

# Program Safeguard Systems Assessment (Draft)

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August 2016

## INO: Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program

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## ABBREVIATIONS

ADB	– Asian Development Bank
AMAN	– <i>Aliansi Masyarakat Adat Nusantara</i> (Indigenous Peoples Alliance of the Archipelago)
AMDAL	– <i>Analisis Mengenai Dampak Lingkungan</i> (environmental impact assessment)
APKT	– <i>Aplikasi Penyelesaian Keluhan Terpadu</i> (integrated complaint solving application)
Kementerian ESDM	– <i>Kementerian Energi dan Sumber Daya Mineral</i> (Ministry of Energy and Mineral Resources)
kV	– kilovolt
m	– meter
m <sup>2</sup>	– square-meter
MOER	– Ministry of Environment Regulations
MSOE	– Ministry of State Owned Enterprise
NTB	– Nusa Tenggara Barat (West)
NTT	– Nusa Tenggara Timur (East)
PLN	– <i>Perusahaan Listrik Negara</i> (State Electricity Corporation)
PLN Decree	– Decree of the Board of Directors of PLN
PSSA	– program safeguard system assessment
ROW	– right-of-way
SMK3	– <i>Sistem Manajemen Kesehatan dan Keselamatan Kerja</i> (occupational health and safety management system)
SPPL	– <i>Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup</i> (letter of commitment for the environmental management plan and environmental monitoring plan)
UKL/UPL	– <i>Upaya Pengelolaan Lingkungan Hidup / Upaya Pemantauan Lingkungan Hidup</i> (environmental management efforts and environment monitoring efforts)

## PROGRAM SAFEGUARD SYSTEMS ASSESSMENT

1. 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 modality of the Asian Development Bank (ADB). The executing and implementing agency will be the State Electricity Corporation (PLN), a 100% state-owned enterprise. PLN's broader program expenditure for strengthening and developing Eastern Indonesia's power transmission and distribution systems is estimated at \$6,825 million during 2016–2020. PLN has requested a loan of \$600 million from ADB to finance a portion of the program. ADB will provide \$600 million (8.8%) in support of the same program.

2. The program safeguard system assessment (PSSA) aims to (i) examine the safeguard systems of the Government of Indonesia and PLN, and related implementation practices and capacity; and (ii) suggest safeguard program actions where gaps and weaknesses are found. ADB undertook the PSSA in partnership with PLN. The assessment builds on existing knowledge of ADB and PLN as well as on 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 assessment, the program triggers environment, involuntary resettlement and indigenous peoples safeguard principles of ADB's Safeguard Policy Statement (2009).

3. 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 Indonesian provinces of Nusa Tenggara Barat (West) (NTB), Nusa Tenggara Timur (East) (NTT), and Sulawesi. This will be achieved through the following outputs during 2016–2020:

- (i) **Output 1. Distribution system strengthened and expanded.** Output 1 will help address the financing needs for the expansion and strengthening of the distribution system and consequently improve electrification rates, reduce overloading and address reliability issues for the local population and businesses.
- (ii) **Output 2. Operational management and implementation capacity strengthened.** This output will contribute to PLN's overall efforts to: (a) address operational challenges, such as by reducing non-technical losses, payment defaults, and technical staff servicing costs in remote areas through expanding the use of digital pre-paid meters; and/or (ii) 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; and/or (iii) improve waste treatment practices and enhance consultations with land owners on location of distribution transformers; and/or (iv) track the timely implementation of contracts.

### A. Program Environmental and Social Impacts and Risks

4. **Environment.** Activities that would be classified category A in ADB's Safeguard Policy

Statement<sup>1</sup> will not qualify for results-based lending support.<sup>2</sup> Activities located in or directly adjacent to key biodiversity areas,<sup>3</sup> in addition to national protected areas that include areas of wildlife sanctuaries or reserves, refuge for animals, and cultural heritage, will be excluded from the scope of the program. The program is categorized B for environment as the impacts are not deemed significant.

5. Expansion and reinforcement of the distribution network will generally take place along existing roads and in community areas already subject to human disturbance. Environmentally sensitive locations are not likely to be impacted.

6. 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 from heavy equipment and truck traffic; potential for hazardous materials and oil spills associated with heavy equipment operation and fueling activities; and occupational and community health and safety hazards. Potential impacts during operational phases include generation of wastes consisting of trimmed trees and used equipment, and oil spills from used transformers. Potential risks to occupational and community health and safety include electrocution.

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

8. Expansion of the distribution network will require (i) use of no more than 0.2 square meters (m<sup>2</sup>) of land for installing utility poles;<sup>4</sup> and (ii) possible removal of non-land assets (primarily trees) located within 2.5 m of the conductors during their stringing.

9. Distribution transformers are classified into two categories based on mounting location; pad-mounted transformer and pole-mounted transformer.<sup>5</sup> Pad-mounted transformers will be installed on (i) the premises of customers who require power at the primary distribution level, which are generally large commercial centers or industrial complexes; or (ii) public land. The number of customers fed by a single pad-mounted distribution transformer varies depending on the number of customers in an area, thus the location of transformers can be selected quite flexibly by adjusting their capacity and coverage area. Pole-mounted transformers are installed on two utility poles which occupy about 4.5 m<sup>2</sup> (1.5 m x 3 m) of land.

10. **Indigenous peoples.** The program is categorized B for indigenous peoples because the program's impacts to indigenous peoples are not deemed significant.

11. Indigenous peoples are identified in all provinces in Nusa Tenggara and Sulawesi, and

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<sup>1</sup> An activity would be classified 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).

<sup>2</sup> Results-based lending for programs will exclude activities that would be classified category A in the Safeguard Policy Statement. ADB. 2013. *Piloting Results-Based Lending for Programs*. Manila. (para.66).

<sup>3</sup> Key biodiversity areas are sites of international importance for the conservation of biodiversity through protected areas and other governance mechanisms. They are identified nationally using simple standard criteria, based on their importance in maintaining species populations, and informed by the International Union for Conservation of Nature.

<sup>4</sup> Diameter of the poles is 40 centimeters for medium-voltage distribution lines and 20 centimeters for low-voltage distribution lines.

<sup>5</sup> (i) pad-mounted transformers are installed on concrete pads and locked in steel cases (no more than 9 m<sup>2</sup> required); and (ii) pole-mounted transformers are installed high above on a utility pole.

some of them are potential customers of electricity access program. Therefore, some of the lands owned by indigenous peoples might be used for the installation of utility poles.

## **B. Safeguard Policy Principles Triggered**

12. The ADB Safeguard Policy Statement has 11 environmental principles, which will all be triggered by the program.

13. Of its 12 involuntary resettlement principles, 7 will be triggered, 5 will not: principle 3 on 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 resettlement plan and its disclosure. The program's negative impact is minimal (paras.7–**Error! Reference source not found.**). Deterioration of affected persons' livelihoods and physical relocation are not foreseen. Voluntary donations will be applied for the expected impacts.

14. Of its 9 indigenous peoples principles, 6 principles will be triggered, 3 will not. Activities which require the consent of affected Indigenous Peoples communities are not anticipated (principle 4). Distribution line projects do not restrict access to and physically displace indigenous peoples from protected areas and natural resource (principle 5), and do not involve legal recognition of customary rights to lands and territories or ancestral domains (principle 8).

## **C. Diagnostic Assessment**

### **1. Assessment Methodology and Resources**

15. 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 included reference to ADB's technical assistance for country safeguard systems in Indonesia.<sup>6</sup>

16. Meetings and extensive discussions were held with key PLN staff at headquarters and PLN staff from regional offices 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 with community stakeholders, land owners, indigenous peoples groups, NGO, district and village offices, and contractors were held 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 regional offices and units in Sulawesi and Nusa Tenggara to obtain their views, suggestions, and recommendations on the draft PSSA.

### **2. Environment**

17. The result of the diagnostic assessment of the government's current system (policy and legal frameworks), PLN practices, and the gap between them and the ADB Safeguard Policy Statement regarding environment is summarized in the Safeguards Diagnostic Assessment.

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<sup>6</sup> ADB. 2010. *Technical Assistance for Strengthening and Use of Country Safeguard Systems*. Manila (TA 7566-REG); ADB. 2013. *Technical Assistance for Aligning Asian Development Bank and Country Systems for Improved Project Performance*. Manila (TA 8548-INO).

18. **Policy and legal frameworks.** The system of Indonesia's environmental impact assessment (AMDAL) was established in 1982 and has been amended several times, most recently by a *Government Regulation No. 27/2012 Regarding Environmental Permit*, which is the derivative of *Law No. 32/2009 Regarding Environmental Protection and Management*.

19. The government's environment laws and regulations, specifically, *the Ministry of Environment Regulations (MOERs) No. 05/2012 Regarding Type of Activities Requiring AMDAL, No.16/2012 Regarding Guidelines for Preparation of Environmental Documents, No. 17/2012 Regarding Guidelines for Public Participation in AMDAL Process and Environmental Permit* prescribe the requirements for AMDAL, environmental management efforts and environmental monitoring efforts (UKL/UPL),<sup>7</sup> or letter of commitment for the environmental management plan and environmental monitoring plan (SPPL),<sup>8</sup> environmental permit process, guidelines for preparing environmental documents, requirements of community involvement, public consultation and grievance redress mechanism, and implementation and monitoring of appropriate mitigation measures to address adverse environmental impacts.

20. In addition, *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. *Law No. 14/2008 Regarding Public Information* guarantees the provision of correct information to the public as a form of public service. *Law No. 13/2003 Regarding Manpower*, and *Government Regulation No. 50/2012 Regarding Practice of Health and Safety Management System* ensure the right of every worker to protection, health, and safety to achieve optimal work productivity; and require implementation of a health and safety system. *Presidential Decree No. 32/1990 Regarding Management of Protected Area* regulates the procedures and mechanisms for the preservation of protected areas and *Law No. 11/2010 Regarding Physical Cultural Resources* for cultural heritage.

21. **PLN practices.** Environmental mitigation measures have been observed as specified in *the decree of the PLN Board of Directors (PLN Decree) No. 473/2010 Regarding Construction Standard for Low Voltage Power Network*<sup>9</sup> and *PLN Decree No. 606/2010 Regarding Construction Standard for Medium Voltage Power Network*<sup>10</sup>. To address the potential risks for workers' health and safety, PLN established an occupational health and safety management system (SMK3) which has been strictly implemented with penalties imposed on contractors for non-compliance. Each PLN regional office submits to PLN headquarters occupational health and safety performance report and environmental performance report quarterly.

22. PLN has an effective complaints management system through (i) call center 123, which can be accessed by anyone anywhere in Indonesia through the website, email, telephone, and social media; (ii) online by using integrated complaint solving application (APKT); and (iii) frontline, i.e., customer services. PLN *Rayon* (para.46) immediately act on complaints about distribution networks including those against construction impacts, environment, community

<sup>7</sup> 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 process of the decision- making regarding the implementation of the businesses and /activities.

<sup>8</sup> 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.

<sup>9</sup> PLN. 2010. *Lampiran Keputusan Direksi PT PLN (Persero)/Nomor:473.K/DIR/2010 Buku 3–Standar Konstruksi Jaringan Tegangan Rendah Tenaga Listrik*.

<sup>10</sup> PLN. 2010. *Lampiran Keputusan Direksi PT PLN (Persero)/Nomor:606.K/DIR/2010 Buku 5–Standar Konstruksi Jaringan Tegangan Menengah Tenaga Listrik*.

health and safety, and resettlement issues by deploying PLN technical service responders.

23. **Gaps identified.** In Nusa Tenggara and Sulawesi, no environmental document is prepared for distribution lines including the ones in or directly adjacent to protected areas. Regional offices in these areas do not have information on the location of the protected areas which could be used for screening. Environmental assessment is not conducted and environmental management is not fully implemented. Some contractors do not dispose the trimmed tree branches properly, leaving them on a private land without land owners' permission. Field investigations also noted that safety clearances of distribution lines with houses and trees were not in accordance with the prescribed clearance standards in some areas.

24. In addition, there are general flaws in the waste management. Used equipment generated from distribution line maintenance such as poles, cables, transformers, meters are accumulated at warehouse sites. Most of them are stored in open areas without soil protection. The current assets and wastes disposal system requires several verification and administrative procedures that has resulted in delays of disposal and long years of storage at warehouse sites.<sup>11</sup> During the field investigations, oil spills from used transformers were also noted at the warehouse sites and at areas where oil-draining activities were being done<sup>12</sup>.

25. Based on the assessments undertaken, the environment safeguard system currently in place through the government's environmental laws and regulations are sufficient to comply with the ADB Safeguard Policy Statement principles that are triggered. However, PLN can improve current practices by ensuring compliance with the government's environmental requirements. PLN needs to obtain the information of protected areas for the screening and exclusion of activities in or directly adjacent to protected areas from the scope of the program (para.4). The environmental management can be improved by preparing and implementing environmental documents as required by the government's laws and regulations. The management of wastes can be improved by cleaning up existing oil spills, equipping warehouse sites with oil containment/protection measures, improving the administrative process of assets and waste disposal and securing the appropriate permit for storage and disposal of hazardous wastes. Community safety can be further enhanced through awareness building and regular tree trimming around existing distribution lines.

### 3. Involuntary Resettlement

26. **Policy and legal frameworks.** There is no system (policy and legal frameworks) which covers the resettlement impact of distribution line projects.<sup>13</sup>

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<sup>11</sup> Used equipment are still considered as Government assets and are required to go through internal audit and verification within PLN involving the Ministry of State Owned Enterprise (MSOE) and Directorate General of National Wealth under the Ministry of Finance. Broken materials which are less than 5 years but with economic value can be disposed through auction by PLN headquarters discretion but would need agreement of the Board of Commerce composed of 9 commissioners. Used assets which are more than 5 years and with low economic value are disposed through the MSOE. The long process of inventory, review, audit, and verification by different units and the prudence of the relevant authority to sign the accountability statements procrastinate the disposal of used equipment. Currently, PLN has about Rp900 Billion worth of materials for disposal which are stocked at PLN warehouse sites (including inside warehouses and in open outdoor space) in Sulawesi and Nusa Tenggara.

<sup>12</sup> Some PLN Areas conduct minor repair and oil draining of broken transformers at warehouse sites.

<sup>13</sup> *PLN Decree No. 0289/2013 Regarding 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 substation, network, transmission, distribution, power plant, and office, by giving indemnity;

27. **PLN practices.** For the installation of distribution lines, PLN starts consultation with village heads from the planning stage. The consultation agenda includes the project plan, use of land, and cable stringing that may require removal of non-land assets (mainly trees).

28. PLN, in conjunction with contractors, facilitates the planning of the alignment and the 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 land and private land. The alignments of distribution lines, including the location of utility poles, can be changed if needed. The distance between the poles varies from 60 m to 80 m for medium-voltage networks and 30 m to 40 m for low-voltage networks. Even within the same alignment, the conductors are able to avoid disturbance of non-land assets by setting the height of poles and conductors higher or by replacing the bare cable with an insulated cable 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 to avoid disturbance of non-land assets to the maximum extent possible or else to obtain concurrence of the affected persons for the use of private land for utility poles and removal of non-land assets.

29. If a distribution line is installed upon the request of a community, the head of a village submits 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. Thus no compensation is provided to the affected persons. For other cases, if utility poles need to be located on private land, then only a verbal agreement from the landowner is obtained. Coordination for use of land and affected trees/crops is handled by contractors.

30. The grievances related to these resettlement impacts are received and resolved through the comprehensive complaints management system (para.22).

31. **Gaps identified.** The result of the diagnostic assessment of PLN practices and gap with ADB's Safeguard Policy Statement regarding involuntary resettlement are summarized in Additional Information for the PSSA.

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 Safeguard Policy Statement.<sup>14</sup> Identified gaps between PLN's practices and the ADB principles revolve around principles 2 and 12.

33. Consultation is conducted primarily through the village heads, and not all the affected persons are involved in the decision making for the distribution line alignment and design.

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and/or (ii) indirect land acquisition for creating free space by giving compensation for the land crossed by the electricity network and transmission and by giving indemnity for the plants and buildings. However, this Decree does not mention use of land (not "direct land acquisition") for distribution lines (utility poles) and indirect land acquisition for creating "free space" under distribution lines (i.e., removal of non-land assets for stringing of conductors).

<sup>14</sup> 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; and (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.



Interview with some affected persons during the site investigations revealed that not all of them are knowledgeable about the project and its implications and consequences.

34. If a distribution transformer needs to be located on private land, *PLN Decree No. 0605/2010 Regarding Construction Standard for Power Distribution Substation*<sup>15</sup> requires written permission for the use of the land obtained from the landowners. However, in Nusa Tenggara and Sulawesi, no written agreement has been obtained from the affected persons.

35. Coordination for use of land and affected trees/crops is handled exclusively by contractors. The process is neither documented nor monitored by PLN or any third party.

36. Based on the field investigations in urban and rural areas and interviews with some affected persons, 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 land owners' 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 through reviewing complaints received, and take necessary actions if the 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. *The Basic Agrarian Law No.5/1960* and *the Constitutional Court Decision No. 35/2012* recognize indigenous peoples' rights. Some local governments in Nusa Tenggara and Sulawesi have local regulations (*Peraturan Daerah*) regarding recognition and validation of indigenous peoples.

38. The Government of Indonesia, the World Bank and Indigenous Peoples Alliance of the Archipelago (AMAN), which actively advocates indigenous peoples rights, issued an indigenous peoples map which indicates the identifications and the population of indigenous peoples living throughout Indonesia.

39. The Ministry of Social have regular program to empower Indigenous Peoples groups through various activities including provision of public facilities. The Ministry of Energy and Mineral Resources has been providing electricity access program to Indigenous Peoples, although the program does not cover all the Indigenous People households.

40. **PLN practices.** Although many Indigenous Peoples recognize the benefit of electricity access and expect to be connected, not all of them have electricity access. For example, some Indigenous Peoples groups in Lombok in NTB were not connected to electricity until 2014, although they had been requesting the connection for a long time. The electrification rate among Indigenous Peoples communities in Gorontalo province in Sulawesi is less than 10%.

41. In general, the socio economic conditions of Indigenous Peoples are less developed compared to the dominant society. Most of the Indigenous Peoples communities are in remote areas (such as highland, coastal area and protected forest) with limited transport access, and

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<sup>15</sup> PLN. 2010. *Lampiran Keputusan Direksi PT PLN (Persero)/Nomor:605.K/DIR/2010 Buku 4–Standar Konstruksi Gardu Distribusi Dan Gardu Hubung Tenaga Listrik.*

away from public facilities such as schools and health centers. Due to the inconvenient access, village offices rarely invite the Indigenous Peoples to consultations on the development plans. Therefore the expectation of the Indigenous Peoples communities on electricity access is not fully reflected in the development plans. The difficulties in obtaining forestry permits and limited transport access to these communities also make PLN reluctant to prioritize the installation of distribution lines in these areas.

42. For the installation of distribution lines in the area of Indigenous Peoples, PLN starts consultation with village heads from the planning stage, and respects and takes into consideration the options the affected Indigenous Peoples prefer 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 and gap with ADB's Safeguard Policy Statement regarding Indigenous Peoples are summarized in Additional Information for the PSSA.

44. Identified gaps between PLN's practices and the ADB principles revolve around 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. Assessment of the impacts is not conducted, and an IPP is not prepared. Consultation is conducted primarily through the village heads, and the affected Indigenous Peoples may not be fully involved in the decision-making (para.33).

45. Based on the field investigations and interviews with some Indigenous Peoples, 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. However, PLN needs to; (i) identify the Indigenous Peoples among the potential customers; and (ii) strengthen the consultation process to ensure the participation of Indigenous Peoples in tailoring project benefits for affected communities in a culturally appropriate manner.

## 5. Institutional Arrangements

46. PLN regional offices (*wilayah*)<sup>16</sup> are responsible for the construction, operation of power plants, substations, transmission lines and distribution lines. Each *wilayah* has some units called *Area* which is in charge of construction of distribution lines and operation of substations, transmission lines and distribution lines. Each *Area* has some units called *Rayon* which is in charge of customer services including maintenance of distribution lines within sub districts.

47. PLN is a decentralized operation, and therefore has dedicated safeguard staff at headquarters and in regional offices. Headquarters staff is responsible for policy matters while regional staff is responsible for the delivery. At PLN headquarters, Health, Safety and Environment Division (Div K3L) which comprises four full-time staff handles environmental and social safeguards issues all over the country. Each *wilayah* has one to two staff assigned to oversee implementation of health, safety and environmental policies. Some *Areas* have one to three safety officers who monitor the health and safety aspects.

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<sup>16</sup> There are one *wilayah* each in NTB (headquartered in Lombok) and NTT (headquartered in Kupang), and two *wilayahs* in Sulawesi; (i) Sulselrabar (headquartered in Makassar) covering the provinces of South Sulawesi, West Sulawesi and South East Sulawesi; (ii) Suluttenggo (headquartered in Manado) covering the provinces of North Sulawesi, Central Sulawesi and Gorontalo.

48. Since 1967, PLN has implemented many projects including distribution lines some of which have been funded by multilateral agencies. PLN has accumulated adequate knowledge and experience in handling environmental and social safeguard issues. To enhance their capacity, PLN staff attend trainings (including training on safeguards) provided by the Education and Training Unit of PLN Corporate University. All staff are entitled to select and attend trainings 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.<sup>17</sup>

49. **Weakness in implementation effectiveness of the safeguard system.** On the basis of this assessment, weak application of environmental regulations and *PLN Decrees* was found to be an outcome of low staff awareness about the related regulatory framework and guidelines (para.23). Robust in-house refresher training is to be conducted regularly for PLN staff to increase the awareness of safeguard requirements and ensure their proper implementation. Focal persons for environmental and social safeguards will be assigned at headquarters and each unit (*wilayah, Area, Rayon*) to ensure compliance with the safeguard program actions.

#### D. Safeguard Program Actions

50. Given the assessment and considering the scope and scale of the impacts and the risks, 10 program actions are proposed with their indicators and targets, responsibility, time frame, and budget resources to address the identified gaps and weaknesses (Table 2). PLN has adequate capacity and has agreed to implement these actions. ADB will monitor the status of these actions during program implementation.

51. To facilitate the implementation of the safeguard program action No. 4 (Improve the management of waste and asset at warehouse site), improvement of asset and waste management is set as one of the disbursement-linked indicators (DLIs) of the program (Table 1), which covers \$48 million (8%) of the disbursement.

**Table 1: Disbursement-Linked Indicator (DLI) related to waste and asset management**

DLI 8: Asset and waste management improved with 80% of used PLN-owned equipment (included in the disposal inventory as of end-2016) disposed by 2020	
Year	Disbursement-Linked Indicator (DLI)
2017	<ul style="list-style-type: none"> <li>• Inventory of used equipment for disposal as of end-2016 prepared and approved by PLN Accounting Division (Div-AKT)</li> <li>• Disposal inventory approved by Ministry of State Owned Enterprise (MSOE)</li> <li>• PLN Guidance for Asset Management (1998) revised to accelerate disposal of hazardous waste</li> </ul>
2018	<ul style="list-style-type: none"> <li>• Existing oil spills cleaned in accordance with the Ministry of Environment Regulations No.33/2009</li> <li>• 20% of PLN-owned used equipment in the inventory (as of end-2016) disposed</li> </ul>
2019	<ul style="list-style-type: none"> <li>• 30% of PLN-owned used equipment in the inventory (as of end-2016) disposed</li> </ul>
2020	<ul style="list-style-type: none"> <li>• Equip all warehouses with oil containment / protection measures</li> <li>• 30% of PLN-owned used equipment in the inventory (as of end-2016) disposed</li> </ul>

<sup>17</sup> The 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 6); (iii) discussion and workshop for strengthening the AMDAL system through the subproject: Strengthening Capacity of Indonesia's Environment Impact Assessment (AMDAL) System under TA 7566-REG (footnote 6).

**Table 2: Safeguards Program Actions**

Proposed Action	Indicator / Target	Responsible Agencies	Timeframe	Budget Resource
<b>General</b>				
1. Issue a technical guidance (including the guidance on safeguards screening) on the implementation of safeguard program actions	Technical guidance issued to General Managers of PLN Wilayah	Div K3L	Prior to the first annual disbursement	PLN Head Office (as required)
<b>Environmental Safeguards</b>				
2. <u>Ensure the application of environmental mitigation measures</u> to the construction of distribution lines	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) BLHD	PLN Wilayah	2017 onwards	PLN Wilayah
	ii) Environmental mitigation measures specified in the environmental document included in the contract document	PLN Wilayah	2017 onwards	PLN Wilayah
	iii) Implementation of the mitigation measures monitored	PLN Wilayah	2017 onwards	PLN Wilayah
3. <u>Improve the management of waste and asset at warehouse site</u>	i) Inventory of used equipment for disposal as of end-2016 prepared	PLN Wilayah Div AKT	by Dec 2017	PLN Wilayah Div AKT
	ii) Disposal inventory approved by Board of Commerce (for equipment which are less than 5 years) and MSOE (for equipment which are more than 5 years)	Div AKT	by Dec 2017	Div AKT
	iii) PLN Guidance for Asset Management (1998) revised to accelerate disposal of hazardous waste	Div AKT Div K3L	By Dec 2017	Div AKT Div K3L
	iv) Waste/asset Management Improvement Plan (including timeframe, budget, human resource) prepared in consultation with Div AKT and Div 3KL and approved by Div PR SNT	PLN Wilayah PLN Area Div PR SNT	by Dec 2017	PLN Wilayah PLN Area
	v) Existing oil spills cleaned up in accordance with relevant regulations (including MOER No.33/2009 and Government Regulation No. 101/2014)	PLN Wilayah PLN Area	by Dec 2018	PLN Wilayah PLN Area
	vi) Warehouse sites equipped with oil containment/protection measures	PLN Wilayah PLN Area	by Dec 2020	PLN Wilayah PLN Area
	vii) Waste/asset Management Improvement Plan implemented	PLN Wilayah PLN Area	by Dec 2020	PLN Wilayah PLN Area
4. <u>Enhance the community safety along</u>	i) Awareness building (for prevention of plants along the distribution lines and prevention of public contact with	PLN Wilayah (Public Relation Division)	2017 onwards	PLN Wilayah

Proposed Action	Indicator / Target	Responsible Agencies	Timeframe	Budget Resource
distribution lines (including transformers) under operation	potentially dangerous equipment) conducted for communities			
	ii) Performance of tree trimming by the distribution line maintenance contractors monitored	PLN Wilayah	2017 onwards	PLN Wilayah
	iii) Outbreak due to tree disturbance reduced (baseline data collected in 2016)	PLN Wilayah	2017 onwards	PLN Wilayah
	iv) Safety notice posted on newly installed distribution transformers	PLN Wilayah (through contractors)	2016 onwards	PLN Wilayah
<b>Social Safeguards (Involuntary Resettlement and Indigenous Peoples)</b>				
5. <u>Strengthen meaningful consultation</u> <sup>a</sup> with affected peoples and IPs	i) A guidance on meaningful consultation issued in collaboration with Div PR SNT and Div Cooperate Communication (The guidance will ensure the participation of IPs in tailoring project benefits for affected IPs communities in a culturally appropriate manner.) with reference to MOER No.17/2012	Div K3L	Prior to the first annual disbursement	Div K3L
	ii) Process and result of the consultations documented	PLN Wilayah	2017 onwards	PLN Wilayah
6. <u>Obtain written agreement</u> from the land owners for the use of land for distribution transformers	Written agreement obtained following Buku 4, and documented	PLN Wilayah	2017 onwards	PLN Wilayah
7. <u>Monitor the resettlement outcomes and their impacts</u> on the living standards of displaced persons through reviewing complaints received, and take necessary actions if the impacts are found to affect the income and livelihood status of the affected persons.	The monitoring result documented	PLN Wilayah	2017 onwards	PLN Wilayah
<b>Capacity Building</b>				
8. <u>Appoint focal persons</u>	Safeguards focal persons (respectively for environment	PLN Wilayah	Prior to the	PLN Wilayah

Proposed Action	Indicator / Target	Responsible Agencies	Timeframe	Budget Resource
to implement environmental and social safeguard activities	and social safeguards) appointed at Wilayah, Area and Rayon	PLN Area PLN Rayon	first annual disbursement	PLN Area PLN Rayon
9. <u>Build capacity</u> on environmental and social safeguards focusing on the safeguard program actions.	Refresher trainings held annually for relevant staff in PLN (headquarters, Wilayah, Area, Rayon), contractors and key local government counterparts	Div K3L	Every 4th quarter starting from 2017 onwards	Div K3L Div Talenta
<b>Monitoring</b>				
10. <u>Monitor and ensure the implementation of the program actions</u>	i) Implementation of the program action 4 monitored and reported to PLN Wilayah annually	PLN Area (focal persons)	Every 4th quarter starting from 2017 onwards	PLN Area
	ii) Implementation of the program actions; 2, 3, 4, 5, 6 and 7 monitored and reported to Div PR SNT, Div PPT, and Div K3L annually	PLN Wilayah (focal persons)	Every 4th quarter starting from 2017 onwards	PLN Wilayah
	iii) The list of distribution line projects (with the village names and the length of distribution lines) with the result of safeguards screening <sup>b</sup> submitted to Div PR SNT and Div K3L annually	PLN Wilayah	Every 1st quarter starting from 2017 onwards	PLN Wilayah

AMDAL = *Analisis Mengenai Dampak Lingkungan* (environmental impact assessment), BLHD = *Badan Lingkungan Hidup Daerah* (provincial/district Environment Agency), Div AKT = Accounting Division, Div K3L = Health, Safety and Environment Division, Div PPT = Permit and Land Division, Div PR SNT = Sulawesi Nusatenggara Regional Development Division, Div Talenta = Budget and Human Resources Division, IP = Indigenous Peoples, MOER = the Ministry of Environment Regulations, PLN = *Perusahaan Listrik Negara* (State Electricity Corporation), SPPL = *Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup* (letter of commitment for the environmental management plan and environmental monitoring plan), UKL/UPL = *Upaya Pengelolaan Lingkungan Hidup / Upaya Pemantauan Lingkungan Hidup* (environmental management efforts and environment monitoring efforts), *Wilayah* = regional office.

<sup>a</sup> Meaningful Consultation is a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of 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.

<sup>b</sup> PLN *Wilayah* identify (i) the projects in protected areas (designated by the Government of Indonesia) in consultation with special planning of BAPPEDA and forestry agencies, and (ii) the projects in Indigenous Peoples communities making use of the community village list provided by ADB. ADB will identify the activities in Key Biodiversity Areas, making use of the list provided by PLN.

# Additional Information to Program Safeguard Systems Assessment

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August 2016

**INO: Sustainable Energy Access in Eastern  
Indonesia—Electricity Grid Development Program**





1. This document supplements the Program Safeguard Systems Assessment for the INO: Sustainable Energy Access in Eastern Indonesia—Electricity Grid Development Program, and includes; (i) Table 1: Safeguards Diagnostic Assessment; and (ii) Figure 1: Map of Protected Areas and Key Biodiversity Areas in Nusa Tenggara and Sulawesi.

**Table 1: Safeguards Diagnostic Assessment**

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
<b>Environment</b>		
<p><b>Principle 1.</b> Use a screening process for each proposed project, as early as possible, to determine the extent and type of environmental assessment so that appropriate studies are undertaken commensurate with the significance or potential impacts and risks.</p>	Yes	<p>&lt;System&gt;  <i>MOER No. 05/2012 Regarding Type of Activities Requiring AMDAL</i> is a prescriptive screening process used to determine whether projects are required to conduct an AMDAL and secure an environmental clearance from the environmental agency.            Under <i>MOER No. 05/2012</i>, AMDAL is required for business/activities listed in its <i>Appendix I</i> which does not include distribution line.            In addition, <i>MOER No. 05/2012, Article 4</i> requires AMDAL for business/activities which; (a) have the scale/magnitude smaller than those listed in <i>Appendix I</i>; and/or (b) not listed in <i>Appendix I</i> but have a significant impact on the environment. These business/activities shall be determined based on: (a) scientific considerations regarding environmental capacity and its acceptability; and (b) the significance of environmental impact regarding the type of local ecosystem.  <i>MOER No. 05/2012, Article 3</i> also requires AMDAL for business/activities in or directly adjacent to protected areas which are listed in <i>MOER No. 05/2012, Appendix III</i>.  <i>Law No. 32/2009 Regarding Environmental Protection and Management</i> requires UKL/UPL for business/activities that do not have significant environmental impact. BLHD specifies the type of business/activities which requires UKL/UPL.            Under <i>Law No. 32/2009</i>, business/activities which do not require AMDAL or UKL/UPL shall prepare SPPL. The determination of the type of business/activities which require SPPL shall be based on the following criteria; (i) not included in the category of significant environmental impact; and (ii) activities of micro and small enterprises.            The templates of UKL/UPL and SPPL are at <i>Appendix IV</i> and <i>V</i> of <i>MONRE No.16/2012 Regarding Guidelines for Preparation of Environmental Documents</i> respectively.</p>
<p><b>Principle 2.</b> Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative and induced impacts and risks to physical, biological, socioeconomic (including impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues), and physical cultural resources in the context of the project's area of influence. Assess potential transboundary and global impacts, including climate change. Use strategic environmental assessment where appropriate.</p>	Yes	<p>&lt;Practices&gt;  <i>Law No. 32/2009</i> may require SPPL for distribution lines and <i>MOER No. 05/2012</i> requires AMDAL in case they are located in or directly adjacent to protected areas, however, in Nusa Tenggara and Sulawesi, no environmental document is prepared for distribution lines. BLHDs in these areas do not regulate distribution lines. <i>Wilayahs</i> in these areas do not have information on the location of the protected areas</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
		<p>which could be used for screening.</p> <p>&lt;Gap&gt; Environmental assessment is not conducted for distribution lines. While the activities in or directly adjacent to protected areas will be excluded from the scope of the program (see para.4 of PSSA), PLN does not have information for the screening.</p>
<p><b>Principle 3.</b> Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.</p>	Yes	<p>&lt;System&gt; There is no system (policy and legal frameworks) which requires alternatives' examination for distribution lines.</p> <p>&lt;Practice&gt; Regardless of the absence of legal requirement, alternatives on location, route, equipment, capacity, technical specifications and other design considerations are examined during selection and planning of subprojects by PLN. Pole locations are adjusted based on results of site surveys and request of affected household, which, as a result, mitigates negative environmental and social impacts. The screening process of PLN <i>wilayah</i> for proposed distribution system gives priority to: (i) areas located in a central district; (ii) communities in proximity to an area where an existing distribution line is operating; (iii) areas with sufficient generation capacity available; and (iv) areas with communities' request for electrification (see para 40. of PSSA).</p> <p>&lt;Gap&gt; N/A</p>
<p><b>Principle 4.</b> Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an EMP that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Key considerations for EMP preparation include</p>	Yes	<p>&lt;System&gt; The system may require SPPL for distribution lines and <i>MOER No. 05/2012</i> requires AMDAL in case they are located in or directly adjacent to protected areas (see the &lt;Practice&gt; of Principles 1 and 2 above). AMDAL and SPPL are supposed to present measures to avoid, minimize, and/or offset adverse environmental impacts. <i>Decree of the Board of Directors of PLN (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</i> include the mitigation measures to be taken against environmental impacts caused by distribution line during construction and operation stages. The mitigation measures include proper handling of excavated soil, appropriate selection of vehicle for transportation of poles, recovery of excavation site, adequate distance from other objects (1-6 m depending on the kind of the objects), etc.</p> <p>&lt;Practices&gt; The contract of the civil works specifies the compliance of <i>PLN Decrees No. 473/2010</i> and <i>No. 606/2010</i>, however, neither AMDAL nor SPPL is prepared for distribution lines in Nusa Tenggara and Sulawesi (see the &lt;Practice&gt; of</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.		Principles 1 and 2 above).  <Gap> There is no EMP prepared for distribution lines and environmental management is not fully implemented. Some contractors do not dispose the trimmed tree branches properly, leaving them on a private land without land owners' permission.
<b>Principle 5.</b> Carry out meaningful consultation with affected people and facilitate their informed participation. Ensure women's participation in consultation. Involve stakeholders, including affected people and concerned non-government organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment. Establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.	Yes	<System> There is no system (policy and legal frameworks) which requires meaningful consultation and grievance redress mechanism for distribution lines.  <Practice> Regardless of legal requirement, prior to civil works, consultation (socialization) and coordination are conducted by PLN and contractors with the village heads but not with all affected households. The agenda of the consultation includes project plan and safety. GRM has been developed by PLN through; (a) <i>Call Centre 123</i> ; (b) online by using APKT; and (c) front line i.e. customer services which will also be used for the program. The complaints to the <i>Call Center 123</i> would be recorded and divided in three subjects: 1) Technical, 2) Customer services (commercial), and 3) Other (including environmental and social safeguards matters).  <Gap> Not all the affected households are involved in the consultation.
<b>Principle 6.</b> Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected	Yes	<System> Under <i>Law No. 14/2008 Regarding Public Information, Chapter 1, Article 4</i> , everyone has the right to obtain public information, attend public meetings to obtain public information, obtain copies of public information through an application, and/or disseminate public information.  <Practice> Environmental assessment is not disclosed because the environmental documents are not prepared (see the <Practices> of Principles 1 and 2 above).  <Gap> See the <Practice> above.

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
people and other stakeholders.		
<p><b>Principle 7.</b> Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.</p>	Yes	<p>&lt;System&gt; There is no system (policy and legal frameworks) which requires environmental monitoring of distribution lines.</p> <p>&lt;Practices&gt; PLN <i>wilayahs</i>, being in charge of the construction and operation of distribution line, have one to two staff handling matters related to health and safety whose scope of work includes the monitoring of the compliance of <i>the PLN Decrees</i> (see the &lt;System&gt; of Principle 4 above). The result of the monitoring is summarized in occupational health and safety performance report and environmental performance report submitted to PLN headquarters quarterly. The environmental documents including monitoring reports are disclosed when requested by stakeholders including communities.</p> <p>&lt;Gap&gt; N/A</p>
<p><b>Principle 8.</b> Do not implement project activities in areas of critical habitats, unless (i) there are no measureable adverse impacts on the critical habitat that could impair its ability to function, (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and (iii) any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantially outweigh the environmental costs, and (iii) any conversion or degradation is</p>	Yes	<p>&lt;System&gt; GOI has ratified international regulation on biodiversity through <i>Law No. 05/1994 Regarding United Nation Convention Regarding Biodiversity</i> which requires the environmental assessment of proposed projects likely to have significant impacts on biological diversity with a view of avoiding or minimizing such effects. <i>MOER No. 05/2012, Article 3</i> requires AMDAL for activities in or directly adjacent to protected areas which are listed in <i>MOER No. 05/2012, Appendix III</i> which includes areas of wildlife sanctuaries/reserves and refuge for animals. <i>Presidential Decree No. 32/1990 Regarding Management of Protected Area, Article 37</i> stipulates that; (i) in protected areas, cultivation, which interferes with the environmental function of the protected area, is prohibited; and (ii) in nature reserves and areas of cultural heritage, cultivation, which alters the landscape, land use conditions, natural ecosystem, or environmental function of the nature reserves or cultural heritage, is prohibited. If AMDAL indicates that cultivation activities interfere with the function of protection, it should not be developed, and function as a protected area should be gradually restored. In case there are subprojects that would be located in or directly adjacent to protected area, the said subproject will be required under <i>MOER No. 05/2012</i> to conduct extensive AMDAL and to develop conservation programs to avoid the degradation of the environment. In case AMDAL indicates that the project interferes with the function of protection, it should not be developed.</p> <p>&lt;Practices&gt; Majority of the areas for electrification are located in</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
<p>appropriately mitigated. Use a precautionary approach to the use, development and management of renewable natural resources.</p>		<p>settlement areas and the distribution lines are installed along roads. Some medium voltage distribution lines pass through protected areas such as declared savannahs and production forest to provide electricity to a community.</p> <p>In Nusa Tenggara and Sulawesi, no environmental document is prepared for distribution lines even though they are located in or directly adjacent to protected area. <i>Wilayahs</i> in these areas do not have information on the location of the protected areas which could be used for screening (see the &lt;Practices&gt; of Principles 1 and 2 above).</p> <p>&lt;Gap&gt; See the &lt;Practice&gt; above.</p>
<p><b>Principle 9.</b> Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials subject to international bans or phase-outs. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.</p>	<p>Yes</p>	<p>&lt;System&gt; <i>Government Regulation No. 101/2014 Regarding Management of Toxic and Hazardous Waste Substances</i> regulates the proper management of hazardous waste covering; (i) method of identifying, reducing, storing, collecting, transporting, utilizing, processing, and hoarding hazardous wastes; (ii) risk mitigation and emergency responses to address environmental pollution caused by hazardous waste. The regulation considers the wastes discharged from distribution line projects including transformers and their oil as hazardous wastes which require BLHD's permit for the storage.</p> <p>Under <i>MOER No. 33/2009 Regarding Recovery Procedure of Land Contaminated by Hazardous and Toxic Waste</i>, restoration of contaminated land consists of four activities; (i) planning, (ii) implementation (land survey following <i>Appendix I</i>, determination of sampling points following <i>Appendix II</i>, and land restoration following <i>Appendix III</i>); (iii) evaluation; and (iv) monitoring. The entity who is responsible for the land restoration prepares a plan and submit it to MOEF for approval. The implementation is monitored by MOEF, Governor or mayor depending on the location. The result of the implementation needs to be reported to MOEF which evaluates the implementation, confirms the compliance with <i>MOER No. 33/2009</i>, and issues a letter of "Contaminated Land Settlement Status". Once the letter is issued, monitoring of the contaminated land needs to be conducted at least semi-annually for one year, and the result needs to be submitted to the MOEF.</p> <p>&lt;Practices&gt; Some <i>wilayahs</i> store hazardous waste at warehouse sites without BLHD's permission. PLN's logistic warehouse sites have accumulated large quantities of broken transformers, meters, cables, wood, steel, and other waste materials awaiting proper disposal for a long time (more than some decades in some cases). Oil spills from transformers were found in the warehouse compounds which are contaminating the soil.</p> <p>&lt;Gap&gt;</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
		There are flaws on the implementation of environmental mitigation measures to manage industrial wastes including hazardous wastes.
<p><b>Principle 10.</b> Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize adverse impacts and risks to the H&amp;S of local communities.</p>	Yes	<p>&lt;System&gt;  <i>Law No. 13/2003 Regarding Manpower</i> states that every company has the obligation to practice health and safety management and to integrate them into the company management system. Implementation of health and safety system had been issued by <i>Government Regulation No. 50/2012 Regarding Practice of Health and Safety Management System</i>.</p> <p>&lt;Practices&gt;  To address the potential risks on workers' and communities' health and safety, health and safety guideline exclusively for distribution line is in place. However, some of the interviewed households mentioned the deficiencies during construction by contractors such as lack of cover on excavated soil (2-meter deep) while waiting for the pole to be installed, thus, causing potential hazards to community. Some of the distribution poles are also located very close to houses and trees, not complying with the safety clearance requirement.</p> <p>&lt;Gap&gt;  There is gap in terms of contractor's obligation and PLN's observance of safety clearance to ensure community safety.</p>
<p><b>Principle 11.</b> Conserve physical cultural resources and avoid destroying or damaging them by using field-based surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of "chance find" procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.</p>	Yes	<p>&lt;System&gt;  <i>MOER No. 05/2012, Article 3</i> requires AMDAL for activities in or directly adjacent to protected areas which are listed in <i>MOER No. 05/2012, Appendix III</i> which includes areas of cultural heritage. The definition, criteria, procedures and mechanism for cultural heritage preservation is regulated in <i>Law No. 11/2010 Regarding Physical Cultural Resources</i>.</p> <p>&lt;Practices&gt;  During identification of site locations, physical cultural resources (mosques, burial sites, historical sites, etc.) are avoided. The village heads and temple/mosque committee are consulted about locating poles near temples, mosques, sacred trees, and other important physical cultural resources.</p> <p>&lt;Gap&gt;  N/A</p>
<b>Involuntary Resettlement<sup>a</sup></b>		
<p><b>Principle 1.</b> Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced</p>	Yes	<p>&lt;Practices&gt;  The potential IR impact of the program activities is limited to (i) use of no more than 0.2 m<sup>2</sup> of land for installation of utility poles; (ii) possible removal of non-land assets (primarily trees) located within 2.5 m of the conductors (within the 7 m wide ROW in the case of trees) during their stringing; and (iii) use of about 4.5 m<sup>2</sup> of land for installation of pole-mounted transformers (see para.9 and 10 of PSSA).</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
persons, including a gender analysis, specifically related to resettlement impacts and risks.		<Gap> N/A
<p><b>Principle 2.</b> Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation, and monitoring and evaluation of resettlement programs. Pay particular attention to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, and Indigenous Peoples, and those without legal title to land, and ensure their participation in consultations. Establish a grievance redress mechanism to receive and facilitate resolution of the affected persons' concerns. Support the social and cultural institutions of displaced persons and their host population. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.</p>	Yes	<p>&lt;Practices&gt; Consultation (socialization) and coordination with the village heads are conducted by PLN and contractors prior to civil works in close coordination with relevant local government agencies because the distribution line are generally constructed along the public roads. The APs complaint are brought to PLN through (a) <i>Call Center 123</i>; (b) online by using APKT; and (c) front line (see the &lt;Practices&gt; of Environmental Principle 5 above).</p> <p>&lt;Gap&gt; Affected households are sometimes not informed about the pole location and would become aware of the distribution line project only when the contractor arrives to install the pole.</p>
<p><b>Principle 3.</b> Improve, or at least restore, the livelihoods of all displaced persons through (i) land-based resettlement strategies when affected livelihoods are land based</p>	No	<p>&lt;Not Triggered&gt; The impact is minimal (see the &lt;Practices&gt; of Principle 1 above). Deterioration of APs' livelihoods is not foreseen.</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
<p>where possible or cash compensation at replacement value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.</p>		
<p><b>Principle 4.</b> Provide physically and economically displaced persons with needed assistance, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.</p>	No	<p>&lt;Not Triggered&gt; There is no relocation (see the &lt;Practices&gt; of Principle 1 above).</p>
<p><b>Principle 5.</b> Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to</p>	No	<p>&lt;Not Triggered&gt; (see the &lt;Practices&gt; of Principle 3 above)</p>



Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.		
<b>Principle 6.</b> Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.	Yes	<Practices> The impact of the program activities is not likely to affect the income and livelihood status of the APs (see the <Practices> of Principle 1 above).  <Gap> N/A
<b>Principle 7.</b> Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets.	Yes	<Practices> APs who can demonstrate that the non-land assets belong to them are deemed as the owners of the assets regardless of the titles to land or any recognizable legal rights to land.  <Gap> N/A
<b>Principle 8.</b> Prepare a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.	No	<Not Triggered> No resettlement plan is prepared. (Voluntary donation is applied.)
<b>Principle 9.</b> Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.	No	
<b>Principle 10.</b> Conceive	Yes	<Practices>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.		IR procedures are part of development projects. The impact is minimal (see the <Practices> of Principle 1 above) and significant involuntary resettlement impacts are not foreseen.  <Gap> N/A
<b>Principle 11.</b> Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.	Yes	<Practices> Voluntary donation is applied, and no compensation or resettlement entitlements are provided. However, agreement on land use and cutting trees, if required, is obtained before the commencement of civil works.  <Gap> N/A
<b>Principle 12.</b> Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.	Yes	<Practices> Coordination for use of land and affected trees/crops are handled exclusively by contractors, and not monitored by PLN or any third party, although PLN may acknowledge the agreement over the impacts caused by distribution line facilities requested by communities and utility poles with transformers.  <Gap> Monitoring is not conducted.
<b>Indigenous Peoples</b>		
<b>Principle 1.</b> Screen early on to determine (i) whether Indigenous Peoples are present in, or have collective attachment to, the project area; and (ii) whether project impacts on Indigenous Peoples are likely.	Yes	<System> There is no system which requires the screening of distribution line projects in terms of the existence of or impact on Indigenous Peoples.  <Practices> PLN does not screen distribution line projects in terms of the existence of or impact on Indigenous Peoples.  <Gap> See the <Practice> above.
<b>Principle 2.</b> Undertake a culturally appropriate and gender-sensitive social	Yes	<System> <i>MOER No. 05/2012</i> requires AMDAL in case distribution lines are located in or directly adjacent to protected areas

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
<p>impact assessment or use similar methods to assess potential project impacts, both positive and adverse, on Indigenous Peoples. Give full consideration to options the affected Indigenous Peoples prefer in relation to the provision of project benefits and the design of mitigation measures. Identify social and economic benefits for affected Indigenous Peoples that are culturally appropriate and gender and intergenerationally inclusive and develop measures to avoid, minimize, and/or mitigate adverse impacts on Indigenous Peoples.</p>		<p>(see the &lt;System&gt; of Environmental Principles 1 and 2 above). Under a <i>Government Regulation No. 27/2012 Regarding Environmental Permit</i>, AMDAL requires the assessment of environmental and social impact which may include the impact on indigenous peoples or customary communities.</p> <p>&lt;Practices&gt; The main purpose of distribution line projects' assessment is to identify the potential customers based on the community's access to electricity, demand for electricity, and economic condition. The poor customers are connected to electricity free of charge. However, in general, Indigenous Peoples have limited access to electricity because most of them live in remote areas and not invited to the consultation on the development plan including electricity access projects. During identification of site locations, physical cultural resources (mosques, burial sites, historical sites, etc.) are avoided. The village heads and temple/mosque committee are consulted about locating poles near temples, mosques, sacred trees, and other important physical cultural resources (see the &lt;Practice&gt; of Environmental Principle 11 above).</p> <p>&lt;Gap&gt; Assessment of potential project impacts on Indigenous Peoples is not conducted, though PLN respects and takes into consideration the options the affected Indigenous Peoples prefer in relation to the provision of project benefits and the design of mitigation measures.</p>
<p><b>Principle 3.</b> Undertake meaningful consultations with affected Indigenous Peoples communities and concerned Indigenous Peoples organizations to solicit their participation (i) in designing, implementing, and monitoring measures to avoid adverse impacts or, when avoidance is not possible, to minimize, mitigate, or compensate for such effects; and (ii) in tailoring project benefits for affected Indigenous Peoples communities in a culturally appropriate manner. To enhance Indigenous Peoples' active participation, projects affecting them will provide for culturally appropriate and gender inclusive</p>	Yes	<p>&lt;System&gt; <i>Law No. 41/1999 Regarding Forestry</i> requires: (i) communities to participate in the development in the field of forestry; and (ii) the Government to encourage the participation of the community through various activities in forestry.</p> <p>&lt;Practices&gt; Consultation (socialization) and coordination with the village heads are conducted by PLN and contractors prior to civil works. The APs complaint are brought to PLN through (a) <i>Call Center 123</i>; (b) online by using APKT; and (c) front line (see the &lt;Practices&gt; of Environmental Principle 5 above).</p> <p>&lt;Gap&gt; Not all the affected Indigenous Peoples are involved in the consultation.</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
<p>capacity development. Establish a culturally appropriate and gender inclusive grievance mechanism to receive and facilitate resolution of the Indigenous Peoples' concerns.</p>		
<p><b>Principle 4.</b> Ascertain the consent of affected Indigenous Peoples communities to the following project activities: (i) commercial development of the cultural resources and knowledge of Indigenous Peoples; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of Indigenous Peoples. For the purposes of policy application, the consent of affected Indigenous Peoples communities refers to a collective expression by the affected Indigenous Peoples communities, through individuals and/or their recognized representatives, of broad community support for such project activities. Broad community support may exist even if some individuals or groups object to the project activities.</p>	<p>No</p>	<p>&lt;Not Triggered&gt; Distribution line projects do not involve: (i) commercial development of the cultural resources and knowledge of Indigenous Peoples; (ii) physical displacement from traditional or customary lands; and (iii) commercial development of natural resources within customary lands under use that would impact the livelihoods or the cultural, ceremonial, or spiritual uses that define the identity and community of Indigenous Peoples.</p>
<p><b>Principle 5.</b> Avoid, to the maximum extent possible, any restricted access to and physical displacement from protected areas and</p>	<p>No</p>	<p>&lt;Not Triggered&gt; Distribution line projects do not involve restricted access to and physical displacement from protected areas and natural resources.</p>

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
<p>natural resources. Where avoidance is not possible, ensure that the affected Indigenous Peoples communities participate in the design, implementation, and monitoring and evaluation of management arrangements for such areas and natural resources and that their benefits are equitably shared.</p>		
<p><b>Principle 6.</b> Prepare an Indigenous Peoples plan (IPP) that is based on the social impact assessment with the assistance of qualified and experienced experts and that draw on indigenous knowledge and participation by the affected Indigenous Peoples communities. The IPP includes a framework for continued consultation with the affected Indigenous Peoples communities during project implementation; specifies measures to ensure that Indigenous Peoples receive culturally appropriate benefits; identifies measures to avoid, minimize, mitigate, or compensate for any adverse project impacts; and includes culturally appropriate grievance procedures, monitoring and evaluation arrangements, and a budget and time-bound actions for implementing the planned measures.</p>	Yes	<p>&lt;System&gt; There is no system which requires the preparation of IPP for distribution projects.</p> <p>&lt;Practices&gt; No IPP is prepared for distribution projects.</p> <p>&lt;Gap&gt; See the &lt;Practice&gt; above.</p>
<p><b>Principle 7.</b> Disclose a draft IPP, including documentation of the consultation process and the results of the social impact assessment in a</p>	Yes	

Principles	Triggered Yes / No	Current system (policy and legal frameworks) / practices and gap between them and the ADB SPS
timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected Indigenous Peoples communities and other stakeholders. The final IPP and its updates will also be disclosed to the affected Indigenous Peoples communities and other stakeholders.		
<b>Principle 8.</b> Prepare an action plan for legal recognition of customary rights to lands and territories or ancestral domains when the project involves (i) activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, or (ii) involuntary acquisition of such lands.	No	<Not Triggered> Distribution line projects do not involve (i) activities that are contingent on establishing legally recognized rights to lands and territories that Indigenous Peoples have traditionally owned or customarily used or occupied, or (ii) involuntary acquisition of such lands.
<b>Principle 9.</b> Monitor implementation of the IPP using qualified and experienced experts; adopt a participatory monitoring approach, wherever possible; and assess whether the IPP's objective and desired outcome have been achieved, taking into account the baseline conditions and the results of IPP monitoring. Disclose monitoring reports.	Yes	<System> There is no system which requires IPP for distribution projects (see the <System> of Principles 6 and 7 above.).  <Practices> PLN monitors the project progress and number of customers, but not the project impacts on affected Indigenous Peoples.  <Gap> See the <Practice> above.

AMDAL = Analisis Mengenai Dampak Lingkungan (environmental impact assessment), AP = affected person, APKT = Aplikasi Penyelesaian Keluhan Terpadu (integrated complaint solving application), BLHD = Badan Lingkungan Hidup Daerah (provincial/district Environment Agency), EMP = environmental management plan, GOI = Government of Indonesia, MOEF = Ministry of Environment and Forestry, MOER = Ministry of Environment Regulation, PLN = Perusahaan Listrik Negara (State Electricity Corporation), wilayah = regional office.

<sup>a</sup> There is no system (policy and legal frameworks) which covers the involuntary resettlement impact triggered by the program.

Sources: ADB.2009. *Safeguard Policy Statement*. Manila. pp.16–18; Diagnostic assessment of GOI's current system and PLN practices.

**Figure 1: Map of Protected Areas and Key Biodiversity Areas in Sulawesi and Nusa Tenggara**



KBA: Key Biodiversity Area, AZE: Alliance for Zero Extinction

Source: Integrated Biodiversity Assessment Tool (IBAT). BirdLife International and Conservation International, 2015. Key Biodiversity Areas: December 2014 version. Maintained by BirdLife International on behalf of BirdLife International and Conservation International.