS PER 31 DESEMBER 2019 (BASELINE)							
No.	Jenis	UIW Kalimantan Barat	UIW Kalimantan Selatan dan Tengah	UIW Kalimantan Timur	UIW MMU	UIW P2B	TOTAL
		6800	7100	7200	7500	7600	
1	Bang & Kelip Hal.	564.982.054	593.417.248	1.015.559.476	3.876.892.844	349.304.296	8.038.906.839
2	Bang. Sal. Air & P.	-	62.835.000	1.569.575.000	-	-	1.649.704.136
3	Jl Sepur Samping	-	-	563.495.000	-	-	563.495.000
4	Instalasi dan Mesin	39.442.436.045	6.540.098.941	14.185.020.419	168.023.235.503	32.733.666.134	429.276.120.947
5	Reaktor Nuklir	-	-	-	-	-	-
6	Perikp. Peny. T L	-	49.620.152	15.740.300	1.594.154.716	2.037.017.073	4.435.472.031
7	Gardu Induk	-	-	-	-	-	11.909.088.643
8	S. U. Teg. Tinggi	-	-	-	-	-	162.067.574
9	Kabel dibawah tanah	-	-	-	-	-	-
10	Jaringan Distribusi	495.329.488	2.997.075.323	734.520.417	799.390.893	1.448.733.452	6.475.049.573
11	Gardu Distribusi	2.342.470.869	13.330.986.785	14.232.985.152	1.001.312.061	305.980.694	31.213.735.561
12	Perikp L L Dist.	18.734.056.641	3.244.664.807	1.551.043.699	1.586.255.634	737.504.850	25.853.525.631
13	Perikp Penglih Data	-	36.173.333	-	485.751.000	-	2.455.461.433
14	Perikp Transmisi Data	-	6.030.000	-	-	-	80.370.900
15	Perikp Telekomunikasi	-	20.497.565	473.505.227	2.314.035.809	-	2.833.154.602
16	Perlengkapan Umum	358.188.000	184.759.260	2.351.460.579	4.257.290.239	-	8.964.640.509
17	Kend.Bermotor & Alat yg mobil	1.097.281.189	809.427.539	1.216.548.517	923.671.174	1.386.470.016	19.052.347.205
18	Material Cadang	-	-	-	-	-	-
19	Tanah dan Hak atas Tanah	-	1.907.847.488	-	62.648.145	7.673.050.000	9.643.545.633
	<b>TOTAL</b>	<b>63.034.744.286</b>	<b>29.783.433.441</b>	<b>37.909.453.786</b>	<b>184.924.638.018</b>	<b>46.671.726.515</b>	<b>362.323.996.046</b>
	<b>Usulan Penghapusan</b>	<b>7.738.919.842</b>	<b>4.769.810.748</b>	<b>4.637.717.867</b>	<b>44.495.410.538</b>	<b>20.193.602.890</b>	<b>81.835.461.885</b>
	<b>Prosentase</b>	<b>12,28%</b>	<b>16,01%</b>	<b>12,23%</b>	<b>24,06%</b>	<b>43,27%</b>	<b>22,59%</b>

Disposing asset management will follow the procedure from Director Decree No. 015.E/870/DIR/1998 regarding Penarikan Aktiva Operasi Menjadi Aktiva Tidak Beroperasi dan Director Decree No. 1233/DIR/2011 regarding Tata Cara Penghapusbukuan dan Pemindahtanganan Aktiva Tetap PT PLN (Persero). Hazardous Waste with used equipment categorized (ATTB) that has been abolished from operation asset will be managed as

hazardous waste. PLN DIV K3L has prepared Draft of Director Decree of Hazardous Waste Management which already submitted to Legal Division for their review. Because of the pandemic, SPI difficult to physically check the ATTB at UIW's.

The Target of DLI 6 (i) Inventory of used equipment for disposal as of end of 2019 prepared by five UIWs. Three out of five UIWs have prepared proposals for disposal inventory for ATTB from distribution operations that has been accumulated until 31 December of 2019, namely UIW Kalselteng, Kalbar and Kaltimra. UIW MMU and P2B are still in the process of completing the documents.

The target of DLI 6 (ii) 25 additional warehouses holding environmental permits by 2024 in the year 2020 is 3 additional warehouse has environmental documents (SPPL) submitted and approved by DLH. Moreover, there was a follow-up meeting between PLN, ADB, IVA, and safeguards consulting firm regarding DLI and PAP of environmental safeguards on March 3, 2021 and also the correspondence through email on March 4-5, 2021. It is agreed that the requirement of DLI 6 is changed from "hold environmental permit" to "submit environmental documents required and receive approval by DLH". For those warehouses that are only subject to SPPL, environmental performance report (Laporan Kinerja Lingkungan) will also be required confirming compliance with PLN K3L performance indicators for warehouse management. . The three warehouses as mentioned above are from UP3 Samarinda and UP3 Kaltara (ULP Tarakan) in UIW Kaltimra and UP3 Ambon in UIW MMU. Table 7 shows the warehouses environmental document in UIW's.

**Table 6: Warehouse Environmental Permit Achievements in 2020 RBL-ADB**

No	UIW dan Unit Pelaksana	2019 - 2020	
		Jumlah	Enviromental Document
1	UIW Kalselteng		
	Sub-total Kalselteng	0	
2	UIW Kaltimra		
	UP3 Samarinda	1	SPPL
	UP3 Kaltara, ULP Tarakan	1	SPPL
	Sub-total Kaltim	2	
3	UIW Kalbar		
	Sub-total Kalbar	0	
4	UIW Maluku dan Maluku Utara		
	UP3 Ambon	1	SPPL
	Sub-total Maluku	1	
5	UIW Papua dan Papua Barat		
	Sub-total Papua dan Papua Barat	0	
TOTAL ED		3 SPPL	

DIV K3L has developed a housekeeping checklist for warehouses of used material. Warehouses should comply with the checklist below and will be evaluated on a biannual basis. In 2020, 3 (Three) warehouses with SPPL have not implemented the warehouse checklist. so no achievements in 2020.

**Table 7 Housekeeping Checklist for Warehouses of Used Material**

FORM HOUSEKEEPING MATERIAL ATTB YANG MENGANDUNG LB3													
No.	Jenis ATTB yang Mengandung LB3 (Trafo, Kapasitor, dll)	Jumlah	Lokasi Penyimpanan			Fasilitas Penyimpanan							
			Nama Gudang	Koordinat	Luas Area (m2)	Tidak bercampur dgn material lainnya	Pemisahan trafo dari tahun manufaktur <1997 dan >1997	Pemisahan kapasitor sesuai merk dagang	Eviden (Foto)	Memiliki atap / penutup (tidak terkena hujan)	Eviden (Foto)	Terdapat ceceran oli/minyak trafo	Jika ada, jelaskan kondisi ter-update, kegiatan yang sudah dilakukan, dan rencana tindak lanjutnya
						(ya / tidak)	(ya / tidak)	(ya / tidak)		(ya / tdk)		(ya / tidak)	

### 3.3.7 RBL DLI 7: Consumer Education

The definition of indicator is conduct consumer education workshops on safe and productive energy use implemented by 5 UIWs by 2020 with a minimum of 30% female participation for each workshop. The achievement in 2020 was not conduct consumer workshops at 5 UIWs. The workshop will be held at 5 UIWs on June 2021 after the preparation of workshop materials and mechanisms at Pusdiklat is completed and Training of Trainers (ToT) was carried out. The progress of TW I 2021 is the development of materials based on material references from ADB. Planned submission of materials to ADB by the end of May 2021.

The list of TOT participants from UIW and UP3 has been submitted to the Regional with the gender composition of male and female PLN employees. The plan for the implementation of the TOT in June 2021 and for the plan to organize a workshop for the general public in the second semester of 2021.



**Table 9: Timeline for Preparation of Safe and Productive Energy Use Workshop Materials to the Local Community**

No	Item Kegiatan	PIC	Februari				Maret				April				Mei				Juni				Keterangan
			I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	
1	Pembahasan Awal dengan PLN Kantor Pusat dan ADB	PUSDIKLAT - PTE - DIS																					
2	Penyusunan Kurikulum dan Silabus	PUSDIKLAT - PTE - DIS																					
3	Pengembangan Materi Pembelajaran	PUSDIKLAT - PTE - DIS																					Minggu III April Progres 50%
4	Validasi Materi	PUSDIKLAT - PTE - DIS																					Disampaikan ke ADB
5	Pilot Class (Optional)	PUSDIKLAT - PTE - DIS																					
6	Pendalaman materi (ToT)	PUSDIKLAT - PTE - DIS																					
7	Penyampaian Laporan ke PLN Pusat - Materi Siap - Daftar Rekomendasi Instruktur	PUSDIKLAT - PTE - DIS																					
8	Penyiapan Modul dengan beberapa bahasa daerah	PUSDIKLAT - PTE - DIS																					
9	Penyelenggaraan (Sosialisasi atau Workshop ke Masyarakat umum)	REGIONAL																					

### 3.3.8 RBL DLI 8: Integrating E-Procurement and SAP Systems

The target of Integrating E-Procurement and SAP Systems in 2020 was E-Procurement and SAP systems are integrated and rolled out by 2020. E-Proc & SAP system had been integrated in 2019. In March 2021 DIVSTI has held a socialization of the latest E-Proc feature that is related to this DLI to procurement officials at UIW. The integrated E-procurement and SAP interface modules will be completed in Q4 in 2021. Currently, UIW will input all contracts into E-Procurement.

### 3.4 Non-Disbursement Linked Indicators

#### 3.4.1 RBL Non-DLI 1: Improved Time Use

The target in this Non DLI is to improve time use of male and female customers after getting access to electricity. The scope of the evaluation and assessment is Kalimantan, Maluku and Papua (KMP). DIV RKO will conduct a study regarding the socio-economic and gender impacts of the database that is owned by the realization of this ADB loan program. Currently the consultant re-tender process because previously only 1 prospective consultant sent the bid submission.

#### 3.4.2 RBL Non-DLI 2: Pilot Community Training Conducted on Basic PLTS

The target in this Non DLI is a pilot community training conducted on basic PV mini-grid maintenance where the PV mini-grid has remote monitoring technology with at least 30% female participation in 2021-2024. Progress of TW I 2021 Pusdiklat prepares the development of training modules which have been achieved 80%, the materials have considered and combined material from ADB. when the module development is complete, the Training of Trainers (ToT) will be continued with the UIW participants. The timeline of the pilot community training on basic PV mini-grid maintenance is as follows:

**Table 10: Timeline of Pilot Community Training on Basic PV mini-grid maintenance**

No	Kegiatan	PIC	Status	2021												2022												2023													
				1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		
1	Sumber Materi "Operasi & Pemeliharaan PLTS PV"	PLN CorpU	100%																																						
2	Modifikasi & Pengkayaan Materi (jika diperlukan)	PLN CorpU	80%																																						
3	Penentuan Target Peserta <i>Penentuan target perlu dipertimbangkan: PLTS eksisting yang memiliki spesifikasi yang dipersyaratkan ADB</i>	UIW	0%																																						
4	ToT bagi pegawai UIW (sesuai target peserta)	PLN CorpU & UIW	0%																																						
5	Pilot Community Training (didampingi Instruktur Pusdiklat)	PLN CorpU & UIW	0%																																						
6	Feedback & Training Material Revision	PLN CorpU	0%																																						
7	Community Training by UIW (Future Scale Up)	UIW	0%																																						

#### 3.4.3 RBL Non-DLI 2: Capacity for social monitoring

The definition of indicator is annual report on social impact of electrification with data disaggregated by sex published by end of 2022. There were not annual report yet on social impact of electrification in 2020.

### 3.5 Program Action Plan (PAP) Implementation ADB RBL Programs

PAP Items	Indicator	Responsible Teams	Time Frame	IVA Verification
1	(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	UIW; DIV RSP and DIV RMP	From 2020	(i) Not completed. Mission clarified for PLN and IVA that least cost analysis should be akin to published Least Cost analysis for Maluku and Papua, at least including similar LCOE options and calculations. Mission further clarified that cold storage planning should incorporate upcoming large fisheries port facility developments . (ii) Partially completed. Completed for distribution expansion but not renewable energy projects. (iii) Completed for 2020. PLN has provided evidence of job safety analysis document and photos of safety briefing. (iv) Completed for 2020. BASTPs have been provided by PLN as evidence.
<b>Technical Design</b>				
2	(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.	DIV RKO PUSLITBAN DIV RSP DV RMP	From 2022 and 2023	(i) On Progress. PLN Puslitbang has provided TOR, timeline, and budget for the current regulation review, planned for 2021-2022. IVA observes that the progress is on track to meet the indicator target by 2022. (ii) On Progress. PLN Puslitbang has provided TOR, timeline, and budget for the guideline study, planned for 2023. IVA observes that the progress is on track to meet the indicator target by 2023.
3	(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.	DIV RKO PUSLITBANG DIV RSP DV RMP	From 2022 and 2023	(i) On Progress. PLN Puslitbang has provided TOR, timeline, and budget for the study, planned for 2021-2022. IVA observes that the progress is on track to meet the indicator target by 2022. (ii) On Progress. The study planned for indicator (i) will be the basis of the recommendation mentioned in this indicator. As the first indicator is on track to meet the target by 2022, IVA also considers this indicator on track to meet the target by 2023.

Program Result				
4	<p>(i) 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;</p> <p>(ii) 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 experts, on impact assessment, to review and approve the firm's outputs;</p> <p>(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.</p>	DIV RKO, PUSDIKLAT, DIV MRE, DIV RSP and DV RMP	From 2021	<p>(i) On Progress. (timeframe: from 2021)</p> <p>(a) PLN has started with roadmap development with 2021-2024 target of poor HHs connection.</p> <p>(b) The development of training module and preparation for one ToT is on progress and modul.</p> <p>(c) The module has been discussed with ADB. for the suitability of the material in the field will be discussed in TOT.</p> <p>(ii) On Progress. (timeframe: from 2021)</p> <p>(iii) On Progress.</p> <p>The recruitment process has started since February 2021 and now is at the stage of re-bidding process, but the expert group has not been convened.</p>
5	<p>(i) Report on grant achievements against indicative target: (a) power generation from solar PVs (&lt;10 MW) increased by an additional 4,020 MWh annually; (b) 17,500 HHs have access to PLN electricity from improved PLTS;</p> <p>(ii) 10 PLN PLTS upgraded and operational with remote monitoring;</p> <p>(iii) 10 PLN PLTS upgraded and operational with hybridization utilizing energy</p>	DIV EBT, DIV RMP, DIV RSP, DIV RKO	From 2021	<p>(i) On Progress. The timeframe starts from 2021. For the additional energy generation from 2019-2020 is 1.705 MWh.</p> <p>(ii) On Progress. The timeframe starts from 2021. This indicator cannot be verified yet as PLN is still in planning stage and there is no improved PLTS from PLN yet.</p> <p>(iii) On Progress. The timeframe starts from 2021. This indicator cannot be verified yet as PLN is still in planning stage and there is no improved PLTS from PLN yet.</p>

	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.			(iv) On Progress. The timeframe starts from 2021. This indicator cannot be verified yet as PLN is still developing the training material. For more information, please refer to non-DLI 2 in the DLI report.
<b>Monitoring and Evaluation</b>				
6	(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	(i) Completed for 2020. IVA has received evidence regarding PLN's internal monitoring and evaluation system, updated monthly DLI monitoring sheet, and regular meeting related to the RBL program. (ii) Not completed for 2020. Please refer to PAP 7 indicator (i) for more information
<b>Gender</b>				
7	(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.	DIV ATS, DIV STI, PUSDIKLA T	(i) From 2020 (ii) From 2020 (iii) By 2025 (iv) By 2025	(i) Not completed. The interface module has not been completed as the additional features in AP2T display to enable identification and tracking is not completed yet. (ii) Not completed. The development of training material of consumer education on safe and productive energy use is ongoing, but not yet includes the module on livelihood opportunities for women. (iii) PLN has started the procurement process for recruiting a consultant to conduct the impact assessment study. There is no clear information in the bidding document of the impact study on how the impact on gender would be included in the study. (iv) PLN has started the preparation for the training
<b>Financial Management</b>				
8	(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	DIV ANG  DIV AKT	From 2020	(i) Completed for 2020. IVA has received evidence of the usage of MAXICO, business process flowchart for creating consolidated financial statement, and statement from PLN that the usage is as they intended when they plan to purchase the software. (ii) Completed for 2020. IVA has received evidence that all UIW in KMP has already implemented E-Budget. (iii) Completed for 2020. IVA has received evidence for MAXICO & E-Budget training.
9	High level summary of key internal initiatives and their impacts included in the 2nd quarter and annual RBL progress reports.	DIV CMO	From 2020	Overall status: Completed for 2020.  IVA has received information that the initiative reporting is handled by DIV CMO. The initiatives were part of the transformation program launched by PLN in April 2021, and each initiative PIC

				provides a report via an app developed by PLN, so DIV CMO can monitor them in in real time. In this verification, 15 sub-initiatives were reported.
<b>Procurement</b>				
10	Report submitted following procurement Monitoring Framework.	DIV MRP, DIV RSP, DIV RMP, and UIW	From 2020	Partially completed  PLN DIV MRP presented the 2020 yearly procurement monitoring report and the 2021 quarter one report.
11	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) implementation of sustainable operations and maintenance procedures for remote monitoring and EMS operations..	DIV RSP, DIV RMP, DIV EBT and DIV MRE	From 2021	On Progress.  Similar with PAP 5, PLN is still in planning stage for the work listed under this PAP, which are also similar with the list of work under PAP 5
12	Procurement audits conducted and information sheet shared with ADB	DIV MRP, DIV RSP, DIV RMP, UIW, and SPI	From 2021	On Progress.  IVA had received the audit report & audit schedule from units in Kalimantan, Maluku, and Papua with sampling rate above the 10% threshold.  PLN is to attach a list of all contracts covered by the audit report to the reports going forward
<b>Safeguard</b>				
13	(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,	DIV K3L, DIV RSP, DIV RMP, DIV RSD, DIV RMD, and UIW	From 2020	(i) Not. Completed. Focals shared but no official appointment letters. Supervision of social is under the DIV of Regional Distribution and Asset Management (DIV RSD and DIV RMD) Sumkal and Sulmapana. (ii) Not Completed. The time frame was revised from 2020 to Q3 2021. Guideline being supported by Hatfield. (iii) Not Completed. The time frame was revised from 2020 to Q4 2021. The progress is being monitored for 2020 Annual Verification.

	<p>representatives from each UIW, UP3 and UP2K office, and representatives from ULP office as needed, through PLN's Corporate University.</p> <p>(iv) Briefing brochure on safeguards requirements prepared for and disseminated (through briefing sessions) to contracted vendors / contractors on environmental and social safeguards.</p> <p>(v) Safeguards code of practice developed for solar PV, mini/micro-hydro, and small biogas facilities</p>			<p>(iv) Not Completed. The time frame was revised from 2020 to Q4 2021. The progress is being monitored for 2020 Annual Verification.</p> <p>(v) Not completed for 2020 Annual Verification. DIV K3L has prepared a draft work plan for the preparation of Code of Practice. According to the draft, the Code of Practice will be prepared by PLN (DIV K3L) with Hatfield in October 2021 and the target is to be completed in December 2021.</p>
14	<p>(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 DIV K3L.</p> <p>(ii) UIW annual workplan is screened and categorized by DLH and Forestry Department</p> <p>(iii) Involuntary resettlement and Indigenous Peoples (Customary Communities) screening and categorization reports prepared by UIW and reviewed by DIV RSD and DIV RMD</p> <p>(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.</p>	<p>(i) UIW and DIV K3L</p> <p>(ii) UIW and DIV K3L</p> <p>(iii) UIW, DIV RSD and DIV RMD</p> <p>(iv) UIW and DIV K3L</p>	From 2020	<p>(i) Completed for Annual Verification 2020.</p> <p>None of 814.12 ckm of MV lines constructed in 2020 were verified as crossing protected areas and/or KBA. None of the 126.13 ckm of LV lines constructed in 2020 were verified as crossing protected areas and/or KBA.</p> <p>(ii) Not completed for annual verification 2020.</p> <p>As of end 2020, PLN have only received environmental document direction letter for distribution network from DLH Kalimantan Selatan and Kalimantan Tengah Provinces.</p> <p>(iii) Partially completed for 2020:</p> <p>IR screening:</p> <p>Out of 30 UP3/UP2K units: 5 units did not submit any data; 3 units did not submit 2020 data; 5 units reported no distribution work activity in 2020; and 17 units conducted IR screening and reported no IR impact</p> <p>IP screening:</p> <p>Out of 30 UP3/UP2K units: 5 units did not submit any data; 3 units did not submit 2020 data; 5 units reported no distribution work activity in 2020; 13 units screened IP, reported no impact and IVA verifies that there is no activity with locations listed in IP database; 4 units screened IP and reported no impact, but IVA verifies that there are 17 activities with locations listed in IP database.</p> <p>(iv) Not completed for Annual Verification 2020.</p> <p>According to the draft work plan, the format of the executive summary has been prepared and will be applied to all UIW. The target for the executive summary to be uploaded to the PLN website is by end of June 2021</p>
15	(i) Vulnerable groups (poor households, customary communities, women, and children/youth) invited to consultations.	UIW, UP3, UP2K, DIV RMD and DIV	2020 onwards	<p>Not completed for 2020.</p> <p>PLN had not documented any process of public consultation and GRM. Therefore, no results could be verified against indicators (i), (ii), (iii) and (iv) of this PAP.</p>

	<p>(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.</p> <p>(iii) Consultation records on issues discussed and agreements reached with participants completed with attendance list segregated by gender and customary (indigenous) status.</p> <p>(iv) All complaints/grievances and remedial measures recorded and compiled.</p>	RSD		<p>Based on discussion with distribution contractors and adat leaders during verification mission, PLN had conducted public consultation with affected persons, IP and other vulnerable groups. However, PLN nor contractor documents the process. Thus, IVA did not receive any documentary evidence of this public consultation.</p> <p>During verification mission, PLN explains that there is no grievance submitted by communities or affected persons on distribution work activities in 2020. Since, there is no documentary evidence, IVA cannot verify this</p>
16	<p>(i) Written agreement (private land) for distribution transformers</p> <p>(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 of customary communities with communal access rights prior to the construction commencement.</p> <p>(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).</p> <p>(iv) Proper mitigation (compensation for lost non-land assets or income and income restoration program) for land users affected by the program.</p>	<p>(i), (ii): UIW, UP3, UP2K, DIV RMD and DIV RSD</p> <p>(iii): IVA</p> <p>(iv) UIW, UP3, and UP2K</p>	From 2021	<p>(i) Partially completed. IVA has received two samples of written agreement with landowners for distribution transformers installation.</p> <p>(ii) Completed. PLN explained during verification mission that there were no construction of solar PV, mini/micro-hydro and biogas power plants in 2020</p> <p>(iii) Not completed. Since PLN only submitted two samples of written agreement and no other documentary evidence on how PLN conducted consultations on land acquisition and voluntary land donation, IVA can not verify this indicator.</p> <p>(iv) Completed. PLN explained that there were no work activities in 2020 that has significant impact on lost non-land assets or income.</p>



17	<p>(i) Q2 and Q4 RBL implementation reports submitted to ADB include consolidated results of safeguards screening and safeguards program actions.</p> <p>(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.</p> <p>(iii) Assessment of whether customary communities' access to electricity has increased by the Mid Term Review and end of the Program.</p>	DIV K3L, DIV RSD, and DIV RMD	From 2021	<p>(i) Completed. PLN had submitted Annual 2020 report.</p> <p>(ii) No impact on livelihood of affected persons from the distribution line program found. Impacts on the trees trimming and felling were minor.</p> <p>(iii) Some PLN's customers and community leaders expressed that communities, including customary communities, benefitted greatly from the electricity program. Awareness on safety of using electricity need to be prioritized urgently</p>
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