# LAMPIRAN

# Lampiran 1. Daftar Proyek Tahun 2018 (Finan, cing)

										Impacts		
No	Sector	Type of Project*a	Project Name	Brief Description*b	Location	Amount Allocated (in USD)*c	Amount Committed (in USD) *c	Average Project Lifetime*d	Environmental Impacts*e	Other results	Social/ SDGs*g	Project Owners
				MI	TIGATION PROJ	ECTS						
1	Renewable Energy	Generation and transmission of energy from renewable energy sources	Planning, Development and Supervision of New, Renewable Energy and Energy Conservation Infrastructure	Development of Renewable Energy and Energy Conservation Infrastructure that includes centralized Solar Power Plant, Micro-hydro Power Plant, Communal Biogas Power Plant, Biogas communal, Biogas Power Plant, Biogas communal, Biogas Power Plant, Devered by POME (Palm Oil Mill Effluents), and Biofuel Power Plant.	tba	25,109,474	22,591,656	5 years	tbd	tbd	7, 9, 13	Ministry of Energy and Mineral Resources
2	Renewable Energy	Generation and transmission of energy from renewable energy sources (Minihydro)	Development of Minihydro Power Plants	The projects aims to improve the electrification ratio in off-grid areas at Oksibli (3 MW) & Ilaga (700 kW) District of Papua Provinces. It replaces the existing disseligenerators, which was operated in limited operating hours.	tba	8,595,420	7,573,364	5 years	tbd	tbd	7, 9, 13	Ministry of Energy and Mineral Resources
3	Energy Efficiency James on 2018-2027 electricity supply business plan (RUPTL)	Improvement of the energy efficiency of infrastructure	Installation of Energy-Saving Solar Energy Lights in the Rural Area	Distribution of solar-powered LED lightings, which consists of solar panels with a capacity of 20 watt peaks, 4 LED lights equal to 40 watts, and batteries.	tba	44,465,073	41,651,657	5 years	tbd	tbd	7, 11, 13	Ministry of Energy and Mineral Resources
4	Energy Efficiency	Improvement of the energy efficiency of infrastructure	Installation of Energy Efficiency Equipments	Installation of Smart Public Street Lighting integrated with Solar Power Plants.	tba	32,319,063	28,223,088	5 years	tbd	tbd	7,11,13	Ministry of Energy and Mineral Resources
5	Sustainable Transport	Developing Clean Transportation Systems	Construction and Management of Railways Infrastructure and Supporting Facilities in Sumatera	Construction of the Trans Sumatera Railways.	tha	20,475,936	19,664,405	10 years	tbd	tbd	8, 9, 11, 13	Ministry of Transportation
6	Sustainable Transport	Developing Clean Transportation Systems	Construction and Management of Railways Infrastructure and Supporting Facilities in Greater Jakarta	Construction of Greater Jakanta double-double track Railways.	tha	338,954,650	337,149,904	10 years	tbd	tbd	8, 9, 11, 13	Ministry of Transportation Activate

<sup>\*</sup> Please note that the total amount is based on the 2018 Allocated (Pagu) State Budget (APBN). Per 31 December 2018, the total Committed amount is 87,04% of the 2018 Allocated State Budget or 54,7% of total green Sukuk proceeds (1.25 billion). Any committed (realisation) amount exceeding the Green Sukuk proceeds is financed by other sources of fund available in the general treasury account

## Lanjutan Lampiran 1

							Amount Allocated (in	Amount Committed	Average Project		Impacts		
ı	No	Sector	Type of Project*a	Project Name	Brief Description*b	Location	USD)*c	(in USD) *c	Lifetime*d	Environmental Impacts*e	Other results	Social / SDGs*g	Project Owners
					AD	APTATION PROJ	ECTS						
	7	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Food security	Construction of surface irrigation networks authorized by the Central Government	Development and rehabilitation of dams and surface irrigation networks which are the authority of the center and the regions.	tba	278,866,659	203,049,831	10 years	tbd	tbd	8, 9, 11, 13	Ministry of Public Works and Housing
	8	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Flood mitigation	Construction of Filood Control Facilities	With the increasing rainfall intercity, some areas become more prone to risk of flooding. This is added by land use changes and narrowing river causing higher run-off/soormwater. The projects include construction of retention ponds/ polders, flood canals, controlling gates, and pumping stations.	tba	37,338,415	24,346,808	10 years	thd	tbd	8, 9, 11, 13	Ministry of Public Works and Housing

<sup>\*</sup> Please note that the total amount is based on the 2018 Allocated (Pagu) State Budget (APBN). Per 31 December 2018, the total Committed amount is 87,04% of the 2018 Allocated State Budget or 54,7% of total green Sukuk proceeds (1.25 billion). Any committed (realisation) amount exceeding the Green Sukuk proceeds is financed by other sources of fund available in the general treasury account

## Notes:

- a. The type of projects refers to the further details on the 9 Eligible Green Project on the Framework. For full details, please see Annex 2
- b. There can be multiple spots on each location mentioned. Information on 2018 projects' location will be provided in the next annual report. TBA; To be Announced details have been determined, but are not ready to be announced.
- c. The exchange rate is using the State Budget USD Assumption that is 13,400 IDR per USD. The amount committed presented in the table is as of 31 December 2018. The amount is retrieved from the system on 24 January 2019
- d. Based on financial life of project.
- e. Methodology and assumptions is disclosed in Annex 1. TBD; To be determined data of 2018 projects will be provided in the next annual report.
- f. Additional indicators on the direct impact of the green project.
- g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.

Activate W

			120 20		1	Amount	Average Project		Impacts*e		
D	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Committed (in USD)*c 25	Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results "f	Social /SDGs*9	Project Owners
					Project financing (2019) - 2019	issuance					
1	Renovable Energy	Generation and framerisation of energy from remanable energy sources	Planning, Development and Supervision of New, Renewable Energy and Energy Conservation infrastructure	Construction of new and networkle energy infrastructure, with a fecus on areas cutable current electricity coverage. The project sizes to improve the electrification ratio in off-gnd areas across the country. Prover generation is acrosed from solar and broges power plants.	Acade, Dat, Bereija Bilding biloch, West Strontere, North Sarriate, Berejüll, Jamich Sorft Stronten, 20.2 Novelberte, 1000 Sarriate, Berejüll, Jamich Sorft Stronten, 20.2 Novelberte, 1000 Sarriate, 1000 Sarriate, West Jore, West Kalimatera, South Kalimatera, Est Kalimatera, Cartesia Kalimatera, North Kalimatera, Mahala, Rehnt Makali, Wast Rakas Braggam, East Nose Sireggere, Spens, West Papora, Rive, South East Salamesi, East Solamesi, Wast Salamesi, South Salamesi, Cartesia Solamesi, Wast Salamesi, South Salamesi, Cartesia Solamesi, Wast Salamesi, South Salamesi, Cartesia	4,305,470	5-20 Years	tu.	the	7,4,9,11,13	Ministry of Energy and Mineral Resources
2	Sustainable Transport	Developing Clean Trans- portation Systems	Construction and Management of Ruleways Infrastructure and Sup- porting Facilities in Surraters	Construction of the Trans Sumatra Railway from Aceh to Lampung province. The Trans Sumatra Railway causes a mode shift from road transport to rail transport and logistics.	North Sumatra, West Sumatra, and South Sumatra	12,744,867	5 Years	the	tbe	8, 9, 11, 13	Ministry of Transportation
	Sustainable Transport	Developing Clean Transportation Bystems	Construction and Management of Double Track Railways Infrastruc- ture and Supporting Facilities in Java Line	Construction of the double track railway project in the Trans- Java railway's northern and acultiern sections, upgrading the single-track railway.	North and South-Java Line	276,028,810	5 Years	tie .	the	8, 9, 11, 13	Ministry of Transportation
	Waste to Energy and Waste Man- agement	Improving waste min- agement	Improvement of Municipal Solid Waste Management System	Improvement of basic waste management infrastructure services through the development of city, regional and special area-scale of final disposal arise.	Central Java, East Java, North Sematra, Nisz, Lampung, East Kalimantan, North Salawess, Central Salawess, South East Salawess, West Nusa Tenggers, Bengkulu	10,826,773	10 Years	the	the	11,13	Ministry of Public Works are Housing
5	Resilience to Climate Change for Highly Water- shie Areas and Sectors/Dissater Risk Reduction	Floor miligation	Construction of Pland Control Facilities	Construction of retention ponds/ polders, flood canals, dikes, checkdam, and river resistenence and normalization. It aims to reduce the risk of flooding due to increased rainful intensity and land use changes.	West Java, Central Java, Yogyakaria, North Surratura, West Sumatura, South Sultanesi, Makkis, Bali	96,572,073	5 Years	No.	the	8, 8, 11, 13	Minutey of Public Works are Housing
otes The The	types of projects to can be multiple	e on the alticution of the encu- vetions to the further details a spots on each location m go rate is based on the Str	et correlated. The Reputric of Indonesia s of the SI eligible sectors in the Gre entioned.	6. Per 31 Docenter 2010, facilità announ aborata in francing mus pre- chem Band and Green-Sahak Fransenin against etito the aboration of to seri Bond/Sahak fransenvols. For full details, phases refer to Anno sudget year of IDR 16,000 per USD.	t. Additi	doel 2008 idology and assumption onal indicators of the di-	is is disclosed in Annex rect impact of the gree	2. Tbc: to be confirmed - data for the 2015	projects will be provided in the next annual report.  o project.		

# Lampiran 3. Daftar Proyek Tahun 2019 (Refinancing)

									Impacts*e		
No	Sector	Type of Project*a	Project Name	Brief Description	Location'b	Amount Committed (in USD)*c <sup>20</sup>	Average Project Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results "f	Social /SDGs*9	Project Owners
					Project refinancing (2017) - 201	9 issuance					
	Renewable Energy	Generation and transmission of energy from renewable energy sources	Development of New, Renewable Energy and Energy Conservation Infrastructure	Construction of new and renewable energy infrastructum, with a focus on areas outside current electricity coverage. The project aims to improve the electrification ratio in off-grid eners across the coverity. Power generation is sourced from solar, mini hydro, and micro hydro power plants.	Papus, West Papus, East Nzas Tenggars, South Sultavesi, Central Sultavesi, North Sultavesi, South East Sultavesi, South Kalemertan, North Kalemertan, East Kalemertan, West Surraters, Riss, Gorontals, West Kalemetan, North Sumaters, East Java, and Central Java, West Java and Riss Islands	31,074,978	5-20 Years	134,872.41 tonnes	15,607 households with electricity, 7,429 kW power generaled, Improves electrification ratio.	7, 8, 9, 11, 13	Ministry of Energy and Milneral Resources
2	Renewable Energy	Generation and transmis- aion of energy from renew- able energy sources	Installation of Energy-Saving Solar Energy Lights in the Rural Area	Installation of energy saving sobs-powered lamps in areas with limited or no electricity facilities. These lamps would improve accessibility to lighting for off-grid areas while reducing use of clessel generators.	Papus, West Papus, Maluku, West Nuss Tenggars, and Rau	8,549,387	3 Years	1,154,748 tonnes	79,556 Units installed, providing households with lighting.	7, 11, 13	Ministry of Energy and Milneral Resources
3	Waste and Waste to Energy Man- agement	Improving waste man- agement	Improvement of Municipal Solid Waste Management System	Improvement of basic waste management inhastructure services through the development of city, regional and special area-scale of final disposal sites.	All provinces except East Kalimantan	63,125,075	5 Years	In order to achieve 48,000,000 tonnes target set in RAN-GRK	2,056,200 households served.	11,13	Ministry of Public Works and Housing
4	Energy Efficiency	Improvement of the energy efficiency of infrastructure	Installation of Navigation Facilities	Construction, rehabilitation and replacement of marine navigation sides and the installation of solar cells to power marine navigation aids. The shift towards solar powered marine ravigation side reduces the use of fousit half sources of growth.	Jakaria, Central Java, Ezat Java, Acah, North Surnatera, West Surnatera, Risu, South Surnatera, West Kalimanian, South Kalimanian, Ezat Kalimanian, North Kalimanian, North Sulawesi, South Sulawesi, South Ezat Solawesi, Makuku, Ilbat, Ezat Nasa Yenggura, Payan, West Payan and Pilas Inlands.	94,171,985	5 Years	141,000 tonnes	2,459 units constructed, improvement in makine transport safety.	7, 9, 13	Ministry of Transportation
5	Energy Efficiency	Improvement of the energy efficiency of infrastructure	Improvement of Land Transportation Traffic Management Services	Installation of road traffic equipment such as traffic signs, were traffic control systems (ATCS) and navigation aids for river and lake crossings (SENF) with energy-saving sensors.	Jakarta, West Java, Central Java, Yogyakarta, East Java	15,099,009	5 Years	203,116 tonnes	Reducing traffic congestion and improve safety in river and take crossings.	7, 9, 13	Ministry of Transportation
6	Sustainable Trans- portation	Developing Clean Transpor- tation Systems	Construction and Management of Railways infrastructure and Support- ing Facilities in Sumaters	Construction of the Trans Sumatra Railway from Aceh to Lampung prov- ince. The Trans Sumatra Railway causes a mode shift from road transport to rail transport and logistics.	North Survaters, West Survatra, South Survatra	67,658,651	10 Years	213,000 tonnes	Construction of 343.2 km of nailways, shifting mode in logistics and passenger transport.	8, 9, 11, 13	Ministry of Transportation
7	Sustainable Trans- portation	Developing Clean Transpor- tation Systems	Construction and Management of Double Track Railways Infrastructure and Supporting Facilities in Java North Line	The construction of the double track railway project in the Trans Java railway's northern section, upgrading the single-track railway.	North Java Line	7,672,090	10 Years	552,000 tonnes	Upgrading of 338.6 km of doublishack railway, cut travel time and therefore noduce fuel wage.	0, 2, 11, 13	Ministry of Transportation
	Sustainable Trans- portation	Developing Clean Transpor- tation Systems	Development of Jabodetabek Urban Train	Construction of double-double track of the Jabodetabek urban railway network.	Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi)	2,820,903	10 Years	778,000 tonnes	Shifting mode from private to public transport, with 314,317,883 trips in 3917.	0, 9, 11, 13	Ministry of Transportation
9	Energy Efficiency	Improvement of the energy efficiency of infrastructure	Construction, Rehabilitation and Maintenance of Airport Infra- structures	The installation of solar-powered sheet lights and solar power plants. It improves the energy efficiency of algorit and ensure electricity is sourced from necessities sources.	Johann, Weel Jury, Central Jury, East Jury, Aceh, North Sumaters, Weel Sumaters, Fless, Sooth Similaries, Lorgang, West Nationales, Cented Galeronius, Sooth Kais, Calabora, Sooth S	90,447,768	5 Years	10,478 tonnes	Usage of mnewable energy to power lighting in airports.	7, 9, 13	Ministry of Transportation

Lampiran 4. Daftar Proyek Tahun 2020 (Financing)

	1							7		Impacts*e		-
No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*e	Average Project Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results "f	Social / SDGs*g	Project Owners
1	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Drought management	Provision and Management of Ground Water and Raw Water	The project aims at improving raw water service for domestic consumption and social & aconomic productivity, namely for agricultural, industrial, urban and other strategic areas. The project components include development of the infrastructure and supporting facilities for raw water provision originated from surface and ground water or other existing sources. The activities cover natural/artificial poliders/retention basins and raw water unit development.	All provinces except Bengkulu, Gerontalo, Central Sulawesi, Ball	555,833,911,820	38,599,577	5 - 10 years	N/A	Fuffilment of raw water needs of 275,5353 m² per second	3, 5, 6, 8, 10, 11, 13	Ministry of Public Works and Housing
2	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Flood mitigation	Flood and Lava Control, Urban Drainage Management, and Coastal Protection	The project aims at improving water resource infrastructure resilient to water potential damages risks, both of hydrometeorogical or natural disaster particularly floods from urban to coastal areas. It includes normalisation of river bank and dikes, water carel, sluces, polder retentions, and check dams/sabo dams.	All provinces except Lampung, Central Kalmantan, Central Sulawesi, Maluku	1,493,195,870,681	103,694,158	5 - 25 years	N/A	Strengthening of cliffs to protect area of 728.6 Ha; Flood control of 1191.8 Ha of areas	3, 5, 6, 8, 10, 11, 13	Ministry of Public Works and Housing
3	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Food security	Management of Dam, Lake, and Other Water Retention Facilities	The project aims at improving water reservoir integrated with and for supporting the intigation network system development and rehabilitation project for achieving national food security. The project activities include development and rehabilitation of new and existing dams and polider/water retentions.	Aceh, North Sumatera, South Sumatera, Bangia Beiltung Island, Lampung, DKJ Jalanta, Wiest Java, Banten, Central Java, DY Yogyskarta, East Java, Central Kallmantan, South Kallmantan, North Kallmantan, South Sulawesi, Southeast Sulawesi, Sutheast Sulawesi, Best Nusa Tenggara, East Nusa Tenggara, Maluku, Papua	1,911,865,541,963	132,768,440	20 - 30 years	N/A	Irrigation water supply for paddy fields covering an area of 7855.65 Ha; Raw water supply of 86.78 ouble m per second; Flood reduction of 533.57 cubic m per second	3, 5, 6, 8, 10, 11, 13	Ministry of Public Works and Housing
4	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Food security	Development and Rehabilitation of Water Surface Irrigation Network	The project aims at improving the infigation network system's performance and efficiency by applying a modernised irrigation concept to support national food security. Based on the location, the project is planned to improve rain-ded to irrigated ricefields. The project components include development 8 enhabilitation of water irrigation infrastructure. 8 service, management system, and strengthening the operation 8 management capacity of the institutions 8.	All provinces except Flau Island, West Kalimantan, Bal, and West Papua	1,385,865,503,242	96,240,660	tbc	N/A	the	3, 5, 6, 8, 10, 11, 13	Ministry of Public Works and Housing
5	Sustainable Transport	Transportation network upgrade to higher climate resilient design standard	Development and Management of Railway Transportation Infrastructure and Supporting Facilities	The project aims at improving public accessibility and safety & security as an alternative shifting to already heavy-burden road with private vehicles in order to enhance inter-regional connectivity. The project include development and maintenance of parts of fersater Jakanta Communier Line and Southern Java Double Track railways and supporting facilities.	DKI Jakarta (Greater Jakarta Commuter Line) and Central Java (South Java Double track)	8.952,704,665	621,716	10 years	Greater Jakarta Commuter Line: 172,001 tonnes (2020) & 567,522 (2019); Southern Java Double Track: 121,850 tonnes	Southern Java Double Track is expected to increase passenger-km by 1.3 times (or 2,547,985,852 passengers are expected to shift from bus/ private car/ motorcycles/; and reduce travel time by an average of 30 minutes	8, 9, 11, 13	Ministry of Transportation

<sup>4</sup> Financing Projects of the 2000 Global Green Subuk Issuance are projects implemented in 2000. Per 31 December 2000, the total amount allocated to financing a 49.59% of the 2000 Global Green Subuk proceeds (USD 750 million). Any amount exceeding the Green Subuk proceeds a financial by other sources of finds admittal in this perinal trissary account.

Lampiran 5. Daftar Proyek Tahun 2020 (Refinancing)

Go to Setting

											Impacts*e		
N	ło	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*c	Amount Committed (in USD)*c	Average Project Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results "f	Social / SDGs*g	Project Owners
		Resillence to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Food security	Management of Irrigation Water for Agricuture	To ensure the water irrigation supply for enhancing quality and quantity of rice (flood security), the project implemented rehabilitation of tertiary irrigation network, development of retention basin (embung) for agriculture, and development of other water source by pumping and piping irrigation and ground water usage. The locations selection were focused on rice production centre prone to drought.	Ali provinces except Riau Island and DRI Jakarta	327,117,407,450	22,716,487		N/A	134,700 Ha rehabilitated tertiary irrigation network, 400 units retention basin (embung) for agriculture built, and 1,071 units of other water source developed	1, 2, 8, 13	Ministry of Agriculture
-		Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Food security	Expansion and Protection of Agriculture Lands	Recent ricefleids conversion to other landuses has been unavoidable, which threats the national food security and self-sufficiency programme. Ministry of Agriculture targetted 12,000 Ha of new and revitallised ricefle	Aceh, West Sumatra, Jambi, South Sumatra, Lampung, Bengkulu, Fliau Island, West Java, West Kalimantan, South Kalimantan, North Sulawesi, Contral Sulawesi, South Sulawesi, Southeast Sulawesi, West Sulawesi, East Nusa Tenggara, Maluku, North Maluku, Papua, West Papua	174,808,438,544	12,139,475		N/A	12,000 Ha of new and revitallised riceflieds	1, 2, 8, 13	Ministry of Agriculture
•		Resilience to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Drought management	Supervision and Development of Drinking Water Supply System	The project aims at expanding and improving public access to safe drinking water at urban and rural areas with pipeline network. The project to cover pipeline and non pipeline network development, improving the standardised drinking water quality, and reducing the water losses.	All provinces except DI Yogyakarta and South Sumatera	649,118,443,950	45,077,670	10 years	N/A	1,236,000 people are expected to benefit from the project	6, 13	Ministry of Public Works and Housing
4		Resillence to Climate Change for Highly Vulnerable Areas and Sectors/Disaster Risk Reduction	Public health management	Supervision and Development of Settlement Areas	The development and supervision of residential areas, both in urban, rural and special areas such as outher island and border area aims at improving the environment quality and basic services for infrastructure and facilities that meet Minimum Service Standard in housing sector. Activeling zero target of slum areas is the focus of the project in urban area. For rural areas, the focus of the project in urban area, drainage and drinking water, to enhance the productivity.	All Provinces	2,414,614,630,848	167,681,572	•	-	tbc	•	Ministry of Public Works and Housing

										Impacts*e		
No	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Amount Committed (in IDR)*o	Amount Committed (in USD)*c	Average Project Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO2e)	Other results "f	Social / SDGs*g	Project Owners
5	Sustainable Transport	Transportation network upgrade to higher climate resilient design standard	Construction and Management of Railways Infrastructure and Supporting Facilities	Development of double track rallways connecting Kreya and Kutoarjo with 76km in length is part of the national priority multi-year contract project of Java's South Line Double Track. The project aims at improving the passenger-km and safety of transporting passengers and logistics. The project components include development of rallways and the supporting facilities.	Central Java and East Java	593,748,602,651	41,232,542	10 years	N/A	N/A	8, 9, 11,	Ministry of Transportation
6	Sustainable Transport	Transportation network upgrade to higher climate resilient design standard	Construction and Management of Railways Infrastructure and Supporting Facilities	The project aims at enhancing and maintenancing the existing railway infrastructure's capacity and safety, and to expand number of travelling schedules for passengers and logistics. The activities include maintenance and adding part of double track railways of Southern Java, respectively.	DRI Jakarta and Banten (Greater Jakarta Commuter Line) and West Java, Central Java, East Java (South Java Double track)	184,422,350,664	12,807,108	10 years	Greater Jakarta Commuter Line: 564,345 tonnes	Speed up train travel time and increase the efficiency of flow of passengers & goods - reducing fuel consumption	8, 9, 11,	Ministry of Transportation
7	Waste to Energy and Waste Management	improving waste management and Rehabilitation of landfill areas	Supervision and Development of Settlement Sanitation	While municipal solid waste management focuses to reduce number of waste disposed to landfill by applying 3R principles, the Ministry of Public Works and Housing priorities to develop regional landfill for 3-4 cities, and improve the carrying capacity and management from open dumping to santary landfills.	All provinces except Banten	1,163,691,459,558	80,811,907	5 - 10 years	tho	2,059,094 households are expected to benefit from the improved waste management	11, 13	Ministry of Public Works and Housing

Notes:

a. The type of projects refers to 9 eligible sections under the Republic of Indonesia Green Bond' Suitak Framework.

b. The projects may be implemented in multiple apots on each location mentioned.

c. Disnotes innted assessment born EY on the amount committed to give injection. The Republic of Indonesia Green Bond and Green Suitak Framework against which the aboution of this emount committed was essessed is available as https://www.utpcs.kemanises.go.id/page/lose/2058. The currency activation will be based on the State Budget Assemption for 2020 todget year of DR 14, 400 per USD.

Based on the investable for project assemptions are disclosed in Annex. That to be confirmed – the respective data will be provided in the next enrual seport.

Additional and outdoors of the direct impact of the green projects.

g. Most releasest or direct social architer Sustaination Development Oceals impacts, as a result of the project.

						Amount				Impacts*e		
No.	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Committed (in IDR)*c	Amount Realized (in IDR)*c	Average Project Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO <sub>2</sub> e)	Other results "f	Social / SDGs*g	Project Owners
1	Renewable Energy	Generation and transmission of energy from renewable energy sources	Planning, Development, and Supervision of New, Renewable Energy and Energy Conservation Infrastructure	Installation of 23 units of rooftop solar PV plants on the State's border stations and 2 volcano observation stations, which aims to encourage the adoption of the rooftop solar PV by public and private sector. Recently, Ministry of Energy and Mineral Resources issued a regulation to allow the electricity consumers to feed any excess electricity back into the grid.	West Kalimantan, East Kalimantan, Southeast Kalimantan, East Nusa Tenggara, West Papua, East Java, and Maluku	28,659,728,000	1,962,995	5 years	136.86 tonnes	150 kWp power generated	7, 9, 13	Ministry of Energy and Mineral Resources
2	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Food security	Development of Surface, Swamp, and Non-Paddy Irrigation Network	Construction of canal blockings at Bulungan Peat Hydrological Unit area, as one of the approaches to restore the degraded peatland ecosystem area. The serior includes to Sesayap, Mahakam, and Berau-Kelai Riverine Management Area. The canal blocking constructions increase the water level and re-wet the peatland area to avoid forest and peatland fires.	Special Capital Region of Jakarta, North and East Kalimantan	102,894,243,456	7,047,551	5 years	N/A	North Kalimantan: 1.8 km long canal, benefiting ±120 hectares; East Kalimantan: 2 km long canal benefiting ±100 hectares	2, 6, 12, 13, 15	Ministry of Public Works and Housing
3	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Flood mitigation	Flood and Lava Control, Urban Drainage Management, and Coastal Protection	Coastal protection structures consist of seawalls and breakwaters. The coastal protection construction aims to withstand abrasion from waves that continue to erode coastal areas, tidal flooding and sea level rise. The development is prioritized at residential areas and public facilities of fishermen settlements, as one of the climate vulnerable communities, as well as in special economic zones and tourism areas.	Banten, West Java, East Nusa Tenggara, Gorontalo Provinces	636,022,399,286	43,563,178	5-25 years	N/A	Banten: 3.5 km, West Java: 1.5 km, East Nusa Tenggara: 0.1 km	3, 8, 11, 13	Ministry of Public Works and Housing
4	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Drought management	Development of Drinking Water Supply System	The drinking water supply system development includes the construction, expansion and improvement of reservoirs, intakes, transmission pipes, water treatment plants as well as the main and secondary networks at regional level that serves 3 to 4 neighbouring municipalities. The development is prioritized at areas prone to prolonged drought or flooding due to the impact of climate change and improve the drinking water supply debit.	North Sumatera, Riau, Special Region of Yogyakarta	1,364,452,917,517	93,455,679	25 years	N/A	Improve drinking water supply debit within 750 to 2,000 litre/second on average, which potentially serve about 180,000 household connections or about 900,000 individuals	6, 13	Ministry of Public Works and Housing
5	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Public health management	Provision of Access Towards Liveable Housing	The activities include the construction of buildings, infrastructure, public supporting facilities and the furniture. The flat development is purposed for the low-income labours, vulnerable communities, students, and government officers.	Banten, West Java, DI Yogyakarta, East	880,750,244,892	60,325,359	15 years	N/A	685 building units with 41,831 m2 floor area and their supporting infrastructure and facilities were constructed, benefiting 2,055 to 2,740 tenants	3, 6, 7, 11, 13	Ministry of Transportation

Activate Windo

<sup>&</sup>lt;sup>2</sup> Financing Projects of the 2021 Global Green Sukuk Issuance are projects implemented in 2021. Fer 31 December 2021, the total amount allocated to financing is 49.05% of the 2021 Global Green Sukuk proceeds USD 750 million). Any amount exceeding the Green Sukuk proceeds is financed by other sources of fund available in the general treasury account.

		Sustainable Transport	Transportation network upgrade to higher climate resilient design standard	Construction and management of railways infrastructure and supporting facilities, the safety and security; and the railway transportation service	The activities include construction and enhancement of new and existing railway infrastructure and the supporting facilities, as well as enhancing the safety and security facilities. The railways improve interiors as well as on Java Island. In addition, the Ministry of Transport develops urban railway system operating at high levels of parformance for airport trains in Solo City of Central Java.	North Sumatera, West Sumatera, Special Capital Region of Jakarta, West Java, Central Java, East Java Provinces	651,382,448,487	44,615,236	10 years	tbc	Increased number of passengers and goods, length of network, frequency of service. Shifting of and reducing road transport's load	7, 8, 9, 11, 13	Ministry of Transportation
		Sustainable Transport	Transportation network upgrade to higher climate resilient design standard	Train Transportation Connectivity Infrastructure	The project includes enhancement of railway tracks and supervision of Light Rail Transit (LRT) in Palembang (Iry of South Sumarta Province. This LRT connects the airport to the city centre, operating at high levels of per	South Sumatera	689,951,315,000	47,256,939	15 years	tbc	Increased number of passengers and goods transported, length of network, frequency of service; Shifting of and reducing road transport's load	7, 8, 9, 11, 13	Ministry of Transportation
	3	Green Building	Green Building	Development of Housing and Buildings	The activities include construction and rehabilitation of buildings that meet the green and environmental friendly criteria and indicators set by the Government. Recently, the Ministry of Public Work and Housing issued a ministrain egulation to provide the standard and performance indicator assessment. In 2021, the green building construction was implemented at market and university buildings.	Region of Jakarta, Lampung, North	109,589,201,916	7,506,110	10 years	tbe	10,371 m2 floor-sized green buildings were constructed or retrofitted; the Aksara Traditional Market in Medan provides 670 klosks benefiting for 670 MSMEs	3, 6, 7, 11, 13	Ministry of Public Works and Housing
(	,	Waste and Waste to Energy Management	Improving waste management	Improvement of Municipal Solid Wate Management System at Regional- and City-scale	In 2021, the Ministry of Public Work & Housing (MOPWH) implemented the development of decent sanitation services, which cover municipal solid waste (MSW) management and severage management systems. For the MSW, I regional-scale sanitary landitis that serve 3 municipalities, and 11 city scale landitis were developed and restuitised. Some of the landitiss are supported with facilities for applying SM principle (reduce, reuse and recycle), leachate treatment, and one landfill for waste to energy generation. For municipal sewarque system, off-site domestic wastewater management systems for actional strategic flourism area. The constructions included wastewater treatment plants, and the piping network, which connect household and business areas.	Sulawesi Selatan, Special Region of Yogyakarta, Riau,	913,558,418,802	62,572,494	10 years	tbc	Improvement of community waste management, prevention of leachate water pollution; Expected number of beneficiaries for the MSWs are 865,857 households, while for sewerage system are 75,780 households	3, 6, 7, 11, 13, 14,	Ministry of Public Works and Housing

						Amount				Impacts*e		
No.	Sector	Type of Project*a	Project Name	Brief Description	Location*b	Committed (in IDR)*c	Amount Realized (in IDR)*c	Average Project Lifetime*d	Mitigation (Annual GHG Emission Avoided, in CO <sub>2</sub> e)	Other results *f	Social / SDGs*g	Project Owners
1	Renewable Energy	Generation and transmission of energy from renewable energy sources	Development and Management of Sea Transportation and Traffic sub-sector	Installation and revitalisation of solar PV powered aids to navigation at see to enhance the see safety transportation and traffic services. The devices include solar PV for lighthouses, beacons and flare buoys.	Special Capital Region of Jakarta	2.378.308.332.581	162.897.831	5-10 years	4,972 tonnes	Reduce energy consumption intensity. More efficient operation of shipping navigation facilities	7, 13, 14	Ministry of Transportation
2	Sustainable Transport	Developing Clean Transportation Systems	Construction and Management of Railways Infrastructure and Supporting Facilities	Improvement of Greater Jakarta urban railway infrastructure and supporting facilities and their management. These include the improvement of double-double track railways.		1.962.126.674,298	134.392.238	10 years	197,564.81 tonnes	Upgrading gateway of urban and intercity railways to double- double track in Jakarta and Bekasi area	7, 8, 9, 11, 13	Ministry of Transportation
3	Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction	Food security	Construction of surface irrigation networks	Rehabilitation and enhancement of civil works and their primary and secondary channel system at sortice ringular areas, which are under the authority implemented particularly at rice and crop production centres.	Special Region of Yogyakarta, South	1.244.270.145.378	85.223.983	5-10 years	N/A:	286.22 km irrigation network system network system network system irrigates rice **ieli, from area at 63,446.979 hectare in total in Central Java, 90 Kogyalarta and South Increased in outlivetion intensity index at Irrigation area ranging from 100% to 245% and from 230% to 290%.	3, 5, 6, 8, 10, 11, 13	Ministry of Public Works and Housing

- Notes:
  a. The type of projects refers to 9 eligible sectors under the Republic of Indonesia Green Bond/ Sukuk Framework.
  b. The projects may be implemented in multiple spots on each location mentioned.
  c. Denotes institled assurance from EY on the amount committed to green projects. The Republic of Indonesia Green Bond and Green Sukuk Framework against which the allocation of the amount committed was based on the State Budget Assumption for 2021 budget year of IDR 14,600 per USD.
  d. Based on financial life of project.
  e. Methodology and assumptions are disclosed in Annex. The: to be confirmed the respective data will be provided in the next annual report.
  I. Additional indicators of the direct impact of the green projects.
  g. Most relevant or direct social and/or Sustainable Development Goals impacts, as a result of the project.



### المحتسويسات

من الدستور الإلهي . .... ...... ٧ 11 تمهيد : البيئة ومكوناتها ..... ١٢ ما المراد بالبيئة؟ .. ...... 19 التأصيل الشرعي لرعاية البيئة ...... ۲١ ١ ـ علم أصول الدين ورعاية البيئة ....... 40 ٢ ـ علم السلوك ورعاية البيئة .. . ... ... أ... السلوك ٣٨ ٣ علم الفقه ورعاية البيئة ......٣ ٤٤ ٤ ـ أصول الفقه ورعاية البيئة ....... ٥٣ ٥ ـ علوم القرآن والسنة ورعاية البيئة ....... الركائز الإسلامية لرعاية البيئة ..... ٥٧ ٥٨ ١ ـ التشجير والتخضير ...... ٦٤ ٢ ـ العمارة والتثمير ...... ... ... ... ... ... ... ٧٥ ٣ .. النظافة والتطهير ......٣ ۸٣ ٤ ـ المحافظة على الموارد ..... ٥ ـ الحفاظ على صحة الإنسان ...... 1.0 11. ٧-المحافظة على البيئة من الإتلاف ......٧ 124 101 100 الأخطار على البيئة .. أ ..... الشخطار على البيئة .. أ

Lanjutan Lampiran 8

17.	١ ـخطر التلوث
۱۹۸	٢ ـ خطر استنزاف الموارد
418	٣۔خطر اختلال التوازن
419	عاذا تفسد البيئة؟
419	ظهور الفساد في البر والبحر وأسبابه
۲۳۳	وسائل إسلامية معاصره لرعاية البيئة
137	رعاية البيئة في واقعنا التاريخي
707	خاتمة

Lampiran 9. Daftar Isi Kitab Al-Qawâ'id al-Hâkimah li-Fiqhi al-Muâmalât

لقاعدة الرابعة: لا ضرر ولا ضرار	51
التركيز على ضرر الغير دون ضرر النفس:	52
كالام اين رچپ قارپ ولم يصل:	53
الضرر والضرار المنفي هو ما كان يغير حق:	55
1- منع المضارة في الوصية:	55
2- منع المضارة في الرّجعة للمطلقة:	56
<ul> <li>منع المضارة في الإيلاء وترك الجماع يغير</li> </ul>	56
5- منع المضارة في الرضاع:	57
6- منع المضارة في البيع:	58
النَّوع الثَّاني: من ايقاع الضرر بالغير:	58
قاعدة أساسية في الفقه:	59
أ. قاعدة: الضرر يدفع بقدر الإمكان.	61
فقى ميدان المصالح العامة:	63
و في ميدان الحقوق الخاصة:	65
ب ـ قاعدة (الضرر يزال):	65
جــ الضرر لا يزال بالضرر:	67
ومن فروع هذه القاعدة:	67
د. يُتَحمَّل الضرر الخاص لدفع الضرر العام:	69
هـ ـ يزال الضرر الأشد بالضرر الأخف:	71
و ـ درء المقاسد أوثى من جثب المصالح:	73
هذه القاعدة تحمي البيئة من الإتلاف والإفساد والتلوث:	75
تشريعات مقتنة في المحافظة على البينة:	76
دقع الضرر القامش يأي وجه كان:	77
قرار المجمع الفقهي الإسلامي الدولي حول البينة:	79

## DAFTAR RIWAYAT HIDUP

1 Nama Lengkap : Mirza Syifa Anam

2. Tempat dan Tanggal Lahir : Birayang, 19 Juni 1998

3. Agama : Islam

4. Kebangsaan : Indonesia

5. Status Perkawinan : Kawin

6. Alamat : Jalan Pendidikan Komp. CPB Blok V/F9

Martapura

7. No. HP/Alamat email : 0812-5212-7609/manaazrim@gmail.com

8. Pendidikan :

a. TK Raudatul Jannah Martapura lulus tahun 2004

b. MIN Model Martapura lulus tahun 2010

c. MTsN Model Martapura lulus tahun 2013

d. MA PPMI Assalaam Sukoharjo Surakarta Jawa Tengah lulus tahun 2016

e. S1 Akuntansi ULM Banjarmasin lulus tahun 2020

9. Orang Tua :

Ayah

Nama : Parno Pekerjaan : PNS

Alamat : Komplek Citra Permata Biru Blok V/H4

Martapura

<u>Ibu</u>

Nama : Wahyu Hidayati Diani Murja

Pekerjaan : Ibu Rumah Tangga

Alamat : Komplek Citra Permata Biru Blok V/H4

Martapura

10. Saudara (jumlah saudara) : 1 (Satu)

11. Suami

Nama : Elditya Subekti

Pekerjaan : Karyawan BUMN

Alamat : Jalan Pendidikan Komp. CPB Blok V/F9

Martapura

12. Anak (jumlah anak) : 1 (Satu)

13. Pengalaman Organisasi/Kerja

a. Anggota Forum Studi Al-Quran FEB ULM Banjarmasin tahun 2016-2020

b. Staf Keuangan Yayasan Generasi Robbani Banjarbaru tahun 2021-2022

14. Daftar Karya Ilmiah

a. *Adversity Intelligence* dan Etika Kerja Islam dalam Meningkatkan Kepuasan Kerja dan Kinerja Akuntan (2020)

- b. Status Kepemilikan Asset Bersama Akad Musyawarah Mutanaqisah(MMQ) dalam Perbankan Syariah di Indonesia (2021)
- c. Relevansi Kaidah Fiqih *Green Sukuk* dan Kaidah Fiqih Bermazhab Imam Syafii (2022)

Banjarmasin, 15 Mei 2023 Penulis,

Mirza Syifa Anam