

CLIMATE RESILIENCE THROUGH SUSTAINABLE ENERGY

Sustainability Report 2023



Contents

2 About This Report

— Section 01
Who We Are

- 3 About Cenergi
- 4 Cenergi's Renewable Energy Portfolio

— Section 02
Our Leadership and Insights

- 5 Our Board of Directors
- 6 Message from our Group CEO
- 8 Message from the Head of Corporate Strategy and Sustainability



Our Carbon Credit Journey: Accelerating Methane Reduction from Agriculture Sector

pg. 14

Our Solar Energy Journey: Powering Up for a Sustainable Future



pg. 22

— Section 03
Sustainability Management

- 9 Sustainable Approach and Governance
- 10 Our Vision, Mission and Core Values
- 11 Recognition and Awards
- 11 Membership in Associations

— Section 04
Our Key Business Areas

- 12 Feature Story : Biogas Power Plants
- 16 Cenergi's Technologies for Palm Oil Mill Effluent ("POME")
- 18 Feature Story : Biomass Pellets Plants
- 22 Feature Story : Solar Power Plants and Energy Efficiency
- 26 Environmental Commodities Portfolio

Environmental Commodities Portfolio Generated from Our Biogas and Solar Assets



Scaling the Supply of Sustainable Biomass and Clean Fuel



pg. 18

pg. 26

— Section 05
Our Sustainability Matters

- 27 Material Sustainability Matters
- 29 Stakeholder Engagements
- 32 Our Value to the Environment
- 38 Our Value to our People
- 44 Our Value to the Economic Contribution

— Section 06
Appendices

- 48 ESG Performance Data
- 50 GRI Index
- 52 Abbreviation and Acronyms

About This Report

Clean energy is no longer just an alternative - it is at the forefront of global climate action. Cenergi SEA Berhad (from herein known as "Cenergi") has a unique role to play in addressing climate action. Cenergi is a renewable energy developer which owns and operates plants producing renewable energy from wastes. By doing so, Cenergi plays an active role in decarbonization while providing solutions that can support our partners and stakeholders in their sustainability efforts to achieve their climate goals. Since 2008, Cenergi has been dedicated to driving renewable energy solutions, focusing on biogas, solar, and biomass to advance decarbonization efforts.

Cenergi continuously develops and invests in new business segments. In 2023, development works on generating Biomass Pellets from Palm Oil Empty Fruit Bunch ("EFB") and Biomethane from Palm Oil Mill Effluent ("POME") were accelerated and now form the basis for future growth.

Our Annual Sustainability Report for the financial year 2023 highlights our continuing efforts in broadening our scope of activities that supports low-carbon economy transition, waste into energy, and sustainable development for our stakeholders, the environment, and society.

REPORTING SCOPE AND BOUNDARY

The scope of this Report covers the period from 1 January 2023 to 31 December 2023. Where applicable, we have included comparative historical data.

Cenergi, a subsidiary of UEM Lestara Berhad, was incorporated in 2008. It is a sustainable energy solutions company specialising in reducing carbon emissions through renewable energy and energy efficiency projects. Cenergi operates in Malaysia and Indonesia. The Head Office is located in Selangor, Malaysia.

The Report outlines the sustainability efforts and performances of the Group's operations for the following business divisions:

- Cenergi RE Sdn Bhd which undertakes investments in Biogas Projects

- Cenergi EE Holdings Sdn Bhd which undertakes investments in Solar and Energy Efficiency Projects
- Cenergi EPC Sdn Bhd which undertakes the engineering, procurement and construction of renewable energy ("RE") projects
- Cenergi Operations and Maintenance Sdn Bhd which undertakes the operations and maintenance of RE projects
- Cenergi Refuel Sdn Bhd which undertakes the development and operation of biomass pellet manufacturing facilities, and manufacturing activities to produce biomass pellets
- Other subsidiaries

REPORTING FRAMEWORKS AND GUIDELINES

Information contained in this Report has been prepared by referring to Global Reporting Initiative ("GRI") Standards 2021, Bursa Malaysia Securities Berhad's Sustainability Reporting Guide (Third Edition), United Nations Sustainable Development Goals ("UN SDGs"), Greenhouse Gas ("GHG") Protocol and other best practices suited to the business sector where Cenergi operates in.

FORWARD-LOOKING STATEMENTS

This Report includes forward-looking statements regarding our goals, targets, and future plans. These statements are based on currently available information and operating conditions. However, readers should be aware that actual results may differ due to risks and uncertainties beyond our control.

FEEDBACK CONTRIBUTION

This Report can be downloaded from Cenergi's corporate website at www.cenergi-sea.com. We value your feedback and suggestions for improvements or ideas. Please direct your inquiries or feedback to:

Cenergi SEA Berhad

Level 4, Block E, Dataran PHB, Saujana Resort, Section U2, 40150 Shah Alam, Selangor

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About Cenergi

GRI 2-6

CLIMATE RESILIENCE THROUGH SUSTAINABLE ENERGY

As a leading provider of sustainable energy solutions, Cenergi specialises in biogas, solar and energy efficiency projects, biomass pellets, and small hydropower projects. Additionally, we generate Renewable Energy Certificates ("REC") and carbon credits, playing a pivotal role in the global transition to clean energy and financing low-carbon energy initiatives and carbon market activities. Our commitment to advancing a low-carbon future, positions Cenergi as one of the vital contributors to renewable energy generation, powering a sustainable and resilient climate future for the nation.

CREATING VALUE IN 2023

DELIVERING VALUE TO SHAREHOLDERS

Total Assets

RM467.47 Mil

Shareholders Equity

RM186.48 Mil

Revenue

RM71.20 Mil

A TRUSTED PARTNER IN RENEWABLE ENERGY PROJECTS¹

Total Capacity

60.40 MW

Biogas Projects

15

Solar Projects

18

PROJECTS UNDER DEVELOPMENT¹

Small Hydro Projects

1

Biogas Projects

7

Solar Projects

2

INVESTING IN ENERGY EFFICIENCY SOLUTIONS¹

Total

RM45 Mil

A TRUSTED SUPPLIER OF SUSTAINABLE BIOMASS PELLETS²

Operational Plants

1

In Development

4

2023 EMISSION AVOIDANCE²

In tons of tCO₂e

739,667

BUILDING OUR CENERGI TEAM³

Employees

245

- Highly skilled in multi-disciplinary fields
- Building in-house capabilities to support our mission

¹ More information under Section 4 : Key Business Areas

² More information under Section 5 : Our Value to the Environment

³ More information under Section 5 : Our Value to our People

CONTRIBUTIONS TO UN SDGS

Cenergi has aligned its business initiatives with the UN SDGs. Our efforts in solar energy generation, methane capture, and carbon credit development drive meaningful contributions to several SDGs, including:



SDG 6: Clean Water and Sanitation

Cenergi advances this goal by capturing methane from agriculture palm oil mill effluent, which enhances wastewater treatment and reduces pollution. This effort ensures the responsible management of effluent, contributing to cleaner waterways and supporting sustainable water systems.



SDG 7: Affordable and Clean Energy

Cenergi contributes solar and biogas-generated electricity to the national grid. This clean energy generation reduces reliance on higher GHG-intensity sources, such as coal, thereby enhancing the sustainability of the country's energy mix.



SDG 11: Sustainable Communities

Stakeholder engagement and continuous dialogue are integral to our business. These efforts empower stakeholders and ensure their active participation in key decision-making processes, particularly those impacting the environment and local communities during project development.



SDG 12: Responsible Consumption and Production

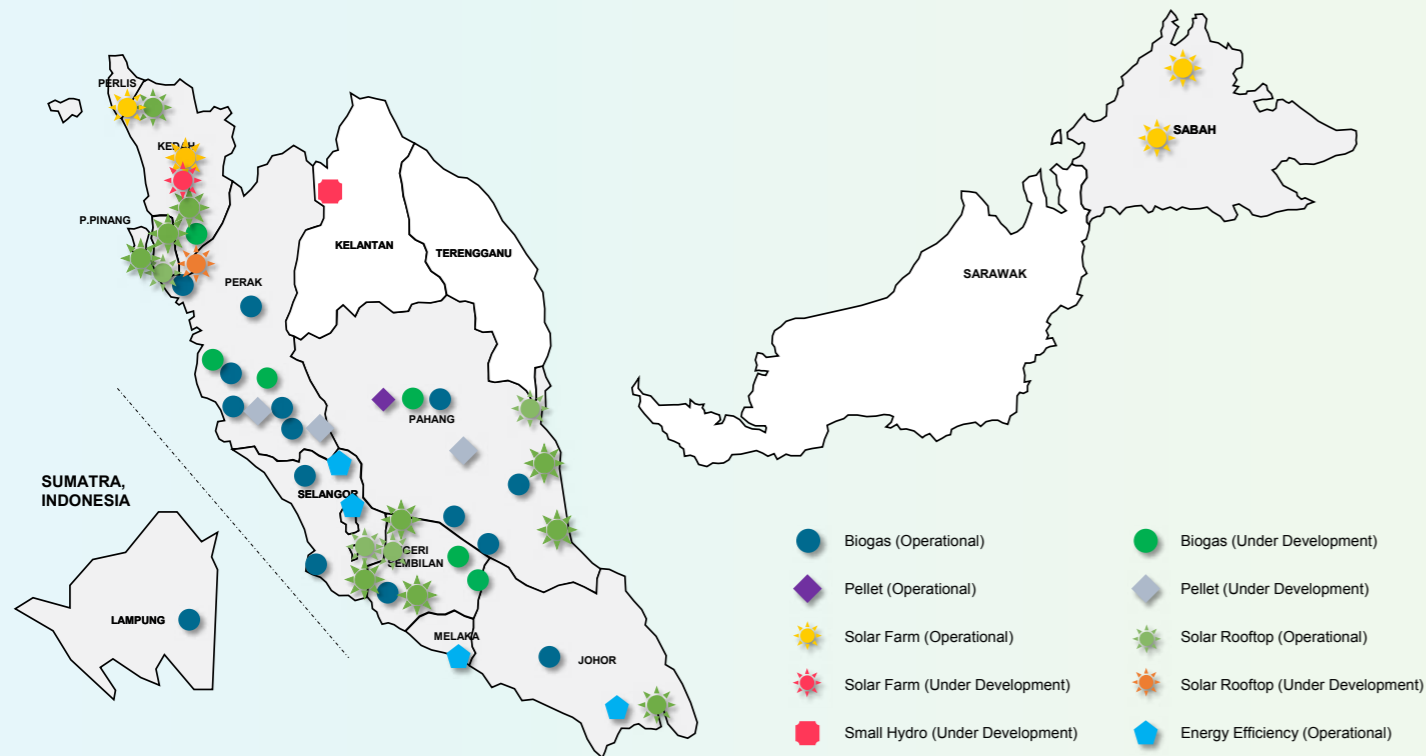
Through biomass pelletization from empty fruit bunches ("EFB") and methane recovery, Cenergi fosters a circular economy. These initiatives minimise waste, reduce odours, and promote sustainable resource use, aligning with principles of responsible production.



SDG 13: Climate Change

Cenergi drives climate action by capturing methane and converting it into energy, with flaring used only in emergencies to minimise global warming potential. Our energy efficiency projects further reduce carbon footprints by delivering significant energy savings for clients, contributing to global climate change efforts.

Cenergi's Renewable Energy Portfolio



JOHOR	MW
● Bell YP	2.4
● AEON Bukit Indah	-
● @Mart	0.4

KEDAH	MW
● Sg. Dingin	1.2
● NEDA Sg. Tiang	11.3
● CGPP Kuala Ketil	44.9
● Inokom	5.8
● ACM	3.0

KUALA LUMPUR	MW
● AEON AU2	-

MELAKA	MW
● AEON Bandaraya Melaka	-

NEGERI SEMBILAN	MW
● Sua Betong	1.2
● Koh Foh	1.2
● Classic	2.4
● Kim Hin 1	1.2
● Kim Hin 2	0.5
● TROX	0.5

PAHANG	MW
● Havys	2.1
● Cheekah	1.1
● Sri Jelutung	1.4
● FJP	1.5
● FJP 2	4.0
● FJP Pellet (under upgrading work to 2.0 Tph)	1.0 Tph
● Felcra Maran Pellet	3.0 Tph
● RIPI	0.5
● KotaSAS	0.1
● DeRhu	0.5

PERAK	MW
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● Pantai Remis	1.5
● Chersonese	1.2
● Sri Ganda	2.4
● Astana Endah	1.2
● Langkap	1.6
● Elphil	1.2
● Felcra Nasaruddin	1.2
● Felcra Seberang Perak	1.5
● Felcra Seberang Perak Pellet	3.0 Tph
● Wisma Muaziq	2.0 Tph

PERLIS	MW
● IRMS	5.0

PULAU PINANG	MW
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● Hewlett Packard	2.7
● Texchem-Pack Perai	0.6
● Texchem-Pack Bayan Lepas	0.5
● Guppy	1.1
● MALPOM	2.4

SELANGOR	MW
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● Tennamaram	1.6
● West	1.6
● Texchem-Pack Subang Jaya	0.3
● Texchem-Pack Bangi	0.5
● IIUM	-

SABAH	MW
-------	----

● DASB	1.0
● MPSB	1.0

KELANTAN	MW
----------	----

● Sg. Suih	3.5
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LAMPUNG, INDONESIA	MW
--------------------	----

● Hamparan	3.0
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Our Board of Directors

Datuk Amran Hafiz Afffudin

Chairman



Datuk Amran Hafiz Afffudin was appointed Chairman and Director of Cenergi SEA Berhad on 19 July 2024. He was appointed to the Board of UEM Group Berhad ("UEM Group"), the flagship infrastructure arm of Khazanah Nasional Berhad ("Khazanah"), on 15 April 2022 and re-designated as Chairman on 1 January 2023. He was subsequently re-designated and appointed as the Managing Director, a position he assumed since 1 August 2024. Prior to UEM Group, Datuk Amran, who has over 27 years of experience, was the Executive Director and Head of the Asset Development Group, overseeing Khazanah's Malaysian Investments.

**Dato' Mohd Izani Ghani who was appointed Chairman of Cenergi SEA Berhad on 10 October 2023, resigned from the position on 19 July 2024.*

Ahmad Jauhari Yahya

Director



Ahmad Jauhari Yahya joined Cenergi SEA Berhad as Executive Director in 2015 and transitioned to a Non-Executive Director role on 27 October 2023. With over 25 years of experience in the energy and power sectors, Ahmad Jauhari was the former CEO of Malakoff, where he was instrumental in establishing the company as Malaysia's leading Independent Power Producer. He currently serves as Chairman of Minconsult Sdn. Bhd. and holds board roles in several other prominent companies.

Harman Faiz Habib Muhamad

Director



Harman Faiz Habib Muhamad was appointed to the Board of Cenergi SEA Berhad on 11 August 2023. He is currently the Chief Executive Officer of UEM Lestira Berhad ("UEM Lestira"), the green industries arm and wholly-owned subsidiary of UEM Group. Prior to this, he served as UEM Group's Director, Commercial and Director, Corporate Support Services.

Mohd Firdaus Hisham

Director



Firdaus Hisham was appointed to the Board of Cenergi SEA Berhad on 1 January 2023. He is currently the Chief Strategy Officer of UEM Group and a Board Member of UEM Lestira. Prior to joining UEM Group, he was a Director in Khazanah's Investment team where he led the Portfolio Value Development/Sentinel, Tourism and Iskandar teams.

Heidir Hasnan

Director



Heidir Hasnan joined the Board of Cenergi SEA Berhad on 14 September 2023 and currently serves as Vice President in the Investments Division at Khazanah Nasional Berhad. Heidir is experienced in corporate finance, mergers and acquisitions, and business development with institutions like Kumpulan Wang Persaraan, Petronas, and Lembaga Tabung Angkatan Tentera.

Message from our Group CEO

Dear Valued Stakeholders,

Cenergi's Vision is to be the Premier Clean Energy and Environmental Solutions Company. Our goal is to support the energy transition, aligning closely with national and global climate aspirations and actions, including the National Energy Transition Roadmap ("NETR").

HAIROL AZIZI TAJUDIN

Group Chief Executive Officer



Message from our Group CEO

— Looking ahead, we see a bright future. The outlook is exceptionally positive. We are excited to expand our existing asset portfolio and explore opportunities in other relevant sectors —

Over the past decade, Cenergi's journey has focused on expanding our renewable energy ("RE") footprint. When I assumed the role of Group CEO in 2020, uncertainty loomed amid the global pandemic. Yet, Cenergi's entrepreneurial spirit has fuelled our growth, enabling us to enhance our RE asset portfolio from 20.1 MW to 60.4 MW and significantly increase our biogas projects from 8 to 15, reinforcing our position in Malaysia's renewable energy sector. This growth reflects our agility and the strength of our partnerships with stakeholders.

In 2023, Cenergi became a subsidiary of UEM Group after UEM secured a majority stake from Khazanah Nasional Berhad. As a key asset in UEM Group, we are well-positioned to drive sustainable development forward with a long-term vision. Cenergi's revenue growth is driven by the accelerated commissioning of new projects, which generate increasing amounts of renewable energy.

Building on this momentum, we are accelerating the scaling-up of our Palm Oil Empty Fruit Bunch ("EFB") biomass pellet production, with growth expected to increase significantly in the coming year. This innovation supports corporate players, particularly in hard-to-abate sectors, helping them meet their sustainability goals with our clean and renewable fuel sources. Furthermore, our solar energy portfolio is set to expand significantly in line with the increasing awareness among industry players about the benefits of harnessing solar power and supported by various programs from the Malaysian government including Net Energy Metering ("NEM"), Corporate Green Power Program ("CGPP"), and Large-Scale Solar ("LSS").

Our commitment to innovation drives our investment in new segments and technologies, opening up new potential for future growth. A notable development is our progress in the development of carbon credits from Palm Oil Mill Effluent ("POME") biogas power plants under the VERRA's Verified Carbon Standard ("VCS") Program. The carbon credits generated in the near future will contribute towards the decarbonization efforts of industries in Malaysia.

At the heart of Cenergi's achievements and growth strategy lies the shared commitment to our values among our entire team. I am grateful for our diverse team, of which the majority are under the age of 40, bringing fresh energy and innovative ideas to bring our mission to life. With our unwavering integrity in business ethics and robust financial backing, we are continually enhancing our position in Malaysia's renewable energy landscape.

Looking ahead, we see a bright future. The outlook is exceptionally positive. We are excited to expand our existing asset portfolio and explore opportunities in other relevant sectors. As we move forward, I would like to extend our deepest gratitude for your belief in our mission. Your unwavering support has been pivotal to our growth and success, and we look forward to achieving even more together.



RE asset portfolio
60.40 MW



Increasing solar asset capacity to 81.40 MWp upon the completion of the **44.90 MWp** solar power plant in Kedah

Message from the Head of Corporate Strategy and Sustainability

Dear Valued Stakeholders,

We are delighted to share with you an update on the progress Cenergi has made in our commitment to energy transition and building a low-carbon future for Malaysia.

In 2023, our biogas and solar power plants have successfully avoided a total of 739,667 tCO₂e in greenhouse gas ("GHG") emissions, with 98% of this reduction coming from our biogas assets that capture and avoid methane emissions into the atmosphere and produce green energy. Methane is a powerful driver of climate change and accounts for a significant portion of today's global warming. Biogas generated from methane capture has the power to become a game-changer for Malaysia's energy future and improve the environmental performance of Malaysia's palm oil mills based on the principles of sustainability. Cenergi has taken significant strides in 2023 to develop technology-based carbon credits generated from methane capture at palm oil mills under VERRA's VCS Program. Please read more about our carbon emissions and carbon avoidance in Section 5 of our report.

renewable energy for their Scope 2 accounting. This is another key step by Cenergi that enables our clients to improve accuracy of their GHG emissions calculation.

Cenergi's RECs have played a key role in helping our clients reach their climate goals. Through the International Renewable Energy Certificate ("I-REC") Standard, we provide our clients with RECs that enable them to make transparent and credible claims about their renewable energy usage and emissions reductions. Cenergi will continue our efforts to build a low-carbon, sustainable eco-system for all stakeholders and we're excited to play a crucial role in their journey.

Our Sustainability Report brings together our strategy, commitment and contributions in shaping a more resilient, climate-ready future. We hope this inspires you to join us in these efforts.

NESA ALBEPER DEROZARIO
Head of Corporate Strategy & Sustainability



— Cenergi will continue our efforts to build a low-carbon, sustainable eco-system and we're excited to play a crucial role in their journey —

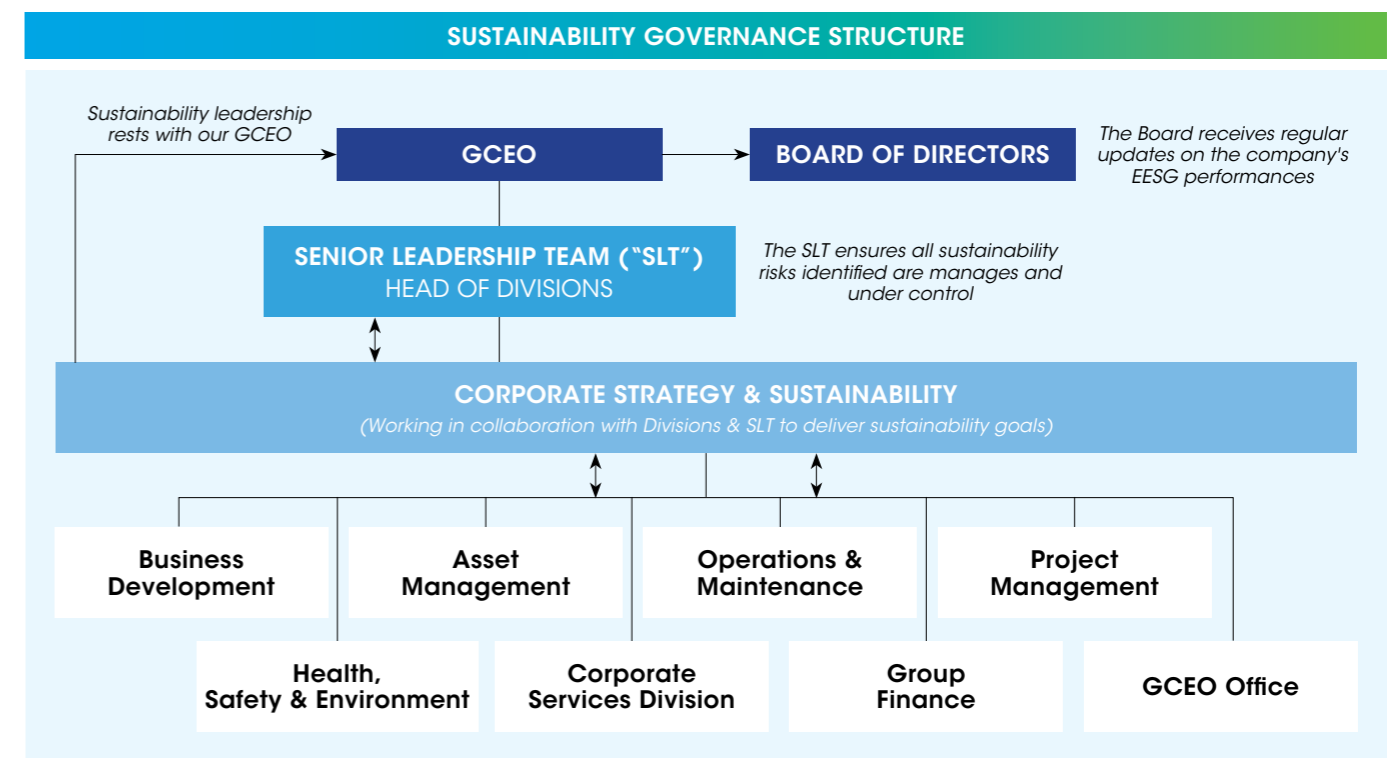
Sustainable Approach and Governance

GRI 2-9, 2-11, 2-12, 2-13, 2-14, 2-23, 2-26, 2-27, 205-1, 205-2, 205-3

Cenergi is dedicated to maintaining the highest standards of governance into everything that we do. The Board of Directors serves as the Group's highest governance authority, responsible for establishing our purpose, values, and strategic direction of the Group.

The Board receives regular updates on environmental, social and governance ("ESG") performance from the GCEO. The Corporate Strategy and Sustainability Department plays a crucial role in identifying, assessing, monitoring, and managing sustainability risks and opportunities.

The Senior Leadership Team is tasked with ensuring that all identified risks are effectively controlled and managed. This collaborative approach fosters a culture of accountability and commitment, with the GCEO ultimately leading and reinforcing our dedication to maintaining sustainable business practices.



BUSINESS ETHICS AND INTEGRITY

At Cenergi, we are dedicated to conducting our business with ethics and integrity while fully complying with all applicable laws and regulations where we operate. Integrity is at the forefront of Cenergi's agenda. We uphold a zero-tolerance policy toward bribery and corruption, implementing various measures and policies to mitigate risks across our Group and among our stakeholders.

Anti-bribery and anti-corruption policy has been introduced in Cenergi. All policies including Code of Business Conduct, Whistleblowing Policy, No Gift Policy and Anti-Bribery and Anti-Corruption Policy are communicated formally to all employees. Additionally, our GCEO has issued an Integrity & Anti-Corruption Statement, which is available on our corporate website as our commitment to ethical conduct.

At Cenergi, we recognise that promoting a culture of sustainability goes hand in hand with implementing rigorous policies and procedures that align with our ethical standards. Our commitment to integrity, accountability, and strong governance is evident through our comprehensive policy framework, which guides our daily operations. By diligently following these legal standards and embodying the spirit of ethical business practices, we strive to cultivate enduring relationships with all stakeholders and make a meaningful, positive impact in the communities where we operate.

Our Vision, Mission and Core Values

Cenergi is driven by a clear vision to be a leader in the renewable energy sector, committed to enabling access to green energy for all. Our mission focuses on solutions that support global and national climate goals, while positively impacting communities and the environment.

VISION

Premier Clean Energy and Environmental Solutions Company

MISSION

We are passionate in providing innovative and practical solutions in the areas of renewable energy, energy efficiency and environmental conservation to achieve net zero emissions, for a sustainable future

CORE VALUES

At Cenergi, our core values form the foundation of our culture and define how we collaborate to achieve our goals. These values guide us in making ethical decisions, building strong relationships, and fostering a positive, inclusive environment for our employees, partners, and stakeholders.

SUSTAINABILITY

Integrating sustainable developments and committing towards a safe and harmonious future for all

AGILITY

Pivoting towards rapid change and adapting with flexibility

INTEGRITY

Maintaining high standards of ethics, honesty and moral principles in all business conduct

INNOVATION

Developing new ideas and converting them into realities, encouraging curiosity and a willingness to take calculated risks

RESPECT

Achieving greater goals by acknowledging each other's similarities and differences

Recognition and Awards

Cenergi's excellence in renewable energy has been recognised over the years through numerous prestigious awards. These accolades reflect our steadfast commitment to innovation, sustainability, and leadership in the renewable energy sector, affirming our significant impact on shaping a cleaner energy future.

ASEAN Sustainable Energy Challenge 2023  AFEO	The BrandLaureate Property Branding Awards 2022 Infrastructure Category - Renewable Energy 	The Asset Triple Islamic Finance Awards 2022 Best Asean Green SRI Sukuk 
National Energy Award Special Award, 2020 	Sustainable Business Award Best SME, 2018 and 2019 	Frost & Sullivan 2014 Best Practices Awards 

Membership in Associations

GRI 2-28

As active members of key industry associations, we stay ahead of emerging trends, helping to shape policies and drive progress in the renewable energy sector. Our participation strengthens collaboration and progress across the sector, ensuring we remain a key contributor to the industry's advancement.

Construction Industry Development Board ("CIDB")	Malaysia Association of Energy Service Companies ("MAESCO")	Registered Solar Photovoltaic Investor Under NEM Programme
MyHijau Certified - Malaysian Green Technology and Climate Change Corporation ("MGTC")	Malaysia Biomass Industries Confederation ("MBIC")	Malaysian Small Hydro Industry Association
Registration of Energy Service Company - Energy Commission	Malaysian Photovoltaic Industry Association ("MPIA")	Malaysian Dutch Business Council ("MDBC")

Biogas Power Plants



Cenergi plays a key role in reducing methane emissions, a potent greenhouse gas with a global warming potential 28 times higher than CO₂. With 15 operational plants and 7 more under development, boasting a combined capacity of 38 MW, Cenergi is Malaysia's largest grid-connected biogas player. Over the years, we have refined our proprietary designs and in-house technologies to optimise the performance and efficiency of our biogas plants, helping to advance the country's shift to renewable energy.

**15**

Operational plants

**7**

Under development

Feature Story



OUR LANGKAP CARBON CREDIT PROJECT

Projected annual VCU
32,000
annually

Totalling
224,000
VCU
over the initial
7-year crediting
period

Approximately
70%
methane is captured
and converted into
clean renewable
energy

The VCS Program is one of the world's most widely used GHG crediting program in the voluntary carbon market.

OUR CARBON CREDIT JOURNEY: ACCELERATING METHANE REDUCTION FROM THE AGRICULTURE SECTOR

Cenergi's journey in the biogas power sector began with the 2013 commissioning of the Palong 2.1 MW Biogas Power Plant in Pahang. This marked the start of an industry-leading portfolio that now makes Cenergi the largest grid-connected biogas player in Malaysia, with 15 plants generating a combined 25 MW. The newly completed Langkap Biogas Power Plant in Perak represents a milestone as Malaysia's first POME-to-biogas facility to be registered under the VERRA Verified Carbon Standard ("VCS") for carbon credits. It follows closely from our first carbon credit project, the Hamparan Biogas Power Plant in Lampung, Indonesia. The VCS Program is the world's most widely used GHG crediting program in the voluntary carbon market.

How It All Began

This achievement is the result of a partnership between Cenergi and Gabungan Perusahaan Minyak Langkap ("the Mill"), which is certified under the Malaysian Sustainable Palm Oil ("MSPO") Certification and the MSPO Supply Chain Certification Scheme.

Langkap biogas plant initiated its operations and emissions reduction on 16 February 2023 and completed its carbon credit validation exercise on 16 October 2023. Third-party verification audit is expected to be completed in 2024. The plant is projected to achieve an approximate value of 32,000 verified carbon units ("VCU") annually, totalling up to 224,000 tCO₂e credits over the initial 7-year crediting period, with two renewal options extending up to 21 years.

Scaling Sustainable Solutions with the Grouped Project Approach

Cenergi's Langkap Plant is registered under the Grouped Project approach, utilising the AMS-III.H. methodology for Methane Recovery in Wastewater Treatment under the VCS Program. This unique method aggregates smaller projects, reducing costs and simplifying carbon credit certification.

Key features of the Grouped Project approach

Aggregation
Small projects pool
resources for validation and
verification

Flexibility
New projects using the
same methodology can
join, creating scalability

Efficiency
Collective monitoring
programs reduce
redundancy and costs

This approach lowers barriers for smaller mills, making carbon credits more accessible and affordable. Having successfully implemented this process with the Langkap Plant, Cenergi plans to extend this framework to future projects, further expanding carbon credit generation and enhancing project viability.

Significant Contribution to Methane Reduction

Prior to Cenergi's intervention, the Langkap Mill's open anaerobic lagoon system released substantial quantities of methane, a potent greenhouse gas, into the atmosphere. This traditional method was responsible for approximately 46,000 tCO₂e greenhouse gas emissions annually¹. Cenergi's biogas power plant has mitigated these emissions by capturing approximately 70% and converting the methane into clean, renewable energy, which is then fed into the national grid.

Promoting Sustainability in the Agriculture Sector

Cenergi's biogas projects are strategically located next to palm oil mills, allowing direct conversion of wastewater to renewable energy. This process transforms the waste into a valuable asset for the agriculture sector, particularly for palm oil producers. Methane emissions are a significant byproduct of crops refining processes like oil palm and cassava. Left untreated, wastewater from these activities generates substantial methane.



Cenergi's biogas plants help reduce this impact, while also mitigating pollution, odour and hydrogen sulphide emissions, contributing to cleaner air and water in surrounding communities.

Alignment with UN Sustainable Development Goals ("SDGs") and Malaysia's Climate Strategy



Cenergi's biogas initiatives contribute to voluntary carbon markets ("VCM") that supports corporate ambitions to achieve their Paris-aligned reduction targets via carbon offsets.

Methane reduction is a global priority, highlighted by the Global Methane Pledge initiative launched at COP26, which aims to reduce anthropogenic methane emissions by at least 30% by 2030. In Malaysia, methane accounts for approximately 15% of total GHG emissions², making its reduction critical to achieve the country's climate goals.

¹ VCS Registry Project ID 4279 Project Design Document ("PDD")

² Malaysia's Fourth Biennial Update Report BR4 to UNFCCC



Cenergi's Technologies for Palm Oil Mill Effluent ("POME")

Cenergi has been a champion in transforming mill by-products into valuable resources. Our solutions focus on three key areas:



Biogas Power Plants where palm oil mill effluent is converted into renewable energy

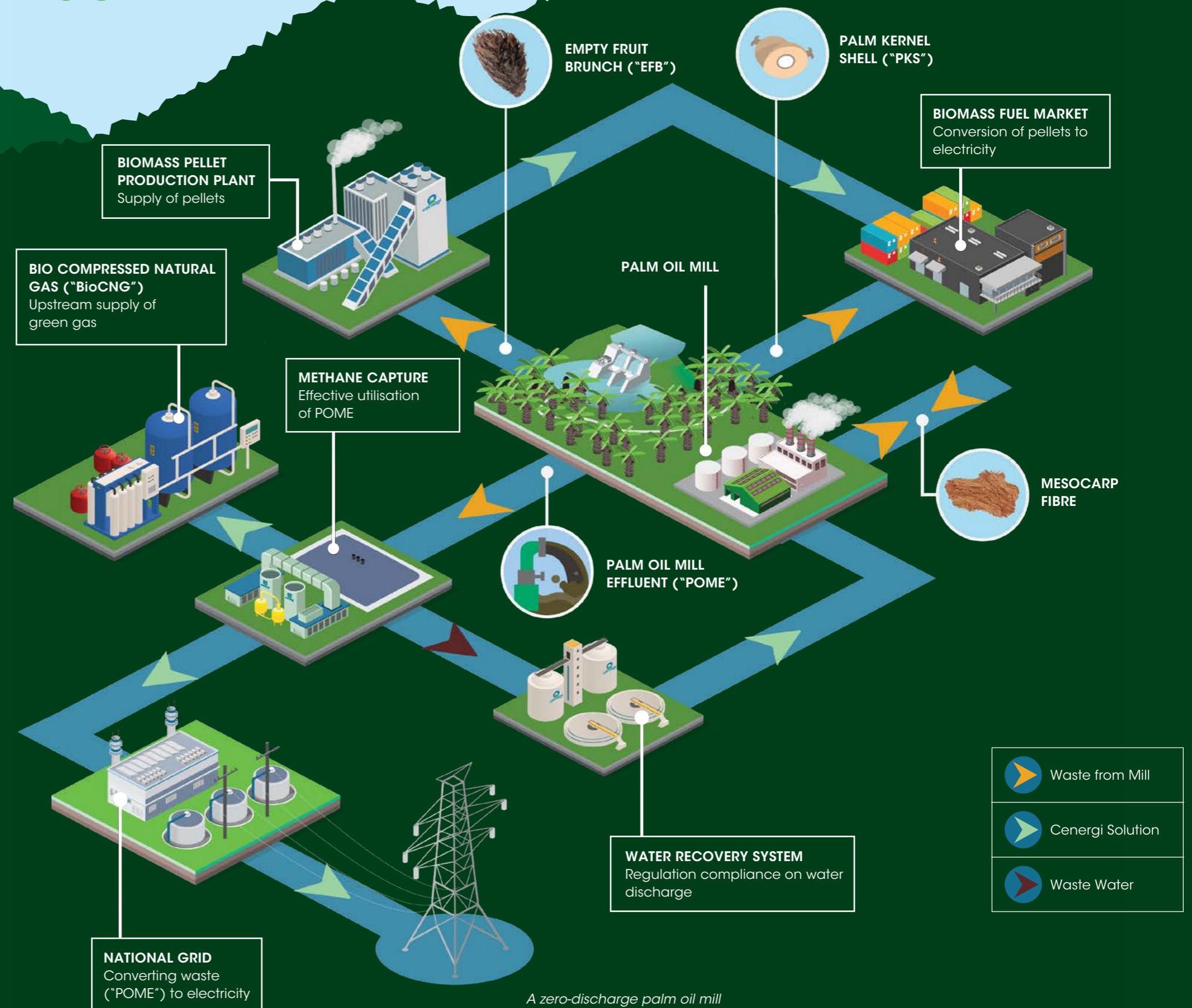


Biomass Pellets which serve as a clean alternative fuel for energy production



Generation of Carbon Credits, fostering environmental responsibility

By effectively utilising mill byproducts, Cenergi not only helps the waste challenges but also supports a circular economy, contributing to the reducing emissions and national transition towards a low-carbon future.



Biomass Pellet Plants

Cenergi's biomass pellets business features one operational plant, with four additional facilities under development, poised to increase our production capacity from 1 ton per hour to an significant 10 tons per hour by end of 2024. Our commitment to innovation has led us to develop proprietary designs and optimise operations, allowing us to effectively meet market demands while reinforcing our position in the renewable energy sector.

**1**

Operational plant

**4**

Under development

Feature Story



CENERGI'S PELLET JOURNEY

2023

Relocation to FJP and upgrade to full-fledged operation plant

2021 - 2023

EFB pellet analysis to assess the suitability for co-firing application

2019 - 2021

Pilot plant construction & operation at Batu Pahat, Johor

2017 - 2018

Feasibility & market study

CENERGI'S GAME-CHANGER: OVERCOMING CHALLENGES IN SCALING THE SUPPLY OF SUSTAINABLE BIOMASS AND CLEAN FUEL

The Waste Problem: Challenges from Palm Oil Industry By-Products

As one of the largest producers of palm oil globally, Malaysia and Indonesia generate significant by-products from palm oil extraction, such as palm kernel shells ("PKS") and empty fruit bunches ("EFB"). While PKS has achieved an optimal utilisation rate close to 100%, EFB utilisation remains below 50%, as reported by the National Biomass Action Plan ("NBAP"). For every 100 tons of fresh fruit bunches processed, approximately 23 tons of EFB are produced, posing a growing waste challenge and a potential opportunity for sustainable solutions.



Innovation Born Out of Necessity: Adapting to Global Sustainability Trends

In response to growing global sustainability trends, Malaysia is focusing on circular principles to reduce greenhouse gas ("GHG") emissions and improve waste management, particularly through initiatives like the NBAP, which aims to convert palm biomass into fuel pellets, and the National Energy Transition Roadmap ("NETR"), targeting the co-firing of up to 15% biomass with coal. As a major palm oil exporter, the country faces increasing pressure to minimise the environmental impact of its production processes, especially regarding the management of EFB, which decompose quickly and release methane — a potent greenhouse gas. Recognising these challenges, Cenergi proactively addressed EFB waste in 2017 by leveraging our extensive experience with mills to develop sustainable solutions that mitigate environmental impacts while creating value from waste.

Cenergi's Breakthrough: Turning EFB Waste into a Clean Energy Source

By transforming EFB into a clean and renewable fuel source, Cenergi recognised the opportunity to enhance traditional waste management and promote sustainable energy development. This innovative approach, required agility and a vision to create solutions that are:



In the first phase (2017-2018), Cenergi's team conducted a feasibility study on EFB processing methods and industry needs. Cenergi chose a pelletisation process with mineral removal such as Sodium and Potassium via washing and collaborated with a mill in Batu Pahat, Johor, to develop a pilot plant. The second phase (2019-2021) involved investing in a 1-ton-per-hour EFB Pellet Plant to produce test pellets. Extensive demonstration tests showed that EFB pellets could be co-fired with primary fuel in coal combustion systems, potentially displacing up to 5% of coal. By 2021, Cenergi consistently produced EFB pellets for that met client specifications, for trial burn at including those of coal power plants and industrial boiler.



Scaling "The Impossible": Tackling The Supply Chain Challenge

Next, Cenergi was ready to scale up with a new plant, doubling its capacity. Felcra Jayaputra Sdn Bhd, an existing biogas-to-electricity ("BTE") partner in Jerantut, Pahang, agreed to collaborate on the 2-ton-per-hour FJP Pellet Plant, and the pilot plant was successfully relocated in 2023. Scaling up required balancing market demands with production costs. Additionally, Cenergi is committed to a closed-loop system, ensuring that no new waste is generated.

This phase of development faced significant hurdles, presenting a steep learning curve for the team. Pre-treatment processing had to be adjusted, while the originally planned production of premium pellets caused substantial water returns to the mill effluent system. Securing a reliable electricity supply for the plant also posed a challenge. Finally, Cenergi needed to swiftly pivot to market the new standard pellets to a broader client base. "We had to be adaptable," says the Plant Head. "While premium pellets had a niche demand, the market for standard pellets is much larger domestically."

Sustainable Biomass at Scale: Meeting Growing Demand for Decarbonisation

With a 2-ton-per-hour operating plant, FJP is well-positioned to meet market needs. The pellets cater not only to hard-to-abate industries with pressure to decarbonise but also to the agricultural sector, including mushroom cultivation.

With the growing acceptance of the EFB pellets, Cenergi initiated three new plants in 2023 — one in Pahang and two in Perak. This move increases capacity to 10 tons per hour, with an expected annual output of 30,000 tons by the end of 2024.

In expanding its pellet plants, the Cenergi team leverages its experience in operating a network of existing Biogas to Electricity plants. "The key is to be nimble and adopt an entrepreneurial mindset in doing this business," says the Group CEO, expressing confidence that EFB pellets as a sustainable biomass and clean fuel source is a game-changer for the Group.

Solar Power Plants and Energy Efficiency

The deployment of solar energy solutions plays a crucial role in displacing fossil fuels and decarbonizing the energy system. Cenergi's solar and energy efficiency asset portfolio not only supports our key partners in their decarbonisation efforts but also strengthens our position in the renewable energy sector. Currently, our utility solar farms include three operational sites and two projects under development, while we have 14 operational rooftop solar systems with two more in progress. Collectively, these assets contribute to a total renewable energy generation capacity of 82.4 MWp. Of this total, 35.4 MWp is currently operational, while the remaining 47 MWp is in the development stage. Additionally, Cenergi has invested RM 45 million in four energy efficiency projects, aligning with national sustainability and energy transition objectives.



14 Solar Rooftop



1 Solar Rooftop
under development



4 Solar Farms



1 Solar Farm under
development

Feature Story



NEDA SUNGAI TIANG FACT SHEET

Capacity
11.3 MWp

Initial Operating Date
10 November 2023

Agrivoltaic Initiative
960 m²
of vegetable cultivation
5%
solar farm land area

**Cenergi's first
agrivoltaic
integrated with
fertigation system**

CENERGI HAS STEADILY EMERGED AS A NOTABLE DEVELOPER PLAYER IN MALAYSIA'S SOLAR ENERGY SECTOR

**Cenergi Solar Energy Journey:
Powering Up for a Sustainable Future**

Since the commercial operation of its first utility-scale solar farm of 5 MW in Padang Besar, Perlis in 2016, Cenergi has steadily emerged as a notable developer player in Malaysia's solar energy sector. Our operational solar assets now encompass a total capacity of 35.4 MWp, comprising 14 rooftop installations and three solar farms. We commissioned the 11.3 MWp Sungai Tiang solar farm under the New Enhanced Dispatch Arrangement ("NEDA") program, and now developing 44.9 MWp Kuala Ketil solar farm under the Corporate Green Power Program ("CGPP") in Kedah, Malaysia. Upon completion of these plants, Cenergi's total solar capacity is set to increase from 35.4 MWp to 81.4 MWp.

Malaysia's First NEDA Solar Farm

The solar farm in Sungai Tiang is particularly significant for Cenergi, being the Group's inaugural plant developed in-house, from design to commissioning with 33kV interconnection. Achieving its Initial Operating Date ("IOD") on November 10, 2023, the 11.3 MWp plant is also the first solar farm completed under Malaysia's NEDA program. This achievement not only showcases Cenergi's expanding capabilities but serves as a valuable springboard for future solar projects. By operating under the NEDA Scheme, the Sungai Tiang project is able to trade surplus energy in Malaysia's energy market, contributing to the national goal of increasing renewable energy in the energy mix in alignment with Malaysia's National Renewable Energy Policy and Action Plan.



Agrivoltaics: Merging Solar Power with Agriculture GRI 203-2

In the NEDA Sungai Tiang Project, Cenergi is enhancing sustainability by implementing agrivoltaics, which allows for simultaneous solar energy production and crop cultivation. Elevated solar panels, installed 3 meters above the ground, facilitate the cultivation of compatible crops beneath them. Notably, this project features our first agrivoltaics system integrated with a fertigation system in Peninsular Malaysia, positioning the NEDA Sungai Tiang Project as a leading development in blending energy generation with agricultural land use.

Despite agrivoltaics being relatively new to Malaysia, Cenergi was dedicated to exploring dual-purpose land use models. While there are uncertainties of long-term impact of partial shading on crop yields, early tests using crops such as chilies, eggplants, and cabbages have been promising. The first crops grown under the panel systems have already been harvested and distributed to local communities who have shown their support and interest, demonstrating the potential for energy projects to provide both environmental and social co-benefits.

From the start, 960 square meters representing five percent of the solar farm's land area has been designated for the agrivoltaics system. This pilot area will generate crucial data, helping to refine and scale similar systems in future projects.



Environmental Commodities Portfolio

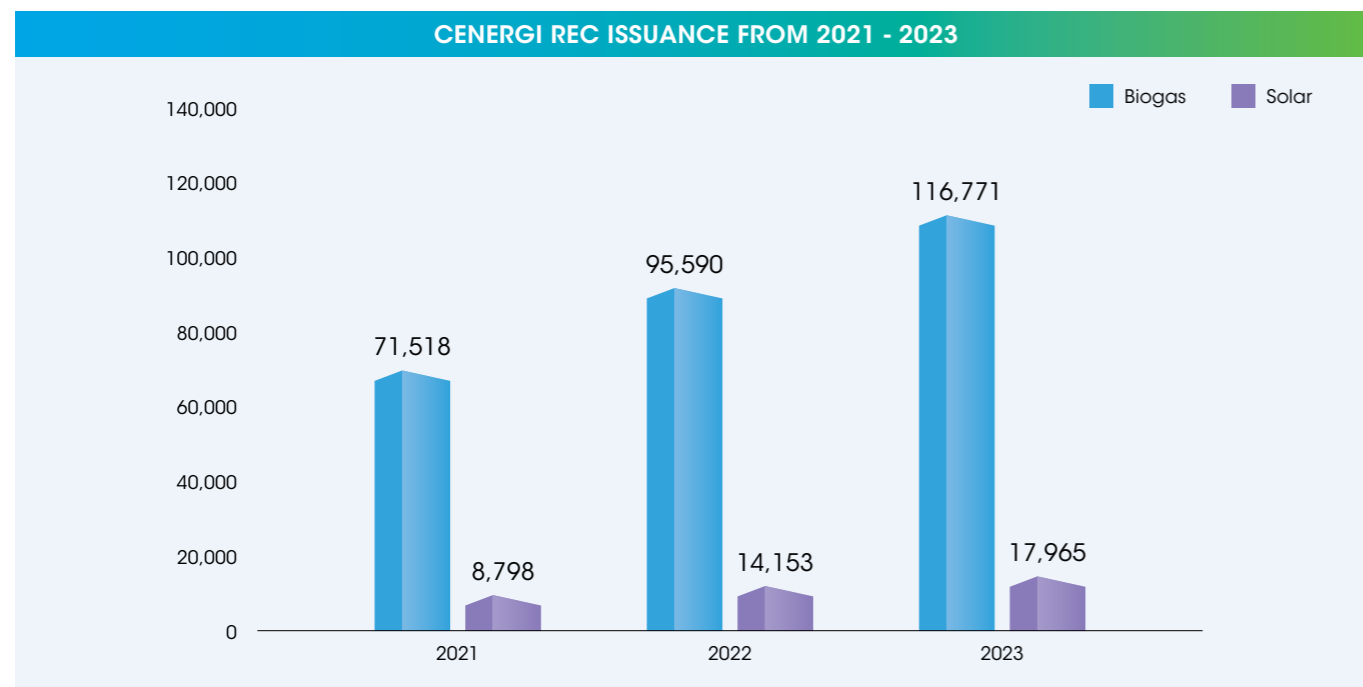
Cenergi's Environmental Commodities Portfolio includes RECs and carbon credits, both vital components of our commitment to sustainable energy solutions.

RENEWABLE ENERGY CERTIFICATE

RECs are Energy Attribute Certificates ("EAC") that transfer the green electricity attributes from project developers to consumers. Each REC represents one megawatt-hour ("MWh") of renewable energy generated, capturing unique characteristics such as the date of production, the generation device's location, the technology used (e.g., solar, biogas, hydropower), and the age of the production equipment. These certificates can be traded independently of the underlying energy, making EACs as essential tracking instruments for REC transactions.

As demand for low-emission energy sources grows in Malaysia, Cenergi's RECs play a pivotal role in reduction of Scope 2 emissions, and working in partnership with corporate clients to achieve their net-zero or climate-neutral goals.

Cenergi's RECs are registered under the international I-REC Standard. By end of 2023, we registered a total of 14 biogas projects and 7 solar projects (including one grouped solar rooftop assets) with I-REC, all listed on I-REC's Evident Registry. Notably, we issued a total of 134,736 RECs for generation of vintage 2023, marking a 19% increase from the 109,743 RECs issuance of vintage 2022.



CARBON CREDITS

As of this reporting period, Cenergi has two active carbon credit projects at various stages of registration with VERRA. More information is available under Section 4 Biogas Power Plant of this report. The Langkap Biogas Plant (Project ID 4279) is projected to generate approximately 32,000 tCO₂e of methane avoidance annually, while the Hamparan Biogas Power Plant (Project ID 3297), which captures methane from a cassava mill, is expected to avoid around 30,000 tCO₂e of methane emissions each year. By investing in future credits generated by Cenergi, businesses can play a crucial role in aligning their growth with net-zero pathways.

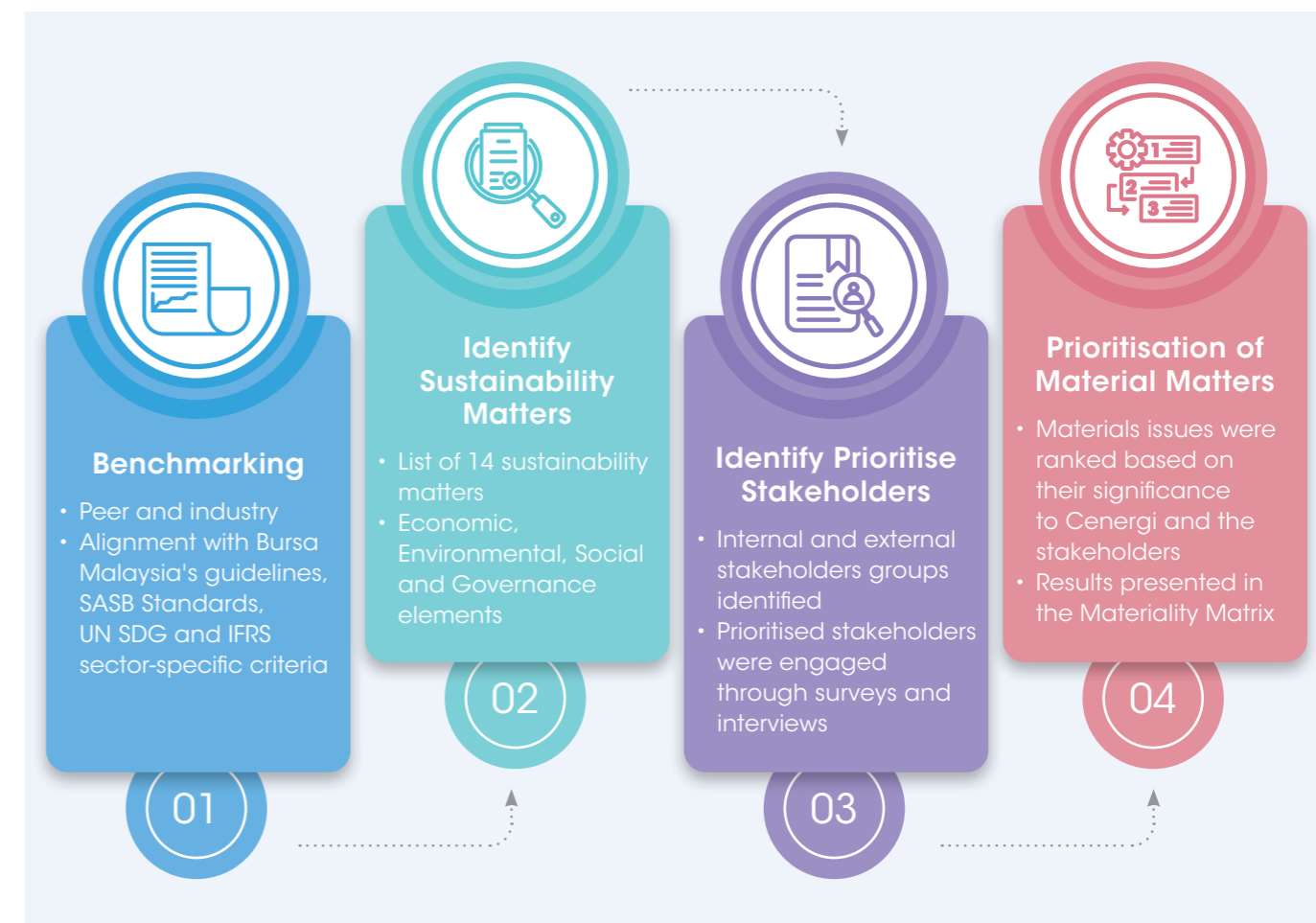
Cenergi is committed to continuing our focus in the development of technology-based carbon credits. We will continue to contribute to the formulation of national policies that enable both compliance and voluntary carbon markets to effectively and equitably support Malaysia's goal of achieving net-zero emissions by 2050.

Material Sustainability Matters

GRI 3-1, 3-2, 3-3

To drive sustainability throughout the value chain, Cenergi conducts a materiality assessment every two years to identify and assess environmental, economic and social ("EES") impacts that are significant from Cenergi's operations and issues that influence our stakeholders' needs, preferences and concerns. In 2023, we undertook a comprehensive evaluation to ensure our priorities align with emerging sustainability trends, global risks, and industry practices.

We identified our material matters by considering EES factors that are most relevant to our business and prioritised them through stakeholder engagement, internal and external surveys. The in-depth materiality assessment was structured around 4 key steps:



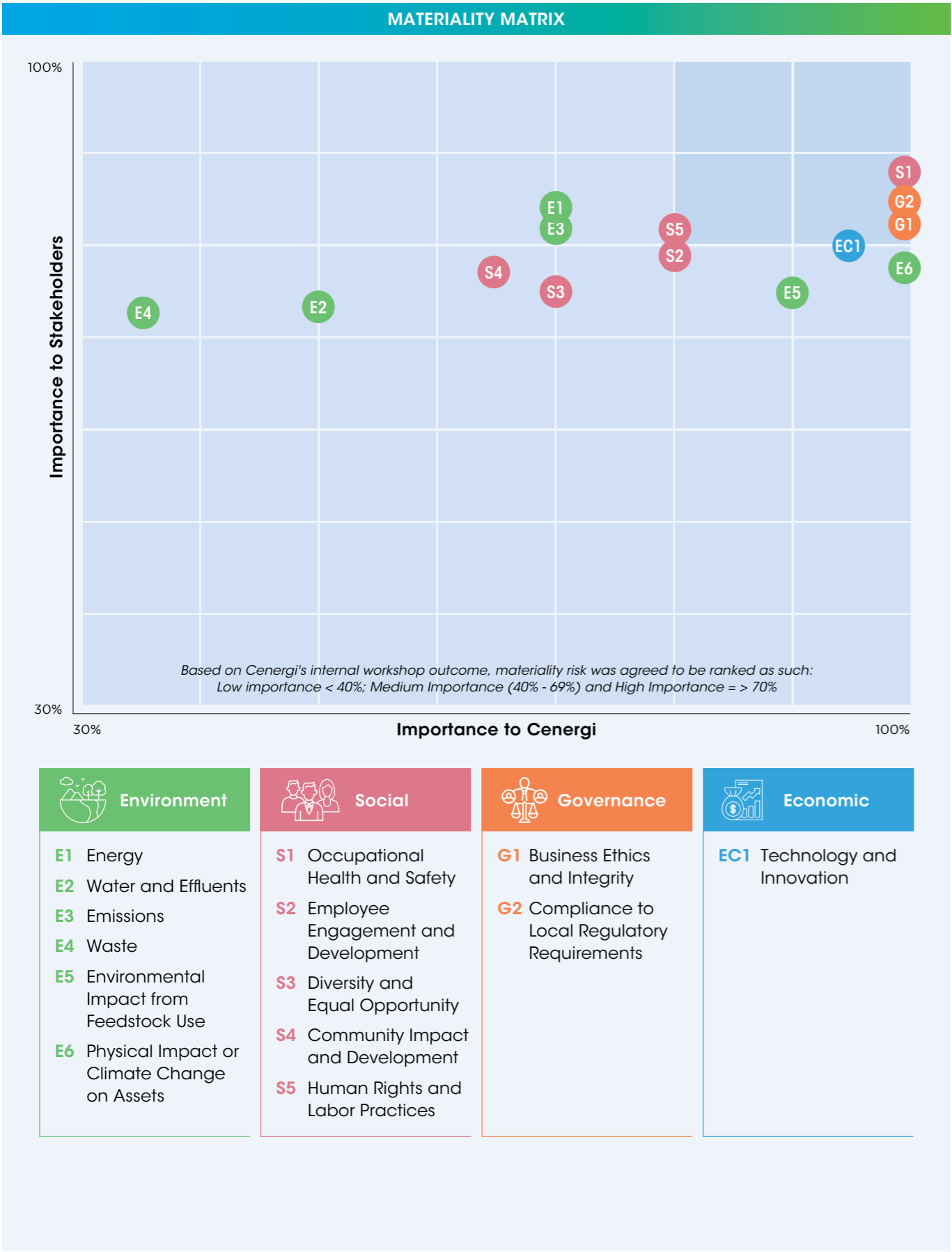
Based on the survey outcome, the materiality assessment identified 14 preliminary sustainability matters, of which Cenergi rated 11 as high importance, 2 as medium importance, and 1 as low importance while our stakeholders rated all 14 sustainability matters as high importance. This evaluation is illustrated in the Materiality Matrix below.

The top materiality matters that was rated above 80% by both Cenergi and our stakeholders, are occupational health and safety, business ethics and integrity, and compliance with local regulatory requirements.

The corresponding sections of this report details how Cenergi addresses these critical issues.

(S1)	Occupational health and safety	Section 5, Page 40
(G1)	Business ethics and integrity	Section 3, Page 9
(G2)	Compliance with local regulatory requirements	Section 5, Page 37

Material Sustainability Matters







Stakeholder Engagements

At Cenergi, we understand the importance of addressing the needs and expectations of our diverse internal and external stakeholders. Through regular, transparent communication, we treat our stakeholders as partners in building strong relationships. Our engagement methods keep us attuned to emerging issues and help align our actions with shared sustainability goals. These collaborations guide our strategic decisions and ensure compliance with regulatory requirements as we pursue our mission.



Stakeholder Engagements

D Daily **R** Regularly **A** Annually

Engagement Approaches	Frequency	Needs And Expectations	Relevant Material Topics
 Employees			
<ul style="list-style-type: none"> Internal communications Training and development Company events Performance Appraisal Townhall sessions Meetings 	D	<ul style="list-style-type: none"> Safety at work Conducive work place Career development and advancement Training and development Fair employment practices 	<ul style="list-style-type: none"> Occupational Health and Safety Employee engagement and development Diversity and Equal Opportunity Human Rights and Labour Practices
 Banks			
<ul style="list-style-type: none"> Briefing by the Board and/or Group Annual Sustainability Reports Press releases Meetings 	R	<ul style="list-style-type: none"> Growth Compliance Creditworthiness Reputation Double materiality-Impact of business operations to climate & vice versa 	<ul style="list-style-type: none"> Financial and Sustainability Performance Ethical Business and Integrity Compliance to agreed Framework Physical Impact of Climate Change on Assets
 Investors or shareholders			
<ul style="list-style-type: none"> Briefing by the Board and/or Group Annual Sustainability Reports Press releases Meetings Annual SUKUK Report 	R	<ul style="list-style-type: none"> Growth Long term value creation Compliance to SUKUK requirement Climate change impact to business sustainability 	<ul style="list-style-type: none"> Financial and Sustainability Performance Ethical Business and Integrity Compliance to Regulations Technology and Innovation Physical Impact of Climate Change on Assets
 Clients			
<ul style="list-style-type: none"> Website and social media Marketing events Mobile and email communications Surveys Face-to-face interactions 	R	<ul style="list-style-type: none"> Promised deliverables Brand value Fair commercial terms Good service Superior technology Climate change impact to business sustainability 	<ul style="list-style-type: none"> Ethical Business and Integrity Compliance to Regulations Technology and Innovation Physical impact from climate change on assets

Stakeholder Engagements

D Daily **R** Regularly **A** Annually

Engagement Approaches	Frequency	Needs And Expectations	Relevant Material Topics
 Asset Partners			
<ul style="list-style-type: none"> Website and social media Mobile and email communications Surveys Face-to-face interactions 	R	<ul style="list-style-type: none"> Investment Returns Promised deliverables Fair commercial terms Superior technology 	<ul style="list-style-type: none"> Impact from climate change Financial and operational performance Compliance to Regulations Technology and Innovation
 Suppliers/Vendors/Contractors/Subcontractors			
<ul style="list-style-type: none"> Mobile and email communications Surveys Face-to-face interactions 	R	<ul style="list-style-type: none"> Compliance to specifications Fair price and comply to agreement Planning and communication for stocks or parts availability 	<ul style="list-style-type: none"> Supply chain procedures Fair treatment Ethical Business Conduct
 Government Bodies/Regulators/Authorities			
<ul style="list-style-type: none"> Mobile and email communications Site visits and inspections Audits Surveys Meetings 	R A	<ul style="list-style-type: none"> Demonstration of compliance Responsive communications and actions Impact of business operations to climate 	<ul style="list-style-type: none"> Compliance to laws and regulations Ethical Business Conduct Physical Impact of Climate Change on Assets
 Local Community			
<ul style="list-style-type: none"> Website and social media Site visits Social programmes 	R	<ul style="list-style-type: none"> Environmental impacts Job opportunities Impact of business operations to climate 	<ul style="list-style-type: none"> Community Impact and Development Physical Impact of Climate Change on Assets
 Media			
<ul style="list-style-type: none"> Mobile and email communications Face-to-face interactions 	R	<ul style="list-style-type: none"> Clear and timely communications 	<ul style="list-style-type: none"> Brand value Communication for the Group

MANAGEMENT APPROACH TO ENVIRONMENTAL PRACTICES

As a leader in clean energy solutions, Cenergi has continually evolved in carbon and energy management, with 2023 marking a year of enhancements in our emissions reporting and management frameworks. We have refined and expanded our data collection methods and adopted best practice to ensure precise tracking of GHG emissions. This progress is part of our ongoing commitment to a transparent GHG inventory.

Our environmental initiatives focus on key areas like energy management, water and effluent treatment, emissions reduction, and waste minimisation. Central to our approach is the use of effluent as feedstock within closed-loop systems, converting wastewater into clean energy that directly supports stakeholders' decarbonization efforts and bolsters our impact on climate action. Our circular economy practices allow us to transform waste into valuable resources, regenerating materials that would otherwise go to waste.

The insights gained and measures implemented in 2023 will be foundational to our continued progress, setting a benchmark for ongoing improvement and fortifying our mission to deliver sustainable environmental impact.

GHG EMISSIONS GENERATED AND AVOIDED

Cenergi is dedicated to effectively addressing our GHG emissions or carbon footprint by thoroughly understanding our emissions baseline profile.

This section outlines three key components:

- 1 Our GHG emissions generated from our operations
- 2 Our GHG emissions avoided through our renewable energy projects
- 3 A summary of our overall impact to greenhouse gas emissions

GHG Emission Generated

GRI 305-1, 305-2, 305-3

Cenergi began its environmental journey in 2022 by initiating the inventorying of its Scope 1, 2 and 3 emissions at our Head Office and electricity use at our biogas assets only. The report was prepared in accordance with requirements of the Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard (GHG Protocol).

In 2023, Cenergi broadened its reporting scope to include emissions generated by both our Head Office and all operational assets, in accordance with GHG Protocol principles for Scope 1, 2, and 3 emissions. The sources of emissions within this defined boundary are summarised in the following table.

Our Value to the Environment



Head Office



Pellet
1 Asset



Biogas
15 Assets



Solar Farm
4 Assets

Emission by Scope	Organisation Emission (tCO ₂ e)	Operational Emission (tCO ₂ e)		
Scope 1	Company vehicles	<ul style="list-style-type: none"> Forklift Fugitive losses from refrigerants and fire-fighting equipment Rotary dryer for PKS 	<ul style="list-style-type: none"> Stack/process emissions from biogas generator set & flare Fugitive losses from anaerobic digester ("AD") Fugitive losses from refrigerants and fire-fighting equipment 	<ul style="list-style-type: none"> Fugitive losses from refrigerants and fire-fighting equipment
Scope 2	Purchased electricity for consumption			
Scope 3	<ul style="list-style-type: none"> Employee commuting Business travel 			

Emissions by Scope (tCO ₂ e)	2021 (tCO ₂ e)	2022 (tCO ₂ e)	2023 (tCO ₂ e)		
	Organisational Emissions ^a	Organisational Emissions ^a	Organisational Emissions ^a	Operational Emissions ^b	Total Emissions
Scope 1	17	24	61	103,867	103,930
Scope 2	760 ^c	1,304 ^c	22	1,178	1,200
Scope 3 ^d	9	503	106	256	362
Annual Emissions	786	1,831	189	105,303	105,492

^a Organisational emission refers to direct and indirect emissions from Head Office operations only, reported in 2021, 2022, and 2023.

^b Operational emissions refer to direct and indirect emissions generated from operational assets, comprising 15 biogas plants, 4 solar farms and 1 pellet plant. This is the initial year of reporting for these emissions, which were not included in previous reports.

^c In 2021 and 2022, Scope 2 emissions refer to purchased energy by the Head Office and biogas assets only. In 2023, the purchased energy is reported separately under organisational emissions (head office) and operational emissions (biogas, pellet and solar farms).

^d Scope 3 emissions refer to emissions from employees commuting to work and employee air travels. The lower Scope 3 emissions in 2023 can be contributed to an increase in number of employees in 2023 commuting via the Light Rail Transit ("LRT") that has a station located approximately 800 meters from Cenergi's office.

Total GHG emissions from our head office and operational assets in 2023 amounted to 105,492 tCO₂e. While our head office contributed a negligible 189 tCO₂e, the majority of our emissions, 103,867 tCO₂e, originated from Scope 1 fugitive emissions at our 15 biogas plants. In the absence of precise data from our biogas plants, we estimated a 90% capture efficiency for the anaerobic digesters, referencing the CDM AMS-III.H methodology. The remaining 10%³ represents the Scope 1 fugitive emissions as quantified above.

GHG Emission Avoided

Cenergi's biogas and solar operational assets have played a transformative role in GHG emissions avoidance through methane capture and generating renewable energy which reduce the dependency on non-renewable energy sources. A comparison of annual carbon avoidance generated from our renewable energy projects between 2021 and 2023 is shown in the table below. The GHG emissions avoidance of 739,667 tCO₂e represents a 43% increase in emissions avoided in comparison to 2022.

Annual Emissions Avoided (tCO ₂ e)	480,980	514,685	739,667
	2021	2022	2023

The total emissions avoidance of 739,667 tCO₂e include emissions amounting to 101,696 tCO₂e that has been transferred to our clients through the sales of our biogas and solar based RECs for reduction of their Scope 2 emissions. The table below provides an overview of Cenergi-owned environmental attributes versus emissions that has been transferred to our clients from sales of the energy attributes in the form of RECs. For further details on RECs, please refer to Section 4: Environmental Commodities Portfolio in this report.

³ According to scientific journals, the fugitive emissions can range between 8 - 12% (equivalent to 83,094 - 124,640 tCO₂e)

OUR VALUE TO THE ENVIRONMENT

Our Value to the Environment

Total GHG Avoidance from All Operating Assets (tCO ₂ e)	Avoidance Claim Transferred to third party via sales of RECs (tCO ₂ e)	GHG Avoidance Owned by Cenergi (tCO ₂ e)
739,667	101,696	637,971

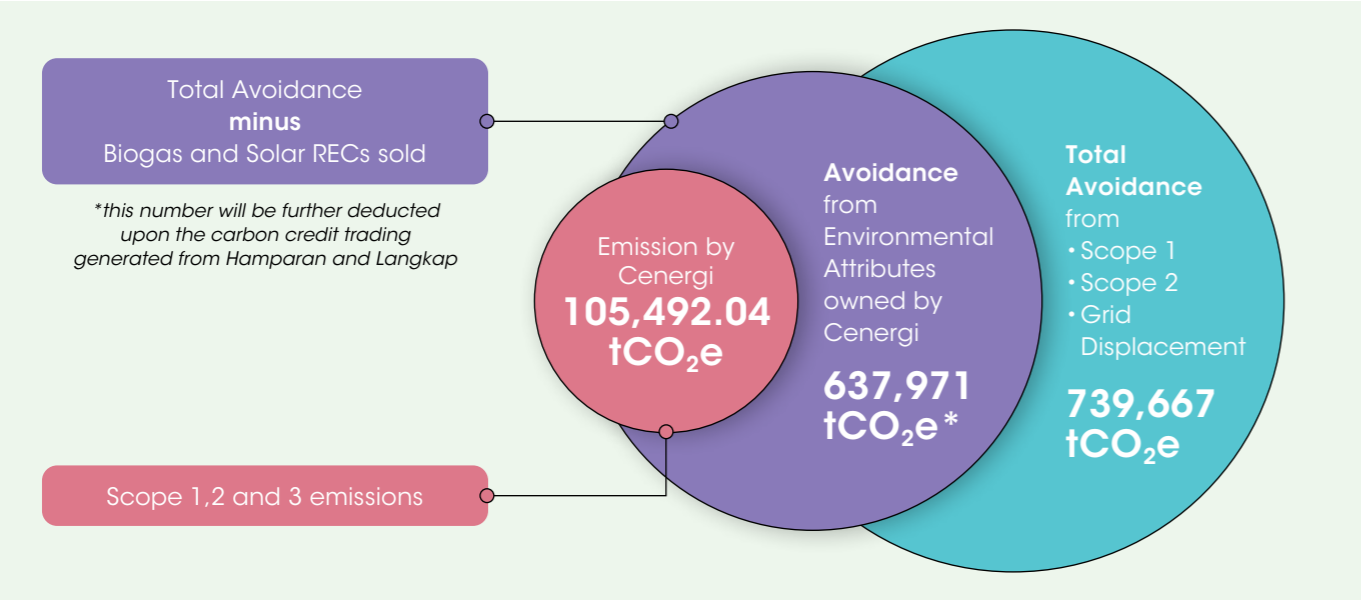
Through the future trading of our carbon credits from the Hamparan and Langkap Biogas Plant, emission reduction attributes will be further excluded from the 2023 emissions reduction portfolio above.

In 2023, our solar assets generated and exported 18,215 MWh of renewable energy to the grid, compared to 14,247 MWh in 2022. This resulted in an avoidance of approximately 12,932 tCO₂e in emissions through the displacement of coal-based electricity generation. This effort supports the nation's net-zero commitments, while the sale of RECs to corporate clients helps them meet their renewable energy or Scope 2 reduction targets.

Conclusion

In 2023, Cenergi's GHG emissions avoidance totalling 637,971 tCO₂e is over six times higher than its generated emissions (or carbon footprint) of 105,492 tCO₂e. This substantial positive impact highlights the effectiveness of our clean energy operations in supporting decarbonization goals and enabling clients to align with their climate practices through the purchase of our environmental attributes.

Note: In this report, "carbon footprint" and "carbon avoidance" are used interchangeably to refer to GHG emissions generated and avoided, respectively, for clarity.



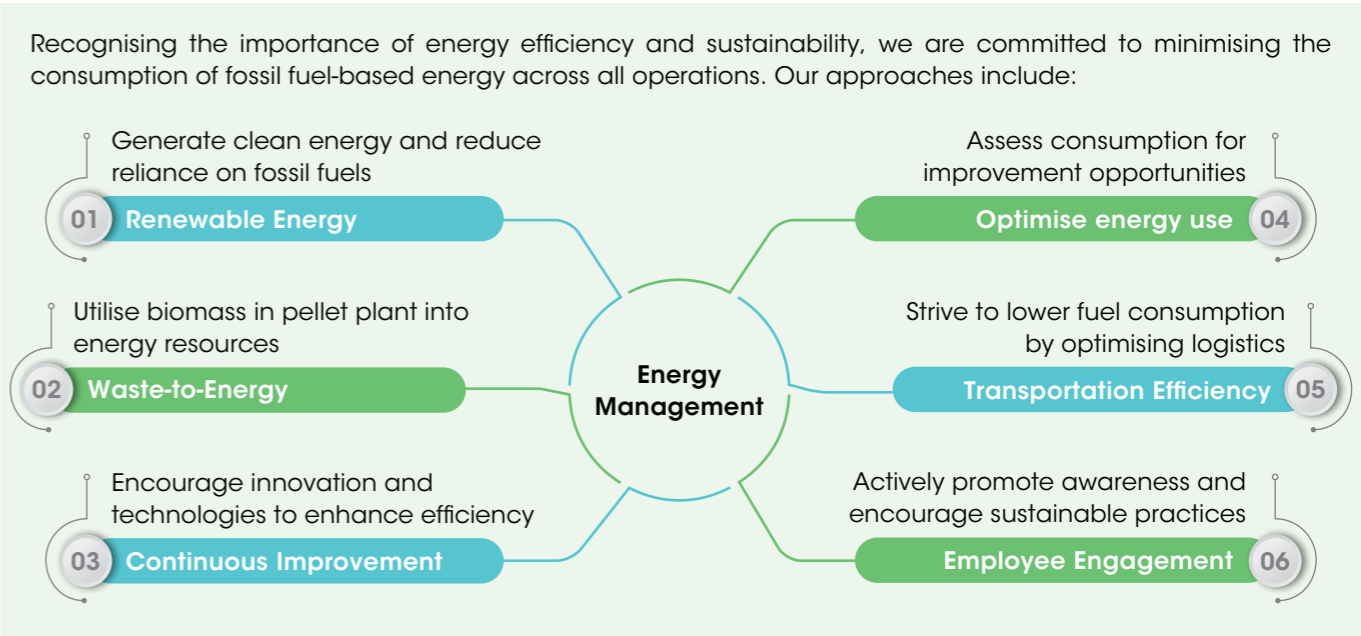
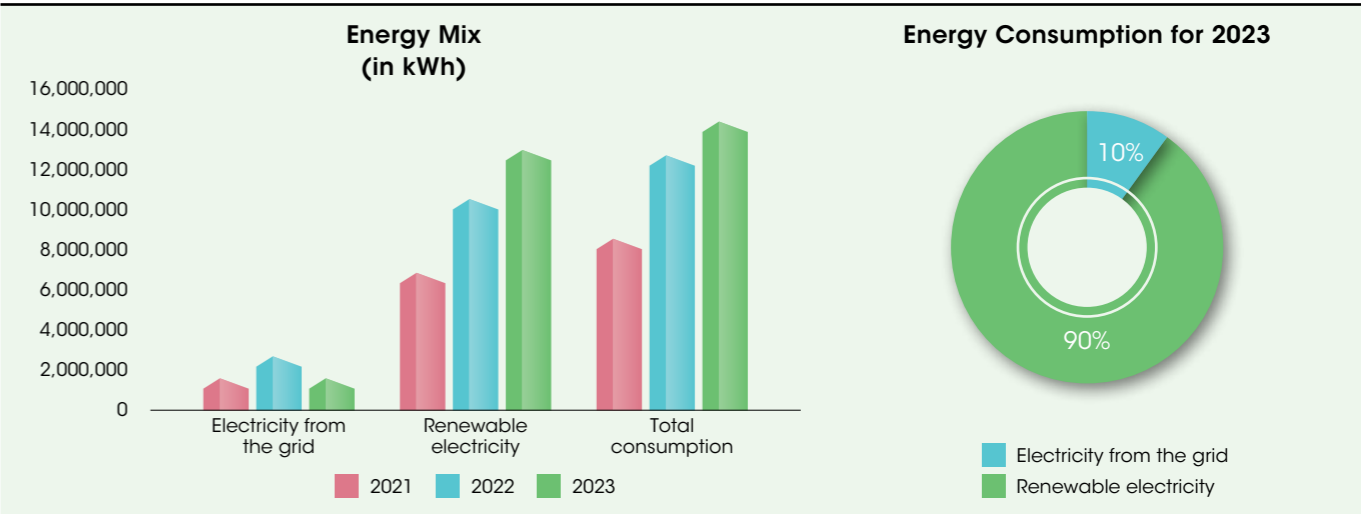
Our Value to the Environment

ENERGY MANAGEMENT

GRI 302-1, 302-4

As a developer for clean energy solutions, Cenergi is conscious of both its energy consumption and the global shift towards renewable energy. Our approach prioritises minimising the use of fossil fuels wherever possible. To support our operations, Cenergi relies on a mix of energy sources, with the majority coming from biogas generated at our own plants, and the remainder from electricity purchased from the grid for our Head Office and plant operations. Other energy sources include diesel for transportation and operational needs. In our biomass pellet plants, the primary fuel consists of shredded EFB and PKS.

In 2023, 90% of the electricity we used came from renewable energy, with the balance purchased from the grid.



Project efficiency is a critical aspect of Cenergi's operations and business activities, in addition to prioritising plant optimisation. There has been a strong focus to develop in-house O&M capabilities at the operational stage to improve project efficiency. Adopting new technologies, implementing e-surveillance of plants, utilising drones and new maintenance technologies, and investing in advanced monitoring, tracking, and predictive analytics technologies, are crucial to Cenergi's future strategy. Through these initiatives, Cenergi is dedicated to minimising energy consumption and enhancing the sustainability of our operations, ultimately contributing to our broader commitment to a low-carbon future.

Our Value to the Environment

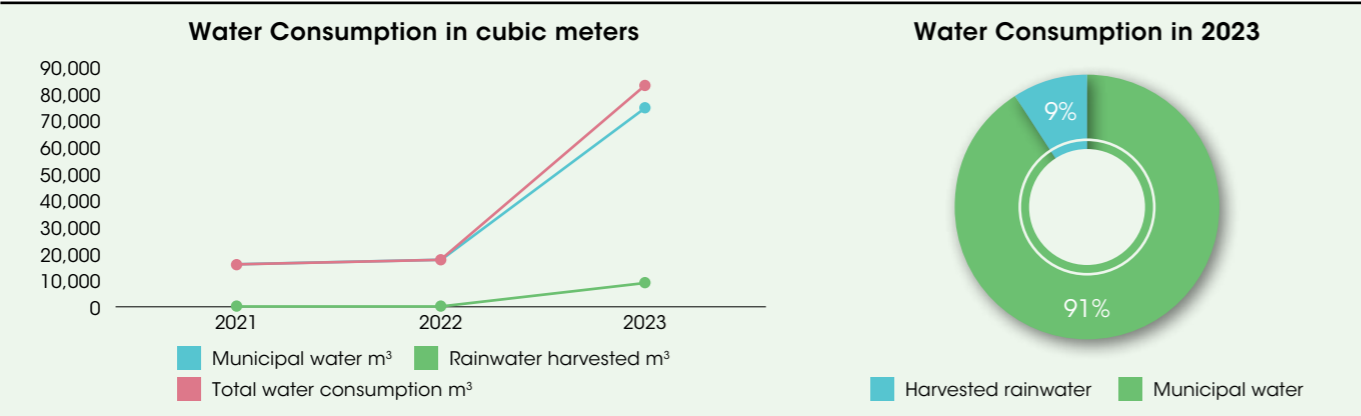
WATER AND EFFLUENT

GRI 303-1, 303-5

Cenergi recognises water as a finite and valuable resource. Water is essential in our operations, particularly in biogas plants where it is used for scrubber cleaning and more. In line with our strategy to prioritise renewable resources, our plant teams have actively implemented rainwater harvesting systems, with new installations in 2023 at 13 biogas power plant sites.

In 2023, rainwater harvesting accounted for 9% of our total water usage at the biogas and solar power plant sites, amounting to approximately 84,000 m³. This is a notable increase from previous years, during which these systems were just beginning to be implemented. This success highlights our commitment to learning from the experiences gained at the Sua Betong and West Biogas Power Plants, where these systems were introduced in 2022. The positive results from these installations have informed our efforts to maximise/utilisation across all other plants.

Water consumption at the Head Office is provided through the building management and is not included in the water consumption this year. We will explore opportunities to measure water usage in the coming year.



Cenergi plays a vital role in addressing a significant environmental challenge: the treatment of effluent, particularly from palm oil mills, which is a major byproduct of the palm oil industry. Left untreated, this effluent can pose severe risks to local ecosystems, including water pollution and greenhouse gas emissions. Cenergi’s biogas power plants, however, are designed as closed-loop systems that convert biogas captured from the wastewater treatment into clean energy. The treated discharge is returned to the mills’ existing wastewater treatment systems, ensuring that no effluent is generated from Cenergi’s operations. This process aligns with environmental frameworks like the RSPO and regulatory requirements, contributing to reduced environmental impact.

In the biogas plant sector, we successfully treated 2.8 million m³ of effluent across our 15 plants in Malaysia, solidifying our status as the largest-grid-connected biogas player in the region. By expanding our operations in this sector, we are not only delivering essential support to our partners and stakeholders but also leading the charge for environmental sustainability.

Year, by Cenergi	2021	2022	2023
Treated POME in Malaysia	1,579,388 m³	2,260,677 m³	2,838,988 m³
Treated wastewater (Cassava processing) in Indonesia	524,119 m³	468,215 m³	564,363 m³

In 2023, the production of washed biomass pellets marked the inaugural year of commercial operations at our first plant, involving a washing process that required the introduction of water. While washed pellets serve as a valuable renewable fuel to substitute fossil fuel-based energy, this process necessitates approximately 4 tons of water for every ton of pellets produced, resulting in a high water footprint. The total water consumed during the first 6 months of 2023 in the pellet plant was approximately 560 m³.

To mitigate this impact and avoid generating increased effluent, Cenergi made a strategic decision, in agreement with our mill partners, to pivot toward producing standard pellets that do not require additional water. This decision aligns with our strategy to avoid generating unnecessary waste, which can have a detrimental impact on the environment.

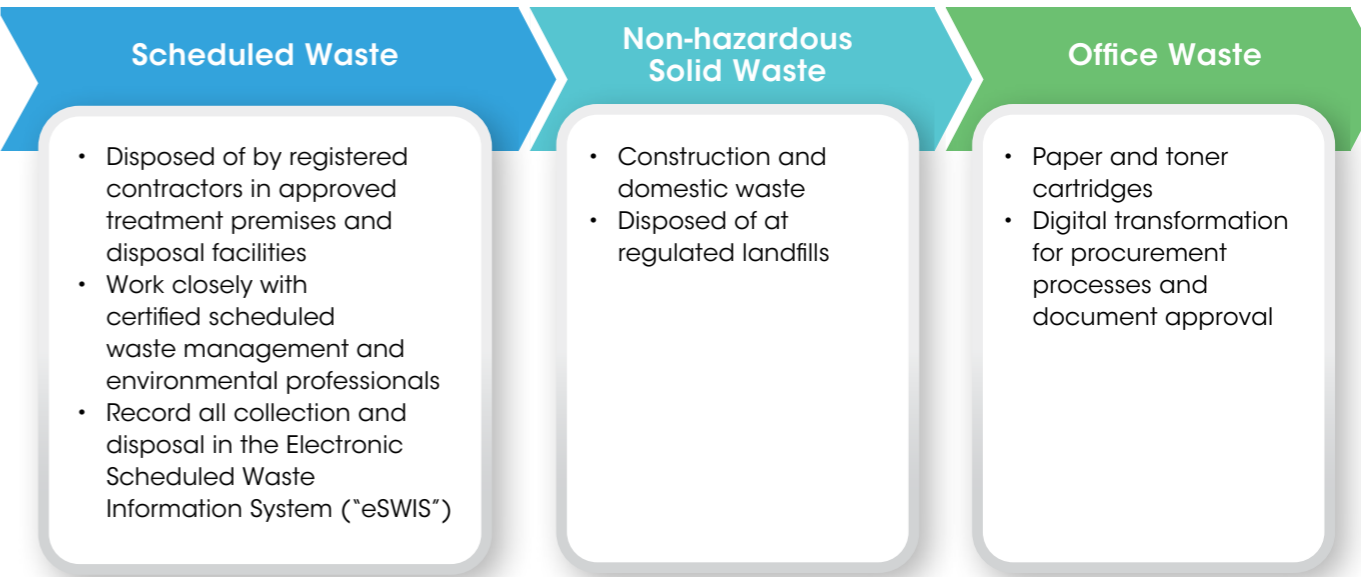
Our Value to the Environment

WASTES MANAGEMENT

GRI 2-27, 306-4

Cenergi generates waste as part of its business operations and is committed to effective management and reduction strategies. At our Head Office, waste management is overseen and managed through our building management system and disposed of at licensed landfills. In 2023, we implemented initiatives to segregate and collect recyclable items, successfully diverting them from the landfills. The total waste sent for recycling in 2023 totalled 405 kg, lower by 14% compared to 2022 as Cenergi introduced a digital signature approval process that lowered the generation of paper waste. We will continue to pursue these recycling initiatives, as they align with our commitment to sustainability.

Additionally, we plan to expand our waste management focus in the coming year to include categorising and measuring wastes across the entire group such as scheduled wastes, non-hazardous wastes and other office wastes.



Cenergi is committed to responsible scheduled waste management and strictly adheres to the Environmental Quality (Scheduled Wastes) Regulations 2005. All scheduled wastes generated from our operations are properly classified, handled, and disposed of in accordance with regulatory requirements. We collaborate with licensed waste management contractors to ensure that all scheduled wastes are treated and disposed of safely at approved waste management facilities.

ENVIRONMENTAL REGULATIONS COMPLIANCE

Cenergi is dedicated to fully complying with all relevant regulations governing its business operations and has maintained a clean record with no penalties imposed by authorities. We uphold a robust internal policy framework, guided by our **"Health & Safety Environment Policy"** and **"Sustainability Policy,"** to ensure adherence to local environmental laws and regulations.

Scan the QR code for Health & Safety Environment Policy and Sustainability Policy or click this link <https://www.cenergi-sea.com/documentation/>

As a testament to our commitment, there have been no reports of fines, non-monetary sanctions or environmental cases brought through dispute resolution mechanisms in 2023. We will continue our proactive approach to environmental compliance and our commitment to responsible operations.

MANAGEMENT APPROACH

At Cenergi, our employees are our most valuable asset, and we prioritise their well-being and development. We are dedicated to occupational health and safety through comprehensive programs that minimise risks and cultivate a culture of safety. Acknowledging that much industry knowledge stems from real-world experience, we place a strong emphasis on training to equip our workforce with essential skills and drive innovation within our sector.

We actively seek to hire talent from local communities surrounding our plants, fostering growth and strengthening community ties. As our team expands, we focus on attracting new hires who are passionate about sustainability and innovation. Their fresh perspectives complement the expertise of our existing team, creating a dynamic workforce poised to address industry challenges. By promoting diversity and inclusion in our hiring practices and engaging locals in our projects, we enhance employee well-being while reinforcing our commitment to social responsibility.

OUR EMPLOYEES

GRI 2-7, 2-9, 401-1, 401-2, 401-3, 405-1

DIVERSITY, INCLUSION AND EQUITY

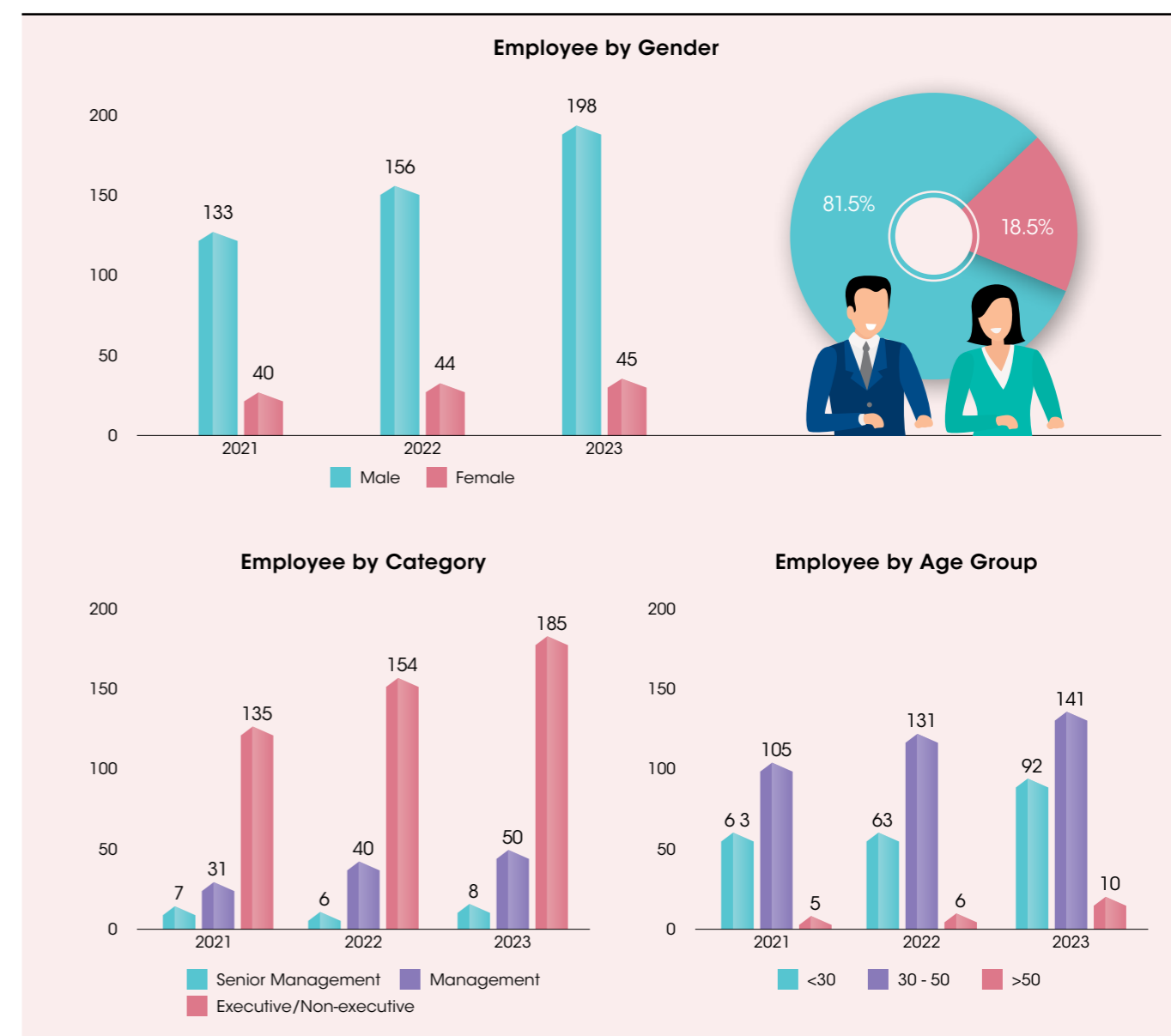
Cenergi is committed to advancing gender equity across all our operations. While the nature of roles at our biogas, solar, and pellet plants results in a higher percentage of male employees, we continue to actively promote inclusivity. As of FY2023, women make up 18.5% of our total workforce, with 45 women employed across the Group.

We uphold the principle of equal pay for equal work, regardless of gender, and are dedicated to encouraging and empowering women to assume leadership roles in various areas of our operations.

As of FY2023, Cenergi's workforce embodies a diverse range of experience levels and age groups, which contribute to our dynamic and inclusive company culture. Senior management, representing 3% of our workforce, provides strategic leadership and steers the company's long-term goals. Meanwhile, 21% of our employees serve in management roles, overseeing operations and ensuring alignment with our business objectives. The remaining 76% of our workforce comprises executive and non-executive employees, who play a critical role in supporting daily operations and driving the company's growth.

OUR VALUE TO OUR
PEOPLE

Our Value to Our People



Our workforce is diverse in age, ensuring a balanced mix of fresh perspectives and seasoned expertise. Employees under 30 years old make up 38% of our team, bringing energy and innovative thinking to the organisation. Those aged 30–50 years account for 58%, offering a combination of experience and adaptability that drives the core of our operations. Meanwhile, 4% of our workforce is above 50, contributing extensive knowledge and leadership, particularly in strategic roles.

At Cenergi, we strive to maintain a dynamic and resilient workforce by attracting and retaining talented individuals who align with our values and contribute to our sustainability goals. In FY2023, our employee turnover rate stood at 38 (15.6%), reflecting our commitment to providing a stable and engaging work environment. To support our ongoing growth and drive innovation across our operations, we welcomed 75 (30.9%) new hires during the year. Additionally, 57% of our new hires were under the age of 30, reflecting our commitment to nurturing young talent and bringing fresh, innovative ideas into the organisation. This younger demographic is essential to driving the future of our sustainability initiatives and contributing to our dynamic work culture. Our hiring practices are guided by principles of diversity, equity, and inclusion, ensuring that we attract a wide range of perspectives and skills. We remain committed to nurturing our employees' growth and providing opportunities for advancement, which is key in maintaining a motivated and dedicated team.

Our Value to Our People

At Cenergi, we recognise that our employees are the foundation of our success. We are committed to creating a workplace where everyone feels valued and motivated by offering competitive rewards and recognition programs. Our reward system is designed to align with individuals' performance, business results, and our sustainability goals, ensuring that our people are rewarded fairly and equitably for their contributions.

Employment Benefits



OCCUPATIONAL SAFETY AND HEALTH MANAGEMENT

GRI 2-27, 403-1, 403-2, 403-5, 403-6, 403-9



Cenergi is deeply committed to prioritising the safety and health of our people, fostering a safe and healthy working environment, particularly for those at our operating plants and construction sites. Our Health, Safety and Environment ("HSE") Policy, accessible on our corporate website, applies to all employees, contractors, and stakeholders present at our facilities.

Our Value to Our People

The management is dedicated to continuous improvement and full compliance with relevant legislation, including the Occupational Safety and Health Act 1994 ("Act 514"), the Factories and Machinery Act 1967 ("Act 139"), the Environmental Quality Act 1974 ("Act 127"), and any other applicable regulations, codes of practice, and requirements that Cenergi adheres to. Our HSE practices are aligned with the ISO 45001 management system, based on the Plan-Do-Check-Act ("PDCA") cycle.

Throughout 2023, Cenergi implemented a variety of HSE activities to ensure the well-being of our employees and uphold high safety standards across all operations. Over 76 employees participated in HSE training sessions during the year, reinforcing our commitment to a safety-first culture. As part of our regular safety inspections and audits conducted for our operational sites, we identified and addressed 26 unsafe work conditions, 7 unsafe acts, and 1 near miss. Additionally, there was 1 first aid case, which was promptly managed. These proactive measures reflect our ongoing dedication to maintaining a safe and healthy workplace for all.

HSE Activities 2023

Fire Drill Training

at both our operating plants and headquarters, alongside safety talks to reinforce key safety protocols.

01

Competency Training

ensure our workforce remains skilled and knowledgeable in their respective safety roles.

03

Industrial Hygiene Seminar

in conjunction with OSH Week 2023, identify and control health hazards in the workplace.

05

Occupational Health and Safety ("OHS") Day
promote awareness and best practices.

02

Safety Inspections & Audit
- identify and address potential hazards.
- evaluate compliance with regulations and internal standard operating procedures.

04

Cenergi has implemented a comprehensive safety and health program to ensure a safe and healthy working environment for its employees.

To address noise and chemical exposure, the company has conducted thorough assessments and implemented management strategies. This exercise was done by appointing a certified and licensed assessor by the Department of Occupational Safety and Health ("DOSH"), conducting a scheduled Noise Risk Assessment ("NRA"). Noise levels have been found to be within stipulated limits. A chemical health risk assessment ("CHRA") has also been conducted to identify and evaluate potential health risks, adhering to the regulations to the Use and Standards of Exposure to Chemical Hazardous to Health ("USECHH, Regulation 2000").

Our Value to Our People

Hazard identification and risk assessment are integral parts of Cenergi's safety program. Before project commencement, a job method statement ("JMS") is conducted to assess risks and control measures. Additionally, hazard identification, risk assessment, and risk control ("HIRARC") are mandatory requirements before site work, ensuring that potential hazards are identified, assessed, and appropriate control measures are implemented.

To enhance safety awareness and reporting, Cenergi has intensified its unsafe condition unsafe act ("UCUA") campaigns. By analysing UCUA reports, the company identified trends, develop site-specific safety programs, and issue stop work orders for severe risks. Cenergi also extends its safety system to contractors, issuing warning letters for high-risk actions.

Overall, Cenergi's commitment to safety and health is evident in its comprehensive initiatives. By addressing noise and chemical management, conducting thorough hazard assessments, and promoting a healthy workplace, Cenergi aims to create a safe and positive working environment for its employees.

TRAINING AND DEVELOPMENT

GRI 404-1

We provide a wide range of continuous learning opportunities, including technical training, leadership development, and sustainability-focused programs, to ensure our workforce is equipped for current and future challenges. New employees start with a structured orientation that introduces them to our sustainability goals, core values, and ethical standards. Team-building activities are also part of training program meant to foster strong connections and developing essential communication skills that support a positive, collaborative work environment. Our compliance management training educates employees on regulatory standards, corporate policies, and ethical responsibilities, including a comprehensive overview of our anti-bribery policies to help identify and avoid conflicts of interest or corruption risks. Additionally, our whistleblowing training highlights safe reporting mechanisms and reinforces the importance of accountability, encouraging employees to report unethical behaviour without fear of retaliation.

Year	Average training hours per employee	Total investment in Training and Development (RM)	Investment per employee (RM/employee)
2023	41	267,000	1099

List of internal and external training:

Internal Training	Nos	External Training	Nos
Cenergi Sustainability Day 2023	1	Microsoft Office (Excel, PowerPoint) and software training (Autodesk)	11
Onboarding, team building	1	ESG related training	6
Overview of Compliance Management, Anti-Bribery & Whistle Blowing	1	Energy and Carbon related training	9
Toolbox (first aid, equipment handling, housekeeping, waste management, pollution, fire etc.)	96	CePSWaM courses	7
Softskills (well-being, critical thinking, influencing & negotiation etc.)	11	Safety and Health training	12
HSE - Safety briefings & trainings, toolbox, BOFA, other HSE-related trainings	68	2024 Budget & Tax Conference	1
O&M trainings for plant operation and management	96	2nd Annual Asia L&D and HR Transformation Summit 2023	2
Technical training (taxation, regulation, documentation, PV system, ISO etc.)	38	Other competencies training	16
Safety briefing	17	Social Media Marketing & Branding Development	1
Conferences & seminars (ESG, energy efficiency, tax & budget)	3	Governance training	5
		Webinar: Tips Mengelola Pajak Perusahaan: Tingkatkan Keuntungan Pemegang Saham	2
Total	332	Total	72

Our Value to Our People



SOCIAL ENGAGEMENT

GRI 413-1

At Cenergi, we are deeply committed to fostering strong relationships with the communities in where we operate. Our social engagement efforts are focused on creating positive, lasting impacts by supporting initiatives that promote education, environmental stewardship, and community well-being. Through active participation in local projects and partnerships with community stakeholders, we strive to address the unique needs of each area. In 2023, we allocated a total of RM10,200 for community engagement initiatives, supporting education and raising awareness about renewable energy.



Cenergi, in collaboration with Yayasan UEM and Pejabat Pendidikan Hilir Perak, is dedicated to supporting underprivileged students in local communities. In 2023, we provided essential school supplies such as uniforms and stationeries to 100 selected students across four schools in Hilir Perak, namely SK Dato Yahya Suban, SK Convent, SMK Sungai Manik, and SMK Convent.



In addition to supporting education, Cenergi also hosted site visits for educational institutions like Heriot-Watt University to our biogas power plant, providing hands-on learning experiences about renewable energy and sustainable practices.



We also hosted Mitsui & Co. and Universiti Malaya at our biogas power plant, strengthening the bridge between the academic and the industry.



Cenergi participated in the International Greentech & Eco Products Exhibition & Conference Malaysia ("IGEM") 2023. The team engaged with attendees, discussing the crucial role of clean energy in achieving a greener future.



We further emphasised its sustainability efforts by presenting a pocket talk session titled "Navigating a Sustainable Future: Our Journey with Carbon Credits." The presentation highlighted the company's strategies and the pivotal role of carbon credits in driving environmental progress. At this event, Cenergi was awarded the IGEM 2023 best booth award and best appreciation awards.



Cenergi showcased its commitment to sustainable palm oil practices and innovative energy solutions at the International Palm Oil Congress and Exhibition ("PIPOC") 2023 organised by the Malaysian Palm Oil Board. The company highlighted the potential of repurposing palm oil waste for bioenergy generation. At the Cenergi booth, delegates explored sustainable innovative solutions through our business segments.

MANAGEMENT APPROACH

Cenergi's management approach is centred on delivering sustainable economic contributions through our asset portfolio, supported by sufficient financial resources essential for our concession business. We ensure effective management of our assets, focusing on long-term value for stakeholders. Our commitment extends beyond financial performance; we actively engage with local communities, contributing to job creation and sustainable development principles.

By investing in renewable energy and energy efficiency projects, we not only mitigate climate impacts but also enhance energy security, supporting Malaysia's transition to a low-carbon economy. Through these efforts, Cenergi aims to create both direct and indirect economic benefits, powering a sustainable future.

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

Cenergi strives to be a catalyst for socio-economic and sustainable development. We generate financial value for our stakeholders while creating socio-economic multiplier effects that benefit local communities. With our strong financial resources, we are well-positioned to enhance our financial performance, allowing us to distribute economic value more effectively among our stakeholders. Section 1 of this report provides the financial performance of Cenergi.

GREEN FINANCING FOR SUSTAINABLE GROWTH

In November 2021, Cenergi launched its inaugural Senior Islamic Medium-Term Notes which may include the Subordinated Perpetual Islamic Notes (hereinafter refer to as "Sukuk Programme" or "Green Sukuk"), raising up to an aggregate amount of RM1.5 billion in nominal value through the Sukuk Programme - an important milestone in advancing our growth strategy. The primary objective of the Green Sukuk is to finance Cenergi's solutions that promote environmental sustainability while creating positive ecological transformation via green financing.

Based on the Shariah principle of Wakalah Bi Al-Istithmar, the Sukuk Programme is aligned with Cenergi's Green Sukuk Framework, which adheres to the Sustainable and Responsible Investment ("SRI") Sukuk Framework by the Securities Commission Malaysia, the ASEAN Green Bond Standards ("GBS"), and the Green Bond Principles ("GBP") issued by the International Capital Market Association.

The issuance of RM210 million in Senior Islamic Medium-Term Notes was completed in December 2021, supplying critical capital for our business expansion and the development of renewable energy projects. These efforts are directly aligned with Malaysia's goal of achieving carbon neutrality by 2050.

Our Value to the Economic Contribution

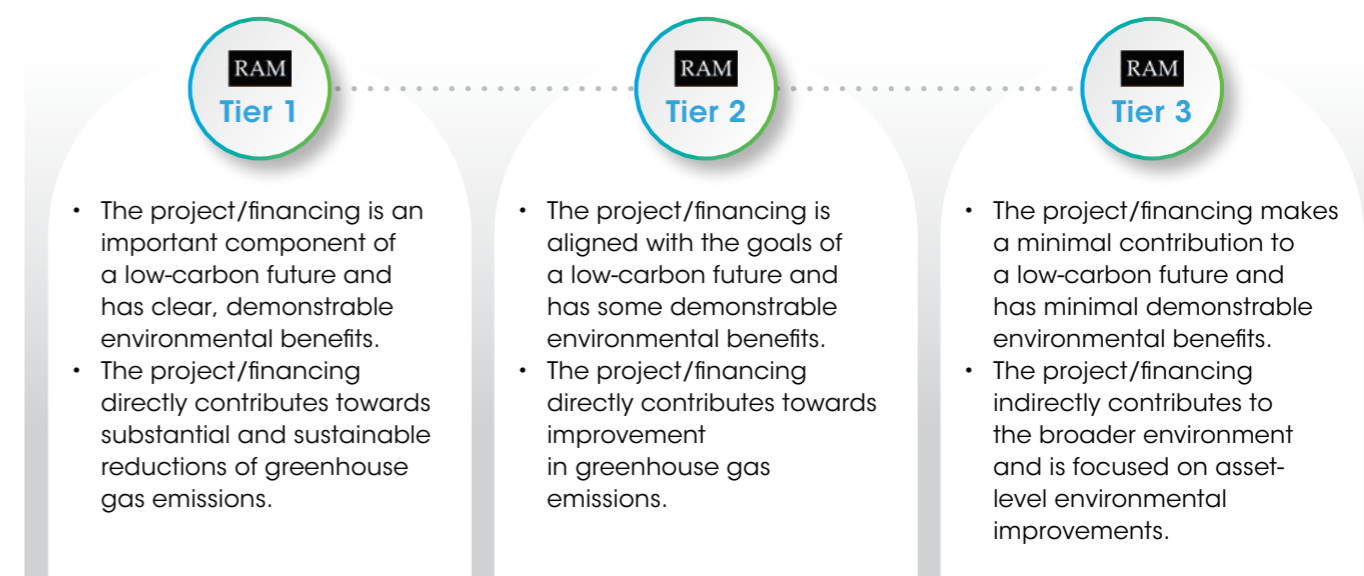
The Green Sukuk funds have been allocated to finance projects that reduce emissions and contribute to climate change mitigation. In 2023 no further Senior Islamic Medium-Term Notes or Subordinated Perpetual Islamic Notes were issued due to sufficient internally generated cash.

ASSIGNED ENVIRONMENTAL BENEFIT ("EB") RATINGS TO CENERGI'S ELIGIBLE PROJECTS

SRI Sukuk Framework, ASEAN GBS and GBR Eligible Project Category	Cenergi's Eligible Project Category	RAM Sustainability EB Rating
<ul style="list-style-type: none"> Pollution Prevention and Control Circular Economy Adapted Products, Production Technologies and Processes Renewable Energy 	Biogas	Environmental Benefit Tier 1
<ul style="list-style-type: none"> Renewable Energy 	Solar	Environmental Benefit Tier 1
<ul style="list-style-type: none"> Renewable Energy 	Wind, Mini Hydro	Environmental Benefit Tier 1
	Biomass	Environmental Benefit Tier 2 to 3
<ul style="list-style-type: none"> Energy Efficiency 	Energy Efficiency	Environmental Benefit Tier 2
<ul style="list-style-type: none"> Pollution Prevention and Control Circular Economy - Adapted Products, Production Technologies and Processes 	Sustainable Biomass Fuel	Environmental Benefit Tier 2 to 3

RAM Sustainability's green bonds/sukuk evaluation is a qualitative and quantitative assessment of the contributions of a project or financing facility to a low-carbon, sustainable future. The transparency and disclosure strength of the green bonds/sukuk is also a key consideration. RAM Sustainability's EB assessment can be categorised as follows:

ENVIRONMENTAL BENEFIT



Source: EB ratings assigned to eligible project categories based on RAM Sustainability's published second opinion reports to date (see <https://www.ram.com.my/sustainability>)

OUR
ECONOMIC
CONTRIBUTION

Our Value to the Economic Contribution

In 2023, RAM Ratings upgraded Cenergi’s corporate credit ratings and the issue ratings for the RM1.5 billion Sukuk Programme to AA3 rating, marking another significant development in our financial journey.

Cenergi’s Green Sukuk Framework, Second Opinion Report by RAM Ratings, and the latest Green Sukuk Annual Report 2023 are available on our corporate website.



Rating Type	Ratings	Rating Action
Corporate Credit Ratings	AA ₃ /Stable/P1	Upgraded from A ₁ /Stable/P1
Issue Ratings		
- Senior Sukuk	AA ₃ /Stable	Upgraded from A ₁ /Stable
- Subordinated Perpetual Sukuk	A ₂ /Stable	Upgraded from A ₃ /Stable

RESPONSIBLE SUPPLY CHAIN
GRI 204-1



Cenergi is committed to maintaining a responsible supply chain.

Our Group's Vendor Code of Conduct and Procurement Policies ensure that we collaborate closely with suppliers who share these values, holding them to high standards of integrity and sustainability. In 2023, more than 90% of our supplier spending was directed towards local businesses.



FINANCIAL IMPLICATIONS AND OTHER RISKS AND OPPORTUNITIES DUE TO CLIMATE CHANGE

Cenergi recognises that climate change presents both risks and opportunities that can significantly impact our business and financial performance. As a pioneer in the renewable energy sector, we have seen firsthand and understand the risks associated with regulatory changes, physical climate impacts, and shifts in market demand. To effectively address these risks, we adopt a proactive approach to risk management and adaptation strategies. Our agility and integrity equip us to navigate this evolving landscape.

Conversely, we recognise significant opportunities in the transition to a low-carbon economy, particularly within our sector, which is supported by both local and global trends. The Malaysian Government is actively facilitating this shift through initiatives such as the Renewable Energy Roadmap, the National Policy on Climate Change, the NETR, and various regulatory frameworks designed to encourage investment in sustainable practices. For Cenergi, this not only provides a pathway to mitigate national climate risks but also positions us to capitalised on emerging market trends.

Our commitment to develop a skilled workforce is vital in this context, to better manage risks and leverage growth opportunities. A knowledgeable team can drive innovation and enhance our competitiveness. Together, these efforts support our long-term mission while contributing positively to environmental sustainability.

Our Value to the Economic Contribution

TECHNOLOGY AND INNOVATION



In Cenergi's business, technology is a crucial driver of both growth and sustainability, directly impacting our economic contribution. As pioneers in biogas and biomass pellet production, innovation is central to our operations. We leverage proprietary technologies and processes developed through real-world learning experiences, many of which are in-house.

With technology and innovation rapidly evolving globally, Cenergi also actively seeks partnerships to unlock new opportunities in clean energy solutions. This openness to collaboration keeps us at the forefront of industry advancements, while our innovation mindset helps us identify new business opportunities. Adopting new technologies, implementing e-surveillance of plants, utilising drones and new maintenance technologies, and investing in advanced monitoring, tracking, and predictive analytics technologies, are crucial to Cenergi’s future strategy. Through these initiatives, Cenergi is dedicated to minimising energy consumption and enhancing the sustainability of our operations, ultimately contributing to our broader commitment to a low-carbon future.



ESG Performance Data

Indicator	Unit	2021	2022	2023
Governance				
Corruption				
Total number of staff trained in anti-corruption	Number	7	122	224
Total number of Senior Management trained in anti-corruption	Number	7	12	8
Total number of Management trained in anti-corruption	Number	0	22	50
Total number of Executives trained in anti-corruption	Number	0	0	54
Total number of non-executives trained in anti-corruption	Number	0	55	86
Operations assessed for corruption-related risks	%	100	0	100
Confirmed incidents of corruption	Number	0	0	0
Supply Chain				
Proportion of suppliers that are locally based	%	88	90	90
Proportion of procurement spent on local suppliers	%	98	95	90
Environment				
Energy				
Total non-renewable electricity consumption (grid)	kWh	1,298,662	2,228,849	1,523,590
Total renewable electricity consumption (biogas)	kWh	7,150,938	10,389,472	12,750,000
Total electricity consumption	kWh	8,449,600	12,618,321	14,273,590
Total non-renewable energy consumption (grid and diesel)	GJ	4,928	8,377	5,485
Total renewable energy consumption (solar and biogas)	GJ	25,743	37,402	45,900
Total energy consumption	GJ	30,671	45,779	51,385
Energy intensity	GWh/RM'mil Revenue	0.18	0.21	0.20
Water				
Municipal water consumption	m³	19,586	22,682	75,998
Rainwater consumed from rainwater harvesting	m³	0	11	7,674
Total water consumption	m³	19,586	22,693	75,597
Waste				
Total waste diverted from disposal (recycled or repurposed)	kg	419	474	405
Total scheduled waste	kg	15,500	12,340	34,334 ⁴
GHG emissions				
Scope 1	tCO ₂ e	17	24	103,930
Scope 2	tCO ₂ e	760	1,304	1,200
Scope 3 (business travel)	tCO ₂ e	9	21	34
Scope 3 (employee commuting)	tCO ₂ e	N/A	482	328
Emissions avoided	tCO ₂ e	480,980	514,685	637,971
GHG emission intensity	kgCO ₂ e RM'mil Revenue	N/A	N/A	1.48
Social				
Employee Diversity				
Total headcount	Number	173	200	243
Workforce by gender (number)	• Female	Number/%	40 (23%)	44 (22%)
	• Male	Number/%	133 (77%)	156 (78%)
Employees by contract	• Full-time employees	Number/%	173 (100%)	200 (100%)
	• Contractors/ temporary employees	Number/%	0	0
Employees by age	• <30	Number/%	63 (36%)	63 (32%)
	• 30-50	Number/%	105 (61%)	131 (66%)
	• >50	Number/%	5 (3%)	6 (3%)
Employees by nationality	• Local employees	Number/%	173 (100%)	200 (100%)
	• Foreign employees	Number/%	0	0
Employees by category	• Senior management	Number/%	7 (4%)	6 (3%)
	• Management	Number/%	31 (18%)	40 (20%)
	• Executives	Number/%	58 (34%)	59 (30%)
	• Non-executives	Number/%	77 (46%)	95 (48%)
Employees by gender and category				
Senior management	• Female	Number/%	3 (43%)	1 (17%)
	• Male	Number/%	4 (58%)	5 (83%)
Management	• Female	Number/%	13 (42%)	13 (33%)
	• Male	Number/%	18 (58%)	27 (68%)
Executives	• Female	Number/%	19 (33%)	25 (42%)
	• Male	Number/%	39 (67%)	34 (58%)
Non-executives	• Female	Number/%	5 (7%)	5 (5%)
	• Male	Number/%	72 (94%)	90 (95%)

ESG Performance Data

Indicator	Unit	2021	2022	2023
Social (Continued)				
Employee Diversity (Continued)				
Employees by age and category				
Senior management	• <30	Number/%	0 (0%)	0 (0%)
	• 30-50	Number/%	5 (71%)	3 (50%)
	• >50	Number/%	2 (29%)	3 (38%)
	• <30	Number/%	1 (3%)	0 (0%)
	• 30-50	Number/%	28 (90%)	38 (95%)
Management	• >50	Number/%	2 (7%)	3 (6%)
	• <30	Number/%	18 (31%)	21 (36%)
	• 30-50	Number/%	39 (67%)	37 (63%)
Executives	• >50	Number/%	1 (2%)	1 (2%)
	• <30	Number/%	44 (57%)	44 (46%)
	• 30-50	Number/%	33 (43%)	50 (53%)
Non-executives	• >50	Number/%	0 (0%)	1 (1%)
				4 (3%)
Disabilities				
Disabled Employees	Number/%	0 (0.0%)	0 (0.0%)	0 (0.0%)
Director Diversity				
Director by gender	• Female	Number/%	1 (20%)	1 (20%)
	• Male	Number/%	4 (80%)	4 (80%)
Directors by age	• <30	Number/%	0 (0%)	0 (0%)
	• 30-50	Number/%	2 (40%)	2 (40%)
	• >50	Number/%	3 (60%)	3 (60%)
				2 (40%)
Turnover				
Total turnover	Number/%	18 (10%)	43 (22%)	38 (16%)
Employee turnover by gender	• Female	Number/%	16 (89%)	9 (21%)
	• Male	Number/%	2 (11%)	34 (79%)
Employee turnover by age	• <30	Number/%	9 (50%)	18 (42%)
	• 30-50	Number/%	9 (50%)	23 (53%)
	• >50	Number/%	0 (0%)	2 (5%)
				1 (3%)
Employee turnover by category	• Senior management	Number/%	0 (0%)	3 (7%)
	• Management	Number/%	4 (22%)	7 (16%)
	• Executives	Number/%	8 (45%)	12 (28%)
	• Non-executives	Number/%	6 (33%)	21 (49%)
Turnover type	• Voluntary turnover	Number/%	18 (100%)	43 (100%)
	• Involuntary turnover	Number/%	0 (0%)	0 (0%)
New hires				
Total new hires	Number/%	37 (21%)	70 (35%)	75 (31%)
Training and development				
Total training time	Hours	3,262	5,994	9,773
Total training for Senior Management	Hours	153	149	650
Total training for Management	Hours	982	1,489	2,196
Total training for Executives	Hours	1,445	1,872	3,263
Total training for Non-executives	Hours	682	2,484	3,665
Total employees trained	Number	152	180	238
Occupational Safety and Health				
Fatalities (employees)	Number	0	0	0
Fatalities (third-party contractors)	Number	0	0	0
Lost time incident rate (employees)	Rate	0	0	0
Lost time incident rate (third-party contractors)	Rate	0	0	0
Employees trained on health and safety standards	Number	58	85	76
Employees receiving general training, which includes safety	Number	37	70	76
Community				
Total amount invested in the community	RM	0	9,000	10,200
Beneficiaries of the investment in the community	Number of Program	0	1	12
Human rights				
Substantiated complaints concerning human rights violations	Number	0	0	0
Cybersecurity and customer data				
Substantiated complaints concerning breaches of customer privacy and losses of customer data	Number	0	0	0

⁴ The increase in scheduled waste generated in 2023 is due to new plants commissioned in that year, resulting in additional waste from construction and equipment replacement. Furthermore, improved and more thorough record-keeping captured waste streams more comprehensively in 2023 as compared to 2022.

⁵ The female director resigned during her tenure before the end of FY2023

GRI Index

GRI Standard	GRI	Standard Disclosure	GRI Location of Disclosures and Reasons for Omissions, if Applicable	SDG
General Disclosure				
GRI 2: General Disclosure 2021	2-1	Organisational details	About This Report, Pg. 2	-
	2-2	Entities included in the organisation’s sustainability reporting	About This Report, Pg. 2	
	2-3	Reporting period, frequency and contact point	About This Report, Pg. 2	
	2-6	Activities, value chain and other business relationships	About Cenergi, Pg. 3	
	2-7	Employees	Our Employee, Pg. 38, ESG Performance Index, Pg. 48-49	
	2-9	Governance structure and composition	Sustainability Approach and Governance, Pg. 9, Our Employee, Pg. 38	
	2-11	Chair of the highest governance body	Sustainability Approach and Governance, Pg. 9	
	2-12	Role of the highest governance body in overseeing the management of impacts	Sustainability Approach and Governance, Pg. 9	
	2-13	Delegation of responsibility for managing impacts	Sustainability Approach and Governance, Pg. 9	
	2-14	Role of the highest governance body in sustainability reporting	Sustainability Approach and Governance, Pg. 9	
	2-18	Evaluation of the performance of the highest governance body	Creating Value in 2023 Pg. 3	
	2-22	Statement on sustainable development strategy	Throughout the report	
	2-23	Policy commitments	Sustainability Approach and Governance, Pg. 9	
	2-25	Processes to remediate negative impacts	Sustainability Approach and Governance, Pg. 9	
	2-26	Mechanisms for seeking advice and raising concerns	Sustainability Approach and Governance, Pg. 9	
	2-27	Compliance with laws and regulations	Sustainability Approach and Governance, Pg. 9, Wastes Management, Pg. 37 Occupational Safety and Health Management Pg. 40-42	
2-28	Membership associations	Membership in Associations, Pg. 11		
2-29	Approach to stakeholder engagement	Stakeholder Engagement, Pg. 29-31		
Material Topics				
GRI 3: Material Topics 2021	3-1	Process to determine material topics	Material Matters, Pg. 27-28	-
	3-2	List of material topics		
	3-3	Management of material topics		
Environmental Management				
Energy Management				
GRI 302: Energy 2016	302-1	Energy consumption within the organisation	Energy Management Pg. 35 ESG Performance Index, Pg. 48	-
	302-3	Energy intensity	ESG performance Pg. 48	
	302-4	Reduction of energy consumption	Energy Management, Pg. 35	
Water and Effluent				
GRI 303: Water and Effluents 2018	303-1	Interaction with water as a shared resource	Water and Effluent, Pg. 36	-
	303-5	Water consumption	Water and Effluent, Pg. 36, ESG Performance Index, Pg. 48	
GHG Emission				
GRI 305: Emission 2016	305-1	Direct (Scope 1) GHG emissions	Carbon Footprint and Carbon Avoidance, Pg. 33-34	7, 11, 13
	305-2	Energy indirect (Scope 2) GHG emissions	Carbon Footprint and Carbon Avoidance, Pg. 33-34	

GRI Index

GRI Standard	GRI	Standard Disclosure	GRI Location of Disclosures and Reasons for Omissions, if Applicable	SDG
Environmental Management (Continued)				
GHG Emission (Continued)				
GRI 305: Emission 2016	305-3	Other indirect (Scope 3) GHG emissions	Carbon Footprint and Carbon Avoidance, Pg. 33-34	7, 11, 13
	305-4	GHG emissions intensity	ESG Performance Pg. 48	
	305-5	Reduction of GHG emissions	Carbon Footprint and Carbon Avoidance, Pg. 33-34	
Waste Management				
GRI 306: Waste 2020	306-3	Waste generated	ESG Performance Index, Pg. 48	12
	306-4	Waste diverted from disposal	Wastes Management, Pg. 37	
	306-5	Waste directed to disposal		
People				
GRI 3: Material Topics 2021	3-3	Management of material topics		
Employee Engagement, Diversity, Equity and Inclusion & Labour Practices				
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Diversity, Inclusion and Equity, Pg. 39, ESG Performance Data, Pg. 48-49	3, 10
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Diversity, Inclusion and Equity, Pg. 40	
	401-3	Parental leave	Diversity, Inclusion and Equity, Pg. 40	
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Occupational Safety and Health Management, Pg. 40-42	8
	403-2	Hazard identification, risk assessment, and incident investigation	Occupational Safety and Health Management, Pg. 40-42	
	403-5	Occupational Safety and Health Management Pg. 38	Occupational Safety and Health Management Pg. 41-42, Training and Development, Pg. 42	
	403-6	Promotion of worker health	Occupational Safety and Health Management Pg. 41-42	
	403-9	Work-related injuries	Occupational Safety and Health Management Pg. 41	
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	ESG Performance Pg. 49	8
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Diversity, Inclusion and Equity, Pg. 39	10
Local Communities				
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	Social Engagement, Pg. 25	
Governance				
GRI 3: Material Topics 2021	3-3	Management of material topics	Material Matters, Pg. 27-28	-
Economic Performance				
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	Our Economic Contribution, Pg. 44-46	7, 9
	203-2	Significant indirect economic impacts	Agrivoltaics: Merging Solar Power with Agriculture, Pg. 25	8
	204-1	Proportion of spending on local suppliers	Responsible Supply Chain, Pg. 46	8, 12
Anti-corruption				
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Sustainability Approach and Governance, Pg.9	16
	205-2	Communication and training about anti-corruption policies and procedures	Sustainability Approach and Governance, Pg.9	
	205-3	Confirmed incidents of corruption and actions taken	Sustainability Approach and Governance, Pg.9	

Abbreviation and Acroynms

BOFA	Basic Occupational First Aid, CPR & AED Training
BTE	Biogas-to-Electricity
CC	Carbon Credits
CDM	Clean Development Mechanism
CePSWaM	Certified Environmental Professional in Scheduled Wastes Management
CGPP	Corporate Green Power Programme
CHRA	Chemical Health Risk Assessment
CO ₂	Carbon Dioxide
DOSH	Department of Occupational Safety and Health
EAC	Energy Attribute Certificate
EES	Environmental, Economic and Social
EF	Emission Factor
EFB	Empty fruit bunches
ESG	Environmental, Social and Governance
GBS	Green Bond Standards
GBP	Green Bond Principles
GCEO	Group Chief Executive Officer
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
HIRARC	Hazard Identification, Risk Assessment and Risk Control
HSE	Health, Safety and Environment
IOD	Initial operating date
ISO	International Organization for Standardization
IFRS	International Financial Reporting Standards
I-REC	International Renewable Energy Certificate
JMS	Job Method Statement
kV	kilovolt
LSS	Large-Scale Solar
MACC	Malaysian Anti-Corruption Commission
mREC	Malaysian Renewable Energy Certificate
MSPO	Malaysian Sustainable Palm Oil
MW	Megawatt
MWh	Megawatt hour
MWp	Megawatt peak
NBAP	National Biomass Action Plan
NDC	Nationally Determined Contributions
NEDA	New Enhanced Dispatch Arrangement
NETR	National Energy Transition Roadmap
NRA	Noise Risk Assessment
O&M	Operation & Maintenance
PDCA	Plan-Do-Check-Act
PKS	Palm kernel shells
POME	Palm Oil Mill Effluent
RE	Renewable Energy
REC	Renewable Energy Certificate
RSPO	Roundtable Sustainable Palm Oil
SASB	Sustainability Accounting Standards Board
SRI	Sustainable and Responsible Investment
tCO ₂ e	Ton Carbon Dioxide equivalent
UCUA	Unsafe Condition Unsafe Act
UN SDGs	United Nations Sustainable Developments Goals
USECHH	Use and Standards of Exposure to Chemical Hazardous to Health
VCS	Verified Carbon Standard
VCU	Verified Carbon Unit



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