



ANNUAL REPORT FOR THE YEAR ENDING 31 DECEMBER 2022

Cenergi SEA Berhad

Issuance of Senior Islamic Medium Term Notes (“Senior Sukuk Wakalah”) and/or Subordinated Perpetual Islamic Notes (“Perpetual Sukuk Wakalah”) under a combined Islamic notes issuance programme of up to an aggregate amount of RM1.5 billion in nominal value based on the Shariah principle of Wakalah Bi Al-Istithmar (“Sukuk Programme”)

(Up to 31 December 2022)	
Proceeds of the Issuance	RM 207.3 million
Amount Utilised Towards Project Cost	RM 184.3 million
Amount Unutilised	RM 23.0 million

Allocation Reporting

The details of Green Sukuk Wakalah tranches:

No.	Type of Projects	Country of Issuance / Origination	Amount Issued (RM million)	Profit Rate	Issue Date	Tenure (Years)	Bond / Sukuk Listing	Green / Social / Sustainability Bond	RAM Assigned Ratings
1	Biogas, Solar and Energy Efficiency	Malaysia	84.1	5.30% p.a.	23 Dec 2021	5	Not listed	Green	A1 / stable
2	Biogas, Solar and Energy Efficiency	Malaysia	123.2	5.55% p.a.	23 Dec 2021	7	Not listed	Green	A1 / stable



List of Eligible Assets (by category):

No.	Project Categories	Summary of Project Details	Up to 31 Dec 2022	
			Allocated Amount (RM million)	Expenditures (RM million)
1	Biogas	Acquiring, developing, operating and/or maintaining projects related to the capture and conversion of methane into biogas, including BTE projects using POME and other agricultural waste, and biogas projects using municipal solid waste or waste sludge.	112.7	112.7
2	Solar	Acquiring, developing, operating and/or maintaining solar projects including utility-scale solar farms and behind-the-meter solar photovoltaic projects.	51.1	51.1
3	Other Renewable Energy	Acquiring, developing, operating and/or maintaining projects to generate energy from other renewable sources, e.g., biomass, wind and water.	n.a.	n.a.
4	Energy Efficiency	Acquiring, developing, operating and/or maintaining EE projects including cogeneration/combined heat and power systems and waste-heat recovery systems.	17.3	17.3
5	Refinance cost	-	3.2	3.2
TOTAL			184.3	184.3

* Note: Unallocated proceeds amounting to RM23.0 million.



Details of eligible assets:

Eligible Assets		Installed capacity (MW)	Net Export Capacity (MW)	Expenditures (RM'000)
Project Company	Project Name			
Category: Biogas				
Cenergi Cheekah Sdn. Bhd.	Cheekah	1.1	1.0	3,275
Cenergi Sri Jelutung Sdn. Bhd.	Sri Jelutung	1.4	1.3	3,751
Cenergi Pantai Remis Sdn. Bhd.	Pantai Remis	1.5	1.4	6,094
Cenergi Tennamaram Sdn. Bhd.	Tennamaram	1.6	1.6	10,821
Cenergi FJP Sdn. Bhd.	FJP	1.5	1.5	9,290
Cenergi Chersonese Sdn. Bhd.	Chersonese	1.2	1.0	7,735
Cenergi Sri Ganda Sdn. Bhd.	Sri Ganda	2.4	2.0	13,945
Cenergi West Sdn. Bhd.	West	1.6	1.4	8,965
Cenergi Sua Betong Sdn. Bhd.	Sua Betong	1.2	1.2	9,128
Cenergi Endah Sdn. Bhd.	Astana Endah	1.2	1.0	7,952
Bell Cenergi YP Sdn. Bhd.	Yong Peng	2.4	2.0	13,997
Cenergi Elphil Sdn. Bhd.	Elphil	1.2	1.0	8,058
Cenergi Langkap Sdn. Bhd.	Langkap	1.6	1.5	9,675
Total by category		19.9	17.9	112,686
Category: Solar				
IRM Solar Sdn. Bhd.	IRM Solar	5.00	5.00	21,462
Marudu Power Sdn. Bhd.	Marudu Power	1.00	1.00	5,777
Digital Awan Sdn. Bhd.	Digital Awan	1.00	1.00	5,501
CSES Rooftop Alpha Sdn. Bhd.	Aerospace Composites Malaysia	3.00	2.50	6,000
Cenergi Sunseap Energy Solutions Sdn. Bhd.	Tanah Makmur Berhad	0.04	0.04	187
Cenergi Sunseap Energy Solutions Sdn. Bhd.	HP Malaysia Manufacturing	2.70	2.20	4,919
Cenergi Sunseap Energy Solutions Sdn. Bhd.	Rompin Integrated Pineapple	0.49	0.40	727
Cenergi Solar Sdn. Bhd.	Inokom	1.21	0.95	1,802
Cenergi Solar Sdn. Bhd.	De Rhu Resort	0.46	0.35	832
Cenergi Solar Sdn. Bhd.	Texchem-Pack (M) Sdn Bhd	0.62	0.60	1,901
Cenergi Solar Sdn. Bhd.	Texchem Corporation Sdn Bhd	0.30	0.20	1,352



Eligible Assets		Installed capacity (MW)	Net Export Capacity (MW)	Expenditures (RM'000)
Cenergi Solar Sdn. Bhd.	@Mart Kempas	0.36	0.28	687
Total by category		16.18	14.52	51,147
Category: Energy Efficiency				
Cenergi EE Sdn. Bhd.	IIUM	n.a.	n.a.	17,315

Impact Reporting

Category		RE Installed Capacity (MW)	RE production (MWh) / Energy Savings (MWh)	GHG emissions avoidance (tCO ₂ e)	Number of job creation
Biogas		19.9	87,218	485,009	113
Solar		17.3	17,850	10,067	13
Other renewable	Mini-hydro	-	-	-	1
	Biomass pellets	1 tph *	209	86.5	2
Energy efficiency		-	25,535	19,698	2
Sustainable biomass fuel		-	-	-	-

Note: one tonne per hour (tph) is production capacity of pellet plant

Methodology:

Emissions Avoidance is based on actual performance and is calculated based on CDM methodologies:

1. Avoidance due to methane capture is based on CDM Methodology – AMS III.H
2. Renewable Electricity Generation for Captive Use and Mini -Grid – AMS I. F

Assumption:

Biogas, Solar and Energy Efficiency Emission factor: 0.585/tCO₂e MWh

Based on the 2017 Combined Margin emissions factor for Peninsular Malaysia of 0.585 mtCO₂/MWh in given 2017 CDM Electricity Baseline for Malaysia by Malaysian Green Technology Corporation.