

Environmental and Social Impact Assessment Report (ESIA) – Part 4

Project Number: 51112-001
August 2018

INO: Jawa-1 LNG to Power Project

Prepared by ERM for PT Jawa Satu Power (JSP)

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PLTGU Jawa 1 Independent Power Project

ANNEX A NUMERICAL STANDARDS

Prepared for:

PT Jawa Satu Power (JSP)

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COMPARISON OF NUMERICAL STANDARDS BETWEEN INDONESIAN REGULATIONS AND WORLD BANK EHS GUIDELINES

This Annex presents the comparison of Indonesian and IFC's environmental assessment and performances levels and measures which are relevant to the Project.

The IFC EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. The IFC Performance Standard 3 for 'Resource Efficiency and Pollution Prevention' states that:

"when host country regulations differ from the levels and measures presented in the World Bank Group EHS Guidelines, projects are required to achieve whichever is the more stringent. If less stringent levels or measures than those provided in the EHS Guidelines are appropriate in view of specific project circumstances, a full and detailed justification must be provided for any proposed alternatives through the environmental and social risks and impacts identification and assessment process. This justification must demonstrate that the choice for any alternate performance levels is consistent with the objectives of this performance standard".

As such it is important early in the regulatory ESIA process to discuss the required resource efficiency and pollution prevention and control techniques for the project so as to avoid potential delays or cost implications, particularly those that may affect engineering design decisions. ERM are able to apply the most stringent performance levels and measures to the ESIA process.

Table A.1 summarises the Indonesian regulatory standards which are applicable to the Project.

Table A.1 Applicable Indonesia Laws and Legislations

Aspect/Feature	Laws and Regulations	Key Requirements for the Project	Key Authorities
Environmental Approval	<ul style="list-style-type: none"> Act No. 32 of 2009 on Environmental Protection and Management; and Regulation of the Minister of Environment (Permen LH) No. 5 of 2012 on Types of Business Plans and / or Activities Required to Have Environmental Impact Analysis. 	<ul style="list-style-type: none"> Given the Project having substantial impact on the environment, it have to be subjected to an environmental impact analysis (AMDAL). 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Regulation of the Minister of Environment (Permen LH) No. 8 of 2006 Guidance in the Preparation for Environmental Impact Assessment. 	<ul style="list-style-type: none"> Guideline and procedures for writing environmental impact analysis (AMDAL) documents. 	
	<ul style="list-style-type: none"> Regulation of the Minister of Environment (Permen LH) No. 05 of 2008 on Working Procedure of EIA Appraisal Committee. 	<ul style="list-style-type: none"> Guidelines for the Authority who assesses the AMDAL documents. 	
	<ul style="list-style-type: none"> Decree of Head of Environmental Impact Management Agency No. 56/BAPEDAL/03/1994 concerning Guidelines to Significant Impacts. 	<ul style="list-style-type: none"> Regulation for determination of significant impacts. 	The Head of Environmental Impact Management Agency (Bapedal)
	<ul style="list-style-type: none"> Decree of the Head of Environmental Impact Management Agency No. 299/BAPEDAL/11/1996 on Technical Guidelines for Technical Guidelines for Social Aspects Study in the Preparation of Environmental Impact Assessments; and Decree of Environmental Impact Management Agency No.8 of 2000 concerning Community Involvement and Information Disclosure in the Process of Environmental Impact Assessment. 	<ul style="list-style-type: none"> Guidance for the assessments of social aspects in the drafting of AMDAL documents; and Regulation of the announcements in the press and the public consultation in relation to the AMDAL process. 	
	<ul style="list-style-type: none"> Decree of Head of Impact Control Agency No. 124 of 1997 on Guidelines in the Aspects of Public Health Study in the Preparation of the Environmental Impact Assessment. 	<ul style="list-style-type: none"> Guidelines for the assessments of health elements in an AMDAL documents. 	
	<ul style="list-style-type: none"> Decree of the Minister (Kepmenkes) No. 876 of 2011 concerning Technical Guidelines for Environmental Health Impact Assessment. 		

Aspect/Feature	Laws and Regulations	Key Requirements for the Project	Key Authorities
Environmental License	<ul style="list-style-type: none"> Government Regulation No. 27 of 2012 on Environmental Permits 	<ul style="list-style-type: none"> The requirement for obtaining the business permit is the Environmental Permit that shall report the requirements and obligations which have been stated in the approval of the AMDAL. The Environmental Permit shall also include the other required environmental protection and management permits, such as waste, gas emission, water discharge permits. 	Central Government
Public Disclosure	<ul style="list-style-type: none"> Act No. 14 of 2008 on Public Information Disclosure. 	<ul style="list-style-type: none"> The Act guarantees the right of every citizen to obtain information from public information quickly, efficiently and at a reasonable cost. 	Central Government
Waste Management: Hazardous Waste	<ul style="list-style-type: none"> Government Regulation No. 101 of 2014 on Management of Hazardous and Toxic Waste. 	<ul style="list-style-type: none"> Permit for managing hazardous and toxic waste. 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Regulation of the Minister of Environment (Permen LH) No. 18 of 2009 on Procedures for Management of Hazardous and Toxic Waste. 	<ul style="list-style-type: none"> Technical guidelines for obtaining permit of temporary storage of hazard and toxic waste, transporting, and processing, including final dumping. 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Decree of Head of Environmental Impact Management Agency No. KEP-01/BAPEDAL/09/1995 on Procedures and Requirements for Storage and Collection of Hazardous and Toxic Material; Decree of Head of Environmental Impact Management Agency No. KEP-02/BAPEDAL/09/1995 on Documents of hazardous and Toxic Waste; and Decree of Head of Environmental Impact Management Agency No. KEP-03/BAPEDAL/09/1995 on Hazardous and Toxic Waste Treatment. 	<ul style="list-style-type: none"> Technical requirements for storage and collection of hazardous and toxic material Reference for management of hazardous and toxic waste; and Technical requirements for hazardous and toxic waste treatment including incineration. 	The Head of Environmental Impact Management Agency (<i>Bapedal</i>)
	<ul style="list-style-type: none"> Minister of Environment of the Republic of Indonesia Regulation No 14 of 2013 regarding Symbol and Label for Hazardous and Toxic Waste. 	<ul style="list-style-type: none"> Symboling and labelling requirements for hazardous and toxic wastes. 	The Ministry of Environment (Central Government, Jakarta)

Aspect/Feature	Laws and Regulations	Key Requirements for the Project	Key Authorities
	<ul style="list-style-type: none"> Minister of Environment Regulation No. 05 of 2009 regarding Waste Management at Port. 	<ul style="list-style-type: none"> Requirements for transferring waste generated from vessel's routine and tank cleaning activities to the operator of waste management facilities on-shore. 	The Ministry of Environment (Central Government, Jakarta)
Waste Management: Non-Hazardous Waste/General Waste	<ul style="list-style-type: none"> Act No. 18 of 2008 on Waste Management. 	<ul style="list-style-type: none"> Provision for every individual to manage their waste in an environmentally sound manner. 	Central Government
Hazardous Materials	<ul style="list-style-type: none"> Government Regulation No. 74 of 2001 on Management of Hazardous and Toxic Materials. 	<ul style="list-style-type: none"> List of the toxic chemicals and guideline for managing hazardous and toxic materials. 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Regulation of the Minister of Environment (Permen LH) No. 3 of 2008 on Procedures for Issuing Symbols and Labels for Hazardous and Toxic Materials. 	<ul style="list-style-type: none"> Symbolling and labelling requirements for hazardous and toxic wastes. 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Decree of Minister for Transportation No. KM 17 of 2000 on Guidelines for Handling of Dangerous Goods / Materials in Shipping Activities in Indonesia. 	<ul style="list-style-type: none"> Obligation to comply with the IMDG (International Maritime Dangerous Goods Code) guidelines in conducting hazardous materials handling in shipping activities. 	The Ministry of Transportation (The Port Administration of Handil)
Wastewater Management: Effluent and Sewage	<ul style="list-style-type: none"> Regional Regulation of Bekasi Regency Number 11 Year 2002 regarding Wastewater Disposal Permit 	<ul style="list-style-type: none"> Provision on obtaining wastewater disposal permit regulation on Bekasi Regency 	Regent of Bekasi Regency
	<ul style="list-style-type: none"> West Java Provincial Regulation No. 3 of 2004 on Water Quality Management and Water Pollution Control 	<ul style="list-style-type: none"> Reference on water quality management in West Java area, including waste water treatment plant 	Governor of West Java
	<ul style="list-style-type: none"> Regulation of the Ministry of Environment and Forestry No. P.68/Menlhk/Setjen/Kum.1/8/2016 on Quality Standard of Domestic Wastewater 	<ul style="list-style-type: none"> Provision on quality standard of domestic wastewater including permit of disposal wastewater 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Ministry of Environment Regulation No. 8 Year 2009 regarding Wastewater Quality Standard for Business and/or Thermal Power Plant Activity 	<ul style="list-style-type: none"> Provision of wastewater quality standard on thermal power plant activity 	The Ministry of Environment (Central Government, Jakarta)

Aspect/Feature	Laws and Regulations	Key Requirements for the Project	Key Authorities
Water Quality and Hydrology: Seawater Pollution	<ul style="list-style-type: none"> Regulation of the Minister of Environment (Permen LH) No. 12 of 2006 on Requirements and Procedures for Permitting Wastewater Disposal into Sea. 	<ul style="list-style-type: none"> Guidelines on permitting for wastewater disposal into the sea 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Decree of the Minister of Environment No. 51 of 2004 on Sea Water Quality Standard 	<ul style="list-style-type: none"> No specific permitting requirements. Stipulated sea water quality standards for marine biota 	The Ministry of Environment (Central Government, Jakarta)
	<ul style="list-style-type: none"> Government Regulation No. 21 of 2010 on Environmental Protection of Maritime 	<ul style="list-style-type: none"> Prohibition for any ship to discharge water waste, hazardous, toxic chemicals and materials containing ozone-depleting substances into seawater. 	Central Government
Water Resources	<ul style="list-style-type: none"> Act No. 7 of 2004 on Water Resources. 	<ul style="list-style-type: none"> Law contains the principles of water resources management policies which consist in 6 main pillars: conservation, utilization, control of destructive force, community participation, steady institutional and good information systems and data 	Central Government
Freshwater Quality	<ul style="list-style-type: none"> Regulation of the Minister of Health (Permenkes) No. 416 of 1990 Standard on Clean Water 	<ul style="list-style-type: none"> Clean water standards and water quality parameters. 	The Ministry of Health (Central Government, Jakarta)
	<ul style="list-style-type: none"> Government Regulation No. 82 of 2001 concerning Water Quality Management and Air Pollution Control 	<ul style="list-style-type: none"> Classification of onshore water usage, the quality standards, the parameter requirement for water quality monitoring and the method for evaluating the water quality status. Based on the purpose of Kalen Atas and Cilamaya River as an irrigation and fishpond, both can be classified as Class II. 	Central Government
Air Quality: Ambient Air	<ul style="list-style-type: none"> Government Regulation No. 41 of 1999 on Air Pollution Control 	<ul style="list-style-type: none"> Standards of ambient air quality 	The Ministry of Environment (Central Government, Jakarta)

Aspect/Feature	Laws and Regulations	Key Requirements for the Project	Key Authorities
Air Quality: Air Emission	<ul style="list-style-type: none"> Ministry of Environment Regulation No. 21 of 2008 on Quality Standard of Immobile Source Emission for Business and/or Thermal Power Plant Activity 	<ul style="list-style-type: none"> Quality standards of emission in atmosphere from thermal industry 	The Ministry of Environment (Central Government, Jakarta)
Noise	<ul style="list-style-type: none"> Decree of the Minister of Environment No. KEP48/MENLH/11/1996 on Noise Standard 	<ul style="list-style-type: none"> Quality standard for noise levels in residential and industrial areas 	The Ministry of Environment (Central Government, Jakarta)
Odour	<ul style="list-style-type: none"> Decree of the Minister of Environment No. 50 of 1996 on Standard of Odour 	<ul style="list-style-type: none"> Quality standard for odour levels 	The Ministry of Environment (Central Government, Jakarta)
Vibration	<ul style="list-style-type: none"> Decree of the Minister of Environment No. 49 of 1996 on Vibration Standards 	<ul style="list-style-type: none"> Quality standard for vibration levels 	The Ministry of Environment (Central Government, Jakarta)

The Project will be undertaken in accordance with the applicable provisions of the IFC Performance Standards (2012), the World Bank Group (WBG) Environmental, Health and Safety (EHS) Guidelines and other good international industry practices.

Applicable IFC guidelines which the Project Proponent will consider in preparing its approach include:

- *Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines, April 30, 2007;*
- *Environmental, Health, and Safety (EHS) Guidelines for Construction and Decommissioning, 2007;*
- *Environmental, Health, and Safety (EHS) Guidelines for Liquefied Natural Gas (LNG) Facilities, 2017;*
- *Environmental, Health, And Safety (EHS) Guidelines for Ports, Harbours and Terminals, 2017;*
- *Environmental, Health, and Safety (EHS) Guidelines for Thermal Power Plants, December 19, 2008 and 2017 (in Draft);*
- *Environmental, Health, And Safety (EHS) Guidelines for Offshore Oil and Gas Development, June 5, 2015;*
- *Environmental, Health, And Safety (EHS) Guidelines for Electric Power Transmission and Distribution, 2007; and*
- *Environmental, Health and Safety (EHS) Guidelines for Shipping, 2007.*

Other international treaties and conventions that are applicable to the Projects include:

- *International Convention for the Prevention of Pollution from Ships (MARPOL) 1978;*
- *IFC PS3 Resource Efficiency and Pollution Prevention;*
- *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975;*
- *ASEAN Agreement on the Conservation of Nature and Natural Resources, 1985;*
- *Convention on Biological Diversity, 1992;*
- *IFC PS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources;*

- *ASEAN Peatland Management Initiative (APMI), 2003;*
- *Convention on Wetlands of International Importance (Ramsar Convention, 1971);*
- *Convention on the Protection of the World Cultural and Natural Heritage, 1972;*
- *Agreement for the establishment of the Asia-Pacific Fishery Commission, 1948;*
- *Convention on Fishing and Conservation of the Living Resources of the High Seas, 1958;*
- *United Nations Convention on the Law of the Sea (UNCLOS III), 1973;*
- *Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 1995;*
- *International Convention for the Safety of Life at Sea (SOLAS), 1974;*
- *International Maritime Dangerous Goods (IMDG) Code Volume 1 (2006) and Volume 2 (2012);*
- *Montreal Protocol on Substances that Deplete the Ozone Layer, 1989;*
- *United Nations Framework Convention on Climate Change – UNFCCC – as Non-Annex Party, 1992;*
- *Stockholm Convention on Persistent Organic Pollutants, 2004; and*
- *Vienna Convention on the Protection of the Ozone Layer (1985) and related Montreal Protocol on Substances that Deplete the Ozone Layer, 1995.*

A.1 ENVIRONMENTAL ASSESSMENT LEVELS

A.1.1 *Soil Quality Standards*

The IFC does not establish standards for soil quality standards nor the local Indonesian standards. However, *Section 4.1 – Contaminated Land, IFC General Environmental, Health, and Safety Guidelines* provides the following:

Land contamination may be encountered in sites under construction or decommissioning due to known or unknown historical releases of hazardous materials or oil, or due to the presence of abandoned infrastructure formerly used to store or handle these materials, including underground storage tanks. Actions necessary to manage the risk from contaminated land will depend on factors such as the level and location of contamination, the type and risks of the contaminated media, and the intended land use. However, a basic management strategy should include:

- Managing contaminated media with the objective of protecting the safety and health of occupants of the site, the surrounding community, and the environment post-decommissioning;
- Understanding the historical use of the land with regard to the potential presence of hazardous materials or oil prior to initiation of decommissioning activities;
- Preparing plans and procedures to respond to the discovery of contaminated media to minimise or reduce the risk to health, safety, and the environment consistent with the approach for Contaminated Land;
- Preparation of a management plan to manage obsolete, abandoned, hazardous materials or oil consistent with the approach to hazardous waste management.

A.1.2 Groundwater Quality Standards

The IFC does not establish standards for groundwater quality. The Indonesian standards are established by the *Regulation of Health Ministry No. 416/1990* in Appendix II.

Table A.2 Groundwater Quality

Parameters	Units	Regulation of Health Ministry 416/1990 Appendix II
<i>Physical Test</i>		
Colour	TCU	50
Odour	-	No odour
Temperature	°C	± 3
Taste	-	No taste
Total Hardness as CaCO ₃	mg/L	500
Total Dissolved Solids, TDS	mg/L	1500
pH	-	6.5 - 9
Turbidity	NTU	25
<i>Anions & Nutrients</i>		
Chloride, Cl	mg/L	600
Fluoride, F	mg/L	1.5
Nitrate Nitrogen, NO ₃ -N	mg/L	10
Nitrite Nitrogen, NO ₂ -N	mg/L	1
Sulphate, SO ₄	mg/L	400
Cyanide, CN-	mg/L	0.1
Sulphide, H ₂ S	mg/L	-
<i>Microbiology Tests</i>		
Total Coli form	MPN/100ml	50
Fecal Coliform	MPN/100ml	10
<i>Dissolved Metals</i>		
Arsenic, As	mg/L	0.05
Cadmium, Cd	mg/L	0.005
Chromium Hexavalent, (Cr ⁶⁺)	mg/L	0.05
Copper, Cu	mg/L	-
Iron, Fe	mg/L	1
Lead, Pb	mg/L	0.05
Manganese, Mn	mg/L	0.5
Mercury, Hg	mg/L	0.001
Selenium, Se	mg/L	0.01
Sodium, Na	mg/L	-
Zinc, Zn	mg/L	15
<i>Organic Chemistry</i>		
Aldrin and Dieldrin	mg/L	0.0007
Benzene	mg/L	0.01
Benzo (a) pyrene	mg/L	0.00001
Chlordane (total isomer)	mg/L	0.007
Chloroform	mg/L	0.03
2,4 D	mg/L	0.1
DDT	mg/L	0.03
Detergent	mg/L	0.5
1,2 Dischloroethane	mg/L	0.01
1,1 Dischloroethene	mg/L	0.0003
Heptaclor dan heptaclor epoxide	mg/L	0.003
Hexachlorobenzene	mg/L	0.00001
Gamma-HCH (Lindane)	mg/L	0.004

Parameters	Units	Regulation of Health Ministry 416/1990 Appendix II
Methoxychlor	mg/L	0.03
Pentachlorophanol	mg/L	0.01
Total Pesticide	mg/L	0.1
2,4,6 urichlorophenol	mg/L	0.01
Potassium Permanganate, KMnO ₄	mg/L	10
<i>Radioactivity</i>		
Gross Alpha Activity	Bq/L	0.1
Gross Beta Activity	Bq/L	1

A.1.3

Water Quality Standards

The IFC does not establish standards for surface water quality. Indonesian standards are established by *Government Regulation (PP) Number 82/2001 on Water Quality Management and Water Pollution Control*, which includes different classes according to use.

Class I is applicable for drinking water (Class I) and Classes II-IV as water suitable for use for recreational, fresh water fish cultivation, livestock and irrigation.

Table A.3 Water Quality

Parameters	Units	PP 82/2001 Class I ⁽¹⁾	PP 82/2001 Class II ⁽²⁾	PP 82/2001 Class III ⁽³⁾	PP 82/2001 Class IV ⁽⁴⁾	IFC
<i>Physical Tests</i>						
Temperature	°C	Three (3) deviation	Three (3) deviation	Three (3) deviation	Three (3) deviation	-
pH	-	6 - 9	6 - 9	6 - 9	5 - 9	-
Hardness	-	-	-	-	-	-
Total Dissolved Solids, TDS	mg/L	1,000	1,000	1,000	2,000	-
Total Suspended Solids, TSS	mg/L	50	50	400	400	-
<i>Anions & Nutrients</i>						
Fluoride, F	mg/L	0.5	1.5	1.5	-	-
Chloride, Cl	mg/L	600	-	-	-	-
Sulphate, SO ₄	mg/L	400	-	-	-	-
Nitrate Nitrogen, NO ₃ -N	mg/L	10	10	20	20	-
Nitrite Nitrogen, as N	mg/L	0.06	0.06	0.06	-	-
Total Phosphate, T- PO ₄ as P	mg/L	0.2	0.2	1	5	-
Sulphide, H ₂ S	mg/L	0.002	0.002	0.002	-	-
Free Ammonia Nitrogen, NH ₃ -N	mg/L	0.5	-	-	-	-
Cyanide, CN	mg/L	0.02	0.02	0.02	-	-
<i>Dissolved Metals</i>						
Arsenic, As	mg/L	0.05	1	1	1	-
Barium, Ba	mg/L	1	-	-	-	-
Boron, B	mg/L	1	1	1	1	-
Cadmium, Cd	mg/L	0.01	0.01	0.01	0.01	-
Chromium Hexavalent, (Cr ⁶⁺)	mg/L	0.05	0.05	0.05	0.01	-
Cobalt, Co	mg/L	0.2	0.2	0.2	0.2	-
Copper, Cu	mg/L	0.02	0.02	0.02	0.2	-
Iron, Fe	mg/L	0.3	-	-	-	-

Parameters	Units	PP 82/2001 Class I ⁽¹⁾	PP 82/2001 Class II ⁽²⁾	PP 82/2001 Class III ⁽³⁾	PP 82/2001 Class IV ⁽⁴⁾	IFC
Lead, Pb	mg/L	0.03	0.03	0.03	1	-
Manganese, Mn	mg/L	0.1	-	-	-	-
Mercury, Hg	mg/L	0.001	0.002	0.002	0.005	-
Selenium, Se	mg/L	0.01	0.05	0.05	0.05	-
Zinc, Zn	mg/L	0.05	0.05	0.05	2	-
<i>Microbiology</i>						
Fecal Coliform	MPN/ 100ml	100	1000	2000	2000	-
Total Coliform	MPN/ 100ml	1,000	5000	10000	10000	-
<i>Others</i>						
Biochemical						
Oxygen Demand, BOD	mg/L	2	3	6	12	-
Dissolve Oxygen, DO	mg/L	6	4	3	0	-
Chlorine, Cl ₂	mg/L	0.03	0.03	0.03	-	-
Chemical						
Oxygen Demand, COD	mg/L	10	25	50	100	-
Surfactant, MBAS	µg/L	200	200	200	-	-
Oil & Grease	mg/L	1	1	1	1	-
Phenol	µg/L	1	1	1	-	-
BHC	µg/L	210	210	210	-	-
Aldrin and Dieldrin	µg/L	17	-	-	-	-
Chlordane	µg/L	3	-	-	-	-
DDT	µg/L	2	2	2	2	-
Heptachlor and Heptachlor epoxide	µg/L	18	-	-	-	-
Lindane	µg/L	56	-	-	-	-
Methoxychlor	µg/L	35	-	-	-	-
Endrin	µg/L	1	4	4	-	-
Toxaphane	µg/L	5	-	-	-	-
<i>Radioactivity</i>						
Gross-A	Bq/L	0.1	0.1	0.1	0.1	-
Gross- B	Bq/L	1	1	1	1	-
<ol style="list-style-type: none"> Class I: Water used as raw water for drinking water, or other uses that require water quality similar as aforementioned. Class II: Water used for infrastructure / water recreation facilities, freshwater fish farming, livestock, water for irrigating crops or other uses that require water quality similar as aforementioned. Class III: Water used for freshwater fish farming, livestock, water for irrigating crops or other uses that require water quality similar as aforementioned. Class IV: Water used to irrigate crops and or other uses that require water quality similar as aforementioned. 						

A.1.4

Ambient Air Quality Standards and Guidelines

The IFC EHS Guidelines for Air Emissions and Ambient Air Quality state that:

“Emissions do not result in pollutant concentrations that reach or exceed relevant ambient quality guidelines and standards ⁽¹⁾ by applying national legislated standards, or in their absence, the current WHO Air Quality Guidelines, or other internationally recognised sources”

Air quality in Indonesia is regulated by *Government Regulation No. 41/1999* regarding Air Pollution Control (PP41/1999). In accordance with the IFC’s EHS Guidelines for Air Emissions and Ambient Air Quality, the air quality standards presented in PP41/1999 should be considered the appropriate standard and should be used for comparison of baseline data and predicted impacts to air quality from the Project.

The air quality standards in PP41/1999 are presented below in **Table A.4**. The IFC EHS guidelines and interim targets are also presented for comparison.

Table A.4 *Ambient Air Quality Standards and Guidelines*

Parameter	Period of Measurement	PP41/1999 ⁽¹⁾ (µg/m ³)	IFC EHS Guidelines ⁽²⁾ (µg/m ³)
Carbon monoxide, CO	1 hour	30,000	-
	24 hour	10,000	-
Hydrocarbons, HC	3 hour	160	-
Nitrogen dioxide, NO ₂	1 hour	400	200 (Guideline) ⁽³⁾
	24 hour	150	-
	1 year	100	40 (Guideline)
Sulphur dioxide, SO ₂	10 minute	-	500 (Guideline)
	1 hour	900	-
	24 hour	365	125 (Interim target-1) ⁽⁴⁾
			50 (Interim target-2)
	20 (Guideline)		
1 year	60	-	
Dust/ Total Suspended Solids (TSP)	24 hour	230	-
Lead (Pb)	1 year	90	-
	24 hour	2	-
Oxidant (O ₃)	1 year	1	-
	1 hour	50	-
	8 hour	-	160 (Interim Target-1)
	100 (Guideline)		
	1 year	235	-

(1) Ambient air quality standards are ambient air quality levels established and published through national legislative and regulatory processes, and ambient quality guidelines refer to ambient quality levels primarily developed through clinical, toxicological and epidemiological evidence (such as those published by the World Health Organisation).

Parameter	Period of Measurement	PP41/1999 ⁽¹⁾ (µg/m ³)	IFC EHS Guidelines ⁽²⁾ (µg/m ³)
PM ₁₀	24 hour	150	150 (Interim target 1)
			100 (Interim target 2)
	75 (Interim target 3)		
	50 (Guideline)		
PM _{2.5}	24 hour	65	70 (Interim target 1)
			50 (Interim target 2)
	37.5 (Interim target 3)		
	25 (Guideline)		
PM _{2.5}	1 year	15	35 (Interim target 1)
			25 (Interim target 2)
	15 (Interim target 3)		
	10 (Guideline)		

1. Indonesian Government Regulation No. 41 Year 1999 regarding Air Pollution Control (PP41/1999).
2. World Health Organisation (WHO) Air Quality Guidelines for Europe, 2nd Edition (2000).
3. The guidelines are intended to provide background information and guidance to (inter)national and local authorities in making risk assessment and risk management decisions. In establishing pollutant levels below which exposure - for life or for a given period of time - does not constitute a significant public health risk, the guidelines provide a basis for setting standards or limit values for air pollutants.
4. Interim targets are proposed as incremental steps in a progressive reduction of air pollution and are intended for use in areas where pollution is high. These targets aim to promote a shift from high air pollutant concentrations, which have acute and serious health consequences, to lower air pollutant concentrations. If these targets were to be achieved, one could expect significant reductions in risks for acute and chronic health effects from air pollution. Progress towards the guideline values should, however, be the ultimate objective of air quality management and health risk reduction in all areas.

The IFC Performance Standard 3 (PS3): Resource Efficiency and Pollution Prevention serves to avoid or minimise adverse impacts on human health and the environment by avoiding or minimising pollution from project activities. It also seeks to promote more sustainable use of resources, including energy and water. Besides, it anticipates to reduce project-related Greenhouse Gas (GHG) emissions.

A.1.4.1

MARPOL 73/78

Additionally, Annex VI of the MARPOL is the Prevention of Air Pollution from Ships which entered into force on 19 May 2005. It sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ODS.

Chapter III: Requirements for Control of Emissions from Ships

Regulation 12: ODS

Section 2 states that any deliberate emissions of ODS shall be prohibited which includes emissions occurring in the course of maintaining, servicing, repairing or disposing of systems or equipment, except that deliberate emissions do not include minimal releases associated with the recapture or recycling of an ODS. Emissions arising from leaks of an ODS, whether or not the leaks are deliberate, may be regulated by Parties.

Section 5 requires each ship to maintain a list of equipment containing ODS.

Section 6 requires each ship shall maintain an ODS Record Book. This Record Book may form part of an existing log-book or electronic recording system as approved by the Administration.

Section 7 states that entries in the ODS Record Book shall be recorded in terms of mass (kg) of substance and shall be completed without delay on each occasion, in respect of the following:

- (1) recharge, full or partial, of equipment containing ODS
- (2) repair or maintenance of equipment containing ODS
- (3) discharge of ODS to the atmosphere:
 - i. deliberate; and
 - ii. non-deliberate;
- (4) discharge of ODS to the atmosphere;
- (5) discharge of ODS to land-based reception facilities; and
- (6) supply of ODS to the ship.

Regulation 13: Nitrogen oxides (NO_x)

Section 3 states that the operation of a marine diesel engine which is installed on a ship constructed on or after 1 January 2000 and prior to 1 January 2011 is prohibited, except when the emission of nitrogen oxides (calculated as the total weighted emission of NO₂) from the engine is within the following limits, where n = rated engine speed (crankshaft revolutions per minute):

- (1) 17.0 g/kWh when n is less than 130 rpm;
- (2) $45 \cdot n^{(-0.2)}$ g/kWh when n is 130 or more but less than 2,000 rpm;
- (3) 9.8 g/kWh when n is 2,000 rpm or more.

Section 4 states that the operation of a marine diesel engine which is installed on a ship constructed on or after 1 January 2011 is prohibited, except when the emission of nitrogen oxides (calculated as the total weighted emission of NO₂) from the engine is within the following limits, where n = rated engine speed (crankshaft revolutions per minute):

- (1) 14.4 g/kWh when n is less than 130 rpm;
- (2) $44 \cdot n^{(-0.23)}$ g/kWh when n is 130 or more but less than 2,000 rpm;
- (3) 7.7 g/kWh when n is 2,000 rpm or more.

Section 5(1) states that the operation of a marine diesel engine which is installed on a ship constructed on or after 1 January 2016:

- (1) is prohibited except when the emission of nitrogen oxides (calculated as the total weighted emission of NO₂) from the engine is within the following limits, where n = rated engine speed (crankshaft revolutions per minute):
 - i. 3.4 g/kWh when n is less than 130 rpm;
 - ii. $9 \cdot n^{(-0.2)}$ g/kWh when n is 130 or more but less than 2,000 rpm;and
 - iii. 2.0 g/kWh when n is 2,000 rpm or more;

- (2) is subject to the standards set forth in subparagraph 5.1.1 of this paragraph when the ship is operating in an Emission Control Area (ECA) designated under paragraph 6 of this regulation; and
- (3) is subject to the standards set forth in paragraph 4 of this regulation when the ship is operating outside of an ECA designated under paragraph 6 of this regulation.

Section 6 states that for the purpose of this regulation, an ECA shall be any sea area, including any port area, designated by the Organisation in accordance with the criteria and procedures set forth in Appendix III of MARPOL Annex VI.

Regulation 14: Sulphur oxides (SO_x) and Particulate Matter

Section 1 states that the sulphur content of any fuel oil used on board ships shall not exceed the following limits:

- (1) 4.50% m/m prior to 1 January 2012;
- (2) 3.50% m/m on and after 1 January 2012; and
- (3) 0.50% m/m on and after 1 January 2020.

Section 3(2) states that Emission Control Areas shall include sea area, including port areas, designated by the Organisation in accordance with the criteria and procedures set forth in Appendix III of MARPOL Annex VI.

Section 4 states that while ships are operating within an Emission Control Area, the sulphur content of fuel oil used on board ships shall not exceed the following limits:

- (1) 1.50% m/m prior to 1 July 2010;
- (2) 1.00% m/m on and after 1 July 2010; and
- (3) 0.10% m/m on and after 1 January 2015.

Regulation 15: Volatile Organic Compounds (VOCs)

1. If the emissions of VOCs from a tanker are to be regulated in a port or ports or a terminal or terminals under the jurisdiction of a Party, they shall be regulated in accordance with the provisions of this regulation.
2. A Party regulating tankers for VOC emissions shall submit a notification to the Organisation. This notification shall include information on the size of tankers to be controlled, the cargoes requiring vapour emission control systems, and the effective date of such control. The notification shall be submitted at least six months before the effective date.
3. A Party which designates ports or terminals at which VOCs emissions from tankers are to be regulated shall ensure that vapour emission control systems, approved by that Party taking into account the safety standards for such systems developed by the Organisation, are provided in any designated port and terminal and are operated safely and in a manner so as to avoid undue delay to a ship.

4. The Organisation shall circulate a list of the ports and terminals designated by Parties to other Parties and Member States of the Organisation for their information.
5. A tanker to which paragraph 1 of this regulation applies shall be provided with a vapour emission collection system approved by the Administration taking into account the safety standards for such systems developed by the Organisation, and shall use this system during the loading of relevant cargoes. A port or terminal which has installed vapour emission control systems in accordance with this regulation may accept tankers which are not fitted with vapour collection systems for a period of three years after the effective date identified in paragraph 2 of this regulation.
6. A tanker carrying crude oil shall have on board and implement a VOC Management Plan approved by the Administration. Such a plan shall be prepared taking into account the guidelines developed by the Organisation. The plan shall be specific to each ship and shall at least:
 - (1) provide written procedures for minimizing VOC emissions during the loading, sea passage and discharge of cargo;
 - (2) give consideration to the additional VOC generated by crude oil washing;
 - (3) identify a person responsible for implementing the plan; and
 - (4) for ships on international voyages, be written in the working language of the master and officers and, if the working language of the master and officers is not English, French, or Spanish, include a translation into one of these languages.
7. This regulation shall also apply to gas carriers only if the type of loading and containment systems allows safe retention of non-methane VOCs on board or their safe return ashore.

Appendix III: Criteria and Procedures for Designation of Emission Control Areas

Section 1 states that this Appendix serves to provide the criteria and procedures to Parties for formulating and submitting proposals for the designation of Emission Control Areas and to set forth the factors to be considered in the assessment of such proposals by the Organisation. An ECA should be considered for adoption by the Organisation if supported by a demonstrated need to prevent, reduce, and control emissions of NO_x or SO_x and particulate matter or all three types of emissions (hereinafter emissions) from ships.

Section 3 (Criteria for Designation of an Emission Control Area) states that:

1. The proposal shall include:
 - (i) a clear delineation of the proposed area of application, along with a reference chart on which the area is marked;
 - (ii) the type or types of emission(s) that is or are being proposed for control (i.e. NO_x or SO_x and particulate matter or all three types of emissions);

- (iii) a description of the human populations and environmental areas at risk from the impacts of ship emissions;
 - (iv) an assessment that emissions from ships operating in the proposed area of application are contributing to ambient concentrations of air pollution or to adverse environmental impacts. Such assessment shall include a description of the impacts of the relevant emissions on human health and the environment, such as adverse impacts to terrestrial and aquatic ecosystems, areas of natural productivity, critical habitats, water quality, human health, and areas of cultural and scientific significance, if applicable. The sources of relevant data including methodologies used shall be identified;
 - (v) relevant information pertaining to the meteorological conditions in the proposed area of application to the human populations and environmental areas at risk, in particular prevailing wind patterns, or to topographical, geological, oceanographic, morphological, or other conditions that contribute to ambient concentrations of air pollution or adverse environmental impacts;
 - (vi) the nature of the ship traffic in the proposed Emission Control Area, including the patterns and density of such traffic;
 - (vii) a description of the control measures taken by the proposing Party or Parties addressing land-based sources of NO_x, SO_x and particulate matter emissions affecting the human populations and environmental areas at risk that are in place and operating concurrent with the consideration of measures to be adopted in relation to provisions of regulations 13 and 14 of Annex VI; and
 - (viii) the relative costs of reducing emissions from ships when compared with land-based controls and the economic impacts on shipping engaged in international trade.
2. The geographical limits of an ECA will be based on the relevant criteria outlined above, including emissions and deposition from ships navigating in the proposed area, traffic patterns and density, and wind conditions.

A.1.5

Noise Standards

Under Indonesian standards, the *Decree of Environmental Ministry No. 48/1996* on Noise level Quality Standard and IFP regulates ambient noise. Noise health and safety limits are established under the Ministry of Manpower Decree No 51 of 1999.

The IFC Performance Standards applicable for industrial noise applies to fixed noise sources only. Noise impacts should not exceed the levels presented in **Table A.5**, or result in a maximum increase in background levels greater than three (3) dB at the nearest receptor location off-site.

Table A.5 Noise Standards (dBA)

Site	MoE Dec. #48/1996 ⁽¹⁾	National Standard 51/1999 ⁽²⁾	IFC EHS Guidelines (LAeq (dBA)) ⁽³⁾⁽⁴⁾	
			Daytime (07:00 - 22:00)	Night-time (22:00 - 07:00)
Residential; Institutional; educational	55	-	55	45
Trade and service	70	-	-	-
Office and trade	65	-	-	-
Green space	50	-	-	-
Industrial; commercial	70	-	70	70
Officials and public facility	60	-	-	-
Recreational	70	-	-	-
Airport	-	-	-	-
Train station	60	-	-	-
Sea port	70	-	-	-
Cultural heritage	-	-	-	-
Hospitals	55	-	-	-
Schools	55	-	-	-
Worship place	55	-	-	-
Industrial Area	70	-	-	-
Occupational Health & Safety (exposure limits)		Exposure Limit/Day	LAeq, 8h	Max LAmax, fast
		-	40-45 (closed offices)	-
		-	45-50 (Open offices)	-
		85 (8 hours)	85 (heavy industry)	110 (heavy industry)
		88 (8 hours)	-	-
		91 (8 hours)	-	-
		94 (1 hours)	-	-
		97 (30 minutes)	-	-

1. Ministry of Environment Decree #48, 1996.
2. Ministry of Manpower Decree 51, 1999.
3. Environmental, Health, and Safety (EHS) Guidelines for Noise Management (2007).
4. Acceptable indoor noise levels for residential, institutional, and educational settings (WHO 1999).

Similar to the air quality, the national standards should be considered and used for comparison of baseline data and predicted impacts to noise generated from the Project.

A.1.6 Marine Water Quality Standards

The IFC does not establish standards for seawater quality. Indonesian standards are established by the *Decree of Environmental Ministry No. 51/2004* in Appendix III.

Table A.6 Marine Water Quality

Parameters	Units	Regulation of Health Ministry 416/1990 Appendix II
<i>Physical Test</i>		
Odour	-	natural
pH	-	7 -8.5
Temperature	°C	natural
Transparency	m	natural
Salinity	‰	natural
Total Suspended Solids, TSS	mg/L	natural
Turbidity	NTU	< 5
Floating debris		none
Oil slick		none
<i>Anions & Nutrients</i>		
Sulphide as H ₂ S	mg/L	0.01
Cyanide, CN-	mg/L	0.5
Ammonia Nitrogen, NH ₃ -N	mg/L	0.3
Nitrate Nitrogen, NO ₃ -N	mg/L	0.008
Phosphate, PO ₄ -P	mg/L	0.015
<i>Microbiology Tests</i>		
Total Coliform	MPN/100ml	1000
Pathogen	cell/100 ml	-
Plankton	cell/100 ml	not blooming
<i>Dissolved Metals</i>		
Arsenic, As	mg/L	0.05
Cadmium, Cd	mg/L	0.005
Chromium Hexavalent, (Cr ₆ ⁺)	mg/L	0.05
Copper, Cu	mg/L	-
Iron, Fe	mg/L	1
Lead, Pb	mg/L	0.05
Manganese, Mn	mg/L	0.5
Mercury, Hg	mg/L	0.001
Selenium, Se	mg/L	0.01
Sodium, Na	mg/L	-
Zinc, Zn	mg/L	15
<i>Organic Chemistry</i>		
Arsenic, As	mg/L	0.012
Cadmium, Cd	mg/L	0.001
Chromium Hexavalent, (Cr ₆ ⁺)	mg/L	0.005
Copper, Cu	mg/L	0.008
Lead, Pb	mg/L	0.008
Mercury, Hg	mg/L	0.001
Nickel, Ni	mg/L	0.05
Zinc, Zn	mg/L	0.05
Selenium, Se	mg/L	-
Silver, Ag	mg/L	-

Parameters	Units	Regulation of Health Ministry 416/1990 Appendix II
<i>Others</i>		
Dissolve Oxygen, DO	mg/L	>5
Biochemical Oxygen Demand, BOD	mg/L	20
Surfactants, MBAS	mg/L	1
PAH	mg/L	0.003
Oil & Grease	mg/L	1
Total Phenol	mg/L	0.002
Total PCB	mg/L	0.01
Pesticide	µg/L	0.01
TBT (Tributyltin)	µg/L	0.01
<i>Radioactivity</i>		
Radionuclides	Bq/L	4

A.1.7 *Biodiversity*

A.1.7.1 *ASEAN Agreement on the Conservation on Nature and Natural Resources, 1985*

As a signatory to the *ASEAN Agreement on the Conservation on Nature and Natural Resources, 1985* shall agree to take all necessary measures, within the framework of its national laws to ensure that conservation and management of natural resources, including marine habitats, are treated as an integral part of development at all stages and at all levels.

Under *Article 5* of this Agreement:

- *Appendix I* to this Agreement shall list endangered species recognised by the Contracting Parties as of prime importance to the Region and deserving special attention. The Appendix shall be adopted by a meeting of the Contracting Parties; Accordingly, Contracting Parties shall, wherever possible:
 - a) prohibit the taking of these species, except for exceptional circumstances by special allowance from the designated authorities of the Contracting Parties;
 - b) regulate the trade in and possession of specimens and products of those species accordingly; and
 - c) especially protect habitat of those species by ensuring that sufficient portions are included in protected areas; (d) take all other necessary measures to improve their, conservation status, and restore their populations to the highest possible level.
- Each Contracting Party shall, whenever Possible, apply the above measures to species endangered at national level.
- The Contracting Parties recognise their special responsibility in respect of species that are endemic to areas under their jurisdiction and shall undertake accordingly to take, wherever possible, all the necessary measures to maintain the population of such species at the highest possible level.

Under *Article 11* of the Agreement, the Contracting Parties, recognizing the adverse effect that polluting discharges or Missions may have on natural processes and the functioning of natural ecosystems as well as on each of the individual ecosystem components especially animal and plants species, shall endeavour to prevent, reduce and control such discharges, emissions or applications in particular by:

- a) submitting activities likely to cause pollution of the air, soil, freshwater, or the marine environment, to control which shall take into consideration

both the- cumulative effects of the pollutants concerned and the self-purification aptitude of the recipient natural environment;

- b) making such controls conditional on, inter alia, appropriate treatment of polluting emissions; and
- c) establishing national environmental quality monitoring programmes, particular attention being paid to the effects of pollution on natural ecosystems, and co-operation in such programmes for the Region as a whole.

A.1.7.2 IFC Performance Standard 6 (PS6): Biodiversity Conservation and Sustainable Management of Living Natural Resources

The PS6 serves to protect and conserve biodiversity. It helps maintain the benefits from ecosystem services and promotes the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

A.1.7.3 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975

CITES is an international agreement between governments, drafted as a result of a resolution adopted in 1963 at a meeting of members of the International Union for the Conservation of Nature (IUCN). The aim of CITES is to ensure that international trade in specimens of wild animals and plants does not threaten their survival and accords varying degrees of protection to more than 33,000 species of animals and plants.

Article II of the Convention states that parties shall not allow trade in specimens of species included in *Appendices I, II and III* except in accordance with the provisions of the present Convention:

- *Appendix I* shall include all species threatened with extinction which are or may be affected by trade. Trade in specimens of these species must be subject to particularly strict regulation in order not to endanger further their survival and must only be authorised in exceptional circumstances.
- *Appendix II* shall include:
 - a) all species which although not necessarily now threatened with extinction may become so unless trade in specimens of such species is subject to strict regulation in order to avoid utilization incompatible with their survival; and
 - b) other species which must be subject to regulation in order that trade in specimens of certain species referred to in sub-paragraph (a) of this paragraph may be brought under effective control.

- *Appendix III* shall include all species which any Party identifies as being subject to regulation within its jurisdiction for the purpose of preventing or restricting exploitation, and as needing the co-operation of other Parties in the control of trade.

Articles III, IV and V of the Convention gives provisions for the regulation of trade in specimens of species included in *Appendices I, II and III* respectively but shall not apply to the transit or transshipment of specimens through or in the territory of a Party while the specimens remain in Customs control as stated under *Article VII* of the Convention.

Permits and certificates granted under the provisions of *Articles III, IV, and V* shall be in accordance with the provisions of *Article VI* whereby each permit or certificate shall contain the title of the present Convention, the name and any identifying stamp of the Management Authority granting it and a control number assigned by the Management Authority. Furthermore, separate permit or certificate shall be required for each consignment of specimens. A Management Authority of the State of import of any specimen shall cancel and retain the export permit or re-export certificate and any corresponding import permit presented in respect of the import of that specimen.

A.1.7.4 *Convention on Biological Diversity (CBD), 1992*

The *Convention on Biological Diversity, 1992*, provides a global legal framework for action on biodiversity. The objectives of the Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the utilisation of genetic resources.

Under *Article 6* of the Convention each Contracting Party shall, in accordance with its particular conditions and capabilities:

- a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, *inter alia*, the measures set out in this Convention relevant to the Contracting Party concerned; and
- b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

Under *Article 7* of the Convention, each Contracting Party shall, as far as possible and as appropriate, in particular for the purposes of *Articles 8 to 10*:

- a) Identify components of biological diversity important for its conservation and sustainable use having regard to the indicative list of categories set down in *Annex I*;

- b) Monitor, through sampling and other techniques, the components of biological diversity identified pursuant to subparagraph (a) above, paying particular attention to those requiring urgent conservation measures and those which offer the greatest potential for sustainable use;
- c) Identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, and monitor their effects through sampling and other techniques; and
- d) Maintain and organise, by any mechanism data, derived from identification and monitoring activities pursuant to subparagraphs (a), (b) and (c) above

Annex I of the Convention states that:

1. Ecosystems and habitats: containing high diversity, large numbers of endemic or threatened species, or wilderness; required by migratory species; of social, economic, cultural or scientific importance: or, which are representative, unique or associated with key evolutionary or other biological processes;
2. Species and communities which are: threatened: wild relatives of domesticated or cultivated species; of medicinal, agricultural or other economic value; or social, scientific or cultural importance: or importance for research into the conservation and sustainable use of biological diversity, such as indicator species; and
3. Described genomes and genes of social, scientific or economic importance.

A.1.7.5

ASEAN Peatland Management Initiative (APMI), 2003

The APMI is a mechanism whereby ASEAN Member Countries through the principles of ASEAN cooperation will collectively collaborate amongst themselves or with other international institutions for mutual benefit to address the issues of peatland management on a sustainable basis to reduce transboundary haze pollution as well as climate change impact.

The goal is to promote sustainable management of peatlands in the ASEAN region through collective actions and enhanced cooperation as well as to reduce risk of fire and associated regional haze and contribute to global environmental management.

The ASEAN Peatland Management Strategy (APMS) has been developed by ASEAN Member States to guide actions to support management of peatlands in the region in the period of 2006-2020. The APMS was adopted in Manila in February 2003, and was last updated in September 2013.

The APMS has been prepared due to the pressing need recognised by both local and international communities for wise use and sustainable management

of peatlands as well as the emerging threat of peatland fire and its associated haze to the economy and health of the region, and its possibility of contributing to global climate change.

A.2 ENVIRONMENTAL PERFORMANCE LEVELS

A.2.1 Air Emission Limits for FSRU Activities

The Ministry of Environmental and Forestry Regulation No. 13 Year 2009 regarding Emission Standard of Stationary Emission Source for Oil and Gas Activity provides air emissions limits which are applicable to the Project.

The IFC PS3 states that when host country regulations differ from the levels and measures presented in the World Bank Group EHS Guidelines, projects are required to achieve whichever is the more stringent. On this basis, the equivalent IFC emission limit guidelines are presented where considered applicable and the more stringent of the two (2) has been highlighted. These values are what the Project should achieve.

Table A.7 Combustion Process - Internal Combustion Engine

Capacity	Fuel	Parameter	Environmental Ministry Regulation No. 13 Year 2009 (mg/Nm ³) ⁽¹⁾	IFC (in mg/Nm ³ or as indicated) ⁽²⁾⁽³⁾
≤ 570 kWth	Oil	NO _x as NO ₂	1000	NA
		CO	600	NA
	Gas	NO _x as NO ₂	400	NA
		CO	500	NA
> 570 kWth	Oil	TSP	150	50 - 100 ⁽⁴⁾
		SO ₂	800	1.5% - 3% sulfur ⁽⁵⁾
		NO _x as NO ₂	1000	1460 ⁽⁶⁾ or 1850 ⁽⁷⁾
		CO	600	NA
	Oil	TSP	50	NA
		SO ₂	150	NA
	Gas	NO _x as NO ₂	400	200 (Spark ignition) 400 (Dual Fuel) 1600 (Compression Ignition)
		CO	500	NA

1. Concentrations are specified at reference condition (Nm³ is at 25°C, 1 atmosphere pressure, dry and 13% O₂)
2. Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines on Air Emissions and Ambient Air Quality (2007) Table 1.1.2 - Small Combustion Facilities Emission Guidelines (3MWth - 50MWth)
3. Concentrations are specified at reference condition (Nm³ is at 0°C, 1 atmosphere pressure, dry and 15% O₂)
4. Up to 100 if justified by project specific considerations (e.g. Economic feasibility of using lower ash content fuel, or adding secondary treatment to meet 50, and available environmental capacity of the site)
5. Up to 3% sulfur if justified by project specific considerations (e.g. Economic feasibility of using lower S content fuel, or adding secondary treatment to meet levels of using 1.5 percent Sulphur, and available environmental capacity of the site)
6. If bore size diameter [mm] < 400: 1460 (or up to 1,600 if justified to maintain high energy efficiency.)
7. If bore size diameter [mm] > or = 400

Table A.8 Combustion Process - Turbine Gas

Fuel	Parameter	Environmental Ministry Regulation No. 13 Year 2009 (in mg/Nm ³ or as indicated) ⁽¹⁾	IFC (in mg/Nm ³ or as indicated) ⁽²⁾⁽³⁾
Oil	TSP	100	N/A
	SO ₂	650	N/A
	NO _x as NO ₂	450	N/A
	Opacity	20%	N/A
Gas	TSP	50	N/A
	SO ₂	150	N/A
	NO _x as NO ₂	150	N/A
	Opacity	320%	N/A
Natural Gas = 3MWth to < 15MWth	TSP	N/A	N/A
	SO ₂	N/A	N/A
	NO _x as NO ₂	N/A	42 ppm ⁽⁴⁾ ; 100 ppm ⁽⁵⁾
Natural Gas = 15MWth to < 50MWth	TSP	N/A	N/A
	SO ₂	N/A	N/A
	NO _x as NO ₂	N/A	25ppm
Fuels other than Natural Gas = 3MWth to < 15MWth	TSP	N/A	N/A
	SO ₂	N/A	0.5% Sulfur ⁽⁶⁾
	NO _x as NO ₂	N/A	96ppm ⁽⁴⁾ ; 150ppm ⁽⁵⁾
Fuels other than Natural Gas = 15MWth to < 50MWth	TSP	N/A	N/A
	SO ₂	N/A	0.5% Sulfur ⁽⁶⁾
	NO _x as NO ₂	N/A	74ppm

1. Concentrations are specified at reference condition (Nm³ is at 25°C, 1 atmosphere pressure, dry and 13% O₂).
2. Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines on Air Emissions and Ambient Air Quality (2007) Table 1.1.2 - Small Combustion Facilities Emission Guidelines (3MWth - 50MWth)
3. Concentrations are specified at reference condition (Nm³ is at 0°C, 1 atmosphere pressure, dry and 15% O₂)
4. Electric generation
5. Mechanical drive
6. 0.5% or lower percent Sulphur (e.g. 0.2 percent Sulphur) if commercially available without significant excess fuel cost

Table A.9 Combustion Process - Boiler, Steam Generator, Process Heater, Heater Transfer

Fuel	Parameter	Environmental Ministry Regulation No. 13 Year 2009 (in mg/Nm ³ or as indicated) ^{(1) (2)}	IFC (in mg/Nm ³ or as indicated) ⁽³⁾⁽⁴⁾⁽⁵⁾
Oil	TSP	150	50 ⁽⁴⁾
	SO ₂	1200	2000
	NO _x as NO ₂	800	460
	Opacity	20	N/A
Gas	TSP	50	N/A
	SO ₂	150	N/A
	NO _x as NO ₂	400	320
	Opacity	20	N/A
Solid	TSP	N/A	50 ⁽³⁾
	SO ₂	N/A	2000
	NO _x as NO ₂	N/A	650
	Opacity	N/A	N/A

- Concentrations for oil are specified at reference condition (Nm³ is at 25°C, 1 atmosphere pressure, dry and 5% O₂).
- Concentrations for gas are specified at reference condition (Nm³ is at 25°C, 1 atmosphere pressure, dry and 5% O₂).
- Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines on Air Emissions and Ambient Air Quality (2007) Table 1.1.2 - Small Combustion Facilities Emission Guidelines (3MWth - 50MWth)
- Concentrations for gas and oil are specified at reference condition (Nm³ is at 0°C, 1 atmosphere pressure, dry and 3% O₂).
- Concentrations for solid are specified at reference condition (Nm³ is at 0°C, 1 atmosphere pressure, dry and 3% O₂).
- 50 or up to 150 if justified by environmental assessment

Table A.10 Combustion Process - Flaring Unit

Parameter	Maximum Levels	Method
Opacity	40%	SNI 19.7117.11- 2005

Table A.11 Production Process - Sulphur Recovery Unit

Sulfur Feed Rate (ton/hr)	Minimum Sulfur Recovery (%)	Standard Method
<2	70 %	Measurement Method and Efficiency Rate Feed Sulfur Recovery using USEPA method 40 CFR Part 60 subpart 60 644 or equivalent method approved by the Ministry of Environment
2-10	85 %	
10-50	95 %	
> 50	97 %	

Table A.12 Production Process - Thermal Oxidant Sulphur Limit

Parameter	Emission Standard (mg/Nm ³)	Method
Sulfur Dioxide (SO ₂)	2600	SNI 19-7117.3.1-2005

Volume of gas measured under standard conditions (25 °C and pressure 1 atmosphere), and dry conditions with correction of O₂ at 0%

Table A.13 *Production Process – Dehydration Glycol Release*

Parameter	Emission Standard	Method
VOC as total petroleum hydrocarbon	Efficiency of emission process hydrocarbon content at least 95% or 0,8 VOC as TPH/MSCF dehydrated gas averaged in 24 hours	Mass balance calculation EPA Method 8260
Volume of gas measured under standard conditions (25 °C and pressure 1 atmosphere), and dry conditions as well as the correction of O ₂ at 0%		

Table A.14 *Production Process – Regenerator Catalyst Unit*

Parameter	Emission Standard (mg/Nm ³)	Method
Particulate	400	SNI 19-7117.12-2005
SO ₂	1500	SNI 19-7117.3.1-2005 Or Method 6, 6C USEPA
NO ₂	1000	SNI 19-7117.5-2005 or Method 7, 7E USEPA
HC	200	-
Volume of gas measured under standard conditions (25 °C and pressure 1 atmosphere), and dry conditions with the correction of O ₂ at 0%.		

Table A.15 *Production Process – Sulphur Recovery Unit Claus System without Gas Incinerator*

Parameter	Emission Standard (mg/Nm ³)	Method
Particulate	400	SNI 19-7117.12-2005
Reduced Sulphur	450	SNI 19-7117.7-2005
NO ₂	1000	SNI 19-7117.5-2005 or Method 7, 7E USEPA
HC	200	-
Volume of gas measured under standard conditions (25 °C and pressure 1 atmosphere), and dry conditions as well as the correction of O ₂ at 0%. Reduced Sulphur are hydrogen sulfide (H ₂ S), carbonyl sulfide (COS) and carbon disulfide (CS ₂)		

Table A.16 *Production Process – Sulphur Recovery Unit Claus System with Gas Incinerator*

Parameter	Emission Standard (mg/Nm ³)	Method
Particulate	400	SNI 19-7117.12-2005
Sulfur Dioxide (SO ₂)	1500	SNI 19-7117.3.1-2005 Or Method 6, 6C USEPA
NO ₂	1000	SNI 19-7117.5-2005 or Method 7, 7E USEPA
HC	200	-
Volume of gas measured under standard conditions (25 °C and pressure 1 atmosphere), and dry conditions with the correction of O ₂ at 0%		

A.2.2 Effluent Discharge Standards for FSRU Activities

Table A.17 Effluent and Discharge

Types	Parameter	Unit	MoE Decree KEP-19/MENLH/2010 Attachment IV	IFC ⁽¹⁾
Waste water process	Oil and grease	mg/L	25	-
	Residual chlorine	mg/L	2	-
	Temperature	°C	45	-
	pH		6 - 9	-
Drainage Wastewater	Oil and grease	mg/L	15	-
	Total Organic Carbon (TOC)	mg/L	110	-
Cooling water	Temperature	°C	-	Temperature increase of no more than 3°C
Storm water drainage ²	Oil and grease	mg/L	-	10
Hydro test Water	COD	mg/L	-	125
	BOD	mg/L	-	25
	Sulfides	mg/L	-	1
	Total Phenols	mg/L	-	0.5
	pH	mg/L	-	6 - 9
	TSS	mg/L	-	35
	Heavy metal (total) ³	mg/L	-	5
	Chlorides	mg/L	-	600 (average); 1200 (maximum)
	Total Hydrocarbon	mg/L	-	10

1. IFC EHS Guidelines for Liquefied Natural Gas (LNG) Facilities (2017)

Additional notes:

- If the drainage of waste water is mixed with the processing waste water, the quality standards meet the process waste
- The cooling water effluent should result in a temperature increase of no more than 3°C at edge of the zone where initial mixing and dilution take place. Where the zone is not defined, use 100 m from point of discharge. Free chlorine (total residual oxidant in estuarine / marine water) concentration in cooling / cold water discharges (to be sampled at point of discharge) should be maintained at 0.2 parts per million (ppm)

Table A.18 Domestic Wastewater

Parameter	Unit	MoE Regulation No. 68/2016 ⁽¹⁾	IFC ⁽²⁾⁽³⁾
pH	-	6 – 9	6 – 9
BOD	mg/L	30	30
COD	mg/L	100	125
TSS	mg/L	30	50
Oil and grease	mg/L	5	10
Ammoniac	mg/L	10	10
Total coliform bacteria	MPN ⁽⁴⁾ / 100 ml	3000	400 ⁽³⁾
Debit	l/man/day	100	-

1. Ministry of Environment Regulation No. 68 Year 2016 regarding Domestic Wastewater Standard.
2. Environmental, Health, and Safety (EHS) Guidelines - General EHS Guidelines for Wastewater and Ambient Water Quality (2007).
3. Not applicable to centralised, municipal, wastewater treatment systems which are included in EHS guidelines for water and sanitation.
4. MPN = Most Probable Number.

Additional notes:

- The effluent should result in a temperature increase of no more than 3° C at the edge of the zone where initial mixing and dilution take place. Where the zone is not defined, use 100 m from the point of discharge when there are no sensitive aquatic ecosystems within this distance.
- Site specific requirement to be established by the EA.
- Elevated temperature areas due to discharge of once-through cooling water (e.g., 1 Celsius above, 2 Celsius above, 3 Celsius above ambient water temperature) should be minimised by adjusting intake and outfall design through the project specific EA depending on the sensitive aquatic ecosystems around the discharge point.

A.2.3 *Air Emissions for Thermal Power Plant Activities*

The following air emissions standards are applicable, according to *Ministry of Environmental and Forestry Regulation No. 21 Year 2008* regarding Emission Standard of Combined Cycle Power Plant.

Table A.19 *Air Emissions for Thermal Power Plant*

Parameter	Environmental Ministry Regulation No. 21 Year 2008 ⁽¹⁾	IFC ⁽²⁾⁽³⁾
	Gas (mg/Nm ³ or as indicated) ⁽⁴⁾	Gas (mg/Nm ³ or as indicated) ⁽⁵⁾
SO ₂	150	-
NO _x as NO ₂	320	51 (25 ppm)
Total of Particulate	30	-
Opacity ⁽⁶⁾	-	-

1. Ministry of Environmental and Forestry Regulation No. 21 Year 2008 regarding Emission Standard of Combined Cycle Power Plant
2. Environmental, Health, and Safety (EHS) Guidelines for Thermal Power Plants (2008)
3. Natural Gas all turbine types of unit >50MWth
4. Concentrations are specified at reference condition (Nm³ is at 25°C, 1 atmosphere pressure, dry and 15% O₂)
5. Concentrations are specified at reference condition (Nm³ is at 0°C, 1 atmosphere pressure, dry and 15% O₂)
6. Opacity is used as an indicator for practical monitoring

A.2.4 Effluent Discharge Standards for Thermal Power Plant Activities

The following effluent and discharge standards are applicable, according to Ministry of Environmental and Forestry Regulation No. 8 Year 2009 regarding Wastewater Standard for Thermal Power Plant Activities.

Table A.20 Main Process Activity - Main Process Source

Parameter	Environmental Ministry Regulation No. 8 Year 2009 (mg/l) ⁽¹⁾	IFC (mg/l, except pH and temp) ⁽²⁾
pH	6 - 9	6 - 9
TSS	100	50
Oil and Grease	10	10
Total residual chlorine	-	0.2
Free Chlorine (Cl ₂) ⁽³⁾	0.5	-
Total Chromium (Cr)	0.5	0.5
Copper (Cu)	1	0.5
Iron (Fe)	3	1.0
Zinc (Zn)	1	1.0
(PO ₄) ⁽⁴⁾	10	-
Lead (Pb)	-	0.5
Cadmium (Cd)	-	0.1
Mercury (Hg)	-	0.005
Arsenic (As)	-	0.5
Temperature Increase by thermal discharge from cooling system	-	Site specific requirement to be established by the EA. Elevated temperature areas due to discharge of once-through cooling water should be minimised by adjusting intake and outfall design through the project specific EA depending on the sensitive aquatic ecosystems around the discharge point.

1. Ministry of Environmental and Forestry Regulation No. 8 Year 2009 regarding Wastewater Standard for Thermal Power Plant Activities
2. Environmental, Health, and Safety (EHS) Guidelines for Thermal Power Plants (2008)
3. If the cooling tower blowdown is channeled to the STP
4. If the Phosphate Injection occurred

Table A.21 Main Process Activity - Blowdown Boiler

Parameter	Unit	Maximum Concentration	IFC ^a
pH	mg/L	6 - 9	6 - 9
Cu	mg/L	1	0.5
Fe	mg/L	3	1.0

If the wastewater of Blowdown boiler is not channeled to the STP

Notes:

IFC^a: IFC EHS Guidelines for Thermal Power Plants, 2008

Table A.22 Main Process Activity - Blowdown Cooling Water

Parameter	Unit	Maximum Concentration	IFC ^a
pH	mg/L	6 – 9	6 – 9
Free Chlorine (Cl ₂)	mg/L	1	-
Zn	mg/L	1	1.0
PO ₄ ⁻	mg/L	10	-

If the wastewater of Colling Tower is not channelled to the STP

Notes:

IFC^a: IFC EHS Guidelines for Thermal Power Plants, 2008

Table A.23 Main Process Activity - WTP Demineralisation

Parameter	Unit	Maximum Concentration	IFC ^a
pH	-	6 – 9	6 – 9
TSS	mg/L	100	50

If the wastewater of WTP Demineralisation is not channelled to the STP

Notes:

IFC^a: IFC EHS Guidelines for Thermal Power Plants, 2008

Table A.24 Supporting Activity - Cooling Water Source (Heat Water)

Parameter	Unit	Maximum Concentration	IFC ^a
Temperature	°C	40*	Site specific requirement to be established by the EA. Elevated temperature areas due to discharge of once-through cooling water (e.g., 1 Celsius above, 2 Celsius above, 3 Celsius above ambient water temperature) should be minimised by adjusting intake and outfall design through the project specific EA depending on the sensitive aquatic ecosystems around the discharge point.
Free Chlorine (Cl ₂)	mg/l	0.5	-

If the heat water is not channelled to the STP

Notes:

*) Monthly Average measurement in condenser outlet

IFC^a: IFC EHS Guidelines for Thermal Power Plants, 2008

Table A.25 Supporting Activity - Desalination Source

Parameter	Unit	Maximum Concentration	IFC
pH	-	6-9	6 – 9
Salinity	‰	In Radius 30 Km from seawater discharge location, the wastewater salinity should be equal to the natural salinity	-

Notes:

IFC^a: IFC EHS Guidelines for Thermal Power Plants, 2008

A.2.5 Water and Sediment Quality for Ports, Harbours and Terminals

Table A.26 Water and Sediment Quality Monitoring Parameters

Parameters
Dissolved oxygen
Temperature
pH
Turbidity
Secchi disk transparency
Conductivity/Salinity
Condition of biological communities
Total Suspended Solids
Chlorophyll
Total Phosphorus
Filterable reactive phosphate
Total Nitrogen
Oxides of Nitrogen
Ammonia
Toxics: Metals and metalloids; non-metallic organics; organic alcohols; chlorinated alkanes and alkenes; anilines; aromatic hydrocarbons (including phenols and xylenols); organic sulfur compounds; phthalates; organochlorine and organophosphorus pesticides; herbicides and fungicides
Sediment (metals and metalloids; organometallics; organics)
Other site-specific parameters, as relevant
Additional notes:
<ul style="list-style-type: none"> Monitoring of water and sediment quality during construction and operational activities of ports and terminals (in particular dredging and disposal activities) should generally include the monitoring parameters. The selection of parameters should be based on local site considerations and the objectives of the monitoring program, including local water quality issues and water uses of interest.

Notes: IFC EHS Guidelines for Ports, Harbors and Terminals, 2017



PLTGU Jawa 1 Independent Power Project

ANNEX B BASELINE SURVEY RESULTS

Prepared for:

PT Jawa Satu Power (JSP)

www.erm.com

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The sections of **Annex B** are structured as follows:

- *Section B.1 Soil;*
- *Section B.2 Groundwater;*
- *Section B.3 Surface Water and River Water;*
- *Section B.4 Air Quality;*
- *Section B.5 Noise and Vibration;*
- *Section B.6 Electromagnetic Field;*
- *Section B.7 Marine Water Quality;*
- *Section B.8 Marine Sediment; and*
- *Section B.9 Marine Plankton and Macrobenthos.*

Note:

- This Annex provides only the results of environmental baseline surveys. For maps of sampling locations, summaries of environmental baseline studies including the applicability of environmental standards and requirements, this Annex shall be read together with **Chapter 7** of ESIA Report.
- Additionally, the name of applicable standards and sampling methods are summarised as “Note” throughout of this Annex.
- Values highlighted in RED are those exceeded limits of applicable standards.

B.1 SOIL

B.1.1 List of Reports

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Soil Investigation at the proposed Power Plant area for 800 to 100 MW CCGT power Plant at Cilamaya, West Java, 2015 (Soilens, 2015);*
- *Geotechnical Investigation of the Jawa 1 CCGT Power Plant IPP Project, Cilamaya, West Java, 2016 (Tigenco, 2016); and*
- *Analisis Mengenai Dampak Lingkungan (AMDAL) Report (ERM, 2018b).2018c).*

Table B.1 Soil Monitoring (2015)

Parameters	S1	S2	S3
Sample depth (m)	1.0 – 1.7	1.0 – 1.7	1.0 – 1.7
pH	7.03	6.95	6.93
Chloride			
• ppm	78.0	167.0	169.7
• % by weight	0.01	0.02	0.02
Sulfate			
• ppm	91.8	255.0	98.2
• % by weight	0.01	0.03	0.01
Organic content in % by weight	4.37	2.43	2.31

Source: Soilens, 2015

Note:

- The undisturbed soil samples were obtained from the boreholes and were obtained using thin walled (Shelby) tube sampler of 73 mm inner diameter.
- All field tests were carried out in accordance to the ASTM standards.
- Neither local Indonesian regulations nor the IFC does not establish standards for soil quality standards.

Table B.2 Soil Monitoring (2016)

Parameters	S4	S5	S6	S7			
Sample depth (m)	1.0-1.5	1.0-1.5	2.5 – 3.0	0.5 – 1.5	2.0 -3.0	2.0-3.0	3.8-4.0
pH	6.78	5.9	6.62	7.73	8.23	7.0	8.0
Chloride (ppm)	52	94	103	12314	9459	5019	14057
Sulfate (ppm)	158	225	219	478	187	253	9

Source: Tigenco, 2016

Note:

- Access borehole was sunk for the exploratory purpose with *in-situ* tests and undisturbed soil sampling. The borehole diameter was sufficiently large to allow the insertion of *in-situ* test apparatus and undisturbed soil sampler with minimum diameter of 75 mm (NX Size).
- The tests methods:
 - Acidity/alkalinity (pH) test : ASTM G 51
 - Sulfur trioxide content test : BS 1377 Test 9
 - Chloride content test : BS 1377 Test 9 (for soil)
 - Carbonate content test : ASTM D 513 (for soil)

- Neither local Indonesian regulations nor the IFC does not establish standards for soil quality standards.

Table B.3 Soil Monitoring (2017)

Parameters	S8	S9	S10	S11	S12	S13
Texture	Silt	Silt Loam	Silt	Silt	Silt Loam	Silt Loam
C-Organic (%)	3.2	3.46	3.92	2.84	3.80	2.52
N-Total	0.33	0.36	0.40	0.30	0.39	0.27
Phosphorus (P)	12.85	45.78	51.71	38.20	15.25	10.16
Potassium (K)	174.74	200.46	110.87	171.45	164.8	113.97
H ₂ O	6.03	4.68	3.95	4.85	6.02	6.10
KCl	5.88	4.62	3.88	4.78	5.95	6.02
Mercury (Hg)	0.333	0.032	0.055	<0.004	0.094	0.104
Chromium (Cr)	18.30	11.47	17.09	13.84	15.57	15.57
Arsenic (Ar)	0.865	0.999	0.273	0.916	0.788	0.554
Selenium (Se)	0.42	0.43	0.49	0.32	0.29	0.35
Copper (Cu)	14.45	15.13	28.84	18.48	33.00	23.65
Lead (Pb)	41.01	45.48	35.37	39.07	59.73	74.38
Zinc (Zn)	92.84	54.56	72.62	87.26	135.56	128.31
Nickel (Ni)	14.22	9.11	19.50	13.79	25.43	18.41

Source: ERM, 2018b

Note:

- Neither local Indonesian regulations nor the IFC does not establish standards for soil quality standards.

B.2 GROUNDWATER

B.2.1 List of Reports

The following data is based on the primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Soil Investigation at the proposed Power Plant area for 800 to 100 MW CCGT power Plant at Cilamaya, West Java, 2015 (Soilens, 2015);*
- *Geotechnical Investigation of the Jawa 1 CCGT Power Plant IPP Project, Cilamaya, West Java, 2016 (Tigenco, 2016);*
- *Environmental Monitoring (RKL and RPL) Semester 2, 2016 completed for SKG Cilamaya (SKG Cilamaya, 2016);*
- *Regulatory Environmental Monitoring (RKL and RPL) Semester 1, 2017 completed for SKG Cilamaya (SKG Cilamaya, 2017); and*
- *Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM, 2018b).*

Table B.4 Groundwater Monitoring (2015)

Parameters	GW1	GW2	GW3	Applicable Standards	
				I	II
Sample depth (m)	1.0 - 1.7	1.0 - 1.7	1.0 - 1.7	-	-
pH	6.73	6.86	6.88	6.5-9	-
Chloride (mg/L)	28.3	50.9	42.7	600 mg/L	-
Sulfate (mg/L)	26.2	14.7	20.6	400 mg/L	-
Organic content (mg/L)	84.55	79.43	89.68	-	-

Source: Soilens, 2015

Note:

- All field tests were carried out in accordance to the ASTM standards.
- I: Regulation of Health Ministry 416/1990 Appendix II
- II: The IFC does not establish standards for groundwater quality standards.

Table B.5 Groundwater Monitoring (2016)

Parameters	GW4	GW5	GW6	GW7	Applicable Standards	
					I	II
pH	7.0	7.0	8.0	7.0	6.5-9	-
Chloride (mg/L)	232	4303	2659	4253	600 mg/L	-
Sulfate (mg/L)	<0.3	92	1.22	1364	400 mg/L	-

Source: Tigenco, 2016

Note:

- The tests methods:
 - Acidity/alkalinity (pH) test: ASTM D 1293
 - Sulfur trioxide content test : ASTM D 516
 - Chloride content test: ASTM D 516
 - Carbonate content test : ASTM D 1888
- I: Regulation of Health Ministry 416/1990 Appendix II
- II: The IFC does not establish standards for groundwater quality standards.

Table B.6 *Groundwater Monitoring (August 2016, November 2016, December 2016 & January 2017)*

Parameters	Unit	Results at GW8				Applicable Standards	
		August 2016	November 2016	February 2017	May 2017	I	II
Physical-chemical characteristics							
<i>in-situ</i> pH	-	7.4	6.5	6.5	7.0	6.5-9	-
<i>in-situ</i> Temperature	°C	27.0	28.0	27.0	30.0	± 3	-
Turbidity	NTU	0.5	13.0	2.0	6.0	25	-
Colour	TCU	12.0	38.0	6.0	3.0	50	-
Total Dissolved Solids (TDS)	mg/L	2,670.0	982.0	88.0	74.0	1500	-
Arsenic (As)	mg/L	<0.005	<0.005	<0.005	<0.005	0.05	-
Mercury (Hg)	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	0.001	-
Selenium (Se)	mg/L	<0.002	<0.002	<0.002	<0.002	0.01	-
Iron (Fe)	mg/L	<0.047	<0.047	0.07	0.111	1	-
Manganese (Mn)	mg/L	0.119	<0.047	<0.047	<0.047	0.5	-
Zinc (Zn)	mg/L	<0.305	<0.305	<0.305	<0.305	15	-
Cyanide (CN)	mg/L	<0.002	<0.002	<0.002	<0.002	0.1	-
Lead (Pb)	mg/L	<0.045	<0.045	<0.045	<0.045	0.05	-
Cadmium (Cd)	mg/L	<0.001	<0.001	<0.001	<0.001	0.005	-
Carbon Carbonate	mg/L	837.0	552.0	26.0	26.0	500	-
Chloride (Cl)	mg/L	1,275.0	378.0	12.0	15.0	600	-
Fluoride (F)	mg/L	0.325	0.559	<0.112	<0.112	1.5	-
Nitrate	mg/L	1.161	0.301	0.174	<0.066	10	-
Nitrite	mg/L	<0.005	0.132	<0.005	<0.005	1	-
Chromium Hexavalent	mg/L	<0.010	<0.010	<0.010	<0.010	0.05	-
Sulphate	mg/L	59	160	<5.0	62.0	400	-
Surfactant (anion)	mg/L	<0.01	<0.01	<0.010	<0.010	-	-
Potassium Permanganate	mg/L	4.588	17.519	7.508	6.004	10	-
Microbiological characteristic							
Total Coliform.	MPN/100ml	< 2	58	15.0	8.0	50	-

Source: SGK Cilamaya, 2016; SGK Cilamaya, 2017

Note:

- I: Regulation of Health Ministry 416/1990 Appendix II
- II: The IFC does not establish standards for groundwater quality standards.

Table B.7 *Groundwater Monitoring (2017)*

Parameters	Unit	Results		Applicable Standards	
		GW9	GW10	I	II
Physical-chemical characteristics					
pH	-	6.4	6.5	6.5-9	-
Temperature	°C	31.9	30.3	± 3	-
Turbidity	NTU	0.52	0.31	25	-
Colour	TCU	3	9	50	-
Total Dissolved Solids (TDS)	mg/L	298	458	1500	-
Arsenic (As)	mg/L	<0.0001	<0.0001	0.05	-

Parameters	Unit	Results		Applicable Standards	
		GW9	GW10	I	II
Mercury (Hg)	mg/L	0.0003	0.0006	0.001	-
Selenium (Se)	mg/L	0.0084	0.009	0.01	-
Iron (Fe)	mg/L	0.058	<0.050	1	-
Manganese (Mn)	mg/L	0.046	0.046	0.5	-
Zinc (Zn)	mg/L	<0.005	<0.005	15	-
Cyanide (CN)	mg/L	0.007	0.007	0.1	-
Lead (Pb)	mg/L	8.85	6.45	0.05	-
Cadmium (Cd)	mg/L	0.002	<0.002	0.005	-
Carbon Carbonate	mg/L	125.73	154.55	500	-
Chloride (Cl)	mg/L	62.98	68.98	600	-
Fluoride (F)	mg/L	0.033	0.055	1.5	-
Nitrate	mg/L	0.106	0.125	10	-
Nitrite	mg/L	<0.005	0.005	1	-
Chromium Hexavalent	mg/L	<0.001	<0.001	0.05	-
Sulphate	mg/L	8.85	6.45	400	-
Surfactant (anion)	mg/L	0.074	0.062	-	-
Potassium Permanganate	mg/L	15.80	13.90	10	-
Microbiological characteristics					
Faecal Coliform.	MPN/ 100ml	920	>1600000	10	-
Total Coliform	MPN/ 100ml	920	>1600000	50	-

Source: ERM. 2018b

Note:

- I: Regulation of Health Ministry 416/1990 Appendix II
- II: The IFC does not establish standards for groundwater quality standards.

B.3 SURFACE WATER AND RIVER WATER

B.3.1 List of Reports

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Bathymetric Survey and Seawater Data Collection Report. 2016 (Pöyry. 2016b);*
- *Environmental Monitoring (RKL and RPL) Semester 2. 2016 completed for SKG Cilamaya (SKG Cilamaya. 2016);*
- *Regulatory Environmental Monitoring (RKL and RPL) Semester 1. 2017 completed for SKG Cilamaya (SKG Cilamaya. 2017); and*
- *Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM. 2018b).*

Table B.8 Surface Water Monitoring (2016)

Parameters	Unit	RW1	RW2	Applicable Standards	
				I	II
pH	-	7.2	7.0	6 - 9	-
<i>in-situ</i> Temperature	°C	28.5	28.7	Three (3) deviation	-
Total Dissolved Solids (TDS)	mg/L	192	178	1,000	-
Total Suspended Solids (TSS)	mg/L	500	450	400	-
BOD5	mg/L	13	16	6	-
COD	mg/L	29.4	34.3	50	-
Dissolved Oxygen(DO)	mg/L	4.5	4.3	3	-
Nitrate	mg/L	1.19	1.79	20	-
Nitrite	mg/L	0.005	0.004	0.06	-
Ammonia	mg/L	0.853	0.568	-	-
Mercury (Hg)	mg/L	0.36	0.09	0.002	-
Arsenic	mg/L	0.0019	0.1793	1	-
Barium	mg/L	<0.001	<0.001	-	-
Cadmium(Cd)	mg/L	<0.001	<0.001	0.01	-
Cobalt	mg/L	<0.001	<0.001	0.2	-
Total Chromium (Cr)	mg/L	0.011	0.008	0.05	-
Copper(Cu)	mg/L	0.075	0.155	0.02	-
Zinc(Zn)*	mg/L	0.114	0.107	0.05	-
Iron (Fe)*	mg/L	0.063	0.193	-	-
Boron	mg/L	<0.003	0.043	1	-
Lead(Pb)	mg/L	<0.001	0.001	1	-
Chloride	mg/L	17.4	14.5	-	-
Manganese(Mn)*	mg/L	0.220	0.157	-	-
Fluoride(F)	mg/L	0.859	0.488	-	-
Sulfate(SO4)	mg/L	53.8	53.9	-	-
Sulfide(H2S)	mg/L	0.019	0.023	0.002	-
Cyanide	mg/L	<0.001	0.001	-	-
Selenium	mg/L	<0.001	<0.001	0.05	-

Parameters	Unit	RW1	RW2	Applicable Standards	
				I	II
Oil & Grease	mg/L	2.40	2.0	1	-
MBAS	mg/L	<0.001	0.302	200	-
Phenol	mg/L	<0.005	<0.005	1	-
Total Phosphate	mg/L	0.022	0.050	1	-

Source: Pöyry, 2016b

Note:

- Sampling method aligned with the *Standard Nasional Indonesia SNI 6.989, 57: 2008* regarding Method for Surface Water Sampling. Before samples are taken, information such as sample code, date, and time of sampling will be noted in CoC (Chain of Custody) paper, including parameters that will be analysed.
- I: Government Regulation (PP) Number 82/2001 on Water Quality Management and Water Pollution Control
- II: The IFC does not establish standards for surface water quality.

Table B.9 Surface Water Monitoring - Plankton Type Diversity (2016)

Species	RW1	RW2
Phytoplankton		
<i>Aqmenellum</i> sp.	0	33
<i>Closterium</i> sp.	66	0
<i>Diatoma</i> sp.	33	0
<i>Eremosphaera</i> sp.	0	33
<i>Eudorina</i> sp.	33	0
<i>Fragilaria capucina</i> .	231	66
<i>Gyrosigma</i> sp.	0	33
<i>Lemanea</i> sp.	99	66
<i>Lyngbya</i> sp.	33	0
<i>Navicula</i> sp.	33	0
<i>Nitzschia</i> sp.	33	0
<i>Oscillatoria</i> sp.	66	33
<i>Phormidium</i> sp.	2046	528
<i>Spirogyra</i> sp.	66	0
<i>Stanieria</i> sp.	825	858
<i>Synedra</i> sp.	198	33
<i>Tribonema</i> sp.	264	198
Total Phytoplankton	52668	39498
ID Simpson	0.779	0.798
Zooplankton		
<i>Alona</i> sp.	33	0
<i>Arcella</i> sp.	98	33
<i>Asplanchna</i> sp.	33	0
<i>Brachionus calyciflorus</i> .	33	0
<i>Brachionus facaltis</i>	0	33
<i>Centropyxis</i> sp.	33	33
<i>Cyclops</i> sp.	66	231
<i>Diaptomus</i> sp.	66	33
<i>Epistylis</i> sp.	99	363
<i>Filinia</i> sp.	33	33
<i>Macrothrix</i> sp.	0	33
<i>Moina</i> sp.	99	132
<i>Notholca</i> sp.	33	0
<i>Phylodina</i> sp.	33	33
<i>Plumatella</i> sp.	33	0
<i>Rhabdolaimus</i> sp.	66	99

Species	RW1	RW2
<i>Rotaria</i> sp.	33	0
Total Zooplankton	791	1056
ID Simpson	0.917	0.803
Total Plankton	4817	2937
ID Simpson	0.780	0.851
Benthos		
<i>Belostoma</i> sp.	3	3
<i>Enallagma</i> sp.	3	0
<i>Paratelphusa</i> sp.	3	6
<i>Pomacea</i> sp.	6	6
<i>Syncaris</i> sp.	21	24
Total	36	39
I.D Shannon & Wiener	1.234	1.072

Source: Pöyry, 2016b

Note:

- Sampling method aligned with the *Standar Nasional Indonesia SNI 6.989, 57: 2008* regarding Method for Surface Water Sampling. Before samples are taken, information such as sample code, date, and time of sampling will be noted in CoC (Chain of Custody) paper, including parameters that will be analysed.

Table B.10 *Surface Water Monitoring (August & November 2016 and February & May 2017)*

Parameters	Unit	Results (RW3)				Applicable Standards	
		April 2016	November 2016	February 2017	May 2017	I	II
pH	-	7.4	7.2	7.6	7.4	5-9	-
<i>in-situ</i> Temperature	°C	28.0	27.0	27.0	30.0	Three (3) deviation	-
Total Suspended Solids (TSS)	mg/L	70	53	7	8	400	-
Total Dissolved Solids (TDS)	mg/L	298	131	170	162	1,000	-
Arsenic (As)	mg/L	<0.005	<0.005	<0.005	<0.005	1	-
Mercury (Hg)	mg/L	<0.0005	0.001	<0.005	<0.005	0.002	-
Selenium (Se)	mg/L	<0.002	<0.002	<0.002	<0.002	0.05	-
Barium (Ba)	mg/L	0.302	0.010	0.110	0.029	-	-
Boron (B)	mg/L	0.038	0.010	0.120	0.114	1	-
Cobalt (Co)	mg/L	<0.006	<0.006	<0.006	<0.024	0.2	-
Sulphide (H ₂ S)	mg/L	<0.002	<0.002	<0.002	<0.002	0.002	-
Cyanide (CN)	mg/L	<0.002	<0.002	<0.002	<0.002	-	-
Phenol	mg/L	<0.001	<0.001	<0.001	<0.001	1	-
Iron (Fe)	mg/L	<0.001	0.574	0.060	<0.026	-	-
Manganese (Mn)	mg/L	<0.001	0.023	0.060	<0.026	-	-
Zinc (Zn)	mg/L	<0.001	0.254	0.030	0.006	0.05	-
Copper (Cu)	mg/L	<0.001	0.002	<0.001	<0.001	0.02	-
Cadmium (Cd)	mg/L	<0.001	<0.001	<0.001	<0.001	0.01	-
Lead (Pb)	mg/L	<0.001	<0.001	<0.001	<0.001	0.03	-
Fluoride (F)	mg/L	0.472	0.436	<0.112	0.154	1.5	-
Chloride (Cl)	mg/L	34.0	10.0	7.0	9.0	-	-
Free Ammonium	mg/L	1.268	<0.026	0.321	0.149	-	-
Nitrate	mg/L	5.662	2.46	0.080	<0.066	20	-
Nitrite	mg/L	<0.015	0.005	0.034	0.025	0.06	-
Surfactant (anion)	mg/L	0.01	<0.001	<0.01	17.0	-	-
Sulphate	mg/L	66.0	56.0	10.0	12.0	-	-

Parameters	Unit	Results (RW3)				Applicable Standards	
		April 2016	November 2016	February 2017	May 2017	I	II
Chromium Hexavalent	mg/L	0.018	<0.01	<0.010	<0.010	0.05	-
BOD5	mg/L	11.0	12.0	14.0	3.0	6	-
COD	mg/L	21.0	87.0	37.0	7.0	50	-
<i>in-situ</i> Dissolved Oxygen	mg/L	2.18	4.05	3.93	3.87	3	-
Free Chlorine	mg/L	0.04	0.02	0.02	0.05	-	-
Total Phosphate	mg/L	0.41	0.13	0.12	0.13	1	-
Oil & Grease	mg/L	<0.20	<0.20	<0.20	<0.20	1	-
Faecal Coliform	MPN/100ml	1,700	28,000	22,000	28,000	2,000	-
Total Coliform	MPN/100ml	2,100	35,000	2,800	3,500	10,000	-

Source: SGK Cilamaya. 2016; SGK Cilamaya. 2017

Note:

- Sampling method aligned with the *Standar Nasional Indonesia SNI 6.989,57: 2008* regarding Method for Surface Water Sampling. Before samples are taken, information such as sample code, date, and time of sampling will be noted in CoC (Chain of Custody) paper, including parameters that will be analysed.
- I: Government Regulation (PP) Number 82/2001 on Water Quality Management and Water Pollution Control
- II: The IFC does not establish standards for surface water quality.

Table B.11 Surface Water Monitoring (2017)

Parameters	Unit	RW4	RW5	RW6	RW7	RW8	RW9	RW10	Applicable Standards	
									I	II
Temperature	°C	28.0	27.6	29.8	29.5	28.3	30.6	31	Three (3) deviation	-
Total Suspended Solid (TSS)	mg/L	23	18	30	20	34	60	55	400	-
Total Dissolved Solids (TDS)	mg/L	264	220	264	240	248	1438	2160	1,000	-
pH	-	7.25	6.93	7.38	7.43	6.98	6.5	7.5	5-9	-
Dissolved Oxygen	mg/L	1.4	3.5	6.7	2.2	1.5	4.6	5.9	3	-
Biological Oxygen Demand (BOD ₅)	mg/L	6.4	5.80	6	6.40	6.2	6.60	6.4	6	-
Chemical Oxygen Demand (COD)	mg/L	74.20	72.05	45.43	63.47	54.02	49.73	81.07	50	-
Total Phosphate	mg/L	0.332	0.201	0.249	0.256	0.388	0.378	0.374	1	-
Ammonia (NH ₃ -N)	mg/L	5.913	2.370	4.240	3.078	0.489	5.691	0.443	-	-
Nitrate (NO ₃ -N)	mg/L	2.133	0.104	1.750	0.093	0.104	1.130	0.162	20	-
Nitrite (NO ₂ -N)	mg/L	1.112	0.030	1.738	0.020	0.008	0.995	0.012	0.06	-
Sulphate (SO ₄)	mg/L	37.71	29.50	39.67	31.26	25.79	40.84	47.09	-	-
Chloride (Cl)	mg/L	16.99	23.99	28.99	36.99	31.99	34.99	33.59	-	-
Arsenic (As)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0016	0.0009	1	-
Cobalt (Co)	mg/L	<0.005	0.033	<0.005	<0.005	<0.005	0.012	0.039	0.2	-
Barium (Ba)	mg/L	0.684	0.324	0.385	0.239	0.22	0.094	0.165	-	-
Boron (B)	mg/L	0.426	0.412	0.399	0.511	0.456	0.432	0.622	1	-
Selenium (Se)	mg/L	0.0038	0.0036	0.0049	0.0070	0.0046	0.0070	0.0096	0.05	-
Cadmium (Cd)	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.01	-
Chromium Hexavalent (Cr ⁶⁺)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.05	-
Copper (Cu)	mg/L	0.025	0.042	0.036	0.036	0.034	0.034	0.04	0.02	-
Iron (Fe)	mg/L	0.272	0.379	0.198	0.179	0.300	0.397	0.458	-	-

Parameters	Unit	RW4	RW5	RW6	RW7	RW8	RW9	RW10	Applicable Standards	
									I	II
Lead (Pb)	mg/L	0.141	0.228	0.272	0.234	0.201	0.302	0.265	0.03	-
Manganese (Mn)	mg/L	0.040	<0.005	0.073	0.035	0.102	0.057	0.993	-	-
Mercury (Hg)	mg/L	0.0005	0.0003	0.0006	0.0004	0.0004	0.0003	0.0028	0.002	-
Zinc (Zn)	mg/L	0.034	0.020	0.033	0.021	0.010	0.016	0.009	0.05	-
Cyanide (CN)	mg/L	0.006	0.007	0.005	0.005	0.007	0.008	0.008	-	-
Fluoride (F)	mg/L	0.049	0.011	0.022	0.302	0.082	0.011	0.176	1.5	-
Free Chlorine (Cl ₂)	mg/L	0.070	0.050	0.050	0.050	0.180	0.080	0.100	-	-
Sulfide (H ₂ S)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	-
Oil & Grease	mg/L	<1	<1	<1	<1	<1	<1	<1	1	-
Surfactant	mg/L	0.096	0.092	0.086	0.084	0.096	0.082	0.096	-	-
Phenol	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	1	-
Total Coliform	MPN/100mL	>1600000	16000	4300	16000	1500	>1600000	16000	2,000	-
Fecal Coliform	MPN/100mL	>1600000	16000	4300	3500	1500	>1600000	16000	10,000	-

Source: ERM, 2018b

Note:

- Sampling method aligned with the *Standar Nasional Indonesia SNI 6.989, 57: 2008* regarding Method for Surface Water Sampling. Before samples are taken, information such as sample code, date, and time of sampling will be noted in CoC (Chain of Custody) paper, including parameters that will be analysed.
- I: Government Regulation (PP) Number 82/2001 on Water Quality Management and Water Pollution Control
- II: The IFC does not establish standards for surface water quality.

Table B.12 Surface Water Monitoring – Sediment (2017)

Parameter	Unit	RW4	RW5	RW6	RW7	RW8	RW9	RW10	Applicable Standards	
									I	II
Mercury (Hg)	mg/kg	0.257	0.061	0.163	0.091	0.080	0.065	0.038	-	0.17
Chromium (Cr)	mg/kg	7.23	9.07	9.16	11.48	11.33	14.32	9.14	-	37.3
Arsenic (As)	mg/kg	1.678	0.749	0.911	0.488	0.649	0.709	0.676	-	5.9
Cadmium (Cd)	mg/kg	3.67	2.49	0.77	1.26	2.72	1.95	1.46	-	0.6
Copper (Cu)	mg/kg	12.28	32.33	23.21	23.11	21.78	30.84	22.88	-	35.7
Lead (Pb)	mg/kg	59.08	66.98	66.42	55.65	71.80	58.58	69.96	-	35

Parameter	Unit	RW4	RW5	RW6	RW7	RW8	RW9	RW10	Applicable Standards	
									I	II
Zinc (Zn)	mg/kg	78.38	151.66	90.75	104.67	97.69	129.82	83.89	-	123
Nickel (Ni)	mg/kg	44.15	31.91	20.72	27.49	32.46	36.21	20.93	-	-

Source: ERM, 2018b

Note:

- Sampling method aligned with the *Standar Nasional Indonesia SNI 6.989,57: 2008* regarding Method for Surface Water Sampling. Before samples are taken, information such as sample code, date, and time of sampling will be noted in CoC (Chain of Custody) paper, including parameters that will be analysed. Neither local Indonesian regulations nor the IFC establish limits/standards for surface water quality.
- I: Not local Indonesian regulations nor IFC establish standards for surface water quality.
- II: Canadian Sediment Quality Guidelines for the Protection of Aquatic Life, 2001

B.4 AIR QUALITY

B.4.1 List of Reports

The following data is reflective of primary data collected at the Project site by ERM specifically to inform the air quality impact assessment detailed in **Chapter 8** and **Annex D**. This includes the following:

- A 12-week NO₂ Radiello diffusion tube survey commissioned on the 10th August 2017 and decommissioned on the 6th November 2017 (see **Table B.13** to **Table B.24**);
- A 12-week NO₂ Radiello diffusion tube survey commissioned on the 16th January 2018 and decommissioned on the 27th March 2018 (see **Table B.25** to **Table B.36**); and
- A 12-week NO₂ Aeroqual AQS-1 (real-time) survey commissioned on the 08th January 2018 and decommissioned on the 02nd April 2018 (see **Table B.37** and **Table B.38**).

Table B.13 Week 1: 10th August - 17th August 2017

Laboratory Sample I.D :		EV171597-1	EV171597-2	EV171597-3	EV171597-4	EV171597-5	EV171597-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		17-Aug-17	17-Aug-17	17-Aug-17	17-Aug-17	17-Aug-17	17-Aug-17
Ambient Sampling Condition							
Temperature	°C	21.0 - 40.7	21.5 - 39.3	20.6 - 40.3	21.0 - 35.5	21.0 - 40.9	20.2 - 38.4
Temperature (average)	°C	29.6	29.4	29.0	27.9	29.1	28.6
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	31.0 - 94.7	33.6 - 92.0	34.9 - 95.2	39.2 - 99.9	35.3 - 98.2	38.4 - 99.9
Humidity (average)	%	70.7	68.5	72.2	75.1	73.8	76.9
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.19	4.57	3.36	3.34	4.33	2.67
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	6.00	8.60	6.32	6.28	8.15	5.02

Table B.14 Week 2: 17th August - 24th August 2017

Laboratory Sample I.D :		EV171656-1	EV171656-2	EV171656-3	EV171656-4	EV171656-5	EV171656-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		24-Aug-17	24-Aug-17	24-Aug-17	24-Aug-17	24-Aug-17	24-Aug-17
Ambient Sampling Condition							
Temperature	°C	21.9 - 39.6	22.6 - 37.7	21.9 - 39.2	22.3 - 35.0	22.1 - 37.9	21.7 - 37.5
Temperature (average)	°C	29.1	28.9	28.8	27.8	29.0	28.6
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	37.4 - 91.8	38.1 - 88.9	36.3 - 93.0	42.7 - 98.0	37.5 - 95.6	41.9 - 98.5
Humidity (average)	%	69.5	66.9	69.7	72.1	71.0	73.7
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.45	3.51	3.08	2.94	3.74	2.24
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	6.49	6.60	5.79	5.53	7.04	4.21

Table B.15 Week 3: 28th August - 04th September 2017

Laboratory Sample I.D :		EV171739-1	EV171739-2	EV171739-3	EV171739-4	EV171739-5	EV171739-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		29-Aug-17	29-Aug-17	29-Aug-17	29-Aug-17	29-Aug-17	29-Aug-17
Ambient Sampling Condition							

Laboratory Sample I.D :		EV171739-1	EV171739-2	EV171739-3	EV171739-4	EV171739-5	EV171739-6
Temperature	°C	21.8 - 39.9	22.8 - 37.7	21.8 - 40.2	22.3 - 34.6	22.1 - 38.3	21.2 - 38.1
Temperature (average)	°C	29.4	29.1	28.8	27.8	28.8	28.4
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	36.6 - 95.6	39.8 - 92.8	36.7 - 94.9	45.5 - 99.9	40.1 - 98.7	40.8 - 99.7
Humidity (average)	%	70.7	68.7	71.6	75.6	74.2	76.4
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.34	4.27	3.38	3.18	4.53	2.55
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	6.28	8.03	6.36	5.98	8.52	4.80

Table B.16 Week 4: 04th September – 11th September 2017

Laboratory Sample I.D :		EV171852-1	EV171852-2	EV171852-3	EV171852-4	EV171852-5	EV171852-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		11-Sep-17	11-Sep-17	11-Sep-17	11-Sep-17	11-Sep-17	11-Sep-17
Ambient Sampling Condition							
Temperature	°C	23.2 - 40.0	23.9 - 38.7	23.1 - 40.9	23.5 - 35.1	23.4 - 39.0	22.8 - 38.7
Temperature (average)	°C	30.1	29.9	29.8	28.5	29.8	29.2
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	39.9 - 94.4	42.9 - 91.3	34.9 - 94.0	47.3 - 99.9	39.8 - 97.9	41.4 - 99.5
Humidity (average)	%	70.5	69.4	70.6	76.0	73.4	76.4
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.81	4.13	3.80	4.09	4.69	3.19
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	7.17	7.77	7.15	7.69	8.82	6.00

Table B.17 Week 5: 11th September – 18th September 2017

Laboratory Sample I.D :		EV171950-1	EV171950-2	EV171950-3	EV171950-4	EV171950-5	EV171950-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		18-Sep-17	18-Sep-17	18-Sep-17	18-Sep-17	18-Sep-17	18-Sep-17
Ambient Sampling Condition							
Temperature	°C	22.1 - 40.8	22.9 - 39.3	22.2 - 40.8	22.5 - 35.0	22.7 - 39.4	21.6 - 39.6
Temperature (average)	°C	30.0	29.9	30.0	28.5	30.0	29.1
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	34.2 - 92.6	40.1 - 90.4	34.8 - 92.3	46.8 - 98.8	38.2 - 95.5	41.1 - 99.3
Humidity (average)	%	69.0	67.7	68.0	73.8	70.3	74.8
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.94	4.18	4.26	4.27	5.01	3.35

Laboratory Sample I.D :		EV171950-1	EV171950-2	EV171950-3	EV171950-4	EV171950-5	EV171950-6
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	7.41	7.86	8.01	8.03	9.42	6.30

Table B.18 Week 6: 18th September - 25th September 2017

Laboratory Sample I.D :		EV171978-1	EV171978-2	EV171978-3	EV171978-4	EV171978-5	EV171978-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		25-Sep-17	25-Sep-17	25-Sep-17	25-Sep-17	25-Sep-17	25-Sep-17
Ambient Sampling Condition							
Temperature	°C	21.7 - 40.4	21.7 - 40.4	21.4 - 39.3	22.4 - 39.9	22.4 - 39.9	21.4 - 39.3
Temperature (average)	°C	29.6	29.6	28.8	29.5	29.5	28.8
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	37.0 - 99.9	37.0 - 99.9	39.1 - 99.9	36.4 - 98.6	36.4 - 98.6	39.1 - 99.9
Humidity (average)	%	71.4	71.4	76.1	72.6	72.6	76.1
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	4.10	6.07	6.15	4.66	6.90	4.27
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	7.71	11.4	11.6	8.77	13.0	8.03

Table B.19 Week 7: 25th September - 02nd October 2017

Laboratory Sample I.D :		EV172052-1	EV172052-2	EV172052-3	EV172052-4	EV172052-5	EV172052-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		02-Oct-17	02-Oct-17	02-Oct-17	02-Oct-17	02-Oct-17	02-Oct-17
Ambient Sampling Condition							
Temperature	°C	22.7 - 38.6	22.7 - 38.6	21.6 - 41.3	22.5 - 35.10	22.5 - 35.1	21.6 - 41.3
Temperature (average)	°C	29.2	29.2	29.4	27.8	27.8	29.4
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	38.3 - 99.9	38.3 - 99.9	32.2 - 99.9	46.1 - 99.9	46.1 - 99.9	32.2 - 99.9
Humidity (average)	%	29.0	29.0	29.4	27.8	27.8	29.4
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.39	5.11	4.38	4.87	5.22	2.75
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	6.37	9.61	8.23	9.16	9.81	5.17

Table B.20 Week 8: 02nd October - 09th October 2017

Laboratory Sample I.D :		EV172189-1	EV172189-2	EV172189-3	EV172189-4	EV172189-5	EV172189-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6

Laboratory Sample I.D :		EV172189-1	EV172189-2	EV172189-3	EV172189-4	EV172189-5	EV172189-6
Date Sampled :		09-Oct-17	09-Oct-17	09-Oct-17	09-Oct-17	09-Oct-17	09-Oct-17
Ambient Sampling Condition							
Temperature	°C	23.6 - 39.4	24.1 - 38.6	23.6 - 42.0	23.7 - 35.0	24.0 - 39.5	23.2 - 38.0
Temperature (average)	°C	30.3	30.1	30.6	28.7	30.3	29.3
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	39.5 - 96.8	42.2 - 96.4	36.0 - 98.4	52.5 - 99.9	42.1 - 99.9	50.0 - 99.9
Humidity (average)	%	72.9	73.3	72.3	81.6	76.0	80.6
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	4.76	3.83	4.15	6.06	7.18	4.60
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	8.95	7.20	7.80	11.4	13.5	8.65

Table B.21 Week 9: 09th October - 16th October 2017

Laboratory Sample I.D :		EV172231-1	EV172231-2	EV172231-3	EV172231-4	EV172231-5	EV172231-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		16-Oct-17	16-Oct-17	16-Oct-17	16-Oct-17	16-Oct-17	16-Oct-17
Ambient Sampling Condition							
Temperature	°C	24.20 - 39.90	24.30 - 39.00	23.60 - 41.90	24.20 - 36.50	24.30 - 40.10	23.20 - 39.00
Temperature (average)	°C	30.3	30.3	30.6	29.1	30.6	29.6
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	40.30 - 99.00	42.30 - 95.30	40.20 - 98.40	49.20 - 99.90	43.30 - 99.90	47.30 - 99.90
Humidity (average)	%	74.5	73.3	73.7	81.1	76.7	81.3
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	4.33	3.72	4.42	5.87	9.35	3.83
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	8.14	6.99	8.31	11.04	17.58	7.20

Table B.22 Week 10: 16th October - 23rd October 2017

Laboratory Sample I.D :		EV172412-1	EV172412-2	EV172412-3	EV172412-4	EV172412-5	EV172412-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		23-Oct-17	23-Oct-17	23-Oct-17	23-Oct-17	23-Oct-17	23-Oct-17
Ambient Sampling Condition							
Temperature	°C	24.3 - 41.6	24.5 - 39.2	23.7 - 42.2	24.0 - 39.8	24.4 - 40.6	23.4 - 93.3
Temperature (average)	°C	30.3	29.9	30.2	28.7	30.3	29.3
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	38.5 - 98.1	42.7 - 96.3	37.9 - 99.1	43.0 - 99.1	43.0 - 99.9	47.6 - 99.9
Humidity (average)	%	73.9	74.1	74.9	81.8	72.3	82.1

Laboratory Sample I.D :		EV172412-1	EV172412-2	EV172412-3	EV172412-4	EV172412-5	EV172412-6
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	1.90	2.10	1.80	1.87	2.86	1.14
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	3.57	3.95	3.38	3.52	5.38	2.14

Table B.23 Week 11: 23rd October - 30th October 2017

Laboratory Sample I.D :		EV172441-1	EV172441-2	EV172441-3	EV172441-4	EV172441-5	EV172441-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		30-Oct-17	30-Oct-17	30-Oct-17	30-Oct-17	30-Oct-17	30-Oct-17
Ambient Sampling Condition							
Temperature	°C	22.4 - 41.4	22.8 - 39.8	22.4 - 42.4	22.6 - 35.7	22.7 - 40.3	22.2 - 39.5
Temperature (average)	°C	30.1	29.9	30.2	28.7	30.1	29.4
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	40.3 - 98.2	39.4 - 94.1	35.4 - 97.5	48.3 - 99.9	40.2 - 99.9	45.7 - 99.9
Humidity (average)	%	74.2	72.4	73.2	80.3	76.3	80.1
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	1.48	1.96	2.60	1.55	3.31	1.34
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	2.78	3.68	4.89	2.91	6.22	2.52

Table B.24 Week 12: 30th October - 6th November 2017

Laboratory Sample I.D :		EV172502-1	EV172502-2	EV172502-3	EV172502-4	EV172502-5	EV172502-6
Customer Sample I.D :		AQ - 1	AQ - 2	AQ - 3	AQ - 4	AQ - 5	AQ - 6
Date Sampled :		06-Nov-17	06-Nov-17	06-Nov-17	06-Nov-17	06-Nov-17	06-Nov-17
Ambient Sampling Condition							
Temperature	°C	23.6 - 41.0	24.0 - 40.1	23.5 - 43.8	23.5 - 36.1	23.8 - 40.3	22.7 - 39.7
Temperature (average)	°C	30.9	30.3	31.3	29.1	30.7	29.9
Duration of Sampling	Hours	168	168	168	168	168	168
Humidity	%	36.3 - 97.9	40.5 - 99.9	33.0 - 95.8	45.9 - 99.9	35.3 - 99.9	41.8 - 99.9
Humidity (average)	%	70.5	71.7	68.6	78.4	73.9	77.9
Ambient Air Tests							
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	1.76	1.57	2.29	1.61	2.90	1.21
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	3.31	2.95	4.31	3.03	5.45	2.27

Table B.25 Week 13: 09th January – 16th January 2018

Laboratory Sample I.D :	EV180221-1	EV180221-2	EV180221-3	EV180221-4	EV180221-5	EV180221-6	EV180221-7	EV180221-8	EV180221-9	EV180221-10	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 6	AQ - 5	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	
Date Sampled :	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	16-Jan-18	
Ambient Sampling Condition											
Temperature	°C	22.6 - 34.5	22.6 - 34.5	22.6 - 34.5	23.2 - 36.8	23.2 - 36.9	22.7 - 40.5	22.9 - 36.6	23.2 - 32.9	23.2 - 32.9	23.2 - 32.9
Temperature (average)	°C	26.9	26.9	26.9	27.8	27.7	27.4	27.8	26.8	26.8	26.8
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168
Humidity	%	54.5 - 99.9	54.5 - 99.9	54.5 - 99.9	47.8 - 95.3	48.1 - 96.1	47.6 - 99.9	47.2 - 99.9	51.1 - 99.9	51.1 - 99.9	51.1 - 99.9
Humidity (average)	%	82.1	82.1	82.1	77.0	78.3	84.8	81.4	85.2	85.2	85.2
Ambient Air Tests											
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	1.04	0.93	0.96	1.17	0.78	1.35	1.22	1.11	1.05	0.96
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	1.96	1.76	1.81	2.20	1.48	2.54	2.29	2.09	1.97	1.80

Table B.26 Week 14: 16th January – 23rd January 2018

Laboratory Sample I.D :	EV180286-1	EV180286-2	EV180286-3	EV180286-4	EV180286-5	EV180286-6	EV180286-7	EV180286-8	EV180286-9	EV180286-10	EV180286-11	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 5 Dup	AQ - 6	
Date Sampled :	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	23-Jan-18	
Ambient Sampling Condition												
Temperature	°C	23.1 - 33.6	23.1 - 33.6	23.1 - 33.6	23.8 - 37.0	23.3 - 36.4	23.6 - 32.9	23.6 - 32.9	23.6 - 32.9	23.7 - 36.9	23.7 - 36.9	23.5 - 37.0
Temperature (average)	°C	26.6	26.6	26.6	27.7	27.2	26.8	26.8	26.8	27.6	27.6	27.1
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168	168
Humidity	%	54.0 - 99.9	54.0 - 99.9	54.0 - 99.9	43.8 - 98.3	45.7 - 99.3	50.5 - 99.9	50.5 - 99.9	50.5 - 99.9	45.1 - 99.9	45.1 - 99.9	52.2 - 99.9
Humidity (average)	%	84	84	84	77	80	84	84	84	81	81	85
Ambient Air Tests												
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	2.57	2.61	2.88	4.23	2.00	3.14	2.64	3.07	3.34	3.53	3.12

Laboratory Sample I.D :	EV180286-1	EV180286-2	EV180286-3	EV180286-4	EV180286-5	EV180286-6	EV180286-7	EV180286-8	EV180286-9	EV180286-10	EV180286-11	
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	4.83	4.91	5.41	7.95	3.76	5.90	4.96	5.77	6.28	6.64	5.87

Table B.27 Week 15: 23rd January – 30th January 2018

Laboratory Sample I.D :	EV180343-1	EV180343-2	EV180343-3	EV180343-4	EV180343-5	EV180343-6	EV180343-7	EV180343-8	EV180343-9	EV180343-10	EV180343-11	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 3 Duplicate	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6	
Date Sampled :	30-Jan-18	30-Jan-19	30-Jan-20	30-Jan-21	30-Jan-22	30-Jan-23	30-Jan-24	30-Jan-25	30-Jan-26	30-Jan-27	30-Jan-28	
Ambient Sampling Condition												
Temperature	°C	22.9 - 34.3	22.9 - 34.3	22.9 - 34.3	23.3 - 36.1	22.9 - 37.4	22.9 - 37.4	23.1 - 33.0	23.1 - 33.0	23.1 - 33.0	23.4 - 36.9	22.9 - 36.8
Temperature (average)	°C	26.7	26.7	26.7	27.8	27.5	27.5	26.9	26.9	26.9	27.9	27.6
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168	168
Humidity	%	63.4 - 99.9	63.4 - 99.9	63.4 - 99.9	49.4 - 99.7	47.3 - 99.1	47.3 - 99.1	59.2 - 99.9	59.2 - 99.9	59.2 - 99.9	49.7 - 99.9	55.4 - 99.9
Humidity (average)	%	85.3	85.3	85.3	78.5	80.5	80.5	86.5	86.5	86.5	82.2	84.5
Ambient Air Tests												
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	4.15	4.36	4.64	4.77	3.39	3.33	3.58	3.38	3.74	4.73	3.17
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	7.80	8.20	8.72	8.97	6.37	6.26	6.73	6.35	7.03	8.89	5.96

Table B.28 Week 16: 30th January – 06th February 2018

Laboratory Sample I.D :	EV180343-1	EV180343-2	EV180343-3	EV180343-4	EV180343-5	EV180343-6	EV180343-7	EV180343-8	EV180343-9	EV180343-10	EV180343-11	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 3 Duplicate	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6	
Date Sampled :	30-Jan-18	30-Jan-19	30-Jan-20	30-Jan-21	30-Jan-22	30-Jan-23	30-Jan-24	30-Jan-25	30-Jan-26	30-Jan-27	30-Jan-28	
Ambient Sampling Condition												
Temperature	°C	22.5 - 33.2	22.5 - 33.2	22.5 - 33.2	22.7 - 34.2	22.8 - 36.4	22.8 - 36.4	22.7 - 32.0	22.7 - 32.0	22.7 - 32.0	22.7 - 34.8	22.7 - 36.1
Temperature (average)	°C	26.3	26.3	26.3	27.0	26.9	26.9	26.5	26.5	26.5	30.0	26.8
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168	168

Laboratory Sample I.D :		EV180343-1	EV180343-2	EV180343-3	EV180343-4	EV180343-5	EV180343-6	EV180343-7	EV180343-8	EV180343-9	EV180343-10	EV180343-11
Humidity	%	69.2 - 99.9	69.2 - 99.9	69.2 - 99.9	58.5 - 99.9	57.9 - 99.9	57.9 - 99.9	67.3 - 99.9	67.3 - 99.9	67.3 - 99.9	57.8 - 99.9	63.5 - 99.9
Humidity (average)	%	92.1	92.1	92.1	87.5	88.7	88.7	93.4	93.4	93.4	92.0	92.9
Ambient Air Tests												
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.50	3.70	3.55	6.89	1.88	1.85	1.69	1.83	1.61	3.08	2.30
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	6.58	6.96	6.67	12.9	3.53	3.48	3.18	3.44	3.03	5.79	4.32

Table B.29 Week 17: 06th February – 13th February 2018

Laboratory Sample I.D :		EV180461-1	EV180461-2	EV180461-3	EV180461-4	EV180461-5	EV180461-6	EV180461-7	EV180461-8	EV180461-9	EV180461-10	EV180461-11
Customer Sample I.D :		AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 3 Duplicate	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6
Date Sampled :		13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18	13-Feb-18
Ambient Sampling Condition												
Temperature	°C	23.0 - 31.3	23.0 - 31.3	23.0 - 31.3	23.5 - 34.5	23.2 - 34.9	23.2 - 37.9	23.5 - 30.8	23.5 - 30.8	23.5 - 30.8	23.2 - 34.8	23.1 - 34.1
Temperature (average)	°C	26.0	26.0	26.0	27.1	26.9	26.9	26.2	26.2	26.2	27.0	26.9
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168	168
Humidity	%	70.5 - 99.9	70.5 - 99.9	70.5 - 99.9	58.5 - 99.9	60.9 - 99.9	60.9 - 99.9	72.7 - 99.9	72.7 - 99.9	72.7 - 99.9	59.7 - 99.9	69.0 - 99.9
Humidity (average)	%	92.9	92.9	92.9	86.5	88.1	88.1	94.1	94.1	94.1	91.1	91.1
Ambient Air Tests												
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	2.77	2.79	3.00	3.46	1.47	1.41	2.02	2.02	2.10	2.34	1.66
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	5.21	5.24	5.64	6.50	2.76	2.65	3.80	3.80	3.95	4.40	3.12

Table B.30 Week 18: 13th February – 20th February 2018

Laboratory Sample I.D :		EV180515-1	EV180515-2	EV180515-3	EV180515-4	EV180515-5	EV180515-6	EV180515-7	EV180515-8	EV180515-9	EV180515-10	EV180515-11
Customer Sample I.D :		AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 3 Duplicate	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6
Date Sampled :		20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18	20-Feb-18
Ambient Sampling Condition												
Temperature	°C	22.60 - 33.60	22.60 - 33.60	22.60 - 33.60	23.30 - 36.20	22.50 - 39.20	22.50 - 39.20	23.10 - 32.10	23.10 - 32.10	23.10 - 32.10	22.90 - 37.40	22.90 - 37.00
Temperature (average)	°C	26.7	26.7	26.7	27.9	27.7	27.7	26.7	26.7	26.7	27.9	27.5
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168	168
Humidity	%	67.80 - 99.90	67.80 - 99.90	67.80 - 99.90	52.20 - 99.40	49.20 - 99.90	49.20 - 99.90	65.90 - 99.90	65.90 - 99.90	65.90 - 99.90	51.00 - 99.90	58.00 - 99.90
Humidity (average)	%	91.5	91.5	91.5	83.4	85.4	85.4	93.2	93.2	93.2	88.0	90.3
Ambient Air Tests												
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	2.27	2.20	2.22	3.96	1.42	1.33	1.76	1.64	1.69	2.26	3.05
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	4.27	4.14	4.17	7.44	2.67	2.50	3.31	3.08	3.18	4.25	5.73

Table B.31 Week 19: 20th February – 27th February 2018

Laboratory Sample I.D :		EV180620-1	EV180620-2	EV180620-3	EV180620-4	EV180620-5	EV180620-6	EV180620-7	EV180620-8	EV180620-9	EV180620-10	EV180620-11
Customer Sample I.D :		AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 3 Duplicate	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6
Date Sampled :		27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18	27-Feb-18
Ambient Sampling Condition												
Temperature	°C	23.0 - 37.2	23.0 - 37.2	23.0 - 37.2	23.4 - 37.0	23.1 - 39.5	23.1 - 39.5	23.1 - 38.8	23.1 - 38.8	23.1 - 38.8	23.5 - 37.9	23.2 - 38.5
Temperature (average)	°C	27.4	27.4	27.4	28.4	28.5	28.5	26.8	26.8	26.8	28.4	28.1
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168	168
Humidity	%	57.00 - 99.90	57.00 - 99.90	57.00 - 99.90	48.50 - 99.90	48.90 - 99.90	48.90 - 99.90	63.80 - 99.90	63.80 - 99.90	63.80 - 99.90	49.40 - 99.90	52.90 - 99.90
Humidity (average)	%	89.5	89.5	89.5	81.7	83.9	83.9	93.6	93.6	93.6	86.6	88.8
Ambient Air Tests												

Laboratory Sample I.D :	EV180620-1	EV180620-2	EV180620-3	EV180620-4	EV180620-5	EV180620-6	EV180620-7	EV180620-8	EV180620-9	EV180620-10	EV180620-11	
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	3.21	3.50	3.46	3.74	2.57	2.64	2.85	2.56	2.69	2.85	2.34
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	6.03	6.58	6.50	7.03	4.83	4.96	5.36	4.81	5.06	5.36	4.40

Table B.32 Week 20: 27th February – 06th March 2018

Laboratory Sample I.D :	EV180702-1	EV180702-2	EV180702-3	EV180702-4	EV180702-5	EV180702-6	EV180702-7	EV180702-8	EV180702-9	EV180702-10	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6	
Date Sampled :	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	06-Mar-18	
Ambient Sampling Condition											
Temperature	°C	23.5 - 37.4	23.5 - 37.4	23.5 - 37.4	23.5 - 37.4	23.3 - 41.7	23.5 - 35.6	23.5 - 35.6	23.5 - 35.6	23.5 - 38.6	23.4 - 37.8
Temperature (average)	°C	28.6	28.6	28.6	28.6	28.9	27.1	27.1	27.1	28.7	28.2
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168
Humidity	%	53.00 - 99.90	53.00 - 99.90	53.00 - 99.90	53.00 - 99.90	43.50 - 99.90	68.80 - 99.90	68.80 - 99.90	68.80 - 99.90	51.90 - 99.90	56.00 - 99.90
Humidity (average)	%	82.4	82.4	82.4	82.4	83.9	94.2	94.2	94.2	87.4	89.9
Ambient Air Tests											
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	2.74	2.00	2.50	4.27	1.86	1.03	1.15	1.40	3.37	1.73
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	5.15	3.76	4.70	8.03	3.50	1.94	2.16	2.63	6.34	3.25

Table B.33 Week 21: 06th March – 13th March 2018

Laboratory Sample I.D :	EV180790-1	EV180790-2	EV180790-3	EV180790-4	EV180790-5	EV180790-6	EV180790-7	EV180790-8	EV180790-9	EV180790-10	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6	
Date Sampled :	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	13-Mar-18	
Ambient Sampling Condition											
Temperature	°C	23.0 - 38.5	23.0 - 38.5	23.0 - 38.5	23.0 - 38.5	23.2 - 41.6	23.0 - 33.9	23.0 - 33.9	23.0 - 33.9	23.3 - 38.2	23.1 - 38.7
Temperature (average)	°C	28.3	28.3	28.3	28.3	28.2	26.7	26.7	26.7	28.1	27.8

Laboratory Sample I.D :		EV180790-1	EV180790-2	EV180790-3	EV180790-4	EV180790-5	EV180790-6	EV180790-7	EV180790-8	EV180790-9	EV180790-10
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168
Humidity	%	47.6 - 99.9	47.6 - 99.9	47.6 - 99.9	47.6 - 99.9	45.3 - 99.9	64.9 - 99.9	64.9 - 99.9	64.9 - 99.9	50.8 - 99.9	54.9 - 99.9
Humidity (average)	%	83.7	83.7	83.7	83.7	86.1	94.2	94.2	94.2	88.2	90.7
Ambient Air Tests											
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	2.61	2.04	2.57	4.23	3.43	2.46	2.48	2.72	4.61	0.46
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	4.91	3.84	4.83	7.95	6.45	4.62	4.66	5.11	8.67	0.86

Table B.34 Week 22: 13th March – 21st March 2018

Laboratory Sample I.D :		EV180847-1	EV180847-2	EV180847-3	EV180847-4	EV180847-5	EV180847-6	EV180847-7	EV180847-8	EV180847-9	EV180847-10
Customer Sample I.D :		AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6
Date Sampled :		21-Mar-18									
Ambient Sampling Condition											
Temperature	°C	22.9 - 42.3	22.9 - 42.3	22.9 - 42.3	22.9 - 42.3	22.6 - 39.3	22.4 - 34.5	22.4 - 34.5	22.4 - 34.5	23.0 - 38.3	22.7 - 39.0
Temperature (average)	°C	28.8	28.8	28.8	28.8	28.6	27.1	27.1	27.1	28.7	28.4
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168
Humidity	%	38.1 - 99.9	38.1 - 99.9	38.1 - 99.9	38.1 - 99.9	48.6 - 99.9	52.7 - 99.9	52.7 - 99.9	52.7 - 99.9	48.9 - 99.9	52.2 - 99.9
Humidity (average)	%	80.8	80.8	80.8	80.8	83.7	91.3	91.3	91.3	85.0	86.8
Ambient Air Tests											
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	2.05	2.15	1.95	2.55	3.05	2.17	2.03	2.14	3.68	0.31
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	3.85	4.04	3.67	4.79	5.73	4.08	3.82	4.02	6.92	0.59

Table B.35 Week 23: 21st March – 27th March 2018

Laboratory Sample I.D :		EV180915-1	EV180915-2	EV180915-3	EV180915-4	EV180915-5	EV180915-6	EV180915-7	EV180915-8	EV180915-9	EV180915-10
Customer Sample I.D :		AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6

Laboratory Sample I.D :	EV180915-1	EV180915-2	EV180915-3	EV180915-4	EV180915-5	EV180915-6	EV180915-7	EV180915-8	EV180915-9	EV180915-10	
Date Sampled :	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	27-Mar-18	
Ambient Sampling Condition											
Temperature	°C	22.6 - 38.5	22.6 - 38.5	22.6 - 38.5	22.6 - 38.5	22.2 - 40.4	22.4 - 36.2	22.4 - 36.2	22.4 - 36.2	22.5 - 38.8	22.0 - 39.0
Temperature (average)	°C	28.0	28.0	28.0	28.0	27.9	26.5	26.5	26.5	27.9	27.6
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168
Humidity	%	49.3 - 99.7	49.3 - 99.7	49.3 - 99.7	49.3 - 99.7	49.8 - 99.9	61.1 - 99.9	61.1 - 99.9	61.1 - 99.9	48.4 - 99.9	50.6 - 99.9
Humidity (average)	%	81.9	81.9	81.9	81.9	83.7	92.1	92.1	92.1	86.7	88.5
Ambient Air Tests											
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	0.46	2.38	2.72	5.00	3.23	2.76	2.80	3.25	3.89	0.53
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	0.86	4.47	5.11	9.40	6.07	5.19	5.26	6.11	7.31	1.00

Table B.36 Week 24: 27th March - 03rd April 2018

Laboratory Sample I.D :	EV180949-1	EV180949-2	EV180949-3	EV180949-4	EV180949-5	EV180949-6	EV180949-7	EV180949-8	EV180949-9	EV180949-10	
Customer Sample I.D :	AQ - 1 (1)	AQ - 1 (2)	AQ - 1 (3)	AQ - 2	AQ - 3 (1)	AQ - 4 (1)	AQ - 4 (2)	AQ - 4 (3)	AQ - 5	AQ - 6	
Date Sampled :	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	03-Apr-18	
Ambient Sampling Condition											
Temperature	°C	24.0 - 38.9	24.0 - 38.9	24.0 - 38.9	24.0 - 38.9	23.5 - 42.3	23.7 - 34.7	23.7 - 34.7	23.7 - 34.7	23.8 - 39.0	23.4 - 39.4
Temperature (average)	°C	30.1	30.1	30.1	30.1	30.2	27.8	27.8	27.8	29.8	29.3
Duration of Sampling	Hours	168	168	168	168	168	168	168	168	168	168
Humidity	%	43.1 - 98.9	43.1 - 98.9	43.1 - 98.9	43.1 - 98.9	38.4 - 90.9	57.6 - 99.9	57.6 - 99.9	57.6 - 99.9	44.5 - 99.9	47.7 - 99.9
Humidity (average)	%	75.4	75.4	75.4	75.4	76.9	89.0	89.0	89.0	80.3	84.5
Ambient Air Tests											
Nitrogen Dioxide, NO ₂ (7 Days)	ppb	1.74	3.20	3.17	4.82	3.09	3.37	2.92	3.49	4.34	1.74
Nitrogen Dioxide, NO ₂ (7 Days)	µg/m ³	3.27	6.02	5.96	9.06	5.81	6.34	5.49	6.56	8.16	3.27

Table B.37 Air Quality Monitoring (AQM1b): 24-Hour Average

Time	NO ₂ (ppb)	Adjusted NO ₂ (ppb)	O ₃ (ppb)	Adjusted O ₃ (ppb)	Wind Speed (m/s)	Wind Direction (°)	Pressure (hPa)	Air Temperature (°C)	Air Relative Humidity (%)
08-01-2018 0:00	15.4	9.0	19.5	19.1	0.65	290.5	1006.6	28.2	82.4
09-01-2018 0:00	10.1	5.5	13.5	12.6	1.02	300.6	1008	27	83.4
10-01-2018 0:00	13.7	1.1	33.2	32.9	2.17	293.5	1007.5	28.7	75.9
12-01-2018 0:00	13.4	6.6	16.4	16.2	1.46	294.3	1005.4	26.9	83.1
13-01-2018 0:00	11.5	1.4	25.6	24.8	2.22	284.1	1006.1	26.4	80.1
14-01-2018 0:00	13.3	5.7	18.8	17.9	1.97	278.2	1006.5	25.5	83.4
15-01-2018 0:00	14.2	5.1	21.1	20.1	1.85	278.3	1005.3	25.6	83.6
16-01-2018 0:00	14.8	6.8	20.1	19.5	1.8	278.3	1005.1	26.5	75.9
17-01-2018 0:00	17.2	10.2	15.2	14.7	1.18	279.8	1004.7	26.1	84.4
18-01-2018 0:00	12.4	6.6	13.3	12.3	1.23	276.6	1005.6	24.8	90.1
19-01-2018 0:00	13.2	6.5	14.7	13.9	2.01	266.5	1005.2	26.1	80.3
20-01-2018 0:00	12.4	6.4	14.1	13.1	2.1	269.6	1004.1	26.8	79.8
21-01-2018 0:00	12.0	5.7	14.5	13.6	1.75	269.9	1003.4	27.4	77.8
22-01-2018 0:00	11.6	7.5	9.4	8.5	1.78	270.7	1003.4	25.7	83.4
23-01-2018 0:00	12.0	4.8	16.6	15.8	1.24	290.7	1003.6	26.6	84.5
24-01-2018 0:00	13.0	5.8	17.2	16.2	1.61	285.7	1003.2	27.1	82.4
25-01-2018 0:00	12.3	6.2	12.5	11.4	2.23	265.8	1003	26.4	79
26-01-2018 0:00	13.8	7.9	13.4	12.4	1.86	267.8	1003.5	26.2	82.3
27-01-2018 0:00	13.1	5.1	17.2	16.3	1.94	279.4	1003.5	26.4	81.8
28-01-2018 0:00	12.2	5.9	13.4	12.2	2.11	271.9	1004.5	25.6	83.8
29-01-2018 0:00	13.3	7.7	11.3	10.4	2.21	266.7	1005.5	26.2	83.6
30-01-2018 0:00	14.2	7.8	12.1	11.5	1.6	275.1	1005.6	25.9	87.3
31-01-2018 0:00	11.9	5.0	14.6	13.9	1.57	287.8	1005.9	26.6	85.7
01-02-2018 0:00	14.9	8.7	12.9	12.3	1.29	288.4	1006.5	26.3	87
02-02-2018 0:00	11.7	2.5	20.6	19.7	1.55	290.4	1006.5	27.1	85.2
03-02-2018 0:00	10.9	1.1	21.7	20.8	1.5	285	1007.5	26.3	88.7
04-02-2018 0:00	10.1	2.8	16.5	15.6	0.97	286.6	1007.9	25.9	90
05-02-2018 0:00	14.2	3.5	21.5	20.7	1.27	275.6	1009.3	24.7	90.7
06/02/2018 07:00	17.4	7.2	19.8	19	0.99	277.3	1008.8	24.9	90
07/02/2018 07:00	18.8	5.8	24.5	23.9	1.27	287.8	1007.6	25.7	89.4
08/02/2018 07:00	16.2	7.5	19.2	17.7	1.29	288.7	1007.4	25.6	90.5
09/02/2018 07:00	23.7	14.8	17.8	17.3	1.59	287.2	1007.2	26.2	88.5
10/02/2018 07:00	15.3	6.4	19	18.5	1.55	291.1	1007.3	26.7	86.4
11/02/2018 07:00	12.0	1.6	25.5	24.9	1.58	293.3	1008.3	25.7	89.2
12/02/2018 07:00	19.1	2.8	35.1	34.8	1.61	288.9	1009.8	26.2	86.6
13/02/2018 07:00	15.6	5.1	22.2	21.7	1.34	284.2	1009.9	26.2	87.6

Time	NO ₂ (ppb)	Adjusted NO ₂ (ppb)	O ₃ (ppb)	Adjusted O ₃ (ppb)	Wind Speed (m/s)	Wind Direction (°)	Pressure (hPa)	Air Temperature (°C)	Air Relative Humidity (%)
14/02/2018 07:00	16.8	10.0	14.4	14	1.31	288.6	1009.3	26.2	88.2
15/02/2018 07:00	14.1	8.6	12.5	11.5	1.48	278.3	1009.6	24.6	91.8
16/02/2018 07:00	14.0	5.7	17.6	17.2	0.99	280.4	1007	26.3	87.7
17/02/2018 07:00	11.7	1.6	21.2	20.3	1.39	291	1006.5	26.9	85
18/02/2018 07:00	12.1	2.1	21.9	21	1.15	279.7	1006.6	27	85.5
19/02/2018 07:00	15.1	7.9	14.8	14.1	0.5	286.1	1006.1	26.5	87.6
20/02/2018 07:00	16.0	6.0	19.5	18.8	0.73	286.9	1005.6	26.4	88.1
21/02/2018 07:00	18.1	5.5	24.7	24.5	0.38	319	1004.6	26.7	86.7
22/02/2018 07:00	13.7	6.2	15.3	14.4	0.32	306.1	1005.2	26.5	87.3
23/02/2018 07:00	13.5	6.9	14.7	14	0.59	288.9	1006.8	26.1	88.3
24/02/2018 07:00	17.7	7.8	20.6	19.9	0.47	285.7	1007.9	26.9	85
25/02/2018 07:00	14.1	2.1	24.6	23.8	0.58	290.9	1006.3	27.1	83.7
26/02/2018 07:00	14.3	4.9	19.5	18.8	0.78	283.7	1006.3	26.5	86.7
27/02/2018 07:00	16.5	8.0	16.9	16.1	0.53	270.5	1005.9	26.7	86.2
28/02/2018 07:00	10.3	4.1	14.1	13	0.56	277.3	1005.9	26.1	89.4
01/03/2018 07:00	19.2	7.0	23.6	23.4	0.57	318.3	1006	26.3	87.4
02/03/2018 07:00	30.3	10.0	34.8	35.2	0.44	6.3	1004.8	27.7	84
03/03/2018 07:00	14.9	5.9	19	18.1	0.49	24.5	1005.2	27.3	85.6
04/03/2018 07:00	19.3	6.7	24.1	24	0.31	341.1	1005.3	28.1	84.3
05/03/2018 07:00	16.8	6.5	19.4	19	0.41	274.4	1006.1	26.7	88.3
06/03/2018 07:00	15.0	9.3	11.6	10.9	0.44	289.9	1006	26	89.1
07/03/2018 07:00	19.1	6.0	23.7	23.4	0.52	283.2	1005.7	26.4	86.2
08/03/2018 07:00	18.1	5.9	21.8	21.3	0.47	259.6	1005.8	26.2	87
09/03/2018 07:00	19.7	10.9	16.8	14.8	0.28	297.8	1005.3	27	87
10/03/2018 07:00	13.5	5.5	15.7	14.8	1.21	284.1	1006	26.9	86.8
11/03/2018 07:00	11.9	5.0	15.2	14.1	1.46	287.1	1006.3	26.8	88.3
12/03/2018 07:00	9.7	5.5	9.2	8.7	0.83	283.8	1006.3	25.7	91.6
13/03/2018 07:00	9.7	5.8	8.9	8.3	0.65	279.7	1007.5	26.1	90
14/03/2018 07:00	14.2	4.1	19.7	18.9	0.58	283	1007.1	26.7	86
15/03/2018 07:00	21.8	9.1	22.2	22.1	0.45	21.1	1006.8	27.9	81.7
16/03/2018 07:00	16.7	6.9	17.8	17.2	0.49	45.3	1006.1	27.6	83.5
17/03/2018 07:00	12.9	5.5	13.8	13.3	0.16	89.1	1007	25.3	89.6
18/03/2018 07:00	18.5	7.7	19.7	19.1	0.34	330.7	1007.1	27	83
19/03/2018 07:00	17.7	4.1	23.9	23.2	0.56	291.9	1006.8	26.6	85.3
20/03/2018 07:00	24.0	11.0	21.8	21.8	0.36	277.1	1004.7	27.3	82.3
21/03/2018 07:00	13.5	7.7	10.8	10.1	1.6	280.4	1004	26	85.3
22/03/2018 07:00	12.8	7.2	9.7	9.2	0.53	283.2	1005	25.2	87.1
23/03/2018 07:00	18.2	6.4	21.1	20.4	0.26	296.3	1005.5	26.6	85.3

Time	NO ₂ (ppb)	Adjusted NO ₂ (ppb)	O ₃ (ppb)	Adjusted O ₃ (ppb)	Wind Speed (m/s)	Wind Direction (°)	Pressure (hPa)	Air Temperature (°C)	Air Relative Humidity (%)
24/03/2018 07:00	13.7	8.5	9.9	9	0.5	247.3	1007.5	25.9	88.3
25/03/2018 07:00	18.8	6.8	21.4	20.8	0.29	48.5	1007.9	26.2	86
26/03/2018 07:00	22.2	10.5	20.1	20	0.38	291.2	1007.2	26.4	85.8
27/03/2018 07:00	20.8	9.9	18.1	18.1	0.2	317.2	1007.2	26.3	85.4
28/03/2018 07:00	28.4	11.9	26.7	26.9	0.25	1.7	1006.5	28	81.7
29/03/2018 07:00	18.0	7.1	19.1	18.8	0.32	339	1005.4	28.2	78.7
30/03/2018 07:00	23.5	9.8	22.5	22.6	0.47	305.3	1005.1	27.5	80.1
31/03/2018 07:00	17.6	6.4	18.9	18.8	0.61	289.2	1005.1	27.6	83.4
01/04/2018 07:00	17.3	8.7	14.5	14.1	0.9	302.2	1005	28.1	81.9
02/04/2018 07:00	22.2	12.8	15.7	15.4	0.82	309.7	1006.1	28.6	80.2

Table B.38 Air Quality Monitoring (AQM4b): 24-Hour Average

Time	NO ₂ (ppb)	Adjusted NO ₂ (ppb)	O ₃ (ppb)	Wind Speed (m/s)	Wind Direction (°)	Pressure (hPa)	Air Temperature (°C)	Air Relative Humidity (%)
08-01-2018 0:00	11.8	10.8	1.8	0.41	283.7	1007.5	27.2	87.7
09-01-2018 0:00	8	4.3	14.7	1.11	298.1	1008.3	26.9	83.3
10-01-2018 0:00	10.4	2.4	26.4	2.05	293	1007.9	27.2	80.5
12-01-2018 0:00	14.4	7	18.6	2.44	263.7	1006.9	27.4	71.5
13-01-2018 0:00	13.3	6.4	19.2	1.64	292	1006.1	27.4	79.8
14-01-2018 0:00	10.3	0.7	25.3	2.41	280.8	1006.4	26.7	78.3
15-01-2018 0:00	12.7	5.1	18.7	2.15	273.4	1006.8	25.7	82.6
16-01-2018 0:00	13.4	3.5	21.3	2.12	271.9	1005.7	25.8	82.9
17-01-2018 0:00	14.4	6.3	18.6	2.08	272	1005.4	26.9	73.2
18-01-2018 0:00	17.1	10	15.1	1.33	273.6	1005.1	26.6	81.7
19-01-2018 0:00	12.3	6	12.9	1.41	268.1	1005.9	25	89.9
20-01-2018 0:00	12.5	4.5	16.2	2.39	261.4	1005.5	26.5	78.7
21-01-2018 0:00	11.6	4.3	16.2	2.59	264	1004.5	27.1	77.7
22-01-2018 0:00	11.7	3.4	17.4	2.17	263.3	1003.7	27.9	74.9
23-01-2018 0:00	11.7	6.2	10.9	2.12	263.1	1003.7	26.2	81.1
24-01-2018 0:00	12.8	4.4	18.6	1.32	291.7	1003.9	26.8	83.9
25-01-2018 0:00	12.3	3.5	19.6	1.93	289.3	1003.5	27.3	81.5
26-01-2018 0:00	11.8	3.9	15.5	2.62	259.5	1003.3	27	76.7
27-01-2018 0:00	13.4	5.7	14.9	2.28	259.9	1003.7	26.8	79.1
28-01-2018 0:00	13.3	3.7	19.3	2.19	272.8	1003.8	26.9	79.4
29-01-2018 0:00	11.4	3.1	15.9	2.56	265.9	1004.7	26.1	81.8
30-01-2018 0:00	12.7	5.4	14.2	2.73	258.7	1005.8	26.7	81.7
31-01-2018 0:00	14.3	6	15.5	1.84	269.2	1006	26.4	85.4
01-02-2018 0:00	12.6	4.4	17.1	1.75	288.1	1006.2	27	83.7

Time	NO ₂ (ppb)	Adjusted NO ₂ (ppb)	O ₃ (ppb)	Wind Speed (m/s)	Wind Direction (°)	Pressure (hPa)	Air Temperature (°C)	Air Relative Humidity (%)
02-02-2018 0:00	15.2	8.2	14.3	1.4	282.6	1006.9	26.8	85
03-02-2018 0:00	12.6	1.6	25	1.92	297.6	1006.8	27.3	84.2
04-02-2018 0:00	11.3	0.4	24.5	1.62	284.2	1007.8	26.5	87.9
05-02-2018 0:00	10	1.6	20.5	1.21	278.5	1008.2	26	89.9
06/02/2018 07:00	14.4	2.2	26.1	1.45	264.7	1009.6	24.9	90.9
07/02/2018 07:00	17.5	4.6	25.3	1.19	270.6	1009.1	25.1	89.5
08/02/2018 07:00	17.5	2.5	30	1.45	286.6	1008	26	88.2
09/02/2018 07:00	16.1	5	23.8	1.41	294.1	1007.7	25.7	90.4
10/02/2018 07:00	21.4	11.5	20.1	1.66	284.2	1007.5	26.5	87.3
11/02/2018 07:00	15.5	5.4	22	1.62	293.6	1007.7	27	85.4
12/02/2018 07:00	12.9	0.6	28.4	1.69	290.8	1008.6	26.2	87.4
13/02/2018 07:00	20.5	1.9	39.4	1.74	287.5	1010.2	26.7	84
14/02/2018 07:00	16.1	3.8	25.3	1.44	280.4	1010.4	26.5	85.9
15/02/2018 07:00	17.8	9.5	16.9	1.44	284.4	1009.8	26.6	86.9
16/02/2018 07:00	13.7	6.2	15.2	1.54	273.7	1010.1	24.9	91.6
17/02/2018 07:00	15.8	4.5	22	1.14	277.8	1007.5	26.7	86.3
18/02/2018 07:00	11.9	0.9	22.7	1.53	299.9	1007	27.1	84.1
19/02/2018 07:00	13.2	1	25.2	1.26	286	1007.1	27.1	84.5
20/02/2018 07:00	14.8	5.5	18	0.77	283.9	1006.6	26.7	87.5
21/02/2018 07:00	14.4	4.2	19.6	0.72	285.2	1006	26.5	88.3
22/02/2018 07:00	18.2	3.3	28.1	0.47	298.1	1005.1	26.7	87.4
23/02/2018 07:00	12	2.5	18.6	0.49	304.3	1005.7	26.5	87.5
24/02/2018 07:00	13.6	5.5	16.7	0.7	281.8	1007.3	26.4	87.7
25/02/2018 07:00	17.6	4.8	24.8	0.68	291.4	1008.4	26.8	85.6
26/02/2018 07:00	14.2	0.7	27.3	0.62	289	1006.8	26.9	84.5
27/02/2018 07:00	14.7	3.6	21.5	0.89	274.3	1006.8	26.6	86.5
28/02/2018 07:00	15.9	5.3	19.9	0.76	271.3	1006.4	26.7	86
01/03/2018 07:00	10.8	2.4	17.8	0.53	265.5	1006.4	26.2	88.8
02/03/2018 07:00	20.2	6.6	26.4	0.71	300.1	1006.5	26.3	88.4
03/03/2018 07:00	31	7.6	42.8	0.49	356.5	1005.3	27.6	85.4
04/03/2018 07:00	14	2.3	24	0.34	11.1	1005.7	27.2	87.1
05/03/2018 07:00	18.2	4.8	27.3	0.44	332.6	1005.8	28.1	85.4
06/03/2018 07:00	17.2	5.3	23.9	0.61	272.7	1006.6	26.9	87.4
07/03/2018 07:00	15.3	7.2	16.1	0.64	296.8	1006.5	26.2	89.1
08/03/2018 07:00	19.2	4.7	28.3	0.73	267.2	1006.2	26.4	87.1
09/03/2018 07:00	17.1	3.1	27	0.65	245.3	1006.3	26.3	87
10/03/2018 07:00	18.9	7.6	22.4	0.41	290.1	1005.8	27.1	87.4
11/03/2018 07:00	13.3	3.9	19.2	1.15	288.9	1006.5	27	86.7

Time	NO ₂ (ppb)	Adjusted NO ₂ (ppb)	O ₃ (ppb)	Wind Speed (m/s)	Wind Direction (°)	Pressure (hPa)	Air Temperature (°C)	Air Relative Humidity (%)
12/03/2018 07:00	11.6	2.9	18.1	1.37	290.2	1006.8	27.1	87.8
13/03/2018 07:00	9.7	4.2	11.8	0.9	272.4	1006.8	26	91.2
14/03/2018 07:00	9.7	4.6	11.5	0.74	280.1	1008	26.2	89.8
15/03/2018 07:00	13.9	2.8	23.7	0.65	296	1007.6	26.6	86.4
16/03/2018 07:00	18.7	3.9	29.8	0.42	8.2	1007.3	27.8	83.5
17/03/2018 07:00	15.1	3	25.1	0.34	67.9	1006.7	27.4	85.9
18/03/2018 07:00	12.2	2.7	19	0.19	144.9	1007.6	25.2	90.8
19/03/2018 07:00	16.7	3.2	26.6	0.28	305.7	1007.7	26.9	84.7
20/03/2018 07:00	15.2	1.3	28	0.67	274.2	1007.4	26.5	86.6
21/03/2018 07:00	22.7	7.5	27.5	0.56	261.8	1005.3	27.3	83.4
22/03/2018 07:00	12.7	3.5	16.2	1.63	274.8	1004.6	26.4	84.3
23/03/2018 07:00	11.8	3.9	14.8	0.58	270	1005.5	25.2	87.5
24/03/2018 07:00	16.4	1.6	27.3	0.21	285.5	1006.1	26.5	86.5
25/03/2018 07:00	13	4.3	14.9	0.8	233.4	1008	26	88.4
26/03/2018 07:00	17	3	26.5	0.18	113.1	1008.5	26.1	87.7
27/03/2018 07:00	21.5	8.5	22.8	0.45	278.5	1007.8	26.5	86.8
28/03/2018 07:00	20.4	8.4	20.7	0.28	267.6	1007.8	26.4	86
29/03/2018 07:00	27.1	6.1	36.3	0.23	331	1007	27.8	83.8
30/03/2018 07:00	17.5	4.6	23.8	0.29	328.8	1006	28.1	80.5
31/03/2018 07:00	23.3	7.3	27.6	0.55	296.2	1005.7	27.4	81.5
01/04/2018 07:00	17.1	5.2	21.2	0.69	289.5	1005.7	27.4	84.5
02/04/2018 07:00	17.5	5.7	20.2	0.94	301.7	1005.6	28.2	82.8

B.5

NOISE AND VIBRATION

Noise was sampled and monitored using a Sound Level Meter (SLM) equipped with features to measure the LAeq (A-weighted equivalent energy level). The analysis were conducted based on the:

- *Standard Nasional Indonesia, SNI 7231:2009, Measurement method for noise intensity in workplace;*
- *ISO 1996:1982, Acoustics, Description and measurement of environmental noise part-1 basic quantity and procedures, vol. 1 page 144-120;*
- *ISO 1996:1990, Acoustics, Determination of occupational noise exposure and estimation of noise induced hearing impairment, vol. 1 page 486-504; and*
- *ISO Standard Handbook ISBN 92-67-10221-4, General aspects of acoustics, methods of noise measurement in general, noise with respect to human being, second edition.*

B.5.1

List of Reports

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Initial Environmental Examination Report, 2016 (IEE. 2016);*
- *Environmental Monitoring (RKL and RPL) Semester 2. 2016 completed for SKG Cilamaya (SKG Cilamaya. 2016);*
- *Regulatory Environmental Monitoring (RKL and RPL) Semester 1. 2017 completed for SKG Cilamaya (SKG Cilamaya. 2017);*
- *Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM. 2018b); and*
- *PLTGU Jawa 1 Independent Power Project - Integrated Environmental and Social Impact Assessment (ESIA) - Additional Baseline Surveys for ESIA (ERM, 2018c).*

Table B.39 Noise Monitoring (2016)

Location	Parameter	dB(A)	Applicable Standards	
			I	II
N1: In the PT Pertamina adjacent to school boundary	Ls1 (06.00 - 09.00)	52.6		
	Ls2 (09.00 - 14.00)	55.0		
	Ls3 (14.00 - 17.00)	54.9	55	Leq, 1-hr in dBA
	Ls4 (17.00 - 22.00)	56.2		• Day : 55 dBA
	Lm5 (22.00 -00.00)	51.2		• Night: 45 dBA

Location	Parameter	dB(A)	Applicable Standards	
			I	II
N2: Cilamaya IV State Primary School	Lm6 (00.00 - 03.00)	44.8	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Lm7 (03.00 - 06.00)	48.6		
	Ls (Leq Daytime)	55.0		
	Lm (Leq Night-time)	48.5		
	Lsm (Leq Day Night)	54.6		
	Ls1 (06.00 - 09.00)	57.4		
	Ls2 (09.00 - 14.00)	65.7		
	Ls3 (14.00 - 17.00)	63.2		
	Ls4 (17.00 - 22.00)	59.0		
	Lm5 (22.00 - 00.00)	55.1		
N3: Bunut Ageung Hamlet. Cilamaya Village. Cilamaya Wetan District	Lm6 (00.00 - 03.00)	50.8	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Lm7 (03.00 - 06.00)	46.5		
	Ls (Leq Daytime)	62.0		
	Lm (Leq Night-time)	51.5		
	Lsm (Leq Day Night)	60.9		
	Ls1 (06.00 - 09.00)	52.5		
	Ls2 (09.00 - 14.00)	54.9		
	Ls3 (14.00 - 17.00)	60.0		
	Ls4 (17.00 - 22.00)	61.2		
	Lm5 (22.00 - 00.00)	46.8		
N4: In the Pertamina (adjacent to wall (irrigation area)	Lm6 (00.00 - 03.00)	44.4	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Lm7 (03.00 - 06.00)	45.3		
	Ls (Leq Daytime)	59.3		
	Lm (Leq Night-time)	45.4		
	Lsm (Leq Day Night)	57.8		
	Ls1 (06.00 - 09.00)	44.9		
	Ls2 (09.00 - 14.00)	59.9		
	Ls3 (14.00 - 17.00)	53.6		
	Ls4 (17.00 - 22.00)	60.9		
	Lm5 (22.00 - 00.00)	53.9		
N5: Paddy field in Cilamaya Village.	Lm6 (00.00 - 03.00)	46.0	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Lm7 (03.00 - 06.00)	52.9		
	Ls (Leq Daytime)	57.8		
	Lm (Leq Night-time)	51.7		
	Lsm (Leq Day Night)	57.5		
N5: Paddy field in Cilamaya Village.	Ls1 (06.00 - 09.00)	53.9	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Ls2 (09.00 - 14.00)	56.1		
	Ls3 (14.00 - 17.00)	55.1		
	Ls4 (17.00 - 22.00)	53.8		

Location	Parameter	dB(A)	Applicable Standards	
			I	II
Cilamaya Wetan District	Lm5 (22.00 – 00.00)	51.9		
	Lm6 (00.00 – 03.00)	51.2		
	Lm7 (03.00 – 06.00)	51.5		
	Ls (Leq Daytime)	54.7		
	Lm (Leq Night-time)	51.5		
	Lsm (Leq Day Night)	55.4		

Source: IEE. 2016

Note:

- I: Decree of Environmental Ministry No. 48/1996 on Noise Level Quality Standard
- II: IFC - Environmental, Health and Safety (EHS) Guidelines - General EHS Guidelines: Environmental Noise Management, Section 1.7 Noise (IFC 1.7 Noise), dated 30 April 2007.

Table B.40 Noise Monitoring Results at Compressor in CCGT Power Plant (November 2015-July 2017)

Location N6 (distance from the compressor in meter)	September 2016	December 2016	March 2017	June 2017	Applicable Standards	
	dB(A)				I	II
0	104	104	105	100	-	-
100	86	87	82	80	-	-
200	74	75	72	68	-	-
300	66	66	67	59	-	-
400	52	52	67	57	-	-

Source: SGK Cilamaya. 2016; SGK Cilamaya. 2017

Note:

- Local Indonesian legislation nor IFC does not establish standards for noise standards of operational compressor.

Table B.41 Noise Monitoring (2017)

Location	Parameter	dB(A)	Applicable Standards	
			I	II
N7 Pertamina Cilamaya	L90	46.9		
	Lm (Leq Night-time)	55.7	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Ls (Leq Daytime)	56.5		
	Lsm (Leq Day Night)	58.9		
N8 Masjid Al- Hidayah	L90	38.3		
	Lm (Leq Night-time)	73.0	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Ls (Leq Daytime)	70.8		
	Lsm (Leq Day Night)	74.6		
N9 Pertamina Residential Area	L90	44.8		
	Lm (Leq Night-time)	56.0	55	Leq, 1-hr in dBA • Day : 55 dBA • Night: 45 dBA
	Ls (Leq Daytime)	57.5		
	Lsm (Leq Day Night)	56.9		
N10	L90	36.1		
	Lm (Leq Night-time)	51.0		

Location	Parameter	dB(A)	Applicable Standards	
			I	II
GCC Residential Area	Ls (Leq Daytime)	50.4		• Night: 45 dBA
	Lsm (Leq Day Night)	53.1		
N11 MTsN 2 Bekasi	L90	41.9		Leq, 1-hr in dBA
	Lm (Leq Night-time)	56.3	55	• Day : 55 dBA
	Ls (Leq Daytime)	41.9		• Night: 45 dBA
	Lsm (Leq Day Night)	56.6		
N12 Access road to GITET Development area	L90	-		Leq, 1-hr in dBA
	Lm (Leq Night-time)	-	55	• Day : 55 dBA
	Ls (Leq Daytime)	-		• Night: 45 dBA
	Lsm (Leq Day Night)	53.2		

Source: ERM, 2018b

Note:

- I: Decree of Environmental Ministry No. 48/1996 on Noise Level Quality Standard
- II: IFC - Environmental, Health and Safety (EHS) Guidelines - General EHS Guidelines: Environmental Noise Management, Section 1.7 Noise (IFC 1.7 Noise), dated 30 April 2007.

Table B.42 *Vibration Monitoring (2017)*

Sampling Code	V1	V2	Applicable Standards	
			I	II
Vibration (mm/s)				
4 Hz	0.008	0.008	<2	Structural Damage
5 Hz	0.006	0.006	<7.5	Triger Action
6.3 Hz	0.005	0.005	<7	Level: 3mm/s
8 Hz	0.004	0.004	<6	
10 Hz	0.004	0.003	<5.2	Human
12.5 Hz	0.003	0.003	<4.8	Disturbance
16 Hz	0.002	0.002	<4	Trigger Action
20 Hz	0.002	0.002	<3.8	level:
25 Hz	0.002	0.002	<3.2	• Daytime: 3mm/s
31.5 Hz	0.001	0.002	<3	• Night-time: 1 mm/s
40 Hz	0.001	0.003	<2	
50 Hz	0.001	0.001	<1	

Source: ERM, 2018b

Note:

- Vibration measurement was conducted based on the method as per *Minister of Environment Decree KEP-49/MENLH/II/1996, regarding Standard Vibration Level, Annex 5.*
- I: Decree of the Minister of Environment No. 49 of 1996 on Vibration Standards.
- II: DIN 4150-3 and DECC Guidelines, 2006.

Table B.43 *Noise Monitoring (2018)*

Location	Parameter	dB(A)	Applicable Standards	
			I	II
N15	L90	41.1		Leq, 1-hr in dBA
	Ls (Leq Daytime)	79.6	55	• Day : 55 dBA
	Lm (Leq Night-time)	52.7		• Night: 45 dBA
N16	L90	39.3	55	Leq, 1-hr in dBA

Location	Parameter	dB(A)	Applicable Standards	
			I	II
N17	Ls (Leq Daytime)	52.6	55	• Day : 55 dBA
	Lm (Leq Night-time)	45.1		• Night: 45 dBA
	L90	54.2		Leq, 1-hr in dBA
N18	Ls (Leq Daytime)	60.2	55	• Day : 55 dBA
	Lm (Leq Night-time)	57.9		• Night: 45 dBA
	L90	43.2		Leq, 1-hr in dBA
N19	Ls (Leq Daytime)	62.6	55	• Day : 55 dBA
	Lm (Leq Night-time)	55.1		• Night: 45 dBA
	L90	43.3		Leq, 1-hr in dBA
N20	Ls (Leq Daytime)	61.8	55	• Day : 55 dBA
	Lm (Leq Night-time)	65.2		• Night: 45 dBA
	L90	45.7		Leq, 1-hr in dBA
N21	Ls (Leq Daytime)	61.6	55	• Day : 55 dBA
	Lm (Leq Night-time)	54.4		• Night: 45 dBA
	L90	46.1		Leq, 1-hr in dBA
N22	Ls (Leq Daytime)	54.4	55	Leq, 1-hr in dBA
	Lm (Leq Night-time)	57.6		• Day : 55 dBA
	L90	45.2		• Night: 45 dBA
N23	Ls (Leq Daytime)	54.4	55	Leq, 1-hr in dBA
	Lm (Leq Night-time)	57.6		• Day : 55 dBA
	L90	45.2		• Night: 45 dBA
N24	Ls (Leq Daytime)	62.1	55	Leq, 1-hr in dBA
	Lm (Leq Night-time)	65.6		• Day : 55 dBA
	L90	46.4		• Night: 45 dBA
N25	Ls (Leq Daytime)	69.2	55	Leq, 1-hr in dBA
	Lm (Leq Night-time)	66.5		• Day : 55 dBA
	L90	50.7		• Night: 45 dBA
N26	Ls (Leq Daytime)	71.7	55	Leq, 1-hr in dBA
	Lm (Leq Night-time)	74.0		• Day : 55 dBA
	L90	45.3		• Night: 45 dBA

Source: ERM, 2018c

- I: Decree of Environmental Ministry No. 48/1996 on Noise Level Quality Standard
- II: IFC - Environmental, Health and Safety (EHS) Guidelines - General EHS Guidelines: Environmental Noise Management, Section 1.7 Noise (IFC 1.7 Noise), dated 30 April 2007.

B.6 ELECTROMAGNETIC FIELDS (EMF)

B.6.1 List of Reports

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM, 2018b); and
- PLTGU Jawa 1 Independent Power Project - Integrated Environmental and Social Impact Assessment (ESIA) - Additional Baseline Surveys for ESIA (ERM, 2018c).

Table B.44 Electromagnetic Field Monitoring (2017)

Unit	EMF1	EMF2	Applicable Standards	
			I	I
T	4.0 x 10 ⁻⁷	4.0 x 10 ⁻⁷	0.0001	0.0001

Source: ERM, 2018b

Note:

- The EMF survey was conducted using an EMF Meter based on the NIOSH Manual for Measuring Occupational Electric and Magnetic Field Exposures, 1998.
- I: Standard Nasional Indonesia (SNI) 04-6950-2003 regarding the High Voltage Transmission (SUTT) and Extra High Voltage Transmission (SUTET) - Electromagnetic Fields Standards
- II: International Commission on Non-Ionising Radiation Protection (ICNIRP)

Table B.45 Electromagnetic Field Monitoring (2018)

Unit	EMF3	EMF4	Applicable Standards	
			I	I
T	0.0001	0.0001	0.0001	0.0001

Source: ERM, 2018b

Note:

- The EMF survey was conducted using an EMF Meter based on the NIOSH Manual for Measuring Occupational Electric and Magnetic Field Exposures, 1998.
- I: Standard Nasional Indonesia (SNI) 04-6950-2003 regarding the High Voltage Transmission (SUTT) and Extra High Voltage Transmission (SUTET) - Electromagnetic Fields Standards
- II: International Commission on Non-Ionising Radiation Protection (ICNIRP)

Table B.46 Electromagnetic Field Monitoring along the Transmission Line (2018)

Unit	EMF5	EMF6	EMF7	EMF8	EMF9	EMF10	EMF11	EMF12	EMF13	EMF14
T	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Source: ERM, 2018c

Note:

- The EMF survey was conducted using an EMF Meter based on the NIOSH Manual for Measuring Occupational Electric and Magnetic Field Exposures, 1998.
- Refer Table B.44 and Table B.45 for the National and International Limits.

B.7 MARINE WATER QUALITY

B.7.1 List of Reports

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Bathymetric Survey and Seawater Data Collection Report, 2016 (Pöyry, 2016b);*
- *Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM, 2018b); and*
- *PLTGU Jawa 1 Independent Power Project - Integrated Environmental and Social Impact Assessment (ESIA) - Additional Baseline Surveys for ESIA (ERM, 2018c).*

Table B.47 Marine Water Monitoring – Upper of Seawater Level (2016)

Parameter	Unit	MW1	MW2	MW3	MW4	MW5	MW6	Applicable Standards	
								I	II
Brightness	M	2.20	2	2.20	5	5	4.7	-	-
Temperature	°C	30.5	30.5	30.2	30.2	30.2	29.9	Natural	-
Turbidity	NTU	2.83	2.94	1.81	0.89	1.14	1.92	<5	-
Odour	-	No Odour	Natural	-					
Color	Pt Co	5	12.5	10	5	5	5	-	-
Total Dissolved Solids	mg/L	31,080	30,730	31,080	31,150	31,150	31,150	-	-
Total Suspended Solids	mg/L	<1	3	<1	<1	<1	<1	Natural	-
Total Phosphorus	mg/L	0.60	0.058	0.010	0.035	0.015	0.043	-	-
BOD	mg/L	86	60	96	85	140	73	20	-
Mercury (Hg)	mg/L	0.09	0.18	0.09	< 0.09	< 0.09	0.09	0.001	-
Arsenic (As)	mg/L	< 0.0001	0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	0.012	-
Barium	mg/L	0.009	0.015	< 0.001	< 0.001	0.019	< 0.001	-	-
Chromium (Cr)	mg/L	0.009	< 0.001	< 0.001	< 0.001	0.022	< 0.001	Chromium Hexavalent: 0.05	-
Boron	mg/L	1.51	0.751	3.05	2.51	1.79	0.624	-	-
Fluoride	mg/L	1.52	1.47	1.36	1.70	1.05	1.39	-	-
Calcium	mg/L	321	400	400	480	400	480	-	-
Magnesium	mg/L	1736	1904	701	1379	1475	1284	-	-
Sodium	mg/L	6542	6417	6458	6542	6417	6583	-	-
Potassium	mg/L	382	364	375	386	375	368	-	-
Selenium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	-
Lead (Pb)	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.008	-
Aluminium	mg/L	0.196	0.351	0.222	0.343	0.291	0.102	-	-
Strontium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-
Cyanide	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	0.008	< 0.001	-	-
Phenol	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	-	-
Cadmium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.005	-
Cobalt	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-

Parameter	Unit	MW1	MW2	MW3	MW4	MW5	MW6	Applicable Standards	
								I	II
Electrical Conductivity	µS/cm	44400	43900	44400	44500	44500	44500	-	-
pH	-	7.31	7.42	7.47	6.82	7.54	7.59	7-8.5	-
Dissolved Oxygen (DO)	mg/L	5.3	5.4	5.0	5.3	5.1	5.2	>5	-
Nitrate (NO ₃ -N)	mg/L	0.096	0.092	0.100	0.136	0.068	0.078	0.008	-
Nitrite (NO ₂ -N)	mg/L	0.006	0.013	0.005	0.011	< 0.004	0.013	-	-
Ammonia (NH ₃ -N)	mg/L	0.150	0.212	0.314	0.395	0.080	0.163	0.3	-
Orthophosphate (PO ₄)	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	Phosphate: 0.015	-
COD	mg/L	154	115	173	154	230	134	-	-
Iron	mg/L	0.026	< 0.01	0.137	0.025	< 0.01	0.046	1	-
Hardness	mg/L	7950	8933	8000	6948	7147	6551	-	-
Chloride	mg/L	15208	16270	15940	15884	13593	15836	-	-
Free Chlorine	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	-
Manganese	mg/L	0.167	0.270	0.241	0.152	0.100	0.032	0.5	-
Sulphate	mg/L	3113	2879	3515	2847	2566	2522	-	-
CO ₂ Total	mg/L	9.46	12.3	8.51	6.62	5.68	4.73	-	-
Bicarbonate	mg/L	104	106	111	121	130	139	-	-
Carbonate	mg/L	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Copper (Cu)	mg/L	0.097	0.217	0.164	0.062	0.106	0.071	0.008	-
Zinc(Zn)	mg/L	0.588	0.712	0.669	0.742	0.508	0.559	15	-
Oil and Grease	mg/L	3.0	4.80	3.60	4.20	4.40	4.60	1	-

Source: Pöyry, 2016b

Note:

- The marine water was sampled using Van Dorn Sampler/ Niskin Bottle.
- I: Decree of Environmental Ministry No. 51/2004 in Appendix III.
- II: The IFC does not establish standards for seawater quality.

Table B.48 Marine Water Monitoring – Bottom of Seawater Level (2016)

Parameter	Unit	MW1	MW2	MW3	MW4	MW5	MW6	I	II
Brightness	M	2.20	2	2.20	5	5	4.7	-	-
Temperature	°C	30.5	30.5	30.2	30.1	30.1	30.0	Natural	-
Turbidity	NTU	2.92	7.67	3.42	1.70	1.30	2.22	<5	-
Odour	-	No Odour	Natural	-					
Color	Pt Co	5	20	5	5	5	5	-	-
Total Dissolved Solids	mg/L	31360	31290	31220	31220	31220	31290	-	-
Total Suspended Solids	mg/L	24	22	87	<1	<1	<1	Natural	-
Total Phosphorus	mg/L	22	87	< 1	< 1	< 1	0.023	-	-
BOD	mg/L	-	-	-	-	-	95	20	-
Mercury (Hg)	mg/L	-	-	-	-	-	< 0.09	0.001	-
Arsenic (As)	mg/L	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	0.012	-
Barium	mg/L	< 0.001	< 0.001	0.014	0.016	0.010	< 0.001	-	-
Chromium (Cr)	mg/L	< 0.001	< 0.001	< 0.001	0.024	0.026	0.013	Chromium Hexavalent: 0.05	-
Boron	mg/L	2.36	< 0.003	2.71	< 0.003	0.855	1.42	-	-
Fluoride	mg/L	1.39	1.59	0.919	1.31	1.39	1.57	-	-
Calcium	mg/L	480	640	640	400	400	320	-	-
Magnesium	mg/L	1379	1284	1093	1189	1285	1428	-	-
Sodium	mg/L	6500	6583	6583	6625	6542	6458	-	-
Potassium	mg/L	357	368	378	364	361	361	-	-
Selenium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	-
Lead (Pb)	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.008	-
Aluminium	mg/L	0.179	0.179	0.162	0.196	0.110	0.102	-	-
Strontium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-
Cyanide	mg/L	0.008	< 0.001	< 0.001	0.011	< 0.001	0.009	-	-
Phenol	mg/L	0.263	< 0.005	< 0.005	< 0.005	0.025	0.025	-	-
Cadmium	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.005	-
Cobalt	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-
Electrical Conductivity	µS/Cm	44800	44700	44600	44600	44600	44700	-	-
pH	-	7.53	7.64	7.69	7.68	7.69	7.71	7-8.5	-
Dissolved Oxygen (DO)	mg/L	5.2	5.4	5.1	5.1	5.4	5.2	>5	-
Nitrate (NO ₃ -N)	mg/L	0.108	0.120	0.544	0.048	0.090	0.049	0.008	-
Nitrite (NO ₂ -N)	mg/L	0.008	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	-	-
Ammonia (NH ₃ -N)	mg/L	0.219	0.309	0.292	0.197	0.223	0.111	0.3	-
Orthophosphate (PO ₄)	mg/L	< 0.01	0.037	< 0.01	< 0.01	< 0.01	< 0.01	Phosphate: 0.015	-
COD	mg/L	211	154	288	173	154	154	-	-
Iron	mg/L	0.029	0.048	0.044	0.168	0.170	1.42	1	-
Hardness	mg/L	6948	6948	6154	5956	6353	6750	-	-
Chloride	mg/L	14387	15353	14387	14387	13905	13905	-	-
Free Chlorine	mg/L	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	-	-
Manganese	mg/L	0.093	0.078	0.063	0.022	0.122	0.307	0.5	-
Sulphate	mg/L	2423	2840	2409	2150	2219	2241	-	-

Parameter	Unit	MW1	MW2	MW3	MW4	MW5	MW6	I	II
CO ₂ Total	mg/L	5.68	3.78	6.62	9.46	4.73	6.62	-	-
Bicarbonate	mg/L	146	144	134	136	144	141	-	-
Carbonate	mg/L	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Copper (Cu)	mg/L	0.062	0.004	0.062	0.066	0.071	0.079	0.008	-
Zinc(Zn)	mg/L	0.406	0.479	0.559	1.406	1.420	1.245	0.05	-
Oil and Grease	mg/L	2.20	2.0	4.40	1.60	2.40	2.40	1	-

Source: Pöyry, 2016b

Note:

- The marine water was sampled using Van Dorn Sampler/ Niskin Bottle.
- I: Decree of Environmental Ministry No. 51/2004 in Appendix III.
- II: The IFC does not establish standards for seawater quality.

Table B.49 Marine Water Monitoring (2017)

Parameter	Unit	MW7	MW8	MW9	MW10	MW11	MW12	MW13	MW14	MW15	MW16	MW17	Applicable Standards	
													I	II
Brightness	M	4.2	2.5	0.1	0.1	1.25	2.5	2.5	5	4	3	1.25	-	-
Seawater Depth	m	12	20	1	1.3	4.5	9	9	12	14	15	7	-	-
Temperature	°C	29.4	28.6	29.6	30.3	29.3	29.1	28.9	29.0	28.7	28.5	28.9	Natural	-
pH	-	8.39	8.31	8.24	8.34	8.43	8.37	8.36	8.38	8.33	8.33	8.35	7-8.5	-
Turbidity	NTU	3.08	2.53	5.77	109	8.29	7.95	15.6	3.29	2.34	4.66	6.22	<5	-
Odour	-	Odour detected											Natural	
Total Suspended Solids	mg/L	<8	<8	647	142	11	12	50	<8	<8	10	11	Natural	-
Total Phosphorus	mg/L	0.60	0.058	0.010	0.035	0.015	0.043	0.60	0.058	0.010	0.035	0.015	-	-
BOD5	mg/L	2.50	2.60	2.40	2.40	2.50	2.30	2.60	2.60	2.40	2.50	2.60	20	-
Mercury (Hg)	mg/L	0.0085	0.0022	0.0014	0.0008	0.0004	0.0003	0.0010	0.0013	0.0010	0.0008	0.0006	0.001	-
Arsenic (As)	mg/L	< 0.0001	0.0004	< 0.0001	0.0001	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	<0.0001	< 0.0001	0.012	-
Chromium Hexavalent	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	Chromium Hexavalent: 0.05	-
Cadmium (Cd)	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.001	0.001	0.005	-
Copper (Cu)	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-
Lead (Pb)	mg/L	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.05	-
Zinc (Zn)	mg/L	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	15	-
Nickel (Ni)	mg/L	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.05	-
Ammonia (NH3-N)	mg/L	0.012	0.010	0.010	0.010	0.011	0.013	0.010	0.012	0.012	0.010	0.012	0.3	-
Nitrate (NO3-N)	mg/L	0.082	0.096	0.139	0.090	0.106	0.087	0.090	0.088	0.090	0.088	0.102	0.008	-
Orthophosphate (PO4)	mg/L	0.004	0.008	0.004	0.004	0.004	0.004	0.004	0.005	0.003	0.002	0.004	Phosphate: 0.015	-
Cyanide	mg/L	0.005	0.006	0.007	0.005	0.007	0.008	0.006	0.007	0.007	0.007	0.005	0.01	-
Hydrogen Sulphide	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.5	-
Oil & Grease	mg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	-
Phenol	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	<0.0005	<0.0005	0.002	-
Surfactant	mg/L	0.080	0.096	0.085	0.086	0.088	0.097	0.086	0.092	0.090	0.075	0.084	1	-

Parameter	Unit	MW7	MW8	MW9	MW10	MW11	MW12	MW13	MW14	MW15	MW16	MW17	Applicable Standards	
													I	II
PAH	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	-
PCB	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	-
TBT	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	-
Total Coliform	MPN/ 100mL	2	2400	33	27	2	0	49	2	5	2	0	1000	-
Fecal Coliform	MPN/ 100mL	2	2400	17	27	2	0	49	2	5	2	0	1000	-
Salmonella	Colony/ mL	0	3.5x10 ¹	0	0	0	0	0	0	0	0	0	-	-

Source: ERM, 2018b

Note:

- I: Decree of Environmental Ministry No. 51/2004 in Appendix III.
- II: The IFC does not establish standards for seawater quality.

Table B.50 Marine Water Monitoring (2018)

Parameter	Unit	MW18	MW19	MW20	MW21	MW22	MW23	I	II
Colour	Pt. Co	<1	<1	<1	<1	<1	<1	-	-
Odour		Odour Detected						Natural	-
Brightness	m	0.8	2	2	4	10	15	-	-
Turbidity	ntu	14.20	5.96	3.65	2.72	1.22	1.07	<5	-
TSS	mg/l	19	8	<8	<8	<8	<8	Natural	-
Temperature	°C	32.8	31.2	31.2	32.4	31	31.1	Natural	-
Garbage	-	-	-	-	-	-	-	-	-
Oil layer	-	-	-	-	-	-	-	-	-
pH	-	8.13	8.17	8.06	8.04	8.16	8.16	7-8.5	-
Salinity	‰	30	31	30	31	31	32	-	-
Dissolved Oxygen	mg/l	5.4	5.7	6.1	5.9	5.7	5.6	>5	-
BOD5	mg/l	1.40	1.20	1.20	1.40	1.30	1.20	20	-
Free Ammoniac	mg/l	0.158	0.077	0.070	0.100	0.109	0.155	-	-
Phosphate (PO ₄ -P)	mg/l	0.312	0.311	0.311	0.311	0.311	0.312	Phosphate: 0.015	-
Nitrate (NO ₃ -N)	mg/l	0.127	0.11	0.53	0.143	0.11	0.18	0.008	-
Sulphide (H ₂ S)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	-
Phenol	mg/l	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	-
Polyaromatic Hydrocarbon	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	-
Polychlorobiphenyl	µg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	-
Surfactant	mg/l	0.148	0.125	0.107	0.090	0.085	0.080	1	-
Oil and Grease	mg/l	<1	<1	<1	<1	<1	<1	1	-
Pesticide	µg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	-
COD	mg/l	55.74	53.59	50.16	54.02	54.02	59.17	-	-
Chlorides	mg/l	19873.84	18834.16	18514.26	18274.33	22433.04	25472.10	-	-
Total Hydrocarbon	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	-
Mercury (Hg)	mg/l	0.0001	0.0008	0.0004	0.0003	0.0003	0.0001	0.001	-
Hexavalent	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.05	-
Arsenic (As)	mg/l	0.0091	0.0050	0.0043	0.0085	0.0096	0.0109	0.05	-
Cadmium (Cd)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.005	-
Copper (Cu)	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-
Lead (Pb)	mg/l	<0.006	<0.006	<0.006	<0.006	<0.006	0.008	0.05	-
Zinc (Zn)	mg/l	0.028	0.025	0.024	0.029	0.025	0.024	15	-
Silver (Ag)	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	-	-
Beryllium (Be)	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-	-
Selenium (Se)	mg/l	0.0010	0.0013	0.0009	0.0010	0.0013	0.0011	0.01	-

Source: ERM. 2018b

Note:

- The marine water was sampled using Van Dorn Sampler/ Niskin Bottle.
- I: Decree of Environmental Ministry No. 51/2004 in Appendix III.
- The IFC does not establish standards for seawater quality.

B.8 *MARINE SEDIMENT*

B.8.1 *List of Reports*

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Bathymetric Survey and Seawater Data Collection Report, 2016 (Pöyry, 2016b);*
- *Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM, 2018b); and*
- *PLTGU Jawa 1 Independent Power Project - Integrated Environmental and Social Impact Assessment (ESIA) - Additional Baseline Surveys for ESIA (ERM, 2018c).*

Table B.51 Marine Sediment Monitoring (2017)

Parameter	Unit	MS1	MS2	MS3	MS4	MS5	MS6	MS7	MS8	MS9	MS10	MS11	MS12	MS13	ANZECC/ ARMANZ 2000	
															ISQG - Low (Trigger Value)	ISQG - High
Sand (2.0-0.06 mm)	%	0.22	0.24	0.19				0.28	0.22	0.27				0.15		
Silt (0.06-0.002 mm)	%	80.95	80.80	84.28				8.88	76.46	89.49				87.07		
Clay (<0.002 MM)	%	18.83	18.96	15.53				18.84	23.32	10.24				12.78		
Mercury (Hg)	mg/kg	0.007	0.011	<0.004	0.030	0.023	<0.004	0.091	0.187	0.017	0.101	0.215	0.373	0.036	0.15	1
Chromium (Cr)	mg/kg	9.71	4.84	<0.09	12.66	13.74	5.84	9.04	13.65	8.52	1.91	13.78	7.41	7.90	80	370
Arsenic (As)	mg/kg	0.659	0.569	1.187	0.386	0.011	1.001	1.148	0.847	0.581	0.553	0.909	0.926	0.816	20	70
Cadmium (Cd)	mg/kg	2.54	0.61	0.33	1.30	1.20	2.90	2.60	4.05	3.85	4.59	1.75	4.40	1.82	1.5	10
Copper (Cu)	mg/kg	13.94	2.22	6.51	16.76	22.01	19.72	20.53	15.24	10.07	6.92	17.40	11.97	18.94	65	270
Lead (Pb)	mg/kg	39.76	18.35	12.40	40.36	42.47	55.25	54.07	51.66	53.11	68.26	50.44	66.23	72.56	50	220
Zinc (Zn)	mg/kg	86.86	40.68	61.74	95.2	101.59	93.29	96.03	79.12	83.29	76.76	85.04	77.98	113.58	200	410
Nickel (Ni)	mg/kg	40.32	16.90	22.33	25.49	31.24	50.54	34.58	45.50	39.59	51.32	26.90	42.33	31.51	21	52

Source: ERM, 2018b

Note:

- Parameters were analysed based on the specification of the Australian and New Zealand interim sediment quality guidelines i.e. ANZECC/ ARMANZ 2000.
- The local Indonesian standards nor IFC does not establish standards for marine sediment quality.

Table B.52 Marine Sediment Monitoring (2018)

Parameter	Unit	MS14	MS15	MS16	MS17	MS18	MS19	ANZECC/ ARMANZ 2000	
								ISQG - Low (Trigger Value)	ISQG - High
Arsenic (As)	mg/ kg	3.414	3.581	3.277	3.477	3.645	5.414	20	70
Cadmium (Cd)	mg/ kg	3.68	3.22	0.64	3.85	3.72	6.80	1.5	10
Chromium (Cr)	mg/ kg	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	80	370
Copper (Cu)	mg/ kg	22.27	26.76	31.94	14.88	15.92	12.10	65	270
Lead (Pb)	mg/ kg	96.15	68.05	110.36	98.59	123.67	119.00	50	220
Mercury (Hg)	mg/ kg	0.028	0.005	0.094	<0.004	0.022	0.077	0.15	1
Zinc (Zn)	mg/ kg	149.69	102.34	112.26	91.43	77.63	72.35	200	410
Nickel (Ni)	mg/ kg	29.95	39.53	5.87	36.82	35.95	51.79	21	52
Silver (Ag)	mg/ kg	3.49	<0.20	1.91	<0.20	4.19	1.20	1	3.7
TBT	µg/ kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	5	70
Total PAHs	µg/ kg	2	2	2	2	2	2	4000	45000
Total PCBs	µg/ kg	<20	<20	<20	<20	<20	<20	23	-

Source: ERM, 2018c

Note:

- Parameters were analysed based on the specification of the Australian and New Zealand interim sediment quality guidelines i.e. ANZECC/ ARMANZ 2000.
- No local Indonesian standards nor IFC does not establish standards for marine sediment quality.

B.9

MARINE PLANKTON AND MACROBENTHOS

B.9.1

List of Reports

The following data is based on primary and secondary data available from the Project area and studies commissioned. This includes the following:

- *Bathymetric Survey and Seawater Data Collection Report, 2016 (Pöyry, 2016b);*
- *Analisis Mengenai Dampak Lingkungan (ANDAL) Report (ERM, 2018b); and*
- *PLTGU Jawa 1 Independent Power Project - Integrated Environmental and Social Impact Assessment (ESIA) - Additional Baseline Surveys for ESIA (ERM, 2018c).*

Plankton was observed by filtering the water samples using the plankton net number 25. The filtered water was placed in sampling bottles and were added with the preservative 4% MAF (methyl alcohol, acetic acid glacial and formalin). Analysis of plankton includes the abundance, diversity, homogeneity, and dominance. Individual number of plankton was calculated by using the Sedgwick Rafter Counting Cell, which determines plankton abundance and homogeneity using a standard equation.

Benthos in the waters bed were sampled using Petersen Grab, sieved to separate benthos from the sediment and be preserved by adding 4% MAF.

Table B.53 Marine Plankton Type Diversity Monitoring (2016)

Species	MP1	MP2	MP3	MP4	MP5	MP6
Phytoplankton						
<i>Amphora sp.</i>	0	33	33	0	33	0
<i>Bacillariaparodoxa.</i>	1980	33	627	66	0	66
<i>Bacteriastrum sp.</i>	0	33	0	0	33	0
<i>Biddulphia.</i>	3630	1419	1089	792	1254	4950
<i>Biddulphia mobiliensis.</i>	0	0	0	33	0	0
<i>Ceratium furca.</i>	891	3630	560	924	33	429
<i>Ceratium fusus.</i>	0	1416	297	0	0	33
<i>Ceratium sp.</i>	198	297	132	4620	33	462
<i>Chaetoceros curvicetus.</i>	99	165	198	33	33	198
<i>Chaetoceros sp.</i>	17490	13530	6600	1056	164	4290
<i>Climacodium sp.</i>	0	0	66	0	0	0
<i>Amphora sp.</i>	0	33	33	0	33	0
<i>Bacillariaparodoxa.</i>	1980	33	627	66	0	66
<i>Bacteriastrum sp.</i>	0	33	0	0	33	0
<i>Biddulphia.</i>	3630	1419	1089	792	1254	4950
<i>Biddulphia mobiliensis.</i>	0	0	0	33	0	0
<i>Ceratium furca.</i>	891	3630	560	924	33	429
<i>Coscinodiscus sp.</i>	2640	1650	693	594	1650	4290
<i>Dinophysis sp.</i>	0	66	33	0	0	0
<i>Diploneis sp.</i>	0	0	33	0	0	0
<i>Ditylum sp.</i>	165	66	66	165	132	198
<i>Ethmodiscus sp.</i>	198	198	99	0	99	132
<i>Fragilaria cylindrus.</i>	66	0	33	0	66	0

Species	MP1	MP2	MP3	MP4	MP5	MP6
<i>Guinardia sp.</i>	495	561	1254	495	594	3201
<i>Hemiaulus sp.</i>	132	264	165	66	33	198
<i>Hemidiscus sp.</i>	0	0	99	33	33	198
<i>Hyalodiscus sp.</i>	33	0	66	0	0	33
<i>Lauderia sp.</i>	33	33	66	33	33	66
<i>Leprocylindrus sp.</i>	0	0	0	0	0	33
<i>Nitzschia longisima.</i>	33	0	132	0	33	0
<i>Nitzschia sigma.</i>	99	33	0	0	0	0
<i>Nitzschia sp.</i>	132	165	429	66	33	66
<i>Oscillatoria sp.</i>	33	33	0	0	0	0
<i>Peridinium sp.</i>	297	594	264	264	66	99
<i>Phrophacus sp.</i>	0	99	0	132	66	66
<i>Pleurosigma sp.</i>	33	165	528	0	33	132
<i>Rhabdonema sp.</i>	0	0	33	0	33	0
<i>Rhizosolenia alata.</i>	0	0	0	33	0	66
<i>Rhizosolenia delicatula.</i>	33	0	0	66	0	33
<i>Rhizosolenia fragilissima.</i>	0	0	0	33	0	66
<i>Rhizosolenia robusta.</i>	198	33	132	66	165	297
<i>Rhizosolenia shrubsolei.</i>	297	132	231	33	132	198
<i>Rhizosolenia stolterfothii.</i>	0	66	132	33	0	66
<i>Rhizosolenia sp.</i>	8910	5610	24750	9240	10560	39204
<i>Spirulina sp.</i>	0	0	33	33	0	0
<i>Stanieria sp.</i>	14190	8910	15510	7260	6930	11220
<i>Thalassionema sp.</i>	66	66	0	33	0	66
<i>Thalassiosira sp.</i>	0	0	99	0	0	0
<i>Thalassiothrix sp.</i>	231	0	0	33	0	198
<i>Tribonema sp.</i>	0	33	0	0	0	0
<i>Triceratium sp.</i>	0	0	33	0	0	0
<i>Trichodesmium sp.</i>	66	165	330	1287	33	1188
Total Phytoplankton	52668	39498	54845	27522	22307	71742
ID Simpson	0.779	0.798	0.700	0.783	0.670	0.663
Zooplankton						
<i>Acartia sp.</i>	6600	4950	6600	9900	4950	5610
<i>Balanus sp.</i>	66	33	66	0	66	66
<i>Brachionus facaltis.</i>	33	0	0	0	0	0
<i>Brachionus sp.</i>	0	0	33	0	0	0
<i>Centropages sp.</i>	3300	132	231	330	33	429
<i>Centropyxis aculeata.</i>	33	0	0	0	0	0
<i>Ciliata.</i>	0	33	0	0	0	0
<i>Cladocera.</i>	33	0	0	33	33	33
<i>Euterpina sp.</i>	1188	1980	396	297	627	231
<i>Favella sp.</i>	165	99	99	0	33	0
<i>Gryphaea sp.</i>	792	165	165	66	66	66
<i>Keratella sp.</i>	33	33	0	0	33	0
<i>Limacina sp.</i>	0	0	0	0	0	33
<i>Nauplii.</i>	2046	1815	6270	297	231	363
<i>Oikopleura sp.</i>	0	0	0	99	0	33
<i>Oithona sp.</i>	4950	198	891	264	33	132
<i>Paracalanus sp.</i>	0	33	0	165	33	165
<i>Polychaeta.</i>	0	33	0	0	0	0
<i>Tintinnopsis sp.</i>	99	99	33	0	33	33
Total Zooplankton	19338	9603	14784	11451	6171	7194
ID Simpson	0.772	0.655	0.616	0.250	0.344	0.384
Total Plankton	72006	49101	69629	38973	28478	78936
ID Simpson	0.865	0.856	0.797	0.827	0.767	0.716

Source: Pöyry, 2016b

Table B.54 Marine Phytoplankton Monitoring (2017)

Parameter	MP7	MP8	MP9	MP10	MP11	MP12	MP13	MP14	MP15	MP16	MP17
Total taxonomy	15	15	15	11	19	19	17	11	19	15	13
Total cell/ m^3	1.159.665	82.207	1.075.666	1.211.001	170.426	506.668	4.927.999	413.033	1.185.002	148.374	294.736
ID Simpson	0.54	0.26	0.61	0.64	0.34	0.20	0.22	0.76	0.23	0.20	0.37
Dominant species (Cell/ m^3)	<i>Trichodesmium</i> sp. (840.000)	<i>Skeletonema</i> sp. (40.100)	<i>Skeletonema</i> sp. (835.333)	<i>Skeletonema</i> sp. (956.667)	<i>Skeletonema</i> sp. (87.218)	<i>Trichodesmium</i> sp. (188.333)	<i>Bacteriastrium</i> sp. (1.558.667)	<i>Trichodesmium</i> sp. (360.401)	<i>Chaetoceros</i> sp. (496.667)	<i>Chaetoceros</i> sp. (48.622)	<i>Trichodesmium</i> sp. (173.434)
	<i>Chaetoceros</i> sp. (142.333)	<i>Nitzschia</i> sp. (7.519)	<i>Nitzschia</i> sp. (100.333)	<i>Nitzschia</i> sp. (95.667)	<i>Trichodesmium</i> sp. (41.604)	<i>Thalassiothrix</i> sp. (75.000)	<i>Trichodesmium</i> sp. (1.381.333)	<i>Chaetoceros</i> sp. (19.048)	<i>Thalassiothrix</i> sp. (166.667)	<i>Thalassiothrix</i> sp. (33.083)	<i>Skeletonema</i> sp. (28.571)
	<i>Thalassiothrix</i> sp. (46.667)	<i>Bacillaria</i> sp. (5.013)	<i>Pleurosigma</i> sp. (39.667)	<i>Trichodesmium</i> sp. (88.667)	<i>Nitzschia</i> sp. (20.050)	<i>Chaetoceros</i> sp. (66.667)	<i>Chaetoceros</i> sp. (672.000)	<i>Thalassiothrix</i> sp. (11.028)	<i>Nitzschia</i> sp. (145.000)	<i>Bacteriastrium</i> sp. (22.055)	<i>Chaetoceros</i> sp. (23.058)

Source: ERM, 2018b

Table B.55 Marine Zooplankton Monitoring (2017)

Parameter	MP7	MP8	MP9	MP10	MP11	MP12	MP13	MP14	MP15	MP16	MP17
Total taxonomy	5	7	9	8	4	13	10	7	6	6	11
Total idn/ m^3	3.159	2.759	14.738	12.633	2.257	26.819	25.966	3.258	2.256	2.758	7.521
ID Simpson	0.28	0.21	0.22	0.30	0.33	0.21	0.19	0.16	0.19	0.21	0.11
Dominant species (idn/ m^3)	<i>Nauplius</i> (1.404)	<i>Nauplius</i> (1.003)	<i>Nauplius</i> (4.561)	<i>Nauplius</i> (5.965)	<i>Nauplius</i> (1.003)	<i>Nauplius</i> (9.273)	<i>Oithona</i> sp. (7.368)	<i>Nauplius</i> (752)	<i>Nauplius</i> (501)	<i>Paracalanus</i> sp. (752)	<i>Nauplius</i> (1.253)
	<i>Paracalanus</i> sp. (702)	<i>Paracalanus</i> sp. (501)	<i>Oithona</i> sp. (4.211)	<i>Paracalanus</i> sp. (3.158)	<i>Larva</i> (752)	<i>Paracalanus</i> sp. (7.018)	<i>Paracalanus</i> sp. (6316)	<i>Acartia</i> sp. (501)	<i>Paracalanus</i> sp. (501)	<i>Gastropoda</i> (sp1) (752)	<i>Acrocalanus</i> sp. (1.003)
	<i>Achantometron</i> sp. (351)	<i>Achantometron</i> sp. (251)	<i>Tintinnopsis</i> sp. (2456)	<i>Tintinnopsis</i> sp. (1.053)	<i>Acartia</i> sp. (251)	<i>Oithona</i> sp. (3.509)	<i>Nauplius</i> (4912)	<i>Acrocalanus</i> sp. (501)	<i>Larva</i> (501)	<i>Pelecypoda</i> (501)	<i>Corycaeus</i> sp. (1.003)

Source: ERM, 2018b

Table B.56 Marine Macrobenthos Monitoring (2017)

Parameter	Unit	MB1	MB2	MB3	MB4	MB5	MB6	MB7	MB8	MB9	MB10	MB11	MB12	MB13
Polychaeta														
<i>Aglaophamus sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	30	0	0	0
<i>Ampharete sp.</i>	Ind/m ³	0	0	0	0	0	0	0	30	0	0	0	0	0
<i>Cirratulus sp.</i>	Ind/m ³	0	0	0	0	0	0	0	30	0	0	0	0	0
<i>Diopatra sp.</i>	Ind/m ³	0	0	0	0	0	0	0	30	0	0	0	0	0
<i>Eunice sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	59	0	0	0	0
<i>Glycera sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	0	0	30	0
<i>Goniada sp.</i>	Ind/m ³	0	30	0	0	0	0	0	0	0	0	0	0	0
<i>Heteromastus sp.</i>	Ind/m ³	0	0	0	0	30	0	0	0	0	0	0	0	0
<i>Lumbrineris sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	30	30	0	0	0
<i>Mageelona sp.</i>	Ind/m ³	0	0	0	89	30	0	0	0	0	0	0	0	0
<i>Nereis sp.</i>	Ind/m ³	0	0	30	59	0	0	0	0	0	0	0	0	30
<i>Notomastus sp.</i>	Ind/m ³	30	0	0	0	0	0	0	0	0	0	0	0	0
<i>Terebellides sp.</i>	Ind/m ³	30	0	0	0	0	0	0	0	0	0	0	0	0
<i>Paraonis sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	30	0	0	0	0
<i>Prionospio sp.</i>	Ind/m ³	0	0	0	118	0	0	0	0	0	0	0	0	0
<i>Potamila sp.</i>	Ind/m ³	0	0	0	30	0	0	0	0	0	0	0	0	0
<i>Sternaspis sp.</i>	Ind/m ³	0	0	0	0	59	0	0	0	0	0	0	0	0
<i>Terebellides sp.</i>	Ind/m ³	0	0	0	0	0	0	0	89	89	148	0	0	0
<i>Trichobranchus sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	0	0	0	30
Oligochaeta														
<i>F. Lumbriculidae sp.</i>	Ind/m ³	0	0	0	0	0	0	0	30	0	0	0	0	0
Sipinacula														
<i>Apionsoma sp.</i>	Ind/m ³	0	59	0	0	30	0	0	30	0	0	0	0	59
Crustaceae														
<i>Ampelisca sp.</i>	Ind/m ³	0	0	0	0	0	0	0	30	0	0	0	0	0
<i>Callianassa sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	30	0	30	0
<i>Cirolana sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	89	0	0	0	0
<i>Leptopocchelia sp.</i>	Ind/m ³	0	0	0	0	0	0	0	30	0	30	0	0	0
<i>Oratosquilla sp.</i>	Ind/m ³	30	0	0	0	0	0	0	0	0	0	0	0	0
<i>Paradorippe sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	0	30	0	0
<i>Photis sp.</i>	Ind/m ³	0	0	59	0	0	0	0	0	0	0	0	0	0
<i>Pinnotheres sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	30	0	0	0
<i>Ptilanthura sp.</i>	Ind/m ³	30	0	0	0	0	0	30	0	0	0	0	0	0

Parameter	Unit	MB1	MB2	MB3	MB4	MB5	MB6	MB7	MB8	MB9	MB10	MB11	MB12	MB13
<i>Tanais sp.</i>	Ind/m ³	30	0	0	0	0	0	0	0	0	0	0	0	0
Pelecypoda														
<i>Nuculuna sp.</i>	Ind/m ³	0	0	0	0	30	30	0	0	0	0	0	0	0
<i>Siliqula sp.</i>	Ind/m ³	0	0	0	59	0	0	0	0	0	0	0	0	0
<i>Tellina sp.</i>	Ind/m ³	0	0	0	30	0	0	0	0	0	0	0	0	0
Ecinodermata														
<i>Ophiuroidea sp.</i>	Ind/m ³	30	0	0	0	0	0	0	0	0	0	30	30	30
Anthozoa														
<i>Hormathia sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	30	0	0	0
Nemertina														
<i>Cerebratulus sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	0	0	30	0
<i>Tubulanus sp.</i>	Ind/m ³	0	0	0	0	0	0	0	0	0	0	30	0	0

Source: ERM, 2018b

Note: Only detected species is recorded.



PLTGU Jawa 1 Independent Power Project

ANNEX C STAKEHOLDER ENGAGEMENT PLAN (SEP)

Prepared for:

PT Jawa Satu Power (JSP)
July 2018

www.erm.com

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1 INTRODUCTION

1.1 PROJECT OVERVIEW

The PLTGU Jawa-1 Project (the Project) involves the development of a Combined Cycle Gas Turbine (CCGT) Power Plant, a Liquefied Natural Gas (LNG) Floating Storage and Regasification Unit (FSRU) and a 500kV power transmission lines and a Substation. These project elements will be developed within the Karawang and Bekasi Regencies of West Java, Indonesia. The Project location and main elements are depicted in **Figure 1-1**.

PT Pertamina (Persero), Sojitz Corporation and Marubeni Corporation (together, the “Sponsors”) have concluded an agreement to develop the Project via a project company named PT. Jawa Satu Power (JSP).

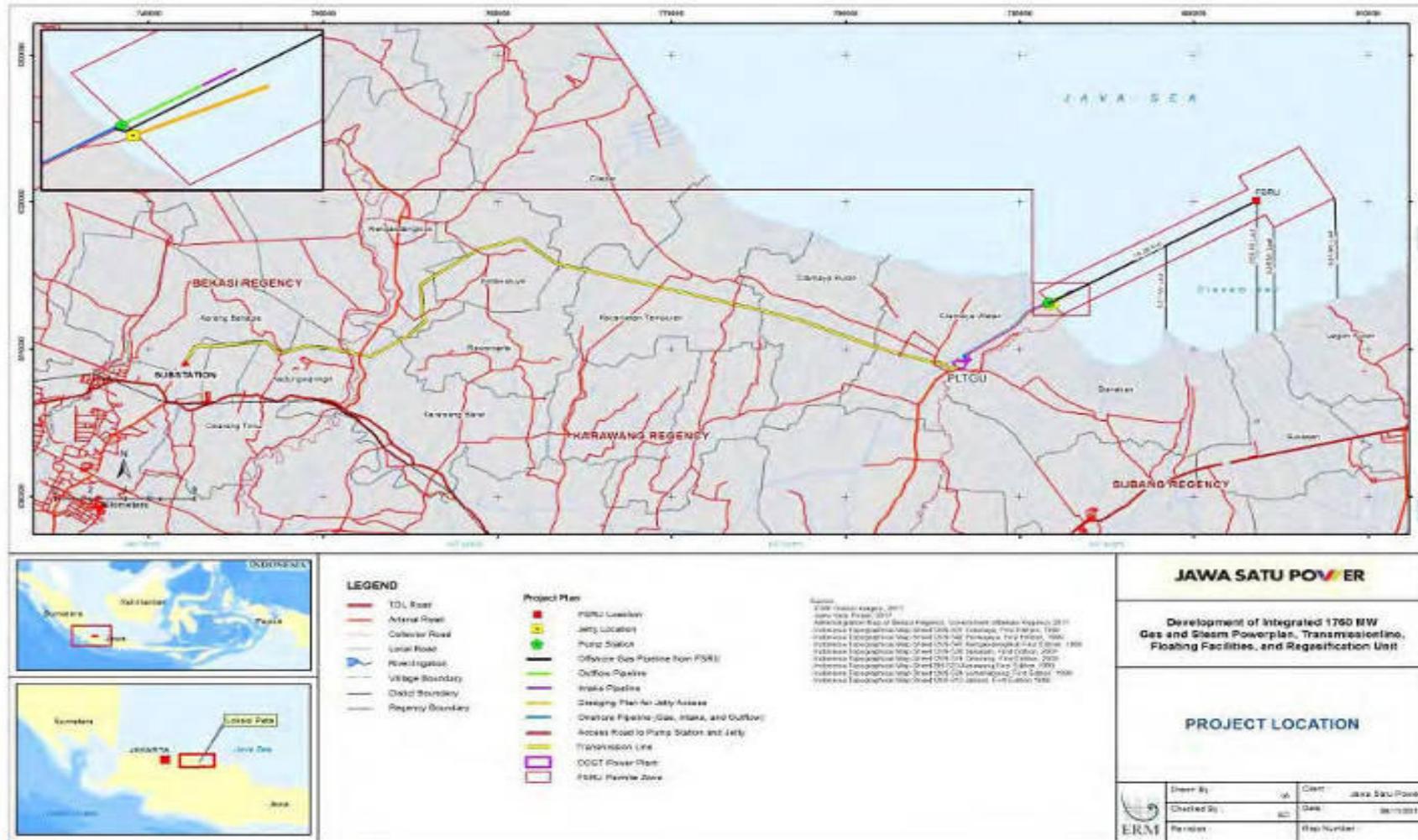
The construction of this Project is expected to commence in late 2018 with operation of the 1,760 MW CCGT Power Plant expected to commence in 2021.

The Project includes the following main components:

- Installation and operation of an FSRU;
- Construction and operation of seawater intake and seawater discharge pipelines;
- Construction and operation of an onshore gas receiving facility;
- Construction and operation of an emergency jetty;
- Gas supply pipelines, both subsea and terrestrial;
- 1,760 MW CCGT power plant;
- A 52 km 500 kV transmission line; and
- An electricity substation in Sukatani, Bekasi.

The LNG will be delivered to the FSRU via tankers; it is expected that the LNG will be supplied mainly from the BP Tangguh project, both of which are located within Indonesia. The FSRU will store and regassify the LNG, prior to delivery to an Onshore Receiving Facility (ORF) located adjacent to the CCGT Power Plant. Following gas treatment within the ORF, the gas will be supplied to the CCGT Power Plant and electricity dispatched to the transmission line and substation. The Scoping Report sets out the Project Description; components and associated facilities in more detail.

Figure 1-1 Project Overview



A consortium of lenders (Japan Bank for International Corporation (JBIC), Nippon Export and Investment Insurance (NEXI) and Asian Development Bank (ADB) leading) and a number of commercial banks are considering financing the Project and an Environment, Social and Health Impact Assessment (ESIA) will be required to demonstrate how the Project aligns with the expectations of the following international Lender Environmental and Social standards and expectations:

- The Asian Development Bank (ADB) Safeguard Policy Statements (SPS);
- Equator Principles III (EPIII) 2013;
- 2012 IFC Performance Standards 1-8 (IFC PS);
- The World Bank Group EHS Guidelines; and
- Japan Bank for International Cooperation (JBIC) Guidelines for Confirmation of Environmental and Social Considerations (The Guidelines).

The Project has conducted the regulatory Environmental Impact Assessment (EIA) process, locally referred to as AMDAL (*Analisis Mengenai Dampak Lingkungan*) and has obtain its Environmental Permit, as of July 2018.

1.2 PROJECT LOCATION

The Project is located in the West Java Province, approximately 108 km east of Jakarta, the capital of Indonesia.

Administratively, the Project is located within Subang, Bekasi and Karawang Regencies (**Figure 1-1**).

The FSRU will be located offshore of Pamanukan Bay, in Subang Regency at a distance of approximately 8.8 km from the Regency coastline.

The Power Plant is located in the administrative area of Cilamaya Village, Cilamaya Wetan District, Karawang Regency.

The 500 kV transmission line then traverses Karawang Regency for a distance of 52 km before joining the Cibatu Baru II /Sukatani EHV Substation in Sukatani, Bekasi Regency.

1.3 PROJECT PROPONENTS

As stated previously the Project is a joint venture between PT Pertamina (Persero), Sojitz Corporation and Marubeni Corporation., referred to previously as the Sponsor Group.

PT Pertamina (Persero) is a state-owned oil and gas company, which also has interests in the Power sector. Pertamina operates the Arun LNG Plant Unit (Aceh) and Bontang LNG Plant Unit (East Kalimantan) and geothermal power assets in Indonesia. Pertamina is also a major downstream supplier of fuel in Indonesia.

Sojitz Corporation is a general trading company that is active in a broad range of industries throughout Asia and globally. In Indonesia, Sojitz has a stake in the BP Tangguh Project via its LNG Japan Corporation consortium with Sumitomo. It also has interests in methanol export and real estate within Indonesia.

Marubeni Corporation is a Japanese headquartered trading house which operates in food and consumer goods, energy, transportation, chemicals and power businesses within Asia and globally. In Indonesia, Marubeni currently has investments in a number of thermal power assets.

In order to design and construct the Project the Sponsors have commissioned a number of contractors, namely the Engineering Procurement and Construction Consortium composed of Meindo, GE and Samsung (see **Figure 1-2**).

Figure 1-2 Project Layout with EPC Responsibilities



PT Perusahaan Listrik Negara (PLN), the Indonesian state electricity company, has entered into the LNG sale and purchase agreement with the LNG supplier for the purpose of fulfilling the LNG supply requirement to the FSRU. The Sponsors will only be responsible for the provision of the necessary gas supply infrastructure to the CCGT power plant and FSRU and the associated onshore and offshore infrastructure to support the transportation of gas. This integrated project will be transferred to PLN at the end of the Power Purchasing Agreement (PPA).

1.4 OVERVIEW OF THIS STAKEHOLDER ENGAGEMENT PLAN (SEP)

This Stakeholder Engagement Plan (SEP) has been prepared to document the methods and process by which its stakeholders and other interested parties are consulted in relation to the proposed power plant project. The SEP is designed with the aim of providing a platform for consultation and information disclosure with all Project stakeholders throughout all phases of the development. This SEP considers all impacted communities; the Project Resettlement Plan (RP) details the landowner and user data and consultation activities undertaken as part of this process (that aligns with the process set out in this SEP).

Good relations between the Project and its surrounding communities and other relevant stakeholders such as local fishermen, land owners and users and local government authorities will be essential for the Project to acquire its social license to operate i.e. to gain stakeholder trust in order to implement the Project in a timely and profitable manner. It is also an important means for receiving community feedback on Project related concerns, perceptions and expectations as well as providing a channel for the Project to disseminate relevant updates and other necessary information to the community.

This document also outlines the Grievance Mechanism (GM) that should be adopted and implemented by JSP, its EPC and other subcontractors. The GM provides a process by which stakeholders and / or interested parties can raise their complaints, concerns and observations and for the Project to address genuine items in a timely and agreeable manner.

The SEP for this Project has been prepared in accordance with the Applicable Standards including relevant national regulations and international standards and guidelines which are further discussed in later in this report.

In terms of stakeholder engagement and disclosure the below guidelines will be adhered to:

- IFC – Stakeholder Engagement; A Good Practice Handbook for Companies Doing Business in Emerging Markets;
- ADB (Asian Development Bank). 2006. *Strengthening Participation for Development Results: A Staff Guide to Participation and Development*; and
- World Bank EHS Guidelines for Electric Power Transmission and Distribution, 2007.

This document has been developed to set out consultation required as part of the regulatory AMDAL process (i.e. the public consultation) and the ESIA process. Where data is available consultation undertaken as part of the land acquisition process has been discussed. However given the process is still ongoing this document will be updated following completion of the Resettlement Plan that will summarize all consultation conducted as part of the land acquisition process.

1.5 STAKEHOLDER ENGAGEMENT PLAN STRUCTURE

The SEP contains the following sections:

- | | |
|-----------|--|
| Section 1 | Introduction – describes an overview of the SEP document, its purpose and objectives and description of the social-economic setting of the Project area. |
| Section 2 | Project Description – describes the Project background and details of the facilities to be built. |

- Section 3 Regulations and Requirements – outlines the key Indonesian legislation and international guidelines concerning stakeholder engagement that apply to the Project.
- Section 4 Previous Stakeholder engagement activities - explains consultation activities undertaken as part of the Project permitting, *Analisis Mengenai Dampak Lingkungan* (AMDAL or regulatory EIA) and Environmental and Social Impact Assessment (ESIA) process.
- Section 5 Project Stakeholders –identifies the Project stakeholders and issues along with the power and influence analysis.
- Section 6 Stakeholder Engagement Planning - provides a detailed description of proposed future stakeholder engagement activities and includes a timetable showing when these activities should occur.
- Section 7 Community Grievance Mechanism - a detailed Project based Grievance Mechanism is discussed.
- Section 8 Management for implementation of SEP - details resources for implementation of this SEP and describes monitoring, reporting and evaluation measures to be undertaken to ensure the success of this SEP.

1.6 *LIMITATIONS*

The findings reported in this SEP are based on the information and data gathered during the public consultations/socialization activities during the AMDAL and stakeholder consultation conducted as part of the ESIA development conducted by ERM.

2 **PROJECT DESCRIPTION**

2.1 **PROJECT LOCATION**

The Project is located in the West Java Province, approximately 108 km east of Jakarta, the capital of Indonesia. Administratively, the Project is located within the Subang, Bekasi and Karawang Regencies (see **Figure 1-1**).

The FSRU and offshore pipeline will be located offshore of Pamanukan Bay, in Subang Regency at a distance of approximately 15 km from the Regency coastline. The CCGT Power Plant will be located in the administrative area of Cilamaya Village, Cilamaya Wetan District, Karawang Regency next to the existing Gas Compression Station (SKG) operated by Pertamina Gas; the transmission line will traverse through the Karawang Regency for a distance of 52 km before joining the Cibatu Baru II /Sukatani EHV Substation in Sukatani, Bekasi Regency.

2.2 **PROJECT COMPONENTS**

2.2.1 **Floating Storage and LNG Regasification Unit (FSRU)**

The FSRU will be located and moored offshore of Ciasem Bay within Subang Regency at a distance of approximately of eight (8) km off the north Ciasem Bay coast and at depth of 16 m of sea level.

The FSRU will be permanently moored and during installation of the vessel, a prohibited zone (a 500 m radius area starting from the outmost side of the installation) and a restricted zone (a 1,250 m radius area starting from the prohibited zone) will be established around the FSRU. Based on *Ministry of Transportation Regulation No. 129 2016*, a secure and safety zone must be established around offshore facilities, including the FSRU and its mooring facilities. Such zone covers both prohibited zone and restricted zone. The prohibited zone is an area with a radius of 500 m starting from the outmost side of the installation; the restricted zone is the area with radius of 1,250 m starting from the prohibited zone.

The FSRU will be 292.5 m in length, 43.4 m in width, and a depth of 26.6 m. Four LNG storage tanks with a total capacity of 170,000 m³ will be retained on the vessel. The vessel will be equipped with four (4) regasification trains; each train having a capacity of 100 mmscfd. The nominal capacity will be 300 mmscfd with a peak capacity of 400 mmscfd.

The FSRU is planned for 25 years and will be taken away for dry dock inspection and maintenance to a suitable port e.g. in Singapore at least once during the operational lifetime. Furthermore, maintenance activities i.e. painting will be conducted periodically to prevent rust on vessel body, deck and on-board

equipment. In addition, to ensure the stability of vessel hull, underwater survey will be carried out periodically.

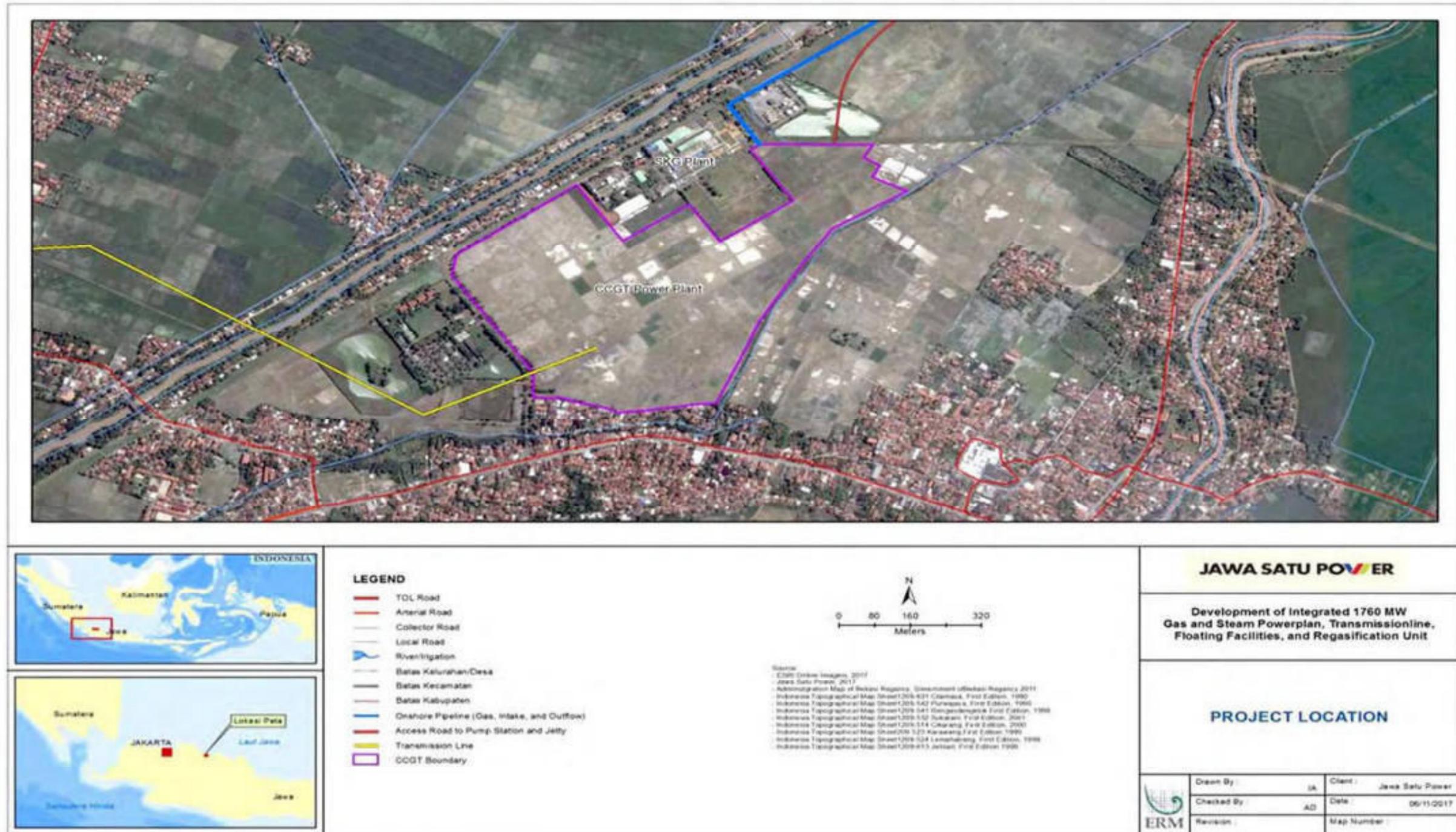
2.2.2 *CCGT Power Plant*

The 1,760 MW CCGT Power Plant will be developed on a 36.7 ha parcel of land located in Cilamaya Village, Cilamaya Wetan District, Karawang Regency. The land was originally owned by Pertamina (Persero) and such land title transfer to PT JSP is still on-going and will complete before the financial close.

The site consists predominately of vacant agricultural land where clearing has already occurred. The CCGT Power Plant site in relation to surrounding communities is shown in **Figure 2-1**. Cilamaya Village is located next to the site with some residences sharing a boundary with the site. It is also reported that some households and small kiosks reside within the border of the site illegally.

The power plant complex will consist of five main buildings supported by other infrastructure. The main buildings include two turbine buildings, control and electrical building, administration building and a workshop/warehouse building.

Figure 2-1 CCGT Power Plant Site



4.1.1 *Transmission Lines*

A 52 km 500kV Transmission Line will be established from the CCGT Power Plant in Cilamaya to Cibatu Baru II/Sukatani EHV Substation in Bekasi Regency.

The line will comprise 118 transmission towers with a transmission corridor of approximately 17 m each side of the transmission lines established, as required by local regulation.

The line will run through two regencies; Karawang and Bekasi and will affect 36 villages. The proposed transmission line route crosses mainly areas of land used for agricultural purposes (rice paddy fields).

It is estimated that a total acquisition of 116,000 m² (11.6 ha) of land is required for the tower footings. This is based on 116 towers and typical footing area of 1000 m² per tower (two towers are currently owned by Pertamina and therefore the land deeds will only require transfer from its subsidiary to the Project Sponsors). The actual land area required will depend on the nature of the tower (the area required for suspension tower, dead end tower and tension tower are different and range from 784 m² to 1,764 m²).

4.1.2 *Substation*

The 500kV Cibatu Baru II/Sukatani Substation will be an outdoor gas insulated design comprising the following number of circuits:

- 1) Two outgoing lines to the 500kv Muara Tawar substation;
- 2) Two outgoing lines to the 500kv Cibatu substation; and
- 3) Two incoming lines from PLTGU Java-1 Power Plant.

In addition the substation site shall include land (space only) for two additional 500kV diameter and one 150 kV Substation (8 bays).

A substation control building shall be provided which will consist of an office room, communications room, control room, and protection room.

4.1.3 *Equipment Jetty - Construction and Operation*

A jetty to support project construction and emergency operations will be established. A volume of approximately 80,000 m³ of material is likely to require dredging to allow access of barges and other supply vessels. The dredging is expected to be approximately 1,500 m in length; the method of dredging is yet to be confirmed.

The jetty construction is expected to require nine months with the foundations piled into the seabed. The jetty will be used to supply large equipment which cannot be readily transported by road during construction, and maintenance and emergencies conditions during operations.

Once the jetty is built roughly one barge every four days will dock there depending on the weather; this will decrease to one barge every two weeks during the last 10 months of construction.

4.2 *TRANSPORT, EQUIPMENT AND MACHINERY REQUIREMENTS*

During construction deliveries of equipment and supplies will occur via local roads and the proposed construction Jetty. **Figure 4-8** depicts the main transport routes to be used during construction.

A significant volume of additional vehicle movements will occur and traffic congestion and disruption is expected along the main transport routes from the Cikampek Toll gate through Kotabaru District, Jatisari District, and Banyusari District a distance of 27 km.

Transport requirements for the Project are estimated as:

- Truck movements associated with the transport of fill material to the site;
- Movements of heavy and wide loads requiring temporary road closures and traffic disruption; and
- Significant truck movements associated with the movements of construction materials to the construction locations.

Vessels will be temporarily present within the nearshore area during pipe laying, dredging and the FSRU installation and mooring.

4.3 *WORKFORCE AND HOUSING*

It is estimated that during construction the total peak workforce will be between 3,400 and 4,000 workers. Where feasible, based on skillsets, the Project will maximize local employment. A basecamp will be provided for non-local workers within the proposed CCGT Power Plant location. Its capacity is yet to be confirmed however is expected to be a significant facility in order to meet the Project's workforce demands. Water, electricity supply and also waste collection and disposal options are currently being confirmed. During the towers and substation construction a smaller workforce will be required; whereby the construction teams are likely to rent temporary accommodation in the local villages depending on the tower location.

- 1 Regulation of Environmental Ministry No. 21/2008 concerning Air Emission Stationary Sources Standard for Combine Cycle Power Plant
- 2 Environmental, Health, and Safety Guidelines Thermal Power Plants (2008)

4.4 *LAND ACQUISITION*

The total area required for the development of the Project is approximately 2,692,090 m². This includes not only lands procured from individual private owners and private entities, but land leased from government owned private entities and land compensated for due to restrictions on use or access. The land acquired for the Project is 762,671 m², leased lands total 180,000 m² and land with restrictions due to the transmission line construction of 1,749,419 m².

Kwarsa Hexagon has been contracted by the Sponsor's Group to oversee the Project's land acquisition activities. Land acquisition will be undertaken for the 500 KV Transmission Line and Cibatu Baru II/Sukatani Substation.

No physical displacement is anticipated however, economic displacement will occur, primarily due to the loss of paddy fields and fishponds. In total, 132 landowners and 27 land users will be impacted by the land required for the tower footings, substation and coastal area project components. While there are approximately 724 landowners who will receive compensation for lands, building, and trees within the transmission line Right of Way.

Land title transfer for the CCGT Power Plant and two of the tower footings from original landowner to PT JSP will be conducted. The current pipeline ROW land is owned by Pertamina however some additional land will also need to be acquired; this will involve some private land owners (to be confirmed by Kwarsa Hexagon) and the Ministry of Environment and Forestry. An access road will also be constructed between the Power Plant and the jetty area that will also involve private land owners. The land acquisition activities of PT. Jawa Satu Power will be conducted in accordance with Indonesian President Regulation No. 149 Year 2015 about Land Procurement for Development Implementation for the Public Interest. Furthermore, to meet the ADB's expectations, a Resettlement Plan is being developed to ensure any gaps between the regulations and the ADB's expectations are addressed.

The land acquisition process commenced in 2017 with identification of landowners and land measurements, negotiation and payment for compensation/land purchase. The process is continuing and will likely be complete by September 2018.

2.3 *SOCIAL SETTING OF PROJECT AREA*

The construction and operation of the Project is likely to impact 39 villages within 14 Sub-Districts and 3 Regencies in West Java. **Table 2-1** presents the Project's social boundaries.

The impacted villages were determined based on their proximity to the project facilities i.e. the transmission line, substation and power plant location. The SEP also covers the coastal villages where fishing activities are undertaken along the Cilamaya River and surrounding coastal areas nearshore of the jetty and the FSRU.

Table 2-1 Project Social Boundaries

Regency	Sub-District	Village
1. Karawang	1. Cilamaya Wetan	1. Muara
		2. Cilamaya
		3. Sukatani
	2. Cilamaya Kulon	4. Sukamulya
		5. Pasirukem
		6. Muktijaya
		7. Tegalurung
		8. Manggungjaya
		9. Sumurgede
	3. Tempuran	10. Jayanegara
		11. Purwajaya
		12. Pegadungan
		13. Pancakarya
		14. Lemahduhur
		15. Lemahkarya
		16. Dayeuhluhur
	17. Tanjungjaya	
4. Rawamerta	18. Sukaraja	
5. Cilebar	19. Sukaratu	
6. Kotawaluya	20. Sindangsari	
	21. Sampalan	
	22. Waluya	
7. Rengasdengklok	23. Mulyajaya	
	24. Karyasari	
	25. Kalangsuria	
8. Karawang Barat	26. Kalangsari	
	27. Mekarjati	
2. Bekasi	9. Pebayuran	28. Tunggakjati
		29. Bantarjaya
		30. Karangmekar
	10. Kedungwaringin	31. Mekarjaya
		32. Karangharum
		33. Karangsari
	11. Cikarang Timur	34. Karangmukti
	12. Karang Bahagia	35. Karangsatu
		36. Karangrahayu
		37. Karangraharja
13. Cikarang Utara	38. Waluya	
	39. Blanakan	
3. Subang	14. Blanakan	39. Blanakan

Source: PT JSP, 2017

Karawang Regency

The total population of the Karawang Regency in 2016 was 2,295,778 people^[1] with a sex ratio of 105.26 and total area of 1,753.27 km²; the density of the Regency was 1,039 persons per km².

Karawang Regency is one of the national food sheds due to its high production of rice and other food crops such as corn, soybean, cassava, and vegetables. In the livestock sector, the regency contributes up to 799,128 tons/year of rice to fulfill the national rice consumption^[2]. Meanwhile, the total fish production (including capture fisheries and aquaculture) was 51,794.21 tons or IDR 1,223,238,249,000. It is understood that the FSRU location and its surrounding area are known as fishing grounds for the nearest fishing communities. Based on focus group discussions conducted with fishermen in the village of Blanakan the concentration of fishing activities are in the range of 5 to 12 km from of the coastal area / line of Blanakan. However, it is important to note that existing exclusion zones already exist in the area due to existing oil platforms and subsea pipelines. The existing exclusion zones exist around the offshore platforms operated by PHE. These are not located near the FSRU (further offshore). Considering these activities, it is likely that the Karawang coastal area may be impacted by the Project and as such, these stakeholders need to be consulted with as part of the AMDAL and ESIA process. They are also being considered in the broader ESIA and ESMP.

Bekasi Regency

The total population of the Bekasi Regency as of 2015 was 3,246,013^[3]. Districts in the industrial areas of Bekasi neighboring Jakarta are much denser compared to those in the rural areas. The industrial sector especially metal and electronics are the highest contributors to the Gross Regional Domestic Product (GRDP) of Bekasi employing approximately 38% of total employment in the regency. Between 2010 and 2014 the size of agricultural land decreased resulting in the decreased production of the food crops and vegetables. This is due to the growing of industrial sector where agricultural area / land are being converted into industrial complexes.

The Bekasi Regency will be impacted by the installation of the substation, tower footings and transmission line. The majority of the land to be acquired is currently used for agricultural activities hence no physical relocation will be required. As such land owners and users will need to be consulted with in relation to the Project (activities, land acquisition project and schedule).

[1] Kabupaten Karawang dalam Angka, 2017

[2] Department of Agriculture, Forestry, Plantation and Livestock of Karawang, 2016

[3] Kabupaten Bekasi dalam Angka 2016

Subang Regency

Based on available statistical data, the total population of Subang Regency as of 2015 was 1,529,388 people with an average population growth rate of 1.05% per year. The number of people employed in Subang Regency was approximately 633,116; of that amount 211,972 people or around 33.48% were employed in agriculture and fisheries. The field of services business (which includes shops and stall owners) employs approximately 318,113 people or about 50.25%. While the field of industry employs approximately 103,031 people or about 16.27% of the working population.

Blanakan village within the Subang Regency is the only identified village potentially impacted by the Project. This is due to the development of FSRU, offshore pipeline and access road and jetty as their fishing grounds / fishing catchment areas are within the Project area. As such this community requires consultation and engagement by the Project.

An additional Public Consultation was conducted on the 9th of November 2017 in Blanakan Sub-District, Subang Regency attended by 33 participants consisting of the Head of Sub-District, Heads of Muara and Blanakan villages, Marine and Air Police of Blanakan Sub-District, Police Resort of Blanakan Sub-District, community leaders of Blanakan and Muara villages, fishermen and fishpond representatives of Muara village and Blanakan Sub-District. The Public Consultation was held to provide updated information regarding the Project development, impacts and to capture concerns for incorporation in the AMDAL and ESIA.

3 REGULATIONS AND REQUIREMENTS

There are two levels of regulatory provisions applicable to the Project. The first is the Indonesian assessment and approvals process. Secondly, as the Sponsor Group have committed to also meeting international standards, the following will be adhered to:

- The Asian Development Bank (ADB) Safeguard Policy Statements (SPS); and
- 2012 IFC Performance Standards 1-8 (IFC PS) and also the World Bank Group EHS Guidelines for the life of the Project.

The Project has obtained the Regulatory Environmental Approval via the Indonesian AMDAL process however in applying international standards to the Project these additional standards and expectations will be met throughout the construction and operational scope covered by the Environmental Social and Health Impact Assessment (ESIA).

ERM has reviewed of the historical consultation completed to date by the Project; it is considered to meet all the Indonesian requirements specifically consultations as part of the AMDAL process. This has been verified by consultations with the MoEF and AMDAL Technical Committee.

Consultation activities to meet the Lenders Applicable Standards are ongoing and will continue throughout the construction and operations.

3.1 PUBLIC CONSULTATION REQUIREMENT UNDER INDONESIAN REGULATION

The Project is committed to upholding all applicable laws and regulations of the Government of the Republic of Indonesia. Laws and regulations most applicable to stakeholder consultation and disclosure activities are summarized in **Table 3-1**.

Table 3-1 National Regulation Framework for Stakeholder Consultation and Information Disclosure

Regulation	Content	Citation
<i>Law No 32 of 2009 about "Environmental Protection and Management."</i>	Chapter XI details expectations associated with community participation. The community has equal rights and opportunities to actively participate in and protect the environment as well as part of the planning and implementation of environmental protection and management.	Articles No. 70 Paragraph 1
<i>Government Regulation (PP) No. 27 of 2012 on Environmental Permit</i>	<ul style="list-style-type: none"> • In preparing the Regulatory EIA / AMDAL, the Project Initiator should include the following parties in the process: <ul style="list-style-type: none"> • Affected communities; • Environmental experts; and • any party who are affected by any form of decision in the AMDAL process 	Article No. 9 Paragraph 1 - 4

Regulation	Content	Citation
	<ul style="list-style-type: none"> • Community / public participation as intended in above paragraph are done through announcement of Business and / or activity plan and public consultation. • Community / public participation shall be made before the preparation of EIA / AMDAL Term of Reference; • The community shall be entitled to submit suggestions, opinions, and responses to the business and / or activity plan within 10 working days since the announcement as referred to point no 2 above. 	
<p><i>Regulation of the State Minister for Environment No. 17/2012 regarding Guidelines for Community Involvement in the Process of Environmental Impact Assessment and Environmental Permit</i></p>	<p>This regulation as guarantee and guidelines the implementations of community involvement in the process of environmental impact assessment and environmental permit.</p> <p>Stated that the mandatory notification should be using 2 mandatory media i.e.</p> <ol style="list-style-type: none"> 1) printed media such as local newspaper and/ or national newspaper (if required by EIA assessment authority 2) bulletin board which is easily accessible to the affected communities <p>In addition to mandatory media as mentioned above, the Project could use other supporting media to undertake notification such as:</p> <ol style="list-style-type: none"> 1) printed media such as brochures, pamphlet, or banner; 2) electronic media such as television, website, social network, short message service (SMS), and/ or radio; 3) bulletin board in environmental agencies and relevant government agencies in national, province and regency level; and 4) other media which can be used <p>In addition, this regulation also mention that the notification should be conveyed through multimedia which is effectively accessible to the community such as website and bulletin board in the Project plan location which easily to reach by the affected community.</p>	<p>Chapter II: Part B, point b</p> <p>Chapter III: Part B, point 1.b</p>

Regulation	Content	Citation
	<ul style="list-style-type: none"> • Guidance of community involvement in the process of environmental impact and environmental permit analysis is intended as a reference: <ul style="list-style-type: none"> • The implementation of community involvement in the environmental impact analysis process; and • Implementation of community involvement in the environmental permit process. • Implementation of community involvement in the EIA and Environmental Permit Process shall be based on the following basic principles: <ul style="list-style-type: none"> ▪ Providing transparent and complete information; ▪ Equality of positions among the parties involved; ▪ Fair and wise problem solving; and ▪ Coordination, communication and cooperation among the parties concerned / involved. 	Article No 1 and 2

3.2 *INTERNATIONAL STANDARDS AND BEST PRACTICES*

The international standards to be applied to the Project are summarized below.

Asian Development Bank (ADB) Safeguard Policies

ADB requires the Project to undertake meaningful consultation as defined under ADB Safeguard Policy Statement (SPS, 2009) as follows:

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.

Based on the above the ADB requires the Project to engage with communities, groups, or people affected by the proposed Project, and with civil society through information disclosure, consultation, and informed participation in a manner commensurate with the risks to and impacts on affected communities. For projects with significant adverse environmental, involuntary resettlement, or Indigenous Peoples impacts, ADB project teams will participate in consultation activities to understand the concerns of affected people and ensure that such concerns are addressed in project design and safeguard plans.

ADB's SPS 2009¹ also governs the social safeguards of ADB's operations and articulates the safeguard policy principles for three key safeguard areas:

- Environment safeguards (SPS, Appendix 1);
- Involuntary resettlement safeguards (SPS, Appendix 2); and
- Indigenous Peoples safeguards (SPS, Appendix 3).

The SPS 2009 applies to all ADB-supported projects reviewed by ADB's management after 20 January 2010. The objective of the SPS is to ensure the social soundness and sustainability of projects and to support the integration of those considerations into the project decision-making process.

The ADB adopts a set of specific safeguard requirements whereby participation in consultation activities is required to understand the concerns of affected people; borrowers/clients are required to meet in addressing social impacts and risks. The ADB has participated in three rounds of consultation activities during the land acquisition process, AMDAL and ESIA data collection and disclosure activities between November 2017 and June 2018. Stakeholders participating in these meetings included land owners and users, fisher folk, communities residing in the coastal area and around the power plant.

The Safeguard Requirements (SR) are described in the following:

- Safeguard Requirements 1 (SR1): Environment Safeguards. A Good Practice Sourcebook (Draft Working Document November 2012);
- Safeguard Requirements 2 (SR2): Involuntary Resettlement Safeguards. A Planning and Implementation Good Practice Sourcebook (Draft Working Document November 2012);
- Safeguard Requirements 3 (SR3): Indigenous Peoples Safeguards. A Planning and Implementation Good Practice Sourcebook (Draft Working Document Revised June 2013).

In addition to the ADB Safeguard Policy Statement (2009) discussed above, the following ADB policies and strategies have been considered as part of this assessment:

- Social Protection Strategy (2001) – which stipulates ADB expectations for compliance with applicable labour laws (e.g. the relevant conventions of the International Labour Organisation [ILO]) in relation to a Project, The strategy specifically discusses expectations with respect to forced or compulsory labour, child labour, discrimination in respect of employment and occupation, and

¹ <https://www.adb.org/documents/safeguard-policy-statement>

freedom of association and the effective recognition of, the right to collective bargaining.

- Policy on Gender and Development (1998) - supports mainstreaming as a key strategy in promoting gender equity in ADBs projects. The key elements of this policy include gender sensitivity, analysis and planning as well as mainstreaming and agenda setting.
- Public Communications Policy (2011) - which aims to enhance stakeholders' trust in and ability to engage with ADB. It recognizes the right of people to seek, receive, and impart information about ADB operations and supports knowledge sharing and enables participatory development with affected people. The policy is based on a presumption in favour of disclosure unless there is a compelling reason for non-disclosure.
- ADB Accountability Mechanism (2012) - ADB's Accountability Mechanism provides a forum where people adversely affected by ADB-assisted projects can voice and seek solutions to their problems and report alleged noncompliance with ADB's operational policies and procedures. It consists of two separate but complementary functions: the problem solving function and the compliance review function. The objective of the Accountability Mechanism Policy (2012) is to be accountable to people for ADB-assisted projects as a last resort mechanism.

Equator Principles

The Equator Principles (EPs) are the environmental and social risk management framework voluntarily adopted by 83 member financial institutions (Equator Principle Financial Institutions, EPFIs). They are primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making. The Equator Principles were developed by private-sector banks and launched in June 2003. They were first revised in July 2006 and new revisions, known as EP III, took effect on June 4, 2013.

The EPs established voluntary principles for addressing environmental and social risks and issues in global project finance transactions, including adherence to IFC Performance Standards. They are designed to serve as a benchmark for the financial industry to manage social and environmental risks in project financing. They apply to all new project financings with total project capital costs of USD \$10 million or more, and across all industry sectors. The Principles (EPs 1 to 10) are:

- Principle 1: Review and Categorisation;
- Principle 2: Environmental and Social Assessment;
- Principle 3: Applicable Environmental and Social Standards;
- Principle 4: Environmental and Social Management System and Equator Principles Action Plan;

- Principle 5: Stakeholder Engagement;
- Principle 6: Grievance Mechanism;
- Principle 7: Independent Review;
- Principle 8: Covenants;
- Principle 9: Independent Monitoring and Reporting; and
- Principle 10: Reporting and Transparency.

The current version of the EPs is the EP III, which apply globally, to all industry sectors.

Given the fact the Project is seeking finance from a consortium of lenders all adopting the EPs framework hence the Project will need to comply with the EP principles to address environmental and social risks and issues.

Under Principle 1: Review and Categorization, the Project is categorized to ensure that the required level of environmental and social due diligence is commensurate with the nature, scale and stage of the Project, and with the level of environmental and social risks and impacts. The categories are:

- Category A – Projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented;
- Category B – Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures; and
- Category C – Projects with minimal or no adverse environmental and social risks and/or impacts.

Under Principle 2: Environmental and Social Assessment, all Category A and Category B Projects are required to conduct an Assessment process to address the relevant environmental and social risks and impacts of the proposed Project.

Principle 3: Applicable Environmental and Social Standards requires that the Project complies with relevant host country laws, regulations and permits that pertain to environmental and social issues. The principle also brings into consideration compliance with the IFC Performance Standards on Environmental and Social Sustainability (IFC PS) and the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines).

- Principles 4 through 7 and Principles 9 and 10 apply to all Category A and, as appropriate, Category B Projects; and
- Principle 8 applies to all Category A and Category B Projects.

IFC Performance Standards 2012

In April 2006 the International Finance Corporation, a member of the World Bank Group, released a set of PSs based upon the original World Bank Group Safeguard Policies, which recognized further the specific issues associated with private sector projects. The IFC PSs have been broadened now to include issues such as greenhouse gases, human rights, community health, and safety and security. A revised set of Performance Standards came into force on January 1, 2012. The complete list of PS's is provided in **Figure 3-1**.

Figure 3-1 International Finance Corporation (IFC) Performance Standards



Source: www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/performance-standards

PS1: Assessment and Management of Environmental and Social Risks and Impacts) sets out the following expectations with regards to stakeholder engagement:

- *“An effective Environmental and Social Management System...involves engagement between the client, its workers and the local communities directly affected by the project”.*
- *“To promote and provide means for adequate engagement with Affected Communities throughout the project cycle on issues that could potentially affect them...”.*
- *“...the client will identify individuals and groups that may be differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status....”.*
- *“Stakeholder engagement is the basis for building strong, constructive, and responsive relationships that are essential for the successful management of a project's environmental and social impacts “.*

- “Stakeholder engagement is an ongoing process that may involve, in varying degrees, the following elements: stakeholder analysis and planning, disclosure and dissemination of information, consultation and participation, grievance mechanism, and ongoing reporting to Affected Communities...”.
- “...The nature, frequency, and level of effort of stakeholder engagement may vary considerably and will be commensurate with the project’s risks and adverse impacts, and the project’s phase of development. ...”.
- “When Affected Communities are subject to identified risks and adverse impacts from a project, the client will undertake a process of consultation...”.
- “Effective consultation is a two-way process that should...(iv) be free of external manipulation, interference, coercion, or intimidation”.

The IFC has also issued a number of other guidance documents related to stakeholder engagement such as:

- IFC (International Finance Corporation), 2009. *Addressing Grievances from Project-Affected Communities: Guidance for Projects and Companies on Designing Grievance Mechanism*; and
- International Finance Corporation (IFC), 2003. *Good Practice Note: Addressing the Social Dimensions of Private Sector Projects*. 200;

Japan Bank for International Cooperation (JBIC)

JBIC adopted the Guidelines for Confirmation of Environmental Considerations on 1st October 2009 through the Japan Finance Corporation (referred to as the JFC Guidelines). In 2002, they were revised as the JBIC Guidelines for Confirmation of Environmental and Social Considerations (the Guidelines), to include detailed provisions. The Guidelines were revised in 2007, 2012 and 2015 to take account of global developments and trends on environmental matters and broad opinions from stakeholders. The current version of the Guidelines is available on JBIC’s website². The Guidelines state that Project proponents are responsible for undertaking “appropriate environmental and social considerations so as to prevent or minimize the impact on the environment and local communities, and not bring about unacceptable impacts which may be caused by the projects for which JBIC provides funding.”

Environmental and social considerations refer not only to the natural environment, but also to social issues such as involuntary resettlement and respect for the human rights of indigenous peoples. It is important to confirm that adequate measures have been taken to mitigate adverse environmental impacts proactively and that understanding has been obtained from all the stakeholders regarding environmental effects, especially when significant environmental impact is foreseen from the proposed project. These are crucial points for proceeding with the proposed project or approving a loan for the project.

² <http://www.jbic.go.jp/en/efforts/environment/confirm>

Regarding World Bank Safeguard Policy and IFC PSs, the Environmental Guidelines stipulates "JBIC also ascertains whether a project meets the relevant aspects of World Bank Safeguard Policy regarding environmental and social considerations. On the other hand, for private sector limited or non-recourse project finance cases, or for where appropriate, JBIC ascertains whether the project meets the relevant aspects of IFC PSs". Therefore further reference to IFC PSs in this SEP also represent meeting JBIC standards.

Nippon Export and Investment Insurance (NEXI)

NEXI encourages the project sponsors in the projects that are subject to NEXI's insurance services, via the applicants for insurance services such as exporters and others (hereinafter referred to as the "Applicants"), to undertake appropriate environmental and social considerations in accordance with the nature of the project, based on the principles adopted by NEXI.

NEXI confirms whether the project sponsors implement appropriate environmental and social considerations, so as to prevent or mitigate potential impacts on environment (i.e. not only on the natural environment, but also on social issues such as involuntary resettlement and respect for the human rights of indigenous peoples: hereinafter referred to as the "environment") which may be caused by the projects relating to insurance (two years or more) services from NEXI.

NEXI's confirmation of environmental and social considerations is one of the most important components in its risk assessment. NEXI incorporates the outcomes of its confirmation of environmental and social considerations in its decisions on issuance of commitment (or on conclusion of an insurance contract if application for commitment is not made. The same applies hereafter.). If, as a result of its confirmation of environmental and social considerations, NEXI judges that the relevant project will cause adverse impacts on the environment, it encourages the project sponsors, through the Applicants, to undertake appropriate environmental and social considerations, and there may be cases where a commitment letter is not issued.

NEXI prescribes its procedures for confirmation of environmental and social considerations such as to classify the projects into 3 categories through screening and to implement Environmental Review for each category and engages to disclose information. In so doing, NEXI endeavors to ensure transparency, predictability and accountability in its decision on issuance of commitment from the viewpoint of environmental and social considerations, taking into account the constrains of the Applicants' business confidentiality and competitive concerns.

Even after making a decision on issuance of commitment, NEXI will take appropriate actions to confirm the status of monitoring by the project sponsor via the Applicants when necessary.

4 PROJECT STAKEHOLDERS

The stakeholder identification and analysis process will form the foundation for planning and designing of subsequent stakeholder engagement activities. The Project's stakeholders and analysis will be reviewed and refined regularly as the Project become more detailed and definite.

A stakeholder is defined as individuals, communities, groups and institutions who:

- Are most likely to experience, at significant levels, any potential negative and / or positive impacts of the proposed Project;
- Have the mandate over the various elements of the project's activities (such as Government institutions); and
- Are considered vulnerable members of the community within the proposed project area.

Qualitative research approaches (one-on-one interviews with key informants and questionnaire) were used to collect data on relevant stakeholder / stakeholder groups and their associated issues and perceptions on the Project. Based on the results of the interviews other key respondents were identified through a snowball technique³.

4.1 *STAKEHOLDERS IDENTIFIED DURING AMDAL AND ESIA CONSULTATIONS PROCESS*

An overview of the key Project stakeholders below is identified based on several categories. The first level is government who has an important role in the AMDAL approval process; the second are those that are potentially directly impacted by the Project; the third category involves any interest parties namely Non-Governmental Organizations / Community Based Organization who can create a potential delay or raise reputation concerns related to the Project.

The two principal categories of stakeholders for this Project include:

1. **Affected parties;** people / entities directly affected by the Project and / or have been identified as most vulnerable to change and who need to be engaged in identifying impacts and their significance, as well as in decision-making on mitigation and management measures, namely:
 - *Sub-District / Local Government* - This stakeholder group consists of the village head or representatives of the village government who live in the villages within the Project footprint. area total of 37 villages are considered as potentially impacted by the Project;

³ A non-probability sampling technique where existing study subjects recruit future subjects from among their acquaintances. Thus the sample group appears to grow like a rolling snowball. As the sample builds up, enough data are gathered to be useful for research.

- *Host Community* – This stakeholder group includes all local residents potentially exposed to significant impacts due to Project construction and operation. Mainly related to the potential construction and operational impacts onshore and offshore and the Project’s need for land. A particular focus is on the community of Cilamaya considering the main Project activities and Power Plant will be located nearby which potentially can have diverse and significant impacts on the local community;
- *Traditional Institutions* – This stakeholder group consists of individuals who live in villages within the Project footprint that have a social and cultural legitimacy and are considered influential within the community. Of importance is the Nadran festival that is conducted in Blanakan each year. Prior to this event the Project will consult with the village authorities to agree appropriate mitigations to avoid impact to the festival;
- *Landowners* – This stakeholder group includes people affected by land acquisition process (transmission line route, pipeline right of way, access roads, water intake and jetty) for the Project and those who may be temporarily impacted by laydown areas and access routes. This will be applied for landowners impacted by the development of the substation and the 500 kV Transmission Line (52 km) in 38 villages in the Regency of Karawang and Bekasi, landowners along the onshore pipeline ROW, area to be acquired for access road and area to build the Jetty;
- *Former Cultivators of Pertamina’s land (Land users)* – This stakeholder group consists of farmers or local residents who formerly conducted farming activities on the land that will be used for the Power Plant development. Pertamina has engaged with these stakeholders and requested them to stop activities on the land. As of mid-2017 no further activities have occurred. Pertamina provided the opportunity for these land users to participate in a separate CSR activity (raising sheep); some are now participating whilst others declined due to other priorities. This is further discussed in the RP and ESIA.
- *Vulnerable Groups* – This stakeholder group consists of the Skewer maker females, owners of kiosks residing next to the Project’s location in Cilamaya village and groups of community residing in the protected forest. Details of this stakeholder group are discussed in separate section of this report;
- *Fishermen Groups* - This stakeholder group includes all fishermen living in the area or village of Muara and Blanakan. These fishermen will likely be impacted by the installation of the offshore facilities and operation of the FSRU, construction and operation of the seawater intake and seawater discharge pipeline and construction and operation of the jetty. These fishermen conduct their fishing activities in the waters around the Project

site (fresh water and sea water); fishing is their main livelihood and source of income; and/or

- *Squatters* – This stakeholder group includes people who have settled within the Project area illegally and have constructed housing, local businesses or conduct agricultural activities on land that will be acquired by the Project.
- *Private and Public Users of the Marine Environment* - The Project will construct some equipment and facilities along the coastal and sea (FSRU). During construction there will be a possibility that some Project activities may impact other marine users or those using existing transportation routes, such as oil and gas companies, shipping companies, port authorities and commercial fishing operators.
- *Road Users and Businesses in and Around Cilamaya* – In order to construct the power plant, jetty and pump house, and the access road etc. the Project will result in road traffic in and out of Cilamaya during the construction period. As such, there will be an impact on other road users and likely fuel providers and businesses along the main routes. As such, these stakeholders will be consulted with prior to heavy periods of traffic.

2. **Other interested parties;** people / entities that are interested in the Project and / or could affect the Project in some way, namely:

- *Central Government* – This stakeholder consists of the Ministry of Environmental and Forestry who is considered as having the most crucial role in the AMDAL approval process.
- *Provincial/Regional Government* - This stakeholder group consists of agencies under the administration of West Java Province Government and Karawang, Bekasi and Subang Regency Government. These government agencies have an important role in the AMDAL approval process.
- *Law Enforcement Agency* – This stakeholder group includes the District Sector Police and District Military Command of Cilamaya Wetan, Cilamaya Kulon, Tempuran, Pedes, Rawamerta, Kedungwaringin, Cikarang Timur and Karang Bahagia.
- *National Level Non-Governmental Organizations* – This stakeholder group consists of national or local based level NGOs namely Wahana Lingkungan Hidup Foundation (WALHI). Through various media coverage this NGO has actively observed the development of infrastructure projects in Indonesia including the development of various power plants to ensure its development in accordance with environmental and social norms.

- **Local Level Non-Governmental Organization** - This stakeholder group consists of local-based community organizations namely Karang Taruna (Local Youth Organization), Gerakan Masyarakat Bawah Indonesia (GMBI), Badan Pembinaan Potensi Keluarga Besar Banten (BPKB); Ikatan Putra Daerah (IKAPUD); and Pemuda Pancasila (PP). These stakeholders were assessed through information provided by a number of head villages interviewed during the baseline data collection phase.
- **Private Companies** - This stakeholder group although not directly impacted may have a vested interest in the Projects planned activities. This may include local contractors interested in procuring services to the Project and those potentially neighboring the site (e.g. SKG Cilamaya).
- **General Public** - This stakeholder group is wide encompassing a broad range of people largely those residing outside the Project area. Interests may be related to employment, environmental protection etc.

4.2 **VULNERABLE GROUPS**

Stakeholder identification and engagement also seeks to identify any potentially vulnerable or disadvantaged individuals and groups in local communities. Vulnerable groups are those who may be differently or disproportionately affected by the Project, or whose situation may mean that special care is needed to engage them in consultation and disclosure activities. They may include female headed houses, the elderly, disabled people or those residing below the poverty line.

The vulnerable groups' within this context were identified by ERM during fieldwork for stakeholder consultation as part of ESIA baseline data collection. Such vulnerable groups include:

1. *Skewer Maker Female Group*

During the field assessment, ERM identified female groups in Cilamaya village working as skewer makers earning around IDR 25,000 per day thus living below the poverty line (if only counting this activity as the single source of income in the household). However, most skewer makers have other members of their household who are working and generating income for the family. This group is also under represented in public activities/ consultation as their time is fully occupied with the skewer making activity and domestic chores, in addition to the fact that generally men adopt the role of representing family in public activities in this region.

2. *Owners of Kiosks Next to the CCGT Plant*

The Project is located next to the land owned by *State Water Department* (Badan Pengairan), where a group of community members reside without legal land deeds. Many of the families living in the location generate income by selling food or other daily necessities in a small kiosk in their house. Their location is easily accessed

through the existing road built by and dedicated for the Gas Compression Station. These groups will be negatively affected if their customers decrease significantly due to impact of project activities such as limited or restricted access to the area.

3. Communities Residing within the Protected Forest

This group consists of people from Muara village who live / reside within the protected forest area. The main source of livelihood of this community is farming and fish ponds. This community will likely be impacted due to the development of Jetty and construction of the access road from the Power Plant to the jetty etc. Further details on the vulnerable groups will be presented in the ESIA document. However, it is planned that in future Project consultation the process is inclusive of these groups; providing a channel for them to voice their concerns and perceptions as well as receives information on the Project.

4.3 STAKEHOLDER ANALYSIS

Based on the results of the consultations, stakeholders were analyzed considering their interest, influence or power and perception in relation to the Project and whether they are a party who will be affected or who will be affecting the Project (temporary and permanently). **Table 4-1** outlines this Stakeholder Analysis.

The matrix is a dynamic tool that should be periodically updated as and when interest and / or influences of each stakeholder change over the Project implementation period.

Stakeholder concerns have been gathered during the AMDAL and ESIA processes and recorded (as presented in this SEP). Consultation and disclosure activities will continue to be implemented by the Project throughout the pre-construction, construction and operation phases. Concerns and issues will be managed by the Sponsors' community relations team, and where necessary, the Project management personnel through transparent consultation and disclosure of relevant project information. All activities will be formally recorded. Where necessary issues will be recorded in the grievance mechanism and addressed through the due processes set out in **Chapter 7**.

Table 4-1 Stakeholder Analysis

No.	Stakeholder Group	Stakeholder	Interest	Power or Influence	Perception
1.	Central Government	Ministry of Environmental and Forestry	<ul style="list-style-type: none"> To become an ad-hoc partner for the Project to fulfill government requirements on administration and business permit / license; and Project to contribute in the development of local economy whilst managing its environmental and social issues properly. 	Legal and formal position in the Central Government level. Through the Environmental Agency have the authority to monitor Project environmental and social performance based on AMDAL. Should any non-compliance occur the Government has the authority to stop all activities related to the Project.	<i>Positive</i> Supportive, the Project is part of a regional development program. As long as it meets the regulations it will bring economic development for the local area.
1.	Provincial / Regencies Government	<ul style="list-style-type: none"> Environmental Agency (DLHK) of Karawang Regency; Bekasi dan Karawang Energy and Mineral Resources Agency; Kanwil BPN (National land Agency in Jawa Barat Province); Development Planning Agency at Sub-National Level (BAPPEDA); Department of Industry and Commerce; Department of Spatial Planning; Directorate of Sea Spatial Planning; and Directorate General of Sea Spatial Management. 	<ul style="list-style-type: none"> To become an ad-hoc partner for the Project to fulfill government requirements on administration and business permit / license; and Project to contribute in the development of local economy whilst managing its environmental and social issues properly. 	Legal and formal position in the Provincial and Regencies Government level. Through the Environmental Agency have the authority to monitor Project environmental and social performance based on AMDAL. Should any non-compliance occur the Government has the authority to stop all activities related to the Project.	<i>Positive</i> Supportive, the Project is part of a regional development program. As long as it meets the regulations, it will bring economic development for the local area.

No.	Stakeholder Group	Stakeholder	Interest	Power or Influence	Perception
2.	Sub-District / Local Government	Head of Districts of: <ul style="list-style-type: none"> • Cilamaya Wetan; • Tempuran; • Cilamaya Kulon; • Cilebar; • Kutawaluya; • Rawamerta; • Rengasdengklok; • Karawang Barat; • Kedung Waringin; • Cikarang Timur; and • Karang Bahagia 	Project to contribute to the local / village social and economic development through providing opportunity for local workforce and social investment Programs.	Formal position as the head of sub-district and usually engaged by the Project in relation to social investment, labor issues and general community engagement.	<i>Positive</i> Supportive; The Project is part of a regional development program. As long as it meets the regulations, it will bring economic development for the local area.
3.	Law Enforcement Agency	District Sector Police and District Military Command of: <ul style="list-style-type: none"> ▪ Cilamaya Wetan; ▪ Cilamaya Kulon; ▪ Tempuran; ▪ Pedes; ▪ Rawamerta ▪ Kedungwaringin; ▪ Cikarang Timur; and ▪ Karang Bahagia 	To become strategic partner in terms of providing security to Project's assets and work with the Project to contribute maintaining community safety and security.	Formal position as the Sub-District level authorities and these agencies enforce the country's national and local laws.	<i>Positive</i> Supportive as long as it meets the regulations and bring economic and community development for the local area.
4.	Host Communities	<ul style="list-style-type: none"> • Community of Cilamaya village; • Head of the 33 project affected villages and as the representative of the village residents. 	Optimizing the beneficial impacts of the Project such as providing community development program for the affected communities, support improvement and maintenance of village infrastructure, optimizing and	Formal position as the village authorities and considered to be the representative of the community which can easily influence the perception of community toward the Project.	<i>Positive</i> Supportive to the Project as long as the Project supports the local economy and manages it adverse impacts.

No.	Stakeholder Group	Stakeholder	Interest	Power or Influence	Perception
			prioritizing villagers as project workers especially during the construction and Project to minimize all the potential adverse impacts.		
5.	Traditional Institutions	Community Leaders of Sub-Districts of: <ul style="list-style-type: none"> ▪ Cilamaya Wetan; ▪ Cilamaya Kulon; ▪ Tempuran; ▪ Pedes; ▪ Rawamerta ▪ Kedungwaringin; ▪ Cikarang Timur; and ▪ Karang Bahagia 	Project to contribute to the local / village social and economic development in terms of providing opportunities for local employment, improving the quality of life of the community, contributing in maintaining security in the impacted villages and to support local infrastructure development and maintenance.	These are key figures that have a strong legitimacy from the people as representatives of the community	<i>Positive</i> Supportive to the Project as long it provides benefits for the community interest.
6.	Landowners	Landowners impacted by the development of the following project's component: <ul style="list-style-type: none"> ▪ 500 KV High Voltage Transmission Line; ▪ Access road; ▪ Project's Jetty; and ▪ Onshore pipeline 	<ul style="list-style-type: none"> • Striving for a fair price for land acquisition and getting support from Project to improve village development; • Land compensation paid timely manner; and • Project to provide an opportunity for work for the land owners impacted by the Project or their families. 	If land compensation issues are not resolved, they could lead to social unrest and may delay the Project's construction.	<i>Positive</i> Supportive to the Project as long as the Project provides fair compensation for the displaced community, and supports the local economy and manages its adverse impacts.
7.	National Level Non-Governmental Organizations	Yayasan Wahana Lingkungan Hidup (WALHI)	Supportive as long as it meets the regulations and bring economic and community development for the local area.	Has an extensive network nationwide with other NGOs, academia and the media so it is very easy to spread news or	<i>Positive</i> As long as the Project supports the local economy and

No.	Stakeholder Group	Stakeholder	Interest	Power or Influence	Perception
				information related to Project's activities.	manages its environmental adverse impacts.
8.	Local Level Non-Governmental Organization	<ul style="list-style-type: none"> • Karang Taruna (Local Youth Organization); • Gerakan Masyarakat Bawah Indonesia (GMBI); • Badan Pembinaan Potensi Keluarga Besar Banten (BPKB); • Ikatan Putra Daerah (IKAPUD); and • Pemuda Pancasila (PP). 	To gain economic benefit from the existence of various companies within the sub-district and regency area.	Local youth organizations are quite active in the village organizing social activities involving youth such as sport and religious events. These organizations have a large potential to influence youth attitude towards the project.	<i>Positive</i> Supportive to the Project as long as the organization received benefits from the Project otherwise will tend to oppose the Project.
9.	Former cultivators of Pertagas land (Land User)	Farmers and local residents who conducted farming activities on Pertagas land that will be used for power plant development	Project to provide employment opportunity to the impacted farmers or their family.	These are communities of land user at the local level in Cilamaya village cultivating the Pertagas land as their main source of income / livelihood.	<i>Positive</i> Supportive to the Project as long as the particular community received benefits from the Project.
10.	Vulnerable Group	<ul style="list-style-type: none"> • Female Craftsmen • Owners of Stalls Located around the Project area in Cilamaya village. 	Project to provide employment opportunity to the impacted community or their family and to be involved in the Project CSR / Social Investment Program	These are normally communities at the local level who sell products or open up small scale businesses as the only source of income. Although no request for compensation has been made it may result in livelihood impacts.	<i>Positive</i> Supportive to the Project as long as the particular community received benefits from the Project.
11.	Local Small Medium Enterprises Group	Local Entrepreneur from Cilamaya Wetan and Manggung Jaya Village	Expectation benefits from the Project through assistance in the form of providing capital and	These are normally communities at the local level who open up small-scale business as source of income.	<i>Positive</i> Supportive and very positive towards the Project.

No.	Stakeholder Group	Stakeholder	Interest	Power or Influence	Perception
			technical assistance for business and economic development.		Sees the project as a big opportunity to develop his businesses in the area.
12.	Squatters	Owners of Kiosks next to the CCGT Plant	Expectation of benefits from the Project through assistance in the form of providing capital and technical assistance for business and economic development.	These communities who own their kiosks however do not have legal rights over the land.	<i>Positive</i> Supportive and very positive towards the Project. Sees the project as a big opportunity to develop his businesses in the area. However, this may change if compensation is not provided.
13.	Private and Public Users of the Marine Environment	<ul style="list-style-type: none"> • Oil and gas companies • Shipping companies • Port authorities • Tourism operators • Commercial fishing operators 	To be regularly informed of activities that may affect their activities, to collaborate with the Project to provide employment opportunity to the impacted community, to be in the Project CSR / Social Investment and to support local and regional economic development in general.	Public and private companies operating strictly under the Indonesian law and regulation.	<i>Positive</i> Supportive, the Project is part of a regional development program.

5 PREVIOUS STAKEHOLDER ENGAGEMENT ACTIVITIES

5.1 *PUBLIC CONSULTATION AS PART OF REGULATORY ENVIRONMENTAL IMPACT ASSESSMENT (AMDAL) PROCESS*

One of the focuses of the Project's historical consultation was through its public consultation which is required as part of the Indonesian regulatory EIA (AMDAL) process. This has included discussions and consultation meetings with the local, provincial and national level authorities, selected impacted community representatives and other relevant Project stakeholders. The consultation meeting covered aspects of the design and timeline, permitting, project area / boundaries, negative impacts of the Project and local economic development / workforce opportunities.

JSP has also undertaken a number of consultation activities in the project-planning phase, largely with various government agencies. The key activities undertaken to date are presented in **Table 5-2**.

Table 5-3 outlines the public consultation conducted to date as part of the AMDAL process.

5.2 *CONSULTATIONS FOR THE ESIA PROCESS*

This section outlines one of the main phases of community consultation during the social-economic baseline data collection for the ESIA. The socio-economic baseline data and information collected will be the basis for conducting the Project impact assessment (AMDAL and ESIA).

Consultations were conducted by teams of ERM and sub-consultants on behalf of the Project. Face to face interviews, one-on-one surveys samples of affected peoples and focus group discussions were the main approach undertaken during the fieldwork. In addition consultations were undertaken as part of the ESIA disclosure with the community in Cilamay, Blanakan and Muara as well as villages along the transmission line.

The Project has provided copies of the RKL RPL to each of the impacted districts. The Project is also conducting ESIA disclosure focusing on the Project impacts and mitigation as well as presenting the schedule and the grievance mechanism. The key points raised by stakeholders in the previous discussions will be address focussing on recruitment and employment and business opportunities, the management of environmental and societal impacts onshore and offshore, the grievance mechanism and the implementation of the CSR and LRP activities.

The Project intends to continue the consultation and disclosure process throughout construction and operations ensuring it targets all those impacted (temporarily and permanently) including fisher folk in Blanakan and Muara, NGOs active in the area and the community of Cilamaya. It will also engage with those identified as potentially vulnerable including the elderly and females and those considered disadvantaged.

Concerns were raised related to the permanent houses below the transmission line where rerouting is not possible (*Chapter 9*). In response the Project undertook an engagement session in July 2018 inviting 10 people who had received compensation due to the right of way impact. The session was led by Kwarza explaining the compensation scheme for the free space according to the applicable regulations. The session was then followed by a question and answer period. Overall the attendees were satisfied with the compensation received however raised concerns related to risks of electrical shock and health issues due to magnetic fields. The H&S design mitigations were discussed and the grievance mechanism shared along with a commitment for continuing consultation during construction.

Table 5-4 provides a summary of the consultation activities undertaken during the ESIA development. The list of respondents consulted is presented in **Annex 4**.

5.3 *CONSULTATIONS DURING THE LAND ACQUISITION PROCESS*

JSP has engaged a local land surveying consultant to manage all its land acquisition activities; including identification of land owners, eligibility and assets, consultation of Project activities, the compensation and disbursement process. The land owners along the transmission line have been engaged with and provided with information on the Project activities (specifically the land requirements), and compensation has taken place. Consultation with land owners along the access road and pipeline right of way have also been completed, led by Pertamina. The Project has also engaged with the landowners impacted by the transmission line right of way to discuss the compensation process. This has included discussions with the landowners, district and village authorities, local police and military and community leaders.

Table 5-5 provides a summary of the consultation activities undertaken related to the land acquisition process.

A summary of the socialization and consultation activities undertaken related to the compensation scheme is also provided in **Table 5-5**. ERM was also provided with the Minutes of Meetings of the consultations that are presented in **Annex 7** of this SEP. Consultation data provided as part of the land acquisition process is further discussed and presented in the Resettlement Plan (**Annex I**).

There are a number of key differences between the consultation required for the AMDAL and the activities required for the ESIA; in general the ESIA consultation and disclosure activities are more in-depth and broad. **Table 5-1** presents the key gaps between the two processes and requirements.

Table 5-1 *Consultation Requirements and Gaps between the AMDAL and ESIA*

AMDAL Consultation/Disclosure Requirements	ESIA Consultation/Disclosure Requirements
<ul style="list-style-type: none"> The formal AMDAL public consultation is conducted via a public newspaper announcement followed by public consultation sessions (4) in the key communities. 	<ul style="list-style-type: none"> Stakeholder consultation commences during the ESIA baseline study phase, followed by disclosure of the ESIA.
<ul style="list-style-type: none"> The Public consultation session are recorded, with minutes, photographs and list of attendees presented in the KA ANDAL and ANDAL 	<ul style="list-style-type: none"> All stakeholder consultation sessions are recorded in a stakeholder engagement log with meeting minutes throughout the project lifecycle. The ESIA consultation is presented in the SEP and the remaining activities are recorded and tracked in the stakeholder engagement database.
<ul style="list-style-type: none"> Consultation is required as part of the RKL RPL process on a needs basis 	<ul style="list-style-type: none"> Stakeholder consultation is carried out proactively throughout all the project phases with all project affected people
<ul style="list-style-type: none"> No consultation plan is required 	<ul style="list-style-type: none"> The ESIA requires a formal Stakeholder Engagement Plan is developed and implemented by the Project. The SEP is a live document that is regularly updated by the Project.
<ul style="list-style-type: none"> The public consultations are by invite only with selected government, community, NGO representatives. 	<ul style="list-style-type: none"> The ESIA requires consultation and disclosure activities for all project stakeholders.
<ul style="list-style-type: none"> No specific request or guidance for consultation materials 	<ul style="list-style-type: none"> The ESIA consultation materials should be culturally appropriate, developed in a clear manner and in the local language.
<ul style="list-style-type: none"> No specification to consult with vulnerable groups 	<ul style="list-style-type: none"> The ESIA requires consultation with vulnerable groups (eg ethnic minorities), and to consider gender in all project consultation activities
<ul style="list-style-type: none"> No specific requirement for community relations personnel 	<ul style="list-style-type: none"> The Project is expected to recruit qualified community relations personnel to manage the grievances and conduct formal and informal community consultation activities through all phases of the project
<ul style="list-style-type: none"> No requirement for a grievance mechanism 	<ul style="list-style-type: none"> The Project is required to develop and implement a grievance mechanism and disclose this widely to the project affected people

5.4 *SUMMARY OF CONSULTATION TO DATE*

Stakeholder identification and issues analysis is an important part of stakeholder engagement planning; it is a key step in informing the strategies that will be applied during the consultation. This stakeholder identification aims to build understanding of the Project's stakeholders to support the follow up on activities required.

The following provides a summary of the stakeholder issues identified during public consultation as part of the AMDAL and ESIA:

- Limited project information disclosure;
- Opportunity for local workers to be employed by the Project;
- Project to support local / village infrastructure development and community empowerment through education and training;
- Project to contribute to local economic development particularly to support the development of local small medium enterprises and to provide Corporate Social Responsibility program in general;
- Project to contribute in maintaining security within the community; to involve them in project security;
- Land acquisition and compensation;
- Project to contribute in improving the local community health;
- Project to manage environmental adverse impact adequately (i.e. waste management, dust, noise and smoke disturbance);
- Develop an Emergency Response Plan related to accident, gas leaking and explosion;
- Compensation for disruption to fishing ground areas caused by Project activities at sea;
- Sea restriction zone affecting traditional fishing lane and sea traffic signage;
- Project to ensure marine traffic safety and security for the fisherman communities;
- Project socialization particularly for activities impacted fisherman communities in Muara Baru and Pasir Putih area; and
- Project to provide access to land above where the new pipeline is going to be planted to be used for livelihood purposes.

One of the key mitigation actions will be effective engagement with key stakeholders to address the issues and concerns set out in this Report. This will not only support the Project in addressing potential stakeholder issues but assist in the dissemination of accurate project information whilst providing a two way dialogue between the Project and its stakeholders. Further, it will support in building stronger stakeholder relations. The Project is proposing to conduct regular and informed consultation activities during the Project lifecycle to discuss the proposed Project activities, employment and procurement opportunities, the land acquisition process, entitlements and compensation measures, Project impacts and proposed mitigation measures and broader Project benefits.

The Project has disclosed the ESIA focusing on discussing the Project impacts and mitigation as well as presenting the schedule and the grievance mechanism. The Project intends to continue the consultation and disclosure process throughout construction and operations ensuring it targets all those impacted (temporarily and permanently) including fisher folk in Blanakan and Muara, NGOs active in the area and the community of Cilamaya. It will also engage with those identified as potentially vulnerable including the elderly and females and those considered disadvantaged.

Table 5-2 provides the overall summary of consultation conducted by the Project to date.

Table 5-3 sets out the ESIA consultation and **Table 5-4** the consultation undertaken for the AMDAL whilst **Table 5-5** provides an over of consultation undertaken for the land acquisition process.

Table 5-2 Summary of Consultation to Date

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
Provincial / Regencies Government	Karawang Regency, Cilamaya Wetan and Tempuran District	<ol style="list-style-type: none"> 1. Environmental Agency (DLHK) of Karawang Regency; 2. Bekasi and Karawang Energy and Mineral Resources Agency; 3. Kanwil BPN (National land Agency in Jawa Barat Province; 4. Development Planning Agency at Sub-National Level (BAPPEDA); 5. Department of Industry and Commerce; 6. Department of Spatial Planning; 7. Directorate of Sea Spatial Planning; and 8. Directorate General of Sea Spatial Management. 	<ul style="list-style-type: none"> • Project description; • Regulations related to construction of power plant; • Concept of Partnership offered to community and government by the project. This concept to optimize the beneficial impact such as community development as well as prioritizing local workers and minimizing adverse impacts to both the environment and community. 	<ul style="list-style-type: none"> • Potential hazards caused by the project such as radiation due to electromagnetic fields from the Transmission Line; • Community accessibility to the Project site / location; • Clarification on land acquisition process and compensation for impacted landowners; • Impact on health and sanitation; and • Impact on water supply / availability. 	<ul style="list-style-type: none"> • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans to be implemented throughout the Project cycle. • Land acquisition was conducted on a willing-buyer and a willing seller principle for the transmission line tower footing and adhere to Permen ESDM no 38/2013 on the TL RoW
	Bekasi Regency, Cikarang Timur District	Environment Agency of Bekasi Regency	<ul style="list-style-type: none"> • ANDALALIN (Traffic Impact Assessment) will be separated from the AMDAL, this is based on the government regulation; • Disclosure of project information including timeline; and • Disclosure of land acquisition process. 	<ul style="list-style-type: none"> • Compensation for land acquisition will be provided for loss of land, loss of assets including house / building and crops; • Clarification on potential hazards caused by the project such as radiation due to electromagnetic fields from the Transmission Line; 	<ul style="list-style-type: none"> • Land acquisition was conducted on a willing-buyer and a willing seller principle for the transmission line tower footing and adhere to Permen ESDM no 38/2013 on the TL RoW • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
				<ul style="list-style-type: none"> • Opportunity for local workforce to be involved in the Project; • Community accessibility to the Project site / location; and • Impact to community health particularly related to the Transmission Line. 	<p>detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans to be implemented throughout the Project cycle.</p> <ul style="list-style-type: none"> • The project is committed to maximize the local employment opportunity where feasible.
District / Local Government	Karawang Regency	Head of Districts of: 1. Cilamaya Wetan; 2. Cilamaya Kulon; 3. Tempuran; 4. Cilebar; 5. Rawamerta;	<ul style="list-style-type: none"> • Project design and development, impacts and opportunities; • Project local labor requirements and procurement mechanism; • Opportunities for Project involvement in community development. 	<ul style="list-style-type: none"> • Project local labor requirements and procurement mechanism; • Dissemination of AMDAL and RKL RPL documents; • Project community Grievance Mechanism; and • Coordination with local security forces. 	<ul style="list-style-type: none"> • The project is committed to maximize the local employment opportunity where feasible. This will be managed further by the EPC in close coordination with local government authorities • AMDAL and RKL-RPL documents will be disseminated • The Project will establish grievance mechanism and socialize it to the community • The project will coordinate with local security forces.
	Bekasi Regency	Head of Districts of: 1. Cikarang Timur; and 2. Karang Bahagia	<ul style="list-style-type: none"> • ANDALALIN (Traffic Impact Assessment) will be separated from the AMDAL, this is based on the government regulation; 	<ul style="list-style-type: none"> • Clarification on potential hazards caused by the project such as radiation due to electromagnetic fields from the Transmission Line; 	<ul style="list-style-type: none"> • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
			<ul style="list-style-type: none"> • Disclosure of project information including timeline; and • Disclosure of land acquisition process. 	<ul style="list-style-type: none"> • Community accessibility to the Project site / location; • Impact to community health particularly related to the Transmission Line; • Opportunity for local workforce to be involved in the Project; and • Compensation for land acquisition will be provided for loss of land, loss of assets including house / building and crops. 	<p>relevant management plans to be implemented throughout the Project cycle.</p> <ul style="list-style-type: none"> • Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018 and will continue during the month of July and August to discuss the Project impacts.
Law Enforcement Agency	Karawang Regency	<p>District Sector Police and District Military Command of:</p> <ol style="list-style-type: none"> 1. Cilamaya Wetan; 2. Cilamaya Kulon; 3. Tempuran; 4. Pedes; 5. Rawamerta 6. Kedungwaringin; 7. Cikarang Timur; and 8. Karang Bahagia 	Project design and development, impacts and opportunities	<ul style="list-style-type: none"> • Dissemination of AMDAL and RKL RPL documents; • Disclosure of Project Land Acquisition Lack of engagement and coordination with local security forces; • Project local labor requirements and procurement mechanism; and • Opportunity for partnership related to security aspect of the project assets and safety throughout the construction and operation of the Project. • Lack of socialization on Project information. 	<ul style="list-style-type: none"> • AMDAL and RKL-RPL documents will be disseminated • Land acquisition process has been conducted in a close coordination with village authorities • The project is committed to maximize the local employment opportunity where feasible. • The project will coordinate with local security forces. • Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
					and will continue during the month of July and August to discuss the Project impacts.
	Bekasi Regency	District Sector Police and District Military Command of: 1. Kedungwaringin 2. Cikarang Timur 3. Karang Bahagia	<ul style="list-style-type: none"> • ANDALALIN (Traffic Impact Assessment) will be separated from the AMDAL, this is based on the government regulation; • Disclosure of project information including timeline; • Opportunity for local workforce to be involve in the Project. 	<ul style="list-style-type: none"> • Disclosure of land acquisition process; Compensation for land acquisition will be provided for loss of land, loss of assets including house / building and crops; • Clarification on potential hazard caused by the project such as radiation due to electromagnetic fields from the Transmission Line; • Community accessibility to the Project site / location; and • Impact to community health particularly related to Transmission Line. 	<ul style="list-style-type: none"> • Land acquisition was conducted on a willing-buyer and a willing seller principle for the transmission line tower footing and adhere to Permen ESDM no 38/2013 on the TL RoW • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans to be implemented throughout the Project cycle.

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
Host Community	Karawang Regency, Cilamaya Wetan District, Cilamaya Village	<ol style="list-style-type: none"> 1. Host Communities of Cilamaya village; 2. Head of project affected villages and representative of the village residents 	<ul style="list-style-type: none"> • Disclosure of project information including timeline; • Opportunity for local workforce to be involve in the Project. 	<ul style="list-style-type: none"> • Lack of socialization on project information; • Environmental, Health, Safety, and Security issue; • Economic development; • Disclosure of land acquisition process; • Infrastructure development; • Local employment; and • CSR program. 	<ul style="list-style-type: none"> • Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018 and will continue during the month of July and August to discuss the Project impacts, mitigations, the grievance mechanism and project opportunities. • Land acquisition was conducted on a willing-buyer and a willing seller principle for the transmission line tower footing and adhere to Permen ESDM no 38/2013 on the TL RoW
Traditional Institutions	Karawang Regency	Community Leaders of Sub-Districts of: <ol style="list-style-type: none"> 1. Cilamaya Wetan; 2. Cilamaya Kulon; 3. Tempuran; 4. Pedes; 5. Rawamerta 	<ul style="list-style-type: none"> • Disclosure of Project Grievance Mechanism; and • Opportunities for Project involvement in local economy and community development. 	<ul style="list-style-type: none"> • Opportunity for Project to support social or community events such as Independence Day celebration and cultural events. 	<ul style="list-style-type: none"> • The project will develop a community development plan/ CSR programs where support for such events can be further discussed.
	Bekasi Regency	Community Leaders of Sub-Districts of: <ol style="list-style-type: none"> 1. Kedungwaringin; 2. Cikarang Timur; and 3. Karang Bahagia 	<ul style="list-style-type: none"> • ANDALALIN (Traffic Impact Assessment) will be separated from the AMDAL, this is based on the government regulation; 	<ul style="list-style-type: none"> • Compensation for land acquisition will be provided for loss of land, loss of assets including house / building and crops; • Clarification on potential hazard caused by the Project such as radiation due to 	<ul style="list-style-type: none"> • Land acquisition was conducted on a willing-buyer and a willing seller principle for the transmission line tower footing and adhere to Permen ESDM no 38/2013 on the TL RoW

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
			<ul style="list-style-type: none"> • Disclosure of land acquisition process; and • Disclosure of project information including timeline. 	<p>electromagnetic fields from the Transmission Line;</p> <ul style="list-style-type: none"> • Community accessibility to the Project site / location; • Opportunity for local workforce to be involve in the Project; and • Impact to community health particularly related to Transmission Line. 	<ul style="list-style-type: none"> • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans to be implemented throughout the Project cycle. • The Project has commenced the ESIA disclosure activities discussing project impacts, mitigations, the grievance mechanism and project opportunities and has prepared a non-technical summary to share with its stakeholders.
Former cultivators of Pertagas land	Karawang Regency, Cilamaya Wetan District, Mekar Maya Village	7 farmers and local residents who conducted farming activities on Pertagas land that will be used for power plant development	<ul style="list-style-type: none"> • Project design and development, impacts and opportunities; • Opportunities for Project involvement in community development. And • Land replacement for farming activities. 	<ul style="list-style-type: none"> • Dissemination of AMDAL and RKL RPL documents; • Project local labor requirements and procurement mechanism; • Project community Grievance Mechanism; and • Economic development of the farmer through initiation livestock cooperative; and • Social or community events such as Independence Day 	<ul style="list-style-type: none"> • AMDAL and RKL-RPL documents will be disseminated • The project is committed to maximize the local employment opportunity where feasible. This will be managed further by the EPC in close coordination with local government authorities • The Project has commenced the ESIA disclosure activities discussing project impacts, mitigations, the grievance mechanism and project

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
				celebration and cultural events.	opportunities. This group will be eligible to participate in the Project's CSR program.
Vulnerable Group	Cilamaya Village	Female Craftsmen and Owners of Stalls Located around the Project area in Cilamaya village.	<ul style="list-style-type: none"> • Project design and development, impacts and opportunities; and 	<ul style="list-style-type: none"> • Opportunities for Project involvement in local economy and community development particularly involving the identified vulnerable group; • Disclosure of Project Grievance Mechanism. • Project local labor requirements and procurement mechanism and opportunity for local workforce to be involved in the Project. 	<ul style="list-style-type: none"> • The project is committed to maximize the local employment opportunity where feasible. This will be managed further by the EPC in close coordination with local government authorities
Local Small Medium Enterprises Group	Karawang Regency, Cilamaya Wetan District, Cilamaya Village	23 Local Entrepreneurs	<ul style="list-style-type: none"> • Project design and development, impacts and opportunities; • Project local labor requirements and procurement mechanism; • Project community Grievance Mechanism; and • Opportunities for Project involvement in 	<ul style="list-style-type: none"> • Lack of socialization on project information; • Infrastructure development; • Capital for small-medium enterprises; and • CSR program; and local employment. 	<ul style="list-style-type: none"> • Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018 and will continue during the month of July and August to discuss the Project impacts mitigations, the grievance mechanism and project opportunities. • The project will develop a community development plan/ CSR programs where support

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
			community development.		for communities can be further discussed.
	Karawang Regency, Cilamaya Kulon District, Manggung Jaya Village	1 Local Entrepreneur	<ul style="list-style-type: none"> • Project design and development, impacts and opportunities; • Project local labor requirements and procurement mechanism; • Project community Grievance Mechanism; and • Opportunities for Project involvement in community development. 	<ul style="list-style-type: none"> • Funding assistance on small-medium enterprise and infrastructure development; and • Local employment training. 	<ul style="list-style-type: none"> • The project will develop a community development plan/ CSR programs where support to the communities can be further discussed.
Fishermen Group	Karawang Regency, Cilamaya Wetan District, Muara Village	16 Sea fishermen	<ul style="list-style-type: none"> • Project design and development, impacts and opportunities; • Project local labor requirements and procurement mechanism; • Project community Grievance Mechanism; and • Opportunities for Project involvement in community development. 	<ul style="list-style-type: none"> • Limited information / socialization on Project development. • Sea restriction zone; and Marine traffic safety and security particularly for the local fishermen. • A clear socialization as well as a warning indicator that should or should not be passed, for example by installing buoys and lights. 	<ul style="list-style-type: none"> • Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018 and will continue during the month of July and August to discuss the Project impacts mitigations, the grievance mechanism and project opportunities. • More detail explanation on health and safety in the sea area during the construction and operation will be provided during the ESIA disclosure to

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
		5 Fishpond fishermen	<ul style="list-style-type: none"> A clear and detailed calculation of the compensation mechanisms. 	<ul style="list-style-type: none"> Access for farmer to utilize land above the pipeline RoW for farming activities. Limited information / socialization on Project development. 	<p>the fishermen by the end of July 2018.</p> <ul style="list-style-type: none"> Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018 and will continue during the month of July and August to discuss the Project impacts mitigations, the grievance mechanism and project opportunities. Specifically discussions will take place on the access road construction and right of way and mitigation measures. The grievance mechanism will also be discussed along with the compensation process and eligibility.
	Subang Regency, Blanakan District, Blanakan Village	10 Fishermen	<ul style="list-style-type: none"> Community development program for the affected fishermen communities / group. 	<ul style="list-style-type: none"> Limited information / socialization on Project development; Compensation for sea restriction zone affecting the fishermen fishing ground Disruption on fishing activities Sea restriction zone Marine traffic safety. 	<ul style="list-style-type: none"> Public consultations for AMDAL have been conducted and ESIA disclosure activities have been started in June 2018 and will continue during the month of July and August to discuss the Project impacts mitigations, the grievance mechanism and project opportunities. More detail explanation on Project impacts to fishermen related to fishing activities,

Stakeholder Group	Location	Stakeholder	Key Message	Issues Raised	Project Response
					<p>health and safety during the construction and operation will be provided and discussed during the ESIA disclosure to the fishermen by the end of July 2018.</p>

Table 5-3 Public Consultation as part of Regulatory EIA (AMDAL) Process

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
Karawang Regency	Government Consultation	1. Department of Investment and One Stop Integrated Service	<ul style="list-style-type: none"> • Consultation related to all permits required under the Karawang Regency administration. 	NA	
22 February 2017; Karawang Regency	Government Consultation	1. National Land Agency	<ul style="list-style-type: none"> • Application of Technical Recommendation to Land Authority 	NA	
17 March 2017; Cilamaya Wetan District, Karawang Regency	Public Consultation	<ol style="list-style-type: none"> 1. Environment Agency of Karawang 2. Police Sector of Cilamaya Wetan and Cilamaya Kulon District 3. District Command of Cilamaya Wetan and Cilamaya Kulon District 4. District Head of Cilamaya Wetan, and Cilamaya Kulon District 5. Village Head of Cilamaya, Sukatani, Tegal Urug, Sukamulya, and Manggung Jaya Village 6. Village Representatives of Cilamaya, Sukatani, Tegal Urug, Sukamulya, and Manggung Jaya Village 7. Representatives of Fisherman Forum 8. Representatives of NGO 	<ul style="list-style-type: none"> • Project description. • Regulations related to construction of power plant. • Concept of Partnership offered to community and government by the project. This concept to optimize the beneficial impact such as community development as well as prioritizing local worker and minimizing adverse impact to both environmental and social. 	<ul style="list-style-type: none"> • Clarification on potential hazards caused by the project such as radiation due to electromagnetic fields from the Transmission Line; and • Community accessibility to the Project site / location. 	<ul style="list-style-type: none"> • The impacts resulted from the Project are assessed in the AMDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans to be implemented throughout the Project cycle. • The Project completed the AMDAL process and a copy of the AMDAL has also been provided to the district. • Consultations are ongoing discussing potential impacts from the transmission line and mitigations along with the grievance mechanism.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
		9. UPTD Representatives of Cilamaya Wetan and Cilamaya Kulon District.			
23 March 2017; Tempuran Sub-District Office Hall, Karawang Regency	Public Consultation	<ol style="list-style-type: none"> 1.Environmental Agency (DLHK) of Karawang Regency 2. Police Office (Kepolisian Sektor) of Tempuran, Pedes and Rawamerta 3. District Military Command (Komando Rayon Militer) of Tempuran, Pedes and Rawamerta 4. Head of Tempuran, Cilebar and Rawamerta District 5. Head of Jayanegara, Pagadungan, Lemah Makmur, Mekar Pohaci, Tanjung Sari, Dayeuh Luhur, Sukaratu and Sukaraja Village 6. Representatives of Jayanegara, Pagadungan, Lemah Makmur, Mekar Pohaci, Tanjung Sari, Dayeuh Luhur, Sukaratu and Sukaraja Village 7. Representatives of Local Implementation Unit of Agriculture (UPTD Pertanian) of Tempuran, Cilebar and Rawamerta Village. 	<ul style="list-style-type: none"> • Project description; • Regulations related to construction of power plant; • Concept of Partnership offered to community and government by the project. This concept to optimize the beneficial impact such as community development as well as prioritizing local worker and minimizing adverse impact to both environmental and social; and • Land acquisition process and compensation for impacted landowners. 	<p>Clarification related to potential hazards caused by the project such as radiation due to electromagnetic fields from the Transmission Line;</p> <p>Community accessibility to the Project site / location;</p> <p>Project impact on health and sanitation; and</p> <p>Project impact on water supply / availability.</p>	<ul style="list-style-type: none"> • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans related to social, environment, and also health and safety to be implemented throughout the Project cycle. • The Project completed the AMDAL process and a copy of the AMDAL has also been provided to the district. • Consultations are ongoing discussing potential impacts from the transmission line and mitigations along with the grievance mechanism •
27 March 2017; Karawang Regency	Government Consultation	<ol style="list-style-type: none"> 1. Department of Investment and One Stop Integrated Service; 2. Regent Karawang. 	<ul style="list-style-type: none"> • Application of Location Permit 	NA	

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
20 April 2017; Cikarang Timur Sub-District, Bekasi Regency.	Public Consultation	<ol style="list-style-type: none"> 1. Environment Agency of Bekasi Regency 2. Police Sector of Kedungwaringin, Cikarang Timur, and Karang Bahagia Sub District 3. Military Rayon Command of Kedungwaringin, Cikarang Timur, and Karang Bahagia Sub District 4. Sub District Head of Cikarang Timur, and Karang Bahagia 5. Village Representatives of Karang Mekar, Mekarjaya, Karang Harum, Karangsari, Karang Rahayu, and Karang Setia Village 6. UPTD Representatives of Kedungwaringin, Cikarang Timur, and Karang Bahagia Sub District 7. Environmental activist around project (NGO) 	<ul style="list-style-type: none"> • ANDALALIN (Traffic Impact Assessment) will be separated from the AMDAL, this is based on the government regulation; • Disclosure of project information including timeline; and • Disclosure of land acquisition process. 	<ul style="list-style-type: none"> • Compensation for land acquisition will be provided for loss of land, loss of assets including house / building and crops; • Clarification on potential hazards caused by the project such as radiation due to electromagnetic fields from the Transmission Line; • Community accessibility to the Project site / location; • Opportunity for local workforce to be involved in the Project; and • Project impact to community health particularly related to Transmission Line. 	<ul style="list-style-type: none"> • Land acquisition will be conducted on a willing-buyer and a willing seller principle for the transmission line tower footing and adhere to Permen ESDM no 38/2013 on the TL RoW • The impacts resulted from the Project are assessed in the ANDAL document and mitigation measures are detailed in the RKL-RPL document. The Project is also doing ESIA and developing relevant management plans related to social, environment, and also health and safety to be implemented throughout the Project cycle. • Consultations are ongoing discussing potential impacts from the transmission line and mitigations along with the grievance mechanism
19 May 2017	Government Consultation	<ol style="list-style-type: none"> 1. Regent of Karawang 		<ul style="list-style-type: none"> • Barriers in spatial related issues need to be further discussed with the Coordinating Minister of Economy 	<ul style="list-style-type: none"> • Noted, this is part of the administrative process obtaining relevant permits.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
19 October 2017, Central Jakarta	MoEF Meeting to Discuss KA-ANDAL (EIA Terms of Reference)	<ol style="list-style-type: none"> 1. PT Pertamina; 2. PHE ONWJ; 3. Fisheries Department of Subang Regency; 4. Department of Manpower and Transmigration, Energy and Mineral Resources Agency (Mining and Mineral Agency) of Subang Regency; 5. Fisheries Department of Karawang Regency; 6. Department of Industry and Commerce of Karawang Regency; 7. Directorate of Sea Planning - Marine and Fisheries Ministry; 8. Energy and Mineral Resources Agency of West Java Province; 9. IPB (Bogor Agricultural University); 10. Environmental Health Directorate -Ministry of Health 11. Environmental Agency of West Java Province 12. Environmental Agency of Karawang Regency 13. Ministry of Energy and Mineral Resources 	<ul style="list-style-type: none"> • Land acquisition; • Socio-economic and Corporate Social Responsibility program; and 	<ul style="list-style-type: none"> • Opportunity for local workforce to be involved in the Project; • Project potential impact on health and safety aspect such as magnetic field, noise, vibration, traffic, and road disturbance; • Project potential impact on environment such as flooding, dust, and decreasing availability of clean water; • Sampling should be done in ANDAL document (aquatic biology) and provide the map of sampling point; • Mangrove survey should be based on reference Kep. Men LH No. 201/2004; • Location of development plant; Subang Regency (Blanakan, Sukasari, and Legonkulon District) should be added; • Jetty development should be coordinated 	<ul style="list-style-type: none"> • The Project has included the additional survey, baseline and impact assessment studies in the AMDAL and RKL RPL. The document has been approved by the MOEF. The final AMDAL has also been provided for reference.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
		14. UGM (University of Gadjah Mada); 15. UI (University of Indonesia); 16. Environmental Agency of Subang Regency; 17. Directorate General of Human Settlements – Ministry of Public Work ; 18. Regional Planning and Development Agency of Bekasi Regency; and 19. Regional Planning and Development Agency of West Java Province.		with KKP and DKP Jawa Barat; including LNG-FSRU; <ul style="list-style-type: none"> • Should be equipped with map of existing sea utilization; • Bathymetry should be checked with BIG (LIPI map) and Pushidros (Sea map) as secondary data; and • Impacts on fishermen communities. 	

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
9th November 2017; Sub-District of Blanakan, Subang Regency	Public Consultation	<ol style="list-style-type: none"> 1. Head of Muara Village; 2. Community Leaders of Muara Village; 3. Fishermen Group from TPI (Fish Auction) Samudera Mina, Muara Village; 4. Fishermen Ponds Group of Tanah Timbul Jaya, Muara Village; 5. Head of Blanakan Sub-District; 6. Head of Blanakan Village; 7. Blanakan Sub-District Police; 8. Marine and Air Police of Cilamaya Wetan and Blanakan Sub-Districts; 9. Fishermen Group of KUD Mandiri Mina Fajar Sidik, Blanakan Village; 10. Fishermen Group of Mina Bahari, Muara Ciasem Village; 11. Fishermen Group of Karya Baru, Cilamaya Girang Village; 12. Fishermen Group of Grinting, Jayamukti Village; 13. HNSI of Subang Regency; and 14. Community Leaders of Blanakan Sub-District. 	<ul style="list-style-type: none"> • Project to involve NGOs in Subang such as PNTI (Indonesian Association of Traditional Fishermen) to discuss issues or concerns related to fishermen. 	<ul style="list-style-type: none"> • Project to provide compensation to fishermen should there be damage to fishing gear due to the impact of project activities; • Project to establish regular communication with the affected communities particularly to the fishermen prior and during project implementation; • Construction of offshore pipelines does not interfere with the fishing activities; • Project to prioritize non-skilled local workforce to be employed in the project; and • Concerns related to impacts to the economy and livelihood of fishermen considering fishing is the key skill possessed to sustain livelihood. 	<ul style="list-style-type: none"> • The Project has developed a RP that sets out eligibility for compensation. It has also committed to early consultation to provide information on the construction activities, mitigations, and H&S measures that will be implemented. • The Project has established community grievance mechanism, and will continue to socialize it to the impacted community. • The Project will conduct fish catch survey to assess the impact of the Project on the marine species and fishermen's livelihood. • The Project is committed to maximize local employment opportunity where feasible. This will be further managed by EPC in a close coordination with local authorities.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
28 th February 2018: MoEF office in Central Jakarta	ANDAL and RKL-RPL Discussion with MoEF Technical Commission	<ol style="list-style-type: none"> 1. Directorate of Sea Planning - Marine and Fisheries Ministry; 2. IPB (Bogor Agricultural University); 3. Deputy of Spatial Planning and Strategic Area- Ministry of Economy 4. Directorate of Spatial Utilization- Ministry of Agriculture and Spatial Planning 5. Directorate of Oil and Gas - Ministry of Energy and Mineral Resources 6. Directorate of Marine Spatial Utilization – Ministry of Marine and Fisheries 7. Directorate of Onshore and Offshore Guard – Ministry of Transportation 8. Directorate of Port – Ministry of Transportation 9. Directorate of Public Work– Ministry of Public Work ; 10. Directorate General of Food-crops – Ministry of Agriculture 11. Environmental Health Directorate -Ministry of Health 	<ul style="list-style-type: none"> • Revise the ANDAL and RKL-RPL document by explaining all activities in an integrated concept. • Additional technical meeting 	<ul style="list-style-type: none"> • Project description is needed to be detail in dredging activities, thermal discharge, mass balance, waste balance, CCGT system, gas composition, air pollution control system, mobilization route, volume of cut and fill, land acquisition, local content, Hydrotest, crossing pipeline method, compensation mechanism, alternative on Transmission Line, substation, ERP, FSRU location, water balance and WWTP • Explain the spatial planning suitability with the recommendation from Ministry of Agriculture and Spatial Planning • Review the baseline data • Analyse the data which exceeding the 	The Project has included the additional survey, baseline and impact assessment studies in the AMDAL and RKL RPL. The document has been approved by the MOEF. The final AMDAL has also been provided for reference.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
		12. Hydrograph and Oceanography Center – Indonesian Navy Force 13. Directorate of Forest Management Area – Ministry of Environmental and Forestry 14. Directorate of Pollution and Damage Control of Offshore and Coastal – Ministry of Environmental and Forestry 15. Directorate of Air Pollution – Ministry of Environmental and Forestry 16. Directorate of Water Pollution – Ministry of Environmental and Forestry 17. Directorate of Hazardous and Non-Hazardous Waste Management - Ministry of Environmental and Forestry 18. Directorate of Impact Prevention - Ministry of Environmental and Forestry 19. UGM (University of Gadjah Mada); 20. UI (University of Indonesia);		threshold such as air quality <ul style="list-style-type: none"> Review the consistency of scoping and impact justification Review the thermal modelling Depth analysis on the jetty construction, hydro oceanography, coastal change, current model, erosion and sedimentation, air quality and noise, marine traffic, mobilisation of materials and equipment, Transmission Line, aquatic biota, TSS from pipeline deployment, and sea water quality Review the RKL-RPL Socialization with the impacted communities Review the maps and figure to be more informative 	
1 st March 2018;	ANDAL and RKL-RPL Discussion	1. Environmental Agency of West Java Province	<ul style="list-style-type: none"> Socialization to the impacted communities and related parties in 	<ul style="list-style-type: none"> Clarify the project description i.e. : Crossing Location on 	The Project has included the additional survey, baseline and impact assessment studies in the

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
MoEF office in Central Jakarta	with MoEF Appraisal Commission	<ol style="list-style-type: none"> 2. Energy and Mineral Resources Agency of West Java Province; 3. Transportation Agency of West Java Province; 4. Marine and Fisheries Department of West Java Province; 5. Fisheries Department of Subang Regency; 6. Department of Manpower and Transmigration, Energy and Mineral Resources Agency (Mining and Mineral Agency) of Subang Regency; 7. Environmental Agency of Subang Regency; 8. Environmental Agency of Karawang Regency; 9. Department of Industry and Commerce of Karawang Regency; 10. Fisheries Department of Karawang Regency; 11. IPB (Bogor Agricultural University); 12. Spatial Planning Agency of Bekasi 13. Environmental Agency of Bekasi Regency 14. NGO of Fisherman Group from Karawang 15. NGO of Fisherman Group from Subang 	<p>terms of the implementation of all activities.</p> <ul style="list-style-type: none"> • Considering the impacts on the protected fauna 	<p>the Transmission Line, Hazardous Waste management, Hazardous waste storage, pipeline deployment method, location of dumping area, site pile construction, batching plant, wastewater discharge to the sea, jetty, work opportunity for local people, dredging and ship specification</p> <ul style="list-style-type: none"> • Clarify the surrounding activities and its impact related to the project. Distance to the coral reef, fishing ground, fishponds, fish auction and agriculture area. • Clarify the project location to the spatial planning of West Java • Socialization to the impacted communities (fisherman, farmer) on the project activities and its impacts. • Depth Analysis on the coral reef, mangrove that is caused by jetty 	<p>AMDAL and RKL RPL. The document has been approved by the MOEF. The final AMDAL has also been provided for reference.</p>

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
		16. Community representatives from Subang, Karawang and Bekasi 17. NGO of Karawang 18. NGO of Bekasi 19. PT Pertamina and PHE ONWJ;		construction, abrasion, marine traffic, erosion and sedimentation, land acquisition and mobilization of materials and equipment.	
10 th April; MoEF office in Central Jakarta	Additional ANDAL and RKL-RPL Discussion with MoEF Technical Commission	1. Environmental Agency of West Java Province 2. Environmental Agency of Subang Regency; 3. Environmental Agency of Karawang Regency; 4. Marine and Fisheries Department of West Java Province 5. Energy and Mineral Resources Agency of West Java Province; 6. Transportation Agency of West Java Province; 7. Deputy of Spatial Planning and Strategic Area- Ministry of Economy 8. Directorate of Spatial Utilization- Ministry of Agriculture and Spatial Planning 9. Directorate of Oil and Gas - Ministry of Energy and Mineral Resources 10. Directorate of Marine Spatial Utilization - Ministry of Marine and Fisheries	<ul style="list-style-type: none"> Clarify on the project description and surrounding activities Socialization to the impacted communities and related parties in terms of the implementation of all activities. 	<ul style="list-style-type: none"> Clarify the project description i.e. : labour recruitment, local content, jetty design, substation design, dredging plan, side casting method, hazardous waste management, area of IPPKH Clarify the surrounding activities such as fish ponds Depth analysis on the spatial planning justification from the Ministry of Agriculture and Spatial Planning Recommendation Depth analysis on the land acquisition impact, seawater, dust, noise, land traffic, EMF, sedimentation and plankton. 	The Project has included the additional survey, baseline and impact assessment studies in the AMDAL and RKL RPL. The document has been approved by the MOEF. The final AMDAL has also been provided for reference.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
		<ul style="list-style-type: none"> 11. Hydrograph and Oceanography Center – Indonesian Navy Force 12. Directorate of Biodiversity Conservation – Ministry of Environmental and Forestry 13. Directorate of Forest Management Area – Ministry of Environmental and Forestry 14. Law Bureau of Ministry of Environmental and Forestry 15. Directorate General of Planologi - Ministry of Environmental and Forestry 16. Directorate of Onshore and Offshore Guard – Ministry of Transportation 17. Directorate of Port – Ministry of Transportation 18. Directorate of Public Work– Ministry of Public Work ; 19. Directorate General of Food-crops – Ministry of Agriculture 20. Environmental Health Directorate -Ministry of Health 21. Directorate of Impact Prevention - Ministry of Environmental and Forestry 22. UGM (University of Gadjah Mada); 		<ul style="list-style-type: none"> • Review the RKL-RPL. 	

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
		23. UI (University of Indonesia); 24. IPB			
27 th April; MoEF office in Central Jakarta	Assistance meeting of AMDAL and RKL-RPL	Directorate of Impact Prevention – Ministry of Environmental and Forestry	<ul style="list-style-type: none"> • Clarify on the impact evaluation • Revise the RKL-RPL matrix 	<ul style="list-style-type: none"> • Clarify the project description : Area (m2) within the protected forest, area of substation, licensing that will be proposed, socialization that will be conducted from PT JSP (exclude the public consultation activities), land acquisition mechanism, volume of land fill within substation area, WWTP capacity, jetty occupation, dumping location of dredging material in the land and its volume. • Clarify the justification of spatial planning and protected forest • Clarify the surrounding activities especially indicating that there is no salt farmer surrounding the offshore area. • Overlay the modelling of temperature and 	The Project has included the additional survey, baseline and impact assessment studies in the AMDAL and RKL RPL. The document has been approved by the MOEF. The final AMDAL has also been provided for reference.

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
				<p>salinity within the sensitive area (such as coral reef and mangrove)</p> <ul style="list-style-type: none"> • Clarify the method of scoping process • Clarify the social boundary and ecological boundary map • Specify the impact prediction on the magnitude and the criteria such as the health and social impacts. • Clarify the holistic evaluation • Clarify the environmental feasibility criteria • Clarify the RKL-RPL matrix : check the consistency and relevant institution • Add the management approach in the matrix RKL-RPL. 	
7 th May 2018; MoEF office in Central Jakarta	Assistance meeting of ANDAL and RKL-RPL	Directorate of Impact Prevention – Ministry of Environmental and Forestry	<ul style="list-style-type: none"> • Revise the salinity and temperature modelling map 	<ul style="list-style-type: none"> • Clarify the dredging material placement (volume and area) • Justification on the exception on the 	The Project has included the additional survey, baseline and impact assessment studies in the AMDAL and RKL RPL. The document has been approved by the

Date and Location	Activities	Stakeholder	Key Message	Issues Raised	Project Response
				<p>power plant activities within the protected area based on the President Regulation</p> <ul style="list-style-type: none"> • Review the impact of Disease Prevalence • Complete the analysis of salinity and temperature modelling. Ensure that those dispersion is not affecting to the coral reef • Flood study map • Clarify the substation type • Clarify the social boundary and administrative boundary <p>Clarify on the impact justification in Chapter 3.</p>	<p>MOEF. The final AMDAL has also been provided for reference.</p>

Table 5-4 Stakeholder Consultations during the ESIA Development Phase

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
08 – 09 August 2017, Cilamaya Kulon and Cilamaya Wetan District, Karawang Regency	Interview	Teacher from Muara and Pasirrukem Village	Project Description ESIA process	<ul style="list-style-type: none"> • Project support to local infrastructure development. • Project support to local economic development such as providing assistance on capital for small-medium enterprises and CSR program. 	The Project will implement a CSR program and LRP. The Program details will be consulted and disclosed to the community and relevant local authorities.
09 – 11 August 2017, Cilamaya Kulon and Cilamaya Wetan District, Karawang Regency	Interview	Small Medium Enterprises / Local Entrepreneur from Cilamaya Wetan and Manggung Jaya Village	Project Description ESIA process	<ul style="list-style-type: none"> • Lack of socialization on project information; • Project support to local infrastructure development; • Project support to local economic development such as providing assistance on capital for small-medium enterprises and CSR program; and • Opportunity for local workforce to be involve in the Project. 	<p>The Project has conducted several public consultations for AMDAL and will continue to consult the impacted communities throughout the Project Cycle.</p> <p>The Project will implement a CSR and LRP program. The Programs detail will be consulted and disclosed to the community and relevant local authorities.</p> <p>The Project is committed to optimizing local employment and opportunities where feasible.</p>

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
10 - 16 August 2017, Cilamaya Kulon, Blanakan, and Cikarang Timur District, Karawang Regency	Interview	Village Officer from: 1. Cilamaya Village 2. Pasirrukem Village 3. Muktijaya Village 4. Karang Sari Village 5. Blanakan Village	Project Description ESIA process	<ul style="list-style-type: none"> • Lack of socialization on project information; • Project support to local infrastructure development; • Project to support local economic development such as providing assistance on capital for small-medium enterprises and CSR program; • Opportunity for local workforce to be involve in the Project. 	<p>The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle.</p> <p>The Project will implement CSR programs. The Programs detail will be consulted and disclosed to the community and relevant local authorities.</p> <p>The Project is committed to optimize local employment and opportunity where feasible.</p>
15 August 2017, Cilamaya Wetan District, Karawang Regency	Interview	Police and Army from Cilamaya Village	Project Description ESIA process	<ul style="list-style-type: none"> • Lack of socialization on project information; and • Lack of engagement and coordination with local security forces. 	<p>The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle.</p> <p>The Project will closely coordinate with local security (as part of the District Consultation Board/ Muspika) for the security issues.</p>

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
09 – 18 August 2017; Cilamaya Wetan, Cilamaya Kulon, Tempuran, Cikarang Timur, Karang Bahagia District, Karawang Regency	Consultation	Village Head of: 1. Cilamaya, 2. Sukatani, 3. Tegalurung, 4. Sumurgede, 5. Jayanegara, 6. Purwajaya, 7. Pegadungan, 8. Pancakarya, 9. Lemahduhur, 10. Dayeuhluhur, 11. Muktijaya, 12. Karang Sari, 13. Muara Karang Satu	Project Description ESIA process	<ul style="list-style-type: none"> • Lack of socialization on project information; • Project support to local infrastructure development; • Project support to local economic development such as providing assistance on capital for small-medium enterprises and CSR program; and • Disclosure of land acquisition process • Opportunity for local workforce to be involve in the Project. 	<p>The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle.</p> <p>The Project will implement a CSR program. The Programs detail will be consulted and disclosed to the community and relevant local authorities.</p> <p>The Project is committed to optimize local employment and opportunity where feasible.</p> <p>The land acquisition process is managed by a consultant agency and has been and will continue to coordinate closely with the village heads.</p>
08 – 15 August 2017; Cilamaya Wetan District	Interview	Community Household from Cilamaya Village; Local People	Project Description ESIA process	<ul style="list-style-type: none"> • Lack of socialization on project information • Project support to local infrastructure development; and • Project to support local economic development such as providing assistance on capital for small-medium enterprises and CSR program. 	<p>The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle.</p> <p>The Project will implement CSR programs. The Programs detail will be consulted and disclosed to the community and relevant local authorities.</p> <p>The Project is committed to optimize local employment</p>

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Opportunity for local workforce to be involve in the Project; and • Project environmental and health adverse impacts particularly on waste management, noise, dust, fire and accident caused by project activities such as gas leakage and explosion. 	and opportunity where feasible. AMDAL study and the ESIA is assessing the impacts resulted from the Project. The Project will develop environmental and social management plans to mitigate the potential impacts
08, 13-14 August 2017; Cilamaya Wetan District	Interview	Community Leader from Cilamaya Village;	Project Description ESIA process	<ul style="list-style-type: none"> • Project support to local infrastructure development; and • Project support to local economic development such as providing assistance on capital for small-medium enterprises and CSR program. • Opportunity for local workforce to be involve in the Project. 	The Project will implement CSR programs. The Programs detail will be consulted and disclosed to the community and relevant local authorities. The Project is committed to optimize local employment and opportunity where feasible.
12 August 2017; Cilamaya Wetan District	Focus Group Discussion	Former cultivators of Pertamina land (7 people attended the FGD)	Project Description ESIA process	<ul style="list-style-type: none"> • Project to support economic development of the farmer through initiation livestock cooperative; • Project to support social or community events such as Independence day 	The Project will implement CSR programs. The Programs detail will be consulted and disclosed

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				celebration and cultural events; and <ul style="list-style-type: none"> • Opportunity for local workforce to be involve in the Project. • Project to support farmer through providing land replacement for farming activities. 	
15 August 2017; Cilamaya Wetan District	Focus Group Discussion	Women's group (10 people attended the FGD)	Project Description ESIA process	<ul style="list-style-type: none"> • Opportunity for local workforce to be involve in the Project. • Project support to local infrastructure development; and • Project support to local economic development such as providing assistance on capital for small-medium enterprises and CSR program. 	The Project will implement CSR programs. The Programs detail will be consulted and disclosed to the community and relevant local authorities. The Project is committed to optimize local employment and opportunity where feasible.
9 August 2017; Cilamaya Wetan District	Focus Group Discussion	Sea Fisherman Group from Muara Village (16 people attended the FGD)	Project Description	<ul style="list-style-type: none"> • Limited information / socialization on Project development. • Sea restriction zone that could affect the fishermen fishing area hence it can decrease the catch which in turn also decrease fishermen income; 	The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle. AMDAL and ESIA study will provide potential impacts to the social and environment

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • A clear socialization as well as a warning indicator which should or should not be passed, for example by installing buoys and lights; and • Project to ensure the sea traffic safety and security particularly for the local fishermen. 	<p>including impacts to fishermen. The Project will develop environmental and social management plans to mitigate the potential impacts.</p>
16 August 2017; Cilamaya Wetan District	Focus Group Discussion	Fishpond Fisherman Group from Muara Village	Project Description	<ul style="list-style-type: none"> • Limited information / socialization on Project development. • A clear and detailed calculation of the compensation mechanisms to the farmers to maintain their livelihoods (e.g., sufficient compensation value to be used for working on other land); • The compensation value is calculated clearly and transparently and agreed with the fishermen; • Access for farmer to utilize land above the pipeline RoW for farming activities; 	<p>The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle. The Resettlement Plan outlines the detail compensation (in the entitlement matrix) and will be disclosed to the community.</p>

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> Considering the historical compensation rate of the land in order to establish the propose compensation scheme. 	
13 August 2017; Blanakan Sub-District	Focus Group Discussion	Fisherman Group from Blanakan	Project Description	<ul style="list-style-type: none"> Limited information / socialization on Project development; Sea restriction zone that could affect the fishermen fishing area hence it can decrease the catch which in turn also decrease fishermen income; Sea restriction zone should be clearly socialize and equipped with signage to avoid sea traffic accident; Compensation should be provided for sea restriction zone affecting the fishermen fishing ground; Project to implement community development program for the affected fishermen communities / group; 	<p>The Project has conducted several public consultation for AMDAL and will continue to consult the impacted communities throughout the Project Cycle.</p> <p>The Project will implement CSR programs. The Programs detail will be consulted and disclosed to the community and relevant local authorities. AMDAL and ESIA study will provide potential impacts to the social and environment including impacts to fishermen.</p> <p>The Project will develop environmental and social management plans to mitigate the potential impacts, including issues related to health and safety.</p>

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Installation of pipeline on the seabed can be anchored. Fishermen questioned how technical the piping was; and • Project to ensure the sea traffic safety and security particularly for the local fishermen. 	
19 th -29 th December 2017 Cilamaya and Bekasi Districts	Focus Group Discussions & Interviews	Land owners and users of the transmission line tower footing in the 37 villages	Project Description ESIA and RP process Discussion of ESMP	<ul style="list-style-type: none"> • Impact from radiation and the danger of the transmission line especially during the rainy season; • Potential decrease in price of the land after the construction and electrification of the transmission line; • Impact to agricultural activities and crops; • Request to be allowed to continue cultivate the land after the purchase; • Compensation price must be sufficient to at least purchase replacement 	<p>AMDAL and ESIA study will provide the assessment of potential impacts to the social and environment including EMF issues. The government regulation provides detail measurement of safe distance to the high voltage aerial network and the Project will comply with the regulation. After the installation of the cable, the facilities will be managed by PLN. Compensation is calculated based on the replacement cost, considering the NJOP, market price and offer from the land owners. Transaction will be done only if the land owner agrees to sell the land.</p>
17 th -26 th January 2018 Cilamaya and Bekasi Districts	Focus Group Discussions & Interviews	Land owners and users of the transmission line tower footing in the 37 villages	Project Description ESIA and RP process		
23 rd -24 th January 2018 Cilamaya and Bekasi Districts	ADB led Focus Group Discussions	Land owners and users of the transmission line tower footing in two villages	Understanding of Project Description and land acquisition process		
16 th -21 st May 2018 Subang District	Focus Group Discussions & Interviews	Land owners and users in the coastal area	Project Description ESIA and RP process		

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<p>land with the same size and conditions; and</p> <ul style="list-style-type: none"> Request for a simple process and documentation of the land acquisition. 	<p>The process of the land acquisition is designed as simple as possible yet adhere to the applicable regulations.</p>
<p>8th June 2018, Kalangsuria Village Office</p>	<p>ESIA Disclosure</p>	<ul style="list-style-type: none"> Landowners; and Village and District authorities 	<ul style="list-style-type: none"> Project update, schedule and key parties-sponsors; ESIA process; ESIA findings; Mitigations proposed; Stakeholder consultation; and Grievance mechanism 	<ul style="list-style-type: none"> Project to ensure that the land of the tower footings will not be a nesting place for rats which will destroy the rice paddy plants. Concerns relating to safety in the vent of a tower collapse or cable break. 	<p>The tower footing land will be typically higher compared to its surrounding lands as the tower will be constructed permanently. Farmers should not worry about the tower footing lands become nesting place for rats.</p> <p>Safety mitigations have been built in to protect the nearby communities form H&S issues such as tower collapse or electruction.</p>
<p>9th June 2018, Sukamulya Village Office</p>	<p>ESIA Disclosure</p>	<ul style="list-style-type: none"> Surrounding communities nearby the CCGT Fisherfolk; and Village and District authorities 	<ul style="list-style-type: none"> Project update, schedule and key parties-sponsors; ESIA process; ESIA findings; Mitigations proposed; Stakeholder consultation; and Grievance mechanism 	<ul style="list-style-type: none"> Employment opportunities to be coordinated by village authorities to avoid horizontal conflict; Project to be aware of flood risks given that the CCGT area is located in between two running river (Cilamaya River and the Irrigation channel); 	<p>The Project will implement CSR programs. The Programs detail will be consulted and disclosed to the community and relevant local authorities.</p> <p>The project has conducted flood study and taking the results of the study into consideration of the Project design.</p>

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Project should provide a buoy to mark the construction site during the subsea pipeline laydown hence the fishermen are aware of the activities; • The Project plan and schedule should be informed to the fishermen communities; • Project should preserve the mangrove areas as those are important for the fishermen as the breeding ground of shrimps. • Disturbance to fishponds from construction. • Use of agents and headhunters for recruitment locally. 	<p>The Project will consult the communities prior to construction activities so that the communities are aware about the Project plan. There is a grievance mechanism as a channel for the community to submit grievances related to the Project.</p> <p>Agree to preserve the mangrove area where possible.</p> <p>The project will mitigate impacts on local fishponds through consultation, design and monitor. Should damage occur the project will compensate on a case by case basis.</p> <p>The Project will use local manpower agency and village heads to conduct recruitment.</p>
30 th of July 2018; Cilamaya Village (Cilamaya Village Office)	ESIA Disclosure	<ul style="list-style-type: none"> • Head of village of Cilamaya and Muara; • Sub-District Head of Cilamaya Wetan; • Head of Sub-District Police and Military Command; 	<ul style="list-style-type: none"> • Project description; • Project schedule and timeline for construction phase; • Update on the Project current activities; 	<ul style="list-style-type: none"> • Similar socialization / disclosure of ESIA should be conducted more broader affected villages; • The Project must optimize the local employment opportunity particularly 	<ul style="list-style-type: none"> • The process of ESIA disclosure / socialization will be conducted gradually starting from the sub-district level and now to the village level; • The Sponsors are committed to prioritize local people for the

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
		<ul style="list-style-type: none"> • Representative of affected community from Blanakan and Muara Village; • Head of Environmental Agency of Karawang Regency; 	<ul style="list-style-type: none"> • Introduction to the EPC Contractor and their role in the Project; • ESIA process; • ESIA findings (Environmental, Health and Social Impact of the Project); • Impact mitigations proposed; • Project Grievance Mechanism and contact person for receiving community and external stakeholder grievances 	<ul style="list-style-type: none"> • during the construction phase; • The Project should give real contribution to the communities and village development; • Concern related to radiation coming from the Power Plant and Transmission Line; • Concern on possibility of relocation of houses located alongside the irrigation channel near the Power Plant; • Possibility to form a communication forum to address issues related to labor and recruitment qualification; • Concern on wastewater and its discharge to the nearby river; • Concern on incompatibility between ESIA as a document and the implementation on the ground; 	<ul style="list-style-type: none"> • employment opportunities. The Sponsors and the EPC will be coordinating closely with the village authorities and relevant government entities on worker's recruitment process; • The project will implement social investment program / CSR program however this will be further assess and develop by the CSR team; • The government has issued a regulation regarding the safe distance from the transmission line network (minimum height of the lowest cable is 18 meter) and the Project will comply with the regulation; • There will be no relocation / resettlement of houses. The Project even avoids housing area for the transmission line ROW; • The Sponsor agreed in the near future to establish such communication forum to address labour issues; • The wastewater will not be discharged to the nearby

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Schedule for Project construction to begin; • Concern on community safety due to mobilization of construction transportation; and • Concern on access restriction to the road between Tanggul Pertamina to Cilamaya during the construction period. 	<p>river. There will be processes of controlling and monitoring the waste to ensure that wastewater meets the safety standard;</p> <ul style="list-style-type: none"> • The Project will report the implementation of the AMDAL / ESIA every 6 months to the Environmental Agency and will also be monitored by the Agency regularly; • Construction activities will start in August or September 2018; • Beside AMDAL the Project will also have ANDALALIN or the Traffic Impact Assessment. All of provisions and regulations regarding to traffic procedure will be explained in ANDALALIN. It will include speed limit, providing traffic signs and officer to manage traffic; and • The road will not be closed and the community still can use the road. The Project will build a new

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
31 st of July 2018; Blanakan Village (Village Unit Cooperative Office of Fishermen Group)	ESIA Disclosure	<ul style="list-style-type: none"> • Head of village of Blanakan • Sub-District Head of Blanakan; • Head of Sub-District Police and Military Command; • Representative of affected fishermen community from Blanakan and Muara village. 	<ul style="list-style-type: none"> • Project description; • Project schedule and timeline for construction phase; • Update on the Project current activities; • Introduction to the EPC Contractor and their role in the Project; • ESIA process; • ESIA findings (Environmental, Health and Social Impact of the Project); • Impact mitigations proposed; and • Project Grievance Mechanism and contact person for receiving community and external stakeholder grievances 	<ul style="list-style-type: none"> • Compensation for fishing activities and fishing area impacted by the sea pipeline laying down activities. The construction activity is feared to affect the coral reefs, water turbidity and causing noise disturbance to fish; • The Project must optimize the local employment opportunity particularly during the construction phase; • Concern on incompatibility between ESIA as a document and the implementation on the ground; • Concern on possibility of fishermen net stuck in the sea pipeline; • The Project should give real contribution to the fishermen communities and village development; 	<p>access road for heavy vehicles;</p> <ul style="list-style-type: none"> • The sea pipeline will be buried on the bottom of the sea floor, therefore it will not have any affect to the coral reefs. The project will conduct assessment / survey on fish catch by the fishermen prior the construction start and during the construction to see whether there is a significant effect to fish catch due to pipeline laying down activities. The result will be used to determine the solution and compensation to provided for the impacted fishermen; • The Sponsors are committed to prioritize local people for the employment opportunities. The Sponsors and the EPC will be coordinating closely with the village authorities and relevant government entities on worker's recruitment process; • The Project will report the implementation of the

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Waste generated during the sea pipeline laying down activities should be properly managed and clean up from the sea. During the laying down activities a signage of mark should be placed in the construction site at sea; • Related to compensation scheme for the affected communities the Project can adopt the system implemented by the Pertamina; • Project to provide lamp / torch for prawn fishermen to increase the catch; • Similar socialization / disclosure of ESIA should be conducted more broader affected villages; • Related to all sea activities, the Project should coordinate with the Water Police Unit to ensure its safety and security. 	<ul style="list-style-type: none"> • AMDAL / ESIA every 6 months to the Environmental Agency and will also be monitored by the Agency regularly; • Since the pipeline will be buried on the bottom of the sea, fisherman's net will not get stuck on the pipeline; • The project will implement social investment program / CSR program however this will be further assess and develop by the CSR team; • Material storage and pipeline welding process will be all conducted within a ship to minimize any construction waste dispose to the sea. A mark or signage will be placed at the construction site at sea; • Since Pertamina is one of the shareholder of this Project, surely the Project can learn and apply Pertamina good practice related to establishing

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
					<p>compensation scheme for the affected communities;</p> <ul style="list-style-type: none"> • The Project will consider providing lamp / torch for prawn fishermen; • The process of ESIA disclosure / socialization will be conducted gradually starting from the sub-district level and now to the village level; and • The Project will definitely coordinate closely with the Water Police Unit and other relevant parties to ensure all activities at sea are safe and secure.
31 st of July 2018; Cilamaya Village (Saiyo Restaurant)	ESIA Disclosure for NGOs group	<ul style="list-style-type: none"> • Gerakan Masyarakat Bawah Indonesia (GMBI); • Pemuda Pancasila (PP); • Forum Komunikasi Putra Putri Purnawirawan dan Putra Putri TNI-Polri (FKPPI); • Laskar Merah Putih (LMP); 	<ul style="list-style-type: none"> • Project description; • Project schedule and timeline for construction phase; • Update on the Project current activities; • Introduction to the EPC Contractor and their role in the Project; • ESIA process; • ESIA findings (Environmental, 	<ul style="list-style-type: none"> • Concern on community safety due to mobilization of construction transportation; • Compensation for impacted fishermen and farmers; • Concern on incompatibility between ESIA as a document and the implementation on the ground; • With regard to building relationship with the 	<ul style="list-style-type: none"> • Beside AMDAL, the Project will also have ANDALALIN or the Traffic Impact Assessment. All of provisions and regulations regarding to traffic procedure will be explained in ANDALALIN. It will include speed limit, providing traffic signs and officer to manage traffic; • The Project will conduct further study / community need assessment for the affected community to

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
		<ul style="list-style-type: none"> • Gabungan Inisiatif Barisan Anak Siliwangi (GIBAS); • BANLOK; • Youth Group of Cilamaya District (Karang Taruna); • BPAN; • Projo Karawang; • KOMPAK; • NKRI; and • Environmental Cadre Group; 	<p>Health and Social Impact of the Project);</p> <ul style="list-style-type: none"> • Impact mitigations proposed; and • Project Grievance Mechanism and contact person for receiving community and external stakeholder grievances 	<p>affected communities, the Project should acknowledge local wisdom and best practices and empower the local communities;</p> <ul style="list-style-type: none"> • The Project must optimize the local employment opportunity particularly during the construction and operational phase; • Concern on potential air pollution generated by the Project that will have impact to the villagers particular to children; • Project to provide medical support to local communities; • Possibility Project to develop program in collaboration with the NGOs; and • Project should build good relationship with all its stakeholders and be responsible its impact mitigation program. 	<p>ensure the social investment program will be developed or the compensation scheme will align with the community need;</p> <ul style="list-style-type: none"> • The Project will report the implementation of the AMDAL / ESIA every 6 months to the Environmental Agency and will also be monitored by the Agency regularly; • The Sponsors are committed to prioritize local people for the employment opportunities. The Sponsors and the EPC will be coordinating closely with the village authorities and relevant government entities on worker's recruitment process; • One of the reasons why the power plant type is PLTGU is because it emits cleaner emission than other type of power plant. The study of air pollution is attached in AMDAL as well; • Health support program for the communities will be

Date & Location	Activity	Stakeholder Involved	Key Message	Issues Raised	Sponsor Feedback
					<p>considered as part of the CSR program;</p> <ul style="list-style-type: none"> • The Project will take into consideration collaborating with the NGOs; and • It is the project commitment to build good relationship with all of its stakeholders and one form of good relationship will be reflected through implementing CSR program to the communities.

Table 5-5 Stakeholder Consultation Conducted by the Land Acquisition Consultant

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
Cilamaya	Cilamaya Wetan	Karawang	24-09-2017	Landowners	<ul style="list-style-type: none"> JSP conveys the intent and purpose of the project as a government program; There are 7 tower locations in Cilamaya village where 2 towers (T.001 and T.002) are on PERTAMINA's land (so there is no need for land acquisition) while 5 towers are located in the community's paddy field; and The area of land to be used is different, according to the needs of the tower. 	<ul style="list-style-type: none"> The landowner hopes that all of his plots are purchased because they are in the middle of his property; and The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. 	<ul style="list-style-type: none"> NA. This is part of the negotiation and transaction process to each of the land owners. The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price.
Sukatani	Cilamaya Wetan	Karawang	23-09-2017.	Landowners	<ul style="list-style-type: none"> JSP conveys the aims and objectives of the project to support the national electricity program; 	<ul style="list-style-type: none"> The landowner is willing to sell their land, as long as the payment for the land purchase with 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					<ul style="list-style-type: none"> • There are 5 Tower in Sukatani Village (T.008 - T.012), which lands are owned by the community; • 	<p>agreed price will be brought to them.</p> <ul style="list-style-type: none"> • The landowner expressed concern about the impact of radiation (due to electromagnetic from the Transmission Line) caused and the danger of electricity during the rain; 	<p>parties agreed on the land location and price.rice.</p> <ul style="list-style-type: none"> • Periodic and proper maintenance and monitoring to secure the safety of the community around the Transmission Line area will be carried out by PLN.
Sukamulya	Cilamaya Kulon	Karawang	21-09-2017.	Landowners and village government	JSP delivered the intent and purpose of the project at the location of Sukamulya Village.	<ul style="list-style-type: none"> • Village government and land owners are ready to support the land acquisition of 500 kV Transmission Line tower. • Landowners are concerned about the negative impact of the 500 kV Transmission Line. • Based on experience from other local power projects, the land price usually drops after construction and the area utilized for Transmission Lines. • Impact of damage 	<ul style="list-style-type: none"> • Periodic and proper maintenance and monitoring to secure the safety of the community around the Transmission Line area will be carried out by PLN. • The government has issued regulation regarding compensation for the land and impacted objects under the high voltage aerial network. One of the considerations of this regulation is the devaluation of the land impacted by high voltage aerial network. The project will adhere to this

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<p>during construction.</p> <ul style="list-style-type: none"> The village government expects the transaction process to be simplified. The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. 	<p>regulation.</p> <ul style="list-style-type: none"> The project will implement a health and safety management plan during the construction to ensure community safety. The land acquisition process will be conducted in a simple process yet adhere to applicable regulations. The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price.
Muktijaya	Cilamaya Kulon	Karawang	05-10-2017.		JSP delivered the intent and purpose of the project at the location of Muktijaya Village.	<ul style="list-style-type: none"> Landowners inquire about tower security, construction process & possible damage to their fields & other rice fields around it because the location is in the middle of his land. Mr. Ali Hidayat as the land owner asked JSP to be able to shift the location of the tower to 	<ul style="list-style-type: none"> The project will implement a health and safety management plan during the construction to ensure community safety and minimize impact to the community. The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<p>the south end so that the fields are not cut off.</p> <ul style="list-style-type: none"> The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. The completeness of the file will be handled by the land owner and the Muktijaya Village Government. 	<p>parties agreed on the land location and price.</p>
Pasirukem	Cilamaya Kulon	Karawang	03-10-2017.	Landowners and village government	<ul style="list-style-type: none"> JSP delivered the project aims and objectives that are part of the 35,000 MW government program. Cultivation of the land prior to construction will be discussed later with JSP, Landowners and Village Government. 	<ul style="list-style-type: none"> Landowners asked to recheck their land accompanied by the landowners to confirm the exact location of the required land. The village government said that the community should understand the rights and obligations when and after the land acquisition. H. Guntur (Land Owner) expressed concern about the diminishing value of land and danger from the Transmission Line. Ade 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price. The government has issued regulation regarding compensation for the land and impacted objects under the high voltage aerial network. One of the considerations of this regulation is the devaluation of the land

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						bin Tarli (Landowner) complained about the status of cultivation of land after sale and purchase because it will be worked on by the village.	impacted by high voltage aerial network. The project will adhere to this regulation.
Tegalurung	Cilamaya Kulon	Karawang	05-10-2017	Landowners	JSP conveys the intent and purpose of the project at the Tegalurung Village Site.	<ul style="list-style-type: none"> Land owners support the construction of transmission lines and they're willing to sell their land in accordance with the agreed price; and The landowner "Anyih" expects his whole land to be purchased at once. 	
Manggunjaya	Cilamaya Kulon	Karawang	22-09-2017	Landowners and village government	JSP conveys the purpose and objectives that is part of the activities of the government's 35,000 MW program.	<ul style="list-style-type: none"> Village Governments and Owners of land (Represented by parents) understand and ready to assist and willing to release land for government programs. The landowner asked for site checking and to confirm the area required to build the 500 kV 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price. Advanced notice will be provided to enable the land owners harvest their crops prior to construction.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<p>Transmission Line Tower.</p> <ul style="list-style-type: none"> • Cultivation of land before construction is expected to be permissible to the landowners. 	
Sumurgede	Cilamaya Kulon	Karawang	18-09-2017	Landowners	JSP conveys the aims and objective of the project that is a government program.	<ul style="list-style-type: none"> • The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. 	The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price.
Jayanegara	Tempuran	Karawang	14-09-2017	Landowners and village government	JSP conveys the purpose and objective of building the 500 kV SUTET line to support the government's program to increase the 35,000 MW power;	<ul style="list-style-type: none"> • The Village Government is ready to assist and support the work that is a government program; • Land owner H. Abdullah asked for compensation or land acquisition good enough to obtain land of the same condition in other location. • The landowner asked to check the location of the land to be used. • The landowner asked for permission to make 	<ul style="list-style-type: none"> • The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price • Advanced notice will be provided to enable the land owners harvest their crops prior to construction.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						cultivation before the construction activity can be done by the land owner.	
Purwajaya	Tempuran	Karawang	13-09-2017	Landowners	JSP conveys the purpose and objectives of the Transmission Line project that is a government Program.	<ul style="list-style-type: none"> The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price
Pagadungan	Tempuran	Karawang	12-09-2017	Landowners and village government	JSP conveys the aims and objective of the project that is a government program.	<ul style="list-style-type: none"> Landowners and Village Government support Transmission Line construction activities in Padagadungan Village area. The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. The landowner hopes the land under the tower and around the Transmission Line can still be cultivated. 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price. The land owners can cultivate the land under the TL RoW. For the tower footing, it will be managed and decided by PLN whether it can be cultivated by the community or not. The land acquisition process will be conducted in a simple process yet

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<ul style="list-style-type: none"> The village government hopes the documentation process can be simplified. 	adhere to applicable regulations.
Pancakarya	Tempuran	Karawang	11-09-2017	Landowners and village government	JSP conveys the purpose and objectives of the Transmission Line project which is a government Program;	<ul style="list-style-type: none"> Village Governments and Land Owners are ready to support the Transmission Line land acquisition process. The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them and they hopes the transaction process will be simplified. Tower T.40 is located in 2 land owners (Yudha & Eneung Rusiti). The landowner is willing to sell their land, as long as the payment for the land purchase with agreed price will be brought to them. 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
Lemahduhur	Tempuran	Karawang	04-10-2017	Landowners and village government	JSP conveys the purpose and objectives of the Transmission Line project that is a government Program.	<ul style="list-style-type: none"> The village government supports the activities to be carried out after JSP conveys the purpose and objective of the project implementation that is a national program in the expansion of 35,000 MW energy. Epong (Land Owner) requested to double check his land to clarify that the required land is really owned by him during land acquisition activities. The concerns of Racih's mother is related to the radiation (due to electromagnetic fields from the Transmission Line) disturbance caused by the 500 kV Transmission Line. 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land location and price. The project will implement a health and safety management plan during the construction and operation to ensure community safety.
Lemahkarya	Tempuran	Karawang	13-09-2017	Landowners and village government	JSP conveys the purpose and objectives of the Transmission Line project that is a government Program.	<ul style="list-style-type: none"> Village government and land owners are ready to support the land acquisition of 500 kV Transmission Line with agreed price. 	<ul style="list-style-type: none"> The land acquisition will be conducted on a principle of willing-buyer willing-seller. Transaction will be conducted only if both parties agreed on the land

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<ul style="list-style-type: none"> • Village Governments and landowners expect the land acquisition process to be simplified and as soon as possible. • The Land ownership documents of T.45 will be taken out of the Bank by the landlord during the acquisition transaction. The Land deed is in the Bank for mortgage 	<ul style="list-style-type: none"> • location and price. • The land acquisition process will be conducted in a simple process yet adhere to applicable regulations.
Dayeuhluhur	Tempuran	Karawang	08-09-2017	Landowners and village government	JSP conveys the intention and objectives of the Project that is one of the national strategic projects.	<ul style="list-style-type: none"> • Landowners and village governments are ready to support land acquisition activities in accordance with the agreed price with JS. • The village government said that the land acquisition process needs to be simplified. • Landowners are concerned about the safety of farmers around the Transmission Line location. 	<ul style="list-style-type: none"> • The land acquisition process will be conducted in a simple process yet adhere to applicable regulations. • The project will implement a health and safety management plan during the construction and operation to ensure community safety.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
Sukaraja	Rawamerta	Karawang	16-09-2017	Landowners and village government	<ul style="list-style-type: none"> JSP conveys the intention and objectives of the Project which is one of the national strategic projects; and The establishment of good relationships between the JSP team and the village government. 	<ul style="list-style-type: none"> The establishment of good relationships between the JSP team and the village government. Village Governments and Landowners understand the purpose and objectives of project implementation and are willing to assist in the identification of land owners of 500 kV transmission tower sites. Village Government understands JSP plan to verify land owner data for tower site in Sukaraja Village. Approved schedule for land owner identification is 17 - 19 September 2017. Verification of land owners' data tower will be implemented 22 - 23 September 2017. The village government and the community are ready to support the construction activities of the tower site and are ready to assist in the 	NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						process of completing the data of the land owner.	
Sukaratu	Cilebar	Karawang	27-09-2017	Landowners and village government	<ul style="list-style-type: none"> The establishment of good relations and introduction of JSP team with village government; JSP conveys the purpose and objective of coordination and socialization; JSP conveyed the plan of tower construction of 500 kV transmission line; JSP submits the terms / requirements (necessary documents) for land acquisition of the RoW corridor path; and There is one tower in Sukaratu village so that the process of land acquisition will be easier and faster, but almost all land is in the process of 	<ul style="list-style-type: none"> Village Governments and Land Owners understand the land ownership identification plan for transmission towers of 500 kV PLTGU Java 1; The village government understands the land ownership verification plan in Sukaratu Village, Cilebar District; and The Village Government understands about the construction plans of the 500 kV transmission line towers as well as the terms and conditions required for land acquisition activities. 	NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					national land certification (Prona) so that it awaits the results for land acquisition.		
Sindangsari	Kutawaluya	Karawang	23-09-2017	Landowners and village government	<ul style="list-style-type: none"> JSP conveys the purpose and objective of coordination and socialization of the government's plan for the development of Java PLTGU tower & transmission line 1; and JSP explains the land acquisition of towers that must be completed by the land owner. 	<ul style="list-style-type: none"> Village Head, Village Apparatus and Land Owner understand the plan of tower construction and requirements for land acquisition tower; The area of land acquisition is adjusted to the needs of tower needs; Implementation of payment can be done after the validity of the land is complete and supported with complete administrative data; and Landowners agree to follow agreed upon rules. 	NA
Sampalan	Kutawaluya	Karawang	22-09-2017	Landowners and village government	<ul style="list-style-type: none"> JSP conveyed the plan of tower building transmission line 500 kV PLTGU Java 1; JSP conveys the terms or conditions of land acquisition and Transmission Line; 	Village Governments and Land Owners understand the tower development plan as a government program.	NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					<ul style="list-style-type: none"> • There are 4 points in Sampalan Village that need to be done land acquisition; • After identification of land owners, then will be collected other supporting documents for land acquisition; • Payment can be made if the file requirements are met, complete and accountable; and • The area of land acquisition is adjusted to the needs of tower area. 		
Waluya	Kutawaluya	Karawang	23-09-2017	Landowners, village leaders, and village government	<ul style="list-style-type: none"> • JSP conveys the purpose and objectives of project implementation; • JSP explains the identification of the owner of the tower site; and • JSP describes the schedule of identification and 	<ul style="list-style-type: none"> • Landowners understand the terms or conditions of land acquisition tower; • the requirements file to be prepared by the land owner assisted by the village apparatus for administrative completeness; • Owners of land domiciled outside the village will be 	NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					<p>verification of data completeness of land owner tower.</p>	<p>immediately contacted by the village; and</p> <ul style="list-style-type: none"> Village and community leaders are expected to assist the government's program in order to run well. 	
Mulyajaya	Kutawaluya	Karawang	14-09-2017	Landowners	<ul style="list-style-type: none"> JSP conveys the purpose and objective of coordination and socialization which is about the government plan of tower construction & transmission line of PLTGU Java 1; JSP conveys the terms or conditions for land acquisition of towers that must be completed by the land owner; The land associated with the national land certification program (PRONA) cannot be paid before the proof of land ownership is a Certificate issued or issued by BPN; 		NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					<ul style="list-style-type: none"> • Payment can be made after the requirements and provisions of administered files are completed; and • Payment is made in front of a notary public. 		
Karyasari	Rengasdengklok	Karawang	23-09-2017	Landowners and village government	<ul style="list-style-type: none"> • JSP conveyed the plan of building tower transmission line 500 kV PLTGU Java 1; • There are 6 tower points to be released in Sampalan Village; • Land acquisition can be done if the requirements / conditions are met. 	<ul style="list-style-type: none"> • Village government and land owners are ready to support the development and land acquisition program of 500 kV Transmission Line PLTGU Java 1 in Karyasari Village, Rengasdengklok District; and • The hope of landowners and village government, land acquisition activities can be implemented immediately. 	NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
Kalangsuria	Rengasdengklok	Karawang	29-09-2017	Landowners and village government	<ul style="list-style-type: none"> JSP conveyed the plan of building of tower site of transmission line of 500 kV PLTGU Java 1; <ul style="list-style-type: none"> The construction will be implemented from Cilamaya to Cikarang Utara There are 3 Tower in Kalangsuria Village for land acquisition Land requirements will be adjusted to the type of tower. JSP explains the terms / Requests for land acquisition and RoW corridor path. 	<ul style="list-style-type: none"> Village government and landowners understand the tower construction plans and land acquisition requirements; and Payment will be made in the presence of a notary. 	NA.
Kalangsari	Rengasdengklok	Karawang	20-09-2017	Landowners and village government	<ul style="list-style-type: none"> JSP conveyed the plan of tower construction of transmission line of 500 kV PLTGU Java 1 - Cibatu Baru; The area of land used for the tower is adjusted to the needs of the tower; 	<ul style="list-style-type: none"> Village Governments and Landowners understand the provisions / requirements for land acquisition and compensation of the ROW corridor path; and Payment must be attended by the person whose name 	NA. This is part of the land verification and negotiation process.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					<ul style="list-style-type: none"> The payment will be made in front of the notary; and The process of completing documents that the owner is not placed then can be sent via email / post. 	is listed in the land deed.	
Mekarjati	Karawang Barat	Karawang	10-10-2017	Landowners	<ul style="list-style-type: none"> JSP explains the purpose and objective of coordination and socialization of the neighboring plan of the construction of 500 kV transmission line tower site; and JSP conveys the terms and conditions of land acquisition for tower land that must be completed by the land owner. 	<ul style="list-style-type: none"> Land document in the form of Certificate of Property (SHM) needs to be checked by BPN; Loan of original certificate is made with document receipt; and Some towers need to be conducted by the state court because the heirs are still under age. 	NA. This is part of the land verification process.
Tunggak Jati	Karawang Barat	Karawang	24-09-2017	Landowners	<ul style="list-style-type: none"> JSP explains the purpose and objective of coordination and socialization of the neighbouring plan of 	<ul style="list-style-type: none"> Landowners understand about the construction plan of the transmission line tower site; and 	NA. This is part of the land negotiation and verification process.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					<p>the construction of 500 kV transmission line tower site;</p> <ul style="list-style-type: none"> • JSP conveys the terms and conditions of land acquisition for tower land that must be completed by the land owner; • The area of land acquisition is adjusted to the needs of the tower floor area; • Prices are based on NJOP and land market prices in the region; and • Implementation of payment can be done after the validity of the land is complete. 	<ul style="list-style-type: none"> • The results of the socialization to the LDII (Landowners) is willing to release land for the purpose of government programs and related to price negotiations are still waiting for the decision of LDII leaders. 	
Cilamaya	Cilamaya Wetan	Karawang	30-01-2018	<ul style="list-style-type: none"> • Landowners; • District and Village Authorities; and • Local Police and Military; 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • Project to provide sufficient time for the local farmers to harvest their farming product prior conducting the construction activities; 	<ul style="list-style-type: none"> • Project will coordinate and provide information to District and Village authorities and the community prior conducting any

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<ul style="list-style-type: none"> To optimize local content and prioritize local workforce where feasible; Road damage due to Project traffic mobilization; 	<ul style="list-style-type: none"> construction activities; and; Project will coordinate with the relevant government agency related to public road utilization for construction vehicles.
Sukatani	Cilamaya Wetan	Karawang	01-02-2018	<ul style="list-style-type: none"> District of Cilamaya Wetan Leadership Committee (Muspika); Head of District Police Command; and Head of Village of Sukatani. 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> Compensation for houses or building located under the Transmission Line; Who are eligible for compensation?; and Purpose of the development of the Power Plant? 	<ul style="list-style-type: none"> In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building and land located within the free space of the TL will be compensated as much as 15% of the building or land value; Compensation is granted to the legitimate landowners by indicating a valid proof of ownership; and The development of PLTGU Jawa 1 is intended to increase the energy security for Java - Bali region. With the growth of population and industry there is an increase of electricity

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
							demand therefore the additional production will minimize the risks of electricity shortage.
Sukamulya	Cilamaya Kulon	Karawang	05-02-2018	<ul style="list-style-type: none"> Landowners; and Village Authorities 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> Determination of compensation value; Access to community land after being compensated; Impacts of electric and magnetic radiation to community health and Project community grievance handling / management 	<ul style="list-style-type: none"> The value / price of compensation for the Free Space of TL will be determined / calculated by the KJPP.; and The community can still utilized the land prior any construction activities begin.
Sindangsari	Kutawaluya	Karawang	05-02-2018	<ul style="list-style-type: none"> Landowners; District and Village Authorities; Local Police and Military; and 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> Determination of compensation value; Project to have close coordination and to inform district and village authorities and community prior to conducting any construction activities; Eligibility to receive compensation; Compensation for damaged crops due to 	<ul style="list-style-type: none"> In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building and land located within the free space of the TL will be compensated as much as 15% of the building or land value; Compensation is granted to the legitimate landowners by indicating a valid proof of ownership; and

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						<ul style="list-style-type: none"> construction activities; and Method of compensation payment. 	<ul style="list-style-type: none"> Project will coordinate and provide information to District and Village authorities and the community prior conducting any construction activities;
Sukaratu	Cilebar	Karawang	06-02-2018	<ul style="list-style-type: none"> Landowners; and Village Authorities 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> The compensation mechanism for land or paddy field area that have no purchase deed yet; Does the compensation value being calculated based on the NJOP (Tax Object Selling Value) or the current market value? 	<ul style="list-style-type: none"> Need to add certificate issue by the village authority stating that the recipient is the rightful landowner; and The compensation value is calculated based on the current market value.
Sukaraja	Rawamerta	Karawang	07-02-2018	<ul style="list-style-type: none"> Head of District of Rawamerta; Local District Police and Military Command; Head of village of Sukaraja; and 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> During the construction activities who will be responsible if there is any impact to the community? Is it PLN or JSP? In the absence of agreement on the value of the compensation, in accordance with the 	<ul style="list-style-type: none"> During the construction activities it will be under the responsibility of JSP and the Contractor, while the post-construction i.e. maintenance will be under the responsibility of PLN. The value / price of compensation for the Free

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> Landowners within the TL ROW 		<p>applicable provisions the compensation will be deposited to the District Court. This mean that the landowner have no right of refutation?</p> <ul style="list-style-type: none"> Does the compensation value being calculated based on the NJOP (Tax Object Selling Value) or the current market value? 	<p>Space of TL will be determined / calculated by the KJPP as an independent appraisal appointed by the Government.</p> <ul style="list-style-type: none"> The compensation value is calculated based on the current market value.
Muktijaya	Cilamaya Kulon	Karawang	07-02-2018	<ul style="list-style-type: none"> Secretary of District of Cilamaya Kulon; Local District Police and Military Command; Head of village of Muktijaya; and Landowners within the TL ROW 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> Is there any way for the compensation value can be above 15%?; and What is the status of the land after being compensated? 	<ul style="list-style-type: none"> In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building located within the free space of the TL will be compensated as much as 15% of the building value; and The status of landownership remains to the right of the landowner. There is no change in terms of land ownership.

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Karangharum	Karangbahagia	Bekasi	07-02-2018	<ul style="list-style-type: none"> • Head of village of Karangharum, • Local District Military and Police Command; and • Landowners within the TL ROW. 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • How to calculate the area of land eligible for compensation? • When will the remaining 20% of the land compensation be paid? 	<ul style="list-style-type: none"> • To be measured of 17m to the right and to the left from the center of the tower footing. This calculation is based on the SNI No. 4-6018-2002 regarding free space of high voltage transmission line. • Land compensation is paid into two terms; 80% for the first payment term and the second payment for the remaining 20% once the separation of the land certificate issue by the land agency.
Waluya	Kutawaluya	Karawang	08-02-2018	<ul style="list-style-type: none"> • Landowners; • District and Village Authorities; and • Local Police 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • Insufficient amount of compensation if based on Ministerial Regulation No.38 Year 2013. 	<ul style="list-style-type: none"> • In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building and land located within the free space of the TL will be compensated as much as 15% of the building or land value; • The value / price of compensation for the Free

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
							<p>Space of TL will be determined / calculated by the KJPP as an independent appraisal appointed by the Government.</p> <ul style="list-style-type: none"> The compensation value is calculated based on the current market value.
Sumurgede	Cilamaya Kulon	Karawang	08-02-2018	<ul style="list-style-type: none"> Landowners; District Authorities; and Village Authorities; 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> Eligibility and landownership documentation requirement to receive compensation; and Project community grievance handling / management. 	<ul style="list-style-type: none"> The role of village government will be crucial in facilitating the community with regard to issuing legal documentation in order for the landowner to have the right to receive the compensation.; and During construction phase there will be personnel assigned from JSP to manage concerns or complaints raised by the community related to the Project. The procedure for submitting community complaints is being

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
							socialized to the community.
Mekarjaya	Kedung-waringin	Bekasi	08-02-2018	<ul style="list-style-type: none"> • Head of Village of Mekarjaya; • Vice-Head of Local Police Command; • Representative of Government of District of Kedung Waringin; • Landowners within the TL ROW. 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • During construction phase the Project can provide opportunities for local workforce to be involved in the Project; and • Eligibility and landownership documentation requirement to receive compensation 	<ul style="list-style-type: none"> • As much as possible PT JSP will utilize and provide maximum opportunities for local workforce with proper and transparent recruitment / selection process. • The role of village government will be crucial in facilitating the community with regard to issuing legal documentation in order for the landowner to have the right to receive the compensation
Sampalan	Kotawaluya	Karawang	09-02-2018	<ul style="list-style-type: none"> • Head of District of Kutawaluya; • Local District Police and Military Command; 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • Compensation for access road to be used for the construction of the Transmission Line; • When will the remaining 20% of the land compensation be paid? 	<ul style="list-style-type: none"> • There will be a discussion between the Contractor and the affected communities facilitated by the village authorities to establish agreement on the compensation.; and

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Head of Village of Samplan; and • Landowners within the TL ROW. 			<ul style="list-style-type: none"> • Land compensation will be paid into two terms; 80% for the first payment term and the second payment for the remaining 20% once the separation of the land certificate issue by the land agency.
Manggung-Jaya	Cilamaya Kulon	Karawang	09-02-2018	<ul style="list-style-type: none"> • Landowners; • District and • Village Authorities; 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • Eligibility and landownership documentation requirement to receive compensation; and • Project to have close coordination and to inform district and village authorities and community prior to conducting any construction activities/ 	<ul style="list-style-type: none"> • The role of village government will be crucial in facilitating the community with regard to issuing legal documentation in order for the landowner to have the right to receive the compensation; and • Project will coordinate and provide information to District and Village authorities and the community prior conducting any construction activities;
Karangmekar	Kedungwaringin	Bekasi	09-02-2018	<ul style="list-style-type: none"> • Head of Village of Karangmekar; 	Compensation scheme for area / space traversed by	-	NA

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Vice-Head of Local District Police Command; • Representative of Government of District of Kedungwaringin; • Landowners within the TL ROW. 	the Project 500 kV Transmission Line.		
Mulyajaya	Kotawaluya	Karawang	10-02-2018	<ul style="list-style-type: none"> • Head of District of Kutawaluya; • Head of Local District Police Command of Rengasdengklok; • Head of Village of Mulyajaya; and • Landowners within the TL ROW 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	Is there any way for the compensation value can be above 15%?	In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building and land located within the free space of the TL will be compensated as much as 15% of the building or land value

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Karyasari	Rengas-dengklok	Karawang	12-02-2018	<ul style="list-style-type: none"> Head of Village of Karyasari; Head of District of Rengasdengklok; Landowners within the TL ROW. 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	Is there any way for the compensation value can be above 15%?	In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building and land located within the free space of the TL will be compensated as much as 15% of the building or land value
Karangsatu	Karangbahagia	Bekasi	12-02-2018	<ul style="list-style-type: none"> Landowners; District and Village Authorities; and Local Police and Military 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	Are the community allowed to continue planting crops within the land under the TL tower?	It is better not to plant any trees under the TL tower as it can disturb during the maintenance process.
Kalangsuria	Rengas-dengklok	Karawang	13-02-2018	<ul style="list-style-type: none"> Head of Village of Kalangsuria; Secretary of District of Rengasdengklok; Landowners within the TL ROW. 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	Are the community allowed to continue planting crops within the land under the TL tower?	It is better not to plant any trees under the TL tower as it can disturb during the maintenance process.
Kalangsari	Rengas-dengklok	Karawang	14-02-2018	<ul style="list-style-type: none"> Head of Village of Kalangsari; and 	Compensation scheme for area / space traversed by	Timeline of the Transmission Line construction	JSP will update on the construction timeline and will provide socialization

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> Landowners within the TL ROW. 	the Project 500 kV Transmission Line.		approximately one month prior the commencement of the construction
Pasirukem	Cilamaya Kulon	Karawang	14-02-2018	<ul style="list-style-type: none"> Head of Village of Pasirukem; Head of District Security of Cilamaya Kulon; Local District Police and Military Command; and Landowners within the TL ROW 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	Timeline of the Transmission Line construction;	JSP will update on the construction timeline and will provide socialization approximately one month prior the commencement of the construction
Karangmukti	Karang Bahagia	Bekasi	15-02-2018	<ul style="list-style-type: none"> Head of Village of Karangmukti; Local District Police and Military Command of Karangbahagia; Landowners within the TL ROW. 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> Will land user who works in the village-owned land receive any compensation? Who determines the compensation for the Free Space of the TL? <p>Does the compensation value being calculated based on the NJOP (Tax Object Selling</p>	<ul style="list-style-type: none"> Compensation will be provided to the village as the legal owner of the land. The village authorities then can discuss or set up agreement with landuser whether they will receive any compensation on the village-owned land.

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
						Value) or the current market value?	<ul style="list-style-type: none"> The value / price of compensation for the Free Space of TL will be determined / calculated by the KJPP as an independent appraisal appointed by the Government; and The compensation value is being calculated based on the current market value
Mekarjati	Karawang Barat	Karawang	15-02-2018	<ul style="list-style-type: none"> Head of Mekarjati; Secretary of District of Karawang Barat; and Landowners within the TL ROW ; 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	During the construction activities who will be responsible if there is any impact to the community? Is it PLN or JSP?	During the construction activities it will be under the responsibility of JSP and the Contractor, while the post-construction i.e. maintenance will be under the responsibility of PLN.
Tunggakjati	Karawang Barat	Karawang	15-02-2018	<ul style="list-style-type: none"> Representative of District Government of Karawang Barat; Vice-Head of Local District Police Command; 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	Timeline of the Transmission Line construction	JSP will update on the construction timeline and will provide socialization approximately one month prior the commencement of the construction

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Vice-Head of Local District Military Command; • Head of Village of Tunggakjati; • Landowners within the TL ROW 			
Tegalurung	Cilamaya Kulon	Karawang	15-02-2018	<ul style="list-style-type: none"> • Head of Village of Tegalurung; • Head of District Security of Cilamaya Kulon; • Local District Police and Military Command; and • Landowners within the TL 	Compensation scheme for area / space traversed by the Project 500 kV Transmission Line.	<ul style="list-style-type: none"> • During construction phase the Project can provide opportunities for local workforce to be involved in the Project; and • During the construction activities who will be responsible if there is any impact to the community? Is it PLN or JSP? 	<ul style="list-style-type: none"> • As much as possible PT JSP will utilize and provide maximum opportunities for local workforce with proper and transparent recruitment / selection process; and • During the construction activities it will be under the responsibility of JSP and the Contractor, while the post-construction i.e. maintenance will be under the responsibility of PLN.
Pancakarya	Tempuran	Karawang	19-02-2018	<ul style="list-style-type: none"> • Head of village of Pancakarya; 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the 	<ul style="list-style-type: none"> • Project to provide local farmers to harvest their farming product prior 	<ul style="list-style-type: none"> • JSP will update on the construction timeline and will provide socialization

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> • Head of village of Tanjungjaya; and • Landowners within the TL ROW 	<ul style="list-style-type: none"> • construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	<ul style="list-style-type: none"> • conducting the construction activities; and • Compensation for damage crops and farming area due to construction activities. 	<ul style="list-style-type: none"> • approximately one month prior the commencement of the construction; and • JSP will provide compensation for the damaged crops and farming area during construction through negotiation with the owners
Waluya	Cikarang Utara	Bekasi	19-02-2018	<ul style="list-style-type: none"> • Head of village of Waluya; • Local Military and Police Command of Cikarang Utara; • Representative of District of Cikarang Utara; • Landowners within the TL ROW. 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	-	
Karangsari	Cikarang Timur	Bekasi	19-02-2018	<ul style="list-style-type: none"> • Head of village of Karangsari; • Local Military and Police 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 	<ul style="list-style-type: none"> • Determination of land compensation value; 	<ul style="list-style-type: none"> • The value / price of compensation for the Free Space of TL will be determined / calculated by the KJPP as an

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				Command of Cikarang Timur; <ul style="list-style-type: none"> • Representative of District of Cikarang Timur; and • Landowners within the TL ROW 	kV transmission line tower site; and <ul style="list-style-type: none"> • Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	<ul style="list-style-type: none"> • Timeline of the Transmission Line construction; • Explanation on the compensation based on 15% of market value. 	independent appraisal appointed by the Government; <ul style="list-style-type: none"> • JSP will update on the construction timeline and will provide socialization approximately one month prior the commencement of the construction; and • In accordance with the Ministerial Regulation on Mineral Resource Energy no 38 Year 2013, building and land located within the free space of the TL will be compensated as much as 15% of the building or land value
Purwajaya	Tempuran	Karawang	20-02-2018	<ul style="list-style-type: none"> • Head of village of Purwajaya; • Head of District of Tempuran; • Local Military and Police Command of Tempuran District; 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 	Project grievance mechanism; How will the project manage concerns and issue raised by the affected communities;	During construction phase there will be personnel assigned from JSP to manage concerns or complaints raised by the community related to the Project. The procedure for submitting community complaints is being socialized to the community

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> Landowners within the TL ROW 	500 kV Transmission Line		
Jayanegara	Tempuran	Karawang	20-02-2018	Head of village of Jayanegara	<ul style="list-style-type: none"> Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	Project grievance mechanism; How will the project manage concerns and issue raised by the affected communities;	During construction phase there will be personnel assigned from JSP to manage concerns or complaints raised by the community related to the Project. The procedure for submitting community complaints is being socialized to the community.
Dayeuh Luhur	Tempuran	Karawang	21-02-2018	<ul style="list-style-type: none"> Head of Village; Head of District of Tempuran; Local Military Command; Landowners within the TL ROW 	<ul style="list-style-type: none"> Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	<ul style="list-style-type: none"> Timeline of the Transmission Line construction; Impacts of electric and magnetic radiation to community health. Project to provide local farmers to harvest their farming product prior conducting the construction activities; 	<ul style="list-style-type: none"> JSP will update on the construction timeline and will provide socialization approximately one month prior the commencement of the construction; and Project will have close coordination with the District and Village authorities and also the affected community prior to conducting any construction activities;

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
Lemah Karya	Tempuran	Karawang	22-02-2018	<ul style="list-style-type: none"> • Head of Village; • Secretary of District of Tempuran; and • Landowners 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	<ul style="list-style-type: none"> • Project to provide local farmers to harvest their farming product prior conducting the construction activities; and • Impacts of electric and magnetic radiation to community health; and 	<ul style="list-style-type: none"> • Project to have close coordination and to inform district and village authorities and community prior to conducting any construction activities; • JSP will update on the construction timeline and will provide socialization approximately one month prior the commencement of the construction; and • Calculation of magnetic field had been conducted before and the result is still below the threshold and considered safe for human
Lemah Duhur	Tempuran	Karawang	22-02-2018	<ul style="list-style-type: none"> • Head of village of Lemah Duhur; • Head of Local Military Command of Tempuran District; and • Secretary of District of Tempuran; 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 	Further explanation on the compensation payment.	<ul style="list-style-type: none"> • Land compensation will be paid into two terms; 80% for the first payment term and the second payment for the remaining 20% once the separation of the land certificate issue by the land agency

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
					500 kV Transmission Line		
Pagadungan	Tempuran	Karawang	23-02-2018	<ul style="list-style-type: none"> • Head of village of Pagadungan; • Head of District of Tempuran; • Local Military and Police Command of Tempuran District; • Landowners within the TL ROW 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 500 kV Transmission Line 	<ul style="list-style-type: none"> • Compensation for rice paddy field and semi-permanent hut; and • When will the remaining 20% of the compensation be paid? 	<ul style="list-style-type: none"> • Compensation will not cover for rice paddy as it is not categorized as crops that can interfere with the Free Space of the TL. As for the semi-permanent hut will need to be further confirm with the KJPP team; and • Compensation payment for the remaining 20% of land. This will be paid once the separation of the land certificate issue by the land agency;
Bantarjaya	Pebayuran	Bekasi	23-02-2018	<ul style="list-style-type: none"> • Head of village of Bantarjaya; • Representative of District of Pebayuran; • Local Military and Police Command of Pebayuran District; 	<ul style="list-style-type: none"> • Purpose and objective of coordination and socialization of the construction of the 500 kV transmission line tower site; and • Compensation scheme for area / space traversed by the Project 	<ul style="list-style-type: none"> • Compensation for damage crops and farming area due to construction activities. • Timeline of the Transmission Line construction; • Impacts of electric and magnetic radiation to community health. 	<ul style="list-style-type: none"> • JSP will provide compensation for the damage crops and farming area during construction through negotiation with the owners; and • JSP will update on the construction timeline and will provide socialization

Village	District	Regency	Date	Stakeholder Involved	Key Messages	Issues Raised	Sponsor Feedback
				<ul style="list-style-type: none"> Landowners within the TL ROW 	500 kV Transmission Line		<p>approximately one month prior the commencement of the construction; and</p> <ul style="list-style-type: none"> Calculation of magnetic field had been conducted before and the result is still below the threshold and considered safe for human.

6 STAKEHOLDER ENGAGEMENT PLAN

6.1 STAKEHOLDER ENGAGEMENT METHODOLOGY

Stakeholder engagement is centered on building and maintaining constructive relationships over time with groups of people / stakeholders who are affected or interested in the Project's activities. It is an ongoing process between the Project and its stakeholders that extends throughout the life of the Project and encompasses a range of activities and approaches, from information sharing and consultation, to participation, negotiation, and information of partnerships.

Considering the social setting of the communities living around the Project area and category of stakeholders identified during the AMDAL and ESIA consultation, the following section sets out the strategy and approach for the Project to conduct stakeholder engagement activities in a culturally appropriate manner.

The goal is to ensure the timely provision of relevant and understandable information and to create a process that provides opportunities for all stakeholders to express their views and concerns, and allows the Project to consider and respond to them. The nature and frequency of this engagement should reflect the level of Project risks and impacts.

6.1.1 Stakeholder Engagement Materials

Materials supporting stakeholder engagement will include printed information in the form of leaflets and posters as well as documents that form the focus of disclosure and consultation activities, including the AMDAL and ESIA Reports. Other materials are developed to support consultation meetings, including presentations, posters and banners illustrating aspects of the Project and the AMDAL and ESIA process.

Potential consultation / engagement methods that could be used by the Project include (but are not exclusive to) those detailed in **Table 6-1**.

Table 6-1 Stakeholder Engagement Tools

Method*	Use
Briefings and presentations	Provide information on a specific issue/initiative to those that may be affected.
Public displays	Increase accessibility of information to community. Include Fact Sheets/Newsletters and staff to answer questions.
Media coverage (both editorial and advertising)	Raise awareness amongst wide audience.
Open days	Informal event designed to raise awareness and provide vehicle for addressing community concerns. Include printed material and staff for further information.
Printed/website materials (external)	Provide updates to reach wide audience.

Method*	Use
Printed/intranet materials (internal)	Provide updates to reach wide internal audience.
Videos/DVDs	Visual depiction of development/activities. Can be used in briefings/presentations, open days, public displays and other methods of consultation/engagement.
Website	Provides regular updates and stores other useful information (such as fact sheets/newsletters etc.). Include feedback mechanism.
Community Consultative Committees	Made up of relevant interest group representatives in order to provide a vehicle for constructive discussion and good relationships.
Community profiling	Used to understand the community profile in a specific geographical area or community of interest. Can assist in better understanding consultation needs.
Focus groups	Often used to identify specific issues on which to base further research or consultation.
Negotiation/mediation	Aimed at dealing with conflict and resulting in an agreed outcome.
Public meetings	Used to raise awareness amongst wide audience and provides a vehicle for community to raise their concerns.
Stakeholder interviews	Used to gain in-depth understanding of a specific issue.
Surveys	Used to gain overview of community views or level of community understanding.
Community partnerships	Provide an opportunity for joint company-community decision making on community projects and initiatives.
Social investment	Strategic contributions to support areas of identified need in the community. Can lead to good relationships and will enhance corporate reputation.

6.1.2 *Communication Channels*

Feedback mechanisms are adapted to suit the needs and preferences of the different stakeholders, as well as their location. They range from comment boxes, which are used in local communities to gather feedback in written form, to web-based mechanisms that can gather feedback from more urban stakeholders who have more easy access to information technology.

The different consultation and disclosure methods, materials and communication channels that can be used to engage stakeholders are shown in **Table 6-2**.

Table 6-2 *Communication Channels*

Stakeholder Category	Disclosure Methods	Communication Channels
Government Authorities	Notification, key documents and invitations to meet with Project addressed to specific stakeholders.	<ul style="list-style-type: none"> Email, telephone, post and in person. Meeting and correspondence with the Project representatives.

Stakeholder Category	Disclosure Methods	Communication Channels
Residents of local communities and local road users	Paper copies of documents made available in central community location (e.g. town halls, cultural centers, village head office, traditional market, etc.)	<ul style="list-style-type: none"> Email, telephone, post and in person. Secure comment boxes Community meetings and public hearings
Landowners	Relevant information send directly to affected peoples	<ul style="list-style-type: none"> Email, telephone, post and in person. Meeting and correspondence with the Project representative.
Land users and farmers	<ul style="list-style-type: none"> Paper copies of documents made available in central community location (e.g. town halls, cultural centers, village head office, traditional market, etc.) Notification, key documents and invitations to meet with Project addressed to specific stakeholders. 	<ul style="list-style-type: none"> Email, telephone, post and in person. Secure comment boxes Community meetings and public hearings Private and roundtable meetings with the Project
Non-government organizations (NGOs)	Notifications, key documents and invitation to meet with the Project addressed to specific stakeholders.	<ul style="list-style-type: none"> Email, telephone, post and in person. Meeting and correspondence with the Project representative
Media	Press releases and media interviews regarding Project updates and disclosure periods	Media contacts

6.2 *PLANNED FUTURE STAKEHOLDER ENGAGEMENT*

This SEP identifies the relevant stakeholder groups, key messages to be delivered, approach and tools of engagement, timeline and responsible parties. The SEP is designed to include all relevant stakeholders and issues to cover the entire lifecycle of the Project. However, the plan is a dynamic tool to be periodically updated and adapted to the current social, economic and political situation of the area since the Project's stakeholders and issues / concerned raised may change over the life time of the Project.

The project is currently recruiting E&S resources (male and female) to oversee the implementation of the ESMP, this includes appropriate resources to manage and conduct the consultation and disclosure activities and address grievances.

Over the months of June, July and August the Project will focus on the ESIA disclosure in the communities around the power plant, coastal area and transmission line and substation. The sessions will aim to include a representative cross section of the Project's stakeholder including females, youth, the elderly, fishing folk and the poor. In addition, NGOs with interest in the Project will be engaged with. The activities will be organized with invitations sent via the village office with the non-technical summary provided in advance. The Project will also prepare a banner to identify the location. The selected venues will be easily

accessible and fit for purpose providing a conducive environment for the discussions.

The discussions will be tailored depending on the location, level, and type of potential impact including:

- The overall project description, key entities involved and schedule;
- Potential project impacts and proposed mitigations including potential impacts on livelihoods (fishing and fish ponds as well as paddy);
- Project benefits such as employment, provision of services and goods and the CSR and livelihood restoration programs; and
- The Grievance Mechanism and key JSP personnel.

An attendance sheet will record all attendees with all questions and answers along with comments recorded.

Based on the analysis of stakeholder interests' versus power or influence presented in **Table 5-1** in the previous section, the type of engagement that will be implemented for each of the different stakeholder identified is shown in **Figure 6-1**.

The proposed future Project stakeholder engagement activities, based on ERM's understanding of potential project impacts and stakeholder consultation results are presented in **Table 6-3**. The actions recommended in this table should commence immediately to ensure the stakeholders, in particular nearby community, are sufficiently informed and have had the opportunity to express their concerns. For example discussions related to the grievance mechanism, construction impacts such as noise, air emissions, traffic, non local worker presence, employment opportunities and impacts to marine areas should commence immediately.

Figure 6-1 Stakeholder Engagement Based on Power / Influence versus Interest

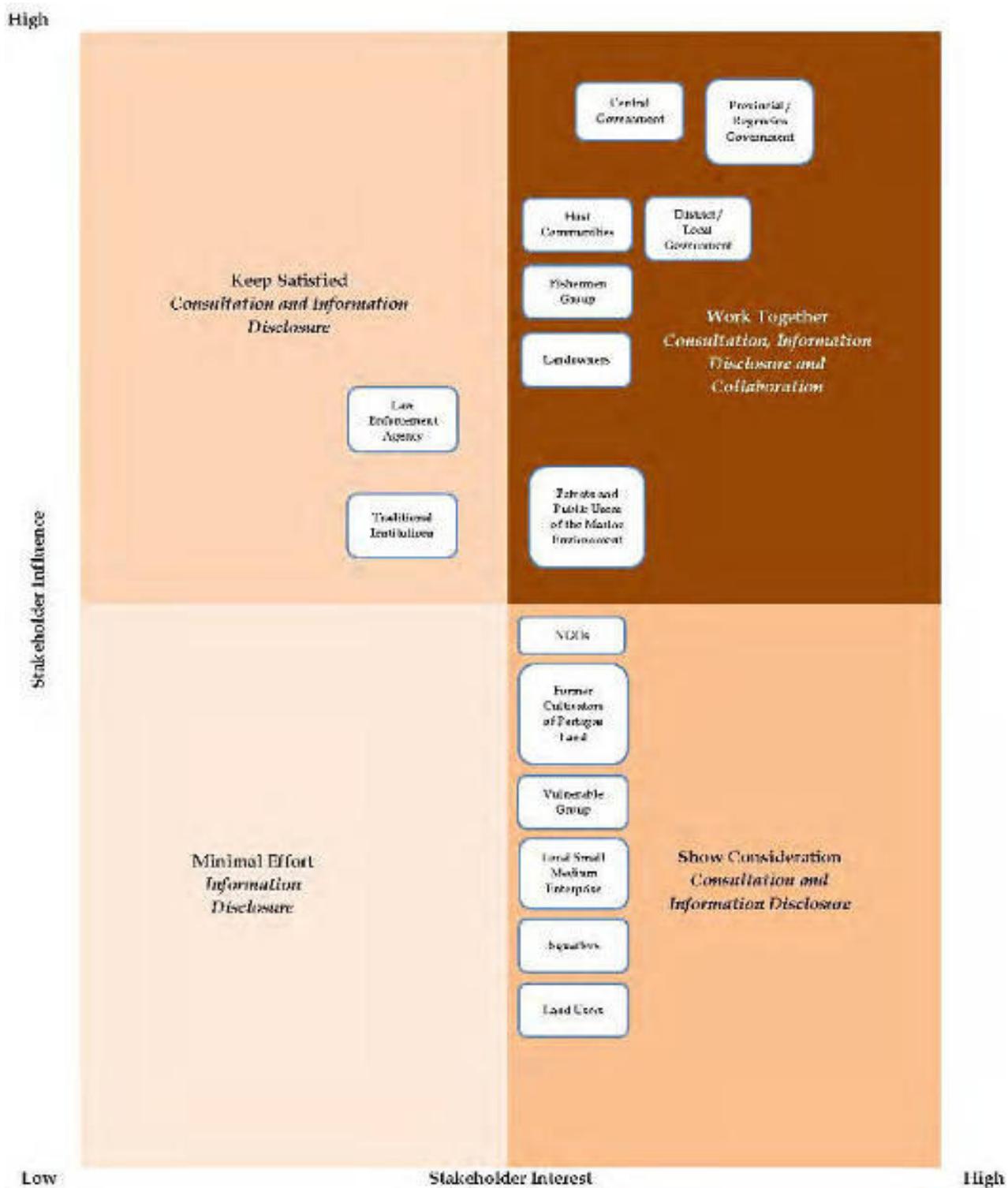


Table 6-3 PT Jawa Satu Power Stakeholder Engagement Plan

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
1.	Central Government	<ul style="list-style-type: none"> Ministry of Environmental and Forestry 	Obtaining all regulatory permits and licensing requirements for the development of the Project mainly the AMDAL permit.	<p><i>Approach:</i> Consultation, Collaboration and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> Direct one-on-one meeting with relevant government agencies as required Focus Group Discussion at regencies level Workshop Briefing and presentation 	PT Jawa Satu Power	Pre-Construction and Construction and Operations
2.	Provincial / Regencies Government	<ul style="list-style-type: none"> Environmental Agency (DLHK) of Karawang Regency; Bekasi dan Karawang Energy and Mineral Resources Agency; Kanwil BPN (National land Agency in Jawa Barat Province; 	Obtaining all regulatory permits and licensing requirements for the development of the PT Jawa Satu Power Plant Project mainly the Location Permit, Construction Permits and AMDAL permit.	<p><i>Approach:</i> Consultation, Collaboration and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> Direct one-on-one meeting with relevant 	PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
		<ul style="list-style-type: none"> • Development Planning Agency at Sub-National Level (BAPPEDA); • Department of Industry and Commerce; • Department of Spatial Planning; • Directorate of Sea Spatial Planning; and • Directorate General of Sea Spatial Management. 		<p>government agencies as required</p> <ul style="list-style-type: none"> • Focus Group Discussion at regencies level • Workshop 		
3.	District / Local Government	<p>Sub-District Heads of:</p> <ul style="list-style-type: none"> ▪ Cilamaya Wetan; ▪ Cilamaya Kulon; ▪ Tempuran; ▪ Pedes; ▪ Rawamerta ▪ Kedungwaringin; ▪ Cikarang Timur; and ▪ Karang Bahagia 	<ul style="list-style-type: none"> ▪ Project design and development ▪ Dissemination of AMDAL and RKL RPL documents. ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; ▪ Addressing other concerns not discussed in the above. ▪ Providing an opportunity for feedback. ▪ Project local labour requirements and procurement mechanism. ▪ Project community Grievance Mechanism. ▪ Opportunities for Project involvement in community development. 	<p><i>Approach:</i></p> <p>Consultation, Collaboration and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Socialization forum in each village or sub-district involving village governments. • Briefing and presentations. • Printed project updates / Website Material • Videos / Film 	PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
4.	Law Enforcement Agency	District Sector Police and District Military Command of: <ul style="list-style-type: none"> ▪ Cilamaya Wetan; ▪ Cilamaya Kulon; ▪ Tempuran; ▪ Pedes; ▪ Rawamerta ▪ Kedungwaringin; ▪ Cikarang Timur; and ▪ Karang Bahagia 	<ul style="list-style-type: none"> ▪ Project design and development, impacts and opportunities. ▪ Dissemination of AMDAL and RKL RPL documents. ▪ Project local labour requirements and procurement mechanism ▪ Opportunity for partnership related to security aspect of the project assets and safety throughout the construction and operation of the project. ▪ Project security requirements. ▪ Disclosure of Project Grievance Mechanism. 	<p><i>Approach:</i> Consultation and Information Disclosure</p> <p><i>Tools:</i> Socialization forum in each village or sub-district involving village governments</p>	PT Jawa Satu Power	Pre-Construction and Construction
5.	Host Communities	<ul style="list-style-type: none"> ▪ Community of Cilamaya village; ▪ Head of the 37 project affected villages as representatives of the village residents. 	<ul style="list-style-type: none"> ▪ Project design and development ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; ▪ Providing an opportunity for feedback. ▪ Addressing other concerns not discussed in the above. ▪ Project local labour requirements and procurement mechanism. ▪ Project community Grievance Mechanism. ▪ Opportunities for Project involvement in community development. 	<p><i>Approach:</i> Consultation, Collaboration and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Socialization forum in each village • Posters in location where it is easily accessible to the community. • Public Displays • Project briefing and presentations 	PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
				<ul style="list-style-type: none"> • Media Coverage • Printed project updates/ Website Material • Videos / Film 		
6.	Traditional Institutions	Community Leaders of Sub-Districts of: <ul style="list-style-type: none"> ▪ Cilamaya Wetan; ▪ Cilamaya Kulon; ▪ Tempuran; ▪ Pedes; ▪ Rawamerta ▪ Kedungwaringin; ▪ Cikarang Timur; and ▪ Karang Bahagia 	<ul style="list-style-type: none"> • Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; • Providing an opportunity for feedback. • Addressing other concerns not discussed in the above. • Opportunities for Project involvement in local economy and community development; • Opportunity for Project to support social or community events such as Independence day celebration and cultural events/CSR activities; • Disclosure of Project Grievance Mechanism. 	<i>Approach:</i> Consultation, collaboration, Information and Disclosure <i>Tools:</i> <ul style="list-style-type: none"> • Direct one-on-one meeting as required • Focus Group Discussion in the village level. • Public Displays • Briefing and Presentations • Media Coverage • Printed / Website Material • Videos / Film 	PT Jawa Satu Power	Pre-Construction, Construction and Operation
7.	Fishermen Groups	Fishermen communities originated from the village of Muara and Blanakan	<ul style="list-style-type: none"> ▪ Project design and development, ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; 	<i>Approach:</i> Consultation, Collaboration and Information Disclosure	PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
			<ul style="list-style-type: none"> ▪ Addressing other concerns not discussed in the above. ▪ Providing an opportunity for feedback. ▪ Marine / Sea restriction zone which will be applied by the Project during construction and operation; ▪ Project Sea traffic safety and security plan; ▪ Disclosure of Project Grievance Mechanism. ▪ Opportunities for Project involvement in local economy and community development particularly for the fishermen group. 	<p><i>Tools:</i></p> <ul style="list-style-type: none"> • Socialization and consultation forum in the village level • Posters in location where it is easily accessible to the fishermen community. • Public Displays • Briefing and Presentations • Media Coverage • Printed / Website Material • Videos / Film 		
8.	Landowners	<p>Landowners impacted by the development of the following project's component:</p> <ul style="list-style-type: none"> ▪ 500 KV High Voltage Transmission Line; ▪ Access road; ▪ Project's Jetty; and ▪ Onshore pipeline 	<ul style="list-style-type: none"> ▪ Land acquisition process and compensation scheme; ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; ▪ Providing an opportunity for feedback. ▪ Addressing other concerns not discussed in the above. ▪ Livelihood / Income Restoration program / scheme for the project affected landowners; ▪ Community health and safety due to impact of transmission 	<p><i>Approach:</i></p> <p>Consultation, Collaboration and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Direct one-on-one meeting with landowner as required; and • Socialization forum in the village level. • Public Displays 	Local land acquisition consultant on behalf of PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
			<p>line; onshore pipeline installment; and</p> <ul style="list-style-type: none"> ▪ Disclosure of Project Grievance Mechanism particularly during the land acquisition phase. 	<ul style="list-style-type: none"> • Briefing and Presentations • Media Coverage • Printed / Website Material • Videos / Film 		
9.	Former cultivators of Pertagas land	Farmers and local residents who conducted farming activities on Pertagas land that will be used for power plant development	<ul style="list-style-type: none"> ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; ▪ Providing an opportunity for feedback. ▪ Addressing other concerns not discussed in the above. • Opportunities for Project involvement in local economy and community development particularly for the former cultivators of the Pertagas land. • Project local labour requirements and procurement mechanism and opportunity for local workforce to be involved in the Project; and • Disclosure of Project Grievance Mechanism. 	<p><i>Approach:</i></p> <p>Consultation and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Socialization forum in the village level. • Focus Group Discussion in the village level. • Public Displays • Briefing and Presentations • Media Coverage • Printed / Website Material • Videos / Film 	PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
10.	Vulnerable Group	<ul style="list-style-type: none"> Female Craftsmen Owners of stalls located around the Project area in Cilamaya village. 	<ul style="list-style-type: none"> Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; Providing an opportunity for feedback. Addressing other concerns not discussed in the above. Opportunities for Project involvement in local economy and community development particularly involving the identified vulnerable group; Project local labour requirements and procurement mechanism and opportunity for local workforce to be involved in the Project. Disclosure of Project Grievance Mechanism. 	<p><i>Approach:</i></p> <p>Consultation and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> Direct one-on-one meeting as required Socialization forum in the village level. Focus Group Discussion in the village level. Public Displays Briefing and Presentations Media Coverage Printed / Website Material Videos / Film 	PT Jawa Satu Power	Pre-Construction, Construction and Operation
11.	National Level Non-Government Organizations	<ul style="list-style-type: none"> Wahana Lingkungan Hidup Foundation (WALHI) 	<ul style="list-style-type: none"> Project development, impacts and opportunities. Management of environmental and social adverse impacts. Dissemination of AMDAL and RKL RPL documents. 	<p><i>Approach:</i></p> <p>Consultation and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> Direct one-on-one meeting as required 	PT Jawa Satu Power	Pre-Construction and Construction

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach
				<ul style="list-style-type: none"> • Focus Group Discussion at regency level. • Briefing and Presentations • Printed / Website Material • Media Coverage • Videos / Film
12.	Local Level Non-Government Organizations	<ul style="list-style-type: none"> • Karang Taruna (Local Youth Organization); • Gerakan Masyarakat Bawah Indonesia (GMBI); • Badan Pembinaan Potensi Keluarga Besar Banten (BPKB); • Ikatan Putra Daerah (IKAPUD); and • Pemuda Pancasila (PP); 	<ul style="list-style-type: none"> ▪ Project development, impacts and opportunities. ▪ Project local labour requirements and procurement mechanism and opportunity for local workforce to be involved in the Project. ▪ Project's social investment/community development programs ▪ Management of environmental and social impacts. 	<p><i>Approach:</i> Communication and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Direct one-on-one meeting with relevant CBO as required • Focus Group Discussion at Sub-District level • Briefing and Presentations • Printed / Website Material • Media Coverage
13.	Local Small Medium Enterprises Group	Local Entrepreneur from Cilamaya Wetan and Manggung Jaya Village	<ul style="list-style-type: none"> ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; 	<p><i>Approach:</i> Consultation and Information Disclosure</p>

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
			<ul style="list-style-type: none"> ▪ Addressing other concerns not discussed in the above. ▪ Project design and development; and ▪ Project's social investment/local economic and community development programs. 	<p><i>Tools:</i></p> <ul style="list-style-type: none"> • Direct one-on-one meeting as required • Focus Group Discussion in the village. • Public Displays • Briefing and Presentations • Media Coverage • Printed / Website Material • Videos / Film 		
14	Squatters	Owners of Kiosks Next to the CCGT Plant	<ul style="list-style-type: none"> ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; ▪ Addressing other concerns not discussed in the above. ▪ Providing an opportunity for feedback. ▪ Opportunities for Project involvement in local economy and community development particularly involving the identified vulnerable group; ▪ Project local labour requirements and procurement mechanism and opportunity for local 	<p><i>Approach:</i></p> <p>Consultation and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Direct one-on-one meeting as required • Socialization forum in the village level. • Focus Group Discussion in the village level. • Public Displays • Briefing and Presentations 	PT Jawa Satu Power	Pre-Construction, Construction and Operation

No.	Stakeholder Group	Stakeholder	Key Issue / Message	Approach	Responsibility	Phase of Project
			<p>workforce to be involved in the Project.</p> <ul style="list-style-type: none"> ▪ Disclosure of Project Grievance Mechanism. 	<ul style="list-style-type: none"> • Media Coverage • Printed / Website Material • Videos / Film 		
15	Private and Public Users of the Marine Environment	<ul style="list-style-type: none"> • Oil and gas company; • Shipping companies; • Port authorities; • Tourism operator; and • Commercial fishing operators 	<ul style="list-style-type: none"> ▪ Disclosure of ESIA; the final project design, identified impacts and proposed mitigations; ▪ Addressing other concerns not discussed in the above. ▪ Project design and development; and ▪ Seeking opportunity to collaborate for supporting local economic and infrastructure development. 	<p><i>Approach:</i></p> <p>Consultation and Information Disclosure</p> <p><i>Tools:</i></p> <ul style="list-style-type: none"> • Direct one-on-one meeting as required • Focus Group Discussion at regency level. • Briefing and Presentations • Media Coverage • Printed / Website Material 	PT Jawa Satu Power	Construction and Operation

7 *COMMUNITY GRIEVANCE MECHANISM*

A grievance mechanism is a process for systematically receiving, investigating and responding to stakeholder complaints. When carefully designed, properly implemented and embedded in an effective engagement and disclosure program, they provide significant benefits to both companies and communities.

A well-functioning grievance mechanism:

- Demonstrates a company's willingness to take community concerns seriously, thereby contributing to better relationships with stakeholders;
- Promotes early identification and resolution of concerns, leading to better management of operational impacts and the avoidance of potential harm; and
- Reduces the potential for complaints to escalate into litigation, protests, security incidents, or regulatory challenges that could result in project delays.

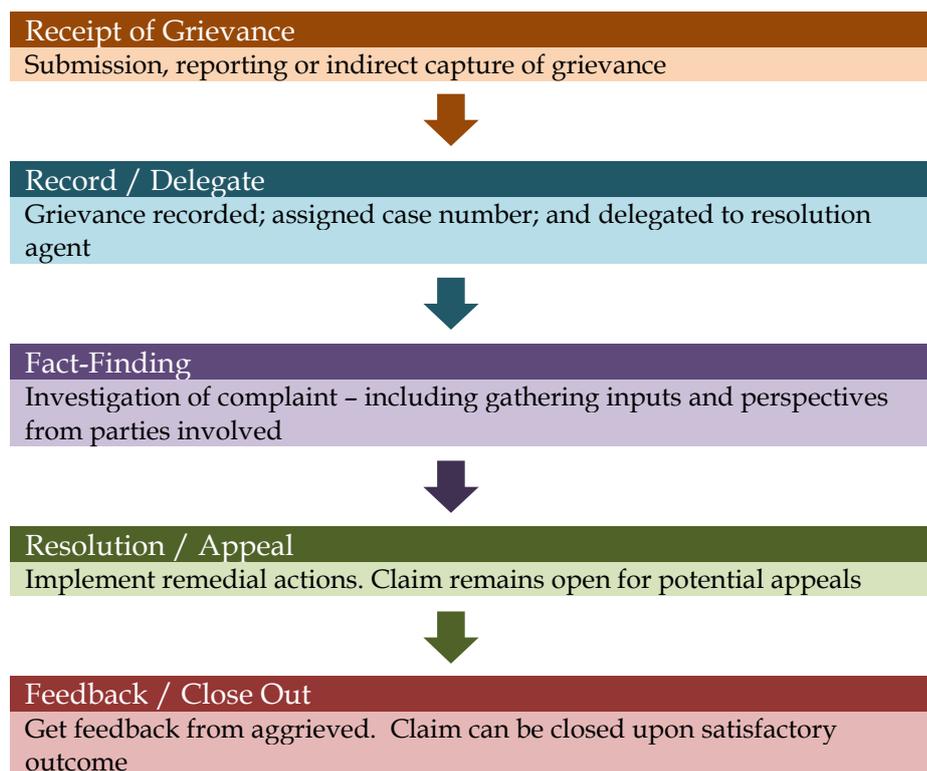
A Project-level grievance mechanism is a locally based, formalized way for a company or Project to accept, assess, and resolve stakeholder complaints related to Project activities. It offers a package of widely understood and effective procedures for solving problems in a culturally appropriate manner.

7.1 *PROPOSED GRIEVANCE MECHANISM FOR PROJECT-AFFECTED COMMUNITIES*

Throughout the life cycle of the Project queries and grievances from community may arise hence a Grievance Tracking Redress Mechanism (GTRM) is established to address such incidences. The GTRM will be triggered in all instances where a complaint is received by the Project or its contractors (such as the land acquisition consultant and the EPCs for the offshore and onshore activities).

Typically, an effective GTRM is characterized by five basic steps and activities that are easy to follow and understand as illustrated in **Figure 7-1**.

Figure 7-1 Grievance Tracking Redress Mechanism



A summary of the process of identifying, investigating, and resolving grievances is detailed in the **Table 7-1**.

Table 7-1 Summary of Stages of Grievance Handling

Stage	Description	Responsibility	Timeline
Stage 1: Receipt of Grievance	<ul style="list-style-type: none"> ▪ Comments and questions are received and analyzed as part of the standard feedback process. ▪ Feedback or complaints can be received through verbally face to face or via email or phone and WhatsApp. ▪ All communications are subject to the feedback process, which ensures that feedback is documented, incorporated, and responded to as needed. ▪ When the grievance is identified, stage 2 of the grievance procedure is initiated. 	Community Liaison Officer	
Stage 2: Record/ Delegate	<ul style="list-style-type: none"> ▪ When a grievance is identified, it is officially registered in a grievance log (see Annex 1 a template of grievance log) and given a unique identification number. ▪ It is categorized based on the type of complaint and its severity. Grievances are categorized into two categories: <ol style="list-style-type: none"> 1. Low significance grievance, with characteristics: <ul style="list-style-type: none"> • The complaints involve individual affected people only; 	Community Liaison Officer	3 days after the receipt of Grievance

Stage	Description	Responsibility	Timeline
	<ul style="list-style-type: none"> • One-off grievance, less probability it will attract media attention; and • Does not require immediate intervention from managerial level <p>2. High significance grievance, indicated by the following conditions:</p> <ul style="list-style-type: none"> • The complaints involve a large group of affected people; • Has not been resolved during the time specified in this mechanism • Recurring and potentially affecting the Project activities schedule; • Potentially attracting media attention; and • Requiring immediate intervention from managerial level. <ul style="list-style-type: none"> ▪ An initial response is sent to the person(s) who raised the grievance within six (6) working days, acknowledging their feedback and describing the next steps in the grievance process, time estimates for these steps and a contact person. ▪ The issue will be delegated to relevant unit/ department to be followed up. 		
<p>Stage 3: Fact Finding</p>	<ul style="list-style-type: none"> ▪ The Project will investigate grievances and their surroundings in a timely manner. Investigations may include photographs and other evidence, witness statements, interviews with affected stakeholders and other parties, review of site register, and other information gathering activities. ▪ The results of the investigation will be reviewed and a resolution will be proposed. The development of the resolution may involve consultation with the person(s) involved. The proposed resolution will then be formally communicated to all parties. 	<p>Community Liaison Officer and Grievance Redress Officer</p>	<p>6 days</p>
<p>Stage 4: Resolution or Appeal</p>	<ul style="list-style-type: none"> ▪ If the resolution is accepted by all parties, it will be documented, implemented and the grievance is closed. ▪ If the resolution is not accepted, it will be reconsidered and the following resolution may be proposed: <ul style="list-style-type: none"> ○ If complainant is not satisfied with the proposed resolution either party resorts to a mediator / arbitrator; ○ Mediator / Arbitrator then reviews the grievance and seeks resolution; ○ Mediator / Arbitrator then propose resolution; ○ If both parties are satisfied with the proposed resolution it will be 	<p>Stakeholder Relations Lead and EHS&S Manager</p>	<p>6 days</p>

Stage	Description	Responsibility	Timeline
	<p>documented, implemented and the grievance is closed;</p> <ul style="list-style-type: none"> ○ If both parties are not satisfied with the proposed resolution, then the complainant or Project will resort to the courts. 		
Stage 5: Feedback/ Close out	<ul style="list-style-type: none"> ▪ After the accepted resolution has been implemented, it will be monitored and its effectiveness will be evaluated. All parties will be notified that the resolution has been implemented and will have the opportunity to provide feedback on the grievance process and its implementation. 	Stakeholder Relation Lead and EHS&S Manager	15 days

7.2 *MONITORING AND REPORTING OF GRIEVANCE MECHANISM*

The Project will establish an internal monitoring process to monitor the effectiveness of the Grievance Mechanism. Internal monitoring will be undertaken on a quarterly basis / four times annually. The monitoring process is designed to identify areas of high performance and areas for improvement to enhance the process. The reporting of the Project Grievance Mechanism will be aligned and consistent with the ESIA and ESMP reporting.

The scopes of the monitoring include:

- Assessing the effectiveness of the grievance tracking and handling procedure;
- Identifying the need for organizational improvement in implementing the procedure;
- Evaluating the progress of resolution implementation and identify intervention needs from senior management to manage overdue / outstanding cases or recurring grievances; and
- Identifying the need for improvement of the procedure, should any significant changes in external factors occur, e.g. economic and political conditions that potentially encourage additional social risk and impact.

7.3 *DISCLOSURE OF GRIEVANCE MECHANISM*

The disclosure and communication of the project grievance mechanism is underway. The Project has disclosed and discussed the grievance mechanism with the landowners along the transmission line since late 2017. Grievance mechanism disclosure activities for the Cilamaya community around the power plant and coastal area communities is planned in July and August 2018.

The process will be conducted in a culturally appropriate manner in the local language (the majority of the community residing around the Project site are able to speak Bahasa Indonesia fluently but the local Sundanese language is also spoken widely) and in a format that is understandable to the entire project affected peoples

As stated previously, the Project is currently recruiting personnel to manage the grievance process based on ADB's requirements. The Project intends to continue consultation and disclosure activities with all the relevant stakeholders to promote awareness of the Project Grievance Mechanism during the pre and construction phase of the Project.

The Project intends to disclose the mechanism via formal and informal meetings and discussions as well as via the non-technical summary. It will also prepare promotional materials that can be presented on village information boards and around the Project site.

The following information is being disclosed by the Project:

- Who can raise complaints – focusing on affected communities;
- Where, when, and how community members can log complaints;
- Who is responsible for receiving and responding to complaints, and if any external parties can receive complaints from communities;
- What type of responses complainants can expect from the Project including timing of responses; and
- The benefits that complainants can receive from using the grievance mechanism.

It is essential that the local government (and all contractors) also fully understand the mechanism to enable them to communicate the step-by-step process to the project affected people, particularly in the case where the grievances are submitted to them for resolution.

7.4 *WORKER GRIEVANCE MECHANISM*

The Project will provide a grievance mechanism for workers to raise reasonable workplace concerns. The mechanism will involve an appropriate level of management and address concerns promptly, using an understandable and transparent process that provides feedback to those concerned, without any retribution.

The workers (including sub-contractors) will be informed of the grievance mechanism at the time of recruitment and provided refreshers on the process thereafter during their employment.

Similar to the affected people's mechanism appropriate resources and budget should be allocated to address these matters in a transparent and understandable process that provides feedback to the workers without any retribution. The process should be anonymous and fair. Some guiding principles set out by the IFC include:

- The company will establish a transparent process for workers to express concerns and file grievances;
- There will be no retaliation or discrimination against those that express grievances;
- Management will treat the grievances seriously and take appropriate action; and

- The company's grievance mechanism does not replace other channels as defined by law or collective bargaining agreements.

The worker grievance mechanism is being developed as part of the Project worker management plan and will be finalized prior to worker recruitment and construction activities. Once final it will be disclosed widely amongst the Project and EPC employees via the worker inductions and training and around the Project site and accommodation areas.

8 MANAGEMENT FOR IMPLEMENTATION OF STAKEHOLDER ENGAGEMENT

8.1 DEDICATED RESOURCES FOR MANAGING THE SEP

The SEP (and grievance mechanism) will be effective if adequate resources – people, systems and processes, and associated financial resources – are assigned to implementation, and if responsibilities are clearly defined. Stakeholder engagement management should be recognized as a business function with clearly defined objectives, assigned responsibilities, timelines, budget, senior management oversight, and regular reporting.

Currently the Project is in the process of establishing Environmental, Social and Health and Safety (EHS&S) resources to undertake the EHS&S activities including stakeholder engagement and grievance activities. In the interim, personnel from the Project have been actively conducting consultation with the government in order to provide initial information regarding the Project and as part of acquiring formal data for the development of regulatory EIA (AMDAL). The Project contractors for the land acquisition have been undertaking extensive consultation with the Project’s land owners whilst the Sponsors E&S advisors have been conducting a series of consultations associated with the AMDAL and ESIA. The Project Sponsor has identified two experienced local staff to take on these roles specifically the Grievance Redress Officer; they will conduct formal and informal community consultation activities/awareness raising events associated with the project, oversee, and manage Project grievances.

In order to execute the plan throughout the project lifecycle the key organizational structure / function outline in **Table 8-1** will be considered in JSP’s organization.

Table 8-1 Key Roles and Responsibilities to Implement the Stakeholder Engagement Plan

No	Roles and Responsibilities
EHS&S Manager	
1	Develop and endorse Social and Community related Policies
2	Liaise with government stakeholders
3	Plans, directs, manages, and coordinates community development program, projects, services, functions and activities
4	Monitor and report the Project’s Social performance on a regular basis to the Project Manager, and take action to address performance issues, as needed.
5	Develops, justifies, and manages the budget
Stakeholder Relations	
1	Lead collaboration with Project EPC Construction HSE Team to establish and implement the Project Grievance Mechanism for construction phase.
2	Ensure the social-related commitments in the HSE&S Policy are applied.
3	Manage the grievance mechanism monitoring and audit as required.

No	Roles and Responsibilities
4	Report to the Top Management and Lenders on social issues and grievance resolution implementation progress.
Stakeholder Consultation & Grievance Redress	
1	To manage the implementation of the grievance mechanism as required.
2	To collaborate with other related units or departments and external parties (e.g. Contractors) in resolving grievances.
3	To coordinate the grievance team in preparing proper documentation of grievances and their resolution.
4	Lead the grievance mechanism monitoring and report to the Stakeholder Relations Lead and other relevant parties as required.
Community Liaison	
1	To observe the steps required in tracking and handling grievances.
2	To receive, record and log grievances properly as required.
3	Support the Grievance Redress officer in communicating with stakeholders and complainants.
4	Support Grievance Redress officer in coordinating with contractors and other related parties as requested.
5	To ensure proper documentation and database update of grievance and its resolution.
6	To prepare periodical grievance reporting.

These key roles and responsibilities will be employed to manage stakeholder engagement activities; with some roles concurrently undertaken by one officer.

8.2 *MONITORING AND TRACKING OF STAKEHOLDER ENGAGEMENT ACTIVITIES*

Monitoring the stakeholder engagement activities is important to ensure that consultation and disclosure efforts are effective, and in particular, that stakeholders have been meaningfully consulted throughout the process. Monitoring also allows the Project to improve its strategies by using rigorous information acquired from the monitoring activities.

The Project under the ESIA will establish an Environmental and Social Management Plan (ESMP) that will be used as a platform to monitor the stakeholder engagement activities, particularly the following items:

- The implementation of this SEP;
- Consultation activities conducted with all groups of stakeholders;
- The effectiveness of the engagement processes in managing impacts and expectations by tracking feedback received from engagement activities; and
- All grievances received.

Performance will be reviewed regularly against the SEP by tracking the following indicators:

- Materials disseminated: type, frequency, and location;
- Place and time of formal engagement events and level of participation by specific stakeholder categories and groups;

- Number of comments by issue / topic and type of stakeholder, and details of feedback provided;
- Number and types of grievances and the nature and timing of their resolution;
- Recording and tracking commitments made to stakeholders; and
- Community attitudes and perceptions towards the Project based on media reports and stakeholder feedback.

8.3 *DATA GATHERING AND REPORTING*

8.3.1 *Data Gathering and Tracking*

Stakeholder consultation activities conducted throughout all the phases of the Project and grievance submitted by any relevant external parties will need to be properly recorded and documented. This will enable the Project to track the consultation activities and to determine whether any issue or concern expressed by the stakeholder needs to be addressed and acted upon immediately. Particular to grievance management it will also provide information whether the grievances has been partially or fully settled. A stakeholder and grievance database is proposed (see **Annex 2** and **Annex 3**) which will need to be populated continuously by Project Stakeholder Consultation and Grievance Redress Officer or its relevant function for every stakeholder engagement activity has been conducted or after receiving any grievances from external parties

8.3.2 *Reporting*

The Project will develop regular reports (quarterly during the construction and annual report during operations) to present all activities for the period and summarize raised issues. This report should be developed from the data analysis of the stakeholder and grievance database managed by the Project. The report will also detail the measures taken to address the issues, timeline of responses, as well as corrective and mitigation measures to address grievances, and analysis of trends. It will be supported by records of engagement activities, grievances submitted and minutes of key meetings. The report will particularly highlight the following aspects:

- Total number of stakeholders engaged according to stakeholder category;
- Numbers of comments and queries received according by topic and responses given;
- Issues raised and levels of support for and opposition to the Project;
- Numbers of grievances logged; and
- Time to resolution of grievances.

Upon receipt of these reports, the lender may request improvements or corrective actions to be implemented to the consultation process or grievance mechanism approach or monitoring. As such, this SEP must be regularly updated to reflect Project and stakeholder changes and therefore should be considered as a live document. The reporting on consultation activities during the pre-construction phase is included in the ESIA. Reporting requirements for latter stages will be specified and consistent with the ESMP.

ANNEXES

Annex 1 Community Grievance Form

Grievance Form		
Date		
Reference Number		
Full Name (optional and can be left blank)		
ID Number (optional and can be left blank)		
Contact Information (optional and can be left blank)	Address	
	Postal Code	
	Phone	
	Email	
Content of Grievance or complaint	Classification	
	Significance	
	Description	
	Location	
Consent to disclose the grievance information to third parties		
Signature of complainant		
Received by	Name	
	Signature	
Status of grievance	Investigation	
	Resolution	
	Complainant feedback	
	Close out reporting	
Date for response to be submitted to the complainant		

Annex 3 Stakeholder Engagement Database

No	Date	Location	Project Staff in Attendance	Stakeholders Involved	Contact Persons / Organization	Meeting Summary / Key Issues Raised	Follow-Up Actions

Annex 4 *List of Stakeholders Consulted during ESIA development Phase*

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
1	09 August 2017	Iyos Rosita	Head of Village	District / Local Government	Muara	Cilamaya Wetan	<ul style="list-style-type: none"> • Lack of project information • Local employment • CSR funding • Funding assistance on infrastructure development
2	09 August 2017	Koeswandi	Head of Village	District / Local Government	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Lack of project socialization • Land acquisition • Local employment
3	09 August 2017	Yahya Suleman	Head of Village	District / Local Government	Sumurgede	Cilamaya Kulon	<ul style="list-style-type: none"> • Lack of project socialization • Funding assistance on small-medium enterprise and infrastructure development • Local employment • Training
4	09 August 2017	Suwanda	Head of Village	District / Local Government	Jayanegara	Tempuran	<ul style="list-style-type: none"> • Funding assistance on small-medium enterprise and infrastructure development • Local employment • Training
5	09 August 2017	Endang	Head of Village	District / Local Government	Mulyajaya	Kutawaluya	<ul style="list-style-type: none"> • Land Acquisition
6	09 August 2017	Lili Suherman	Head of Village	District / Local Government	Kalangsuria	Rengasdengklok	<ul style="list-style-type: none"> • Land Acquisition
7	10 August 2017	Karsim	Head of Village	District / Local Government	Tegalurung	Cilamaya Kulon	<ul style="list-style-type: none"> • Lack of project socialization • Land acquisition • Funding assistance on small-medium enterprise and infrastructure development • Local employment • Training
8	10 August 2017	Ata Sutisna	Head of Village	District / Local Government	Pancakarya	Tempuran	<ul style="list-style-type: none"> • Lack of project information • Land Acquisition • Funding assistance on small-medium enterprise and infrastructure development • Local employment • Training

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
7	10 August 2017	Tarno	Head of Village	District / Local Government	Purwajaya	Tempuran	<ul style="list-style-type: none"> Funding assistance on small-medium enterprise and infrastructure development Local employment Training
8	11 August 2017	Olim	Head of Village	District / Local Government	Pegadungan	Tempuran	<ul style="list-style-type: none"> Lack of project information Funding assistance on small-medium enterprise and infrastructure development Local employment Training
9	12 August 2017	Maman Sukarman	Head of Village	District / Local Government	Lemahdudur	Tempuran	<ul style="list-style-type: none"> Funding assistance on small-medium enterprise and infrastructure development Local employment Training
10	14 August 2017	Suryadi	Head of Village	District / Local Government	Karangsatu	Karangbahagia	<ul style="list-style-type: none"> Land Acquisition Local employment
	14 August 2017	Engki	Head of Village	District / Local Government	Sukaraja	Rawamerta	<ul style="list-style-type: none"> Land Acquisition
11	15 August 2017	Sawa Isyarot	Head of Village	District / Local Government	Muktijaya	Cilamaya Kulon	<ul style="list-style-type: none"> Lack of project information Funding assistance on small-medium enterprise and infrastructure development Local employment Training
12	16 August 2017	Saman Masruki	Head of Village	District / Local Government	Sukatani	Cilamaya Wetan	<ul style="list-style-type: none"> Local employment Land acquisition Community security
13	16 August 2017	Umbara	Head of Village	District / Local Government	Karangsari	Cikarang Timur	<ul style="list-style-type: none"> CSR funding Funding assistance on small-medium enterprise and infrastructure development Local employment Training
14	18 August 2017	Sapin Hidayat	Head of Village	District / Local Government	Dayeuhluhur	Tempuran	<ul style="list-style-type: none"> Lack of project information Funding assistance on small-medium enterprise and infrastructure development Local employment

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
							<ul style="list-style-type: none"> • Training
15	15 August 2017	Rasit	Army (Babinsa)	Law Enforcement Agency	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Appointed security does not coordinate with local security • Local security is not involved • Unfairness security funding
16	15 August 2017	Nurdin	Police (Kamtimnas)	Law Enforcement Agency	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Project will only add more burden to interviewee
17	08 August 2017	Hadis	Community Leader (Teacher, Fish Auction Manager)		Muara	Cilamaya Wetan	<ul style="list-style-type: none"> • Provide community development / CSR
18	09 August 2017	Sehu Supomo	Teacher		Pasirrukem	Cilamaya Kulon	<ul style="list-style-type: none"> • Education development • Support and funding assistance on small-medium enterprise, infrastructure and facilities • Environmental issue; dust
19	10 August 2017	Ali	Village Secretary	District / Local Government	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Local contractor • Local employment • Land Acquisition
20	12 August 2017	Dasam	Village Cooperative Secretary	District / Local Government	Blanakan	Blanakan	<ul style="list-style-type: none"> • Fisherman welfare • Disruption on fisherman activity
21	15 August 2017	Warsid	Village Secretary	District / Local Government	Muktijaya	Cilamaya Kulon	<ul style="list-style-type: none"> • Lack of project information
22	16 August 2017	Jaya Marjaya	Village Secretary	District / Local Government	Karangsari	Cikarang Timur	<ul style="list-style-type: none"> • Lack of project information • Funding assistance on small-medium enterprise and infrastructure development • Local employment • Training
23	08 August 2017	Didi Sukardi	Entrepreneur and Farmer		Manggung Jaya	Cilamaya Kulon	<ul style="list-style-type: none"> • Funding assistance on small-medium enterprise and infrastructure development • Local employment • Training
24	09 August 2017	Asep	Community Leader (Entrepreneur and Leader of Youth Organization)		Muara	Cilamaya Wetan	<ul style="list-style-type: none"> • Lack of project information • Local employment

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
25	11 August 2017	Agus Mae	Entrepreneur (Ex Pertamina land's cultivator)		Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Lack of project information • Land acquisition
26	8 August 2017	Iman	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	8 August 2017	Indah	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Project's flare • CSR program
	8 August 2017	Mulyati	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village development • CSR program
	8 August 2017	Nur	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Dust
	8 August 2017	Suki	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village development • Job opportunities • Local employment • CSR program
	9 August 2017	Asiah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Electrical supply • Noise • Breathless
	9 August 2017	Cicih	Trader	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Electrical supply • Hot gas waste
	9 August 2017	Mimin	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Flare
	9 August 2017	Ade	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Local employment • CSR program • Loss of income

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
	9 August 2017	Komariah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Health issue
	9 August 2017	Edah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Conflict of interest
	10 August 2017	Ani	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Hot weather • Windbreak
	10 August 2017	Rawi	Fisherman	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Dust • Hot weather
	10 August 2017	Wariah	Fisherman	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Wildfire
	10 August 2017	Maya	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition
	10 August 2017	Nurhayati	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Smoke • Gas waste • CSR program
	10 August 2017	Mulyadi	Trader	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Hot weather • Electrical short-circuit
	10 August 2017	Erlina	Trader	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Wildfire (Safety issue)

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
	11 August 2017	Yeyen	Fisherman	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Pollution • Hot weather • Waste • Noise • Land acquisition
	11 August 2017	Iis	Fishermen	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Hot weather • Gas Waste • Noise • Smell
	11 August 2017	Dasri	Employee	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Land acquisition • Local employment • CSR program • Noise • Accident • Flare
	11 August 2017	Agus Mae	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Waste • Fire
	11 August 2017	Badriah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Dust • Fire
	11 August 2017	Royah	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Wildfire • Loss of income • CSR program
	11 August 2017	Neneng	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
	13 August 2017	Atikah	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Smoke
	13 August 2017	Atikah	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Smoke • Air pollution • CSR program
	13 August 2017	Tutun	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Fire
	13 August 2017	Alex	Fisherman	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Polluted gas
	13 August 2017	Wahyudi	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	14 August 2017	Ipen	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • CSR program
	14 August 2017	Dacih	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • CSR program
	14 August 2017	Nining	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	14 August 2017	Imas	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	14 August 2017	Anesah	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Flare • Hot weather
	14 August 2017	Carsih	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Flare • Hot weather

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
	14 August 2017	Rasti	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Flooding
	14 August 2017	Ida	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	14 August 2017	Miyati	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Lower electrical price • CSR program
	14 August 2017	Nita	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	15 August 2017	Adik Maulana Yusuf	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Human resource improvement; education, training, and health • Disturbance • Road blockade
	15 August 2017	Isah	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition • Fire • Smell • Gas leaking
	15 August 2017	Euis	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition • Fire • Dust • Noise
	15 August 2017	Yeti	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition
	15 August 2017	Maya	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
							<ul style="list-style-type: none"> • CSR program • Land acquisition
	15 August 2017	Nawang		Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Infrastructure development • Health facilities • Radiation • CSR program
	15 August 2017	Tarini	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition
	15 August 2017	Warsih	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise • Dust
	15 August 2017	Elin	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Road blockade
	15 August 2017	Iti	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition
	15 August 2017	Kapsah	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • CSR program
	15 August 2017	Rahayu	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Noise
	15 August 2017	Kaban	Farmer	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Road disruption
	15 August 2017	Wati	Employee	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Road blockade • CSR program
	08 August 2017	Melinda Fransiska	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Infrastructure development • Health facilities • Job opportunities • CSR program

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
	08 August 2017	Sri Rohayati	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Job opportunities • Local employment • Accident
	08 August 2017	Puspa Rini	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Land acquisition
	08 August 2017	Adkoni	Employee	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Job opportunities • Local employment • CSR program
	08 August 2017	Imah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Job opportunities • Local employment • CSR program • Accident • Fire
	09 August 2017	Sri Lestari	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	09 August 2017	Resem	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Fire
	09 August 2017	Rusminah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Accident • Fire
	09 August 2017	Eli	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Safety issue • Security • Noise
	09 August 2017	Desi	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Land acquisition • CSR program
	09 August 2017	Ida	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Explosion • Waste • Smoke • Hot weather
	10 August 2017	Agus Saleh	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Hot weather

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
							<ul style="list-style-type: none"> • Land acquisition • CSR program
	10 August 2017	Rohimah	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Land acquisition • CSR program
	10 August 2017	Tuti	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Hot weather • No wind • Land acquisition
	10 August 2017	Yani	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Land acquisition • CSR program
	10 August 2017	NA. Titin	Employee	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Land acquisition
	10 August 2017	Sutrisno	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • CSR program
	10 August 2017	Fia	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Hot weather • CSR program
	11 August 2017	Agus Muharram	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Land acquisition • Electrical induction • Health issue • Noise • CSR program
	11 August 2017	Udi Mashudi	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Land acquisition • Noise • Smell • CSR program
	11 August 2017	Ulyana	Labor and Trader	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	11 August 2017	Juniah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Arid

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
							<ul style="list-style-type: none"> • Explosion • Smell
	11 August 2017	Sukarsih	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program • Gas issue
x	11 August 2017	Nuraini	Trader	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> •
	11 August 2017	Inah	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Wildfire • CSR program
	11 August 2017	Inem	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Land acquisition • Job opportunities • Local employment
	13 August 2017	Aa Syafrudin	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Radiation • Gas leaking
	13 August 2017	Akip Juarya	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Explosion • CSR program
	13 August 2017	Lukman	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Low electrical price • Waste • CSR program
	13 August 2017	Siti Jamilah	Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Job opportunities • Local employment • CSR program
	14 August 2017	Yati	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program
	14 August 2017	Ropi	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • Explosion • CSR program
	14 August 2017	Sakur	Farmer	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Village improvement • CSR program
	14 August 2017	Anan Burhanudin	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> • Job opportunities • Local employment • CSR program

No	Date	Name of Stakeholders	Position	Category	Village	Sub-District	Issue Raised by Stakeholders
							<ul style="list-style-type: none"> Gas leaking Project socialization
	14 August 2017	Suhirin	Trader	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> Village improvement Job opportunities Local employment Wildfire
	14 August 2017	Endik	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> Village improvement Job opportunities Local employment Wildfire CSR program
x	14 August 2017	Warsih	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none">
	14 August 2017	Nanis	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none">
	14 August 2017	Rohimah	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none">
	14 August 2017	Patoni	Entrepreneur	Community Leader	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> Job opportunities Local employment CSR program
	14 August 2017	Dani	Labor and Entrepreneur	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> CSR program
	14 August 2017	M Toha Paroga	Unemployed	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> Job opportunities Local employment CSR program
	14 August 2017	Acim	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> CSR program
	14 August 2017	Tarwan	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> Job opportunities Local employment CSR program
	14 August 2017	Maya	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> CSR program
	14 August 2017	Aditya	Labor	Host Community	Cilamaya	Cilamaya Wetan	<ul style="list-style-type: none"> CSR program

Annex 5 Stakeholder Feedback Database

Date and Location	Activities	Stakeholder Involved	Key Message Delivered	Issues Raised by Stakeholder	Project Response to Address Issue Raised by Stakeholder	Project PIC

Annex 6 Stakeholder Feedback Form

Stakeholder Feedback Form		
Date		
Reference Number		
Full Name (optional and can be left blank)		
ID Number (optional and can be left blank)		
Contact Information (optional and can be left blank)	Address	
	Postal Code	
	Phone	
	Email	
Key Message Delivered by the Project		
Feedback / Issue Raised by Stakeholder		
Project Response to Address Feedback		
Received by Project Person in Charge	Name	
	Signature	

Annex 7 Minutes of Meeting of Community Consultation Undertaken by the Project related to Compensation Scheme of Transmission Line Open Area / Space.

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : Selasa 30 Januari 2018
Lokasi : Desa Cilamaya Kec. Cilamaya Wetan Kab. Karawang
Peserta : 1. Camat Kecamatan Cilamaya Wetan (Hamdani)
2. Polsek Cilamaya Wetan (Dadang. G)
3. Danramil Cilamaya Wetan (Sukirno)
4. Kepala Desa Cilamaya (Kusnadi)
5. Warga pemilik lahan di dalam ROW

Materi sosialisasi

Penjelasan mengenai kompensasi ruang kosong di bawah jalur SUTET.

Camat Kecamatan Cilamaya Wetan (Hamdani)

- Pada waktu kontruksi diharapkan tidak berbarengan saat disawah ada tanaman apalagi tanaman padi sudah mulai mengisi siap dipanen, walaupun harus dilakukan kegiatan kontruksi harus dilakukan musyawarah dengan pemilik lahan disekitar lahan yang sudah dibebaskan.
- Koordinasi dengan pihak desa dan kecamatan harus dilakukan sebelum dilakukan kontruksi
- Berdayakan tenaga kerja local sesuai dengan kemampuan dan keahliannya

Kapolsek Cilamaya Wetan (Dadang. G)

- Sangat mendukung kelancaran pembangunan PLTGU yang merupakan program pemerintah
- Siap berperan sebagai pengamanan saat mobilisasi ala-alat saai kontruksi bila diperlukan
- Bersama warga siap menjaga KAMTIBMAS

DANRAMIL Cilamaya Wetan (Sukurno)

- Semua harus mendukunga program pemerintah
- Siap bersama seluruh elemen masyarakat, kepolisian dan pihak pengembang untuk menjaga KAMTIBMAS

Tanya Jawab/Harapan/Kekhawatiran:

Kosasih (tokoh masyarakat/petani)

Harapan :

- Untuk perhitungan harga kompensasi seharusnya mengacu pada harga lahan yang sudah dibebaskan

Kekhawatiran:

- Nilai jual tanah yang terlintasi jalur/ROW/ruang kosong akan menurun.
- Dampak radiasi medan magnit dan medan listrik dari SUTET terhadap kesehatan manusia

Pertanyaan :

- Apa tindak lanjut dari sosialisasi dalam waktu dekat ini ?

Sujana (UPTD Pertanian Cilamaya Wetan)

Kekhawatiran :

- Rusaknya sarana jalan desa dan jalan kecamatan pada saat mobilisasi alat berat .
- Rusaknya lahan pertanian/sawah pada saat kontruksi.
- Masalah social yang akan timbul ketika banyak pendatang terutama pekerja proyek PLTGU baik orang luar negeri maupun dari dalam negeri.

Harapan :

- Harus ada sosialisasi atau pemberitahuan sebelum dilakukannya kontruksi.
- Berdayakan tenakankerja local karawang terutama Cilamaya sesuai dengan kemampuannya.
- Pengembang harus mengantisipasi masalah social yang ditimbulkan karena banyak pekerja dari luar daerah

Kesimpulan

- Isu yang diangkat/ didiskusikan
Kekhawatiran akan dampak social dan jalan rusak yang ditimbulkan saat pekerjaan kontruksi berlangsung
 - Responden dari sponsor
Ketika pekerjaan kontruksi akan dilaksanakan, kontraktor akan melakkan sosialisasi ke desa dengan mengundang bapak ibu sekalian untuk meminta izin sekaligus membicarakan kesepakatan kopensasi atau ganti kerugian jika ada kerusakan terhadap tanaman warga dan berkoordinasi dengan instansi terkait dalam penggunaan akses jalan dan keamanan.
-

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : Selasa, 6 Februari 2018
Lokasi : Desa Sukaratu Kec. Cilebar Kab. Karawang
Peserta : 1. Camat Cilebar (A. Kartiwa)
2. Kapolsek Pedes (Much Sutusna)
3. Kepala desa Sukaratu (Sukanda)

Materi sosialisasi

Camat Kecamatan Cilebar (A. Kartiwa)

Pada kesempatan hari ini kita dapat berkumpul di Aula desa Sukaratu merupakan anugrah karena bertepatan hari ini adalah hari pertama saya bertugas di kecamatan Cilebar. Dalam kegiatan ini juga menjadi kesempatan saya untuk memperkenalkan diri kepada bapak-ibu sekalian dan mohon bantuan serta dukungannya untuk dapat membangun kecamatan Cilebar, karena masih banyak pekerjaan yang harus kita lakukan bersama terutama pada musim hujan sekarang banyak sawah yang terkena banjir dan itu harus kita lihat bersama apa penyebabnya. Saya juga meminta kepada pihak PT. JSP untuk dapat menjelaskan runutan proyek dari awal kegiatan, apakah sudah ada pertemuan sebelumnya dan proses hingga saat ini sampai mana. Seperti yang saya belum ketahui bahwa di kecamatan Cilebar ini akan terlewati jalur SUTET, apakah hanya desa Sukaratu saja atau ada desa yang lainnya mohon dijelaskan dan diinformasikan kepada saya. Pada prinsipnya kami dari pihak pemerintahan Kecamatan mendukung program ini apalagi telah menjadi program pemerintah pusat.

Kapolsek Pedes (Much Sutusna)

Alhamdulillah saya bisa hadir dalam kegiatan sosialisasi ini, pada sekitaran bulan maret 2017 lalu saya juga pernah diundang untuk mengikuti kegiatan sosialisasi proyek PLTGU ini di kecamatan Tempuran mungkin waktu itu hanya semacam pemberitahuan awan bahwa akan ada kegiatan pembangunan PLTUG dan SUTET. Sebagai mana kita ketahui bahwa SUTET adalah aliran tegangan tinggi pada kesempatan ini mohon juga dijelaskan bagaimana dampak atau bahaya yang ditimbulkan terhadap kesehatan manusia.

Kepala desa Sukaratu (Sukanda)

Pada sosialisasi awal di kecamatan Tempuran, informasi yang kami dapat bahwa ada 3 perusahaan yang akan menangani kegiatan pembangunan PLTGU dan SUTET yaitu perusahaan yang membebaskan tanah, perusahaan untuk penyusunan AMDAL dan perusahaan untuk konstruksi. Mungkin prosesnya sampai saat ini baru perusahaan untuk penyusunan AMDAL dan untuk Pembebasan lahan yang sudah turun. Dalam kesempatan ini saya sengaja mengundang bapak-ibu yang lahan sawahnya terlintasi jalur kabel SUTET, diharapkan selain penjelasan tentang kompensasi juga dijelaskan apasaja dampaknya terhadap kesehatan manusia.

Penyampaian materi sosialisasi oleh tim dari Kwarsa (materi terlampir)

Tanya jawab

1. Wasim BPD

Tanya : Bagaimana pemberian kompensasinya apabila tanah atau lahan sawah yang belum AJB ?

Jawab : ditambahkan dengan surat keterangan dari desa yang menyatakan calon penerima adalah pemilik yang sah

Tanya : Tadi bapak narasumber hanya menjelaskan yang 500 KV tetapi tidak menjelaskan yang tegangan 1.760 MW, bagaimana dampaknya terhadap petani yang bekerja di dawahnya ?

Jawab : perlu bapak-ibu ketahui bahwa 500 KV dengan 1.760 MW itu adalah hal yang berbeda. 1.760 MW itu adalah satuan daya listrik yang dihasilkan oleh pembangkit PLTGU yang di Cilamaya, sedangkan 500 KV adalah satuan tegangan yang dialirkan melalui kabel SUTET.

2. Atim (pemilik lahan)

Tanya : Bagaimana jika lahannya adalah warisan yang belum ada surat pelimpahan hak, sedangkan pemberi warisnya sudah meninggal ?

Jawab : Dilampirkan surat keterangan dari desa saja, nanti ada runutan sejarah kepemilikan lahan yang dimiliki oleh desa dan disahkan oleh kepala desa.

3. Wasim BPD

Tanya : Apakah perhitungan nilai kompensasi berdasarkan yang tertera di NJOP atau nilai jual pasaran saat ini ?

Jawab : merunut dari peraturan yang ada tentunya menggunakan harga pasaran saat ini.

4. Kepala desa (Sukanda)

Tanya : Setelah SUTET dioperasikan, jika ada kejadian putus kabel atau gagal kontruksi siapa yang bertanggung jawab atas kerugian warga ?

Jawab : saat masa kontruksi berlangsung tentunya yang akan bertanggungjawab adalah pengembang dalam hal ini PT. JSP dan Kontraktor yang bekerja, sedang setelah beroperasi tentunya pemerintah melalui PLN yang akan bertanggungjawab.

Tanya : Kapan akan dibayarkan kompensasinya :

Jawab : saat ini kita baru memasuki tahap pengukuran dan verifikasi, kalau tidak ada halangan dan proses pengumpulan surat-surat lancar kami berharap di bulan April kompensasi sudah dapat dibayarkan

Kesimpulan

- Isu yang diangkat/didiskusikan
Pertanyaan dari warga lebih terfokus pada masalah kompensasi baik untuk ruang bebas maupun pada saat pelaksanaan pekerjaan kontruksi hingga operasionalnya nanti.
 - Respon dari sponsor
Narasumber menjelaskan berdasarkan materi sosialisasi
-

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : Senin, 5 Februari 2018
Lokasi : Desa Sindangsari Kec. Kutawaluya Kab. Karawang
Peserta : 1. Sekcam Kecamatan Kutawaluya (H. Agus Sanusi)
2. Polsek Kutawaluya (Supanri)
3. Danposramil Kutawaluya (Jagurdin)
4. Kepala desa Sindangsari (H. Kaning)

Materi sosialisasi

Sosialisasi kompensasi ruang bebas di desa Sindangsari Kecamatan Kutawaluya – Karawang

Sosialisasi di desa Sindangsari dihadiri oleh Sekcam kecamatan Kutawaluya, perwakilan dari Polsek Kutawaluya, Danposramil Kutawaluya, Kepala desa Sindangsari beserta jajarannya.

- Sekcam Kecamatan Kutawaluya (H. Agus Sanusi)
Kecamatan Kutawaluya hanya 4 desa yang terlintasi jalur SUTET, desa Sindangsari, Sampalan, Waluya dan Mulyajaya. Pembangunan PLTGU dan SUTET ini adalah salah satu program pemerintah yang harus kita dukung bersama demi kepentingan kita bersama juga tentunya, apalagi hasil dari listriknya untuk menyuplai kebutuhan listrik Jawa-Bali atrinya untuk kebutuhan listrik kita semua termasuk bapak dan ibu yang hadir disini. Dalam kesempatan sosialisasi ini saya harapkan bapak ibu sekalian dapat menyimak dan memahami apa saja yang akan disampaikan oleh nara sumber, dan nantinya pada sesi Tanya jawab diharapkan bapak ibi sekalian dapat bertanya sebanyak mungkin hingga jelas dan tidak ada lagi uneg-uneg sesampainya dirumah natinya.
- Perwakilan Polsek Kutawaluya (Supanri)
Dengan adanya proyek PLTGU dan SUTET ini tentunya akan berdampak pada kamtibmas, kami dari pihak kepolisian mendukung program pemerintah dibidang pengamanan. Kegiatan ini sangat penting bagi kita semua untuk mendapatkan informasi seluas-luasnya baik tentang proyeknya ataupun tentang kompensasi yang akan diberikan sebagai hak bapak-ibu sekalian. Seperti yang telah disampaikan oleh pak sekcam tadi mohon bapak-ibu memahami dan jika ada kekurangannya harap dimaklum. Bertanyalah jika tidak jelas jangan sampai nanti ada pembicaraan yang tidak baik dibelakang hari kemudian.
- Danposramil Kutawaluya (Jagurdin)
Dengan adanya proyek SUTET ini kita tetap harus waspada, waspada dan waspada. Artinya waspada akan dampak yang akan ditimbulkan baik terhadap kesehatan maupun dampak social nantinya ketika perkerjaan dimulai. Namun demikian kita semua harus mendukung program pemerintah yang merupakan program strategis pembangunan. Pada kegiatana sosialisasi ini bapak-ibu sekalian harus bertanya sejelas-jelasnya biar mengerti dan faham dengan kegiatan ini.

- Kepala desa Sindangsari (H. Kaning)
Terimakasih kepada bapak-ibu sekalian yang hadir memenuhi undangan dari kami selaku kepala desa, sengaja yang diundang pada kesempatan ini adalah para pemilik lahan yang terkena jalur SUTET. Kami selaku kepala desa dan pemerintahan desa hanya sebagai fasilitator, memfasilitasi pertemuan antara pengembang PT. JSP dengan warga untuk kegiatan sosialisasi ini. Selanjutnya nanti selahkan bapak-ibu sekalian mengikutu kegiatan dan mendengarkan serta menahami apa yang akan disampaikan oleh narasumber nantinya.

Materi sosialisasi disampaikan oleh pak Apip tim sosialisasi kompensasi ruang bebas (Kwarsa)

Tanya jawab:

1. Bapak Warna

Tanya : Bagaimana jika ada kerusakan terhadap tanaman saat nantinya pekerjaan kontruksi berlangsung dan siapa yang akan bertanggungjawab ?

Jawab : bapak-ibu sekalian, kami dari PT. JSP akan meminta kepada kontraktor bila nantinya akan memulai pekerjaan kontruksi harus melakukan sosialisasi dahulu dan membicarakan hal-hal yang mungkin akan terjadi dengan warga desa. Dan bilamana nanti terjadi kerusakan tentunya kontraktor akan mengganti kerusakan tersebut tentunya atas dasar musyawarah dan mufakat.

2. Bapak H. Surdi

Tanya : Apakah ada perbedaan harga antara tanah yang sudah memiliki SHM dengan dengan yang belum SHM dalam hal pembayaran kompensasi ?

Jawab : Tidak ada, perbedaan harga bukan dilihat dari surat-surat tanahnya melainkan dilihat dari produktivitas dan kelas tanahnya.

3. Bapak Ursid

Tanya : Apakah penggarap juga mendapatkan kompensasi ?

Jawab : Kompensasi hanya diberikan kepada pemilik tanah yang sah atau yang memiliki surat-suratnya, namun dapat dititipkan kepada penggarap apabila pemiliknya jauh berada diluar kota tentunya dengan surat kuasa yang diketahui oleh kepala desa.

4. Ibu Nur

Tanya : Dimana kompensasi dibayarkan dan kapan ?

Jawab : nanti kita sepakati dengan pihak desa apakah akan dibayarkan di kantor desa atau di dusun masing-masing agar tidak terlalu jauh bila ke kantor desa. Masalah kapan waktunya semua tergantung dari bapak ibu sekalian, semakin cepat syarat-syarat atau data kepemilikan dikumpulkan tentunya dapat mempercepat proses. Jika semuanya lancar sekitar bulam April kompensasi dapat dibayarkan.

Kesimpulan

- Isu yang diangkat/didiskusikan

Warga lebih antusias ketika menanyakan besaran kompensasi yang akan diberikan, besaran 15% dari harga pasar masih menjadi pokok pembahasan, karena warga menginginkan lebih.

- Respon dari sponsor

Narasumber menjelaskan kepada warga mengacu pada Permen ESDM no 38 tahun 2013, bahwa besaran kompensasi yang sudah diatur adalah 15%.

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : 8 Februari 2018
Lokasi : Kantor Desa Waluya Kec. Kutawaluya Kab. Karawang
Peserta : 1. Camat Kutawaluya (Saryadi)
2. Danpospol Kutawaluya (Supandi)
3. Kepala Desa Waluya (Hermansyah)
4. Warga pemilik lahan dalam ROW

Materi sosialisasi

Camat Kecamatan Kutawaluya (Saryadi)

Kami dari pemerintahan kecamatan mengucapkan terimakasih kepada bapak-bapak sekalian yang hadir di kantor desa Waluya ini, tidak hanya warga desa Waluya yang hadir tetapi juga dari desa tetangga dan dari karawang tetapi yang pasti bahwa yang diundang pada kesempatan ini adalah warga yang tanah atau lahannya terlintasi jalur SUTET.

Danpospol Kutawaluya (Supandi)

Permohonan maaf dari bapak Kapolsek karena tidak bisa hadir dalam kegiatan sosialisasi ini dikarenakan ada hal yang tidak bisa ditinggalkan dan diwakilkan. Pesan beliau semoga apa yang direncanakan dan dikerjakan oleh pemerintah melalui PT. JSP dapat berjalan dengan lancar. Kami dari pihak kepolisian tentungan sangat mendukung program pemerintah ini dan siap mendukung dalam bidang keamanan. Dalam hal ini saya juga meminta kepada warga sekalian untuk dapat bertanya seluas-luasnya nanti dalam sesi Tanya jawab agar jelas dan tidak ada uneg-uneg saat nanti dirumah.

Kepaladesa Waluya (Hermansyah)

Terimakasih kepada bapak-bapak sekalian yang telah hadir memenuhi undangan dari PT. JSP, kami dari pihak desa hanya sebatas memfasilitasi seadanya dan sekemampuan kami. Kami dari pemerintahan desa meminta kepada PT. JSP untuk dapat memberikan penjelasan yang lengkap kepada warga kami terkait kegiatan sosialisasi kompoensasi ruang hampa hari ini, dan kami selaku pemerintahan desa tentunya juga seiring dengan dari pihak pemerintahan Kecamatan dan kepolisian akan mendukung program pemerintah.

Tanya jawab

1. Agus

Tanya : Tolong jelaskan kembali perhitungan nilai kompensasi ?

Jawab : nilai kompensasi menurut Permen ESDM no. 38 tahun 2013 bahwa ketentuannya 15% dari harga pasar. Dalam perhitungan kompensasi yang akan dilaksanakan nanti ada 3 objek yang mendapatkan kompensasi dengan perhitungan ; untuk tanah $15\% \times \text{Luas tanah} \times \text{Harga pasar}$, untuk bangunan $15\% \times \text{Luas bangunan} \times \text{Harga pasar}$ dan untuk tanaman Jenis tanaman \times harga pasar.

Tanya : Kenapa pemerintah menentukan besaran 15% ? dan siapa yang menentukan harga pasar ? karena dengan 15% artinya kompensasi yang kami terima kecil sekali.

Jawab : Kalau bapak tanya kepada kami tentunya kami tidak bisa menjawab kenapa pemerintah menentukan besaran 15%, tetapi jika dibandingkan dengan proyek pemerintah yang lalu itu hanya diberikan sesuai dengan NJOP kalau untuk kompensasi saat ini ditentukan senilai harga pasar yang sudah survey, dikaji, dianalisa dan ditetapkan berdasarkan wilayah masing-masing yang saat ini sudah tinggi

Usulan : Menurut kami nilai 15% dari harga pasar itu masih sangat kecil, kami akan musyawarah dan nantinya besarnya akan kami sampaikan kepada pihak pengembang.

2. H. Uun

3. Endang

Kesimpulan

- Pertanyaan warga pemilik lahan dalam ROW lebih banyak masalah harga atau besaran nilai kompensasi yang akan diterima, karena warga belum bisa menerima jika perhitungan nilai kompensasi $15\% \times L_t \times H_p$. ekspektasi warga tentang harga kompensasi sangat tinggi lebih dari 15% dari harga pasar, warga juga mengusulkan nilai pasar setiap lahan disamakan besarnya.
- Tanggapan dari tim sosialisasi : Nilai 15% dari harga pasar tersebut bukan kami yang menentukan bukan juga KJPP, tetapi pemerintah melalui Permen ESDM no. 38 tahun 2013. Dalam penentuan harga pasar KJPP melakukan survey ke lapangan menanyakan langsung ke masyarakat di setiap wilayah yang terlintasi jalur SUTET, kami yakin KJPP bekerja dengan sangat profesional dan tidak akan merugikan masyarakat.

Namun demikian jika bapak-bapak masih belum bisa atau tidak menerima kompensasi ketika nantinya dilakukan pembayaran, menurut ketentuan peraturan pemerintah melalui permen ESDM no. 38 tahun 2013 uang tersebut kami titipkan di pengadilan negeri setempat, selanjutnya jika bapak-bapak sekalian suatu saat ingin mengambilnya silahkan datang ke pengadilan negeri setempat (PN Karawang). Dan setelah uang dititipkan di pengadilan, secara otomatis pengembang sudah bisa melakukan kegiatan konstruksi.

NOTULENSI

Kegiatan : Sosialisasi Kompoensasi Ruang Bebas
Tanggal : Senin, 5 Februari 2018
Lokasi : Desa Sukamulya Kec. Cilamaya Kulon Kab. Karawang
Peserta : 1. Kepala desa Sukamulya
2. Ketua BPD desa Sukamulya

Materi sosialisasi

Sosialisasi kompensasi ruang bebas di desa Sukamulya Kecamatan Cilamaya Kulon – Karawang
Kegiatan sosialisasi dihadiri oleh Kepala Desa beserta jajarannya, perwakilan dari kecamatan Cilamaya Kulon, dari polsek Cilamaya Kulon dan Babinsa Cilamaya kulon.

- Kepala desa Sukamulya (H. Ade Asep Amaludin)
Terimakasih kepada bapak-ibu yang telah hadir meluangkan waktu memenuhi undangan dari kami selaku kepala desa Sukamulya untuk mengikuti kegiatan sosialisasi kompensasi proyek SUTET yang merupakan program pemerintah. Kita selayaknya ikut membantu dan mensukseskan program ini. Dalam kegoiatan ini semoga nantinya bapak-ibu sekalian dapat penjelasan bagai mana proses dan besaran harga kompensasi yang akan diberikan, selauin itu bapak-ibu sekalian dapat bertanya seluas-luasnya agar faham dan mengerti.
- Ketua tim lapangan Karawang 1 (Hikmawan)
Kami dari tim lapangan sangat berterimakasih karena sampai saat ini bapak-ibu sekalian berperan ikut menjaga patok yang ada dilahan bapak-ibu sekalian yang mana patok tersebut nantinya akan menjadi tapak berdirinya tower untuk SUTET. Selanjutnya kami mohon maaf juga apabila keberadaan kami dilapangan membuat bapak-ibu sekalian terganggu atau tidak nyaman bahkan banyak timbul pertanyaan untuk itu kami mohon maaf. Dalam kegiatan sosialisasi ini nantinya narasumber akan menjelaskan mengenai kompensasi ruang bebas, apa tu ruang bebas mari kita simak bersama dan apabila nantinya ada yang kurang dimengerti mohon jangan sungkan untuk bertanya.

Tanya jawab

1. Bapak H. Abidin

Tanya : Kompensasi ini apakah warga bernegosiasi langsung dengan kontraktor atau ada musyawarah didesa ?

Jawab : Untuk kompensasi ruang bebas penentun harganya sudah dihitung oleh KJPP dengan perhitungan rumus tadi yang saya sampaikan

2. BApak Wasim BPD

Tanya : Apakah kompensasi ruang bebas ini dibayarkan sekali atau tiap tahun ? karena kami seterusnya menggarap atau bekerja dibawah jalur SUTET.

Jawab : hanya dibayarkan sekali, karena bapak-ibu sekalian masih dapat menggarap tanah tersebut karena tidak dibebaskan

Tanya : Berapa nilai besaran kompensasinya ?

Jawab : Sampai saat ini masih dalam proses perhitungan oleh KJPP, kami belum tahu berapa besarnya. Mungkin dalam akhir bulan Februari ini bias selesai KJPP melakukan survey sehingga harga dapat diketahui.

3. Ibu Mayang

Tanya : Apakah warga yang terlintas jalur SUTET setelah mendapatkan kompensasi dapat menggarap lagi tanahnya ?

Jawab : Kompensasi untuk jalur bebas berbeda dengan jual beli untuk tapak tower, bapak-ibu yang mendapatkan kompensasi pada jalur bebas masih bias menggarap lahannya karena tidak dibebaskan dan masih milik bapak-ibu sekalian, sedangkan untuk pembebasan pada tapak tower lahan akan digunakan selamanya oleh PLN nantinya.

4. Bapak Rudi

Tanya : Apakah ada dampak kesehatan bagi manusia ? karena kami petani setiap hari bekerja disawah dibawah jalur SUTET.

Jawab : Berdasarkan kajian dan pengukuran medan magnet dan medan listrik yang ditimbulkan sangat kecil dan jauh dari bakumutu yang ditetapkan oleh standar nasional dan internasional, artinya masih sangat aman bagi kesehatan manusia.

Tanya : apakah ada pengaruh terhadap televisi ?

Jawab : Sejauh ini belum ada laporan ataupun kasus SUTET berpengaruh terhadap televisi, seperti jalur yang sudah ada melewati perumahan contohnya di daerah Bekasi perkotaan tidak ada pengaruh apapun.

5. Bapak Karyono BPD

Tanya : Apakah proyek PLTGU dan jalur SUTET ini sudah mempunyai dokumen AMDAL ?

Jawab : Sampai saat ini PT. JSP baru memiliki dokumen KA-ANDAL, sedangkan dokumen AMDALnya masih dalam tahap revisi.

Tanya : Untuk pembayaran kompensasi apakah dilakukan di desa atau langsung ke rumah masing-masing pemilik lahan ?

Jawab : Menurut kesepakatan saja, agar lebih memudahkan koordinasi kami menginginkan dilakukan di kantor desa, namun tidak menutup kemungkinan dapat dilakukan di dusun masing-masing. Untuk penerima kompensasinya langsung kepada pemilik tanah yang sah.

Tanya : Jika nanti disaat kontruksi ada keluhan atau keberatan dari warga, kemana warga harus mengadu atau menyampaikan keluhan atau keberatannya ?

Jawab : PT. JSP mempunyai mekanisme untuk menyampaikan keberatan atau keluhan warga melalui Grievance Mechanism, nanti di desa ada kotak dan format keluhan, di pasang poster alur penyampaian keluhan dan kontak person yang bias dihubungi. Nantinya ada personil PT. JSP yang akan menindaklanjuti keluhan dari warga yaitu bapak Maryono.

6. Bapak H. Ade Asep Amaludin Kepala desa Sukamulya

Terimakasih atas partisipasi dari bapak-ibu sekalian karena sudah mengikuti kegiatan sosialisasi ini, namun saya merasa sedikit kecewa dengan sosialisasi ini karena harga atau nilai kompensasinya belum bisa di keluarkan. Namun demikian tidak menjadi hambatan dalam kegiatan ini terimakasih juga kepada tim sosialisasi dari PT. JSP yang sudah memberikan pemaparan kepada warga kami.

Kesimpulan

- Isu yang diangkat/didiskusikan
Isu yang muncul dalam sesi Tanya jawab adalah kekhawatiran dampak SUTET terhadap kesehatan

- Respon dari sponsor
Narasumber menjelaskan berdasarkan hasil dari pengukuran yang sudah dilakukan kemudian dibandingkan dengan batas besaran medan magnet dan medan listrik yang diperbolehkan menurut WHO, IRPA, IDI dan SNI 8151-2015 bahwa batas bakumutu yang diperbolehkan adalah 5 Kv/m dan medan magnet 0,5 mt/m

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : 9 Februari 2018
Lokasi : Desa Manggungjaya
Peserta : 1. Perwakilan dari Kecamatan Cilamaya Kulon
2. Perwakilan dari Koramil
3. Sekdesa Manggungjaya
4. Pemilik lahan di dalam ROW

Materi sosialisasi

Sambutan dari Camat Cilamaya Kulon / yang diwakili Bapak Sandi (kasi POLPP)
Kami dari pemerintahan kecamatan khususnya kecamatan Cilamaya Kulon sangat apresiasi sekali dengan adanya kegiatan sosialisasi ini, tentunya sangat berguna sekali untuk kita semua untuk dapat mengetahui dengan gamblang proses rencana pembangunan PLTGU Jawa-1 Cilamaya dan jaringan SUTET yang melintasi kecamatan Cilamaya Kulon khususnya desa Manggungjaya. Pemerintah dalam hal ini PLN tidak sembarangan menunjuk PT. JSP untuk melakukan pembangunan PLTGU Jawa-1 ini, tentunya PT JSP mempunyai perangkat atau tenaga ahli yang mumpuni dibidangnya. Selain itu kita juga harus mendukung program pemerintah yang tentunya akan bermanfaat bagi masyarakat luas. Sudah barang tentu pembangunan yang akan dilaksanakan pemerintah tidak akan merugikan masyarakat. Dalam kesempatan ini marilah kita simak bersama apa yang akan disampaikan nanti oleh tim sosialisasi Jawa Satu Power dan di sesi tanya-jawab nanti saya mohon kepada bapak sekalian untuk banyak bertanya agar lebih jelas.

Sambutan dari Danramil / yang diwakili oleh Bapak Oday. S (Danposmil)

Dalam kesempatan ini saya mewakili komandan saya yang saat ini sedang rapat di Karawang bersama Kapolres, yang mana dalam waktu dekat ini Kabupaten Karawang akan kedatangan pasukan yang cukup besar dari luar daerah untuk melaksanakan program pemerintah Cutarum Bersih. Tentunya kita sebagai tuan rumah harus mempersiapkan segala sesuatunya.

Pada prinsipnya kami dari pihak keamanan mendukung penuh segala program pembangunan yang akan dan sedang dilaksanakan oleh pemerintah. Dalam hal ini tentunya kami akan berpartisipasi dalam bidang keamanan, dalam kegiatan sosialisasi ini saya berpesan kepada masyarakat untuk dapat bertanya langsung jika ada yang kurang jelas jangan sampai nanti sampai dirumah ada uneg-uneg atau ganjalan. Dan jika ada masalah nantinya tolong jangan bertindak sendiri, kita punya pemerintahan desa yang akan mengakomodir segala keluhan warga, tentunya dari pihak perusahaan atau pengembang juga mempunyai mekanisme dalam menyelesaikan masalah.

Sekali lagi saya minta kepada seluruh masyarakat khususnya masyarakat desa Manggungjaya marilah kita berperan bersama-sama untuk mensukseskan pembangunan ini, karena dengan adanya dukungan dari kita semua pembanguna dapat berjalan dengan baik.

Sambutan Kepala Desa Manggungjaya / yang diwakili oleh Bapak H. Unung Nuruhidin (sekdes) Pertama-tama saya menyampaikan permohonan maaf dari bapak kepala desa yang mana dalam kesempatan ini beliau tidak bisa hadir ditengah-tengah kita dikarenakan sakit. Kami dari pihak pemerintahan desa sangat berterimakasih atas kedatangan bapak sekalian atas undangan dari PT. JSP, kami pemerintahan desa hanya sebatas memfasilitasi saja kegiatan sosialisasi ini dan jika ada sesuatu yang kurang pas dalam penyediaan tempat dan fasilitas kami mohon dimaklumi. Selanjutnya, sengaja yang diundang pada kesempatan ini adalah warga yang memiliki lahan yang terkena jalur kabel dan akan diberikan kompensasi. Bagaimana cara dan bentuk kompensasinya mari kita simak bersama penyampaian dari tim PT. JSP.

Tim Sosialisasi Kompensasi Ruang Bebas (Hikmawan) coordinator wilayah Karawang 1 Terimakasih kepada bapak sekalian yang sudah hadir disini memenuhi undangan kami, dan terimakasih juga karena sampai sekarang patok kami masih terjaga dengan baik. Memang benar apa yang disampaikan oleh bapak Sandi dari kecamatan tadi banwasanya pembangunan yang dilakukan oleh pemerintah itu tidaklah merugikan masyarakat, salah satunya kegiatan kita kali ini sosialisasi kompensasi ruang bebas. Artinya dalam proyek PLTGU Jawa-1 ini ruang bebas yang tidak ada apa-apanya pun diberi kompensasi.
Materi sosialisasi terlampir.

Tanya jawab

1. Danuri

Tanya : Bagaimana kalau pemilik lahan sudah meninggal tetapi lahannya belum diwariskan ?

Jawab : mohon dibuatkan surat keterangan kuasa waris yang diketahui oleh pihak desa dan kecamatan lalu dilampirkan persyaratan lainnya seperti foto copy KTP, KK, SPPT dan surat tanahnya.

2. Adang

Tanya : Bagaimana jika tanah tersebut tidak mempunyai surat-surat atau belum AJB ataupun SHM ?

Jawab : bisa ditambah dengan surat keterangan dari desa tentang status da nasal usul tanah

3. Kaswan

Tanya : Bagaimana jika surat-surat tanahnya tidak ada, tetapi hanya mempunyai SPPT ?

Jawab : Jika surat-surat tanah bapak tidak ada, sama dengan pertanyaan sebelumnya. Jika di SPPT masih atas nama orang tua dan sudah meninggal harus dilengkapi dengan surat keterangan kuasa waris. Tetapi kalau di SPPT sudah nama bapak cukup dilengkapi dengan surat status da nasal-usul tanah yang diketahui desa dan camat.

4. Roya

Tanya : Kompensasi dibayarkan Cuma sekali kepada pemilik lahan, bagaimana jika nantinya lahan dijual ke orang lain atau sudah pindah kepemilikannya ?

Jawab : Menurut Permen ESDM no. 38 tahun 2013, Kompensasi tanah, bangunan dan tanaman yang berada di bawah ruang bebas SUTT atau SUTET hanya dapat diberikan satu kali. Dalam hal telah berpindah tangan kepada pemilik yang baru, maka pemilik baru tersebut tidak berhak menuntut pembayaran Kompensasi. Dalam peraturan menteri ESDM sudah sangat jelas disebutkan.

Tanya : Bagai mana jika ada kerusakan disaat pembangunan atau pekerjaan nantinya ?

Jawab : Bapak-bapak sekalian sebelum dilakukan pekerjaan kontruksi, kontraktor akan melakukan sosialisasi seperti ini di kantor desa dengan mengundang warga. Dalam kesempatan itu akan disampaikan hal-hal yang menyangkut dengan penggunaan lahan dan lainnya, disana tentunya bapak sekalian bisa bermusyawarah untuk hal tersebut.

Kesimpulan

- Isu yang diangkat/ didiskusikan
Antusiasme warga dalam bertanya masih pada besaran nilai kompensasi yang kan diberikan, dan kompensasi saat kegiatan kontruksi berlangsung
- Respon dari sponsor
Penjelasan yang diberikan kepada warga sesuai dengan materi sosialisasi

NOTULENSI

Kegiatan : Sosialisasi kompensasi Ruang Bebas
Tanggal : Selasa 13 Februari 2018
Lokasi : Desa Kalangsuria Kec. Rengasdengklok Kab. Karawang
Peserta : 1. Kepala desa Kalangsuria
2. Sekcam Kecamatan Rengasdengklok
3. warga pemilik lahan dalam ROW

Materi sosialisasi

Dikarenakan hujan deras dalam perjalanan menuju desa Kalangsuria saya datang terlambat dan hanya mengikuti sesi tanya jawab.

Tanya jawab

1. Edi Sukardi

Tanya : Bagaimana dampak radiasi SUTET terhadap tanaman dibawahnya ?

Jawab : Batasan medan magnet dan medan listrik yang direkomendasikan oleh WHO, IRPA, IDI dan SNI 8151-2015 adalah 5 Kv/m untuk medan listrik dan 0,5 MT/m untuk medan magnet. Dibandingkan dengan beberapa hasil pengukuran yang kami lakukan di beberapa transmisi SUTET Paito - Gersik dan dan Adipala menunjukkan hasil masih jauh dibawah baku mutu yang ditetapkan tersebut yakni 0,0042 Kv/m dan 0,0017 Mt/m artinya masih sangat aman baik untuk tumbuhan maupun manusia.

2. Lili Suherman

Tanya : di wilayah saya terdapat 2 rumah yang berada tepat dibawah jalur SUTET, mereka menempati tanah pengairan, apakah mereka juga dapat kompensasi ?

Jawab : Permen Energi dan Sumber Daya Mineral No. 38 Th. 2013 tentang Kompensasi Atas Tanah, Bangunan, dan Tanaman Yang Berada Di Bawah Ruang Bebas Saluran Udara Tegangan Tinggi dan Saluran Udara Tegangan Ekstra Tinggi. Dalam Permen ESDM diatas sudah jelas bahwa bangunan mendapatkan kompensasi tetapi tanahnya tidak karena bukan hak milik pribadi.

Tanya : Apakah lahan dibawah tower boleh digarap oleh warga ?

Jawab : Sampai saat ini kami belum tahu kebijakan PLN seperti apa, namun jika melihat dari tower yang sudah ada sebaiknya tidak untuk sawah atau ditanami padi kembali, karena dapat mengganggu pada saat pemeliharaannya nanti.

Kesimpulan

- Isu yang diangkat/didiskusikan
Warga menanyakan dampak kesehatan terhadap manusia dan tumbuhan dibawah jalur SUTET dan penggunaan lahan tapak tower yang sudah dibebaskan.
- Respon dari sponsor

NOTULENSI

Kegiatan : Sosialisasi Kompensasi ruang Bebas
Tanggal : 14 Februari 2018
Lokasi : Desa Pasirukem Kec. Cilamaya Kulon Kab. Karawang
Peserta : 1. Kepala desa Pasirukem
2. Kasi Trantib Kec. Cilamaya Kulon
3. Koramil Cilamaya
4. Polsek Cilamaya
5. Warga pemilik lahan dalam ROW

Materi sosialisasi

- Kepala Desa Pasirukem

Selamat datang dan terimakasih kepada bapak ibu sekalian yang telah meluangkan waktu untuk mengikuti kegiatan sosialisasi pada siang hari ini, perlu diketahui warga pemilik lahan yang diundang pada siang hari ini dari 27 undangan 8 diantaranya warga Pasiruken, sekebihnya dalah warga dari luar desa Pasirukem yang memiliki lahan di disini. Jadi mohon maaf jika banyak diantara bapak-ibu sekalian yang tidak saya kenal. Selanjutnya saya selaku pemerintahan desa mohon maaf yang sebesar-besarnya kepada bapak-ibu undangan dan tim dari PT. JSP karena dalam penyambutan dan fasilitas serta pelayanan kami kurang memuaskan. Kami juga selaku pemerintahan desa mendukung apa yang telah menjadi program pemerintah dalam hal ini pembangunan PLTGU dan jalur SUTET.

- Kasi Trantib POLPP Kecamatan Cilamaya Kulon (Bapak Sandi Huda)

Dari pemerintahan kecamatan sangat apresiasi sekali dengan adanya kegiatan sosialisasi ini dimana masyarakat mendapatkan penjelasan seluas-luasnya tentang apa yang akan dan sedang dilakukan oleh PT. JSP selain itu juga akan terjalin komunikasi yang baik antara warga dengan pengembang yang berujung pada ketertiban dan keamanan baik di masyarakat maupun di dapan pembangunan PLTGU-Jawa1 dan di kecamatan Cilamaya Kulon khususnya.

Sebagaimana kita ketahui bahwa pembangunan PLTGU ini nantinya akan menambah pasokan listrik untuk masyarakat, tentunya ini juga akan menambah dan mempercepat proses pembangunan dan pertumbuhan ekonomi masyarakat. Program pemerintah yang baik ini sudah seharusnya kita dukung bersama melalui peran serta dari masyarakat. Pesan saya kepada masyarakat bilamana nantinya dekemudian hari ada hal-hal atau permasalahan tolong jangan bertindak sendiri-sendiri, kita punya kepala desa sebagai pimpinan kita, tentunya poihak desa akan mengakopmodir segala permasalahan dari warga dan menindaklanjutnya serta akan berkoordinasi dengan pihan kecamatan dan keamanan setempat. Dalam sesi tanya jawab nanti sebaiknya bapak-ibu sekalian dapat bertanya seluas-luasnya agar sepulangnya dari kegiatan ini tidak ada lagi uneg-uneg yang menggajjal.

- Danposramil Cilamaya (N. Warjuki)

Kami sebagai alat Negara dalam hal ini TNI harus mendukung semua program dari pemerintah. Dalam kegiatan sosialisasi ini kami minta kepada PT. JSP untuk dapat menjelaskan kepada masyarakat pa dampak baik dan buruknya dengan adanya pembangunan PLTGU-Jawa1 ini. Dan kepada bapak-ibu sekalian peserta sosialisasi terutama pemilik lahan silahkan bertanya dan menyampaikan usulan kepada PT. JSP karena ini adalah kesempatan kita bertemu dan berdiskusi dengan pihak pengembang.

- Babinkamtibmas Cilamaya Kulon

Kami dari pihak kepolisian tentunya mendukung sekali apa yang menjadi program pemerintah, peran kami tentunya dibidang keamanan dan ketertiban saat pembangunan berlangsung. Pesan dari bapak kapolsek meri kita sukseskan pembangunan ini dengan berperan menjaga ketertiban dan keamanan.

Tanya jawab

1. Ono Darsono

Tanya : Yang ingin saya tanyakan, berapakah luasan tanah yang terkena kompensasi setiap warga pemilik lahan ?

Jawab : untuk mengetahui berapa besaran atau luasan tanah bapak ibu sekalian yang terkena kompensasi baru minggu depan semua desa kami rilis dan dapat dilihat di kantor desa Pasirukem.namun jika bapak-ibu penasaran nanti setelah acara ini selesai dapat saya perlihatkan dari peta bidang yang saya bawa dan itu belum final.

Tanya : Kapan kompensasi dibayarkan ?

Jawab : Tergantung pada kecepatan bapak-ibu sekalian mengumpulkan data kepemilikan atau persyaratannya, kami harap minggu depan sudah terkumpul dan akan difasilitasi oleh pihak desa. Jika semua berjalan lancar di akhir bulan Maret proses pembayaran sudah bisa dilakukan.

2. Hasan

Tanya : Kapan pelaksanaan pembangunan SUTET dimulai ?

Jawab : Jika tidak ada halangan dan semuanya lancar mungkin sekitaran bulan Oktober atau November 2018 sudah dimulai pekerjaannya.

Tanggapan : Artinya masih ada waktu sampai panen berikutnya, jangan sampai pas lagi tanaman padi kami hamper panen pekerjaan dimulai tentunya akan dapat merusak tanaman padi kami.

3. Ade

Tanya : Saya adalah salah satu yang lahannya dibebaskan untuk tapak tower, baru dibayar 80%. Yang saya tanyakan adalah kapan sisa 20% dibayarkan ?

Jawab : Pembayaran sisa yang 20% dapat dilakukan setelah proses pemecahan di BPN selesai pak, kami kemarin mendapat info dari BPN bahwa proses pembuatan surat-suratny aselesai sekitar 2 bulan. Kami juga masih menunggu kapan BPN selesai dan akan langsung melakukan pelunasan sisanya.

Tanya : Berapa besaran nilai pasar untuk tanah yang terkena kompensasi ?

Jawab : Besaran nilai pasar lahan bukan kami yang menentukan tetapi dilakukan oleh lembaga independen penilai harga pasar yaitu dari KJPP. Kami juga masih menunggu KJPP mengeluarkan nilai pasar setiap lahan dan nanti akan di umumpak di kantor desa.

Kesimpulan

- Isu yang diangkat/ didiskusikan

Pada umumnya peserta menanyakan berapa besaran nilai pasar untuk lahan yang terkena kompensasi dan kapan pelaksanaan pembayaran kompensasi dilaksanakan, kegiatan sosialisasi berjalan dengan baik dan lancar.

Peserta undangan dari warga yang terlintas ROW 27 undangan namun yang datang dalam daftar hadir sampai 68 orang

- Respon dari sponsor

Tanggapan dari narasumber terkait pertanyaan warga masih dalam lingkup materi sosialisasi. Namun yang menjadi catatan adalah banyaknya peserta diluar undangan yang hadir dan tidak mengikuti kegiatan sosialisasi menjadi perhatian khusus untuk kegiatan berikutnya.

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : Kamis, 15 Februari 2018
Lokasi : Desa Tegalurung Kec Cilamaya Kulon Kab. Karawang
Peserta : 1. Kepala desa Tegalurung
2. Kasi Trantib Kecamatan Cilamaya Kulon
3. Polsek Cilamaya
4. Danramil Cilamaya
5. Warga pemilik lahan dalam ROW

Materi sosialisasi

- Kepala Desa Tegalurung (Karsim)

Saya atasnama pemerintahan desa Tegalurung mengucapkan terimakasih atas segala dukungan dan kerjasamanya sehingga terlaksanakannya kegiatan sosialisasi kompensasi ini, sesuai dengan permintaan dari PT. JSP bahwa warga yang diundang adalah pemilik lahan yang berada di bawah jalur. Saya harap bapak-ibu sekalian yang hadir saat ini dapat menyimak dan memahami apa yang akan disampaikan oleh perwakilan dari TP. JSP dan nantinya tolong juga disampaikan kepada warga lainnya yang tidak dapat hadir.

Pada sesi Tanya jawab nanti kami harapkan kepada bapak-ibu sekalian untuk bertanya mengenai hal-hal yang kurang jelas.

Kepada PT. JSP selaku pengembang PLTGU-Jawa 1 saya mewakili warga memohon atau mengusulkan kalau bisa ketika nanti akan dilaksanakan pekerjaan tower ataupun penarikan kabel diusahakan jangan waktu di sawah warga ada tanaman padinya diusahakan setelah kalau bisa setelah panen, untuk menghindari kerusakan tanaman warga. Pada umumnya warga merasa tidak rela jika tanamannya tergusur walaupun ada penggantiang atau gantiruginya.

Terakhir permohonan atau usulan kami adalah usahakan ada keterlubatan warga kami dalam kegiatan pembangunan proyek PLTUG ini, minimal sebagai buruh kasarnya, supaya kami selaku tuan rumah tidak hanya jadi penonton saja.

- Kasi Trantib Cilamaya Kulon (Sandi Huda)

Saya mewakili pemerintahan kecamatan sangat mendukung dan berapresiasi sekali dengan adanya kegiatan sosialisasi ini karena akan terjadi komunikasi antara pengembang dan masyarakat yang akan berdampak positif dan menghasilkan ketertiban

serta keamanan disaan pembangunan dan pembangunana diwilayah kecamatan Cilamaya Kulon khususnya.

Sudah menjadi tanggungjawab kita semua untuk mendukung program pembanguna pemerintah untuk ketersediaanya pasokan energy listrik yang saat ini masih kita sama-sama rasakan. Karena dengan dukungan kita semua, pemerintah dan masyarakat maka pembanguna dapat berjalan dengan baik.

Bapak-ibu sekalian pesan kami dari kasi TRANTIB adalah, jika nanti dikemudian hari ada permasalahan apapun itu diharapkan untuk jangan bertindak sendiri-sendiri. Kita punya kepala desa sebagai perwakilan warga, sampaikan kepada beliau pasti kepala desa akan mengakomodir dan menindaklanjuti baik ke pihak kecamatan maupun ke pihak keamanan.

- Kanit Intel Polsek Cilamaya (Suratman)

Dengan akan dilaksanakannya kegiatan pembangunan PLTGU cilamaya dalam waktu dekat ini, saya mohon jika asa sesuatu permasalahan segera laporkan ke desa atau pihak keamanan untuk menjaga konsidi tetap kondusif. Kami dari pihak kepolisian sangat mendukung program pemerintah, demikian juga hendaknya dengan bapak-ibu sekalian harus kita sukseskan bersama.

- Penyampaian materi sosialisasi oleh pak Yudi (Kwarsa)

Tanya jawab

1. Jami'at

Tanya : Kapan pekerjaan kontruksi dimulai :

Jawab : menurut jadwal yang sekarang kita pegang kalau semuanya lancar pada awal September 2018 pekerjaan sudah dimulai. Atau sebulan sebelum pekerjaan dimulai nanti kami sarankan kepada kontraktor untuk sosialisasi dulu seperti ini ke desa-desa.

Tanya : Kapan kompensasi akan dibayarkan ?

Jawab : Tergantung pada kecepatan bpak-ibu sekalian mengumpulkan 4 persyaratan tersebut yakni copy KTP, KK, SPPT 1 tahun terakhir, bukti surat tanah dan keterangan desa. Tetapi kami punya target pada bulan April semoga sudah bisa dibayarkan.

2. Komarudin

Tanya : Tolong jelaskan pengaruh radiasi terhadap kesehatan manusia ?

Jawab : kami pernah melakukan pengukuran di beberapa tempat, memang ada medan magnet dan medan listrik yang ditimbulkan, selama kita masih berada diluar batas ruang bebas masih sangat aman dan tidak ada pengaruhnya terhadap kesehatan, kecuali kita berada dalam ruang bebas yang 9 meter dari bawah kabel terendah. Kami juga pernah melakukan perbandingan tingkat radiasi SUTET dengan microwave, hasilinya pada SUTET medan lisriknya 0,0042 kv/m dan medan magnetnya 0.0017 MT dibawah ketinggian 9 meter dari bawah kabel, sedangkan pada microwave medan listriknya 1.05 Kv/m dan medan magnetnya 0,03312 MT.

3. Kades Tegalurung

Usulan/saran : Kami selaku pemerintahan desa mewakili warga kami megusulkan untuk pekerjaan kontruksi sebaiknya dilakukan setelah panen sehingga tidak merusak tanaman padi.

Kesimpulan

- Isu yang diangkat/didiskusikan

Masyarakat mengkhawatirkan kerusakan terhadap tanaman disaat pekerjaan kontruksi nantinya, dan mengusulkan pekerjaan dilakukan setelah panen.
Kepala desa lebih menyoroti keterlibatan masyarakat nantinya sebagai tenaga kerja local.

- Respon dari sponsor

Satu bulan sebelum pekerjaan kontruksi dimulai kami meminta supaya kontrak melakukan sosialisasi ke desa-desa untuk menginformasikan kepada bapak-ibu sekalian sekaligus membicarakan kemungkinan penggantian kerusakan yang di akibatkan saat pekerjaan kontruksi.

Untuk keterlibatan tenaga kerja lokal nanti kontraktor tentunya akan menghitung berapa kebutuhan tenaga kerja yang dibutuhkan dan berapa yang dari warga local, tentunya ini akan kami sampaikan juga kepada kontraktor yang nanti akan bekerja.

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : Senin 12 Februari 2018
Lokasi : Desa Karangsatu Kec. Karangbahagia Kab. Bekasi
Peserta : 1. Kepala desa Karangsatu
2. Polsek Karangbahagia
3. Koramil Karangbahagia
4. Warga pemilik lahan dalam ROW

Materi sosialisasi

- Kades (Suryadi)

Kami ucapkan terimakasih kepada bapak-ibu sekalian pemilik lahan yang terlintasi jalur transmisi SUTET yang dalam waktu dekat ini akan dilaksanakan pembangunannya, telah dapat meluangkan waktu untuk hadir dalam acara sosialisasi kompensasi ruang bebas ari PT. JSP. Semoga dengan adanya kegiatan ini kita semua dapat memahami dan dapat mendukung program pembangunan dari pemerintah.

Perlu juga kami sampaikan kepada bapak-ibu sekalian kami pemerintahan desa dalam kegiatan ini hanya memfasilitasi guna kelancaran kegiatan ini, kami mohon maaf apabila fasilitas yang ada di desa kami tidak memuaskan atau kurang baik.

Permohonan kami kepada PT. JSP untuk dapat menjelaskan kepada warga kami mengenai materi kegiatan ini dan sebaliknya kepada warga yang kurang mengerti dan kurang fahan agar dapat menanyakan kepada tim dari PT. JSP pada sesi tanya jawab nanti.

- Polsek (Dwi. K)

Pada prinsipnya kami dari pihak kepolisian sangat mendukung program pembangunan dari pemerintah. Sebagai alat Negara kami wajib mendukung dalam segi keamanan dan ketertiban demi kelancaran program pemerintah ini. Kami juga memohon kepada bapak-ibu sekalian untuk dapat mendukung demi kesuksesan program pembangunan ini.

- Koramil (Cece. NS)

Tentunya kita semua harus mendukung serta dapat memahami dengan adanya pembanguna PLTGU-Jawa 1 ini karena untuk kepentingan kita bersama dan kemajuan pembangunan nasional. Kami juga mendukung dengan adanya sosialisasi ini tentunya warga akan mendapatkan penjelasan tentang kompensasi yang akan diberikan kepada warga yang terlintas jalur SUTET. Harapan kami semoga kegiatan ini dapat berjalan dengan lancar dan baik sampai selesai.

Tanya jawab

- H. Maman

Tanya : Jarak 17 meter ke kiri-ke kanan yang mendapatkan pembayaran kompensasi itu diukur dari mana ?

Jawab : Di ukur dari tangan-tangan tiang tower/sumbu as nya tower, bukan di ukur dari kabel tower.

- Ahmadi

Tanya : Saya pemilik lahan tower T 111 yang sudah dibebaskan, pertanyaan saya apakah semua lahan yang dibebaskan tersebut digunakan untuk tiang tower ?

Jawab : Lahan yang dibebaskan untuk tapak tower tidak lah seluruhnya untuk tiang, tetapi ada jarak dari batas yang dibebaskan sekitar 6 meter untuk area kerja pembanguna tower nantinya.

Tanya : Apakah lahan sisa tiang tower dan dibawah tower boleh di tanami nantinya ?

Jawab : Sampai saat ini kami belum tahu kebijakan PLN seperti apa, namun jika melihat dari tower yang sudah ada sebaiknya tidak untuk sawah atau ditanami padi kembali, karena dapat mengganggu pada saat pemeliharaannya nanti.

Kesimpulan

Warga pemilik lahan dalam ROW di desa Karangatu sudah sering sekali berinteraksi dengan tim dilapangan baik dengan pertemuan di kantor desa maupun di lokasi jalur tower. Pada umumnya mereka sudah sangat faham dan mengerti tentang pembangunan PLTGU-Jawa 1 dan jalur transmisi yang akan melewati desa/lahan mereka. Hal ini juga dikarenakan disekitaran wilayah kecamatan Karangbahagia sudah ada jalur transmisi yang sudah sering mereka lihat.

NOTULENSI

Kegiatan : Sosialisasi Kompensasi Ruang Bebas
Tanggal : Kamis 8 Februari 2018
Lokasi : Desa Sumurgede Kec. Cilamaya Kulon Kab. Karawang
Peserta : 1. Kepala desa Sumurgede
2. Tim Sosialisasi
3. Warga pemilik lahan dalam ROW

Materi sosialisasi

- Kepala desa Sumurgede (Yahya)

Terimakasih kepada warga pemilik lahan yang berada dibawah jalur SUTUT yang telah menghadiri undangan dari PT. JSP melalui kami pemerintahan desa Sumurgede. Terimakasih juga kepada tim dari PT. JSP yang sudah datang untuk bersosialisasi ke desa kami.

Perlu bapak-ibu sekalian ketahui bahwa di Sumurgede yang terlintasi jalur ada 18 idang sawah, 3 bidang diantaranya dimiliki oleh 1 orang, dan ada lahan yang dimiliki oleh orang luar desa dan berdomisili di Majalengka.

Adapun tujuan bapak-ibu sekalian diundang ke kantor desa tidak lain adalah untuk mendengarkan sosialisasi pembangunan PLTGU-Jawa1 yang merupakan program pembangunan dari pemerintah.

- Kasi Trantib Cilamaya Kulon (Sandi Hudaya)

Saya mewakili pemerintahan kecamatan sangat mendukung dan berapresiasi sekali dengan adanya kegiatan sosialisasi ini karena akan terjadi komunikasi antara pengembang dan masyarakat yang akan berdampak positif dan menghasilkan ketertiban serta keamanan disaan pembangunan dan pembangunana diwilayah kecamatan Cilamaya Kulon khususnya.

Sudah menjadi tanggungjawab kita semua untuk mendukung program pembanguana pemerintah untuk ketersediaanya pasokan energy listrik yang saat ini masih kita sama-sama rasakan. Karena dengan dukungan kita semua, pemerintah dan masyarakat maka pembanguana dapat berjalan dengan baik.

Bapak-ibu sekalian pesan kami dari kasi TRANTIB adalah, jika nanti dikemudian hari ada permasalahan apapun itu diharapkan untuk jangan bertindak sendiri-sendiri. Kita punya kepala desa sebagai perwakilan warga, sampaikan kepada beliau pasti kepala desa akan mengakomodir dan menindaklanjuti baik ke pihak kecamatan maupun ke pihak keamanan.

Tanya jawab

1. Endang

Tanya : Bagaimana kalau surat tanahnya lagi mesantran (sebagai borah di Bank) ?

Jawab : Cukup dibuktikan dengan foto copynya saja dan surat keterangan dari bank yang bersangkutan.

Tanya : Bagaimana jika tanah sudah diwariskan kepada anak, namun anak tersebut masih dibawah umur ?

Jawab : Dari 4 persyaratan tersebut ditambah dengan surat keterangan dari desa itu sudah cukup. Kompensasi bukan lah proses jual beli, kalau untuk jual beli harus ada surat dari pengadilan negeri yang menyatakan kuasa untuk jual beli karena anak dibawah umur belum bisa melakukan tindakan hokum jual beli.

2. Udi

Tanya : Persyaratan SPPT apakah harus 5 tahun terakhir atau cukup dengan 1 tahun saja ?

Jawab : Pada awalnya persyaratan SPPT harus 5 tahun terakhir, tetapi setelah kami bernegosiasi dengan pihak notaris diperbolehkan SPPT 1 tahun terakhir. Kenapa harus 1 tahun terakhir ? itu adalah sebagai bukti kalau bapak-ibu sudah bayar pajaknya.

3. H. Salim

Tanya : Jika terjadi sesuatu han yang tidak diinginkan atau yang merugikan warga saat pembanguna SUTET dan saat operasionalnya nanti kami harus mengadu kemana ?

Jawab : Pada saat pembangunan nati PT. JSP menempatkan personil untuk mengelola keluhan dari warga, nanti mekanisme pengaduannya akan di tempelkan di kantor desa sebagai pengumuman, bisa juga lewat desa nanti akan di tindaklanjuti oleh tim Pt. JSP. Sedangkan pada saat operasionalnya nati itu sudah menjadi tanggungjawab dari PLN, karena PT. JSP hanya bertugas membangunnya saja setelah menyala langsung diserahkan kepada PLN.

Tanya : Apakah boleh membangun di bawah kabel SUTET ?

Jawab : Pada prinsipnya boleh selama tidak melewati batas ruang bebas 9 meter dari bawah kabel, tetapi sebaiknya berkoordinasi atau pemberitahuan dahulu ke PLN agar PLN dapat melakukan pemantauan.

Kesimpulan

- Isu yang diangkat/didiskusikan
Kelengkapan persyaratan untuk proses kompensasi masih menjadi kendala bagi warga karena ada yang digadaikan di Bank, ada yang tanahnya diwariskan ke anaknya yang masih dibawah umur, ada juga yang pemiliknya berada diluar kota .
- Respon dari sponsor
Untuk mempermudah warga dalam proses kompensasi peran pemerintahan desa sangat diperlukan dengan mengeluarkan surat keterangan dari desa untuk permasalahan tersebut.

NOTULENSI

Kegiatan : Soaialisasi Kompensasi Ruang Bebas
Tanggal : Kamis, 15 Februari 2018
Lokasi : Kelurahan Mekarjati Kec. Karawang Barat Kab. Karawang
Peserta : 1. Lurah Mekarjati
2. Sekcam Kecamatan Karawang Barat
3. Warga pemilik lahan dalam ROW

Materi sosialisasi

- Sekcam (H. Ade Erman)

Adanya pembanguna PLTGU-Jawa 1 sangatlah berarti bagi pembangunan dan mudah-mudahan berguna bagi kita semua. Dengan adanya kegiatan sosialisasi ini saya deri pihak pemerintahan kecamatan sangat mendukung, diharapkan dengan kegiatan ini bapak-ibu

sekalian bisa memahami, mengerti dan mendukung program pemerintah ini karena sangat bermanfaat bagi kita semua.

Dengan sosialisasi juga kita dapat manfaat pengetahuan dan terjalin interaksi antara masyarakat dengan pengembang yang akan membangun PLTGU dan jalur SUTET untuk mengetahui kondisi dan situasi saat ini. Semoga kegiatan sosialisasi ini dapat berjalan dengan lancar dan apabila nanti ada sesi Tanya jawab saya harapkan bapak-ibu bertanya apabila ada yang kurang jelas ataupun yang tidak dimengerti.

- Lurah Mekarjati (Karta Wijaya)

Terimakasih kepada bapak-ibu yang sudah datang memenuhi undangan kami, warga pemilik lahan yang diundang ada 30 orang sesuai dengan daftar yang diberikan oleh PT. JSP namun sesungguhnya masih ada warga pemilik lahan yang tidak hadir karena belum terdaftar dan tidak menerima undangan. Kami mohon nanti setelah kegiatan ini dari pihak TP. JSP melakukan pendataan ulang bersama staf kami sehingga warga pemilik lahan yang belum terdaftar dapat terakomodir.

Selanjutnya mengenai kegiatan sosialisasi kompensasi ruang bebas, saya mohon dari pihak PT. JSP yang akan membawakan materi nantinya untuk dapat menjelaskan dengan sejelas-jelasnya karena saya juga kurang mengerti apa yang dimaksud dengan ruang bebas tersebut dan mengapa harus di beri kompensasi.

Nanti pada sesi tanya-jawab nantinya saya mohon juga kepada bapak-ibu untuk bertanya dan jangan sungkan-sungkan agar semuanya dapat diterima dan difahami dengan jelas.

- Hikmawan (Kwarsa)

Terimakasih pak lurah atas masukannya, nanti tim kami beserta staf dari kelurahan dan pak RT akan melakukan pendataan ulang terkait warga pemilik lahan terken jalur yang saat ini belum terdata.

Tanya jawab

1. Sarwan

Tanya : Saya mau tanya, saya kurang faham mengenai UU, kenapa yang dipakai UU no. 30 tahun 2009 tentang ketenaga listrikan tetapi peraturan menteri keuangannya yang dipakai Permenkeu No. 125/PMK 01 Tahun 2008 tentang Jasa Penilai Publik ?

Jawab : tidak semua UU yang disahkan itu selalu diikuti oleh peraturan menteri, selagi masih relevan dan tidak berpotensi ada tindakan melawan hukum masih dapat di pergunakan. Dalam proyek pembangunan PLTGU-Jawa 1, UU yang dipakai adalah tahun 2009 tentang ketenaga listrikan. Karena proyek ini menggunakan uang Negara maka yang dipakai peraturan menteri keuangan yang masih berlaku tahun 2008.

Tanya : Pada lahan yang sudah dibebaskan masih boleh ditanami padi tidak kedepannya ?

Jawab : Sampai saat ini kami belum tau kebijakan PLN seperti apa, namun jika melihat tower yang sudah berdiri dan beroperasi maka sebaiknya tidak dijadikan sawah lagi karena akan mengganggu pada saat perawatan dari PLN.

Tanya : Apakah ada pengaruhnya terhadap petir ?

Jawab : sebenarnya sangat aman, karena dipaling atas tower akan dipasang kabel penangkal petir dan setiap 5 tower akan disalurkan ke dalam bumi, jika dibandingkan dengan berdiri ditengah lapang atau sawah yang tidak ada towernya maka ini sangat berbahaya jika ada petir karena petir akan memapar benda yang paling tinggi.

2. Komarudin

Saran/masukan : Saya sebagai ketua LPM kelurahan Mekarjati meminta kepada PT. JSP dalam pembayaran kompensasi nantinya harus transparan dan teliti kerana sekecil apapun kesalahan jika menyangkut uang bisa repot nantinya.

3. Carli

Tanya : Bagaimana pembayaran kompensasi bila pemiliknya tidak ada atau berada diluar daerah ?

Jawab : Seharusnya kompensasi diberikan kepada pemilik tanah, namun jika tidak ada bisa diwakili oleh penggarap dengan surat kuasa pengambilan kompensasi dari pemilik lahan atau surat keterangan dari desa.

Tanya : Kapan kompensasi dibayarkan ? hanya satu kali saja atau setiap tahun ?

Jawab : Kompensasi dibayarkan hanya satu kali, bila mana tanah berpindah tangan atau di perjual belikan setelah mendapatkan kompensasi maka pemilik yang baru tidak mendapatkan kompensasi. Karena kompensasi diberikan kepada tanah, bangunan dan tanaman bukan kepada pemiliknya.

4. Ayim

Tanya : pada waktu pendataan dulu ternyata masih ada yang terlewat, ada juga yang salah penulisan nama, yang saya tanyakan apakah data yang kami terima tersebut adalah data baku sudah final atau masih bisa diperbaiki ?

Jawab : Seperti yang sudah kami sampaikan tadi dalam tahapan pemberian kompensasi, ada tahapan validasi data baik nama, luasan dan persyaratannya, jika masih ditemukan kekurangan atau kesalahan maka masih sangat memungkinkan untuk diperbaiki.

5. R. Nainggolan

Tanya : Siapa KJPP itu ? berkedudukan dimana ? dan apakah bapak-bapak dari JSP ini bagian dari KJPP ?

Jawab : KJPP atau Kantor Jasa Penilai Publik adalah lembaga independen yang ditunjuk oleh kementerian ESDM untuk menilai objek yang akan di kompensasikan secara wajar, berkedudukan di Jakarta, dan kami bukan bagian dari KJPP.

Tanya : Untuk transparansi pembayaran kompensasi, dimana pembayaran tersebut dilaksanakan ?

Jawab : Kami akan melakukan pembayaran tentunya dengan kesepakatan bersama warga, bisa di kantor desa, dirumah tokoh masyarakat. Dalam proses pembayaran tersebut kami kami buat berita acaranya yang disaksikan dan ditanda tangani oleh kepala desa dan pemilik lahan.

Tanya : Apabila terjadi sesuatu hal yang tidak diinginkan pada saat pembangunan dan setelah beroperasinya SUTET nanti masyarakat harus mengadu kemana ?

Jawab : Pada saat pembangunan nati PT. JSP menempatkan personil untuk mengelola keluhan dari warga, nanti mekanisme pengaduannya akan di tempelkan di kantor desa sebagai pengumuman, bisa juga lewat desa nanti akan di tindaklanjuti oleh tim PT. JSP. Sedangkan pada saat operasionalnya nati itu sudah menjadi tanggungjawab dari PLN, karena PT. JSP hanya bertugas membangunnya saja setelah menyala langsung diserahkan kepada PLN.

Kesimpulan

- Isu yang diangkat/didiskusikan
Isu yang diangkat adalah tentang data pemilik lahan yang belum terdata, warga masih khawatir jika yang lahannya terlintasi jalur SUTET namun tidak terdaftar sebagai penerima kompensasi akan timbul jejolak di masyarakat dan pada akhirnya menjadikan kondisi tidak kondusif.
- Respon dari sponsor
Tim lapangan Kwarsa dibantu oleh staf kelurahan dan RW akan melakukan validasi data setelah kegiatan sosialisasi selesai.

Public Consultation Minutes of Meeting

Activity : Public consultation on ESIA disclosure of Jawa I Project
 Date : Friday, 8 June 2018
 Location : Village Hall of Kalangsuria Village, Rengasdengklok District, Karawang Regency
 Speakers : 1. Sumadi on behalf of the Sponsors
 2. Risnandar Aminudin (ERM, environment topics)
 3. Annye Simbolon (ERM, social topics)
 Participants : Please see the annex

Description of Activities:

This public consultation session was held to disclose the ESIA process and results of Jawa I Project to the impacted community in Kalangsuria Village. Kalangsuria is one of the Village crossed by the transmission line of the Jawa I Project. The session was attended by *Musyawarah Pimpinan Kecamatan* (District Consultation Board) and the land owners of the transmission line right of way.

Agenda of the session is as follow:

1. Opening remarks, general description, and project schedule by the Sponsors
2. Explanation on the ESIA process and results by ERM
3. Explanation about the grievance mechanism and introduction of the GM officer
4. Commentary from the District Consultation Board
5. Question and Answer

The discussion emphasized the potential risks and impacts related to the tower footings and transmission line as these were relevant to the community in Kalangsuria Village, Karawang Regency.

Questions/ Concerns/ Suggestions raised during the consultation

Name/ stakeholder group	Question/concern/suggestion	Sponsor Feedback
Head of Rengasdengklok District	The Project must optimize the local employment opportunity for the construction of the transmission line	The Project is committed to maximize the employment opportunity for local people when feasible. According to the regulation, the Project must use at least 60% of the local people as workers.
Land owner of the TL RoW	There is a concern on the land price devaluation due to the construction and operation of the transmission line.	The government has issued a regulation to provide compensation for the impacted land and objects under the transmission line RoW to accommodate such devaluation. The Project has conduct the inventory of the impacted land and

		object and compensation payment will be provided to the eligible parties in accordance with the applicable regulation.
Land owner of the TL RoW	Concern that the tower footing area will be a nesting place for rats and damage the crops	Typically the tower footing base will be higher compared to the surrounding land due to construction of the foundation. Hence, there is no need to worry about the nest.
Land owner of the TL RoW	Concern about the “radiation” (EMF) resulted from the transmission line	<p>The government has issued a regulation regarding the safe distant from the transmission line network and the Project complies with the regulation.</p> <p>Many of PLN staffs working under the TL network every day for years and they don't have problems related to EMF. This can be a real example that TL network should not be a problem if we follow the regulation.</p>

Attendee list

DAFTAR HADIR

Kegiatan : Festival Cendekia dan Warteng
 Hari/Tanggal : Jumat, 8 Juni 2018
 Tempat : Balai Desa Kelumpang

NO	NAMA	ALAMAT	JABATAN	TANDA TANGAN
1.	ENCIH	KALAYUDIA	WALYA	
2.	Asmahan	---	---	
3.	SOLOHUSIAH	Mulyajaya	---	
4.	JANAH	---	---	JANAH
5.	TASAN	Mulyajaya	---	
6.	KAMUP	RT RAK	Kampung Kandang	
7.	Komal P	Kb Karang	---	
8.	ARNADI	GB SARI	RT	
9.	B.P. WUNG	GB SARI	RT	
10.	- ARMA	GB SARI	RT	
11.	DEDI	Sampalan	---	
12.	Saman	Tegal Keneng	---	
13.	Hj. KASNI	CUKANG GALAH	---	
14.	REMI	CUKANG GALAH	---	
15.	ANNAB	CAMBA RSARI	---	
16.	AGI S	---	---	
17.	ENDANG R.	WALUYA	---	
18.	SULASTI	SERDES	WALUYA	
19.	DENY F	WALUYA	---	
20.	H. Lili S	Kebonharan	Kader	
21.	Mj Agus	---	warga	
22.	H. Hossan	---	warga	
23.	Remi	---	warga	
24.	Indri	---	warga	
25.	Moch Nur	STAP	---	

DAFTAR HADIR

Kegiatan :
Hari/Tanggal :
Tempat :

NO	NAMA	ALAMAT	JABATAN	TANDA TANGAN
26.	Agus Sunu	Rengasrejo	Ornat	
27.	Samsun	Sindangson	Kaur	
28.	Saman	Tegelkonop		
29.	U. Pasarihu	Koramit	BAUR KONSOS	
30.	Suparso	Kepolek Pangasongkol	Kepolek	
31.	Agus Sunu	Ka. Kertawijaya	Sekam	
32.	Maryono	Cilamaya	PT	



Public Consultation Minutes of Meeting

Activity : Public consultation on ESIA disclosure of Jawa I Project
 Date : Saturday, 9 June 2018
 Location : Village Hall of Cilamaya Kulon District, Karawang Regency
 Speakers : 1. Sumadi on behalf of the Sponsors
 2. Risnandar Aminudin (ERM, environment topics)
 3. Annye Simbolon (ERM, social topics)
 Participants : Please see the annex

Description of Activities:

This public consultation session was held to disclose the ESIA process and results of Jawa I Project to the impacted community in Sukamulya Village. Sukamulya is located around 12 Km from the power plant, and crossed by the Project TL network. The session was attended by *Musyawarah Pimpinan Kecamatan* (District Consultation Board), some villagers from Cilamaya Village (where the power plant is located) and Muara village.

Agenda of the session is as follow:

6. Opening remarks, general description, and project schedule by the Sponsors
7. Explanation on the ESIA process and results by ERM
8. Explanation about the grievance mechanism and introduction of the GM officer
9. Commentary from the District Consultation Board
10. Questions and Answers

Since the participants mainly come from Cilamaya and some from Muara, the discussion emphasized the potential risks and impacts related to the power plant and activities in the coastal area during the construction and operation phase.

Questions/ Concerns/ Suggestions raised during the consultation

Name/ stakeholder group	Question/concern/suggestion	Sponsor Feedback
Nurhasan, community members of Cilamaya	Employment opportunities for the local people; the Project must closely coordinate with the village authorities on workers recruitment issue to ensure local community will get the benefits from the opportunities and avoid horizontal conflict. The project must not be afraid to "NGOs" which generally known to claim representing the community but actually are opportunistic people who	The Sponsors are committed to prioritize local people for the employment opportunities in accordance with the local regulation (60% of the workers must be local). The Sponsors and the EPC will be coordinating closely with the village authorities on workers' recruitment issues

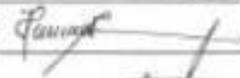
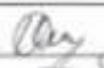
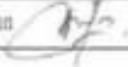
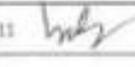
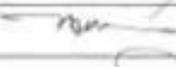
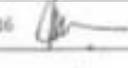
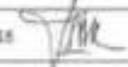
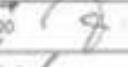
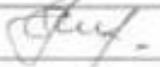
	would like to get personal benefit from the project.	
Pak Ali, village secretary of Cilamaya Village	The Sponsors must remember that Cilamaya Village is a flood-prone area as it's passed by two running rivers (Cilamaya river and irrigation channel)	The project has conducted flood study and taking the results of the study into consideration of the Project design
Fisherman from Muara Village	<ul style="list-style-type: none"> - The Project must put marks on the sea (i.e. buoy) during the construction so the fishermen are aware on the activities and know what to do. - The Project needs to conduct more socialization to explain more detail of the Project plan and schedule to the community (including fishermen community in Muara). This can be done in the fishermen cooperative office. - The Project needs to preserve the mangrove area since it plays important role as breeding grounds for shrimps. 	<ul style="list-style-type: none"> - The Project will put marks during the construction and implement health and safety management plan - The Project will consult the communities prior to construction activities so that the communities are aware about the Project plan. There is a grievance mechanism as a channel for the community to submit grievances related to the Project. - Agree to preserve the mangrove area

Annex 1- Attendants list

DAFTAR HADIR

REGIATAN
HARI/TANGGAL
TEMPAT

: Public Consultation
: Sabtu, 9 Juni 2018
: Aula Kantor Kecamatan Cilamaya Kulon

NO.	NAMA	INSTANSI/ALAMAT	TANDATANGAN
1.	KERTI	CILAMAYA	
2.	H. BARRUN	-	
3.	Budang Rosrid	Kec. Pur/Sgede	
4.	WACIP'S	KAWA UMUM/S GOR	
5.	H. HUSAN	Sukamulya	
6.	Pop. C. S.	C. Lamaya.	
17.	Edi Jurnedi	Tegalung	
8.	Sana'	Kec. Cikul	
9.	M. P. S. H. P.	Kep. B. S.	
10.	Bukhari	Bukit Bay	
11.	Eujang Hermawan	Kec. Cikul	
12.	V. B. C.	Kec. Cikul	
13.	Kuswani	Cilamaya	
14.	Maryono	Pt. Tq	
15.	Abby Istak	Musora.	
16.	Ujung	-	
17.	Rosidin	Cikul	
18.	Rahman	Cikul	
19.	Ari Hamdi	Cikarang.	
20.	Sumantri	-	
21.	I. Berli	-	

DAFTAR NAMA

NO. DAFTAR
 NAMA
 ALAMAT

NO. DAFTAR
 NAMA
 ALAMAT

NO.	NAMA	ALAMAT	NO. DAFTAR
29	Bunawan	Papua	29
30	Royu	Makassar	30
31	Sumarta	Makassar	31
32	Wahana	Culora	32
33	Al. Asy	Sulawesi	33
34	Makassar	Sulawesi	34
35	Orang	Sulawesi	35
36	Sulawesi	Sulawesi	36
37	Atena	Sulawesi	37
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70	Atena	Sulawesi	70

**Public Consultation for ESHIA Disclosure
Minutes of Meeting**

Activity : Public consultation on ESIA disclosure of Jawa I Project
 Date : Monday, 30 July 2018
 Location : Head of Cilamaya Village Office
 Speakers : 1. Sumadi on behalf of the Sponsors
 2. Vasco on behalf of EPC Contractors (GE, project overview)
 3. Risnandar Aminudin (ERM, environment topics)
 4. Arianto Dwi Anggoro (ERM, social topics)

Participants : Please see the annex

Description of Activities:

This public consultation session was held to disclose the ESIA process and the results of impact assessment of Jawa I Project to the impacted community in Cilamaya and Muara Village. A Power Plant along with its supporting facilities such as onshore pipeline, jetty and access road will be built in an area within the Cilamaya and Muara Village. The representative of the affected communities, village and sub-district authorities and other relevant parties attended the session.

Agenda of the session is as follow:

1. Opening remarks and greetings
2. General description and project schedule by the Sponsors
3. PLTGU Project overview by EPC Contractors
4. Explanation on the ESIA process and results by ERM
5. Question and Answer

Questions/ Concerns/ Suggestions raised during the consultation

Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
Nana Hernansyah, Former Head of Cilamaya Village (2001-2007)	<ol style="list-style-type: none"> 1. It is important to socialize the Project before it starts. Socialization should be done to each impacted village. 2. The Project must optimize the local employment opportunity particularly during the construction phase; 3. The Project should provide real contribution to the communities and village development; 4. There is a concern about "radiation" from power plant and transmission line. 	<ol style="list-style-type: none"> 1. The socialization is done gradually, from district level and now to village level. 2. The Sponsors are committed to prioritize local people for the employment opportunities. The Sponsors and the EPC will be coordinating closely with the village authorities and relevant government entities on worker's recruitment process; 3. The project will implement social investment program / CSR program however this will be further assess and

Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
		<p>develop by the CSR team.</p> <p>4. The government has issued a regulation regarding the safe distant from the transmission line network (minimum height of the lowest cable is 18 meter) and the Project complies with the regulation.</p>
<p>Nur Hasan, Section Head of Cilamaya Wetan Government</p>	<ol style="list-style-type: none"> 1. Concern on possibility of relocation of houses located alongside the irrigation chanel near the Power Plant; 2. Possibility to form a communication forum to address issues related to labor and recruitment qualification; 3. In operational phase of the Project, the Project must optimize the local employment opportunity for providing services such as cleaning and security aspect. 	<ol style="list-style-type: none"> 1. There will be no relocation / resettlement of houses. The Project even avoids housing area for the transmission line ROW. 2. The Sponsor agreed in the near future to establish such communication forum to address labour issues; 3. The Sponsors prioritize local employment. Villagers can also prepare themselves by taking higher level of education within 3 years of construction activities so they ready for the operational work opportunities.
<p>Muslihun, Villager of Cilamaya Riverside</p>	<p>Concern on wastewater and its discharge to the nearby river.</p>	<p>The wastewater will not be discharged to the nearby river. There will be processes of controlling and monitoring the waste to ensure that wastewater meets the health and safety standard.</p>

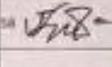
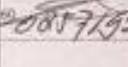
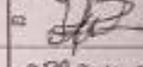
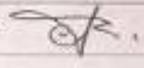
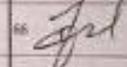
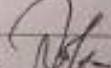
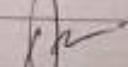
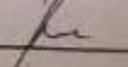
Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
Environmental Department of Karawang Regency	Concern on incompatibility between ESIA as a document and the implementation on the ground;.	The Project will report the implementation of the AMDAL / ESIA every 6 months to the Environmental Agency and will also be monitored by the Agency regularly;
Sujana, Head of Cilamaya Regional Representative Agency (BPD)	The start of construction process.	In August or September 2018.
Caraka, Cooperative Management	<ol style="list-style-type: none"> 1. Concern on community safety due to mobilization of construction transportation; and 2. Concern on reduce of green area within the surrounding of the Power Plant area. 	<ol style="list-style-type: none"> 1. Beside AMDAL, the Project requires Traffic Impact Assessment (ANDALALIN) as well. All of provisions and regulations regarding to traffic procedure are explained in ANDALALIN, including the traffic officer during heavy vehicle mobilization, speed limit of vehicle, etc. 2. Amounting to total area of 33 Ha, only 23 Ha that is used for power plant. The remaining areas can be used to grow plants.
Warsih, Tanggul Pertamina Villager	Concern on access restriction to the road between Tanggul Pertamina to Cilamaya during the construction period.	The road will not be closed and the community still can use the road. The Project will build a new access road for heavy vehicles;

Annex 1- Attendants list

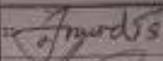
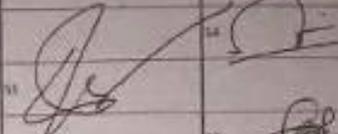
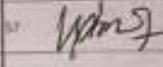
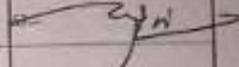
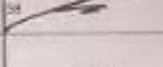
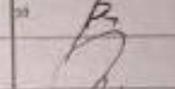
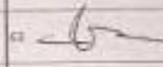
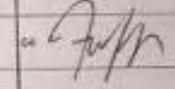
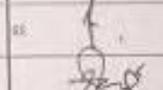
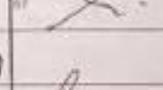
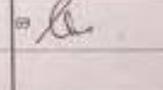
DAFTAR HADIR

Nama Kegiatan: Perseminasi Publik
 Hari/Tanggal: Senin, 30 Juli 2018
 Tempat: Kantor Desa Cilamaya
 Desa/Kelurahan: Cilamaya

No	Nama	Alamat/Instansi	Tanda Tangan
1	SUWIRYA	KR. ANYAR, PANGLAJI	[Signature]
2	STI Ratihati	- " -	[Signature]
3	Hopi yoh	- " -	[Signature]
4	ACEM	- " -	[Signature]
5	Ade nurbaeti	- " -	[Signature]
6	EMPH	- " -	[Signature]
7	Ratna	- " -	[Signature]
8	HARI SETIA BUDI	PSN SUKAMANAH	0858 1340 5840 Bent
9	TAR MIAL	KP. BARU	[Signature]
10	MULYADI	KESERUT	[Signature]
11	Jukmana	Paras	[Signature]
12	NANANG-KOSATI H	SUKAMAYAH	[Signature]
13	Seti Himat	Hulu	[Signature]
14	Manis	Ketinggalan	085692306418
15	Rosi	Selamuka	[Signature]
16	TARSIM	SARIMUYA	[Signature]
17	USMANO S	ARIR II	0857 7808 5301
18	DADANG	KP Jambu	[Signature]
19	Fahrurrozi	KP. Jambu	085719262800
20	Heryan	Jambe	[Signature]
21	Nurhayati	Barahan	085777195147
22	Dede S.	Eldeang	081005220005
23	Euday P.		[Signature]
24	STIFER	Lmp	087770218130
25	AANG K.	Sombelangan	[Signature]

No	Nama	Alamat/Instansi	Tanda Tangan
51	WIDIANDI RAHMATI	SAMSUNG BJT (08129460839)	51 
52	AULIA KHARIS - P	SAMSUNG CBT	52 
53	RABIS ABUSEALAM	SAMSUNG CBT	53 
54	Amisa Sababilla	ERM	54 
55	Arianto D A.	ERM	55 
56	Dhammad	ERM	56 
57	KORTO	SIDAMULYA	57 
58	MANN. SUTAMA.	EPAT AN UTAMA	08569108308. 58 
59	KARSA.	MAYASARI.	59 
60	PATONI	Kp BUNUT	60 
61	MULYANA	(SUKAN MULYA)	081719280059 61 
62	KIARSAH	TANGGUL P	62 
63	CARRA	CILAMANGA	63  088214510047
64	HOPİYAH	CICAMAYA	64 HOPİYAH
65	MUSCITHUN	CILAMAYA (CPM)	65  08571326443
66	SAPAR	= =	66 
67	UAFIDI		67 
68	H. Z. Azzin		68 08128248 1226
69	WANCA	CILAMANGA	69 
70	NANANG	CILAMANGA	70 
71	Dawid A	CILAMANGA	71 
72	CESEP R	CILAMANGA	72 
73	Murhan	CILAMANGA	73 
74	RTADIR	CILAMANGA	74 
75	A. LUYHAN	" "	75 

No	Nama	Alamat/Instansi	Tanda Tangan
26	EMMET MULYATI	KOTAMUARA CO/CUMANDA	
27	ABDUL BASIT	MUARA	
28	SODIKIN	MUARA	
29	Anu Prjanto	Muara	
30	Sutri	Muara	
31	A. HUSRI	Ketinggal	
32	MASHUDI	KETIMPAL	
33	Sulhannudin	MUARA	
34	SANUSI	PASAR SATU	
35	ABOL HADID	Palmas	
36	Murdin A	Palmas	
37	Wahyu Aprianto	Elanya	
38	Leviand	DEU Celayan VII	
39	YOS R	MUARA	
40	RIZKA	MUARA	
41	Iwan S.	Cikamaya WISATA	0822/6240802
42	NATA HERNANDEZ	Cikamaya	
43	RAENAC. A	Elanya	
44	Muhamad Safri	Sidamulya	
45	AHMAD SAHU	DEU. KETIMPAL	
46	HERU NAJARDIN	MUARA	
47	HADISI	Muara	
48	RASMIN	- - -	
49	WATIM	- - -	
50	WAWAN. H.	- - -	 08776082038

NO	Name	Alamat/Instansi	Tanda Tangan
33	Agus. N	Muara	
34	Aep. S.S	Cilamaya	 085 770 2 17 886
35	NAWAN SETIAWAN	DLHK	
36	MUHANA	DLHK	
37	WANUSUK.	Peneliti Ilmiah Kugan	
38	TEDEN.	KRASAN.	
39	Wanta.	Cukarati	 085 68202 6789
40	ACH. NATIK	Cilamaya	 085814016069
41	H. MATRUHIN	Sukatani	
42	Nawar	ka.	
43	ALI FARMISI	Cilamaya / Bekder	
44	SURYA H.	Cilamaya	
45	PR. D. SY.	Cilamaya	
46	T. SARDIWI	INTEC POLTEK CIMA	
47	YUNO. E. WANDU. SY.	POLTEK CIMA	
48	AFSTIANI	Cilamaya	
49	ADE.	"	
50	H. GADIMIN	KORAMIL 0408/CEM	
51	WAWAN M.	"	
52	AIZKA AT	Muara	
53			
54			
55			
56			
57			
58			
59			
60			

Annex 2- Photos



JAWA SATU POWER

Jakarta, 20 Juli 2018
No. 053 /JSP/1000/2018-S0

Lampiran : 1 (satu) Lembar
Undangan Konsultasi Publik

Yang terhormat,
Bapak Camat
Kecamatan Cilamaya Wetan
Jl. Raya Cilamaya Blok Mawar No.5
Mekarmaya, Cilamaya Wetan
Kabupaten Karawang, Jawa Barat 41394.

Dengan Hormat,

Demikian dengan surat ini kami sampaikan informasi bahwa PT Jawa Satu Power (JSP) berencana membangun Pembangkit Listrik Tenaga Gas dan Uap (PLTGU) Kapasitas 120 MW beserta fasilitas penunjangnya di Desa Cilamaya, Kecamatan Cilamaya Wetan, Kabupaten Karawang.

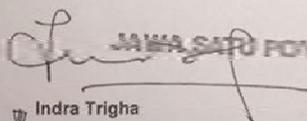
Selubungan dengan rencana pembayaran proyek tersebut akan menggunakan sumber dana pinjaman dari Bank Pembangunan Asia, dimana salah satu persyaratan yang harus dilakukan oleh JSP adalah melaksanakan konsultasi publik seperti yang pernah kami lakukan saat proses pengurusan dokumen AMDAL, maka kami berencana melaksanakan konsultasi publik untuk berdiskusi masalah dampak yang ditimbulkan oleh proyek. Oleh karena itu, kami mengundang Bapak/Ibu untuk dapat menghadiri konsultasi publik yang akan kami lakukan pada:

Hari / Tanggal : Senin, 30 Juli 2018
Waktu : 09.30 WIB - selesai
Tempat : Kantor Desa Cilamaya

Demikianlah surat undangan ini kami sampaikan, Besar harapan kami agar Bapak/Ibu dapat menghadiri acara yang dimaksud.

Mas kerjasama dan partisipasinya kami ucapkan terima kasih.

Direktur,


JAWA SATU POWER

Indra Trigha

- Tembusan :
1. Kapolsek Sektor Kecamatan Cilamaya Wetan
 2. Komando Distrik Militer Kecamatan Kecamatan Cilamaya Wetan
 3. Kepala Desa Cilamaya
 4. Kepala Desa Muara
 5. Perwakilan Masyarakat desa yang terdampak
 6. Perwakilan kelompok Nelayan
 7. UPTD-Pedanaan Kecamatan Cilamaya Wetan

Gedung Wisma Nusantara X, 20
Jl. MH. Thamrin No. 59
Jakarta 10350 – Indonesia
T +62 21 381 5111

**Public Consultation for ESHIA Disclosure
Minutes of Meeting**

Activity : Public consultation on ESIA disclosure of Jawa I Project
 Date : Tuesday, 31 July 2018
 Location : KUD Mandiri Mina Fajar Sidik Hall, Blanakan Village
 Speakers : 1. Sumadi on behalf of the Sponsors
 2. Vasco (GE, project overview)
 3. Representative of Meindo Elang Indah (FSRU overview)
 4. Risnandar Aminudin (ERM, environment topics)
 5. Arianto Dwi Anggoro (ERM, social topics)

Participants : Please see the annex

Description of Activities:

This public consultation session was held to disclose the ESIA process and the results of impact assessment of Jawa I Project to the impacted community in Blanakan village. Most of Blanakan Villagers are fishermen whose capture zone will be impacted by the sea pipeline and FSRU construction and operation activity. The session was attended by the representatives of local government and security forces, and villagers from Blanakan Village.

Agenda of the session is as follow:

6. Opening remarks and greetings
7. General description and project schedule by the Sponsors
8. PLTGU Project overview by EPC Contractors
9. Explanation on the ESIA process and results by ERM
10. Question and Answer

Questions/ Concerns/ Suggestions raised during the consultation

Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
Agus Supriatna, Leader of KUD Saluyu Mulya	Compensation for fishing activities and fishing area impacted by the sea pipeline laying down activities. The construction activity is feared to affect the coral reefs, water turbidity and causing noise disturbance to fish;	The sea pipeline will be buried on the bottom of the sea floor, therefore it will not have any affect to the coral reefs. The project will conduct assessment / survey on fish catch by the fishermen prior the construction start and during the construction to see whether there is a significant effect to fish catch due to pipeline laying down activities. The result will be used to determine the solution and compensation to provided for the impacted fishermen.
M. Fauzan, KUD Mina Bahari Management	<ul style="list-style-type: none"> • The Project must optimize the local employment opportunity particularly during the construction phase; and • Concern on incompatibility between ESIA as a document 	<ul style="list-style-type: none"> • The Sponsors are committed to prioritize local people for the employment opportunities. The Sponsors and the EPC will be coordinating closely with the village authorities and relevant government

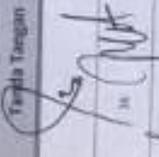
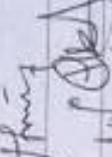
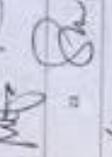
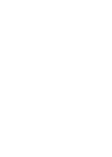
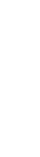
Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
	and the implementation on the ground	<p>entities on worker's recruitment process</p> <ul style="list-style-type: none"> The Project will report the implementation of the AMDAL / ESIA every 6 months to the Environmental Agency and will also be monitored by the Agency regularly
Jaelani, Fisherman	Concern on possibility of fishermen net stuck in the sea pipeline	Since the pipeline will be buried on the bottom of the sea, fisherman's net will not get stuck on the pipeline.
Isnaini, Head of Blanakan Village	The Project should give real contribution to the fishermen communities and village development	The project will implement social investment program / CSR program however this will be further assess and develop by the CSR team
Representative of Indonesia Navy	Waste generated during the sea pipeline laying down activities should be properly managed and clean up from the sea. During the laying down activities a signage of mark should be placed in the construction site at sea.	Material storage and pipeline welding process will be all conducted within a ship to minimize any construction waste dispose to the sea. A mark or signage will be placed at the construction site at sea.
H. Tosan, Sea Survey of Subang Regency	Related to compensation scheme for the affected communities the Project can adopt the system implemented by the Pertamina.	Since Pertamina is one of the shareholder of this Project, surely the Project can learn and apply Pertamina good practice related to establishing compensation scheme for the affected communities;
Nuryono, Fisherman	Project to provide lamp / torch for prawn fishermen to increase the catch	The Project will consider providing lamp / torch for prawn fishermen.
Sitorus, Head of Water Police Unit	<ul style="list-style-type: none"> Similar socialization / disclosure of ESIA should be conducted more broader affected villages; Related to all sea activities, the Project should 	<ul style="list-style-type: none"> The process of ESIA disclosure / socialization will be conducted gradually starting from the sub-

Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
	<p>coordinate with the Water Police Unit to ensure its safety and security</p>	<p>district level and now to the village level; and</p> <ul style="list-style-type: none"> • The Project will definitely coordinate closely with the Water Police Unit and other relevant parties to ensure all activities at sea are safe and secure.

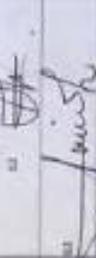
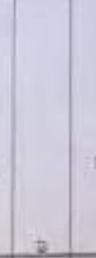
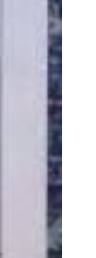
DAFTAR HADIR

Nama Kegiatan : Konsultasi Publik Hasil Studi Analisa Mengenai Dampak Lingkungan (AMDAL) Pembangunan PLTDJ TAMBA-1 (1.750 MW)
 Hari/Tanggal : 31 Juli 2018
 Tempat : Aula Koperasi Mina Pajar Sidiq
 Desa/ Kelurahan : Desa Blanakan

No	Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/HP	Email	Tanda Tangan
1	ZAELANI	pelelonyan	nelayan	0877 27530354		
2	AGUS SUPRIATNA	KETUA KUD SAMPUNADJO	Nelayan	085 222 504234		
3	NANDA PURYANA	- - -	Nelayan	-		
4	RARA NURASIO	- - -	Nelayan	085 319 422 873		
5	Sanda	Blanakan	Nelayan	08152220800941		
6	IWANG	Blanakan	nelayan			
7	N/P X	BLANAKAN	NELAYAN			
8	SARWONO	BLANAKAN	NELAYAN	081951814662		
9	Alim	Blanakan	WELAYAN	082520028587		
10	Yona	- - -	- - -	085 322000110		
11	CODIN.M	MK. SARI	- - -			
12	MURAYATO	Blanakan Ko	Kopaska	0819210706		
13	Samsa	Blanakan	Kopaska			
14	H. Ad. THOMAS	MUARA	DE HNO Ag	08127006134		

No	Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/WP	Email	Tanda Tangan
15	H.A. RUTH	Muara	Kud. Muar Dahi	08127006137		
16	Joko S.	Marongan	POLAIR JABAR			
17	Vasco T.	GE	PM			
18	H. Triyodi	Cilamayaagung	Pengurus KUD	081280928461		
19	H. URIP	Cilamaya girang	Pengurus KUD			
20	Syamsul. Samudra	Cilamaya girang	Nelagan.			
21	STEFANUS	Ciparigi	Wakil K. K. K.	08228354165		
22	SUMARDI	JSP		0813-95509-509		
23	KRISTY HALLISON	REDA Nauli	REDA ADE			
24	Ananta D.A	DKN Jblu	EKM	0810201534		
25	Anisa Salsabilla	ERM	ERM			
26	TAMAR		Com			
27	HENNY AL	JSP				
28	Rizwanan	ERM	ERM			
29	Salidi	DUAPO	NEROPADU	081921512408		
30	Abrar		Pengurus KUD	081389122111		
31	Ferry	PM	PM			
32	RATYADI	Mr. Naulian	KoripMD	08180211202		

No	Nama	Alamat/Hubungan	Pekerjaan/Labatan	No Telp/HP	Email	Tanda Tangan
01	HJ. ISHABATI	BLAHAKAN	KADES	081219538610		
02	TATI DAMAYANTI	---	Staf.	082214551617		
03	TORUNG	Dkt	MEI	08138775125		
04	Johannes M.S	---	MEI	0812500415		
05	Dionysius Dwiyudi	---	MEINDO	0817460381		
06	Dahwaning	JKT.	MEINDO	081346515225		
07	PICOTO	Kud MFS	Staf.	08524128784		
08	TAUFIK H	BLAHAKAN	---	085840878667		
09	AGUS. W.	YBL ANR	---	70080209		
10	DWI SUPRIATI	Kud Karyo dan	PERENCANAAN	081249140328		
11	ONO	---	---	0021207884		
12	TAKIM	---	---	085322526307		
13	CHAI	BLAHAKAN	---			
14	Camory	Tp / Alami	TPI	085787317		
15	SUTARNO	POSAL	TNI	082317091456		
16	SODIRIN	PERC	Managemen	0870000009		
17	DARSIM	Desa	Kerang Panan.	08521747408		
18	Nahudin	Desa	Kashtaga	083869395346		

No	Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/HP	Email	Tanda Tangan
51	SUKIRANA	POS TUGUR BLANDAK	Postman	08772289109		
52	H. Hm. M	KUMU	Manajemen	08138488788		
53	Yono	-	-	082375201		
54	OCIO R	-	-	0872671916		
55	Xanto	-	-	08011500810		
56	Prusim	-	-	0853124046		
57	Christians	-	-	08122103533		
58	Dronjor	PO TUGUR	-	0812213200		
59	Nan. F	KUP.	Arbiter	08212211248		
60	Sekhartha. W	Security team	Sec. KUMU	081324986488		
61	Usep Sujana	-	-	08382582507		
62	Atiah	Karyawan KUD	-	08231988308		
63	Aisyah	Karyawan KUP	-	08421579836		
64	Jabon	-	-	0813211567071		
65	CATUR PRASETIO	BANK POS POLAIRUD	DAMPOS POLAIRUD	087223699935		
66						
67						
68						

Annex 2- Photos



JAWA SATU POWER

Jakarta, 30 Juli 2018
No.051/JSP1000/2018-SO

Lampiran : 1 (satu) lembar
Perihal : Undangan Konsultasi Publik

Yang terhormat,
Bapak Camat
Kecamatan Blanakan
Jl. Ciasem, Blanakan, Kabupaten Subang
Jawa Barat 41259

Dengan Hormat,

Bersama dengan surat ini kami sampaikan informasi bahwa PT Jawa Satu Power ("JSP") berencana membangun Pembangkit Listrik Tenaga Gas dan Uap ("PLTGU") kapasitas 1.760 MW beserta fasilitas pendukungnya di Desa Cilamaya, Kecamatan Cilamaya Wetan, Kabupaten Karawang. Fasilitas besar yang diprakirakan berdampak kepada nelayan dan Blanakan dan sekitarnya adalah adanya Penyimpanan LNG di tengah laut yang disebut FSRU.

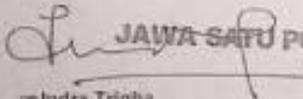
Sehubungan dengan rencana pembiayaan proyek tersebut akan menggunakan sumber dana pinjaman dan Bank Pembangunan Asia, dimana salah satu persyaratan yang harus dilakukan oleh JSP adalah melaksanakan konsultasi publik seperti yang pernah kami lakukan saat proses pengurusan dokumen AMDAL, maka kami berencana melaksanakan konsultasi publik untuk berdiskusi masalah dampak yang ditimbulkan oleh proyek. Oleh karena itu, kami mengundang Bapak/Ibu untuk dapat menghadiri konsultasi publik yang akan kami laksanakan pada:

Hari / Tanggal : Selasa, 31 Juli 2018
Waktu : 10.00 WIB - selesai
Tempat : Aula KUD Mandiri Mina Fajar Sidik, Desa Blanakan, Kecamatan
Blanakan, Kabupaten Subang

Demikianlah surat undangan ini kami sampaikan, besar harapan kami agar Bapak/Ibu dapat menghadiri acara yang dimaksud.

Atas kerjasama dan partisipasinya kami ucapkan terima kasih.

Direktur,


Indra Trigha

Tembusan :

1. Kepolisian Sektor Kecamatan Blanakan
2. Polisi Laut dan Udara (Polairut) Kecamatan Blanakan
3. Polisi Laut dan Udara (Polairut) Kecamatan Cilamaya Wetan
4. Kepala Desa Blanakan
5. Kepala KUD Mandiri Mina Fajar Sidik
6. Perwakilan Masyarakat desa yang terdampak
7. Perwakilan kelompok Nelayan

Gedung Wana Nusantara II, 20
Jl. MH. Thamrin No. 59
Jakarta 10350 - Indonesia
T +62 21 381 5111

**Public Consultation for ESIA Disclosure
Minutes of Meeting**

Activity : Public consultation on ESIA disclosure of Jawa I Project
 Date : Tuesday, 31 July 2018
 Location : Saiyo Cilamaya Restaurant, Cilamaya Village
 Speakers : 1. Sumadi on behalf of the Sponsors
 2. Risnandar Aminudin (ERM, environment topics)
 3. Arianto Dwi Anggoro (ERM, social topics)
 Participants : Please see the annex

Description of Activities:

This public consultation session was held to disclose the ESIA process and results of Jawa I Project to local and national non-governmental organization (NGO).

Agenda of the session is as follow:

11. Opening remarks and greetings
12. General description, project schedule, and project overview by the Sponsors
13. Explanation on the ESIA process and results by ERM
14. Question and Answer

Questions/ Concerns/ Suggestions raised during the consultation

Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
Urumian	Concern on community safety due to mobilization of construction transportation	Beside AMDAL, the Project will also have ANDALALIN or the Traffic Impact Assessment. All of provisions and regulations regarding to traffic procedure will be explained in ANDALALIN. It will include speed limit, providing traffic signs and officer to manage traffic. Before ANDALALIN is approved, ANDALALIN document has to be reviewed by Land Transport Department, Police, Ministry of Public Works and Housing, and Environmental Department.
Fahri, Gibas Organization	Compensation for impacted fishermen and farmers	The Project will conduct further study / community need assessment for the affected community to ensure the social investment program will be developed or the compensation scheme will align with the community need;
Wanosudi, Environmental Observer of Karawang Regency	With regard to building relationship with the affected communities, the Project should acknowledge local	Agreed and we will try to build strong relationship with all stakeholders.

Name/stakeholder group	Question/concern/suggestion	Sponsor feedback
	wisdom and best practices and empower the local communities;	
Budi, NKRI Organization	Concern on incompatibility between ESIA as a document and the implementation on the ground;	The Project will report the implementation of the AMDAL / ESIA every 6 months to the Environmental Agency and will also be monitored by the Agency regularly;
Edi, BPAN	<ul style="list-style-type: none"> • The Project must optimize the local employment opportunity particularly during the construction and operational phase. • Concern on potential air pollution generated by the Project that will have impact to the villagers particular to children 	<ul style="list-style-type: none"> • The Sponsors are committed to prioritize local people for the employment opportunities. The Sponsors and the EPC will be coordinating closely with the village authorities and relevant government entities on worker's recruitment process; • One of the reasons why the power plant type is PLTGU is because it emits cleaner emission than other type of power plant. The study of air pollution is attached in AMDAL document as well.
Agus M, Projo Organization	Project to provide medical support to local communities	Health support program for the communities will be considered as part of the CSR program
Cecep, Lodaya Organization	Possibility Project to develop program in collaboration with the NGOs	The Project will take into consideration collaborating with the NGOs
Kusman H	Project should build good relationship with all its stakeholders and be responsible its impact mitigation program.	It is the project commitment to build good relationship with all of its stakeholders and one form of good relationship will be reflected through implementing CSR program to the communities

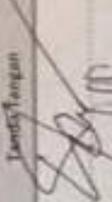
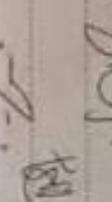
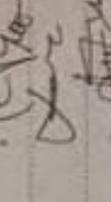
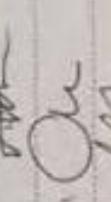
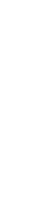
DAFTAR HADIR

PUBLIK CONSULTATION (KONSULTASI PUBLIK)

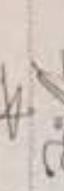
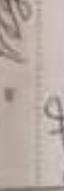
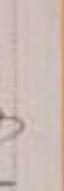
SELASA, 31 JULI 2018

PM SAIXO

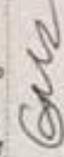
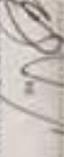
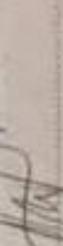
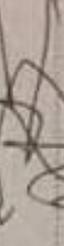
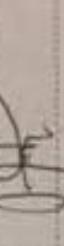
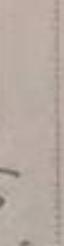
CLAMAYA

No	Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/HP	Email	Tanda Tangan
1	Wanusaiki	Pemerintah Kabupaten		081281528021	wanusaiki@gmail	
2	Ferdianto	Kantor Luwu Kabupaten		081281528021		
3	Ananda P.A.	EMM	Laki-laki	085804749251		
4	Alwir	U.C.E.				
5	Ansa Sabillah	ERM				
6	Klaugus F.R.	GIBAS CD	Setjen	0897510604	klagus.fr@gmail.com	
7	Aep Saepudin	GIBAS CD	Bnd	08578132458		
8	Roby. I	BANLOK	BANLOK	081513956711		
9	WANAN.S.	BANLOK	KANLOK.	081519713302		
10	Rafiqi A.	GIBAS		0857165711		
11	U.U. R.	BANLOK	Belungo	085813 --		
12	MUNGGAT	BANLOK		082122377036		
13	Jatar	BANLOK		081281826943		
14	MUSTOPA.	BANLOK		0856147327		

Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/HP	Email	Tanda Tangan
NANANG A.F.	ISARAR	Fefua	0813 8166 8555	BHARAN @S.MILL.COM	
DE KAMATI	BANLOK BANKA SEWETI	-	085 77728100		
ERMAN	BANLOK	SEKREN	085719948869		
CA'IM	BANLOK		081262888889		
NANTAN S. SURAB	BANLOK		0856 9218 9234		
TANAHAN	BANLOK BUKA KECEPET		08988110392		
TAEMO			0858 13245376		
HAIR	Karang Tunj	Anggota	0852 65446 55		
AGUS. M.	PROJO KRIS	KOMINFO	0857 7958 5882		
M. STANFACON	PROJO KRW	O.K.K.	08183971901		
ERI RAMLAN	EPAN. AI	KORLATP.	081312511856		
YAMA. AZ.	BANLOK		085715510338		
ROKIS.	Banlok		087879866576		
DJIMAN	GIGAS.		08588391998		
AKOT	DALOK		68212843748		
APRI ANU	DALOK		07897144708		
ANAN SUPRIPTO	FKPPI		085216034349		
S. KOPRARAY	FKPPI		08225807228		

Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/HP	Email	Tanda Tangan
AHWAKUWAH	Cilacap	Ketur. Logg	082113 098972		
TARI	- - -	NKL Keloya			
Cecep	- - -	- - -			
MATHYF	- - -	NKRI	08933645825		
HUTAY	PP	KORCOM	08588586607		
PUDIN	- - -	NKRI	085880230960		
GENDON	- - -	NKRI	08885257027		
ARUN	- - -	NKRI			
Ika Sakti	Culung	KALUKR	08909092930		
NAR. RATAK	Cilacap	NKRI			
Sachi	- - -	NKRI			
TEGUH	- - -	NKRI	08588333203		
NASIHIN	Cikarang	PP	08571719534		
HIKMAT. SM	"	"			
HAYO	"	"			
ANTON	"	"			
Ahmad S.	"	"			
TAAN	"	"			

Nama	Alamat/Instansi	Pekerjaan/Jabatan	No Telp/HP	Email	Tanda Tangan
T. TOHAN. W.	FK PDI	—	08298081611		7/Jul 10
Fahrurrozi	Cilamaya.	Kasat GAS	085719268900		
ADE	PASUKAN 12	Kasat PANGEM	081311341609		
AGUS	BRANCUH	P. 12	085714885752		
ADI. H	P. ISMAYA	KETUA	081510568839		
ARI. S	CILAMAYA	P. ISMAYA	082113098007		
RIDA F.	Cilamaya	P. ISMAYA	085711307399		
KUSMAN HERDIAN	CILAMAYA	GRIB HERKUFES	0858 90145919		
ADRIAN BUN	CILAMAYA	LUM P.			
HAERULSAHEH	CILAMAYA	KARANGTARUNADESA	085775189320		
DOHI RAHMAT	CILAMAYA.	GIBAS.	083015654199.		
DEDI. S (DEW)	CILAMAYA	NKR1	085922080070		
BUDI	—	—	087741475110		
YUDI.	—	NKR1	0812964573		
JAYADI	—	CM P			
UKAT. KETAW	BANJUSARI	BARAK	085775362979		
TANDU	CILAMAYA	lum p			
DARUN	Cilamaya	KARANGTARUNADESA	08567234888		

No	Nama	Alamat/Instansi	Pekerjaan/Jabatan	No. Telp/NP	Email	Tanda Tangan
97	HERHALIM	Cilamaya	GMBI			
98	DIRMAN	- 1. -	LMP	085718923672		
99	Heriyanto	Cumaya	LMP	085779241164		
100	BUDI HARDO	CILAMAYA	FETU PP			
101	TAGUCHI	Cumaya	LMP			
102	DIDIN D	CILAMAYA	GRIS			
103	TASWIN	CILAMAYA	LMP			
104	COINA	- 1. -	PP			
105	Xuridin	Cumaya	Pinnas			
106	APP GANGSAR	PALSAR	BARA			
107	MISH SORH	FKPF				
108	ALADIMIN	KORAMIC				
109						
110						

Annex 2- Photos



JAWA SATU POWER

Jakarta, 26 Juli 2018
No. 054/JSP1000/2018-S0

Lampiran : 1 (satu) halaman
Perihal : **Undangan Konsultasi Publik**

Yang terhormat,
Bapak/Ibu Ketua Ormas/LSM
Seperti Daftar Terlampir
Di Tempat

Bersama dengan surat ini kami sampaikan informasi bahwa PT Jawa Satu Power ("JSP") berencana membangun Pembangkit Listrik Tenaga Gas dan Uap ("PLTGU") kapasitas 1760 MW beserta fasilitas pendukungnya di Desa Cilamaya, Kecamatan Cilamaya Wetan, Kabupaten Karawang Untuk mendukung beroperasinya PLTGU fasilitas penampungan LNG juga akan dibangun di tengah laut di bagian utara Kabupaten Subang.

Sehubungan dengan rencana pembiayaan proyek tersebut akan menggunakan sumber dana pinjaman dari Bank Pembangunan Asia, dimana salah satu persyaratan yang harus dilakukan oleh JSP adalah melaksanakan konsultasi publik seperti yang pernah kami lakukan saat proses pengurusan dokumen AMDAL, maka kami berencana melaksanakan konsultasi publik untuk berdiskusi masalah dampak yang ditimbulkan oleh proyek. Oleh karena itu, kami mengundang Bapak/Ibu untuk dapat menghadiri konsultasi publik yang akan kami laksanakan pada:

Hari/Tanggal : Selasa/ 31 Juli 2018
Pukul : 19.00 WIB - selesai
Tempat : Ruang Meeting RM Saiyo, Cilamaya

Demikianlah surat undangan ini kami sampaikan, besar harapan kami agar Bapak/Ibu dapat menghadiri acara yang dimaksud.

Atas kerjasama dan partisipasinya kami ucapkan terima kasih.

Direktur


JAWA SATU POWER
Indra Trigha

Tembusan:

1. Kepala Kecamatan Cilamaya Wetan
2. Kepala Kepolisian Sektor Kecamatan Cilamaya Wetan
3. Komandan Koramil Cilamaya Wetan

Gedung Wana Nusantara II, 20
Jl. MH. Thamrin No. 50
Jakarta 10360 Indonesia
T +62 21 381 5111

Lampiran 1

Daftar Peserta Konsultasi Publik dalam Rangka Pemenuhan Persyaratan Bank
Pembangunan Asia untuk Wilayah Sekitar PLTGU milik PT. Jawa Satu Power.

No.	Nama Ormas/LSM	Jumlah
1	Burung Indonesia, Jl. Dadali 32 Bogor Tlp : +6221-2518357222, Fax : +6221-2518357981	1
2	KIARA (Koalisi Rakyat untuk Keadilan perikanan), Jl. Marigga Blok M no. 23 Perumahan Kalibata Indah, Jakset. Tlp : +6221-7992682	1
3	TNC (The Nature Conservancy Indonesia), Graha Iskandarsyah Lantai-3, Jl. Iskandarsyah no. 66C Kebayoran Baru, Jakarta 12160. Tlp : +6221-72792043, Fax : +6221-72792044	1
4	KAPAL Perempuan (Koalisi Perempuan Indonesia). Jl. Kalibata Timur Raya no. 5, Rt 003 Rw 10 Kel. Kalibata, Kec. Pancoran – Jaksel Tlp : 021-7988875, Fax : 021-79187971	1
5	WWF (World Wild Fund), Graha Simatupang Tower 2 Unit C Lantai 7, Jl. TB Simatupang Kav. 38 Jakarta 12540. Tel : +6221-7829461, Fax +6221-7829462	1
6	Pemuda Pancasila	2
7	NKRI	2
8	BARAK	2
9	LODAYA	2
10	FKPPI	2
11	GIBAS	2
12	BANLOK	10
Jumlah Total		27