

PROGRAM MONITORING AND EVALUATION SYSTEM ASSESSMENT

A. Description of the Monitoring and Evaluation System

1. The State Electricity Corporation (*Perusahaan Listrik Negara* [PLN]) is committed to carry out continuous and comprehensive monitoring and evaluation (M&E). A thorough review of existing M&E systems, processes, and procedures, and an assessment of program performance monitoring within PLN reveal extensive data generation, the ability to monitor transmission and distribution in real time, and a regular reporting system. The Management Reporting Information System (*Sistem Informasi Laporan Manajemen* [SILM]) contains data on critical dimensions, such as performance, electricity generation, energy sales, transmission and distribution, and projects and construction. This information will facilitate the monitoring of disbursement-linked indicators (DLIs) for the Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program, which is an Asian Development Bank (ADB) results-based lending (RBL) program. Information about the M&E systems was obtained in conjunction with PLN's Corporate Performance Control Unit (*Satuan Pengendalian Kinerja Korporat* [SPKK]), and generation, transmission, and distribution divisions.

2. **Monitoring and evaluation information systems.** The SPKK is responsible for PLN corporate M&E through the SILM, which provides accurate, real-time, and online data. To implement the M&E requirements, each department has and operates information technology (IT) applications developed together with the Information Technology Division. These applications generate data and provide information on current activities, which provide information for the M&E process.¹ A monthly summary report is generated based on information provided by the SILM and submitted to PLN's board of directors (BOD) and to all heads of divisions. Based on this report, each division provides feedback on conditions in the field, addresses problems, or develops strategies to make progress. In addition, the BOD and SPKK use the BOD dashboard information system, which contains comprehensive, real-time data on customer service, projects, corporate performance, and electricity supply conditions.

3. **Beneficiary group feedback.** PLN stakeholders include bondholders, employees, the Government of Indonesia or regulator (through the Financial Services Authority), Parliament, work partners, customers, creditors, the general public, and the media. Shareholders evaluate the performance of the board of commissioners and BOD using the achievement of key performance indicators (KPIs) determined by PLN and top management. Performance reports are presented to shareholders at the general meeting of shareholders. The board of commissioners is tasked with monitoring and providing counsel to ensure that company goals are achieved, and decisions made during the general meeting are carried out.² Shareholder engagement and feedback are sought from both the general meeting and intensive communication carried out periodically through a variety of media, which obtain feedback in the form of suggestions and desired expectations. This is carried out in accordance with the specific expectations of each shareholder group. PLN's corporate secretary follows up on complaints and suggestions at BOD meetings, including the general meeting of shareholders. This is a systematic, ongoing process: important issues are placed on the BOD dashboard; customer complaints are followed up with the regional representative offices; and all complaint records are summarized in the call center reports. Reporting and communication arrangements with each shareholder group are provided in the Monitoring and Evaluation Framework.³

¹ PLN. 2013. *Annual Report*. Jakarta.

² PLN. 2013. *Sustainability Report*. Jakarta. p. 46.

³ Monitoring and Evaluation Framework (accessible from the list of linked documents in Appendix 2).

4. **Institutional arrangements for monitoring and evaluation.** PLN specifically created the SPKK to monitor, evaluate, and remove any obstacles that may arise during the implementation of tasks and business processes in the corporation. The SPKK coordinates with all PLN divisions and units to obtain current and accurate data, which it processes and evaluates into clear information to facilitate BOD decision-making. In addition, each division is responsible for performing monitoring duties in accordance with its field, and reports through IT systems appropriate to their respective areas. A table of program-relevant IT applications is provided with the M&E framework (footnote 3). Each regional division, including the SPKK, has specific staff members responsible for M&E processes (the SPKK has 11 such personnel). Each division also has an operator to monitor and evaluate division activities, and the division supervisor (senior manager) and head of division also oversee M&E processes. The SPKK organizes monthly meetings with each division and its units to monitor current actual conditions and action plans to solve any problems. For distribution-related projects implemented by the *wilayahs* (regional offices), relevant sections at the *wilayah* level carry out technical verification and payments. All data required for M&E is available and ready to retrieve in real time online at corporate premises. PLN has extensive experience in the successful M&E of projects and programs of all sizes, and this RBL modality is the second program under PLN control.

5. **Independent verification of results.** Risks related to the verification of DLIs will be further mitigated through the use of an independent verification agent (IVA), who will independently verify the DLIs and help the SPKK and other units within PLN establish an approach and verification methodology and build the required capacity. The IVA will verify results through several means, which may include a financial audit, procedural verification, and physical inspection to test the accuracy and quality of results reported by PLN. In accordance with good audit practice, physical verification will take place against a sampling framework and frequency.

6. **Monitoring and evaluation dimensions for operations.** The overall PLN program and the RBL are concerned with generation, transmission, distribution, and operational and performance management. The Operations Division is responsible for the M&E of generation, transmission, and distribution; while the Projects Division, Primary Energy Division, and In-Bound Logistics Division provide data to and support the Operations Division. The SPKK is responsible for managing performance. KPIs clearly set out the company's performance targets for economic, social, environment, and occupational safety and health impacts, as well as other parameters such as customer service, perceptions of PLN, and compliance with laws and regulations. The KPIs are monitored monthly.

7. **Monitoring and evaluation plans.** The Construction Division, along with contract administration staff within the Project Management Office, developed the M&E plans for use during construction. Internal planning procedures are in place for M&E during operations, with divisions monitoring the progress of projects or loans after construction completion. Division supervisors implement the M&E. Plans specify corporate performance indicators, persons in charge, timetables for M&E activities, and intended recipients of the reporting. Separate M&E plans are not needed for the program.

8. **Availability and quality of data.** Data indicators and targets have been established for most of the data collection applications. The units responsible provide the necessary data designated as KPIs for the related unit. Units that do not fill in complete and accurate data will receive a low achievement KPI score. This mechanism ensures the availability and quality of the data. Quantitative data regarding PLN performance includes data from PLN as well as data managed by subsidiaries. PLN also maintains historical data for analysis, annual reports, and 5-

year development plans (footnote 3).⁴ Technical power subsector definitions and calculations used by PLN are standard definitions in international use and are consistent with those adopted by others, including ADB.

9. **Information sharing and reporting.** All PLN divisions and units have access to the data collected via IT applications. This ensures proper information sharing. The Operations Division works closely with the Strategic Programs Division (supply chain, strategies program, planning procurement), and reports to the SPKK. All units also report directly to their division, and provide monthly, quarterly, semiannual, and annual reports on operations to the SPKK. Progress reports on the achievement of KPIs, progress reports for construction projects, and information about any problems are reported monthly through the SILM. Written summary progress reports, which are submitted to the BOD and heads of divisions, contain information based on detailed data for each indicator for the regional distribution and construction units, and detail the progress of implementation (percentage completed) of each project with regard to generation, transmission, and substations, as well as the status of current problems.

B. Assessment of the Monitoring and Evaluation System

10. Within the RBL modality, DLIs include indicators for outcome, outputs, and operational management and performance. Eight DLIs (three outcome and five output indicators) were identified. Indicators not based on PLN's SILM will require separate measurement efforts, such as independent verification. Overall, PLN's M&E system is sufficient and able to generate reliable, timely, and adequate information on results, including those DLIs linked to the SILM. The units responsible provide the necessary data updates. Data specific to DLIs and other indicators are collected, analyzed, and monitored throughout the specific system (footnote 3). The design and monitoring framework records the baselines of all DLIs for the program's outcome and outputs. Reporting should be provided through the SILM to communicate the status of specific DLIs to all PLN-related parties (such as divisions and PLN units), and for M&E purposes. The program's progress data would therefore be easily accessed by and reported to all related parties. The reporting application should also offer ways to provide feedback on the progress reports. One indicator (timely contract implementation) was identified solely for performance monitoring and is not linked to loan disbursements. Risks and mitigating actions are discussed in para. 17.

11. **Disclosure arrangements.** The SILM captures critical information such as the number and type of customers, transmission interruptions, and distribution losses. Data indicators and targets have been established. The division reports accurate, real-time, online data to the SPKK via the IT systems, and the SPKK then processes and evaluates this data into clear information to facilitate internal and BOD decisions. In addition, to ensure proper information sharing, the data collected by the IT applications is accessible by all PLN divisions and units.

12. **Reporting.** Progress reports on the achievement of KPIs, progress reports for construction projects, and information about any problems are available online in real time, and examined monthly by the SPKK and heads of divisions. A monthly summary progress report is generated based on information provided by the SILM, and submitted to the BOD and all heads of divisions. Based on this report, each division provides feedback on conditions in the field, addresses problems, and develops strategies to make progress. Arrangements to disclose the status of program DLIs to stakeholders in a timely and accessible manner to allow them to monitor and provide feedback can be incorporated into PLN's current reporting systems. In

⁴ PLN. 2013. *Statistics*. Jakarta.

addition, PLN will collect all necessary reports and information to verify the accomplishment of the DLIs, and prepare an annual draft DLI achievement report. The PLN director of corporate planning or designee will assess the achievement of the DLIs and authorize the DLI achievement report to be shared with the Ministry of Finance and ADB.

13. **Transparent and reliable monitoring of the performance of the results-based lending.** PLN's current M&E systems enable the transparent and reliable monitoring of PLN projects. M&E of the program DLIs can be incorporated directly into existing systems. In addressing the relationship between sustainable electricity, economic activity, and quality of life (as outlined in the design and monitoring framework impact statement), the systems in place capture useful information that can be measured, analyzed, and extrapolated to provide a larger picture of the program's impact on Indonesia.

14. **Addressing problems.** The SPKK and heads of the generation, transmission, distribution, and performance divisions will routinely carry out M&E of program performance, and the results will be reported to the BOD through the online dashboard and in written reports. The reporting mechanisms will enable the BOD to make necessary decisions to resolve any issues that may arise. The M&E system will also prewarn heads of divisions and general managers of PLN units about conditions requiring immediate attention. This will facilitate the timely resolution of any problems that arise.

15. **Long-term evaluation.** PLN routinely conducts long-term and/or final evaluations (typically conducted by the Construction Administration Division) for its projects and programs. As the program is new and an RBL modality, the SPKK may use other divisions, particularly the Corporate Planning Division, to conduct the ADB completion report and any other necessary evaluations. The SPKK and Corporate Planning Division will release any evaluation reports to the government.

C. Managing Risks and Improving Capacity

16. PLN's Risk Management Office within the Commerce, Risk Management, and Compliance Division analyzes risk. Initial M&E risks became evident during the loan reconnaissance mission for the program. These include:

- (i) PLN's failure to meet funding targets for required investments in power generation, transmission, and distribution;
- (ii) the use of medium-voltage feeder permanent interruptions per 100 kilometers to monitor the frequency of outages; and,
- (iii) annual frequency of reporting.

D. Summary of Risk Mitigation Mechanisms

17. The key monitoring risks and corresponding mitigation measures are summarized below.

Monitoring Risks	Rating	Mitigation Measures
PLN's funding targets for required investments in power generation, transmission, and distribution are not met	Moderate	The Finance and Budgeting Division and Treasury Division track data for funding targets and investments, and can report to the BOD and ADB early on in the process.
Medium-voltage feeder technical interruptions are used to monitor time reductions and the frequency of outages ^a	Medium	Additional specific data available through APD, P3B, and SCADA can be used, including the type and location of customers, reporting methods, employee reports, and branch office locations.
Annual DLI progress reporting to ADB on three ongoing programs ^b or more may reduce PLN's full-time focus on the program during the other months	Low	The SPKK generates monthly summary progress reports, which will include program progress. These can be made available to ADB.

ADB = Asian Development Bank, APD = regional distribution control unit, BOD = board of directors, DLI = disbursement-linked indicator, P3B = Load Dispatch Center, PLN = State Electricity Corporation (*Perusahaan Listrik Negara*), SCADA = supervisory control and data acquisition, SPKK = Corporate Performance Control Unit (*Satuan Pengendalian Kinerja Korporat*).

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

^a PLN generally defines medium voltage as 20 kilovolts.

^b This refers to the ongoing ADB and World Bank results programs and the proposed Eastern Indonesia program.

Source: ADB.