

PT PLN (Persero)

2022 Quarterly Report (January – December 2022)

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

Result Based Lending (RBL) – ADB

13 February 2023

TABLE OF CONTENTS

1.	Intro	duction	4
	1.1	Background	4
	1.2	Program Scope of Work	4
	1.3	Scope of this Quarterly Report	5
2.	Prog	ram Structure, Management and Implementation	6
	2.1	ADB Results Based Lending Program	6
	2.2	PLN Program Management and Implementation	8
3.	ADB	RBL Program Implementation Status	9
	3.1	Summary of DLI Achievements as of Reporting Period	9
	3.2	Eligibility for Disbursement of Performance 2020 and Inte 2021 (Million USD)	erim 11
	3.3	Disbursement Linked Indicators (DLIs)	13
	3.4	Non-Disbursement Linked Indicators	28
	3.5	Grant Implementation	31
	3.6	Program Action Plan (PAP) Implementation ADB RBL Programs	34
4.	Appe	endix	52
	4.1. <i>A</i>	Appendix 1	52

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)

WKTKU = 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)

DIV KPJ = Divisi Pusat Kebijakan

(Policy Center Division)

DIV MEB = Divisi Aneka Energi Baru Terbarukan

(Various Renewable Energy Division)

AP2T = Aplikasi Pelayanan Pelanggan Terpusat

(Centralized Customer Service Application)

APKT = Aplikasi Pengaduan dan KeluhanTerpadu

(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 PenyediaanTenagaListrik (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

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.

This program follows a Results-Based Lending (RBL) structure, in which funds are disbursed in stages and only disbursed to PLN when the mutually agreed Disbursement-Linked Indicators (DLI) are met (provided that disbursement is adjusted to the achievement of part or all of the DLI targets). DLI is results-oriented rather than process-oriented, allowing PLN the flexibility to use its own processes and systems to manage funds and achieve program outcomes.

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

Output 1: Power Distribution Network strengthened and expanded.

The Program shall be tracked by the installed length of medium-voltage distribution lines (DLI 4).

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).

Output 3: Institutional capacity strengthened and social monitoring enhanced.

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

ADB RBL

at least 30 % female participation (DLI 7). Electronic procurement and contract payment system will be integrated and rolled out to improve reporting and monitoring (DLI 8).

1.3 Scope of this Quarterly Report

This Quarterly 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 Quarterly Report covers reporting periods from January 1st, 2022 until Desember 31th, 2022.

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 24th, 2020

b. Loan Signing : Dec 8th, 2020

c. Guarantee Signing : Dec 16th, 2020

d. Loan Effectiveness : Jan 14th, 2021

e. Implementation Period : Jan 2020 – Dec 2025 (5 years)

f. Program Completion : Dec 31st, 2025

g. Loan closing : Jun 30th, 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	Loan	Prior Results	2020	2021	2022	2023	2024	2025
DLI 1	150	25,0		30	30	30	30	30	-
DLI 2	75	12,5	30	9	9	9	9	9	-
JFPR Grant	3	-	0,6	1,0	1,0	0,4	-	-	-
DLI 3	90	15,0		18	18	18	18	18	-
DLI 4	120	20,0		24	24	24	24	24	-
DLI 5	50	8,3		5	9	9	9	9	9
ACEF Grant	3	-		1,0	1,0	1,0	-	-	-
DLI 6	65	10,8		11	11	11	11	11	10
DLI 7	30	5,0		6	6	6	6	6	-
DLI 8	20	3,3	4	-	4	4	4	4	-
TOTAL (Loan only)	600	100	34	103	111	111	111	111	19
TOTAL (Grant)	6	-	0,6	2,0	2,0	1,4	-	-	-

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)
	Outcome			
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
	JFPR Grant	All poor households		3
3	Feeder line permanent interruptions in the distribution system.	Maximum annual rate increased allowed for feeder line is 14,37	Interruption per 100 ckm	90
	Outputs			
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
	ACEF Grant)	additional MWh annually is 40.000 MWh by 2025	MWh	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 50% female participation (1,25 points), total 121 points by 2024	point	30
8	Integrating E-Procurement and SAP systems	Both of systems integrated and rolled out, and at least 80% of contracts in financial value by 2024		20
	TOTAL (Loan only)			600
	TOTAL (Grant)			6

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. The new of PMU and PIU still in progress developing due to reorganisation.

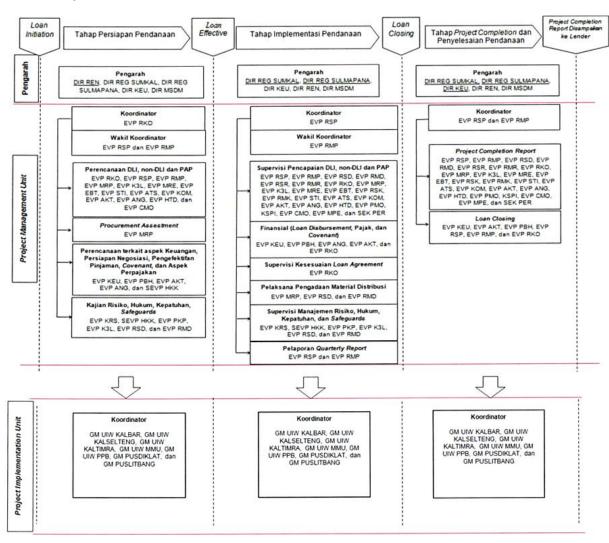


Figure 1: PMU/PIU Organisational Structure (Source : PLN)

3. ADB RBL PROGRAM IMPLEMENTATION STATUS

3.1 Summary of DLI Achievements as of Reporting Period

Table 3 shows a summary of DLI Achievements for the first quarter of 2022 from the evaluation results of PLN.

Table 3: Summary of DLI Achievements RBL-ADB

DLI No.	Target	PLN Reviewed (as of 31 December 2022)	Achieved/ Not Achieved
1	6,38 Million customers (2022)	6,56 Million (data TUL 309 dan AP2T)	Achieved
	2.1 73.368 poor households (2022)	74.830 poor households (Data from AP2T – DTKS Information)	Achieved
2	2.2 7.337 poor female-households (2022) 11.243 poor female-households (2024)	14.207 poor households (Data from AP2T – DTKS Information) PLN fully achieved 2024 target and ADB has fully disbursed 2024 allocation	Achieved
3	15,59/100 ckm permanent interruptions (2022)	3,73 / 100 ckm	Achieved
4	56.685 ckm MV lines for KMP (2021) 58.792 ckm MV lines for KMP (2022)	2022: 57.824 – 43,91 (KBA/IP) = 57.780	2021 late achievement 2022 Not Achieved
	5i List of EBTKE assets to be transferred to PLN cleared by PLN (2020)	PLN has submitted confirmation to EBTKE not to accept assets proposed for transfer	Not Achieved
5	5ii Model KSO or another legal instrument with PEMDA approved by relevant authority within PLN (2020)	The KSO model draft has not yet been approved and expected to be approved by Director	Not Achieved
	5iii Additional MWh RE energy of 9.600 MWh, A further additional 4.000 MW (2021) Additional MWh RE energy of 16.800 MWh, A further additional 12.000 MW (2022)	2.612,37 MWh	Not Achieved

DLI No.	Target	PLN Reviewed (as of 31 December 2022)	Achieved/ Not Achieved
6	6i 40% of 2019 inventory approved by MSOE or relevant PLN authority and 20% of 2019 inventory safely disposed (2022)	51,38% of 2019 inventory approved by BOC (2022) 40,67% inventory safely disposed The Minutes of Handover of Work (BASTP) between PLN UIW and PT Pindad are available regarding the completion of the purchase, transportation, and cleaning of disposed materials, as follows: 1. UIW KSKT on August 29, 2022; 2. UIW KTKU August 15, 2022.	Achieved
	6ii 10 (cum) additional WH have secured the approved environmental docs from the relevant regulatory agency (2021) 15 (cum) additional WH secured the approved environmental docs (2022)	There are 12 environmental documents that were approved in the 2022	2021 Achieved 2022 Not Achieved
	7i 1 Consumer Education Workshop in each of the 5 UIW with min 30% female (2020)	4 UIWs (2020) ≈ 4,75 points	Not Achieved
7	7ii 29 Consumer Education Workshop at the UP3 level (29 UP3s) (2021), Equivalent 34 points (minimum 30% female participation for each workshop) (2021)	29 UP3s (2021) ≈ 32,25 points	Achieved
	29 Consumer Education Workshop at the UP3 level (2022), cumulative target is 63 points	16 UP3s (2022) ≈ 20 points Total: 57 points	Not Achieved
8	At least 60% of contracts in financial value executed by UIW (including units under them) recorded in E-Proc+SAP integrated system (2022)	70,06% (position in Q3 2022)	Achieved

DLI No.	Target	PLN Reviewed (as of 31 December 2022)	Achieved/ Not Achieved
Non- DLI 1	Assessment from PLN on improved time use reported by women and men as a result of access to electricity. Baseline data on time use and income to be collected, disaggregated by sex. Report endorsed by PLN management (2020)	ADB's procurement of international consultants has been completed, currently the process still in data collected by consultants and PLN	Not achieved
Non- DLI 2	At least one pilot community-based training on solar PV maintenance delivered with minimum 30% female participation (2020-2022)	0 Pilot community training Training materials from the basic maintenance of PLTS have been prepared by PLN Pusdiklat and is expected to be conducted in 2025	2020-2022
Non- DLI 3	Annual report on social impact of electrification published by end of 2022 (2022)	Sustainability Report which contains material on the social impacts of ADB's 2021 electrification program published in June 30, 2022 (2021 report) 0 PLN Annual sustainability report (2022 report)	Start from 2022

3.2 Eligibility for Disbursement of Performance 2020 and Interim 2021 (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, and achievement of DLI performance interim 2021, the total disbursement eligibility for loans is 95,80 million USD with the following details:

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

In USD million

		RBL01	RBL 02	RBL03	RBL04	RBL05		
DLI	Financin g Allocatio	17/11/21	16/11/21	8/12/21	28/4/22	9/12/22	Total Disbursement	Saldo Loan
	n	2020 Annual	AF	2021 Interim	2021 Annual	2022 Interim		
1	150	28,33		21,65	24,55	16,96	91,49	58,51
2	75			54,42	3,03	1,62	59,07	15,93
3	90	18,00			17,42	0,58	36,00	54,00

		RBL01	RBL 02	RBL03	RBL04	RBL05		
DLI	Financin g Allocatio	17/11/21	16/11/21	8/12/21	28/4/22	9/12/22	Total Disbursement	Saldo Loan
	n	2020 Annual	AF	2021 Interim	2021 Annual	2022 Interim		
4	120	24,89		7,93		12,9	45,72	74,28
5	50					0	0,00	50,00
6	65			8,80		15,77	24,57	40,43
7	30			3,00		7,29	10,29	19,71
8	20	4.00				4	8,00	12,00
Advance			104,78		-45	-59,12	0,66	-0,66
TOTAL	600	75,22	104,78	95,8	0	0	275,8	324,20
% Disburs mission)	sement aga		45,97%					

Table 5: Grant JFPR Disbursement Eligibility Performance Summary (Source: ADB)

In USD million

DLI	Total ADB Financing Allocation	RBL01 15-Nov-21 Advance	Total Disburse as of 1 Apr 2022	Eligible 2021 Annual Disbursement	Total Disbursement
2.1	3,00	0,00	0,00	2,80	2,80
Advance		0,75	0,75	-0,75	0,00
TOTAL	3,00	0,75	0,75	2,05	2,80

3.3 Disbursement Linked Indicators (DLIs)

KMP

3.3.1 RBL DLI 1: Increased numbers of total PLN Customers

As at December 2022, PLN has a total number approximately 6,56 M customers in Kalimantan, Maluku and Papua, which of the ADB RBL target of 6,38 M for 2022. Data for this indicator are extracted from the SILM system, which has an integrated link to PLN's customer database (AP2T).

No	UNIT	TOTAL CUSTOMER					
		2022 TARGET	Q4 2022 ACTUAL	ACHIEVEMENT			
1	WKB	1.374.086	1.430.968	104,14			
2	WKSKT	2.148.270	2.186.923	101,80			
3	WKTKU	1.368.817	1.408.746	102,92			
4	WMMU	721.940	744.187	103,08			
5	WP2B	768.393	792.272	103,11			
	KALIMANTAN		5.026.637				
	MALUKU DAN PAPUA		1.536.459				

6.381.506,20

6.563.096

102,85

Table 6: Total KMP Customer in Q4 2022

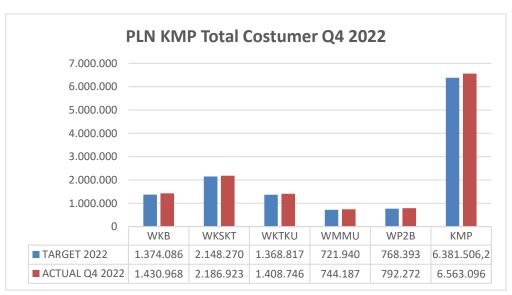


Figure 2: Number of Total PLN KMP Customers in Q4 2022

The achievement in December 2022 is around 101,3% if we compare it to the full target in 2022.

3.3.2 RBL DLI 2: Increased number poor household

Data for ADB RBL DLI 2 data is taken from the AP2T system on all Matching DTKS info and is calculated from 2019 up to December 2022 manually due to screening for duplicate data that appears. The calculation mechanism has been approved by IVA and ADB on the 2021 interim mission review so that for the realization of 2019 to December 2022 there are 74.830 (101,99%) poor household and 14.207 (193,64%) of them are female household. Based on the compilation of data downloaded from AP2T-Info DTKS 2019 up to December 2022 are as follows:

NO	UNIT	ADDITIONAL POOR HHS		ADDITION WOME		ACHIEVEMENT POOR HHS	ACHIEVEMENT POOR
		TARGET 2022	ACTUAL Q4 2022	TARGET 2022	ACTUAL Q4 2022	FOORTHIS	WOMEN HHS
1	WKB	7.856	27.639	786	4.077	351,83	518,98
2	WKSKT	21.521	29.852	2.152	7.422	138,71	344,87
3	WKTKU	20.921	9.448	2.092	1.706	45,16	81,55
4	WMMU	5.693	4.738	569	545	83,22	95,73
5	WP2B	17.378	3.153	1.738	457	18,14	26,30
·	KALIMANTAN	50.297	66.939	5.030	13.205	133,09	262,54
	MALUKU DAN						

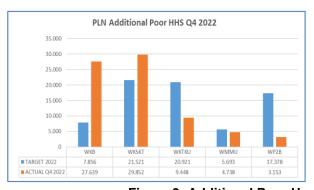
2.307

7.337

1.002

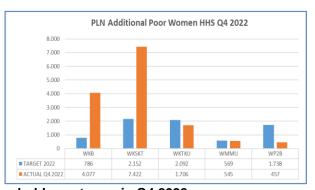
14.207

Table 6: DTKS information data on AP2T-Info DTKS in 2019 up to December 2022



PAPUA

KMP



34,20

101,99

43,43

193,64

Figure 3: Additional Poor Households customer in Q4 2022

3.3.3 RBL DLI 3: MV Feeder Permanent Interruptions

23.071

73.368

7.891

74.830

The number of permanent JTM disturbances reported in the KMP during the period 2022 is 3,73 interuptions > 5 minutes per 100 ckm, where from the ADB RBL target of 16,41 disturbances per 100 ckm for 2022, about 177,25%. Data for this DLI is extracted from SILM, though the source data is filled from Distribution Control Center from each of the PLN Wilayahs. The general disturbance reduction program for KMP is carried out both technically and non-technically. Technically, it takes the form of pruning and cutting trees with relevant stakeholders,

installing animal barriers, walk down care for assets (CFA), etc. while for non-technical, namely synchronization of maintenance outage schedules, development of monitoring applications and execution of troubleshooting, etc.

Table 7: MV Feeder Permanent Interuption in Q4 2022

No	UNIT	FGTM					
		TARGET 2022	ACTUAL Q4 2022	ACHIEVEMENT (%)			
1	WKB	13,86	4,30				
2	WKSKT	21,14	2,38				
3	WKTKU	18,16	2,37				
4	WMMU	8,32	6,37				
5	WP2B	9,80	5,03				
	KALIMANTAN		3,02				
	MALUKU DAN PAPUA		5,72				
	КМР	15,59	3,73	176,05			

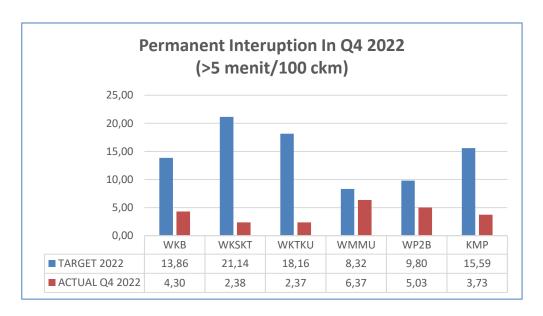


Figure 4: Permanent Interuption in Q4 2022

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

As of Q4 2022, The total length of installed medium voltage distribution network (MV) assets during 2021 after deducting 43,91 ckm (from confirmation of the JTM UIW 2021 realization

screening form) is 57.112 ckm because there were several realizations of work that go to KBA/IP areas, which from ADB RBL 2022 full years target of 58.792 ckm. The achievement in 2022 compared to the full target is around 98,28%. The achievement of the 2021 target of 56,685 km has been achieved in Q3 2022.

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

Table 8: Additional length of medium voltage distribution lines in Q4 2022

No	UNIT	MV Lines Total							
		TARGET 2022	ACTUAL Q4 2022	ACHIEVEMENT (%)					
1	WKB	14.321,00	14.314,00						
2	WKSKT	18.601,00	17.775,37						
3	WKTKU	10.019,00	10.465,88						
4	WMMU	8.520,00	7.836,85						
5	WP2B	7.331,00	7.431,70						
	KALIMANTAN		42.555,25						
	MALUKU DAN PAPUA		15.268,55						
	KMP	58.792,00	57.823,80	98,35					
	EXCLUSION		43,91						
	КВА		43,91						
	IP		0,00						
	IR		0,00						
	TOTAL	58.792,00	57.779,89	98,28					

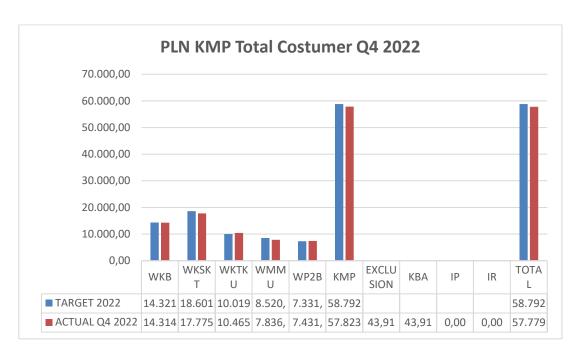


Figure 5: Number of Total Distribution MV Lines in Q4 2022

3.3.5 RBL DLI 5: Green Energy Promotion

Green energy promotion targets in 2020 (i) are List of EBTKE assets to be transferred to PLN which have been completed by PLN and 2020 (ii) KSO model or other legal instruments with PEMDA approved by PLN Director. PLN sent a letter to ESDM dated October 26, 2021 regarding the Submission of Follow-up for PLT EBT for Asset Transfer Through PMPP PT PLN (Persero).

DIV HKK submits an Official Letter to DIV RSP No. 50973/HKM.05.03/SEVP HKK/2021 concerning Submission of Draft PLTS Management Cooperation Agreement between PLN and Local Government (October 2021). DIV EBT submits an Official Letter to DIV RSP No. 18372/KEU.01.08/EVP EBT/2022 dated March 25, 2022 regarding Application for Submission of Technical Study Results and Draft Wording of PKS Template Documents for PLTS Management Between PLN and Local Government. DIV RSP submitted the two reviews to DIV KPJ through official letter No. 25594/HKM.00.04/EVP RSP/2022 dated April 22, 2022 regarding the Request for Review of the PLTS KSO Design Template between PLN and the Local Government. Based on the input from DIV KPJ, the legal documents used are technical instructions to be endorsed by 2 regional directors (Regional Sumkal and Regional Sulmapana). Currently, the draft technical guidelines need to be readjusted by considering PLN's new organizational structure through a request for legal review/opinion regarding the appropriate directorate authority to DIV HKK.

KSO approval steps:

- Request for legal review to DIV HKK related to the suitability of authority for the makers of KSO regulations;
- 2. GRC Process;
- 3. Submission of Official Memorandum to DIV KPJ for the final draft of KSO.
- 4. Approval of conformity of the draft Technical Instructions.

5. Submitting/requesting the ratification of KSO technical guidelines to the relevant Director. Estimated End of **April 2023**

The green energy promotion target in 2022 is that the annual production from the 2018 baseline is 3.309 MWh and the 2022 target is 16.800 MWh, and the additional 2022 target is 12.000 MWh. Total realization of RE production for the classification of types and capacities of PLTS <10 MW, MHP <1 MW, and PLTBio <100 kW (total kit capacity) in Q4 2022 is 2.058,5 MWh. Achievement of RE energy production in Q4 2022 is 78,94% from the RE energy production in 2018 (baseline), so it has not been able to enter the achivement of the 2021 and 2022 target. In 2022, Kalimantan plans to revitalize Solar PV assets that are not operating and derating at UIW Kalbar and UIW Kaltimra. The West Kalimantan UIW is planned in three locations, namely in Sidding, Temajuk, and Limbung Island, while the Kaltimra UIW is in Derawan Solar PV. Derawan Solar PV (Kaltimra) currently decreases capacity to 100 kWp from previous 170 kWp at the beginning of the operation. With this revitalization and additional capacity, it is hoped that the unit can operate better.

Based on the history of operations, the annual energy production of Derawan Solar PV with 170 kWp capacity is 38.17 - 55,73 MWh/year. Meanwhile, the Temajok Solar PV, Limbung Island Solar PV, and Sidding Solar PV are currently not operating. In this asset revitalization, the 3 Solar PV will be repaired and additional capacity will be carried out (Limbung Island PLTS and Temajuk PLTS). Based on data from West Kalimantan operations, the estimated monthly energy production for Temajuk Solar PV is 601,02 MWh/year, Limbung Island Solar PV is 414,72 MWh/year, and Sidding Solar PV is 64,80 MWh/year. The current process is the budget issuance proposal and review. Based on the initial COD plan for PLTS revitalization at UIW KTKU in November 2022 and UIW West Kalimantan in January 2023.

Table 9: RE Production in Q4 2022 (SILM)

UIW	EBT Type	Ownership	Total Unit	Total Installed Capacity (kW)	Total Energy Production (kWh)
UIKL KAL	PV	PLN-Owned	1,00	340,00	133.892,00
	PV	Rent	3,00	450,00	0,00
UIW KALBAR	Hydro	PLN-Owned	3,00	525,00	285.070,00
	PV	PLN-Owned	3,00	180,00	2.303,00
UIW KALTIMRA	Hydro	Rent	1,00	0,00	0,00
	PV	PLN-Owned	1,00	90,00	76.830,00
	PV	Rent	3,00	300,00	0,00
UIW MMU	PV	PLN-Owned	12,00	2.410,00	12.403,00
UIW P2B	Hydro	PLN-Owned	1,00	720,00	268.769,84
	PV	PLN-Owned	85,00	6.941,00	1.833.098,05
Grand Total			129,00	11.956,00	2.612.366,69

Table 10: PLTS Asset Revitalization Plan

Unit	PLTS	IC (kWp)	Estimated Production MWh/Year	Description
Kaltimra	PLTS Derawan #3	370	286,6	On Going
Kalbar	PLTS Temajuk	371	601,0	On Going
	PLTS Sidding	40	64,8	On Going
	PLTS Limbung	256	-	Canceled
Total			952,5	

The gap in achieving the target is very large. Based on PLN's EBT program at the Head Office, by increasing the efficiency of existing power plants, namely reducing the operation of PLN's diesel oil-fueled PLTD generators converted to EBT-based plants. The following is the conversion program planning for the Kalimantan, Maluku and Papua regions. Based on the achievement of MWh production up to Q4 of 2.612,37 MWh.

For 2023, if asset revitalization in Kalimantan can be completed in early 2023, there will be additional MWH production so that the total will be 3.500 MWh in 2023 (exceeding the Baseline Data). However, when compared to the 2022 – 2024 target, the gap is still very wide. So that the focus to be able to achieve these targets is the PLTD to EBT conversion program with an estimated addition of 159.165 MWh in 2025.

Table 11: PLTD to EBT Conversion Program

Project Cluster	Location	Number of Locations	PLTD	PLTS	BESS	Project Cost	CF	PLTS Prod.	Project Batch	Est. COD
			MW	MWp	MWh	(Tr. IDR)	Asumption	MWh/Year		Year
III	Maluku & Papua	24	30,15	48,61	118,13	1,52	15%	63.874	II	2025
V	UIKL, Kalselteng, Kaltimra	27	17,08	26,19	62,67	0,85	15%	34.414	I	2024
VI	Kalbar	19	18,63	46,33	96,05	1,25	15%	60.878	II	2025
-	Total	70	65,86	121,13	276,85	3,62		159.165		

3.3.6 RBL DLI 6: Asset and Waste Management

The management of asset write-offs follows the procedures of the Director's Decree No. 015.E / 870 / DIR / 1998 concerning Withdrawal of Operational Assets into Non-Operational Assets, Director Decree No. 1233 / DIR / 2011 concerning Procedures for Elimination and Transfer. Fixed Assets of PT PLN (Persero), Statement of Decree of the Minister of State-Owned Enterprises regarding Amendments to the Articles of Association of PL PLN (Persero), and Letter of the Director of Finance and Risk Management of PT PLN (Persero) No. 48091/LOG.0103/C01070000/2021 dated September 13, 2021 regarding Notification of Amendment to the Articles of Association regarding the Authorization of AT/ATTB Write-Off Approval and Changes in AT/ATTB Write-off Business Process Flows at the Head Office. B3 Waste Category Used Equipment (ATTB) that has been removed from operating assets will be

managed as B3 Waste. PLN DIV K3L has prepared a Draft Decree of the Director of Hazardous Waste Management which has been submitted to the Legal Department for review. Due to the pandemic, it is difficult for SPI to physically check ATTB at UIW.

The target of Asset and Waste Management in 2022 is 40% of inventory of used equipment for disposal as of end-2019 approved by MSOE or relevant PLN authority and 20% of 2019 inventory safely disposed. Meanwhile, the target for ownership of environmental documents at the used equipment warehouse in 2022 is 15 environmental documents SPPL, UKL/UPL, or DPLH. Especially for SPPL environmental documents, it is necessary to fill out a waste warehouse inspection form either by Zite application or manually.

The UIW proposal at KMP that has been used as a target that has been submitted to the Central PLN is Rp. 13,5 billion.

Table 12: 2019 Inventory of Used Equipment For Disposal

No.	UIW	Type of Disposal Material	Value (IDR)	Progress Status
1 1	UIW Kalselteng	Distribution network (transformers, metals, etc)	876.858.608	Safely disposed on August 29th, 2022.
2	UIW Kalbar	Distribution network (transformers, metals, etc)	2.673.423.570	The Board of Directors Meeting was held in September. The BOC approval process is
		Distribution Substation	3.761.626.382	estimated in December 2022.
3	UIW Kaltimra	Distribution (KWh Meter)	4.637.717.867	Safely disposed on August 15th, 2022.
4	UIW MMU	Distribution network (transformers, metals, etc)	157.772.719	GRC Process Target: 2023
5	UIW P2B	Distribusi	1.452.319.280	Approved by BOC April 5, 2022 Disposed of safely, target by December 2022
		Total	13.559.718.426	

Until the Q4 of 2022, the proposal for the elimination of ATTB from UIW has been submitted to the Head Office (DIV AKT) with a total proposed value of Rp. 13.5 billion (Distribution only) in 2021 the process is as shown in Table 10 above. The first DLI 6 target for material disposal is 40% of the equipment inventory used for disposal by the end of 2019 approved by MSOE or relevant PLN authority and the second is 20% of the 2019 inventory safely disposed. Based on information from the DIV AKT status up to Q4 2022, UIW Kalselteng, UIW Kaltimra, and UIW P2B have received written approval from the Board of Commissioners (Rp 6,96 billion (51,38%)) and safely disposed on August 2022 (Rp 5,51 billion (40,67%)).

DLI target 6 (ii) 25 used material warehouses submit environmental documents and get approval from DLH by 2024. In 2020, 2 used material warehouses have submitted environmental documents (2 SPPL) and were approved by relevant Regulatory Agency but for activities that equipped with SPPL environmental documents not yet equipped with a warehouse checklist. In 2021 PLN will intensively coordinate to be able to speed up the process of issuing environmental documents that are confirmed and approved by the relevant Regulatory Agencies for SPPL environmental documents that must be accompanied by a warehouse checklist. Cumulatively, until the Q4 2022, 12 (twelve) issuances of environmental documents in used material warehouses have SPPL/DPLH which have been submitted and approved by DLH and have been completed by a warehouse checklist. The Nine environmental documents came from UP3 Pontianak (Cemara WH) and UP3 Ketapang (Sampit WH) at UIW West Kalimantan, UP3 Samarinda (ULP Ulu WH) and UP3 Kaltara (ULP Tarakan WH) at UIW Kaltimra, UP3 Ambon (Lateri WH), UP3 Ternate (Ternate WH) and UP3 Masohi (Masohi WH) at UIW MMU, UP3 Manokwari (Manokwari WH), UP3 Sorong (Sorong WH) at UIW P2B, and UP3 Kuala Kapuas (Kuala Kapuas WH), UP3 Palangkaraya (Palangkaraya WH), UP3 Barabai (ULP Kandangan WH) at UIW Kalselteng. Table 11 shows warehouse environmental document achievements in UIW.

Table 13: Warehouse Environmental Permit Achievements in 2022 RBL-ADB

			Environmenta 2019 – Q4	
No	UIW and UP3		Environmental	
		Quantity	Document Type	Date of Issue
1	UP3 Kuala Kapuas, Kuala Kapuas WH	1	SPPL	7 Agustus 2022
	UP3 Palangkaraya, Palangkaraya WH	1	SPPL	7 Agustus 2022
	UP3 Barabai, ULP Kandangan WH	1	SPPL	7 Agustus 2022
	Sub-total Kalselteng	3		
2	UP3 Samarinda, ULP Ulu WH	1	DPLH	6 April 2021
	UP3 Kaltara, ULP Tarakan WH	1	SPPL	5 September 2019
	Sub-total Kaltim	2		
3	UP3 Pontianak. Cemara WH	1	DPLH	2 July 2021
	UP3 Ketapang, Sampit WH	1	DPLH	13 December 2021
	Sub-total Kalbar	2		
4	UP3 Ambon, Lateri WH	1	SPPL	11 May 2020
	UP3 Ternate, Ternate WH	1	SPPL	17 November 2021
	UP3 Masohi, Masohi WH	1	SPPL	3 February 2022
	Sub-total Maluku & Maluku Utara	3		
5	UP3 Manokwari, Manokwari WH	1	SPPL	10 September 2021
	UP3 Sorong, Sorong WH	1	SPPL	11 November 2021
	Sub-total Papua & Papua Barat	2		
	Kumulatif Total		12	

The total achievement of 12 (twelve) warehouses has environmental documents that have been submitted and approved by DLH. From the 2022 target, 15 warehouses have environmental documents equivalent to 80% achievement.

DIV K3L has developed a used material warehouse checklist from manual to digital based on application and web in collaboration with the Zite Platform. In this application, the parent unit allows submitting the results of the warehouse checklist and sharing warehouse locations. As an evaluation function, the application has designed a multilevel monitoring and approval system according to the authority. Warehouses with SPPL environmental documents must comply with the checklist and will be evaluated twice a year (per semester). However, operational problems were still found in using the application so that the previous manual form was still used until the use of the application was running well.

FORM HOUSEKEEPING MATERIAL ATTB YANG MENGANDUNG LB3 Lokasi Penyimpana Fasilitas Penyimpanan emisahan trafo Memiliki atap / Jika ada, jelaskan kondisi ter Pemisahan enis ATTB yang Mengandun dari tahun Terdapat ceceran dgn material apasitor sesua penutup (tidak update, kegiatan yang sudah anufaktur <1997 Nama Gudane oli/minyak trafo lainnya merk dagang terkena hujan) ilakukan, dan rencana tindak dan >1997 lanjutnya (ya / tidak) (ya / tidak) (ya / tidak) (ya / tdk) (ya / tidak)

Table 14 Housekeeping Checklist for Warehouses of Used Material (Eksisting)

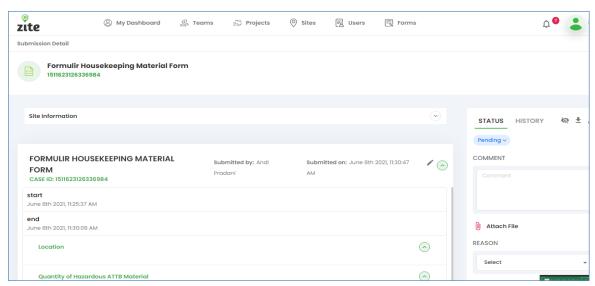


Figure 6: Warehouse management for App and Web-Based Used Material Warehouse

3.3.7 RBL DLI 7: Consumer Education

The definition of the indicator is holding consumer education workshops on safe and productive energy use which will be carried out by 1 UP3 each UIW in 2022 with a minimum participation of 30% women for each workshop. The development of training materials by PLN Pusdiklat was completed on 27 September 2021 and PLN Pusdiklat conveys that the workshop material will always be updated on the link provided by PLN Pusdiklat because educational material will change dynamically. based on material references from ADB and the training material has been shared with UIW. The implementation of Training of Trainer (ToT) Batch 1 in Kalimantan and Batch 2 in Maluku-Papua have been carried out in August 2021 and followed by the implementation of Batch 3 for Kalimantan and Maluku-Papua to accommodate participants who were unable to attend the previous Batch in October 2021. The workshop was held in Q3 2021 with the achievements of 5 UIWs at KMP realized 4 UIWs and target 29 UP3s realized 29 UP3s, Based on Regional independent calculation obtained that meet the requirements the achievement is 33 workshops according to the 2021 target of 34 workshops. Workshop with a total of participants in one UIW/UP3 > 50% worth 1,25 points, which is 16 units and the remaining 17 units are worth 1 point for a total of 37 points. Until the Q4 of 2022, there were 7 workshops that met the requirements with 8,25 points earned. Most of the workshops were held at UIW Kalselteng and then at UIW Kalbar, UIW Kaltimra, UIW P2B and UIW MMU.

Table 15 Implementation of Consumer Education Workshop in 2021

		1	NORKS	HOP Imple	ementation		30% ≤	
Unit Induk	Unit Area	w	М	Total	Precentage of Women Participation	Score	W < 50%	W ≥ 50%
PT PLN (PERSERO) UIW KSKT	Kantor Wilayah	71	37	108	65,74%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Banjarmasin	103	121	224	45,98%	1	1	
PT PLN (PERSERO) UIW KSKT	UP3 Barabai	194	153	347	55,91%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Kotabaru	56	51	107	52,34%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Kuala kapuas	204	113	317	64,35%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Palangkaraya	139	148	287	48,43%	1	1	
PT PLN (PERSERO) UIW KALBAR	Kantor Wilayah	65	40	105	61,90%	1,25		1
PT PLN (PERSERO) UIW KALBAR	UP3 Pontianak	50	70	120	41,67%	1	1	
PT PLN (PERSERO) UIW KALBAR	UP3 Singkawang	54	71	125	43,20%	1	1	
PT PLN (PERSERO) UIW KALBAR	UP3 Sanggau	53	66	119	44,54%	1	1	
PT PLN (PERSERO) UIW KALBAR	UP3 Ketapang	82	27	109	75,23%	1,25		1

		\	NORKS	HOP Imple	ementation		30% ≤	
Unit Induk	Unit Area	w	M	Total	Precentage of Women Participation	Score	W < 50%	W ≥ 50%
PT PLN (PERSERO) UIW KTKU (Updated)	Kantor Wilayah	35	81	116	30,17%	1	1	
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Balikpapan	67	120	187	35,83%	1	1	
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Samarinda	47	63	110	42,73%	1	1	
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Bontang	55	83	138	39,86%	1	1	
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Berau	105	42	147	71,43%	1,25		1
PT PLN (PERSERO) UIW KTKU	UP3 Kaltara	33	67	100	33,00%	1	1	
PT PLN (PERSERO) UIW MMU	Kantor Wilayah			0	0,00%	0		
PT PLN (PERSERO) UIW MMU	UP3 Ambon	66	39	105	62,86%	1,25		1
PT PLN (PERSERO) UIW MMU	UP3 Masohi	37	83	120	30,83%	1	1	
PT PLN (PERSERO) UIW MMU	UP3 Tual	43	59	102	42,16%	1	1	
PT PLN (PERSERO) UIW MMU	UP3 Saumlaki	63	49	112	56,25%	1,25		1
PT PLN (PERSERO) UIW MMU	UP3 Ternate	45	85	130	34,62%	1	1	
PT PLN (PERSERO) UIW MMU	UP3 Sofifi	33	75	108	30,56%	1	1	
PT PLN (PERSERO) UIW MMU (Updated)	UP3 Tobelo	60	46	106	56,60%	1,25		1
PT PLN (PERSERO) UIW P2B	Kantor Wilayah	65	53	118	55,08%	1,25		1
PT PLN (PERSERO) UIW P2B	UP3 Jayapura	35	80	115	30,43%	1	1	
PT PLN (PERSERO) UIW P2B	UP3 Sorong	31	70	101	30,69%	1	1	
PT PLN (PERSERO) UIW P2B	UP3 Manokwari	90	33	123	73,17%	1,25		1
PT PLN (PERSERO) UIW P2B	UP3 Timika	95	45	140	67,86%	1,25		1
PT PLN (PERSERO) UIW P2B	UP3 Merauke	53	51	104	50,96%	1,25		1
PT PLN (PERSERO) UIW P2B	UP3 Biak	94	51	145	64,83%	1,25		1

		\	VORKS	HOP Imple	ementation		30% ≤	
Unit Induk	Unit Area	w	М	Total	Precentage of Women Participation	Score	W < 50%	W ≥ 50%
PT PLN (PERSERO) UIW P2B	UP3 Wamena	32	73	105	30,48%	1	1	
PT PLN (PERSERO) UIW P2B	UP3 Nabire	57	55	112	50,89%	1,25		1
TOTAL						37,00	17	16

Table 16 Implementation of Consumer Education Workshop in Q4 2022

Unit Induk	Unit Area	,	WORKSHO	P Impleme	entation	Score	30% ≤ W < 50%	W ≥ 50%
Onit induk	Onit Area	w	M	Total	Precentage of Women Participation			
PT PLN (PERSERO) UIW KSKT	Kantor Wilayah	68	66	134	50,75%	0		
PT PLN (PERSERO) UIW KSKT	UP3 Banjarmasin	203	202	405	50,12%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Barabai	79	74	153	51,63%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Kotabaru	364	306	670	54,33%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Kuala kapuas	64	40	104	61,54%	1,25		1
PT PLN (PERSERO) UIW KSKT	UP3 Palangkaraya	91	66	157	57,96%	1,25		1
PT PLN (PERSERO) UIW KALBAR	Kantor Wilayah	58	106	164	35,37%	0		
PT PLN (PERSERO) UIW KALBAR	UP3 Pontianak	49	73	122	40,16%	1	1	
PT PLN (PERSERO) UIW KALBAR	UP3 Singkawang	28	111	139	20,14%	0		
PT PLN (PERSERO) UIW KALBAR	UP3 Sanggau	62	294	356	17,42%	0		
PT PLN (PERSERO) UIW KALBAR	UP3 Ketapang	182	241	423	43,03%	1	1	
PT PLN (PERSERO) UIW KTKU (Updated)	Kantor Wilayah	8	32	40	20,00%	0		
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Balikpapan			0	0%	0		
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Samarinda	88	194	282	31,21%	1	1	

		,	WORKSHO	P Impleme	entation	Score	30% ≤ W < 50%	W ≥ 50%
Unit Induk	Unit Area	w	М	Total	Precentage of Women Participation			
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Bontang	29	46	75	38,67%	0		
PT PLN (PERSERO) UIW KTKU (Updated)	UP3 Berau	6	26	32	18,75%	0		
PT PLN (PERSERO) UIW KTKU	UP3 Kaltara			0	0%	0		
PT PLN (PERSERO) UIW MMU	Kantor Wilayah	71	88	159	44,65%	1	1	
PT PLN (PERSERO) UIW MMU	UP3 Ambon	46	45	91	50,55%	0		
PT PLN (PERSERO) UIW MMU	UP3 Masohi	45	36	81	55,56%	0		
PT PLN (PERSERO) UIW MMU	UP3 Tual	130	32	162	80,25%	1,25		1
PT PLN (PERSERO) UIW MMU	UP3 Saumlaki	68	34	102	66,67%	1,25		1
PT PLN (PERSERO) UIW MMU	UP3 Ternate	8	12	20	40,00%	0		
PT PLN (PERSERO) UIW MMU	UP3 Sofifi	105	56	161	65,22%	1,25		1
PT PLN (PERSERO) UIW MMU (Updated)	UP3 Tobelo	142	137	279	50,90%	1,25		1
PT PLN (PERSERO) UIW P2B	Kantor Wilayah			0	0,00%	0		
PT PLN (PERSERO) UIW P2B	UP3 Jayapura	60	65	125	48,00%	0		
PT PLN (PERSERO) UIW P2B	UP3 Sorong			0	0,00%	0		
PT PLN (PERSERO) UIW P2B	UP3 Manokwari			0	0,00%	0		
PT PLN (PERSERO) UIW P2B	UP3 Timika			0	0,00%	0		
PT PLN (PERSERO) UIW P2B	UP3 Merauke	77	69	146	52,74%	1,25		1
PT PLN (PERSERO) UIW P2B	UP3 Biak	54	55	109	49,54%	1	1	
PT PLN (PERSERO) UIW P2B	UP3 Wamena	54	53	107	50,47%	1,25		1
PT PLN (PERSERO) UIW P2B	UP3 Nabire	78	47	125	62,40%	1,25		1
TOTAL						20,00	6	12

In addition, the implementation of the workshop will be combined with the commercial socialization program at UIW and UP3 while still taking into account the conditions for the recognition of the workshop by IVA/ADB and the ongoing pandemic conditions. So that the implementation of the workshop can be done via online.

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

The E-Procurement & SAP system has been integrated in 2019. In March 2021 DIVSTI has held the latest socialization of the E-Procurement feature related to this DLI to procurement officials at UIW. DLI 8 target in 2022 is 60% of contracts in financial value executed by UIW and listed on E-Proc. and SAP. DLI 8 achievements will be calculated at the end of the year. However, based on the 2021 achievement of 55,79%, a complete improvement and strategy for inputting contract information is needed in the E-Procurement and SAP at UIW. DIV MRP in collaboration with the Regional Division will make instructions for inputting contract procurement data from the beginning to the end of the process in order to increase the percentage of data matching on the E-Proc. and SAP. Based on DIV MRP confirmation for the position of the Q3 of 2022 for the achievement of contract data integration in KMP is 70,06%.

Table 17 Eproc + SAP Procurement Contract integration data at KMP in Q3 2022

UIW	Sum of Net Order	SAP+Eproc	%
UIW Kalimantan Barat	368.847.276.387	214.032.029.719	58,03
UIW Kalselteng	246.844.226.668	171.426.332.066	69,45
UIW Kaltim & Utara	205.613.646.567	97.036.921.499	47,19
UIW Maluku & Maluku Utara	218.308.732.972		86,60
OTW Watuku & Watuku Otara		189.057.322.686	
UIW Papua & Papua Barat	219.182.796.471		95,99
		210.386.064.530	
Grand Total	1.258.796.679.065		70,06
Granu Total		881.938.670.500	

3.4 Non-Disbursement Linked Indicators

3.4.1 RBL Non-DLI 1: Improved Time Use

The non-DLI target is optimizing the use of time in activities after getting access to electricity for male and female customers. The formation of the Advisory Team has issued a Team Decree with No. 0092.K/DIR/2022 concerning the Formation of the Assistance Team for the Implementation of the Grant Socio-Economic and Gender Impact Evaluation in Maluku Papua on 15 March 2022, namely the recommendation of the mentoring team are as follows:

Table 18: Proposal Draft of the Socio-economic Assessment Assistance Team

TIM	SUSUNAN KEANGGOTAAN PENDAMPING PELAKSANAAN <i>GRANT SOCIO-ECONOMIC AND G</i> <i>IMPACT EVALUATION</i> DI MALUKU PAPUA	GENDER									
Ket	ua										
	Perencanaan dan Pengendalian Regional Sulawesi, Maluku, Papu ggara	a dan Nusa									
Wakil Ketua											
a.	VP Manajemen Keuangan Regional Sulawesi, Maluku, Papua dan Nusa Tenggara										
b.	VP Pengelolaan Aset Distribusi Regional Sulawesi, Maluku, Papua dan Nusa Tenggara	DIV RMD									
Ang	gota										
a.	VP Pengembangan dan Standarisasi Proses Administrasi Perencanaan dan Enjiniring	DIV MRE									
b.	VP CSR	DIV KOM									
C.	VP Hubungan Investor, Institusional dan GCG	SET PER									
d.	VP Manajemen Keuangan Regional Sumatera Kalimantan	DIV RSP									
e.	VP Pengamanan Pendapatan Regional Sulawesi, Maluku, Papua dan Nusa Tenggara	DIV RMR									
f.	VP Administrasi Pinjaman dan Hibah Luar Negeri	DIV RKO									
q.	Senior Manager Perencanaan	UIW MMU									
9											
h.	Senior Manager Perencanaan	UIP2B									
-	Senior Manager Perencanaan Senior Manager Niaga & Pelayanan Pelanggan	UIP2B UIW MMU									

ADB has hired international consultants from Milan University, which are Giovanna d'Adda and Jacopo Bonan. PLN and consultants together with ADB have held several discussions related to data needs for assessment activities and PLN has sent the required data, such as:

- a. Electrification roll-out in UIW MMU and UIW P2B from 2022-2025.
- b. Timeline of consulting local surveyor

Table 19: Timeline of consulting local surveyor

	ission Method sal Evaluation Method	One Envelope Technical Evaluation and price negotiation														
NO	ACTIVITIES	PLAN DATE			/lonth				Month			3rd N				
1	Request of Procurement (User to Procurement Division) include Terms of Reference and Budget Estimation		W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4		
2	Preparation of Tender Document															
3	Preparation of Owner Estimate															
4	4 Invitation Letter for Submission Proposal															
5	Pre Bid Conference															
6	Minutes of Proposal Documents Submission															
7	Minutes of Technical and Administration Evaluation															
8	Invitation Letter of Clarification and Negotiation Meeting															
9	Minutes of Clarification and Negotiation Result															
10	Procurement Implementation Report															
11	Request for Approval Appointment Letter (EVP Procurement Division to EVP User)															
12	Approval Appointment Letter (EVP User to EVP Procurement)															
13	Appointment Letter (EVP User to Consultant)															
14	Contract Signing between User and Consultant															

- c. Budgeting of Surveyor Consultants (RAB) with a survey plan to 100 HH in MMU and 100 HH in P2B (adjusted to the budget because the survey cost is quite large)
- d. TOR Electrification Impact Evaluation consultancy services in Maluku and Papua
- e. Supporting materials such as training materials to the public on electricity productive use.

The procurement plan for the national surveyor will be finalized by the MRE Division, the current progress of the RMP Division (PLN) is waiting for recommendations from the ADB regarding recommended universities (for surveyor). After getting recommendations from ADB, RMP Division will send an official letter equipped with TOR and RAB to the MRE division for procurement implementation.

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. The progress of QIV in 2021 is not much different from the conditions in the previous quarter, namely the development of learning materials for Result Indicator 7/ Non-DLI 2 has been completed and has been validated with the ADB Team on September 22, 2021. Training on Trainer (ToT) with Main Unit participants will be implemented after PLTS remote monitoring and hybridization using energy management system are available expected in 2025 based on the worst-case scenario that the budget for the procurement of consultants Supporting PV mini-grid is published for 2023. The implementation plan of the Pilot Community Training on Basic PV mini-grid maintenance will be carried out in March-May 2025 in accordance with the proposed TOR for the procurement of consultants for new PV mini-grid technology at KMP. The timeline of the pilot community training on basic PV mini-grid maintenance is as follows:

Table 20: Timeline of Pilot Community Training on Basic PV mini-grid maintenance based on TOR for Procurement of Technical Consultants

	B10							202	3										202	ı						20	25		
Kegiatan	PIC	STATUS	1	2	3	4	5	6 7	7 8	9	3 10	11	12	1	2	3	4	5	6	8	9	10	11	12	1	2	3	4	5
Implementation of Consulting Services		PLAN		П																									
Implementation or consulting betwices		ACTUAL																											
Final Design of PLTS Pilot Project Upgrade (Sebatik / Derawan)		PLAN																			Π								
inal Design of PL15 Pilot Project Upgrade (Sebatik / Derawan)		ACTUAL																											
Preparation of Biddoc for PLTS Pilot Project Upgrade (Sebatik / Derawan)		PLAN																											
reparation of biddoc for PL15 Pilot Project Upgrade (Sebatik / Derawan)		ACTUAL																											
PLTS Pilot Project Upgrade Procurement Process (Sebatik / Derawan)		PLAN																											
PETO Filot Floject opgrade Floculeille it Flocess (Sebatik i berawari)		ACTUAL																					П					П	
PLTS Upgrade Construction Process and Commissioning (Sebatik / Derawan)		PLAN								П						Т											Т	Т	П
re i opgrade constituction riocess and confinissioning (debatik i berawan)		ACTUAL																					П					П	
Implementation of Operation and Maintenance of Upgraded PV mini-grid		PLAN								Т						П		Т		Т	Т	Т	П					Т	П
implementation or Operation and Maintenance or Opgraded PV mini-grid		ACTUAL																Т		Т			П				Т	Т	
Material preparation according to the PLTS manual module and		PLAN														П		Т		Т			П					Т	П
the implementation of TOT		ACTUAL																		Т			П				Т	Т	
Workshop for Local Communities (Sebatik / Derawan)		PLAN											\neg									T	Г						
workshop for Local Communities (Sebatik r Derawan)		ACTUAL																											

3.4.3 RBL Non-DLI 3: Capacity for social monitoring

The definition of indicators is an annual report on the social impact of electrification with sexdisaggregated data published at the end of 2022. Discussion on the preparation of the annual report on the social impacts of electrification was carried out on February 24, 2022. In the discussion, a timeline was agreed to prepare data and reports must be submitted to the Corporate Secretary by 31 March 2022. PLN has completed the draft report material on March 18, 2022 and has submitted it to ADB for input. In 30 June 2022, the 2021 PLN Sustainability Report has been published and the material for the social impact of electrification has been included in the report.

3.5 Grant Implementation

3.5.1 Grant JFPR (Japan Fund for Poverty Reduction)

a. Target 1. An additional 16,000 poor households will receive PLN electricity by 2024, with results disaggregated by male/female headed households. Currently, the mechanism for budgeting and recording assets is being pursued at PLN. PLN has no experience in using grants using Regional operating budgets. PLN has held a meeting with related divisions (DIVANG, DIV PBH, DIV AKT, and DIV Regional) where a solution was obtained for the Determination of the Budget Ceiling to be issued by the Regional based on the availability of liquid grants in the PLN escrow account. "FIX" which is currently being worked on by DIV STI with estimated completion in December 2022. It is necessary to discuss internally with PLN regarding the potential absorption of possible JFPR grants, namely In-house wiring and Low Voltage Poles Expansion.

b. Target 2:

- (i) An e-module was developed and two trainer-training sessions on conducting community workshops for the safe and productive use of energy were conducted with participation by at least 58 PLN staff. ADB provided input regarding material from the PLN Pusdiklat on September 27, 2021. The PLN Pusdiklat held a Training on Trainer for PLN employees who had been proposed by UIW into 3 batches. From Batch 1 and Batch 2 (August 2021), and Batch 3 (October 2021), there were a total of 68 participants with a total of 28 female participants. The plan is to complete the shortage of trainers due to moving and retiring, so every UIW this year will start applying for ToT training again. Currently, those who have conducted the ToT again are UIW Kalselteng, UIW MMU, and UIW P2B at the end of July and early August 2022. In the Instructor Training (ToT) on June 30 at Udiklat Banjarbaru, UIW Kalselteng and all UP3s participated. Meanwhile, the instructor training on 1-3 August 2022 at Udiklat Makassar was attended by UIW with only one staff in charge of holding a workshop in 2021, namely from: UIW MMU office and from 3 UP3 (Masohi, Manokwari and Timika). For UP3 Saumlaki, the proposed participants for the 2022 ToT have not been attended so the trainer for consumer education only has one employee. The total participants who took part in and passed the 2022 ToT for UIW Kalselteng, UIW MMU, and UIW P2B were 73 male employees and 16 female employees.
- (ii) Culturally sensitive materials (eg language and literacy, among others) for safe and productive use of energy. Culturally sensitive materials (eg language and literacy, among others) for safe and productive energy use can be developed by each of the 29 UP3 offices for community education workshops. Currently, UIWs who have delivered are UIW West Kalimantan, UIW Kalselteng, UIW Kaltimra, and UIW P2B. The UIW delivered at the end of April 2022. As for the UP3 at UIW MMU that have delivered consumer education materials with the addition of culturally sensitive material on the DLI 7 evidence link, 3 out of 7 UP3s in September 2022. The UP3s are UP3 Tual, UP3 Saumlaki, and UP3 Ternate.
- c. **Target 3.** A baseline socio-economic and gender assessment carried out in 2021 and a follow-up socio-economic and gender impact evaluation with input from an expert working group. PLN and ADB have agreed that ADB will employ a team of

international individual consultants in addition to the grant and PLN will employ a national survey company. For the preparation of the focal person working group, a working group was formed from the relevant divisions at PLN Central and UIW in Maluku – Papua. Formation of the Advisory Team has issued a Team Decree with No. 0092.K/DIR/2022 concerning the Establishment of a Assistance Team for the Implementation of the Grant Socio-Economic and Gender Impact Evaluation in Maluku Papua on 15 March 2022. ADB has hired international consultants from Milan University, which are Giovanna d'Adda and Jacopo Bonan. PLN and consultants together with ADB have held several discussions related to data needs for assessment activities and PLN has sent the required data. The procurement plan for the national surveyor will be finalized by the MRE Division, the current progress of the RMP Division (PLN) is waiting for recommendations from the ADB regarding recommended universities (for surveyor). The local surveyor procurement process is estimated to take 3 months.

3.5.2 Grant ACEF (Asian Clean Energy Fund)

a. Target 1:

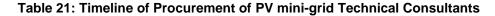
- (i) Additional power generation from solar PVs (<10 MW) increased by an additional 4,020 MWh annually by 2024. (2019 baseline 0 MWh).
- (ii) 17,500 HHs have access to PLN electricity from improved PLTS by 2024. (2019 baseline 0 HHs).

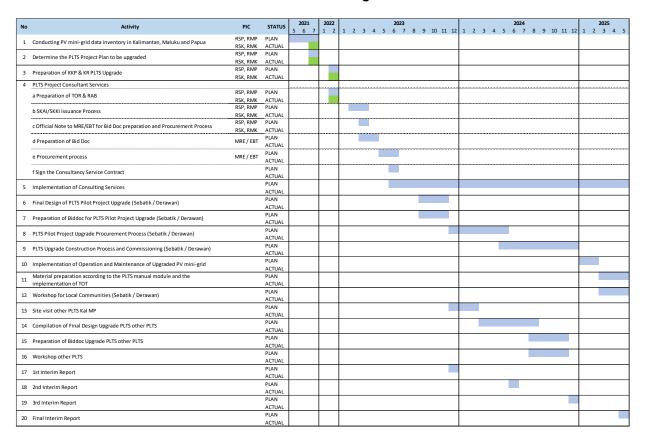
Achievement of the implementation of the ACEF grant Target 1 was not achieved because there was no PLTS that had been upgraded to remote monitoring and the hybrid system with EMS produced kWh of production.

b. Target 2:

- (i) 10 PLN PLTS upgraded and made operational with remote monitoring by 2024. (2019 baseline 0 PLTS upgraded).
- (ii) 10 PLN PLTS upgraded and made operational with hybridization utilizing energy management systems by 2024. (2019 baseline 0 PLTS upgraded).
- PLN will upgrade 14 PLTS (3 from UIW Kalbar: Limbung Island, Temajuk, Siding; 2 from UIW Kaltimra: Sebatik, Derawan; 2 from UIW MMU: Tior Island, Daruba, 7 from UIW P2B: off-grid Beo, off-grid Bianci, Arborek, Saonek, Oksibil, Mansinam, Dogiyai) to include remote monitoring and hybridization using energy management system. Construction of one PLTS pilot upgrade in Derawan will be conducted from H1 2024 for COD in December 2024, while another 13 PLTS ugrades will be completed by October 2025. Power generation expected from 14 PLTS upgrades is 3.596 MWh.
- c. **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).

Based on the timeline for the procurement of PLTS supporting consultants in Kalimantan and Maluku - Papua, the possible implementation may start in 2023. So that the achievement of the 3 targets in the ACEF grant will be implemented no later than 2025. The current obstacle is budget changes that have not been contracted will be accommodated in the RKAP 2023 for the year 2022 RKAP has been closed.





3.6 Program Action Plan (PAP) Implementation ADB RBL Programs

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
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 (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	UID/UIW DIV ODS, DIV ODM DIV RSD	From 2020	item (i) and (ii) 1. KKP samples available for Distribution work, both marketing, network expansion, and additional RE capacity are available which was approved in the first quarter of 2022 • UIW Kalbar: 4 Distribution programs and no RE program • UIW Kalselteng: 5 Distribution programs, 1 used equipment warehouse program, and no RE program • UIW Kaltimra: 8 Distribution programs and 1 RE Program • UIW MMU: 5 Distribution program and no RE Program • UIW P2B: 8 Distribution program and no RE Program • UIW P2B: 8 Distribution program and no RE Program 2. PLN UIW at KMP has proof of SKAI and SKKI which are published until Q2 2022 item (iii) 3. PLN has a sample documentation of the implementation of the safety briefing of PLN and its partners in TW IV • UIW Kalbar: JSA documents available in QI and QII 2022 • UIW Kalselteng: JSA documents available in QI and QII 2022 • UIW Kaltimra: JSA documents available in QI and QII 2022 • UIW MMU: JSA documents available in QI and QII 2022 • UIW P2B: JSA documents available in QI and QII 2022 • UIW P2B: JSA documents available in QI and QII 2022 • UIW Kalbar: 6 documents available in QI and QII 2022 • UIW Kalbar: 6 documents • UIW Kalselteng: 5 documents • UIW Kalselteng: 5 documents • UIW Kaltimra: 6 documents • UIW Kaltimra: 6 documents • UIW MMU: 5 documents • UIW MMU: 5 documents • UIW And and cold storage
				needs, ALMA, and cold storage • UIW Kalbar: 4 document

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
				 UIW Kalselteng: 3 documents UIW MMU: No correspondence yet UIW P2B: 2 document in Biak and Jayapura (cold storage) and 1 document in Nabire Item (vi) 6. PLN has a Q2 2022 investment realization 7. PLN received the results of the Geospatial Least Cost Study from Castlerock on April 1, 2022 and Divisi RMP has submitted the results of its study by Letter No. 20594/KEU.01.08/C01100100/2022 dated April 6, 2022 to UIW MMU and UIW P2B as well as inviting UIW MMU and UIW P2B to attend the discussion meeting on April 12, 2022. The MoM of the meeting on April 12, 2022 has sent by Div RMP's letter No. 23224/KEU.01.08/C01100100/2022 dated April 20, 2022. The results of the meeting, UIW were asked to fill out the Gspreadsheet to be able to evaluate whether the rollout of electrification in Maluku and Papua region using the Geospatial Analysis data from ADB / Castlerock. From the results of filling the Google Spreadsheet, here are some evaluation results: a. Some rollouts of electrification in Maluku anda Papua is same with the PLN roadmap electrification, its means that the geospatial analysis data from ADB have been included in the roadmap of PLN Maluku and Papua, but some have not been included in the roadmap. Some locations in the rollout as planned in the Geospatial Analysis Study also the road map of PLN have been electrified and some are still in progress. b. The PLN electrification roadmap used is the result of the UGM study and has been synchronized with the survey results of UIW MMU and UIW P2B and also syncronized with several electrification requests from the local government c. For the next electricity plan, geospatial study data from ADB is also one of the references in the preparation of electricity rollout in the Sulmapana Region. The link of Gspreadsheet: https://docs.google.com/spreadsheets/d/1wNxHUuGhxxzXhUJtlA4LdSsLKEWOa9FW/edit#gid=633615165

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB		
Technica	al Design					
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, DIV KEU PUSLITBANG DIV RSD	From 2022 and 2023	The Center for Research and Development has conducted discussions/knowledge sharing with transformer manufacturers and academics. The next ongoing activities are simulations of AVR, SWER, 3-phase and 1-phase systems and preparation of standard review documents. The data analysis from UIW has been completed. Next, we will analyze field data for units that implement single phase. The study report will be completed in December 2022, while the technical guidance will be completed in 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, DIV KEU PUSLITBANG DIV RSD	From 2022 and 2023	The Center for Research and Development has conducted discussions/knowledge sharing with transformer manufacturers and academics. The next ongoing activities are simulations of AVR, SWER, 3-phase and 1-phase systems and preparation of standard review documents. The data analysis from UIW has been completed. Next we will analyze field data for units that implement single phase. The study report will be completed in December 2022, while the technical guidance will be completed in 2023.		
Program	n Result					
4	(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; (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	DIV RKO, DIV KEU, PUSDIKLAT, DIV MRE, DIV RSD, DIV PPR	From 2021	(i) a. PLN has conducted further joint discussions regarding the budgeting process and grant implementation, namely with DIV RSD, DIV PPR, DIV RMR, DIV ANG, DIV AKT and UIW regarding the mechanism for coordinating the proposal and use of the ADB JFPR grant budget with a reimbursement system. DIV PBH and DIV STI together carry out the process of assessing change request (CR) details and W4 business processes at FIX and then the timeline for the work will be delivered. There is an issue related to free electricity connection, there is the government's BPBL 2022 program where the target beneficiaries are the same as the free electricity grant program. Based on the results of regional discussions with DIV APR and DIV ATS, the potential provincial customers have entered the ESDM BPBL in 2022, for North Maluku it is not included in the program, with a potential		

PAP Items	Indicator	Responsible Teams	Time Frame		PLN CI	laim to	ADB		
	experts, on impact assessment, to review and approve the firm's outputs; (iii) Conduct a socio-economic and gender impact assessment				00 customers. Minutes of agre istance Budget Plan (BPBL), for				
	with a query-able database of the program in Maluku and Papua, with inputs from the expert working group for endorsement by PLN management.			NO	MATERIAL		Daya	450 VA	
							Vol	Satuan	
				1	MCB satu pole 10A + Box	SNI	1	buah	•
				2	Kabel NYM 3 x 4 mm²	SNI	1	Meter	
				3	Kabel NYM 3 x 2,5 mm ²	SNI	10	Meter	
				4	Kabel NYM 2 x 1,5 mm ²	SNI	10	Meter	
				5	Kotak Kontak 16 A Outbow	SNI	1	buah	
				6	Saklar Tunggal Outbow	SNI	1	buah	
				7	Saklar Ganda Outbow	SNI	1	buah	
				8	Fitting Plafon	SNI	3	buah	
				9	Earthing Rod/Grounding 25 mm ²		1	Set	
				10	Lampu LED 10 W	SNI	3	buah	
				11	Material Bantu (tDos, roset, klem, paku dan isolasi)		1	Lot	
				12	Stiker		1	buah	
				1. lr	Material Cost include: astallation Service connection Fee				
				3. S					
					nitial voucher				
					tamp duty				
				PLN	b. For the plan to add trainers to Pusdiklat, there are 3 proposing gnment letters to UPDL, namely	sals tha	t have b	een follow	ed up by their

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
				MMU. For UIW Kalselteng, ToT has been held on June 30 (37 partcipants), 2022, while UIW P2B and UIW MMU have been held on August 1 and 2, 2022. UIW Kaltimra will propose ToT needs to Regional HTD. For addition, culturally sensitive materials are available for UIW Kalbar, UIW Kalselteng and UIW Kaltimra (represented per UIW) and for UIW P2B in April 2022 and UIW MMU per UP3 in Q3 2022. (ii) To support the assistance of the Socio-Economic and Gender Impact Assessment in MP, DIV RMP has issued a Team Decree: LAMPIRAN I KEPUTISAN DIREKSI PT N. PERSERO) NOMOR 0092 st // DIS // 2022 TANGGAL 15 Maret 2022 SUSUANN REANGGOTAN 15 Maret 2022 SUSUANN EARNGGOTAN 15 Maret 2022 1. Ketua EVP Perencanaan dan Pengendalian Regional Sulawesi, Maluku, Papua dan Nusa Tenggara 2. Wakil Ketua a VP Manajemen Keuangan Regional Sulawesi, Maluku, Papua DIV RMP dan Nusa Tenggara b. VP Pengenidanan And End Distribusi Regional Sulawesi, Maluku, DIV RMD Papua dan Nusa Tenggara 3. Anggota a VP Pengenbangan dan Standarisasi Proses Administrasi DIV MRE Perencanaan dan Enjiniring b. VP CSR c VP Hubungan Investor, Institusional dan GCG SET PER DIV KOM c VP Hubungan Investor, Institusional dan GCG SET PER DIV KOM papua dan Nusa Tenggara UIW MMU Papua dan Nusa Tenggara I VP Administrasi Pipaman dan Hibah Luar Negeri DIV RKO g. Serior Manager Perencanaan UIW MMU b. Serior Manager Riega & Pelayanan Pelanggan UIW MMU J. Serior Manager Niaga & Pelayanan Pelanggan UIW MMU J. Serior Manager Niaga & Pelayanan Pelanggan UIP ZB ADB has hired international consultants from Milan University, which are
				Giovani and Jacopo. PLN and consultants together with ADB have held several

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB					
				discussions related to data needs for assessment activities and PLN has so the required data (iii) PLN and consultants together with ADB have held several discussions related to data needs for assessment activities and PLN has sent the required data. The procurement plan for the national surveyor will be finalized by the M Division, the current progress of the RMP Division (PLN) is waiting recommendations from the ADB regarding recommended universities (surveyor).					
5	5 (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; DIV MEB, DIV RSD, DIV RKO, DIV KEU		From 2021		assesse	e 10 locations in KMP that are proposed to the d by consultants as Non DLI 2. 2 of the 10 PLT that will be upgraded to remote pilot monitoring	S locations, Derawan or and local training		
	(ii) 10 PLN PLTS upgraded and operational with remote monitoring;				No	Lokasi	Kondisi		
	(iii) 10 PLN PLTS upgraded and operational with hybridization utilizing energy management systems; and						1	Kalimantan Barat	
	(iv) At least one pilot community training delivered on basic PLTS maintenance where remote monitoring is used with at least 30% women's participation.								
	icast 30 % women's participation.				2	Kalimantan Timur & Utara (Pilot Project)			
						a. PLTS Sebatik (340 kWp), Ds Padaidi, Kec Sebatik, Kab Nunukan	Operation		
						b. PLTS Derawan (90 kWp), Ds Derawan, Kec Pulau Derawan, Kab Berau	Operation		
					3	Maluku & Maluku Utara			
						a. PLTS Pulau Tior (100 kWp), Ds Tioor, Kec Tioor, Kab Seram Bagian Timur	Operation		
						b. PLTS Daruba, (950 kWp) Ds Wamama, Kec Morotai Selatan, Kab Pulau Morotai	Operation		
						c. PLTS Amarsekaru, (100 kWp)	Damaged		

PAP Items	Indicator	Responsible Teams	Time Frame		PLN Claim to ADB		
						d. PLTS Banda, (100 kWp)	Damaged
						e. PLTS Elat, (200 kWp)	Damaged
					1	Kalimantan Barat	
						a. PLTS Siding (40 kWp), Ds Temong, Kec Siding, Kab Bengkayang	Damaged
					2	Kalimantan Timur & Utara (Pilot Project)	
						a. PLTS Sebatik (340 kWp), Ds Padaidi, Kec Sebatik, Kab Nunukan	Operation
				(ii) (iii) (iv)	estimate 2023, if a will be a (exceeding target, the targets is 159,165). There is for other consultation There is for other consultation PLN Pustraining updated	no progress yet. procurement and constructior r PLTS will be carried out in separate contract	around 2,600 MWh. For eted in early 2023, there be 3,500 MWh in 2023 ed to the 2022 - 2024 able to achieve these estimated addition of a of system upgrades is with PLTS support of system upgrades is with PLTS support of materials for er 2021. This will be mote monitoring and

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
Monitori	ing and Evaluation			
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.	DIV RSD DIV STI, DIV APN, dan DIV ATS	From 2020	 (i) a. DIV RSD as coordinator has prepared a workflow for communication, monitoring, and evaluation of DLI and PAP achievements. b. WAG is available for communication, coordination and sharing of information related to the Program. c. PLN has evaluated and monitored with all PICs for the implementation of DLI and PAP in the Q1 2022 on April 18-20 2022, monitoring TW II 2022 on 15, 18-19 July 2022, monitoring TW III and TW IV on 21 Dec 2022 (ii) An interface module is available between the PLN AP2T database and the National TNP2K that allows identification and tracking of households headed by women/men and can be monitored over a period of time and per UP3 at UIW.
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, PUSDIKLAT	(i) From 2020 (ii) From 2020 (iii) By 2025 (iv) By 2025	(i) The interface module between PLN's AP2T and the National TNP2K database can be used and has undergone additional filters for the on period and selection of all districts/cities. As for the template, there is an improvement in the naming of UP3 and ULP according to the naming at PLN. (ii) PLN Pusdiklat has completed developing a training module on livelihood opportunities for women which is included in consumer education (DLI 7). Training on the safe and productive use of energy is ongoing. (iii) In the TOR, it is explained that in the community survey there were interviews with 5 resource persons, of which 1 - 2 were women. (iv) Based on the implementation timeline, the training will be held in 2025
Financia	al Management	<u> </u>		
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	DIV ANG	From 2020	 (i) The MAXICO program in preparing financial reports is running normally. As for the financial reporting of subsidiaries, it is still uploaded manually because it is in a separate system. (ii) E-Budget is implemented in Regional program targets. Evidence of the use of

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
	MAXICO and E-Budget systems	DIV STI		E-Budget documentation at UIW has been delivered. (achievement once in program) (iii) An update regarding the Single Source of Truth (SSoT) program from the IT development party has been presented and is currently entering the first stage, namely shorter term improvement, 1 of 6 stages being carried out.
9	High level summary of key internal initiatives and their impacts included in the 2nd quarter and annual RBL progress reports.	DIV TCO	From 2020	PLN (DIV TCO) submitted an updated report on the main internal initiatives to reduce costs and strengthen financial sustainability of 21 initiatives.
Procure	ment			
10	Report submitted following procurement Monitoring Framework.	DIV MRP, DIV RSD, and UID/W	From 2020	In Q3 2022 procurement recapitulation data has been submitted by DIV MRP on 22 December 2022.
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 RSD DIV MEB DIV MRE	From 2021	On Progress. Budget Publishing is estimated to be published in 2023.
12	Procurement audits each year of 10% of all contracts at Wilayah/Area offices. Procurement audits conducted and information sheet shared with ADB	DIV MRP, DIV RSD, UID/UIW, and SPI	From 2021	SPI Regional Kalimantan, Maluku, and Papua has submitted a resume of the 2022 interim audit report to the Regional.
Safegua	rd	1	1	
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	DIV K3L, DIV TEK, DIV RSD, DIV ODS, DIV ODM, and	From 2020	(i) DIV RSP submitted a Letter of Assignment of revision-2 Focal Person safeguards in Kalimantan based on the UIW proposal which was submitted to the Regional in the period January - June 2022. For DIV RMD and DI RMP there is still no confirmation of the change in the focal person safeguards. In the future, for changes in the focal person at UIW, UP3, and UP2K, the authority and publication

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
Items	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. (i) Safeguards focal persons appointed at HSSE, PPT, each UIW, UP3 and UP2K office.	UID/UIW		will be handed over by the GM of each UIW. (ii) Currently in the development stage with Hatfield including the training materials. Estimated completion of Technical guidance (including training material) in August 2022. (iii) Annual training (including dissemination of technical guidance) will be held at the end of november 2022.
	(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			(iv) Being prepared by Hatfield for the social safeguards brochure. The brochure will be included in the technical guidance as an attachment.(v) The final version of the COP has been submitted Hatfield to ADB on 9 of June 2022.
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 (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. (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 DIV RSD and DIV RMD (iv) UKL/UPL of annual activities prepared in accordance with screening results and submitted to relevant DLH. Executive	(i) UID/UIW, DIV TEK and DIV K3L (ii) UID/UIW, DIV TEK and DIV K3L (iii) UID/UIW, DIV RSD (iv) UID/UIW, DIV TEK and DIV K3L	From 2020	To achieve the environmental safeguards PAP, DIV K3L has issued letter No. 8314 / KLH.00.01 / C01060500 / 2021 dated March 12, 2021 regarding information on DLI and PAP targets and guidelines for filling out screening forms. (i) All UIWs have filled out the screening form for the activities (in term of budget) that has been approved within Q2 2022. There is no Renewable powerplant added in this term. Based on screening forms, there are severals workplans that falls into KBA and/or IP area: a. UIW Kalselteng: 6 workplans (80,53 kms) screened as KBA, none as IP b. UIW Kaltimra: 4 workpans (0,8 kms) screened as KBA and IP. c. UIW Kalbar: none d. UIW MMU: 1 workplan (1,4 kms) screened as KBA and IP. e. UIW PPB: 9 workplans (35,8 kms) screened as KBA, 6 workplans (5,16 kms) as IP.

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB	
	summaries of UKL/UPL disclosed on PLN website. Full reports made available upon request.			 (ii) As of Q4 2021, there are 3 Units that have submitted letters of reques directions for Environmental Documents to the KLHK, namely UIW Kal UIW Kaltimra, and UIW Kalselteng. UIW Kalbar has received directions the preparation of Environmental Documents on October 5, 2021, Kaltimra on December 21, 2021, and UIW Kalselteng are still waiting directions. UIW MMU and UIW P2B are preparing the data and docum required for submitting the official letter of request. (iii) partially completed. Of 38 UP3/UP2K units, IR screening was reporte 26 units. (iv) Waiting for the completion of point process (ii) The above update is still at the position of 2021, will be updated in the first scannual report 2022 	
15	Strengthen meaningful consultation with affected persons including customary communities and vulnerable groups. Improve grievance redress mechanism (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	UID/UIW, UP3, UP2K, DIV RSD, DIV ODS, DIV ODM	2020 onwards	 (i) Some UP3 has done the consultation. The list of the consultation can be seen in the form. (ii) The list of the consultation that has been done can be seen in the form. However, there is no evidence of the MoM. But based on UP3 information, the topic of the consultation has included the selection of sites and implications of distribution lines, 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) The list of the consultation can be seen in the form. However, the evidence (attendance list) is still minimum. Most of UP3 still not make the attendance list. And of the attendance list that is available has not segregated by gender 	

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
	reached with participants completed with attendance list segregated by gender and customary (indigenous) status. (iv) All complaints/grievances and remedial measures recorded and compiled.			and customary status. (iv) Done. All UP3 has submitted the complaint form and reported no complain for semester 1 2022 period
16	Improve transparency and fair compensation for negotiated land acquisition and voluntary land donation to ensure that people will maintain the same or better level of income or livelihood (i) Written agreement (private land) for 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 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.	(i), (ii): UID/UIW, UP3, UP2K, DIV RSD (iii): IVA (iv) UID/UIW, UP3, dan UP2K	From 2021	(i) Written agreement for distribution transformer -Status per UIW a. UIW Kalbar - Number of installed distribution transformer on private land: 54 - Number of written agreement from land owner: 54 - Achievement: 100% b. UIW Kaltimra - Number of installed distribution transformer on private land: 23 - Number of written agreement: 23 - Achievement: 100% c. UIW Kalselteng - Number of installed distribution transformer on private land: 22 - Number of written aggreement: 22 - Achievement: 100% d. UIW MMU: - Number of installed distribution transformer on private land: 47 - Number of written aggreement: 15 - Achievement: 31,91% e. UIW P2B: - Number of installed distribution transformer on private land: 10 - Number of written aggreement: 7 - Achievement: 70% (ii) Written agreement regarding voluntary land donation for construction of micro-hydro and biogas power plants and village-level solar PV from land owners

PAP Items	Indicator	Responsible Teams	Time Frame	PLN Claim to ADB
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 (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.	DIV K3L, DIV TEK, DIV ODS, DIV ODM	From 2021	-Status per UIW a. For Kalimantan there is no costruction of micro hydro and biogas power plant and village level solar PV b. UIW P2B: there are 15 voluntary land donation for solar PV in 2017-2020 period. The document of land donation have been submitted for all 15 land plots (iii) Done. The list of the land owner of transformer installed can be seen in the form, also the picture of the written agreement. The written agreement has stated that the donation of the land is not more than 5% of the total land owned. (iv) There is no lost of non land asset or income affected by the program. It can be related to the complaint form that reports no complain for semester 1 2022 period. (i) Result of safeguard screening and safeguard program action has been Included in PLN report as written in achievment per indicator (PAP) (ii) For Kalimantan, all UIW has submitted form 7 Monitor Dampak Sosial Ekonomi and no effect has been founded/happened so there is no corrective action need to be reviewed by DIVRSD (iii) PLN UIW at KMP has confirmed data on the number of PLN electricity customers in customary villages through the reference data "List IP 2021".

PAP 9. High Level Summary of Key Internal Initiatives and Their Impacts Included In The 4rd Quarter 2021 RBL Progress Reports

Date of Report	10 th October 2022	For Period Ended	1 st June to 31 st September 2022
Version	1.0	Update	1 st Update

No	Sub Initiative Number	Sub Initiative Name	Description	Start Date	End Date	Status (based on Wave)	Expected Costs / Benefits	Actual Cost / Benefits
1	504	Completion of Transmission and GI Project at UIP JBT - Java North Line	Completed the transmission and substation (GI) project in central Java so that it can distribute energy from cheaper generators	01/01/2020	30/09/2021	Completed	Expected savings of Rp280B (2022), Rp 1.68T (2023), Rp 2.42T (2024) L4 Executed 10 Sept 2021	Saving in 2022 = 0
2	500	Completion of Transmission and GI Project at UIP JBB	Completed the transmission and substation (GI) project in western Java so that it can distribute energy from cheaper generators	01/01/2020	01/12/2022	On track	Expected savings of Rp 1.68T (2023), Rp 2.42T (2024)	Saving start in 2023
3	496	Optimization of reactive power through the installation of capacitors in the JBT Area	Efforts to maintain the voltage at normal conditions in order to be able to distribute energy from cheaper generators through the installation of capacitors in the GI	01/01/2020	01/12/2021	Completed	From 2021 savings of Rp 16.6B per year is expected	- Saving in 2021 Rp16.6B Saving in 2022 Rp16.6B

No	Sub Initiative Number	Sub Initiative Name	Description	Start Date	End Date	Status (based on Wave)	Expected Costs / Benefits	Actual Cost / Benefits
4	505	Completion of Transmission and GI Project at UIP JBTB	Completed transmission and substation (GI) projects in eastern Java and Bali so that they can distribute energy from cheaper generators.	01/12/2021	01/12/2024	On track	Expected savings Rp900B (2023), Rp 2.3T (2024)	Saving start in 2023
5	468	Scale Up EAM Distribusi di Jawa-Bali	Implementing the Enterprise Asset Management (EAM) Program in the distribution sector in Java and Bali to reduce disruption	01/05/2019	15/12/2021	Completed	Expected savings of Rp 8.16B (2021)	- Get saving of Rp72.5B in 2021
6	2459	[QW 20] Reducing PJBB Coal Transportation Costs through Negotiations	Negotiating Existing Coal Contracts to obtain more efficient transportation costs	01/01/2020	15/10/2020	Completed	Expected savings of Rp 56B (2021)	- Get saving of Rp45.7B in 2021
7	4864	Development of Icon Cash e-money	Development of an electronic wallet (e-wallet) platform to generate additional revenue for PLN	21/09/2020	30/06/2022	On track	Expected revenue of Rp7.1B (2021), Rp9.6B (2022), Rp12.9B (2023), Rp 17.1B (2024)	-
8	1141	[QW 20] Coal Switching – PJB	Program to reduce the calorific value of coal from Medium Rank Coal (MRC) to Low Rank Coal (LRC) to reduce the cost	11/05/2020	30/11/2020	On Hold	From 2021 expected savings of Rp155B, Rp72B	- Saving in 2021 Rp19B

No	Sub Initiative Number	Sub Initiative Name	Description	Start Date	End Date	Status (based on Wave)	Expected Costs / Benefits	Actual Cost / Benefits
			of supply (BPP) of coal at PLTU Indramayu, PLTU Rembang, PLTU Pacitan and PLTU Tanjung Awar Awar					No Saving in 2022
9	5213	Roll out AA for EE 2021 - Java (Brantas, Pacitan, Rembang)	Implement advanced analytics to improve energy efficiency at PLTU Brantas, Pacitan, and Rembang.	01/01/2021	31/12/2021	Completed	Savings of Rp 105.3B per year from 2022 is expected	- Get saving of Rp1.1B in 2022
10	487	Captive Power: Hot prospect - engage and win power supply with PT ITP (50 MW)	Efforts to increase sales to PT ITP's captive power owners	20/05/2018	31/12/2020	Completed	Expected revenue of Rp148B (2022), Rp197.3B (2023-2024)	Revenue in 2022 = 0
11	915	Possible prospects - mining captive JIIPE (30 MVA	Efforts to attract potential target customers in the mining industry	20/08/2020	31/01/2022	Completed	Expected revenue of Rp645.7B (2022), Rp968.6B (2023), Rp968.6B (2024)	Revenue start in 2023
12	1106	[KPI] Create and Run a Marketing and Sales Program - 2022	Perform end-to-end customer acquisition activities	20/08/2020	30/11/2022	On Track	Expected revenue of Rp858B (2022)	Revenue in 2022 Rp363.2B
13	7931	Possible prospects - oil and gas Pertamina MoU RU VI Balongan	Efforts to negotiate and enter into contracts with Captive Pertamina RU VI Balongan customers	11/01/2021	30/06/2022	On Track	Expected revenue of Rp138.1B (2023), Rp236.8B (2024), Rp236.8B (2025)	Revenue start in 2023

No	Sub Initiative Number	Sub Initiative Name	Description	Start Date	End Date	Status (based on Wave)	Expected Costs / Benefits	Actual Cost / Benefits
14	12866	Captive prospect - Mining/Smelter: PT Stargate Mineral Asia (200 MVA)	Efforts to negotiate and enter into contracts with Captive customers PT Stargate Mineral Asia	12/11/2021	17/06/2022	Completed	Expected revenue of Rp29.9B (2023) and Rp358.8B (2024)	Revenue start in 2023
15	497	Optimization of reactive power through the installation of capacitors in the JBTMB region	Optimizing Dispatch in the JBTMB area	8/08/2020	1/12/2024	On Track	Expected savings of Rp161.1B (2023) and Rp161.1B (2024)	Saving start in 2023
16	509	Completion of the Transmission and GI Project at UIK SBS - South Sumatra-Lampung Reinforcement and PLTP Rantau Dadap Evacuation	Completed the transmission and substation (GI) project in Southern Sumatra so that it can distribute energy from cheaper generators	8/08/2020	1/12/2024	On Track	Expected savings Rp40B (2023), 261B (2024)	Saving start in 2023
17	899	[QW 21] Implementation of the Decree of the Minister of Energy and Mineral Resources No. 13 in Sorong	Implementation of the Decree no 13 related to gasification of 58 power plants	17/08/2020	31/01/2021	Complete	Expected savings of Rp112B (2021), Rp 272B (2022), Rp528B (2023), Rp592B (2024)	Get saving of Rp212B (2021), Rp196.4B (2022)
18	9526	[QW21] Hot prospect - engage and acquire Captive Power : Tjiwi Kimia (30 MW)	Efforts to increase sales to Tjiwi Kimia's captive power owners (30 MW)	4/05/2021	30/06/2021	Complete	Expected revenue of Rp183B (2021), Rp274.6B (2022-2024)	Revenue in 2021 Rp179.1B, Rp157.1B (2022)
19	1105	[KPI] Create and Run a Marketing and Sales Program - 2021	Perform end-to-end customer acquisition activities	20/08/2020	15/12/2021	Complete	Expected revenue of Rp120B (2021)	Revenue in 2021 Rp125B

No	Sub Initiative Number	Sub Initiative Name	Description	Start Date	End Date	Status (based on Wave)	Expected Costs / Benefits	Actual Cost / Benefits
20	13754	[2022] Roll Out Digital Procurement di Kategori kWh Meter 1 Phase Prabayar	Implementation of Digital Procurement in the Prepaid 1 Phase kWh Meter Category	2/02/2022	27/04/2022	Complete	Expected savings Rp50B (2022)	Get saving of Rp503B in 2022
21	13755	[2022] Roll Out Digital Procurement di Kategori Trafo Distribusi	Implementation of Digital Procurement in the Distribution Transformer Category	2/02/2022	23/02/2022	Complete	Expected savings Rp209B (2022)	Get saving of Rp209B in 2022

4.1. Appendix 1

DAMPAK SOSIAL KELISTRIKAN MELALUI PENDANAAN ADB PROGRAM RESULTS-BASED LENDING (RBL) DI KALIMANTAN, MALUKU DAN PAPUA (KMP)

SOCIAL IMPACT OF ELECTRICITY THROUGH ADB RESULTS-BASED LENDING (RBL) PROGRAM FINANCING IN KALIMANTAN AND MALUKU-PAPUA (KMP)

PLN sedang melakukan program Akses Energi Berkelaniutan di Indonesia Timur — Pengembangan Jaringan Listrik (Tahap 2) dengan piniaman Asian Development Bank (ADB) modalitas Pinjaman Berbasis Hasil¹. Program ini dilakukan sejak 2020 sampai 2025 di Kalimantan, Maluku dan Papua (KMP). Program ini juga didukung dengan 2 hibah yaitu Asian Clean Energy Fund (ACEF) dan Japan Fund for Poverty Reduction (JFPR). Program ini bertujuan mendukung pengembangan jaringan listrik distribusi tenaga guna menghubungkan bisnis dan rumah tangga serta meningkatkan kualitas hidup di Indonesia Timur dengan pemanfaatan secara berkelanjutan listrik sebagai penggerak utama peningkatan kegiatan ekonomi. Berikut ini adalah beberapa dampak sosial dari program:

PLN is implementing Sustainable Energy Access in Eastern Indonesia — Electricity Grid Development Program (Phase 2) using Asian Development Bank (ADB) Results-Based Lending (RBL) modality². This program is carried out from 2020 to 2025 in Kalimantan, Maluku and Papua (KMP). This program is also supported by 2 grants, namely the Asian Clean Energy Fund (ACEF) and the Japan Fund for Poverty Reduction (JFPR). The program aims to to support the development of an electric power distribution network to connect businesses and households and improve the quality of life in Eastern Indonesia by using electricity in a sustainable manner as the main driver of increasing economic activity. Below are a few of the social impacts from the program.

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¹ Pinjaman Berbasis Hasil adalah bentuk pembiayaan berdasarkan kinerja, yang pencairan pinjamannya dilakukan berdasarkan hasil

² Results-Based Loan is a form of performance-based financing, where loan disbursement is based on results.

Pengembangan Jaringan Distribusi untuk Peningkatan Rasio Elektrifikasi di Kalimantan dan Maluku – Papua

Distribution Network Development to Increase Electrification Ratio in Kalimantan and Maluku – Papua

Data pada Tabel 1 di bawah menunjukkan penambahan pelanggan pada tahun 2022 sebesar 211.469 di Kalimantan. Rasio Elektrifikasi (RE) PLN meningkat dari 94,64% (4.355,708 pelanggan) pada tahun 2021 menjadi 95,92% (4.567.177 pelanggan) pada 2022. Sementara di Maluku-Papua, jumlah pelanggan 73.672 meningkat sebesar dengan peningkatan RE PLN dari 72,77% (1.327.014 pelanggan) di 2021 menjadi 73,70% (1.400.686 pelanggan) pada 2022.

Data in Table 1 below shows an increase of customers in 2022 by 211,469 The PLN Kalimantan. Ratio of Electrification (RE) increased from 94.64% (4,355,708 customers) in 2021 to 95.92% (4,567,177 customers) in 2022 Meanwhile in Maluku-Papua, the number of customers increased by 73,672 with a rise in PLN RE from 72.77% (1,327,014 customers) in 2021 to 73.70% (1,400,686 customers) in 2022.

Tabel 1: Jumlah Pelanggan Rumah Tangga PLN dan Ratio Elektrifikasi PLN, 2020-2022
Table 1: Number of PLN Household Customers and PLN Ratio of Electrification, 2020-2022

	Realisasi 2 2020 realiza		Realisasi 20 2021 Realiza		Realisasi 2022 2022 Realization	
Provinsi Province	Jumlah Plg. Rumah Tangga PLN Number of PLN Household Customers	RE PLN (%) PLN ER (%)	Jumlah Plg. Rumah Tangga PLN Number of PLN Household Customers	RE PLN (%) PLN ER (%)	Jumlah Plg. Rumah Tangga PLN Number of PLN Household Customers	RE PLN (%) PLN ER (%)
Kalimantan Barat West Kalimantan	1.161.542	92,29	1.237.754	93,24	1.312.057	93,91
Kalimantan Selatan South Kalimantan	1.190.728	99,64	1.246.260	99,67	1.292.203	99,68
Kalimantan Tengah Central Kalimantan	601.386	86,82	642.112	88,27	677.700	94,31
Kalimantan Timur East Kalimantan	1.012.538	94,40	1.066.553	94,60	1.111.263	94,80
Kalimantan Utara North Kalimantan	150.705	94,06	163.029	96,18	173.954	98,05
Kalimantan	4.116.899	94,01	4.355.708	94,64	4.567.177	95,92
Maluku Maluku	356.335	88,59	374.375	89,52	393.913	91,33

Maluku Utara North Maluku	261.472	85,97	280.106	86,78	296.678	87,42
Papua Barat West Papua	217.134	86,55	230.801	87,47	120.964	88,35
Papua Tengah Central Papua	-	,	1	ı	110.977	47,36
Papua Selatan South Papua	-	-	-	-	85.016	73,54
Papua Papua	415.845	50,95	441.732	53,13	243.468	89,22
Papua Pegunungan Highland Papua	-	-	-	-	27.959	12,09
Papua Barat Daya Southwest Papua	-	-	-	-	121.711	87,67
Maluku-Papua	1.250.786	70,53	1.327.014	72,27	1.400.686	73,70
Kalimantan + Maluku- Papua	5.367.685	87,24	5.682.722	88,28	5.967.863	89,58

Sumber: Sistem Informasi Laporan Manajemen (SILM) PLN Source: PLN Management Report Information System (SILM)

Di tahun 2022 peningkatan RE juga berdampak pada desa-desa dengan masyarakat adat sebagai berikut:

- Provinsi Papua: 5.521 desa dialiri listrik, dengan 467.420 total pelanggan termasuk 5 desa adat (Mamta/Tabi, Lapago, Ha-anim, Meepago, dan Sairei)
- Provinsi Papua Barat: 1.837 desa dialiri listrik, dengan 242.675 total pelanggan termasuk 2 desa adat (Bomberai dan Domberai)

Program ini juga memberikan akses listrik kepada keluarga miskin, termasuk

In 2022, the increase in RE also has impacts on villages with indigenous people, namely:

- 1. Papua Province: 5,521 villages are electrified with a total of 467,420 customers and including 5 customary villages (Mamta/Tabi, Lapago, Haanim, Meepago, and Sairei),
- 2. **West Papua Province:** 1,837 villages are electrified with a total of 242,675 customers and including 2 customary villages (Bomberai and Domberai).

The program also provides electricity

perempuan kepala keluarga (PEKKA) miskin. Sampai tahun 2022, terdapat 74.830 keluarga miskin yang mendapat sambungan listrik PLN, termasuk 14.207 perempuan kepala keluarga (18,99%). Angka ini merupakan hasil sinkronisasi Data Terpadu Kesejahteraan Sosial (DTKS) oleh PLN yang sudah tercatat pada aplikasi AP2T PLN (lihat Tabel 2).

access to poor households, including poor female head of households (FHH). Up to 2022, 74,830 poor households have been provided with PLN electricity connection, including 14,207 female head of household (18.99%). This number is obtained through synchronization of the Integrated Social Welfare Data (DTKS) by PLN which has been recorded in the PLN AP2T application (see Table 2).

Tabel 2: Rumah Tangga Miskin dan Perempuan Kepala Keluarga Miskin Penerima Sambungan Listrik PLN

Table 2: Poor Households and Poor Female Head of Households Provided with PLN Electricity Connection

Provinsi Province	Realisasi s.d. 2018 Up to 2018 Realization			Realisasi 2019 – 2022 2019 – 2021 Realization		
	KK Tidak Mampu Poor HH	KK Perempuan Tidak Mampu Poor Female HH		KK Tidak Mampu Poor HH	ou Mampu	
	Σ	Σ	%	Σ	Σ	%
Kalimantan Barat West Kalimantan	182.901	32.242	17,63%	27.639	4.077	14,75%
Kalimantan Selatan South Kalimantan	170.269	47.996	28,19%	22.593	6.075	26,89%
Kalimantan Tengah Central Kalimantan	66.661	14.640	21,96%	7.259	1.347	18,56%
Kalimantan Timur East Kalimantan	84.410	19.424	23,01%	8.319	1.532	18,42%
Kalimantan Utara North Kalimantan	10.829	2.011	18,57%	1.129	174	15,41%

Kalimantan	515.070	116.313	22,58%	66.939	13.205	19,73%
Maluku Maluku	78.941	11.393	14,43%	3.225	391	12,12%
Maluku Utara North Maluku	36.604	5.463	14,92%	1.513	154	10,18%
Papua Papua	33.762	4.602	13,63%	1.892	292	15,43%
Papua Barat West Papua	24.483	3.327	13,58%	1.261	165	13,08%
Maluku-Papua	173.790	24.785	14,26%	7.891	1.002	12,70%
Kalimantaan + Maluku- Papua	688.860	141.098	20,48%	74.830	14.207	18,99%

Sumber: Aplikasi Pelayanan Pelanggan Terpusat (AP2T) PLN Source: PLN Centralized Customer Service Application (AP2T)

Salah satu keluarga miskin penerima sambungan listrik PLN adalah Ibu Sahana yang tercatat di dalam Data Terpadu Kesejahteraan Sosial (DTKS) sebagai prempuan kepala keluarga yang lanjut usia. Melalui Program Satu Orang Satu Harapan, ia tersambung listrik PLN pada 31 Desember 2022. Ia tinggal di sebuah semi permanen Desa rumah kayu Bobaneigo, Kecamatan Kao Teluk. Kabuten Halmahera Utara, Provinsi Maluku Utara. Untuk melindungi kWh meter dari hujan, ia harus menutupinya dengan pakaian. Sebelum menerima aliran listrik, ia menggunakan lampu minyak tanah berukuran kecil. Saat ini konsumsi listriknya hanya untuk 3 lampu. Pemakaiannya terbilang irit. Sejak penyambungan pada akhir Desember 2022 hingga Maret 2023, ia belum

One of the poor families who received a PLN electricity connection was Mrs. Sahana. She is registered in the Integrated Social Welfare Data (DTKS) as the elderly female head of household. Through the One Person One Hope Program, she was connected to PLN electricity on December 31 2022. She lives in a semi-permanent wooden house in Bobaneigo Village, Kao Teluk Subdistrict, North Halmahera Regency, North Maluku Province. To protect the kWh meter from rain, she covers it with clothing. Before receiving electricity, she used a small kerosene lamp. Currently the electricity consumption is only for 3 lights. Its use is considered economical. Since having the connection at the end of December 2022 up to March 2023, she has not



Foto: Sahana, perempuan kepala keluarga di Maluku Utara, penerima sambungan listrik PLN.

Photo: Sahana, female head of household in North Maluku, recipient of PLN electricity connection.

2. Edukasi Masyarakat tentang Penggunaan Listrik yang Aman dan Produktifi Community Education about Safe and Productive Use Electricity

Pada tahun 2021 persiapan kegiatan edukasi masyakarat tentang penggunaan listrik amah dan produktif telah dilakukan. Pertama. penyusunan materi oleh ADB. Pusdiklat bekerjasama dengan Kedua, setiap unit induk wilayah (UIW) dan unit pelaksana pelayanan pelanggan (UP3) menunjuk perwakilannya terdiri 1 laki-laki dan 1 perempuan untuk mengikuti pelatihan untuk pelatih (TOT). Selanjutnya kegiatan edukasi di masyarakat mengenai listrik aman dan produktif diselenggarakan setiap tahun. Kegiatan edukasi ini dilakukan melalui pertemuan online, offline berupa workshop dan door to door. Selain

In 2021, preparations for community education on safe and productive use of electricity were carried out. First, the development materials by PLN Pusdiklat in collabration with ADB. Second, each regional administrative unit (UIW) and customer service implementation unit appoint their representatives (UP3) comprising of 1 man and 1 woman to participate in training of trainers (TOT). Since then, community education on safe and productive use of electricity were conducted anually. The community education is carried out through online meeting, offline in the form of workshop

bertujuan meningkatkan kesadaran pelanggan, kegiatan ini memberi manfaat bagi PLN dalam memperluas jangkauan pemasaran.

and door to door. Apart from the objective of raising customers' awareness, this activity is beneficial for PLN in expanding its market coverage.





Gambar: Pelaksanaan Lokakarya Edukasi Masyarakat di Pulau Hatta, Maluku Tengah, Maluku

Image: Implementation of Community Education Workshop in Hatta Island, Central Maluku, Maluku

Gambar: Pelaksanaan Lokakarya Edukasi Masyarakat di Barabai, Kalimantan Selatan

Image: Implementation of Community Education Workshop in Barabai, South Kalimantan

Pada tahun 2022, 4.923 orang termasuk 2.318 perempuan (47,09%) telah mengikuti kegiatan edukasi listrik aman dan produktif (lihat Tabel 3). Peserta kegiatan tersebut mencakup pelbagai lapisan masyarakat: akademisi, perangkat desa, masyarakat desa, kelompok perempuan dan lainnya.

In 2022, 4,923 people including 2,318 women (47,09%) participated in community education on safe and productive use of electrical energy (see Table 3). Participants of this activity were varied: academia, village officials, communities, women's groups and others.

Tabel 3: Peserta Edukasi Masyarakat tentang Penggunaan Energi Listrik Aman dan Produktif, 2022

Table 3: Participants of Community Education about Safe and Productive Use of Electrical Energy, 2022

Provinsi Province	Jumlah Peserta Total Participants		Jumlah Peserta Perempuan Total Female Participants			
		Σ	%			
Kalimantan Barat West Kalimantan	1.204	379	31,48%			
Kalimantan Selatan South Kalimantan	1.362	714	52,42%			
Kalimantan Tengah Central Kalimantan	261	155	59,39%			
Kalimantan Timur East Kalimantan	429	131	30,54%			
Kalimantan Utara North Kalimantan	0	0	0%			
Kalimantan	3.256	1.379	42,35%			
Maluku Maluku	595	360	60,50%			
Maluku Utara North Maluku	460	255	55,43%			
Papua Barat West Papua	0	0	0%			
Papua Papua	612	324	52,94%			
Maluku-Papua	1.667	939	56,33			
Kalimantan + Maluku-Papua	4.923	2.318	47,09%			

3. Penanganan Keluhan dan Konsultasi Bermakna bagi Masyarakat Terdampak Pembangunan Listrik

Grievance Handling and Meaningful Consultation for People Affected by Electricity Development

Program ini mengharuskan PLN untuk melakukan konsultansi bermakna dua arah dengan masyarakat untuk memitigasi jika ada keluhan terkait dengan kegiatan program.

Selama berialannva program telah dilakukan konsultansi bermakna antara lain tentang pembangunan listrik desa termasuk proses pasang baru listrik dan keselamatan pemasangan jaringan listrik dan penggunaan listrik. Sejauh ini semua pihak dari pemanaku baik masyarakat, vendor PLN maupun dari PLN itu sendiri memiliki pemahaman yang sama. Sampai dengan saat ini tidak keluhan selama ditemukan proses pembangunan jaringan distribusi.

The program obliges PLN to carry out meaningful two-way consultations with the communities to mitigate complaints related to program activities.

During the course of program, meaningful consultations has been carried out including on village electricity development, i.e. socialization of the process of installing new electricity and socialization of electricity safety. Up to now, multi-stakeholders namely village officials, community, PLN vendors and PLN have mutual understanding. Until now, complaints reports have not been found during the distribution network development process.

PROGRAM CSR PLN

PLN berkomitmen menjadikan tenaga listrik sebagai media untuk a) meningkatkan kualitas kehidupan masyarakat, b) mengupayakan tenaga listrik menjadi pendorong kegiatan ekonomi dan c) menjalankan kegiatan usaha yang berwawasan lingkungan.

Dari sisi sosial, PLN mendukung kegiatan masyarakat setempat melalui program CSR yakni Pelayanan Komunitas dan Program Pemberdayaan dan Pengembangan Masyarakat. Salah satu kegiatannya adalah Pemberdayaan Perempuan untuk Pengembangan Inovasi Produk Rajut di Banjarbaru Kalimantan Selatan.

Pada tahun 2022, total kegiatan CSR di Kalimantan dan Maluku-Papua adalah sebanyak 167 kegiatan. Rekapitulasi kegiatan seperti Tabel 4 di bawah ini.

PLN CSR PROGRAM

PLN is committed to making electric power a medium to a) improve the quality of people's lives, b) strive for electric power to become a driver of economic activity and c) carry out environmentally sound business activities.

From social aspect, PLN supports local community activities through CSR programs, namely Community Services and Community Empowerment and Development Programs. One of the activities is Women's Empowerment for the Development of Knitting Product Innovation in Banjarbaru, South Kalimantan.

In 2022, the total CSR activities in Kalimantan and Maluku-Papua was 167 activities. Recapitulation of activities as in Table 4 below.

Tabel 4. Jumlah Kegiatan CSR per Provinsi, 2022

Table 4. Number of CSR Activities per Province, 2022

Provinsi Province	Jumlah Kegiatan Number of Activities
Kalimantan Barat West Kalimantan	49
Kalimantan Selatan South Kalimantan	17
Kalimantan Tengah Central Kalimantan	32
Kalimantan Timur East Kalimantan	13
Kalimantan Utara North Kalimantan	8
Maluku Maluku	31
Maluku Utara North Maluku	8
Papua Papua	5
Papua Barat West Papua	4
Total	167