Program Safeguard Systems Assessment

August 2017

Indonesia: Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>AMAN</td>
<td>Aliansi Masyarakat Adat Nusantara (Indigenous Peoples Alliance of the Archipelago)</td>
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<td>AMDAL</td>
<td>Analisisis Mengenai Dampak Lingkungan (environmental impact assessment)</td>
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<td>APKT</td>
<td>Aplikasi Penyelesaian Keluhan Terpadu (integrated complaint solving application)</td>
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<td>BLHD</td>
<td>Badan Lingkungan Hidup Daerah (provincial and district environment agencies)</td>
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<tr>
<td>Kementerian ESDM</td>
<td>Kementerian Energi dan Sumber Daya Mineral (Ministry of Energy and Mineral Resources)</td>
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<td>kV</td>
<td>kilovolt</td>
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<td>MOER</td>
<td>Ministry of Environment Regulations</td>
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<td>NTB</td>
<td>West Nusa Tenggara (Nusa Tenggara Barat)</td>
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<td>NTT</td>
<td>East Nusa Tenggara (Nusa Tenggara Timur)</td>
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<td>PLN</td>
<td>State Electricity Corporation (Perusahaan Listrik Negara)</td>
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<td>PSSA</td>
<td>program safeguard system assessment</td>
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<td>RBL</td>
<td>Results-based lending</td>
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<td>SPS</td>
<td>Safeguard Policy Statement</td>
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<td>UKL/UPL</td>
<td>Upaya Pengelolaan Lingkungan Hidup / Upaya Pemantauan Lingkungan Hidup (environmental management plan and environment monitoring efforts (Upaya Pengelolaan Lingkungan Hidup/Upaya Pemantauan Lingkungan Hidup))</td>
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PROGRAM SAFEGUARD SYSTEMS ASSESSMENT

1. The Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program is proposed to finance a portion of overarching power development plans for Eastern Indonesia using the results-based lending (RBL) modality of the Asian Development Bank (ADB). A more robust and expanded distribution network will increase the reliability of services for existing residential customers and businesses, and will connect new customers to drive economic activity. The executing and implementing agency will be the State Electricity Corporation (Perusahaan Listrik Negara [PLN]), a 100% state-owned enterprise. PLN and ADB have agreed on a program size of $1,830 million dedicated to West Nusa Tenggara (Nusa Tenggara Barat [NTB]), East Nusa Tenggara (Nusa Tenggara Timur [NTT]), and Sulawesi, of which $600 million will be financed by the proposed loan.

2. The program’s impact will be enhanced quality of life in Indonesian society, with the sustainable use of electricity as a key driver of increased economic activity. The expected outcome is expanded access to more reliable electricity services for residential, commercial, and industrial customers in the eastern provinces of NTB, NTT, and Sulawesi. The following two output-level results areas make up the results chain below the outcome level:
   (i) Results area 1: distribution system development. This output will help address financing needs for the expansion and strengthening of the distribution system,\(^1\) and consequently improve electrification rates, reduce overloading, and address reliability issues for the local population and businesses.
   (ii) Results area 2: innovation and institutional strengthening. This output will contribute to PLN’s overall efforts to (i) support innovation through pilot-scale smart grid projects, which will reduce non-technical losses, integrate the expanded use of intermittent renewable energy sources, and better manage demand fluctuation; (ii) address operational challenges such as by reducing non-technical losses, payment defaults, and technical staff servicing costs in remote areas by expanding the use of digital prepaid meters among existing customers;\(^2\) (iii) improve asset and waste management practices\(^3\) that will, among other things, help accelerate the disposal of hazardous waste; and (iv) track and improve the on-time completion rate of distribution system service contracts.\(^4\)

3. The program safeguard system assessment (PSSA) aims to (i) examine the safeguard systems of the Government of Indonesia and PLN, as well as related implementation practices and capacity; and (ii) suggest safeguard program actions where gaps and weaknesses are found. The PSSA, which ADB undertook in partnership with PLN, builds on the existing knowledge of ADB and PLN, as well as on a specific analysis carried out during program preparation. The PSSA is based on document reviews, meetings and extensive discussions with PLN, field investigations, and interviews with relevant stakeholders. Based on the PSSA, the program triggers environment, involuntary resettlement, and indigenous peoples safeguard principles under ADB’s Safeguard Policy Statement (SPS 2009).

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\(^1\) The activities are the expansion and reinforcement of the medium- and low-voltage distribution network, and the installation of distribution transformers, service connections and feeders, and customer meter boxes and circuit breakers.
\(^2\) Physical activities under (i) and (ii) are the installation of smart meters and digital prepaid meters that require mechanical and electrical work, not civil work.
\(^3\) Activities under (iii) are listed in Table 1.
\(^4\) Activities under (iv) are primarily administrative and supervision-related, and do not involve physical construction works.
### A. Program Environmental and Social Impacts and Risks

4. **Environment.** Activities that would be classified as category A under ADB’s SPS\(^5\) will not qualify for RBL support,\(^6\) and on the basis a safeguard screening guidance will be issued before first disbursement, and applied by PLN wilayahs (regional offices), the program is categorized B for environment. Activities located in or directly adjacent to key biodiversity areas\(^7\) or national protected areas—including wildlife sanctuaries or reserves, animal refuges, and cultural heritage sites—will be excluded from the program scope through the application of the safeguard screening guidance. Any excluded activities may remain included in the broader PLN program.\(^8\)

5. The expansion and reinforcement of the distribution network will occupy a limited area, and will generally take place along existing roads and in community areas already subject to human disturbance. Potential construction-related impacts from pole and line installation include waste generation; soil erosion from site preparation activities; fugitive dust and other emissions (e.g., from vehicle traffic, land clearing activities, and materials stockpiles); noise and vibration from heavy equipment and truck traffic; oil or fuel spills associated with heavy equipment operation and fueling activities affecting soils and waterbodies; and occupational and community health and safety hazards, including working at height and electrocution. Potential impacts during operation include waste generation (trimmed trees and used equipment), and oil spills or leaks from transformers. Potential risks to occupational and community health and safety include working at height and electrocution.

6. **Involuntary resettlement.** The program is categorized as B for involuntary resettlement as the impacts are not deemed significant.

7. Expanding the distribution network will require (i) the use of no more than 0.2 square meters (m\(^2\)) of land for installing utility poles,\(^9\) and (ii) the possible removal of non-land assets (primarily trees) located within 2.5 meters (m) of the conductors during their stringing.

8. Distribution transformers are grouped into two categories—pad-mounted and pole-mounted.\(^10\) Pad-mounted transformers will be installed on either public land, or the premises of customers who require power at the primary distribution level (generally large commercial centers or industrial complexes). The number of customers fed by a single pad-mounted transformer varies depending on the number of customers in an area; thus, the transformers’ location can be selected flexibly by adjusting their capacity and coverage area. Pole-mounted transformers are installed on two utility poles and occupy about 4.5 m\(^2\) (1.5 m x 3 m) of land.

9. **Indigenous peoples.** The program is categorized as B for indigenous peoples because its impacts on indigenous peoples are not deemed significant.

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\(^5\) An activity would be classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. ADB. 2009. *Safeguard Policy Statement.* Manila (para. 50).

\(^6\) RBL for programs will exclude activities that would be classified as category A under the SPS. ADB. 2013. *Piloting Results-Based Lending for Programs.* Manila (para. 66).

\(^7\) Key biodiversity areas are sites of international importance for the conservation of biodiversity through protected areas and other governance mechanisms. They are identified nationally using simple standard criteria, based on their importance for maintaining species populations, and informed by the International Union for Conservation of Nature.

\(^8\) Activities excluded from the RBL program may remain included in the broader government program. ADB. 2013. *Piloting Results-Based Lending for Programs.* Manila (notes of Figure 3).

\(^9\) The diameter of the poles is 40 centimeters for medium-voltage distribution lines and 20 centimeters for low-voltage distribution lines.

\(^10\) Pad-mounted transformers are installed on concrete pads and locked in steel cases no larger than 9 m\(^2\), whereas pole-mounted transformers are installed high above ground level on a utility pole.
10. Indigenous peoples are identified in all provinces in Nusa Tenggara and Sulawesi, and some are potential customers of the electricity access program. Therefore, some lands owned by indigenous peoples might be used for the installation of utility poles.

B. Safeguard Policy Principles Triggered

11. The program will trigger 11 of the environmental principles in ADB’s SPS.

12. Seven of the SPS’s 12 involuntary resettlement principles will be triggered; the following 5 will not: principle 3 on the improvement or restoration of affected persons’ livelihoods, principle 4 on assistance for physically relocated affected persons, principle 5 on vulnerable groups’ living standards, and principles 8 and 9 on the resettlement plan and its disclosure. The program’s negative impact is minimal (paras. 6–8). No deterioration of affected persons’ livelihoods or physical relocation are foreseen. Voluntary donations will be applied for the expected impacts.

13. Six of the SPS’s 9 indigenous peoples principles will be triggered; 3 will not. Activities requiring the consent of affected indigenous communities are not anticipated (principle 4); distribution line projects will not restrict access to nor physically displace indigenous peoples from protected areas and natural resources (principle 5), and the project does not involve the legal recognition of customary rights to lands and territories or ancestral domains (principle 8).

C. Diagnostic Assessment

1. Assessment Methodology and Resources

14. The assessment incorporated a review of government laws and regulations pertaining to safeguards, PLN guidelines and guidance related to activities under the program scope and safeguards, and other PLN documents, such as monitoring reports related to the program scope. The evaluation of government safeguard systems referred to ADB’s technical assistance for country safeguard systems in Indonesia.11

15. Meetings and extensive discussions were held with key PLN staff at headquarters, and with PLN staff from regional office (wilayahs) in Sulawesi and Nusa Tenggara. Field investigations of existing distribution lines and logistics warehouses were conducted in Lombok in NTB, Kupang in NTT, and Gorontalo and Manado in Sulawesi in April and May 2016. Interviews were held with (i) provincial and district environment agencies (Badan Lingkungan Hidup Daerah BLHD) to validate the environmental assessment and monitoring and reporting procedures related to the program scope; and (ii) community stakeholders, landowners, indigenous peoples groups, nongovernment organizations, district and village offices, and contractors to gather information on their perspectives about PLN’s safeguard implementation practices for distribution lines. A consultation meeting was held on 2–3 August 2016 in Makassar convening PLN headquarters and wilayahs and units in Sulawesi and Nusa Tenggara to obtain their views, suggestions, and recommendations on the draft PSSA.

2. Environment

16. The Safeguards Diagnostic Assessment summarizes the result of the diagnostic

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assessment of the government’s current system (policy and legal frameworks) and PLN practices, as well as the gap between them and the ADB SPS regarding the environment.\textsuperscript{12}

17. **Policy and legal frameworks.** The system of Indonesia’s environmental impact assessment (Analisis Mengenai Dampak Lingkungan [AMDAL]) was established in 1982 and has been amended several times, most recently by a government regulation.\textsuperscript{13}

18. The government’s environment laws and regulations\textsuperscript{14} prescribe the requirements for (i) the AMDAL, (ii) environmental management and monitoring efforts (Upaya Pengelolaan Lingkungan Hidup/Upaya Pemantauan Lingkungan Hidup [UKL/UPL]),\textsuperscript{15} (iii) the letter of commitment for environmental management and monitoring plans (Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup),\textsuperscript{16} (iv) the environmental permit process, (v) guidelines for preparing environmental documents, (vi) community involvement, (vii) a public consultation and grievance redress mechanism, and (viii) the implementation and monitoring of appropriate mitigation measures to address adverse environmental impacts. The regulations do not include distribution line projects in the list of activities requiring the AMDAL, except those in or directly adjacent to protected areas.\textsuperscript{17} Distribution line projects require a letter of commitment for the environmental management and monitoring plans to be submitted to the provincial and district environment agencies.\textsuperscript{18}

19. In addition, laws also (i) regulate the management and disposal of toxic and hazardous waste substances;\textsuperscript{19} (ii) Government Regulation No. 101/2014 Regarding Management of Toxic and Hazardous Waste Substances regulates the management and disposal procedures for toxic and hazardous waste substances while MOER No. 33/2009 Regarding Recovery Procedure of Land Contaminated by Hazardous and Toxic Waste outline restoration procedures for contaminated land;\textsuperscript{20} (iii) guarantee the provision of correct information to the public as a form of public service;\textsuperscript{21} (iv) ensure the right of every worker to protection, health, and safety to achieve optimal work productivity;\textsuperscript{22} (v) require the implementation of a health and safety system;\textsuperscript{23} and (vi) Presidential Decree No. 32/1990 Regarding Management of Protected Area regulate the procedures and mechanisms for the preservation of protected areas\textsuperscript{24} and cultural heritage sites.\textsuperscript{25}

\textsuperscript{12} Additional Information to the PSSA (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

\textsuperscript{13} Government Regulation No. 27/2012 Regarding Environmental Permit, which derives from Law No. 32/2009 Regarding Environmental Protection and Management.

\textsuperscript{14} Specifically, the Ministry of Environment Regulations (MOER) No. 05/2012. Regarding Type of Activities Requiring AMDAL; MOER No. 16/2012. Regarding Guidelines for Preparation of Environmental Documents; and MOER No. 17/2012. Regarding Guidelines for Public Participation in AMDAL Process and Environmental Permit.

\textsuperscript{15} This pertains to the management and monitoring efforts of businesses and activities that have no significant impacts on the environment, which are necessary for the decision-making process regarding the implementation of these businesses and activities.

\textsuperscript{16} This is a statement regarding the undertaking to monitor and manage the environmental impact of businesses and activities that are exempted from the AMDAL or UKL/UPL.

\textsuperscript{17} MOER No. 05/2012. Regarding Type of Activities Requiring AMDAL.

\textsuperscript{18} Law No. 32/2009. Regarding Environmental Protection and Management.


\textsuperscript{21} Law No. 14/2008. Regarding Public Information.

\textsuperscript{22} Law No. 13/2003. Regarding Manpower, and Government Regulation No. 50/2012 Regarding Practice of Health and Safety Management System.

\textsuperscript{23} Presidential Decree No. 50/2012. Regarding Practice of Health and Safety Management System.

\textsuperscript{24} Law No. 11/2010. Regarding Physical Cultural Resources.
20. **State Electricity Corporation (Perusahaan Listrik Negara) practices.** Environmental mitigation measures specified in the decrees of the PLN board of directors have been observed. *(PLN Decree) No. 473/2010 Regarding Construction Standard for Low Voltage Power Network* and *PLN Decree No. 606/2010 Regarding Construction Standard for Medium Voltage Power Network.* PLN restricts the use of herbicides during tree trimming and clearing; it also specifies that transformers should not contain polychlorinated biphenyls, and that electrical equipment including power circuit breakers containing sulfur hexafluoride must comply with the standards of the American National Standards Institute or International Electrotechnical Commission. To address potential risks to workers’ health and safety, PLN established an occupational health and safety management system, which has been strictly implemented with penalties imposed on contractors for noncompliance. Each PLN wilayah submits occupational health and safety and environmental performance reports to PLN headquarters on a quarterly basis.

21. PLN has an effective complaints management system accessible (i) through the call center 123, which can be accessed by anyone anywhere in Indonesia through the company website, email, telephone, or social media; (ii) online by using an integrated complaint solving application; and (iii) through customer services. Complaints are immediately referred within a few minutes of receipt to the concerned technical unit or department, which immediately dispatches *Rayon* (para. 46) to act on complaints regarding distribution networks, including those related to construction impacts, the environment, community health and safety, and resettlement issues. Complaints are normally responded to and resolved within one day.

22. **Gaps identified.** Some regional offices in Nusa Tenggara and Sulawesi (all of the offices interviewed during the assessment) do not prepare environmental documents for distribution lines, including those in or directly adjacent to protected areas. Regional offices in these areas lack information on the location of the protected areas that could be used for screening. Environmental assessments have not been conducted, and environmental management is not being fully implemented. Some contractors do not dispose of trimmed tree branches properly, but leave them on private land without the landowners’ permission. Field investigations also noted that, in some areas, safety clearances of distribution lines with nearby houses and trees were not in accordance with the prescribed clearance standards due to structures that were built and trees that grew or were planted after the installation of the distribution lines.

23. There are also general flaws in waste management. Used equipment generated by distribution line maintenance—such as poles, cables, transformers, and meters—accumulate at warehouse sites, and most are stored in open areas without soil protection. The current assets and waste disposal system requires several verification and administrative procedures, which have resulted in disposal delays and years of storage at warehouse sites.\(^{27}\) Field investigators


\(^{27}\) Used equipment is still considered a government asset and is required to be internally audited and verified within PLN, involving the Ministry of State-Owned Enterprises and Directorate General of National Wealth under the Ministry of Finance. Broken materials less than 5 years old that have economic value can be disposed of through auction at the discretion of PLN headquarters pending the approval of the Board of Commerce, which is composed of nine commissioners. Used assets more than 5 years old and of low economic value are disposed of through the Ministry of State-Owned Enterprises. The long process of inventorying, reviewing, auditing, and verifying by different units, as well as the requirement for the relevant authority to sign the accountability statements, delay the disposal of used
also noted oil spills from used transformers at the warehouse sites and areas where oil-draining activities were being done.\textsuperscript{28}

24. Although PLN \textit{regional offices (wilayah)} submit quarterly environmental performance reports to headquarters, these focus on the environmental impacts of power plants, substations, and transmission lines, and do not cover distribution lines.

25. Based on the assessments undertaken, the environment safeguard system currently in place through the government’s environmental laws and regulations is sufficient to comply with the ADB SPS principles that are triggered. However, PLN must improve current practices by ensuring compliance with the government’s environmental requirements. PLN must obtain the necessary information regarding protected and key biodiversity areas to enable the screening and exclusion of activities in or directly adjacent to protected areas and key biodiversity areas from the program scope (para. 4). Environmental management can also be improved by preparing and implementing environmental documents and associated management procedures as required by the government’s laws and regulations. The management of wastes can be improved by (i) cleaning up existing oil spills, (ii) equipping warehouse sites with oil containment and protection measures, (iii) improving the administrative process of assets and waste disposal, and (iv) securing the appropriate permits for the storage and disposal of hazardous waste. Community safety can be further enhanced by building awareness and regularly trimming trees around existing distribution lines.

3. \textbf{Involuntary Resettlement}

26. \textbf{Policy and legal frameworks.} PLN follows the government’s legal framework related to land acquisition. Land acquisition for electricity distribution is covered under Law No. 2/2012\textsuperscript{29} and the development of distribution networks is stipulated in PLN Decree No. 0289/2013\textsuperscript{30}. However, in practice, there is no land acquisition for the distribution line as it requires only limited land use for the location of electricity poles.

27. \textbf{State Electricity Corporation (\textit{Perusahaan Listrik Negara}) practices.} For the installation of distribution lines, PLN consults with village heads from the planning stage. These consultations cover the project plan, land use, and cable stringing that may require the removal of non-land assets (mainly trees).

28. PLN, in conjunction with contractors, facilitates the planning of the alignment and design of the distribution line in close coordination with village heads and relevant government agencies, such as the Ministry of Public Works and Housing (which has authority over national roads) and local governments (which have authority over regional roads), because the distribution lines are installed along public roads mostly on or close to the border between public and private land. The equipment. PLN is currently holding about Rp900 billion worth of materials for disposal, which are stocked at PLN warehouse sites (including inside warehouses and in open outdoor spaces) in Sulawesi and Nusa Tenggara.

\textsuperscript{28} Some PLN \textit{areas} conduct minor repairs and oil draining of broken transformers at warehouse sites.

\textsuperscript{29} Law No. 2/2012: Land Acquisition for the Development of Public Interest Article 10 (i) stipulates that land for the public interest shall be used for the development of power plants, transmission, substations, grids, and distribution.

\textsuperscript{30} PLN Decree No. 0289/2013 (Land Acquisition for the Purpose of Providing Electricity, Operational Costs of Land Acquisition, and Operational Cost of Compensation) covers (i) direct land acquisition to be used for tower siting, major electricity substations, network, transmission, distribution, power plants, and offices, by giving indemnity; and/or (ii) indirect land acquisition to create free space by compensating owners for land crossed by the electricity network and transmission, and by giving indemnity for the plants and buildings. However, this decree does not mention land use (not “direct land acquisition”) for distribution lines (utility poles) or indirect land acquisition to create “free space” under distribution lines (i.e., the removal of non-land assets for the stringing of conductors).
alignments of distribution lines, including the location of utility poles, can be changed if necessary. Poles are placed 60–80 m apart for medium-voltage networks and 30–40 m apart for low-voltage networks. Even within the same alignment, the conductors can avoid disturbing non-land assets by increasing the height of poles and conductors, or by replacing bare cables with insulated cables that can go along or through obstacles, including trees. This flexibility allows PLN to optimize the alignments of distribution lines, including the location of utility poles, to minimize the siting of utility poles on private land and avoid disturbing non-land assets to the maximum extent possible. Otherwise, PLN must obtain the concurrence of affected persons to use private land for utility poles and to remove non-land assets.

29. If a distribution line is installed at the request of a community, the village head must submit a statement letter on behalf of the community group (including affected persons) signed by the community representatives, with a written commitment to bear any costs, damages, or any other impacts incurred due to the project without any compensation whatsoever. In this case, no compensation is provided to the affected persons. In other cases, if utility poles are to be located on private land, only a verbal agreement from the landowner is necessary. Contractors handle arrangements for the use of land and affected trees or crops.

30. Grievances related to these resettlement impacts are received and resolved through the comprehensive complaints management system (para. 21).

31. **Gaps identified.** The results of the diagnostic assessment of PLN practices, as well as the gap between these and ADB’s SPS regarding involuntary resettlement, are summarized in Additional Information for the PSSA (footnote 12).

32. The distribution line facilities do not need to be at specific locations (para. 28). PLN practices adopted for the program’s impact do not imply expropriation based on eminent domain, and thus do not trigger ADB’s SPS. Gaps were identified between PLN’s practices and ADB principles 2 and 12.

33. Consultation is conducted primarily through the village heads, and not all affected persons are involved in decision-making for the distribution line alignment and design. There is no special attention to gender and vulnerable groups in the consultation process and the participation of women is still limited. Interviews with some affected persons during the site investigations revealed that not all of them are knowledgeable about the project or its implications and consequences.

34. If a distribution transformer needs to be located on private land, PLN requires that written permission for the use of the land be obtained from the landowners. However, no such written agreement has been obtained from affected persons in Nusa Tenggara and Sulawesi. In some cases, the landowners were only made aware that the distribution transformers (4.5 m²) would be located on their own lands only when the contractors arrived at the site and began construction work, and some owners who live away from their land only became aware of this after the transformers were installed.

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31 Resettlement is considered involuntary when displaced individuals or communities do not have the right to refuse land acquisition that results in displacement. This occurs when (i) lands are acquired through expropriation based on eminent domain; or (ii) lands are acquired through negotiated settlements, if the expropriation process would have resulted in the failure of negotiation. ADB. 2009. *Safeguard Policy Statement*. Manila (Appendix 2, para. 5).

35. Coordination and consultation for land use and affected trees or crops are handled by PLN during the planning stage and by contractors during the construction stage. Contractors will collaborate with PLN on this matter only when they cannot settle cases with affected persons. This process is neither documented nor monitored by any party; although the contractors submit official documents to PLN when they finish the contracted work, the documents are not required to cover this process.

36. Field investigations in urban and rural areas and interviews with some affected persons indicate that distribution line projects are unlikely to affect the income and livelihood status of the affected persons. However, PLN needs to (i) strengthen the consultation process; (ii) comply with the PLN Decree No. 0605/2010 by obtaining landowners’ written agreement for the use of private land for distribution transformers; and (iii) monitor the resettlement outcomes and their impacts on the living standards of displaced persons by reviewing complaints received, and take necessary actions if these impacts are found to affect the income and livelihood status of the affected persons.

4. Indigenous Peoples

37. Policy and legal frameworks. The Constitution of Indonesia (1945) recognizes customary communities, and indigenous peoples’ rights are recognized by law. Some local governments in Nusa Tenggara and Sulawesi have local regulations (Peraturan Derah) regarding the recognition and validation of indigenous peoples.

38. The government, the World Bank, and the Indigenous Peoples Alliance of the Archipelago, which actively advocates indigenous peoples’ rights, issued an indigenous peoples map identifying populations of indigenous peoples living throughout Indonesia.

39. The Ministry of Social Affairs has a regular program to empower indigenous groups through various activities, including the provision of public facilities. The Ministry of Energy and Mineral Resources has been providing an electricity access program to indigenous peoples, although the program does not cover all indigenous households.

40. State Electricity Corporation (Perusahaan Listrik Negara) practices. Although many indigenous peoples recognize the benefit of electricity access and expect to be connected, some still lack electricity access. For example, some indigenous groups in Lombok, NTB lacked access to electricity until 2014, although they had been requesting the connection for a long time. The electrification rate among indigenous communities in Gorontalo province in Sulawesi is less than 10%.

41. In general, the socioeconomic conditions of indigenous peoples are less developed than those of the dominant society. Most indigenous communities are in remote areas (such as the highlands, coastal areas, and protected forests) with limited transport access, and away from public facilities such as schools and health centers. Due to inconvenient access, village offices rarely invite indigenous peoples to consultations on development plans. Therefore, indigenous communities’ expectations for electricity access are not fully reflected in development plans. The difficulties of obtaining forestry permits and limited transport access to these communities also make PLN reluctant to prioritize installing distribution lines in these areas.

42. For the installation of distribution lines in areas inhabited by indigenous peoples, PLN must

33 Basic Agrarian Law No. 5/1960; Constitutional Court Decision No. 35/2012.
consult with village heads from the planning stage, and respect and take into consideration the options preferred by affected indigenous peoples in relation to the provision of project benefits and the design of mitigation measures.

43. **Gaps identified.** The result of the diagnostic assessment of PLN practices, as well as the gap between these and ADB’s SPS regarding indigenous peoples are summarized in Additional Information for the PSSA (footnote 12).

44. Gaps have been identified between PLN’s practices and ADB principles 1, 2, 3, 6, 7, and 9. PLN does not screen distribution line projects in terms of the existence of or impact on indigenous peoples. Although the projects affect indigenous communities, impacts on indigenous peoples are not assessed, and Indigenous Peoples’ Plans are not prepared. Consultation is conducted primarily through the village heads, and affected indigenous peoples may not be fully involved in the decision-making (para. 33).

45. Field investigations and interviews with some indigenous peoples indicate that distribution line projects are unlikely to affect the dignity, human rights, livelihood systems, or culture of indigenous peoples, or the territories or natural or cultural resources that indigenous peoples own, use, occupy, or claim as an ancestral domain or asset. There is no obvious need to conduct a specific assessment in relation to indigenous peoples safeguards. However, PLN must (i) identify indigenous peoples among its potential customers prior to the commencement of construction work; and (ii) strengthen the consultation process to ensure that landowners who are members of indigenous communities are fully aware of the projects, and that the project benefits are tailored for affected communities in a culturally appropriate manner.

5. **Institutional Arrangements**

46. PLN regional offices (*wilayahs*)\(^{34}\) are responsible for the construction and operation of power plants, substations, transmission lines, and distribution lines. Each *wilayah* contains some units called *areas* that are in charge of constructing distribution lines and operating substations, transmission lines, and distribution lines. Each *area* contains some units called *rayons* that are in charge of customer services, including the maintenance of distribution lines within subdistricts.

47. As a decentralized operation, PLN has dedicated safeguard staff at its headquarters and in its *wilayahs*. Staff at headquarters are responsible for policy matters, while *wilayah* staff are responsible for implementation. At PLN headquarters, the Health, Safety and Environment Division comprises four full-time staff and handles environmental and social safeguards issues all over the country. Each *wilayah* has one or two staff members who oversee the implementation of health, safety, and environmental policies. Some *areas* have one to three safety officers who monitor health and safety aspects.

48. Since 1967, PLN has implemented many projects, including some distribution lines funded by multilateral agencies. Although PLN headquarters has accumulated adequate knowledge of and experience in handling environmental and social safeguards issues, the implementation of environmental and social safeguards measures remains low at the level of the *wilayahs*, *areas*, and *rayons*. To enhance capacity, PLN staff attend training sessions (including training on

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\(^{34}\) There is one *wilayah* in NTB (headquartered in Lombok), one in NTT (headquartered in Kupang), and two in Sulawesi: (i) Sulselrabar (headquartered in Makassar) covering the provinces of South Sulawesi, West Sulawesi, and Southeast Sulawesi; and (ii) Suluttenggo (headquartered in Manado) covering the provinces of North Sulawesi, Central Sulawesi, and Gorontalo.
safeguards) provided by the Education and Training Unit of PLN Corporate University. All staff are entitled to select and attend training sessions twice a year. In addition, several PLN staff have been enhancing their understanding of social and environmental safeguards by participating in external training conducted by ADB.\textsuperscript{35}

49. **Weakness in implementation and effectiveness of the safeguard system.** This assessment found that the weak application of environmental regulations and PLN decrees was an outcome of low staff awareness about the related regulatory framework and guidelines (para. 22). Robust in-house refresher training is to be conducted regularly for PLN staff to increase their awareness and ensure the proper implementation of safeguard requirements. Focal persons for environmental and social safeguards will be assigned at headquarters and in each unit (both *wilayahs* and *areas*) to ensure compliance with the safeguard program actions.

D. **Safeguard Program Actions**

50. In light of the assessment and considering the scope and scale of the impacts and risks, 10 program actions are proposed to address the identified gaps and weaknesses (DLI = disbursement-linked indicator, PLN = State Electricity Corporation (*Perusahaan Listrik Negara*).

51. Table 2). The detailed safeguard program actions, with their indicators, targets, responsibilities, timeframes, and budget resources, are presented in Additional Information to the PSSA (footnote 12). PLN has adequate capacity and has agreed to implement these actions. ADB will monitor the status of these actions during program implementation.

52. To facilitate the implementation of the safeguard program action 4, improved asset and waste management is set as one of the disbursement-linked indicators of the program (Table 1), which accounts for $48 million (8%) of the disbursement. The achievement, verification, information source, frequency, and verification agency and procedure of this indicator are defined and described in Table 1.

<table>
<thead>
<tr>
<th>Year</th>
<th>Disbursement-Linked Indicator</th>
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</table>
| 2017 | • Inventory of used equipment for disposal as of the end of 2016 prepared and approved by PLN’s Accounting Division  
• PLN’s Guidance for Asset Management (1998) revised to accelerate the disposal of hazardous waste |
| 2018 | • Inventory of used equipment for disposal as of end-2016 approved by the Ministry of State-Owned Enterprise  
• Existing oil spills cleaned in accordance with the Ministry of Environment Regulations No. 33/2009  
• 20% of PLN’s used equipment in the 2016 inventory safely disposed of |
| 2019 | • All warehouses equipped with oil containment and protection measures  
• 50% of PLN’s used equipment in the 2016 inventory safely disposed of |
| 2020 | • 80% of PLN’s used equipment in the 2016 inventory safely disposed of |
| 2021 | • 90% of PLN’s used equipment in the 2016 inventory safely disposed of |

DLI = disbursement-linked indicator, PLN = State Electricity Corporation (*Perusahaan Listrik Negara*).

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\textsuperscript{35} External training includes (i) training on involuntary resettlement in 2010 through ADB. 2007. *Technical Assistance for Training Involuntary Resettlement and Capacity Development* (TA 6425-REG). Manila; (ii) training on social safeguards for land acquisition for the development of public interest conducted in 2014 through the subproject Capacity Development for Social Safeguard Preparation and Implementation in Water Resource Management and Energy in Indonesia under TA 7566-REG (footnote 11); (iii) discussion and a workshop for strengthening the AMDAL system through the subproject Strengthening Capacity of Indonesia’s Environment Impact Assessment (AMDAL) System under TA 7566-REG (footnote 11).
<table>
<thead>
<tr>
<th>Proposed Action</th>
<th>Indicator/Target</th>
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</thead>
<tbody>
<tr>
<td>1. Issue technical guidance on the implementation of safeguard program actions (including guidance on safeguards screening)</td>
<td>Technical guidance (including guidance on safeguards screening) issued to the general managers of PLN wilayahs</td>
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<tr>
<td>2. Strengthen meaningful consultation with affected peoples and indigenous peoples</td>
<td>(i) A guidance on meaningful consultation issued in collaboration with Div PR SNT and KSOM with reference to MOER No. 17/2012 (the guidance will ensure the participation of indigenous persons in tailoring project benefits for affected indigenous communities in a culturally appropriate manner)</td>
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<tr>
<td></td>
<td>(ii) Process and result of the consultations documented</td>
</tr>
<tr>
<td>3. Ensure the application of environmental assessment and management to the construction of distribution lines</td>
<td>(i) Environmental document (UKL/UPL or SPPL) prepared for the construction of distribution lines, and submitted to (and in case of UKL/UPL, approved by the BLHD before the commencement of any construction work)</td>
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<td></td>
<td>(ii) Environmental mitigation measures specified in the environmental document included in the contract document before the award of contract</td>
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<td></td>
<td>(iii) Implementation of the mitigation measures monitored</td>
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<td></td>
<td>(iv) If noncompliance with the proposed mitigation measures is identified, corrective actions shall be proposed and implemented</td>
</tr>
<tr>
<td>4. Improve the management of waste and assets at warehouse sites</td>
<td>(i) Inventory of used equipment for disposal as of the end of 2016 prepared</td>
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<td></td>
<td>(ii) Inventory of used equipment for disposal as of the end of the year (2017 onward) prepared</td>
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<td></td>
<td>(iii) Disposal inventory (as of the end of 2016) approved by PLN’s Board of Commissioners (for equipment less than 5 years old) and MSOE (for equipment more than 5 years old)</td>
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<td></td>
<td>(iv) PLN Guidance for Asset Management (1998) revised to accelerate the disposal of hazardous waste, including a requirement to prepare and submit an annual disposal inventory from the end of 2017 onward</td>
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<td></td>
<td>(v) Waste and asset management improvement plan (including timeframe, budget, and human resources) prepared in consultation with Div AKT and Div 3KL and approved by Div PR SNT</td>
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<td>(vi) Existing oil spills cleaned up in accordance with relevant regulations (including MOEF No. 33/2009 and Government Regulation No. 101/2014), with excavated hazardous waste material disposed of at appropriately licensed hazardous waste disposal facilities, with records of all transfer notes retained</td>
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<tr>
<td></td>
<td>(vii) Warehouse sites with hazardous waste equipped with oil containment and protection measures</td>
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<td>(viii) Waste and asset management improvement plan implemented</td>
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<tr>
<td>5. Enhance the management of community health and safety risks along distribution lines (including transformers) under operation</td>
<td>(i) Awareness building (to prevent tall vegetation along the distribution lines and public contact with potentially dangerous electrical equipment) conducted for communities</td>
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<td>(ii) Tree trimming by the distribution line maintenance contractors monitored</td>
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<td>(iii) Outbreak due to tree disturbance reduced (baseline data collected in 2017)</td>
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<td>(iv) Safety notice posted on newly installed distribution transformers</td>
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<tr>
<td>6. Obtain written agreements from landowners for the use of land for distribution transformers</td>
<td>Written agreement obtained following Buku 4, and documented</td>
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<tr>
<td>7. Monitor the resettlement outcomes and their impacts on the living standards of displaced persons by reviewing complaints received, and</td>
<td>(i) The monitoring result documented</td>
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<td>(ii) If income and livelihood status are affected, corresponding measures shall be formulated and implemented</td>
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<tr>
<td>Proposed Action</td>
<td>Indicator/Target</td>
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<tr>
<td>take necessary actions if the impacts are found to affect the income and livelihood status of the affected persons</td>
<td>Safeguards focal persons (who have attended PLN’s internal safeguards training) appointed at each <em>wilayah</em> (for environment and social safeguards) and each <em>area</em></td>
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<tr>
<td>8. Appoint focal persons to implement environmental and social safeguard activities</td>
<td>Regular meetings, including refresher training sessions, held convening relevant staff at PLN headquarters, <em>wilayah</em>, and <em>areas</em>, including all focal persons, contractors, and key local government counterparts, to ensure the smooth and timely implementation of the safeguard program actions</td>
</tr>
<tr>
<td>9. Build capacity on environmental and social safeguards, focusing on the safeguard program actions</td>
<td>(i) Implementation of the program action 4 monitored, documented, and reported to PLN <em>wilayahs</em> regularly (at least semi-annually), with records (transfer notes) of the disposal of hazardous waste at appropriately licensed facilities</td>
</tr>
<tr>
<td>10. Monitor and ensure the implementation of the safeguard program actions</td>
<td>(ii) Implementation of the program actions 2, 3, 4, 5, 6, and 7 monitored, documented, and reported to Div PR SNT, Div PPT, and Div K3L regularly (at least semi-annually), with records (transfer notes) of the disposal of hazardous waste at appropriately licensed facilities</td>
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<td></td>
<td>(iii) The list of distribution line projects (including village names and the length of distribution lines) with the result of safeguards screening documented and submitted to Div PR SNT and Div K3L annually</td>
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</tbody>
</table>


* Results-based lending for programs will exclude activities that would be classified as category A under the SPS (para. 4 of the PSSA). Considering the anticipated scope and magnitude of impacts associated with the construction of the distribution line, any such activities located in or directly adjacent to protected areas listed in MOEF No. 05/2012, Appendix 3 or unprotected key biodiversity areas would be classified as category A. PLN *wilayahs* will identify (i) projects in protected areas (designated by the Government of Indonesia) and key biodiversity areas in consultation with the spatial planning office of the provincial development planning agency (*Badan Perencana Pembangunan Daerah*) and forestry agencies, and with reference to the protected areas or key biodiversity areas village list provided by ADB; and (ii) projects in indigenous communities making use of the indigenous communities village list provided by ADB. Before beginning any construction or rehabilitation works under the program, PLN *wilayahs* will conduct the screening, and ADB will check the result of the screening to confirm that results-based lending funding is not used for activities that would be classified as category A under the SPS.

* Meaningful consultation is a process that (i) begins early in the project preparation stage and is carried out throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessed by affected people; (iii) is undertaken in an atmosphere free from intimidation or coercion; (iv) is gender-inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) incorporates all relevant views of affected people and other stakeholders into decision-making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.