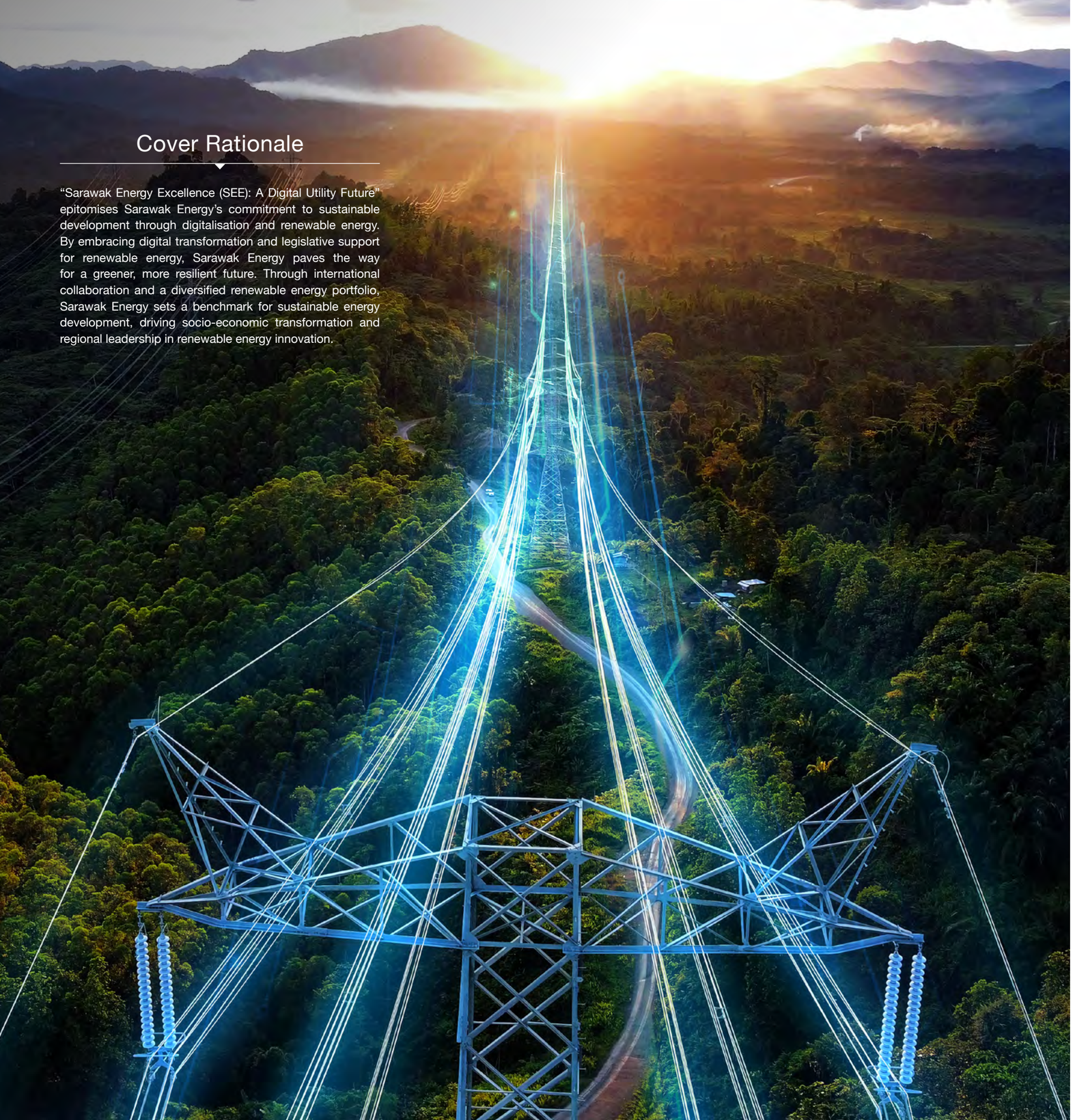
Sarawak Energy Excellence (SEE):
A Digital Utility Future

ANNUAL AND SUSTAINABILITY REPORT 2023



Cover Rationale

"Sarawak Energy Excellence (SEE): A Digital Utility Future" epitomises Sarawak Energy's commitment to sustainable development through digitalisation and renewable energy. By embracing digital transformation and legislative support for renewable energy, Sarawak Energy paves the way for a greener, more resilient future. Through international collaboration and a diversified renewable energy portfolio, Sarawak Energy sets a benchmark for sustainable energy development, driving socio-economic transformation and regional leadership in renewable energy innovation.

INSIDE THIS REPORT

This interactive PDF allows you to access information easily, search for a specific item or navigate between sections and links.

- **CONTENT LIST**
- **LINK**
- **PREVIOUS PAGE**
- **NEXT PAGE**
- **WEBSITE**
- **SEARCH**

ABOUT THIS REPORT

About This Report

2-2, 2-3, 2-5, 2-6, 2-29

Sarawak Energy's success is fuelled by robust corporate strategies and the trust of shareholders, stakeholders, and customers. As part of our commitment to good corporate governance, we continue to voluntarily provide updates on our operational, financial, and sustainable performance through annual reports, even though non-public-listed companies are not obligated to do so.

The Sarawak Energy Annual and Sustainability Report (ASR) provides a holistic and comprehensive overview of the Company's activities and performance for the year 2023.

In 2023, Sarawak Energy remained resilient in the face of challenges and continued to grow despite the constantly changing business landscape, as reflected in the disclosures of our ASR 2023.

Reporting Standards

Guided by local and global best practices in corporate statutory reporting, with the Bursa Malaysia Securities Berhad Listing Requirements as well as the Malaysian Code on Corporate Governance serving as our primary guidelines, our annual report has also complied with the standards set by the Australasian Reporting Awards (ARA).

For further assurance to our stakeholders, we referenced the GRI Standards for our sustainability reporting. For the complete list of Sarawak Energy's GRI disclosures and relevant references, you may refer to pages 259 to 265 of this report. In this year's reporting, we have incorporated selected International Sustainability Standards Board (ISSB)'s International Financial Reporting Standards (IFRS) S2 disclosures as we embark on the transitional journey to adopt the latest climate-related reporting disclosure standards. This will provide consistent, comparable, reliable, clear and efficient climate-related financial disclosures to help our investors and stakeholders make informed decisions.

Sarawak Energy will continue to improve the quality of our reporting while also growing the scope of our disclosures.

Reporting Scope and Boundary

The ASR 2023 consists of a comprehensive overview of the Company's activities and performance for the period from 1 January to 31 December 2023. This includes information on our leadership, corporate strategies, commitments, corporate governance and performance report card, as well as sustainability approaches, responsibilities and milestones.

Reporting boundary includes the data for Sarawak Energy Group's power generation portfolio, transmission and distribution, retail and other related business activities in Sarawak, Malaysia (100% ownership) as well as in West Kalimantan, Indonesia (for energy export) where relevant and available.

This report also highlights the accomplishments, challenges, risks and opportunities during the year, as well as our plans, goals and objectives for the coming year, providing stakeholders with a clearer understanding of our strategic direction moving forward

The ASR 2023 was developed in response to the feedback received from Sarawak Energy's stakeholders and is based on the assessment of our operations in light of the changes occurring in the economy, as well as the domestic and global energy industry.

Assessment of Material Matters

Our Materiality Issues and Materiality Matrix presented on page 117 of this report are based on the assessment of matters that are of the utmost importance to Sarawak Energy and our stakeholders.

Assurance

The Sarawak Energy ASR 2023 has been assured by an independent third party. The assurance statement can be found on pages 252 to 258 of this report.

Feedback

We welcome feedback, comments and enquiries via the following:

Corporate-related enquiries:
corpcomm@sarawakenergy.com

Sustainability-related enquiries:
sustainability@sarawakenergy.com

Statement of the Board of Directors of Sarawak Energy Berhad

The Board is pleased to present the Sarawak Energy Annual and Sustainability Report 2023 with the confidence that it is a fair representation of Sarawak Energy's performance throughout 2023.

Approved by the Board of Directors and signed on behalf of the Board.

Datuk Amar Abdul Hamed Sepawi
Chairman

Datuk Haji Sharbini Suhaili
Group Chief Executive Officer

ABOUT SARAWAK ENERGY

About Sarawak Energy

2-1, 2-6, 2-7, 2-28, EU3

Sarawak Energy is an energy development group of companies and a vertically integrated power utility, wholly owned by the Sarawak Government. Our business includes the generation, transmission, distribution, retail and export of electricity.

With an energy mix that is predominantly renewable hydropower, complemented by indigenous gas and coal for energy security and diversity, we provide the power to light up communities, homes and businesses in Sarawak.

Today, we are Malaysia's largest renewable energy developer and are working towards becoming a regional powerhouse that is fully capable of fulfilling our vision of providing renewable, reliable and affordable energy to Sarawak and beyond.

Total Employees
5,809
(As of 31 December 2023)

Key member of the
International Hydropower Association (IHA)
since 2010

Member of the
Global Reporting Initiative (GRI) Community
since 2016

Member of the
UN Global Compact Network Malaysia & Brunei (UNGCMYB)

Customer Accounts[a]
807,292

674,631
Domestic

118,302
Commercial

1,131
Industrial

13,224
Public lighting

4
Export

Note: [a] *Grid connected and active customers' account.*

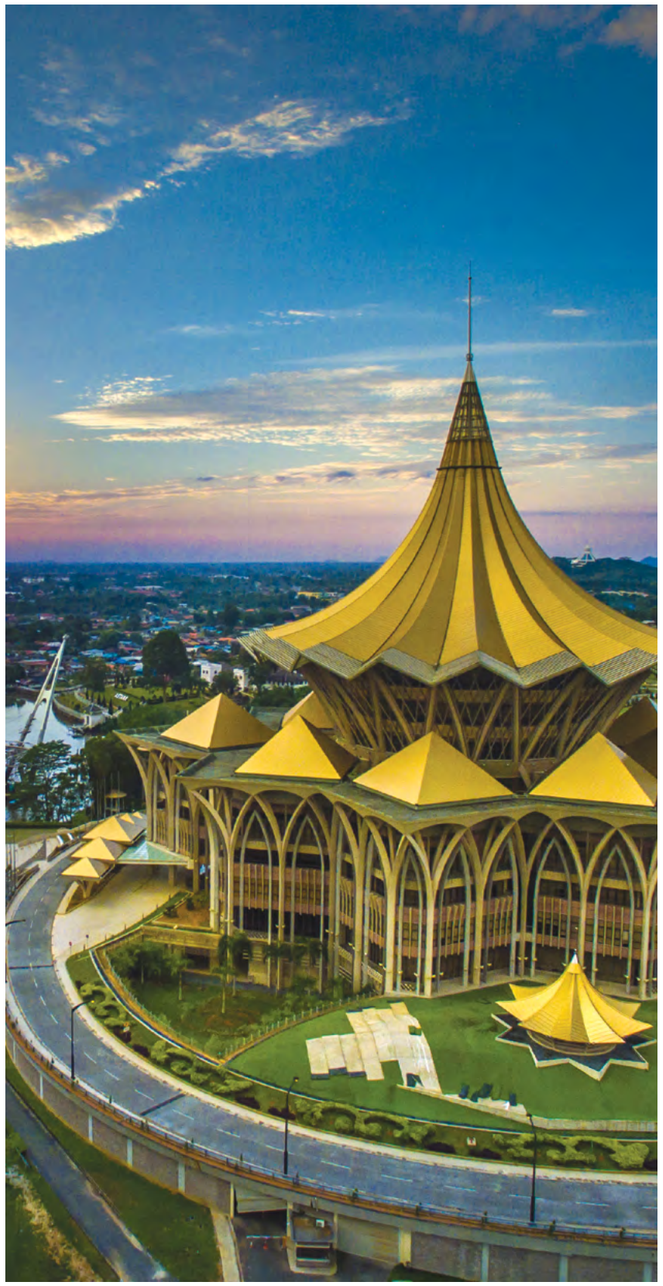
Vision, Mission and Living Our Values

VISION

Sustainable growth and prosperity for Sarawak by meeting the region's need for reliable, renewable energy

MISSION

1. Pursue opportunities for growth by fully developing the Sarawak Government's Sarawak Corridor of Renewable Energy agenda
2. Ensure our own safety and the safety of others, with a commitment to do 'no harm to anyone at any time'
3. Provide a reliable supply of clean, competitively priced energy to support the economic and social development of Sarawak and our partners in the region
4. Operate as a business based on principles that reward our owners and employees, and meet or exceed our customers' expectations
5. Honour the trust placed in us by the people of Sarawak, by acknowledging and respecting them and contributing to their well-being
6. Set and achieve high ethical and corporate standards that are a source of pride for our employees, customers and owners
7. Develop our people, leadership and teamwork to cultivate an agile, open and customer-focused culture that faces challenges and adapts to change through innovation and collaboration
8. Leverage natural resources in a sustainable and responsible way
9. Achieve operational excellence through a commitment to continual improvement and best practice



ABOUT SARAWAK ENERGY

Vision, Mission and Living Our Values

OUR CORE VALUES

COURAGE

We dare to do what is right and in the best interests of our Company and the community, even when it is not easy to do so.

Attributes

- Dare to speak one's mind
- Dare to share different viewpoints
- Dare to intervene to right the wrong
- Dare to take risks in decision-making

UNITY

We collaborate and work together to deliver our business objectives.

Attributes

- Purposeful collaboration
- Enterprise-first mindset
- We before me
- Synergy and teamwork

RESPECT

We value differences, include and acknowledge different points of view and listen well in all situations.

Attributes

- Value differences
- Be inclusive
- Listen
- Be humble

INTEGRITY

We are honest and can be trusted by people to do what is right.

Attributes

- Professionalism
- Honesty
- Trustworthy
- Do the right thing

ACCOUNTABILITY

We work hard and are responsible for delivering our promises to the highest standards.

Attributes

- Ownership
- Commitment
- Delivery on promises
- Do things right with professionalism

WINNING BEHAVIOURS

1. **Proactive on HSSE**
2. **Value and bottom line driven with strong cost discipline**
3. **Trusted to deliver on our promises**
4. **Precise and speed conscious**
5. **Conducting our business with integrity**
6. **Focusing on teamwork and integration**
7. **Working across functional and organisational boundaries**
8. **Proud of Sarawak Energy and will do our best**
9. **Open and adaptable to leverage technology for solutions**
10. **Learning from our experience and mistakes**
11. **Employees of choice, working for the employer of choice**
12. **Respectful of our people and the law of the land**

Renewable Energy for Sarawak and Beyond

2-6, 203-1, 203-2, EU10, EU26, 3-3

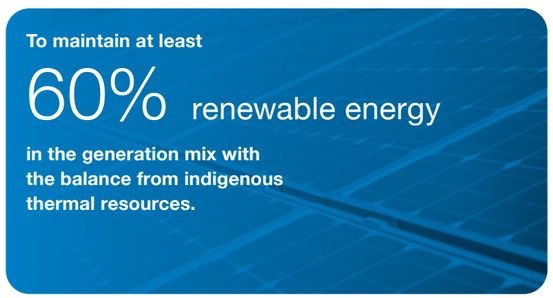
Sarawak Energy takes a holistic approach to power development, balancing energy security, sustainability and affordability to achieve sustainable socio-economic transformation in Sarawak and the region. Our efforts are also aligned with and support Sarawak's Post COVID-19 Development Strategy 2030 that puts affordable, reliable and renewable energy as the key enabler for sustainable economic growth.

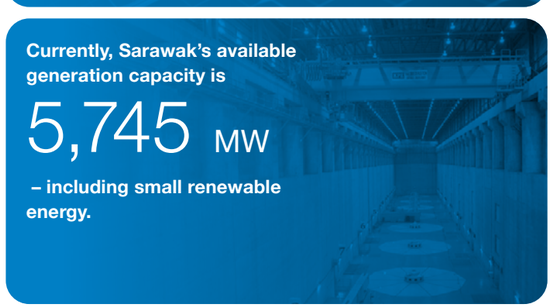
In pursuing this, we are committed to sustainable development and our business strategies are aligned with the United Nations Sustainable Development Goals (UN SDGs), with a focus on six goals that enable value creation and sustainable growth.

A Balanced Generation Mix

Sarawak's generation mix consists primarily of renewable hydropower, with indigenous gas and coal for energy security and diversity.

Long-Term Target





We are continuing to explore technological advances in alternative and renewable energy sources to light up Sarawak sustainably and cost-effectively.

Electricity Tariff

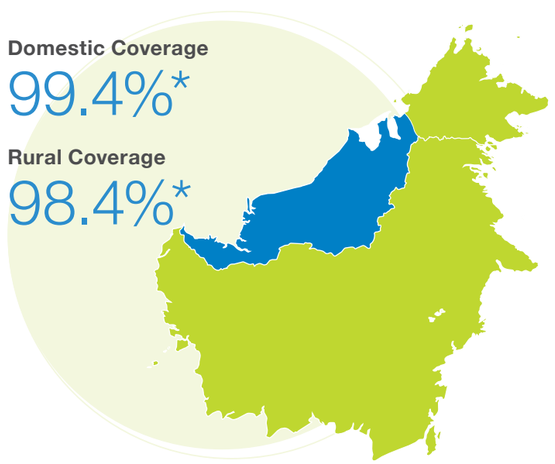
We offer among the most competitively priced average unsubsidised tariffs in Southeast Asia.

Our average rate is 28 cents per kWh. This has attracted significant investments from power-intensive industries to Sarawak, powering job creation and socio-economic growth.

Lighting Up Communities

Working under the purview of the Ministry of Utility and Telecommunication, Sarawak Energy is accelerating rural electrification through the Rural Electrification Scheme (RES), Rural Power Supply Scheme (RPSS) and Sarawak Alternative Rural Electrification Scheme (SARES), to support Sarawak's ambition to achieve full electrification by 2025.

As of 31 December 2023, we have achieved 99.4%* overall domestic coverage and 98.4%* rural coverage in line with UN SDG No. 7 to ensure access to affordable, reliable, sustainable and modern energy for all.



ABOUT SARAWAK ENERGY

Renewable Energy for Sarawak and Beyond

Capturing Growth

Renewable hydropower offers investors reliable, renewable and affordable energy, as well as the option to green their operations.

New Opportunities

Between 2008 and 2023, 15 Power Purchase Agreements (PPA) have been signed with industries in SCORE as well as a Power Exchange Agreement (PEA) for the interconnection with PLN in West Kalimantan. Close to a total of 3,025MW has been committed. In 2023, we:

Signed a term sheet agreement with Longi Malaysia Sdn Bhd for 40MW.

Extended the existing PPA with OCIM Phase 2 for supply of 200MW.

Continued supply to Perusahaan Listrik Negara (PLN) through a joint agreement.

A More Sustainable Energy Future

- As a signatory of the San Jose Declaration on Sustainable Hydropower, Sarawak Energy is aligned with its principles and advocates that, "The only acceptable hydropower is sustainable hydropower".
- First corporate body in Malaysia to pledge support for 'Business Ambition for 1.5°Celsius'.
- Received approval for our near-term science-based targets by the Science Based Target initiative (SBTi) in November 2023 – the first large corporation in Malaysia to receive SBTi validation and approval.
- Developing a 50MW floating solar project at the reservoir at Batang Ai HEP to increase the share of alternative energy in Sarawak's generation mix.
- Working with industrial players in the region to support decarbonisation. Supplying 100% renewable energy via the REC mechanism to offset carbon emissions associated with their electricity consumption.
- Signed a Memorandum of Collaboration with Bursa Carbon Exchange (BCX), Hydropower Sustainability Alliance and International REC Standard Foundation in December 2023 to offer RECs for trading.
- With internationally trained in-house Hydropower Sustainability Standard (HSS) assessors, we reinforce our commitment to enhancing Sarawak Energy's hydropower sustainability performance and establishing ourselves as a renewable hydropower specialist.

Becoming a Regional Powerhouse

We are committed to implementing our plans for an interconnected Borneo via the Borneo Grid and, subsequently, the ASEAN Power grid, placing Sarawak Energy as the Battery of ASEAN.

- In 2016, we established Sarawak's first interconnection to export power to West Kalimantan in Indonesia.
- We signed a Power Exchange Agreement and an Interconnection Agreement with Sabah Electricity Sdn Bhd to export power supply to Sabah in 2021.
- We are making positive progress in the development for the proposed 1,375MW Mentarang Induk Hydroelectric Project in North Kalimantan, which will be our first international joint venture hydropower development project.
- In 2022, the unincorporated consortium (Sarawak Energy, Singapore Power and Sembcorp Utilities) received a non-binding Letter of Support from the Energy Market Authority of Singapore in favour of the proposed Singapore Interconnection Project. The feasibility studies confirmed that the project is technically viable.

Leading Regional Efforts in Climate Action

Greening the Transportation Sector

- First Company in Sarawak to incorporate electric and hydrogen fuel cell vehicles into its corporate fleet.
- Collaborated with Gentari to launch an EV fast charging station in Kuching. This Direct Current Fast Charger Station is the fastest public charger in Borneo and it is part of our plan to make Sarawak EV ready.
- Supported the launch of four Kuching Metro electric city buses to further advance green mobility.
- Through our Integrated Hydrogen Production Plant and Refuelling Station, we fuel Kuching's hydrogen buses and cars.
- Further seeding of universal public EV chargers that are being expanded and deployed to other cities such as Sibu, Bintulu and Miri.

Energy for Sarawak

2-6, 203-1, 203-2, EU1, EU10, 3-3

Sarawak's sustainable growth is underpinned by our commitment to providing reliable, affordable and regionally competitive energy solutions. As the primary energy provider in Sarawak, we are dedicated to harnessing our natural resources in an ethical and sustainable manner to support development and facilitate socio-economic transformation.

To ensure energy diversity and security, Sarawak's generation mix primarily consists of renewable hydropower, supplemented by indigenous coal and gas. Sarawak Energy is expanding its solar capabilities, in line with the Post COVID-19 Development Strategy target to achieve 60% renewable energy by 2030. A pilot 50MW floating solar farm at Batang Ai HEP's reservoir is currently underway – expected to be commissioned in Q4 of 2024.

Our generation capacity has experienced significant growth, increasing from 1,347MW installed capacity in 2010 to a robust 5,745MW available capacity today, which includes small-scale renewable energy installations. Notably, large-scale renewable hydropower plants contribute a substantial 3,452MW to our total capacity. The availability of energy generated from renewable hydropower serves as an attractive proposition for investors seeking to incorporate sustainable practices within their operations.

Generation Capacity Growth

2010 — 2023

1,347 MW — **5,745 MW**

Total Capacity

Contribute A Substantial

+3,452 MW

to our total capacity

Murum Hydroelectric Plant

Energy for Sarawak

2-6, 203-1, 203-2, 3-3

Renewable and Sustainable Hydropower Development

Since acquiring Bakun in 2017, Sarawak Energy has been successfully overseeing the Murum and Bakun Hydroelectric Plants (HEPs) as a unified and integrated operation, in line with Malaysia's pioneering cascading power sources initiative.

1. **Provides a modern power system and accelerates rural electrification efforts.**
2. **Lower Levelised Cost of Electricity (LCOE), enabling Sarawak to have among the most competitive average unsubsidised tariffs in the region.**
3. **Decarbonised Sarawak's power system.**
4. **Mitigates severity of downstream flooding during heavy rainfall.**
5. **Powers community growth.**
   - **LITERACY AND EDUCATION**
   - **EMPLOYABILITY AND ENTREPRENEURSHIP**
   - **CULTURE AND HERITAGE PRESERVATION**
   - **HEALTH AND QUALITY OF LIFE**
6. **Drove launch of Sarawak's first Renewable Energy Certificate (REC).**
7. **Drives renewable energy transition for a sustainable energy future in the region.**
8. **Bolsters Sarawak's socio-economic transformation and digital economy, including development in rural areas.**
9. **Supports the establishment of totally protected areas, such as the Batang Ai National Park.**

Our fourth large renewable hydroelectric project, known as Baleh HEP, is currently under construction and is expected to be completed by the end of this decade.

San Jose Declaration on Sustainable Hydropower's Principles

As a staunch advocate for responsible hydropower development, Sarawak Energy is fully aligned with the principles outlined in the San Jose Declaration on Sustainable Hydropower, which was officially launched at the World Hydropower Congress in 2021.

In order to ensure that hydropower remains sustainable and continues to bring about lasting benefits, we are unwavering in our commitment to the following principles:

- Sustainable hydropower delivers on-going benefits to communities, livelihoods and the climate
- The only acceptable hydropower is sustainable hydropower
- Sustainable hydropower requires stakeholders to work together

Furthermore, we wholeheartedly support the Bali Statement on Powering Sustainable Growth, a significant document that was launched during the 2023 World Hydropower Congress. This statement builds upon the achievements of the San Jose Declaration and aligns with key components of Sarawak Post COVID-19 Development Strategy (PCDS) 2030.

Scan here to view the Bali Statement on Powering Sustainable Growth

Energy for Sarawak

2-6, 203-1, 203-2

Batang Ai Floating Solar Project

Energy Security and Diversity

To increase the share of renewable energy in our generation mix, Sarawak Energy is developing a 50MW floating solar system at the Batang Ai HEP reservoir, scheduled for commissioning in Q4 2024. This innovative project is a joint venture with China Power International Holdings and Trina Solar, with construction commencing on 20 June 2023.

The floating solar farm is situated on the reservoir of the Batang Ai HEP, Sarawak's first hydropower plant, which has been operational since 1985. Floating solar installations, mounted on structures that float on water bodies, benefit from the cooling effect of the water, leading to higher energy yields. The average annual energy output for this project is estimated to be approximately 97,000MWh/year. The synergy between hydropower and floating solar allows the latter to utilise existing grid infrastructure efficiently, enhancing Sarawak's position in renewable energy production and further decarbonising the region's energy landscape.

Upon completion, the Batang Ai Floating Solar Project will become Malaysia's largest floating solar plant, covering 190 hectares of the reservoir surface while occupying less than 3% of the lake's total surface area. It will also be the country's first major hybrid generation facility combining hydropower and solar.

The 50MW facility is expected to offset around 52 kilo tonnes of emissions annually, significantly contributing to the decarbonisation of Sarawak's power system. The project aligns with the Sarawak Government's PCDS 2030 and supports the state's vision of achieving 10GW Generation Capacity by 2030.

Floating solar technology optimises renewable energy generation by leveraging the natural cooling effect of the water, resulting in higher energy yields. This contributes to sustainable socio-economic development in Sarawak while advancing the region's energy transition. The development of the floating solar farm directly benefits the local community by providing employment opportunities, including skills transfer, boat rentals and site management, which help diversify income sources. Once operational, additional opportunities will arise for locals to participate in maintenance activities, further enhancing community benefits. Plans are also underway to deploy floating solar technology at other reservoir sites, such as Bakun and Murum.

In addition, we are currently in the process of installing Malaysia's inaugural utility scale Battery Energy Storage System (BESS) at our Sejingkat Coal-fired Power Plant. This 60MW/hour facility spans approximately 1.7 acres of land. Its primary purpose is to provide essential grid-support services and peak shaving applications to bolster the stability of Kuching's grid. The BESS will replace the previously decommissioned coal generator at the Sejingat Coal-Fired Power Plant, while simultaneously offering spinning reserve capabilities to leverage the available capacity of the Tanjung Kidurong Combined Cycle Gas Turbine.

As of 2023, we have successfully completed the design phase of the major equipment and have initiated foundation works. We anticipate this groundbreaking project to be commissioned by Q3 2024.

Our 842MW Tanjung Kidurong Combined Cycle Power Plant (CCPP), an extension of the existing Kidurong Power Station, was fully commissioned in 2022. This plant is one of the world's most efficient combined-cycle power plants in its class, providing reliable electricity for Sarawak's development and growth.

Energy for Sarawak

2-6, 203-1, 203-2, former EU6, 3-3

In line with the emphasis on carbon emission reduction and our commitment to fostering a sustainable energy future in Sarawak, we have made the strategic decision to refrain from constructing any new coal power plants. The Balingian Coal-fired Power Plant stands as the final addition to Sarawak's portfolio of coal-fired facilities, while the Sejingkat Coal-fired Power Plant is currently slated for retirement in 2028.

Strengthening the Reliability of Our System

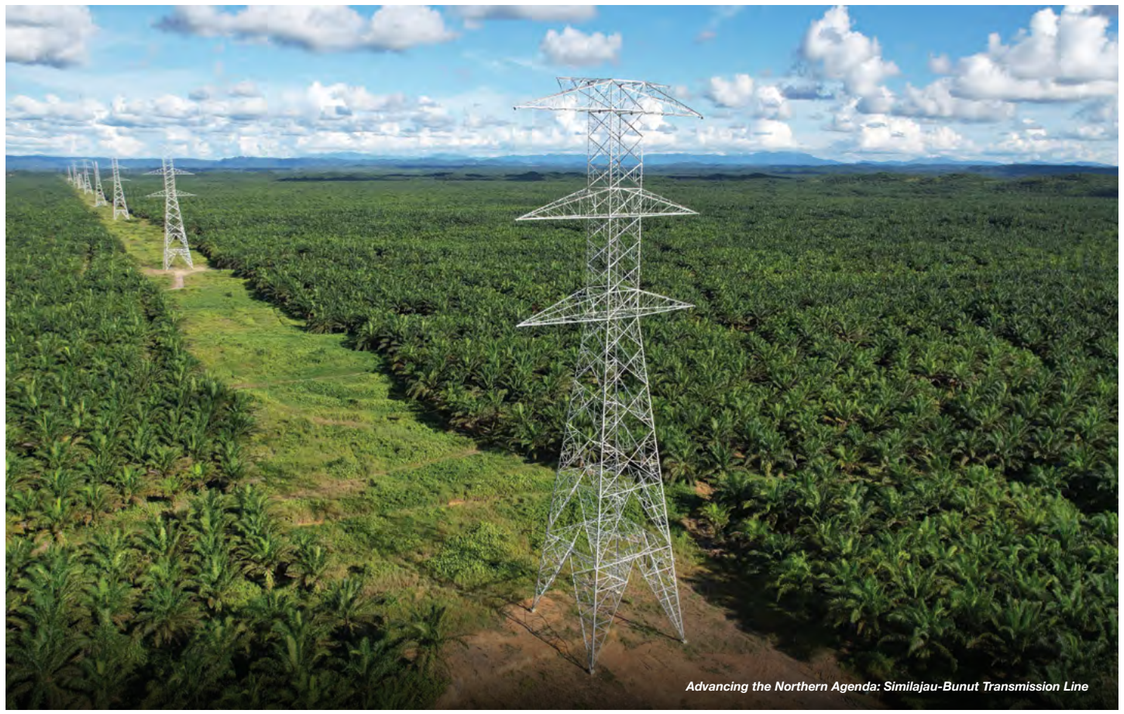
Sarawak Energy remains committed to investing in a robust and dependable transmission system, aimed at enhancing our network within Sarawak and facilitating further opportunities for export growth.

Northern Grid Extension Project

We have made significant progress in advancing the Northern Grid Extension project, which aims to enhance the reliability of the Northern Region's power supply. Through the expansion of our transmission network across Sarawak, we are creating new injection points for potential power exports to neighbouring regions like Sabah. This important endeavour brings us closer to realising the Borneo Grid.

Our efforts have included the construction of Extra High Voltage (EHV) 275/33/11kV substations and 275kV transmission lines. These infrastructure developments are crucial for the project's success and will be implemented in phases.

We are pleased to announce that the project is currently on schedule for commissioning in 2025. Once completed, it will enable the integration of Limbang and Lawas into the transmission grid, allowing for the decommissioning of their respective diesel power plants. This not only contributes to greener operations but also drives climate action in Sarawak.



Advancing the Northern Agenda: Similajau-Bunut Transmission Line

Year In Review 2023

403-1, 403-9

2-6, 203-1, EU26

CREATING A ROBUST HSSE CULTURE

- Achieved Zero Fatality and Lost Time Injury Frequency Rate (LTIFR) at **0.329***
- Recorded **50%** reduction in the number of work-related accidents from 2016 to 2023
- Transitioned from body mass index (BMI) to waist-to-height ratio or WtHR as our occupation health key performance indicator; saw corporate performance improvement of **4.89%** from Q1 to Q4
- **9.4 million** total safe man-hours for Sarawak Energy Resources, maintaining Goal Zero and free of Lost Time Injuries since June 2018
- No intrusions at our guarded assets
- Incepted Zero Leak Drive at all eight major power plants
- Introduced Hazardous Area Classification (HAC) and Process Safety Fundamentals
- Participated in Asia HSE Summit 2023 as a panellist as well as the 37th Asia Pacific Occupational Safety and Health Organisation (APOSHO) Conference

TOWARDS FULL ELECTRIFICATION IN SARAWAK

- **99.4%*** overall electrification rate reached for Sarawak
- **98.4%*** electrification rate for rural areas
- **27,951** households electrified from 2019 to 2023
- Electrified an accumulative 1,995 households through our Last Mile and SARES programmes since January 2023

STRENGTHENING OPERATIONAL AND SERVICE EXCELLENCE

- Achieved customer satisfaction index of **97.26%**
- Recorded overall SAIDI of **81.89 minutes**[a] – our all-time low – and SAIFI of **1.18 times**[a]
- Reduced non-technical losses by **10.79%**, enabled savings up of **582.51GWh**

PROVIDING RELIABLE ELECTRICITY SUPPLY

- Fully commissioned three substations and one partially commissioned
- Proactive maintenance strategy via replacement of aged equipment reaching end of asset economic life
- Grid Expansion of distribution networks to meet growing demand, and Grid Performance improvement via converting Overhead Line to Underground Cable for performance improvement

Note: *1. [a] SAIDI & SAIFI include generation, distribution and transmission level.*
2. LTIFR figure excluding fatalities.

CONTRIBUTING TO LOCAL VALUE CHAIN NETWORK

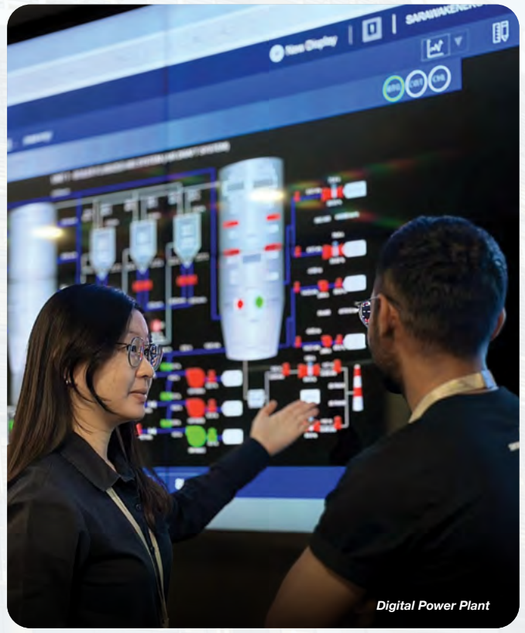
- Registered 4,443 vendors under the Sarawak Energy e-Procurement (SEPRO) system and provided extensive training to both vendors and staff
- Securing competency electrical training courses specifically for Sarawak Energy contractors and individual electricians from the Centre for Technology Excellence Sarawak (CENTEX) and the Sarawak Energy Learning Centre (SELC)

SEALING OUR POSITION AS A GREAT PLACE TO WORK

- Achieved our 'Greater Place to Work' status, affirmed by our Sarawak Energy Employee Survey (SEES) 2023
- Awarded 207 scholarships to students and employees
- Exceeded the target of 95% Individual Development Programme (IDP) with **98%** completion
- Reported the highest Competence Assurance Framework (CAF) Assessment in the last three years
- Recorded **84%** of Diversity, Equity and Inclusion (DEI) SEES score

SPEARHEADING DIGITALISATION

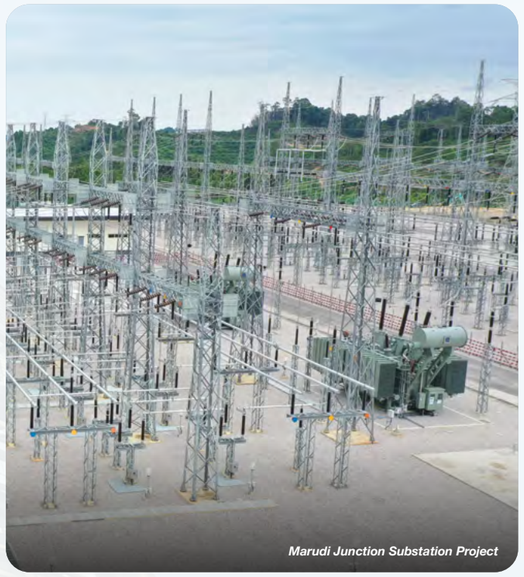
- Launched the Online Dynamic Security Assessment (DSA) – Transient Security Assessment Tool at the State Dispatch Centre (SDC), which is a power system analysis tool to alert system operators of potential imminent system security risks
- **66%** completion of Sarawak Energy Data Network transition since 2020
- Balingian Power Generation (BPG) is officially the first Digital Power Plant (DPP) in Sarawak
- **43%** completion of 2025 Smart Grid Roadmap with installation of:
  - **66,151** smart meters throughout Sarawak
  - **47%** implementation of Distribution Automation systems
  - Deployed Smart Surveillance System to 63 Zone Sub CCTV and 3 11kV D-Sub CCTV
- Rolled out SEB cares 2.0 with new user interface and additional features
- Launched S4 HANA Migration Project, a major enterprise resource planning transformation project to drive operational efficiency



Digital Power Plant

IMPROVING PROJECT DELIVERY

- Experienced unprecedented growth in capital project portfolio at **RM47.37 billion** in 2023
- Rated in the second quintile in the Independent Project Analysis' (IPA) annual benchmarking assessment
- Commissioned two transmission projects which are the Marudi Junction-Eastwood 132kV Transmission Line and the Phase 1 of Kuching Network Reinforcement
- Recorded **95,821** man-hours of training, sharing of experiences and lessons learned since 2020
- Significant improvement of our regulatory and permitting functions for time taken for contractors to obtain approval of foreign manpower work pass



Marudi Junction Substation Project

SHARPENING COMMERCIAL ACUMEN

- Reduced annual generation cost by **RM26.8 million** as a result of Primary Reserve enhancement
- Realised tangible OPEX savings of **RM210,748** through the Zero Leak Drive
- Officially launched the Remote Monitoring and Diagnostic (RMAD) Centre, accumulating savings of **RM5.3 million** since Q1 2022

2023 YEAR IN REVIEW

Year in Review 2023

2-6

C4 Sarawak

EMBEDDING SUSTAINABILITY IN ENERGY

- Launched the CHITOSE Carbon Capture Central Sarawak (C4 Sarawak), Sarawak's first industrial microalgae production facility
- Held the fifth edition of SCIENCE for students, aimed at raising awareness and promoting innovation in sustainable waste management and resource conservation

ADVANCING WITH OUR REGIONAL POWERHOUSE AMBITIONS

- Formed a consortium with Sembcorp Utilities and Singapore Power for technical studies and are in commercial negotiations for interconnection with Singapore
- Successful completion of the first phase of the 1,375MW Mentarang Induk Hydroelectric Project (MIHEP), involving 28 households
- Progressing at the basic engineering stage of the KaBaMa Hydroelectric Project

UPHOLDING GOVERNANCE

- Revised the Group's Procurement Policies and Procedures (PPP) for relevance and adequacy
- Conducted regular engagement sessions such as PPP briefings, Procurement Assurance activities and the Procurement Ambassadors programme to strengthen governance, integrity and transparency
- Streamlined operations and increased transparency through the abolition of manual processes with the adoption of SEPRO system

GAINING INTERNATIONAL RECOGNITION

- Organised the third edition of our flagship conference, the Sustainability and Renewable Energy Forum (SAREF) 3.0, reaffirming our position as a leader in renewable energy development and sustainability in Southeast Asia
- International representation at the United Nations Climate Change Conference (COP28) in Dubai
- Participated in the World Hydropower Congress and the Singapore International Energy Week 2023 and Energy Asia 2023

AWARDS AND ACCOLADES

- **Sustainability**
  - Forward Faster Sustainability Awards 2023 by the United Nations Global Compact Network Malaysia and Brunei
- **HSSE Practices**
  - MSOSH Awards for the fifth consecutive year
  - Gold Merit Award for third consecutive year
- **Human Resource**
  - HR Awards – Best Company to Work for in Asia 2023 and Digital Transformation Award 2023
  - Brandon Hall Awards – Gold awards for the Best Company to Work for in Asia 2023 & Digital Transformation Award 2023

Forward Faster Sustainability Awards 2023

Powering a Sustainable Future: Advancing Renewable Energy on a Global Stage

2-6

SUSTAINABILITY & RENEWABLE ENERGY FORUM | SAREF 3.0

Regional Net Zero and Sustainable Communities

Renewable Energy Development and Interconnections

In continuing the conversation on renewable energy and actionable solutions to build a more sustainable energy future for Southeast Asia, Sarawak Energy concluded the third edition of Sustainability & Renewable Energy Forum (SAREF 3.0) this year.

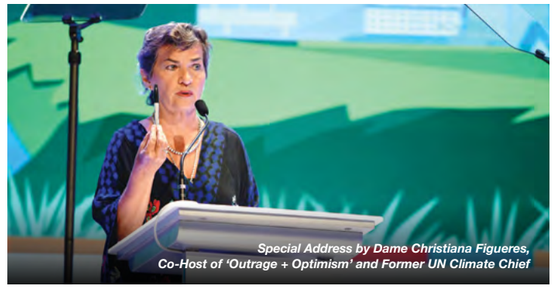
Held from 6 to 7 September 2023, SAREF 3.0 brought together over 1,350 delegates from 18 countries. The forum emphasised interconnections through renewable energy development as a key mechanism to achieve shared regional sustainability goals – ensuring collective energy transition in ASEAN.

Supported by the Ministry of Utility & Telecommunication and the Ministry of Energy & Environmental Sustainability, the forum brought together industry leaders, policymakers and experts from the global energy and sustainability sectors to work together in driving the transition towards a sustainable energy future.

Since the inaugural launch of SAREF in 2019, significant progress has been made to achieve the following five aspirations:

1. **Recognising large hydro as a renewable energy resource in Malaysia**
2. **Work towards greater policy support from the government to enable businesses to deliver on decarbonisation initiatives**
3. **Promote a holistic ecosystem with stakeholder support, including the provision of basic infrastructure and fiscal incentives on electric and fuel-cell vehicles**
4. **Foster greater collaboration with key stakeholders, leveraging SAREF as a platform to deliver the UN SDGs**
5. **Embed concepts on circular economy to advance our sustainability journey**

The opening ceremony, officiated by the Premier of Sarawak, Yang Amat Berhormat Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari, highlighted Sarawak's leadership in renewable energy, driven by hydropower. The Premier underscored Sarawak's potential to become the 'Battery of ASEAN' through power grid interconnections and regional cooperation. This aligns with Sarawak's ambitions to increase its renewable energy mix, export energy to neighbouring regions and develop sustainable cities.



Special Address by Dame Christiana Figueres, Co-Host of 'Outrage + Optimism' and Former UN Climate Chief

Speaking at SAREF 3.0, Dame Christina Figueres emphasised the crucial role of renewable energy in driving global green growth, as capital investments shift towards renewables. To avert irreversible climate damage, urgent emission reductions and exponential solutions are needed, particularly in renewable power generation and mobility, which offer more efficient technologies than fossil fuels. Three urgent steps are required to accelerate the energy transition: building smart grids to accommodate renewable energy, expediting permitting processes, and redesigning energy markets to support renewables.

Sarawak, positioned strategically within ASEAN, can leverage its natural resources to become a regional energy hub and can lead by example to inspire global action on renewable energy.

Powering a Sustainable Future: Advancing Renewable Energy on a Global Stage

2-6, 2-29

Inspiring Progress Through Insightful Sessions

Throughout the two-day conference, SAREF 3.0 featured insightful sessions and an Energy Leaders Forum, covering various topics that emphasised the importance of renewable energy for achieving Net Zero goals and collaboration between the public and private sectors. Key focuses of the panel sessions included regional interconnection via the ASEAN Power Grid, financial support for developing countries, and restructuring lending policies to support renewable energy.

The role of financial institutions, gender diversity, workforce reskilling, and youth participation were also discussed, alongside the urgency for faster action in Southeast Asia's energy transition.

Collaborations and Partnerships

In line with UN SDG 17's focus on fostering partnerships and demonstrating leadership within the industry, the forum also marked several significant launches. These included the Sarawak Chapter of the Malaysian Photovoltaic Industry Association (MPIA), the World Hydropower Outlook, and the Gentari-Sarawak Energy EV Charging Station, reflecting collaborative efforts to share knowledge and drive green energy solutions towards a sustainable future.

The MPIA Sarawak Chapter was launched to boost Net Energy Metering projects, support solar energy adoption, and develop policies and regulations with the government for the photovoltaic industry.

The 2023 World Hydropower Outlook outlined a realistic roadmap to enable hydropower and other renewables to deliver against Net Zero targets and offers a forward look into the future of hydropower.

Sarawak Energy and Gentari launched Borneo's fastest public EV charging station to promote green mobility solutions and increase the adoption of EVs in Sarawak.

Scan the QR codes to access special publications on SAREF 3.0.

Accelerating the Energy Transition: Perspectives from SAREF 3.0

Spearheading Energy Transitions

Follow this space for updates on SAREF 4.0 in 2025.

Powering a Sustainable Future: Advancing Renewable Energy on a Global Stage

2-6, 2-29

THE 2023 UNITED NATIONS CLIMATE CHANGE CONFERENCE (COP28)

Sarawak Energy was also at the COP28 in Dubai, showcasing regional renewable energy leadership by sharing Sarawak's ongoing initiatives in hydropower and its potential as a key player in Southeast Asia's energy transition. A key highlight was Sarawak's focus on its abundant hydropower resources, which contribute to regional Net Zero goals and sustainability initiatives.

Sarawak Energy's delegation also engaged in discussions on funding mechanisms and policy frameworks needed to drive energy transition at scale.

Forging Global Partnerships for the Goals

Sarawak's strategic focus on expanding renewable energy sources, including hydrogen and solar power, is strengthened through collaborations with major global players such as Abu Dhabi Future Energy Company PJSC (Masdar), a global renewable energy leader.

A Memorandum of Understanding (MoU) was signed to advance renewable energy projects in Sarawak and Malaysia, with a goal to jointly develop 2GW of renewable energy, beginning with 1GW in Sarawak. This collaboration aims to further enhance Sarawak's potential in meeting both local and international energy demands while contributing to Malaysia's national renewable energy targets.

Read more about the partnership here

As part of Sarawak Energy's efforts to share our hydropower resources, we signed a Memorandum of Collaboration (MOC) with Bursa Carbon Exchange (BCX), a subsidiary of Bursa Malaysia, the Hydropower Sustainability Alliance, and the I-REC Standard Foundation at COP28's Malaysia Pavilion. This collaboration introduces the trading of renewable energy certificates (RECs) on BCX, Malaysia's voluntary carbon market, enabling corporations to meet their sustainability targets by procuring renewable energy through a credible and transparent mechanism.

Other than REC supply, the MOC also covers cross-border REC trading, promoting sustainability certifications, and integrating the Hydropower Sustainability Standard with I-REC's tracking system. Set for a 2024 launch, this initiative supports Malaysia's Net Zero GHG emissions target by 2050.

Learn more about the MOC here.

2023 YEAR IN REVIEW

Powering a Sustainable Future: Advancing Renewable Energy on a Global Stage

2-6, 2-29

WORLD HYDROPOWER CONGRESS 2023

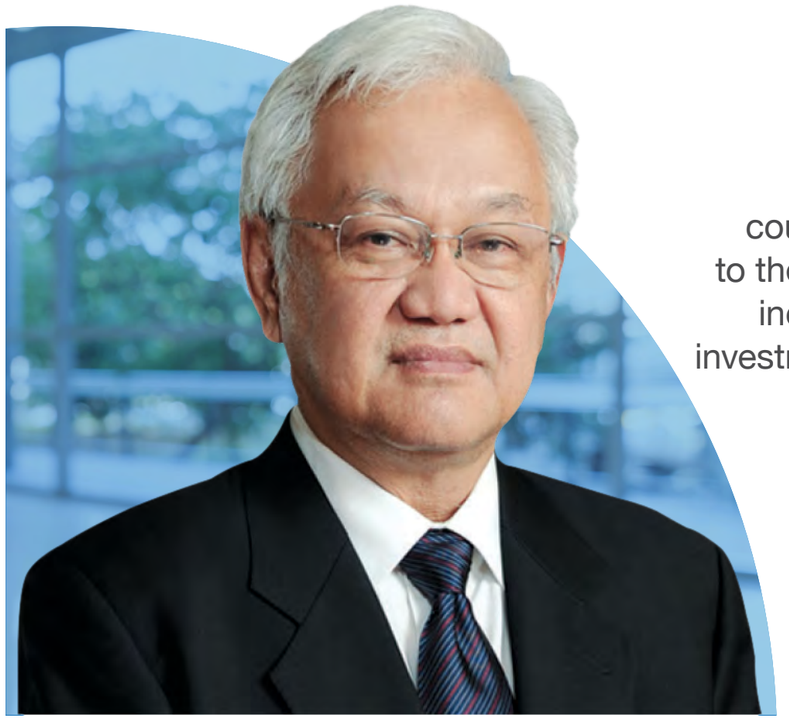
At the World Hydropower Congress (WHC) 2023, Sarawak Energy championed sustainable hydropower development, highlighting its key role in Sarawak's energy transition and hydropower's critical role in achieving global Net Zero targets.

As a strategic sponsor, a central part of Sarawak's engagement at WHC was our participation in a high-level dialogue that focused on cross-border collaborations and regional power grid interconnections, such as the ASEAN Power Grid. The discussions emphasised how hydropower, combined with other renewable energy sources, can enable regional energy security and reduce carbon emissions.

Sarawak Energy shared our hydropower journey and sustainable practices at the various panel sessions and dialogues. Key discussions focused on evaluating GHG emissions from hydropower reservoirs, the strategic role of interconnections, overcoming challenges in modernising hydropower assets, fostering inclusive workplaces, and the critical role of financiers in driving sustainability within the sector.

Chairman's Statement

2-22



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Dear Shareholders

In 2023, the global recovery from the pandemic-induced economic downturn, coupled with responses to the energy crisis, drove increased demand and investment in clean energy.

DATUK AMAR ABDUL HAMED SEPAWI
Chairman of Sarawak Energy

In 2023, the global recovery from the pandemic-induced economic downturn, coupled with responses to the energy crisis, drove increased demand and investment in clean energy. The International Energy Agency (IEA) reported that clean energy investments have surpassed those in fossil fuels, with recent volatility in fossil fuel markets – spurred by Russia's actions in Ukraine – accelerating the adoption of clean energy technologies. Meanwhile, BloombergNEF's Energy Transition Investment Trends 2024 Report reveals a 17% surge in global investment in the low-carbon energy transition, reaching a record USD 1.77 trillion. This substantial investment highlights the resilience of the clean energy transition amidst geopolitical uncertainties and economic challenges.

In Sarawak, the call for clean energy and sustainability resonates strongly, especially following the recent passing of the Electricity (Amendment) Bill 2023, which updates the Electricity Ordinance (EO). The Bill not only enables the State to shift towards clean energy but also empowers Sarawakians and investors to participate in the energy transition. For example, homeowners with solar panels producing up to 50 kW can sell excess electricity back to the main grid. This aligns with the mandate given to Sarawak Energy under the Bill as the single buyer within the State Grid Code. Sarawak Energy is honoured to be appointed in this role as the sole generator, distributor, and supplier of electricity for Sarawak. Following our appointment, we are now permitted to generate electricity from these new energy sources for distribution through our transmission grid system. The Bill will also facilitate obtaining wayleave access, significantly boosting our ability to electrify the rest of Sarawak.

Importantly, the Bill amendments align with the goals of the Post COVID-19 Development Strategy (PCDS) 2030, offering Sarawakians more opportunities in the power generation sector through job creation and revenue generation.

Chairman's Statement

2-6, 2-22, 203-1, 3-3

Key Milestones

This year, Sarawak Energy made great strides in expanding and strengthening our regional and international presence through collaborations and sharing our journey at various engagements. Our work on Sarawak-Indonesia's first international joint venture for the development of the 1,375MW Mentarang Induk Hydropower Project (MIHEP) is progressing well, gaining the national strategic project status due to its importance to Indonesia's Tanah Kuning Green Industrial Park (KIPI) in North Kalimantan. The groundbreaking ceremony for MIHEP was officiated by Joko Widodo, President of the Republic of Indonesia in early 2023.

As Indonesia's largest hydropower project, MIHEP highlights Sarawak Energy's recognition as strong driver of the renewable energy transition in ASEAN.

Our involvement in the project enables us to share our knowledge to advance the energy transition while advocating environmental and economic sustainability throughout the region.

We also forged a partnership with the Sarawak Government, Sembcorp Utilities, and Singapore Power to supply renewable energy directly to Singapore, with commercial negotiations underway for an interconnection. This undersea interconnection represents Sarawak's third interconnection, contributing to revenue diversification, the ASEAN/Borneo Power Grid development, and our Battery of ASEAN aspiration. Beyond driving renewable energy development in Sarawak, our initiative is expected to attract investment for mutual benefit and is supported by the Malaysian Federal Government.

In terms of thought leadership, the third edition of our flagship conference, the Sustainability and Renewable Energy Forum (SAREF) 3.0, attracted more than 1,600 delegates. Themed 'Regional Net Zero and Sustainable Communities: Renewable Energy Development and Interconnections', the event was a resounding success, channeling optimistic discussions into real-world actions for tangible progress in energy transition.

Sarawak Energy's active participation in global platforms such as the United Nations Climate Change Conference (COP28), the 2023 World Hydropower Congress and the Singapore International Energy Week further positions Sarawak Energy as a regional leader in renewable energy development and sustainability, enabling us to share our experience and learnings with a broader audience.

I am proud to announce that Sarawak Energy has achieved over 5 million in Renewable Energy Certificate (REC) volume sales, which is 335 times more than the 15,000 RECs sold in 2020. Sarawak's first REC was launched in 2019 at the inaugural SAREF, promoting inclusivity to allow greater participation by corporates towards shaping a more sustainable energy future.

EXPANDING OUR PRESENCE

NORTH KALIMANTAN

Groundbreaking ceremony for the Mentarang Induk Hydropower Project (MIHEP) was held in North Kalimantan, officiated by President Joko Widodo, of the Republic of Indonesia.

SINGAPORE

Sarawak Energy partnered with the Sarawak Government, Sembcorp Utilities and Singapore Power to directly supply renewable energy to Singapore.

Singapore International Energy Week 2023

Chairman's Statement

2-6, 2-22, 2-23, 2-24, 2-29, 203-1, 3-3

Governance

To maintain a solid foundation of corporate governance and compliance ensuring accountability, transparency, and ethical conduct, Sarawak Energy focused on strengthening our procurement governance this year.

The Group's Procurement Policies and Procedures (PPP) have been updated to ensure relevance and adequacy in line with best practices. This year, regular engagement sessions such as PPP briefings, Procurement Assurance activities, and the Procurement Ambassadors programme, were held to bolster governance, integrity, and transparency. With the adoption of the SEPRO programme, we have streamlined operations and increased transparency by abolishing manual processes. This adoption has also enabled us to expand our vendor engagement and market reach, with almost 700 vendors registered in our system. The effectiveness of the SEPRO programme is further supported by our extensive training programme for vendors and employees.

Moving forward, Sarawak Energy is committed to leveraging technology to improve procurement efficiency and drive innovation.

Investing in Our People

Our people at Sarawak Energy continue to be the backbone of our growth and operations, driving our mission forward with dedication and expertise. Recognising the value of their opinions and feedback, Sarawak Energy is proud to have exceeded our 80% target, achieving the following results in the Sarawak Energy Employee Survey (SEES):

91% for Employee Engagement

85% in Diversity, Equity and Inclusiveness

84% for Continuous Improvement

In tandem with our refreshed Key Focus Areas (KFA) 3.0, identifying high-performance culture as a key enabler is expected to assist us in realising our newly commenced Sarawak Energy Excellence (SEE) 2025 strategic roadmap. To this end, we are focused on creating a winning and sustainable culture aligned with our KFA aspirational targets. We are cultivating an open and collaborative working environment, inspirational leadership and investing in employee retention and development. We are confident that these commitments will ensure the successful delivery of our business strategies.

LEADERSHIP MESSAGES

Chairman's Statement

2-6, 2-22, 203-1, 3-3

Sustainability at the Heart of the Organisation

Sarawak Energy prioritises sustainability across our operations, as evident in our biodiversity preservation efforts this year. The launch of our Biodiversity Interim Monitoring (BIM) initiative at Baleh HEP addresses biodiversity concerns highlighted during the 2020 Hydropower Sustainability Assessment Protocol (HSAP) assessment. Monitoring terrestrial and aquatic fauna and meeting the requirements of the Hydropower Sustainability Standard (HSS) Topic 6, the BIM team produced comprehensive reports in 2023 and implemented actions to close gaps identified through the HSAP recommendations.

We are also responding to global concerns regarding GHG emissions from hydropower reservoirs. Our Limnology & Gases unit initiated extensive studies, aligning with the SDGs and international best practices such as the HSS. As part of these efforts, a research agreement was formed with Curtin University Malaysia for a project titled 'Bioremediation for Mitigation of Greenhouse Gases in Hydropower Reservoirs' to develop a lab-scale prototype using bioremediation techniques to address GHG emissions. This technique, which introduces microorganisms to consume or break down environmental pollutants, aligns with our commitment to the 1.5°C pathway and Malaysia's 2050 decarbonisation goal.

Sejingkat Power Corporation (SPC), our subsidiary, surpassed its target by planting nearly 850 mangrove trees, exceeding the initial goal of 500. Additionally, SPC reached a key milestone with the introduction of the State's inaugural industrial microalgae production facility, named the CHITOSE Carbon Capture Central Sarawak (C4 Sarawak). C4 Sarawak represents an innovative approach to carbon capture and offers the potential for biofuel production by leveraging advanced technology, ultimately contributing to a reduction in our carbon footprint.

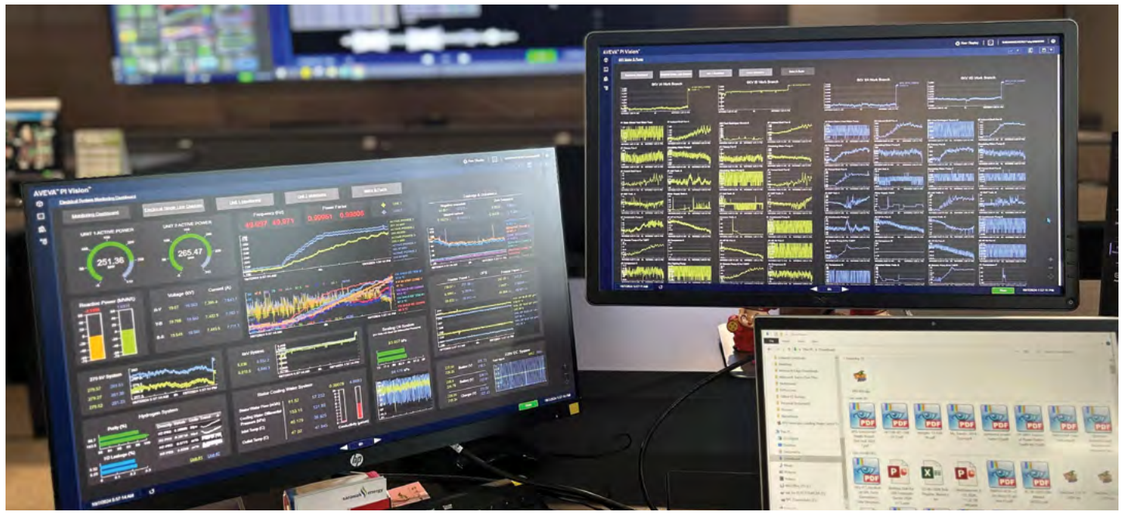
Meanwhile, Murum HEP upholds HSSE excellence through its participation in the MSOSH Award for the fifth consecutive year, aiming to enhance HSSE standards with the involvement of external assessors. Maintaining its Gold Merit Award for the third year running and as the only recipient of this award in Sarawak Energy, Murum HEP achieved a significant safety milestone of 2 million safe man-hours without Lost Time Incidents (LTI).

Externally, we also continued powering young minds in Sarawak through the fifth edition of SCIENCE (Sarawak Community Innovation and Engineering Convention). Themed 'Circular Energy and Zero Waste', the programme raised awareness and promoted innovation in sustainable waste management and resource conservation among school students.

Chitose Carbon Capture Central Sarawak launch

Chairman's Statement

2-22, 203-1



Fulfilling Sarawak's Digitalisation Aspirations

In realising our aspiration of becoming a sustainable digital utility by 2025, we remain guided by the Sarawak Energy Digitalisation Blueprint and Roadmap, implemented in 2018. During the year under review, we focused on bolstering our Digital Foundation, essential for enterprise modernisation and progress in smart grid and digital power plants (DPP). This initiative included upgrading the Sarawak Energy Data Network, with 66% of this transition completed, ensuring readiness for future digital utility challenges. Notable upgrades as part of the transition include enhanced internet connectivity, improved cybersecurity measures, and network transformation at major stations and offices, facilitating seamless remote work and improving user experience.

We also extended our efforts to become a data-driven business, delivering advanced analytics outcomes that support retail fraud analytics, smart meter analytics, and procurement risk analytics. Anchored on our Smart Business pillar, our DPP and Remote Monitoring and Diagnostics (RMAD) facilities integrate essential areas such as data management, cybersecurity, and digital technology to enhance operational efficiency, reliability, and performance. Meanwhile, our Smart Grid roadmap is progressing with smart meter installations, surveillance system deployment, and distribution automation implementation.

In customer service, our mobile application and web portal, SEB Cares 2.0, were successfully launched, offering essential services through an enhanced user interface. Sarawak Energy is driving operational efficiency and business growth through the SAP S/4HANA Migration Project, while collaborating with various stakeholders to support the State's digitalisation aspirations under PCDS 2030 and the Sarawak Digital Economy initiatives.

Sarawak Energy is supporting the State Government's objectives for PCDS 2030 and the Sarawak Digital Economy by collaborating with Sarawak Multimedia Authority, Malaysian Communications and Multimedia Commission, Sarawak Digital Economy Corporation Berhad (SDEC) to explore innovative telecommunications solutions aimed at enhancing rural connectivity, with a focus on the Serudit area in Sarawak.

Outlook

In 2024, energy consumption is expected to accelerate, with fossil fuels maintaining dominance despite the surging demand for renewables. Global energy consumption is expected to grow by 1.8%, primarily driven by robust demand in Asia despite persistently high energy prices. However, this growth will also see global coal, gas, and oil demand reaching record levels, creating additional challenges for emission reduction efforts. High commodity prices are likely to incentivise further investment in oil and gas production.

Nonetheless, momentum in renewable energy will persist, with combined solar and wind energy consumption growing by approximately 11% globally. Many countries are likely to accelerate the construction of hydrogen production capacity. Meanwhile, climate challenges remains a concern, as lower water levels in various regions continue to impact hydropower production.

LEADERSHIP MESSAGES

Chairman's Statement

2-22

At Sarawak Energy, we remain committed to spearheading the development of renewable energy, aligning with the government's initiatives under the Post COVID-19 Development Strategy 2030 (PCDS 2030) and contributing to a sustainable future.

Through innovative projects and strategic initiatives, we are dedicated to advancing clean energy solutions and driving the region's transition towards a greener and more resilient energy landscape. We are continuously exploring the potential of hydropower, including the development of cascading power sources, as well as other renewable energy options such as solar and biomass, to ensure a reliable and sufficient supply of renewable energy.

Acknowledgements

In another challenging yet productive year, I wish to thank our Board of Directors for their guidance in steering the organisation towards success. To our shareholders, we are honoured to have your trust in our vision, and we will continue to uphold our commitments to act in the best interests of Sarawak and its people.

We also recognise the importance of our authorities and regulators in maintaining sector oversight through the right policies that benefit all. To this end, we are grateful to the Premier of Sarawak, Yang Amat Berhormat Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari Bin Tun Datuk Abang Haji Openg, the Sarawak Government, the Ministry of Utility and Telecommunication and the Ministry of Energy and Environmental Sustainability Sarawak for their leadership and support.

I take this opportunity to welcome Datuk Amar Haji Mohamad Abu Bakar bin Marzuki, who has been appointed as Sarawak Energy's Non-Independent Non-Executive Director. At the same time, I congratulate our Group CEO, Datuk Haji Sharbini Suhaili, who has been conferred with the title of 'Datuk' this year – a well-deserved recognition. Our business partners, vendors, suppliers, and industry players are moving with us on our journey towards achieving shared goals for the State and the region, and we hope our collaborations will continue to flourish. At the heart of our organisation is our dedicated workforce, who tirelessly serve our stakeholders. Therefore, I thank the people of Sarawak Energy, consisting of great leaders and loyal employees, for another fulfilling year.

Finally, to our customers and the people of Sarawak who continue to power our business, thank you for believing in us and our mission to become a regional powerhouse.

Datuk Amar Abdul Hamed Sepawi
Chairman

Group Chief Executive Officer's Statement

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2023 was another notable year for Sarawak Energy as we continued to navigate our operating landscape with resilience, overcoming economic challenges while advancing key business strategies.

DATUK HAJI SHARBINI SUHAILI
Group Chief Executive Officer

This year saw us commence the implementation of the Sarawak Energy Excellence (SEE) 2025 Strategic Roadmap, which involves a refreshed set of six Key Focus Areas (KFA) or KFA 3.0.

KFA 3.0 will see higher levels of commitment being invested in HSSE, operations, project delivery, talent management, and commercial performance while nurturing a high-performance culture. We are strengthening these areas by clearly mapping aspirational targets for each KFA, with specified goals that will guide us in achieving our KPIs.

This transformation will be strategically supported by our Sarawak Energy Digitalisation Blueprint and Roadmap, anchored in on five key strategies. These strategies are designed to build a strong and effective digital foundation, transforming our work processes, cultivate a smart business environment, and managing data as strategic assets. Overall, the blueprint aims to foster a strong digital culture and empowers our people to grow technologically. Guided by the Roadmap and focusing on KFA 3.0, we are confident that Sarawak Energy is on track to becoming a sustainable top quartile digital utility.

It is also important to note that our strategies support the Sarawak Government's Post COVID-19 Development Strategy (PCDS) 2030. Going forward, we will ensure that sustainability continues to be a cornerstone of our business as we integrate environmental, social, and governance (ESG) best practices into the Company.

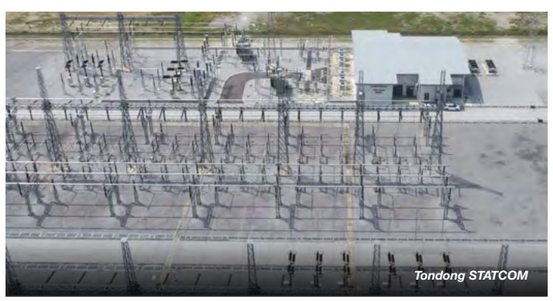
Group Chief Executive Officer's Statement

2-6, 2-22, 203-1, 203-2, 3-3

Key Accomplishments

Despite being in the early stages of implementation, we have made significant progress with SEE 2025, particularly regarding new infrastructure projects and innovative solutions. For instance, as part of our commitment to ensuring a reliable electricity supply to Sarawak, we have successfully commissioned four transmission projects during the year under review, advancing our efforts to achieve full domestic electrification by 2025.

We have also commissioned our very first static synchronous compensator (STATCOM) at the Tondong 275kV Substation, marking a critical moment in the Company's grid reliability and efficiency efforts. The two installed units of Tondong STATCOMs will provide dynamic and automated voltage support to the main state grid, benefiting Kuching – Sarawak's major load centre. By continuously adjusting large amounts of reactive power with fast response times, the Tondong STATCOMs will enhance power system stability and resilience, mitigating the risk of major blackouts or poor power quality during severe network disturbances.


Tondong STATCOM

In the same year, the Long San Solar Hybrid Station by Shanghai Electric was completed and handed over to us – the latest milestone in our sustainable energy solutions journey. With this facility, more than 100 domestic households and 16 public properties at Long San, Baram, will be supplied with renewable energy, providing the community with a more sustainable energy source.

To strengthen our relationship with our investors, we held the Sukuk Investors Townhall this year, our first since 2019, where we successfully completed a total issuance of RM3.5 billion, an increase from the initial RM1.5 billion.

Project Delivery (PD) Excellence

Achieving PD excellence is an important part of our business, and we continue to prioritise timely and efficient project delivery and completion, as reflected in our ranking in the second quintile of the IPA's benchmarking assessment. This achievement solidifies our standing as an industry leader.

This year, we successfully commissioned the Marudi Junction-Eastwood 132kV Transmission Line, a critical part of the Northern Agenda project, which acts as a secondary ring to the 132kV network serving Miri and supports the region's growth. We have also commenced the first phase of the Kuching Network Reinforcement, which includes the installation of new power transformers at several key substations in November 2023. These upgrades have helped alleviate system constraints and address increased demand from customers in the Samajaya Industrial Park area.

Group Chief Executive Officer's Statement

2-6, 2-22, 203-1, 203-2, EU29, 3-3

Value Creation and Optimisation

We engage with our vendors closely, recognising their importance to our supply chain network. In 2023, we signed four MoUs with various financial institutions as part of our Vendor Financing Programme to assist our vendors in financing solutions. Our total financing approved to date is RM82.2 million.

Our contractors and individual electricians continue to benefit from the Centre of Technology Excellence Sarawak (CENTEX) programme and the Sarawak Energy Learning Centre through competent electrical training courses. Additionally, they receive accredited certifications from the Ministry of Utility and Telecommunication's Electrical Inspectorate Unit (EIU). Other value-adding initiatives conducted during the year include the Sarawak Energy Business Opportunity seminar, the third SEVA Awards to celebrate vendors' achievements, and the Competency Development Programme for vendors.

Sustaining Operational Excellence

Our positive SAIDI performance in 2023 of 81.89 minutes reflects our ability to effectively address generation outages, restore power promptly following line tripping and facilitating swift recovery during major outages. This demonstrates the high standards of operational excellence that the Company has upheld throughout the year.

Sarawak Energy Resources has also helped fulfil Balingian Power Generation's (BPG) long-term coal demand by securing four major contracts.

With a dedicated focus on operational excellence, Batang Ai HEP has received a substantial investment of RM44 million for crucial refurbishments, fortifying its operational integrity and extending its serviceability by 10 to 15 years. Notably, this extensive overhaul achieved zero lost time injury (LTI), showcasing stringent planning and robust safety protocols. The initiative has enhanced operational efficiency and cost-effectiveness, reducing the need for Original Equipment Manufacturer Technical Advisors. This transformation empowers Batang Ai employees with autonomous operation capabilities, ensuring sustainable energy generation while upholding the highest safety standards.

We have also improved the accuracy of our generator models in simulations and load forecasts, enhancing post-tripping analysis and system studies, which revealed that the Sarawak Grid System could operate efficiently with a reduced Primary Reserve. This adjustment in Primary Reserve allocation has reduced the annual generation cost for 2023 by RM26.8 million.

In light of recent improvements to the System Protection Scheme (SPS) structure, we have shifted our design approach from event-based to response-based. This strategic change enables us to streamline design complexity and reduce the number of contingencies while providing similar coverage to the existing event-based scheme. Specifically, the response-based SPS at the Kuching 132kV ring network has reduced the number of contingencies from 36 to six, contributing to cost savings in implementing SPS to meet network expansion plans.

Group Chief Executive Officer's Statement

2-6, 201-4, 203-1, EU26, 3-3

Full Electrification of Sarawak

With the Rural Electrification Master Plan 2018 currently being implemented under the Sarawak Government's Projek Rakyat initiative, we are on track to achieving full state-wide coverage, with 98.4%* of our rural communities now having access to 24 hours of reliable, renewable, and clean electricity.

From 2019 and 2023,

27,951

rural households in Sarawak were supplied with electricity.

This electricity is harnessed through a suite of grid and off-grid solutions, including standalone solar and solar hybrid systems. We are on track to achieve full electrification in 2025, despite key challenges such as poor accessibility and difficult geographical conditions.

Investing in New Solutions

This year, we made notable progress in strengthening our position as a leader in renewable energy development and sustainability in Southeast Asia.

Development on the Batang Ai Floating Solar Project has continued. Expected to offset around 52 kilotonnes of carbon emissions yearly once completed, it is anticipated to be finished by Q4 2024. Once completed, it will be Malaysia's largest floating solar plant with a 50MWac capacity.

We are also in the process of installing Malaysia's first utility-scale Battery Energy Storage System (BESS) at the Sejingkat Coal-fired Power Plant. BESS will enhance the grid's stability, and serves as a spinning reserve to optimise the generation capacity of the Tanjung Kidurong Combined Cycle Gas Power Plant. The Sejingkat BESS Project is slated for completion by December of 2024.

In response to the urgent need for sustainable energy solutions, we launched the Hydrokinetic Energy initiative, amplifying our sustainability commitments. In 2023, our R&D Water Energy Unit developed working prototypes, which were tested at Kampung Danu, Bengoh, and showcased at SEB Power's Generation Week event.

Hydrokinetic energy harnesses flowing water to provide renewable, reliable power that will reduce reliance on fossil fuels and promote environmental sustainability. While driving innovation and benefiting local communities, challenges such as turbine efficiency and site selection persist. Nonetheless, we are dedicated to advancing hydrokinetic technology and driving positive change in the renewable energy sector, with plans for upscaled pilots and further research in 2024.

Group Chief Executive Officer's Statement

2-6, 203-1, 3-3

Enhancing Our Smart Retail Services

In 2023, Sarawak Energy fully implemented the Mobile Onsite Billing System (MOBIS) across all stations, improving billing accuracy from 53% in 2020 to 83%, and saving over RM1 million by reducing vendor dependency.

Meanwhile, the Online Supply Application (eCX) automated 10 manual processes, cut processing time from 15 to 5 days, and saved RM1.2 million in manpower costs while conserving over 1.6 million sheets of paper.

Additionally, the SEB Cares mobile app and web portal, which has undergone its development plan in phases, connects customers to various services on a single platform, while Multifunction Self-Service Payment Kiosks have been installed in three shopping malls. Our smart meters have seen greater widespread usage since their implementation in 2019, with 66,151 smart meters installed, achieving a 99.5% success rate in remote readings and identifying 165 tampered cases. By 2026, 180,000 smart meters will be installed in Miri, Sibu, and Bintulu, and a Smart Meter Customer Portal will be launched by the end of 2024, with 34,549 e-Bill subscribers already on board.

Strategic Partnerships

We recently reached a Memorandum of Collaboration (MoC) with Bursa Carbon Exchange (BCX), Hydropower Sustainability Alliance (HSA), and the I-REC Standard Foundation to introduce renewable energy certificates (RECs) on BCX, Malaysia's voluntary carbon market exchange. This comes with a focus on sourcing RECs from Sarawak Energy and facilitating cross-border trading using the I-REC platform. Additionally, the MoC seeks to raise awareness about sustainability certifications like the Hydropower Sustainability Standard and promote their use alongside RECs.

Furthermore, our strategic collaboration with Gentari Sdn Bhd and SEDC Energy Sdn Bhd explores clean energy solutions in Sarawak, aiming to diversify the State's energy mix, produce green hydrogen, and establish an electric vehicle charging network. This collaboration, supported by the Sarawak Government, underscores a commitment to advancing Sarawak's energy transition and decarbonisation initiatives, positioning the State as a regional leader in clean energy.

MoC with BCX, HSA and I-REC

Towards becoming a sustainable digital utility, we have signed an MoU with PETRONAS Digital Sdn Bhd, enabling us to leverage the power of data and analytics to drive impactful business outcomes. Together, we will develop data architecture for modernised data infrastructure on the cloud, enhancing advanced analytics capabilities, fostering data liberalisation and governance, and exploring additional data technologies such as blockchain for digital procurement and ESG initiatives.

Spearheading Energy Transformation Through Digitalisation and Innovation

In line with our Digital Power Plant (DPP) aspirations, we have continued to progress our transformation journey towards achieving Generation Operation Excellence. This initiative requires enhancing our workforce with the necessary skills and knowledge, as well as improving asset productivity while mitigating risks through the adoption of innovative digital technologies.

During the year under review, we marked a significant milestone with the launch of our Remote Monitoring & Diagnostic (RMAD) Centre. RMAD operates as a one-stop centre equipped with specialised tools to proactively identify and address potential issues, thereby enhancing generation efficiency and equipment reliability. The facility will enable our plants to reach peak performance by connecting all power stations and leveraging advanced analytics tools towards this end.

BPG was also announced as Sarawak Energy's first DPP. As the inaugural power plant connected to RMAD, BPG benefits from tools like data historians and asset performance monitoring, enabling collaboration between the RMAD and BPG teams to improve plant reliability, agility, efficiency, productivity, and profitability.

Group Chief Executive Officer's Statement

2-22

Outlook

In the coming year, we anticipate continuous change in the global energy sector, especially with economic uncertainties, geopolitical issues, and a deepening climate crisis. Despite volatility, the global energy sector is poised for significant growth and transformation. With this anticipated evolution comes higher demand from our customers and stakeholders for even more efficient and reliable service delivery, heightened transparency, and a steadfast commitment to sustainable development practices. As expectations heighten, it is imperative for us to uphold a customer and stakeholder-centric approach, ensuring that we maintain excellence across the business to honour their trust in us and sustain our licence to operate.

Sarawak Energy reaffirms our dedication to meeting the State's need for a reliable energy supply and focuses on progressing a sustainable and equitable energy transition. With plans to sustainably source at least 60% of our power from renewables by 2030, Sarawak aims to become a key player in the region's energy landscape by sharing its renewable energy resources with regional neighbours via bilateral interconnections, positioning itself as the 'Battery of ASEAN'. This strategic positioning not only ensures reliable and cost-effective renewable energy for the region but also drives the formation of the Borneo and wider ASEAN grids.

We are confident that with SEE 2025, we are well on the way to becoming a digital utility powerhouse. By embracing new innovations and technology, we can continue to fulfil our commitment to keeping the lights on for Sarawak while catalysing its growth and development strategy.

Acknowledgements

In another pivotal year for Sarawak Energy, I am thankful for the support of the Board of Directors for their sound guidance as we continue to move forward. I also extend my appreciation to the Group Executive Committee (GEC) for their exemplary leadership in steering the organisation and to our employees for their steadfast dedication to achieving our goals.

My highest regard extends to the Premier of Sarawak, Yang Amat Berhormat Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari Bin Tun Datuk Abang Haji Openg, the Ministry of Utility and Telecommunication, the Ministry of Energy and Environmental Sustainability, and all other authorities and regulators for their support and continued belief in Sarawak Energy's ability to deliver for the benefit of the rakyat.

I would also like to express my gratitude to our outgoing Senior Vice Presidents (SVPs) – Mr. Haji Sulaiman, Mr. Ting Ching Zung, and Mr. James Paul – for their service to Sarawak Energy. Your dedication has been instrumental in the growth of Sarawak Energy. With their departure, I welcome to our Group Executive Committee Mr. Yusri Safri, Dr. Chen Shiun, and Mr. George Chapman, who will continue to build on the successes of their predecessors.

Thank you too to our vendors, suppliers, partners, and customers for the continued support, loyalty, trust and for being part of our journey.

As we continue progressing with the SEE 2025 Strategic Roadmap, Sarawak Energy will make headway towards becoming a regional renewable energy powerhouse and digital utility.

Datuk Haji Sharbini Suhaili
Group Chief Executive Officer

Management Discussion and Analysis

2-6, 203-1, 203-2, 3-3

During the year under review, Sarawak Energy continued to demonstrate our commitment towards providing sustainable, reliable and affordable energy to Sarawak and the region. We have also commenced the Sarawak Energy Excellence (SEE) 2025 Strategic Roadmap, to better chart the way forward towards achieving our sustainable digital utility and regional renewable powerhouse aspirations.

Project Delivery (PD) Excellence

PD remains to be a priority for Sarawak Energy as we persist in improving our performance, ensuring safe, timely, efficient and quality delivery of our capital projects. In 2023, our consistent efforts in closing identified gaps from the Independent Project Analysis (IPA) assessments have earned us the continuous rating of the second quintile of the IPA annual benchmarking assessment. As we continue on this positive trajectory, we have finalised action plans that aim to elevate Sarawak Energy to within the top quintile for performance by 2025.

Following the launch of the Sarawak Energy Project Model (SEPM) last year, we have also enhanced our governance and compliance frameworks, specifically our Manual of Authority (MoA) to better reflect the stage-gated decision-making process that guides the delivery of our projects.

In addition to these governance improvements, we have introduced the 8 Quality Focus Area (8QFA) initiative to our Quality Management System (QMS). This initiative was aimed at ensuring compliance with contract requirements and specified quality metrics outlined in project specifications. To support this initiative, we established a dedicated Quality Management Team (QMT) tasked with implementing quality assurance and control measures across all projects.

Building on our internal capabilities, Sarawak Energy has significantly increased its investments in training and development, which has allowed us to nurture local Sarawakian talents and reduce our reliance on external consultants. This strategic shift has been crucial in managing the significant growth in our project portfolio. We have achieved this by strengthening internal capabilities and standardising engineering designs and work processes, particularly for Transmission Lines and Substations. Notably, all Front-End Engineering & Design (FEED) activities for these projects are now conducted in-house, with minimal reliance on external consultancy.

QFA1: Engineering & Design	**QFA5:** Coating & Painting
QFA2: Contractor Quality Management	**QFA6:** Weld Quality Management
QFA3: Material Traceability	**QFA7:** Preservation & Storage
QFA4: Fabrication of Products	**QFA8:** Completion Readiness & Handover

Management Discussion and Analysis

To achieve this, our PD Academy has been crucial to our capability-building efforts. Since 2020, it has recorded 95,821 man-hours in training, which includes sharing experiences and lessons learnt. Additionally, our collaboration with IPA and participation in the Industry Benchmarking Conference (IBC) have provided our people with invaluable exposure to global best practices and expert insights across various stages of project development and implementation.

Our Regulatory & Permitting teams have also made significant strides in improving the efficiency of the approval process for work passes for our foreign manpower. By fostering close collaborations with the Immigration and Labour Management Unit of Sarawak (ILMU), Department of Labour Peninsular Malaysia (JTK) and Immigration Department of Malaysia (JIM), we have minimised rejections and ensured timely manning of our projects. Furthermore, we have implemented a systematic approval process across all projects which has effectively minimised risks associated with late regulatory approvals. Early engagement with stakeholders and communities is now a routine process in our new projects, ensuring their support and minimising disruptions and blockades during project implementation.

Despite the strategic advancements and process improvements, Sarawak Energy continues to face notable challenges that impact the timeline and budget of capital projects, key among them being:

Land and Wayleave Issues

Our capital projects, particularly those under the Northern Agenda, often face land and wayleave complications. The unsustainable demand from certain parties have escalated, significantly delaying project timelines and increasing costs, affecting projects that aim to provide reliable and affordable electricity to the northern regions of Sarawak, which are crucial for connecting areas to the main power network and supporting power delivery to neighbouring Sabah.

To address these issues, major interventions have been approved with the support of State leadership. These include strategies for community engagement like the Social Management Plan and negotiated resolutions to mitigate delays and align community expectations with project goals. In addition, we will focus on closing remaining projects developed using the Electricity Ordinance process and utilise land code to acquire disputed easements.

Contractor Performance Issues

Another persistent challenge is the performance of contractors. Often, contractors who are eager to win contracts quote unrealistic prices and tend to underperform or demand additional compensation to meet the project deadlines. Such practices disrupt project timelines and inflate costs.

Sarawak Energy's management strictly opposes these practices and is taking steps to ensure that contractor commitments are met as agreed without compromising the quality and timeline of projects. This will be done via a comprehensive front-end development process to deliver a well-defined project specification. This is essential to enable enforcement of full compliance by bidders during tendering to minimise likelihood of underbidding.

Sarawak Energy is currently witnessing an unprecedented growth in its portfolio of capital projects, which has reached a total value of RM47.37 billion in 2023. The following progress was recorded in FY2023:

RM20.89 billion

worth of projects that are in execution phase

RM26.48 billion

worth of projects that are progressing through various initial stages including:

Capital Project	Project Stage
Mentarang Induk Hydroelectric Project (MIHEP)	Final Investment Decision Stage
Singapore High-Voltage Direct Current (HVDC) Undersea Interconnection	FEL 2 Stage
KaBaMa Hydroelectric Project	Basic Engineering Stage

Management Discussion and Analysis

203-2, EU28, EU29, 403-9, 3-3

Operational Excellence

Operational Excellence remains as a top priority for Sarawak Energy as we want to deliver seamless and uninterrupted power supply to our customers. In 2023, we achieved notable improvements in our System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI), reaching an all-time low of 81.89 minutes[a] for SAIDI and reducing our SAIFI to 1.18 times[a]. Since 2016, we have seen a 66% improvement in SAIDI and a 58% reduction in SAIFI. In addition, our consistency in maintaining operational excellence over the past decade has contributed to a steady rise in our customer satisfaction index, which increased from 77.42% in 2016 to 97.26% in 2023.

Note: [a] *SAIDI & SAIFI include generation, distribution and transmission level.*

Since 2016

SAIDI
66%
Improvement

Since 2016

SAIFI
58%
Decrease

Since 2016

Customer Satisfaction Index
19.8%
Increase

This year, Sarawak Energy has accomplished several achievements for our operational excellence. The Batang Ai Hydroelectric Power (HEP) which underwent a major overhaul from 2018 until 2023 is an example of our commitment to Operational Excellence. This significant project involved a meticulous refurbishment of all four units of its generators and turbines, restoring them to their original peak performance with enhanced resilience and efficiency. With an investment of RM44 million into the extensive refurbishment, the Batang Ai HEP will be able to supply energy reliably to the state grid, extending its service life by another 10 to 15 years.

Sarawak Energy Resources, through Balingian Energy Minerals Sdn Bhd (BEM) recorded its highest annual coal production ever, reaching 1.6 million metric tonnes without any fatalities or Lost Time Injury Frequency Rate (LTIFR) incidents. BEM and the upcoming A-North Coal Mine will continue to fulfil Balingian Power Generation's (BPG) long-term coal demand by securing four major contracts – ensuring the security of coal supply to BPG.

We have also improved our generator model accuracy in simulations and load forecasts, improving post-tripping analysis, and system studies which revealed that the Sarawak Grid System could operate efficiently with a reduced Primary Reserve. The adjustment in Primary Reserve allocation has reduced the annual generation cost for 2023 by RM26.8 million.

In view of recent improvements to the System Protection Scheme (SPS) structure, we have shifted our design approach from event-based to response-based. This strategic change enables us to streamline design complexity and reduce the number of contingencies while providing similar coverage to the existing event-based scheme. Specifically, the response-based SPS at the Kuching 132kV ring network has reduced 36 contingencies to six contingencies, which will contribute to cost savings in implementing SPS to meet network expansion plans.

Commercial Excellence

Commercial Excellence plays a crucial role in our decision-making process as the efficient use of financial resources, assets, and other resources optimises value for both the Company and our stakeholders. As we continue to expand, Sarawak Energy integrates the latest technologies to enhance grid reliability and diversify our energy mix with the introduction of new alternative renewable energy sources.

We have maintained our focus on broadening our international footprint by seeking new opportunities for interconnections across Southeast Asia, with the HVDC undersea interconnection from Sarawak to Singapore potentially becoming the third interconnection for Sarawak. This follows the interconnections with Kalimantan and an upcoming one with Sabah.

In addition, we are continually refining our procurement processes to improve operational efficiency and are exploring methods to manage costs effectively as we aim for further growth. Sarawak Energy will continue forging strategic partnerships with local vendors, and enhancing their knowledge, capacity, and capabilities. We have also introduced platforms to assess our vendors' performance, enabling us to acknowledge high-performing vendors, showcasing their contributions to the company and elevating them as examples to others.

Health, Safety, Security and Environment (HSSE) Excellence

Throughout 2023, Sarawak Energy Resources (SER) has successfully maintained its Goal Zero initiative, achieving zero fatalities, Lost Time Injuries (LTI), environmental incidents, intrusions, and penalties from government agencies. Notably, the Company has not recorded any LTIs since 2018, accumulating a total of 9,404,598 safe man-hours as of end December 2023. Our diligence has resulted in significant reduction of work-related accidents since 2016, achieving a decrease of over 50% by 2023.

Management Discussion and Analysis

The culture of HSSE Excellence at Sarawak Energy empowers employees to take full responsibility in this area. This year, we conducted regular Health, Safety, and Environment (HSE) audits and inspections, including Contractors Transformation Programme (CTP) and Contractor EIA Compliance Award (CECA), to ensure adherence to the highest HSE standards across all operations. The SER HSE team completed over 100 HSE inspections throughout the year, meticulously assessing various aspects of the work environment to identify and mitigate potential hazards.

Sarawak Energy Resources (SER) HSSE Excellence Week 2023

The SER HSSE Excellence Week 2023 was organised on 12 September at the BEM facility, with the theme 'Saving Lives, Raising Standards, Nurturing Culture'. The event which reflects our transformation in HSSE practices showcases significant achievements, discusses challenges faced and outlines future directions for enhancing HSSE standards.

The week also serves as a crucial platform for fostering a generative HSSE culture within Sarawak Energy, reinforcing the value that HSSE responsibility is shared across the organisation and our stakeholders. The 2023 event also marked a significant milestone for SER, celebrating 7.5 million safe man-hours without a Lost Time Injury, a streak maintained since 2018.

Additionally, a diverse range of both physical and virtual programmes was scheduled from 23 October to 27 October 2023. These activities were designed to engage participants and further emphasise the principles of safety and excellence in every facet of the organisation's operations.

> Since 2021, we have been motivating our employees to upkeep their health and wellbeing and as part of our KFA target, we collectively work towards improving the BMI health reading of our people.

This year, we have enhanced this initiative by launching the waist-to-height ratio (WtHR) company-wide as the new standard for assessing health, aimed at encouraging employees to manage their waistlines effectively. WtHR is recognised as a superior indicator that provides a rapid assessment of health risks compared to BMI alone. Across the board, there was an average improvement of 4.89% in WtHR values as a result of a concerted effort from all staff members.

We also incorporated a mental health survey as part of our Employee Wellbeing Programme, which indicated a significant 12% improvement across all dimensions from the previous year. Additionally, we reinstated our in-house audiometric booths as part of our industrial hygiene initiative. In collaboration with external parties, we have conducted initiatives such as with the Department of Occupational Safety and Health (DOSH) for industrial hygiene programmes, Fitness to Work assessments and preventive health screenings with SOCSO, as well as participated as speakers at hearing conservation programmes.

In 2023, we recorded an increase in metal theft incidents, highlighting ongoing challenges in security. The number of incidents has surged from four cases to 14 in the year under review, resulting in 23 suspects arrested. Several areas had been identified as hotspots due to recurring incidents which highlights the need for enhanced surveillance and security infrastructure. To overcome these challenges, we have collaborated with the law enforcement and local authorities to resolve this increase in criminal activity.

In doing our part for the environment, the Sarawak Energy Tree Planting, Protection and Habitat Restoration campaign has reached a new milestone this year. Through our ongoing collaboration with the Forest Department Sarawak (FDS) since 2021, we have made significant progress, exceeding our annual target of 55,000 trees and securing the future of 70,959 trees, with 54,337 being planted and 16,622 protected.

Towards Becoming a Digital Utility

The organisation's transformation with SEE2025 is supported by our Sarawak Energy Digitalisation Blueprint and Roadmap which is anchored on five key pillars:

1. **A robust and fit for purpose digital foundation**
2. **A modernised new way of working**
3. **Data as strategic assets**
4. **Enabling the Smart Business**
5. **Staying ahead of the curve with initiatives to assess and explore new technologies to ensure that we stay relevant in this industry**

Management Discussion and Analysis

2-6

Becoming a Sustainable Digital Utility by 2025

Building a Robust Digital Foundation

Sarawak Energy has continued to develop and strengthen our Digital Foundation to drive enterprise modernisation, smart grid, and digital power plant (DPP) advancements. The Digital Foundation is built on several key components, with some examples including a robust telecommunication network backbone, enterprise-wide network enhancements, network firewall upgrades, and hybrid hosting solutions.

As part of our commitment to these digital infrastructures, the Sarawak Energy Data Network has been in a transformation phase since 2020. This involves transitioning from the outdated Synchronous Digital Hierarchy (SDH) to a more advanced 100 Gbps Backbone Network. To date, we have completed 66% of this transition, which will serve as traffic for both Information Technology (IT) and Operational Technology (OT), preparing us to meet future Digital Utility challenges.

Significant upgrades have been made in various areas to strengthen this network:

- Centralised Internet capabilities have been enhanced to 2 x 1 Gbps
- Major Power Stations now have a minimum connectivity of 100Mbps
- Major Regional Offices are also equipped with at least 100Mbps
- Branch offices have been upgraded to a minimum of 10Mbps
- Rural offices and stations have been provided with mobile or satellite broadband

These advancements in our Digital Foundation have facilitated:

- Seamless remote working capabilities via solutions such as Azure Active Directory, cloud hosting and the Internet Connectivity Improvement initiative
- An enhanced user experience by introducing self-service options such as password resets, network monitoring, performance improvements, e-Signature services and upgraded standard PCs across Sarawak Energy premises
- Improved reliability, productivity, connectivity and performance in supporting Smart Business initiatives across the region through network transformations and enhancements at major stations and offices

Management Discussion and Analysis

2-6, 3-3

In strengthening cyber security, we have developed a cyber security transformation strategy and roadmap for cyber resilience against an increasing global threat landscape.

Becoming a Data Driven Business

Since 2022, we have successfully delivered advanced analytics outcomes for various business units including retail fraud analytics, smart meter analytics and procurement risk analytics. We will continue to intensify our efforts to unlock valuable business insights and fully transition in becoming a data drive business.

Smart Business Initiative from 2023 and Beyond

Our commitment to digital transformation extends beyond infrastructure to enhancing customer service. The launch of the SEB cares 2.0 mobile app and web portal on 1 June underscores this commitment by improving access to essential services, including bill viewing, payment options, issue reporting, and electricity usage tracking.

In 2023, we achieved a significant milestone by transforming our Balingian Power Generation facility into the first Digital Power Plant. This, coupled with the launch of our Remote Monitoring and Diagnostic Centre, has already yielded positive savings since early 2022.

Furthermore, our SAP S4/HANA Migration Project, a business transformation project, aims to set to enhance operational efficiency and support business growth by providing our employees with next generation ERP for Analytics and Innovation.

To modernise the grid, and enhance safety, operational excellence, and network reliability, our pursuit in Smart Grid development has achieved 43% of the Sarawak Energy Smart Grid 2025 roadmap. Key technologies deployed for Distribution Automation were Distribution SCADA, Distribution Remote Monitoring System (DRMS), scadarisation of 11kV D-Sub, motorised ring main unit, intelligent sectionaliser, and smart line fault indicator. These have resulted in enhanced safety through remote operations, faster fault isolation and service restoration, and reduced sustained outages.

Advanced Metering Infrastructure (AMI) and smart meters are also key components of Smart Grid. Smart meters enable remote reading of electricity usage for accurate & timely billing, power quality monitoring, outage detection, and power theft detection. In 2023, more than 64,000 smart meters were installed in Kuching. The deployment of smart meters will be extended to around 70% of customers in Kuching area by 2026, followed by Miri, Sibu, Bintulu, Sri Aman, Betong, Sarikei, Mukah, Kapit, and Limbang with a total of 496,000 smart meters by 2029.

Contracts and Procurement (C&P)

The C&P team at Sarawak Energy recognises the necessity of enhancing our Sarawak Energy's Procurement Policies and Procedures (PPP), aligning with our strategic objectives and benchmarking our procurement functions against global standards. In line with this, the team practices a strict adherence to procurement policies and procedures and clear accountability when dealing with all C&P activities in the organisation and third-party contracts. This ensures all C&P activities are maintained at a high standard.

To further support this vision, the C&P team embarked on a benchmarking programme with the Chartered Institute of Purchasing and Supply (CIPS),UK.

In addition, the PPP includes the formation of Tender Committees and definition of Procurement Limits of Authority to govern procurement activities within the Group. The PPP is updated continuously to ensure they remain relevant, adequate, and in line with best practices.

We launched the Sarawak Energy e-Procurement (SEPRO) system in 2019, as a digitalisation effort to bring about cost savings and increased efficiency in managing our processes.

With the system we have seen marked improvements in operational efficiency, leading to savings in paper usage, courier services, printing, storage, and man-hours. The system has streamlined operations, abolished manual processes, expanded vendor engagement, and increased market reach, with 4,443 vendors registered since the launch of SEPRO system in 2019 and increased participation in sourcing activities. Moreover, extensive training has been provided for both staff and vendors on the use of SEPRO.

Sarawak Energy has also initiated a shift from transactional to strategic procurement by operationalising Category Management, which has brought operational and cost efficiencies through the streamlining and optimisation of procurement processes.

The Sustainable Supply Chain Movement programme, co-organised by the Sustainability and C&P departments along with Alliance Bank Malaysia Berhad and the UN Global Compact Network Malaysia & Brunei (UNGCMYB), saw over 90 Small and Medium-sized Enterprises (SME) suppliers participate in the programme.

As part of the wider LEAD23 programme, this event was aimed at enhancing sustainability performance among suppliers. The programme emphasised the importance of integrating sustainability into business practices. The event also provided insights into vital resources and financial solutions that support suppliers in their sustainability journey.

Chief Financial Officer's Statement

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Despite a globally challenging environment which included volatility in commodity prices driven by supply chain disruptions and geopolitical tensions, Sarawak Energy continued to demonstrate agility and resilience, evident through achieving record high revenue for the year and maintaining its strong financial track record attributable to prudent financial management.

TAN KOK KIONG
Chief Financial Officer

We remain focused on future proofing our investments portfolio and growing our generation capacity to deliver long term value in energy development to provide secure, sustainable and affordable energy to meet the increasing energy demand in Sarawak and the region.

I am pleased to announce another remarkable year for Sarawak Energy with revenue surpassing the RM7 billion mark for the first time at RM7.147 billion. The revenue growth of 2.6% as compared to the preceding year of RM6.965 billion was primarily due to the higher sales of electricity resulting from increased power uptake by both bulk and organic customers.

Power demand increased from the organic sector resulting in an 8.6% year-on-year improvement, led by higher demand from commercial and industrial consumers coupled with an uptick in the number of organic customers while sales from bulk customers had increased by 3.3% year-on-year, largely underpinned by higher demand from Sarawak Corridor of Renewable Energy (SCORE) customers in the Samalaju Industrial Park.

Profit before tax of RM1.788 billion dipped slightly compared to RM2.220 billion in the preceding financial year notwithstanding the improved revenue, primarily attributable to higher generation costs mainly resulting from the corresponding increase in power demand and higher impairment loss coupled with lower late payment penalty interest.

Profit net of tax was RM1.339 billion against RM2.734 billion year-on-year mainly underpinned by the lower profit before tax as explained above as well as the one-off initial recognition of deferred tax asset totalling RM1,157.1 million vis-à-vis the Investment Allowance for two of our power plants in 2022.

Cash flow from operations of RM3.749 billion remain at healthy levels, allowing us to repay our borrowing commitments in a timely manner, with the remaining balance used to fund the Group's capital expenditure.

Chief Financial Officer's Statement

Strong Credit Ratings

Affirmed by robust financial strength and solid business fundamentals, Sarawak Energy's investment grade international credit ratings of A3/Stable and A-/Stable were affirmed by Moody's Investors Service (Moody's) and S&P Global Ratings (S&P) respectively. These ratings mirror and equalise with the ratings of Malaysia and Sarawak.

During the year, RAM Rating Services Berhad (RAM) also affirmed the credit ratings of Sarawak Energy Berhad and its subsidiary – Bakun Hydro Power Generation Sdn Bhd of AAA/Stable respectively, demonstrating the Group's financial strength and capacity to meet its financial obligations.

	Sarawak Energy Berhad	Bakun Hydro Power Generation Sdn Bhd
RAM	AAA/Stable	AAA/Stable
Moody's	A3/Stable	
S&P	A-/Stable	

2023 Financing Activities

On 9 June, Sarawak Energy organised a Sukuk Investors Townhall – the first townhall since the COVID-19 pandemic which observed a positive turnout of over 150 attendees from the financial community coupled with representatives from Sarawak Energy. Group CEO Datuk Haji Sharbini Suhaili opened the townhall session with welcoming remarks followed by a presentation providing an overview of Sarawak Energy and the session concluded with an interactive question and answer session by the Sarawak Energy management team.

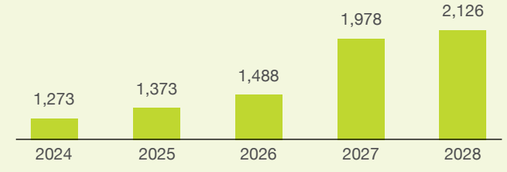
Following the Sukuk Investors Townhall, Sarawak Energy successfully completed a RM3.5 billion sukuk issuance via a book building exercise in July under the Sarawak Energy Berhad RM15 billion Sukuk Musyarakah Programme. The book building exercise garnered one of the highest orderbooks across Malaysia's debt capital market transactions with a total amount close to RM11 billion, receiving strong support from a diversified distribution of both local and foreign investors as well as a number of first-time investors from prominent financial institutions, including fund management companies, banks, pension funds, and insurance entities. As such, the issuance was upsized by approximately 2.33 times from the indicated RM1.5 billion at deal announcement which was priced competitively and ended with a commendable final bid-to-cover ratio of 3.05 times. The issuance consisted of three tranches, as follows:

- 5-year tranche of RM0.5 billion
- 7-year tranche of RM1.0 billion
- 10-year tranche of RM2.0 billion

The issuance proceeds will be utilised to finance the Group's long-term capital expenditures.

The abovementioned RM3.5 billion sukuk Issuance brings the total outstanding borrowings of the Sarawak Energy Group to approximately RM20.034 billion. The Group's borrowing commitments (principal portion only) over the next five years are as illustrated below:

Sarawak Energy Group Debt Maturity Profile – as at 31 December 2023 (RM'mil)



Note: *Principal portion only, excluding interest and profit payments.*

Dividends

Since the end of the previous financial year, the Company declared a final single-tier dividend of 9.8 sen per ordinary share totalling RM158,000,000 in respect of the financial year ended 31 December 2022 on 22 March 2023 and the dividend was paid on 21 April 2023.

On 27 March 2024, the Board of Directors approved a final single-tier dividend of 8.3 sen on 1,610,568,979 ordinary shares, amounting to RM134,000,000 in respect of the financial year ended 31 December 2023. The proposed dividend was paid on 24 April 2024. The financial statements for the current financial year do not reflect this proposed dividend and will be accounted for in equity as an appropriation of retained earnings in the financial year ending 31 December 2024.

Chief Financial Officer's Statement

3-3

Enhancing Our Capital Investment Decisions

An overarching Capital Management Framework was formalised to facilitate Sarawak Energy's ability to improve decision quality, transparency as well as ensuring visibility of value outcome-based capital investment decisions. This included the operationalisation of the Group Investment Committee as a progressive key enhancement, nodding to the Group's disciplined and methodological way forward in-looking approach towards capital management. The Business Performance Appraisal was also established to drive business performance management and value creation with added emphasis to monitor the execution of strategic and operation plans, covering both financial and non-financial metrics relevant to the achievement of short-term and long-term objectives.

Sustainable Digital Utility

On 9 June, Sarawak Energy launched the Enterprise Resource Planning (ERP) for Analytics & Innovation (SERAPI) to mark the beginning of Sarawak Energy's two-year migration of the current ERP system from SAP ECC to SAP S/4HANA. SAP S/4HANA - the next generation of SAP's ERP solutions offer advanced analytics and reporting capabilities designed to enhance the user experience and support sophisticated data analytics, facilitating improved decision-making and operational efficiency.

Through this migration, we are adopting a continuous process improvement mindset to Eliminate, Simplify, Standardised and Automate (ESSA) with the aim of ultimately streamlining business processes across the organisation through digitalisation and optimisation of SAP S/4HANA functionalities whilst ensuring internal controls remain robust and effective.

Looking Ahead

As we venture into the new year, we will endeavour to fulfil our responsibilities and exceed expectations such as growing Sarawak's generation capacity, pursuing enhancements in power network and infrastructure as well as diversifying our market base in alignment with the Sarawak Energy Excellence 2025 Strategic Roadmap and Sarawak's Post COVID-19 Development Strategy 2030.

Progressing towards our ambition to be a regional renewable energy powerhouse in ASEAN, we will continue to be disciplined in our investments, focusing on where we can have the maximum impact in generating value, including securing of tax incentives for qualifying investments such as the recently approved investment allowance for Samalaju Combined Cycle Power Plant. Through our efforts and commitment to ensure a sustainable energy future, I am positive that Sarawak Energy will continue positioning itself for long-term sustainable revenue and profitability growth for continued success in powering Sarawak and beyond in the years ahead.

Sarawak Energy Five-Year Group Financial Highlights

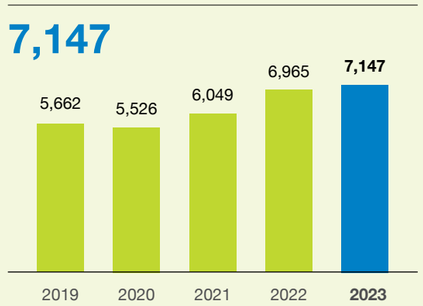
Financial Year Ended 31 December	2019	2020	2021	2022	2023
Performance (RM'000)					
Revenue	5,662,052	5,525,832	6,048,826	6,964,867	**7,147,190**
Profit before tax	1,635,106	1,058,267	1,211,521	2,220,233	**1,787,846**
Profit net of tax	1,182,944	698,800	820,555	2,733,709	**1,339,210**
Profit net of tax attributable to owners of the Company	1,171,623	710,394	818,527	2,717,477	**1,316,867**
Dividend paid	-	-	-	-	**158,000**[2]
Key Financial Position Data (RM'000)					
Property, plant and equipment	29,754,655	30,109,195	30,036,333	30,496,813	**31,615,240**
Right-of-use assets [1]	160,073	167,177	209,166	222,403	**214,962**
Cash and bank balances	4,210,859	5,478,655	5,077,608	4,015,231	**7,541,420**
Total assets	37,107,753	39,156,620	37,697,238	39,535,833	**44,050,756**
Loans and borrowings	20,147,806	21,543,566	19,050,962	17,163,344	**20,034,203**
Total liabilities	26,730,061	28,103,208	25,818,807	25,194,803	**28,499,733**
Share capital	1,833,341	1,833,341	1,833,341	1,833,341	**1,833,341**
Equity attributable to owners of the Company	10,341,056	11,028,594	11,851,585	14,297,952	**15,481,101**
Share Information					
Net asset per share attributable to owners of the Company (RM)	6.42	6.85	7.36	8.88	**9.61**
Net earnings per share (sen)	72.70	44.11	50.82	168.73	**81.76**
Gross dividend per share (sen)	-	-	-	-	**9.81**[2]

[1] *Starting 1 January 2019, leasehold land that was previously classified as property, plant and equipment is now presented as right-of-use assets upon adoption of MFRS 16 Leases.*

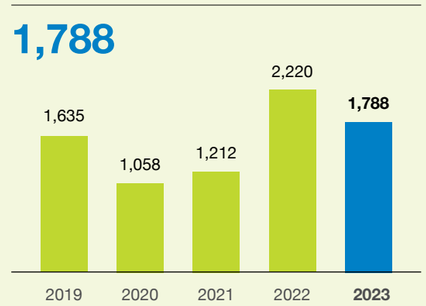
[2] *For financial year ended 31 December 2023, the Company had declared and accounted for a final single-tier dividend of 9.8 sen on 1,610,568,979 ordinary shares, amounting to RM158,000,000 in respect of the financial year ended 31 December 2023.*
On 27 March 2024, the Board of Directors approved a final single-tier dividend of 8.3 sen on 1,610,568,979 ordinary shares, amounting to RM134,000,000 in respect of the financial year ended 31 December 2023. The proposed dividend was paid on 24 April 2024. The financial statements for the current financial year do not reflect this proposed dividend and will be accounted for in equity as an appropriation of retained earnings in the financial year ending 31 December 2024.

Chief Financial Officer's Statement

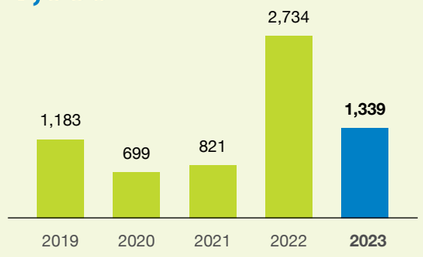
Revenue
(RM'Mil)



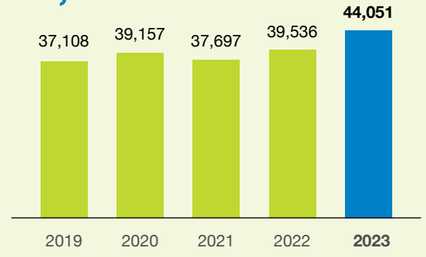
Profit Before Tax
(RM'Mil)



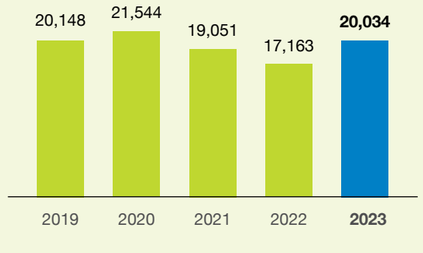
Profit Net of Tax
(RM'Mil)



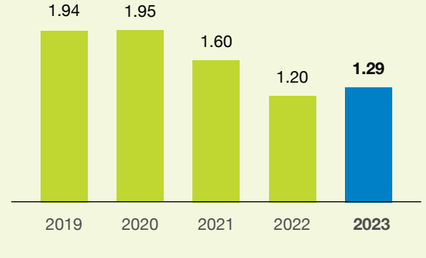
Total Assets
(RM'Mil)



Loans and Borrowings
(RM'Mil)



Gearing ratio
(times)



Our Corporate Structure

2-2

Sarawak Energy Berhad
196701000221 (7199-D)

Resources

- 100% Sarawak Energy Resources Sdn Bhd, 200101022995 (558753-P)
- 60% Balingian Energy Minerals Sdn Bhd, 201501042848 (1168169-W)
- 100% Mukah Energy Minerals Sdn Bhd, 201501037695 (1163016-H)
- 30% Sarawak Coal Resources Sdn Bhd, 200501026659 (708793-D)

Gas

- 100% Sarawak Power Generation Sdn Bhd, 199401019427 (305106-D)
- 100% Kidurong Power Generation Sdn Bhd, 201501029293 (1154614-K)
- 100% Samalaju Power Generation Sdn Bhd, 201601037691 (1208632-P)

Power Generation

- 100% SEB Power Sdn Bhd, 201501029294 (1154615-U)

Hydro

- 100% Batang Ai Power Generation Sdn Bhd, 201501029320 (1154641-H)
- 100% Baleh Hydro Power Generation Sdn Bhd, 201601039279 (1210220-A)
- 100% Murum Hydro Power Generation Sdn Bhd, 200701013863 (771869-W)
- 100% Bakun Hydro Power Generation Sdn Bhd, 199401002358 (288036-M)
- 100% SarawakHidro Power Sdn Bhd, 201101027004 (955139-T)

Other

- 30% Base Floating Solar Sdn Bhd, 202301012550 (1506472-H)

Transmission, Distribution & Retail

- 100% Syarikat SESCO Berhad, 200401034422 (672931-A)

Coal

- 100% Sejingkat Power Corporation Sdn Bhd, 199301022484 (277222-W)
- 20% Gobel Industry Sdn Bhd, 199701004047 (419543-D)
- 100% PPLS Power Generation Sdn Bhd, 200201024010 (591673-M)
- 100% Mukah Power Generation Sdn Bhd, 199801011916 (468044-U)
- 100% Balingian Power Generation Sdn Bhd, 201401047345 (1123534-M)

Others

- 100% Dunlop Estates Holdings Sdn Bhd, 198901006072 (183377-D)
- 100% Sarawak Energy (RES) Sdn Bhd, 201601039186 (1210127-X)
- 100% SEB SERES Sdn Bhd, 202301050385 (1544299-X)
- 100% Sarawak Energy Services Sdn Bhd, 199601022284 (394636-X)
- 50% PT Transmisi Energi Antarbangsa, 4023080731101921
- 50% PT Kayan Energi Internasional, 2010220049085
- 50% PT Kayan Hydropower Nusantara, 8120116191652
- 16.5% Sarawak Cable Berhad, 199801000274 (456400-V)
- 50% Seatrac Sdn Bhd, 200801003874 (805158-T)

Group Organisation Structure

2-9

Board of Directors

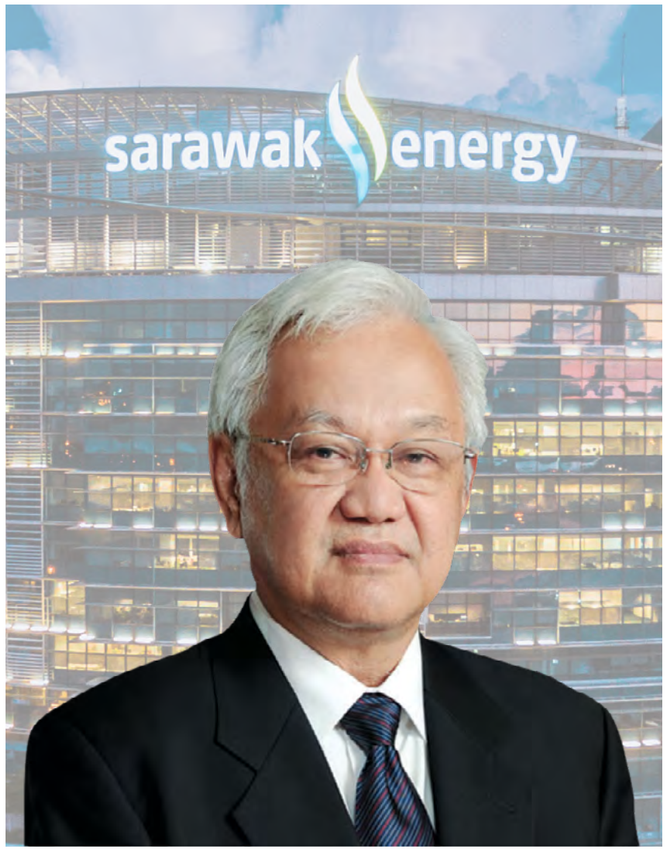
- **Kho Chai Huat**, *Vice President, Internal Audit*
- **Group Executive Committee**
- **Lim Li Na**, *Group Company Secretary*

Datuk Haji Sharbini bin Suhaili
Group Chief Executive Officer

- **James Ung Sing Kwong**, *Group Chief Operating Officer*
- **Lau Kim Swee**, *Chief Executive Officer, SESCO*
- **Pramod Kumar Karunakaran**, *Executive Vice President, Project Delivery*
- **Tan Kok Kiong**, *Chief Financial Officer*
- **Bunyak Anak Lunyong**, *Chief Executive Officer, SEB Power*
- **Dr. Mak Anak Met**, *Senior Vice President, Human Resources*
- **Hajah Siti Aisah binti Adenan**, *Senior Vice President, Corporate Services*
- **Nick James Arnett Wright**, *Senior Vice President, Business Development*
- **Marconi Madai**, *Senior Vice President, Health, Safety, Security and Environment*
- **Sim Ko Sin**, *Chief Digital Officer, Information and Communication Technology*
- **Yusri bin Safri**, *Senior Vice President, Contract & Procurement*
- **Dr. Chen Shiun**, *Senior Vice President, Strategy & Corporate Development*
- **George Albert William Chapman**, *Senior Vice President, Legal & Compliance*
- **Alvin Lim Khiok Leong**, *Chief Operating Officer, Sarawak Energy Resources*

Board of Directors Profile

2-9



YBHG. DATUK AMAR ABDUL HAMED SEPAWI

Chairman of Sarawak Energy
Non-Independent, Non-Executive Director

Age: 74
Gender: Male
Nationality: Malaysian

Meeting Attendance: 5/5

Yang Berbahagia Datuk Amar Abdul Hamed Sepawi joined the Board of Sarawak Energy Berhad and was appointed Chairman of the Company on 27 June 2005. He has attended all Board meetings held in 2023.

Datuk Amar Abdul Hamed is an entrepreneur, property developer, oil palm and tree planter, as well as an industrialist involved in the timber, food and beverage, and energy industries.

He graduated with a Bachelor of Science degree from the University of Malaya in 1971 and pursued his undergraduate studies in Forestry at the Australian National University from 1974 to 1975. He also holds a Master's degree in Forest Products Utilisation from Oregon State University, USA.

He was conferred the Panglima Gemilang Bintang Kenyalang in 1999 and the Datuk Amar Bintang Kenyalang in 2012. He has spent almost 40 years in the corporate world and in recognition of his success, he was most recently awarded the Global Muslim Excellence and Lifetime Achievement in 2022. He received the Sarawak Entrepreneur of the Year 2004 award and The BrandLaureate's prestigious 'Man of the Year' Brand Icon Leadership Award 2015.

He also serves as Chairman of Syarikat SESCO Berhad and Naim Holdings Berhad, as well as Executive Chairman of Ta Ann Holdings Berhad and Sarawak Plantation Berhad.

A COMMITMENT TO GOVERNANCE

Board of Directors Profile

2-9

YBHG. TAN SRI DATUK AMAR HAJI MOHAMAD MORSHIDI BIN HAJI ABDUL GHANI

Non-Independent, Non-Executive Director

Age: 67
Gender: Male
Nationality: Malaysian

Meeting Attendance: 5/5

Yang Berbahagia Tan Sri Datuk Amar Haji Mohamad Morshidi bin Haji Abdul Ghani joined the Board of Sarawak Energy Berhad on 26 May 2010. He is a Non-Independent Non-Executive Director and attended all Board meetings held in 2023.

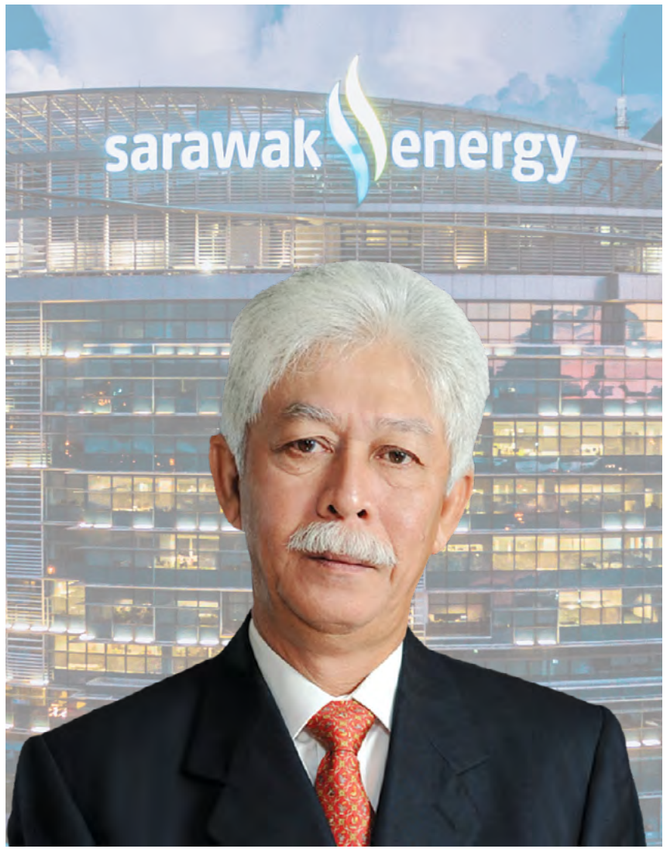
Tan Sri Datuk Amar Haji Mohamad Morshidi graduated with a Bachelor of Economics from Universiti Kebangsaan Malaysia and has a Master of Science in Human Resource Administration from the University of Scranton, Pennsylvania, USA.

He was a Management Executive with PETRONAS from 1980 to 1988, and Director of Kuching North City Hall from 1989 to 1998. He held several senior positions in the Chief Minister's Department before being appointed Permanent Secretary in the Ministry of Social Development and Urbanisation in 2001. He was Director of the State Planning Unit in the Chief Minister's Department prior to his appointment as the Deputy State Secretary of Sarawak in 2006 and later, the State Secretary of Sarawak from August 2009 to August 2019.

Tan Sri Datuk Amar Haji Mohamad Morshidi sits on the boards of Syarikat SESCO Berhad, Bintulu Port Holdings Berhad, Development Bank of Sarawak Berhad and several other private limited companies.

Board of Directors Profile

2-9



YBHG. TAN SRI DATO SRI MOHD HASSAN BIN MARICAN

Independent, Non-Executive Director

Age: 72
Gender: Male
Nationality: Malaysian

Meeting Attendance: 4/5

Yang Berbahagia Tan Sri Dato Sri Mohd Hassan bin Marican joined the Board of Sarawak Energy Berhad on 9 June 2010. He is an Independent Non-Executive Director and has attended four (4) out of five (5) Board meetings held in 2023.

Tan Sri Dato Sri Mohd Hassan is a Fellow of the Institute of Chartered Accountants in England and Wales (ICAEW). He also holds honorary doctorates from the University of Malaya and Universiti Teknologi MARA.

He began his professional career in 1972 at Touche Ross & Co., London, and subsequently became a Partner at Hanafiah Raslan & Mohamad/Touche Ross & Co. in 1981. He was the former President & CEO of PETRONAS, Malaysia's national oil company, from 1995 until his retirement in February 2010.

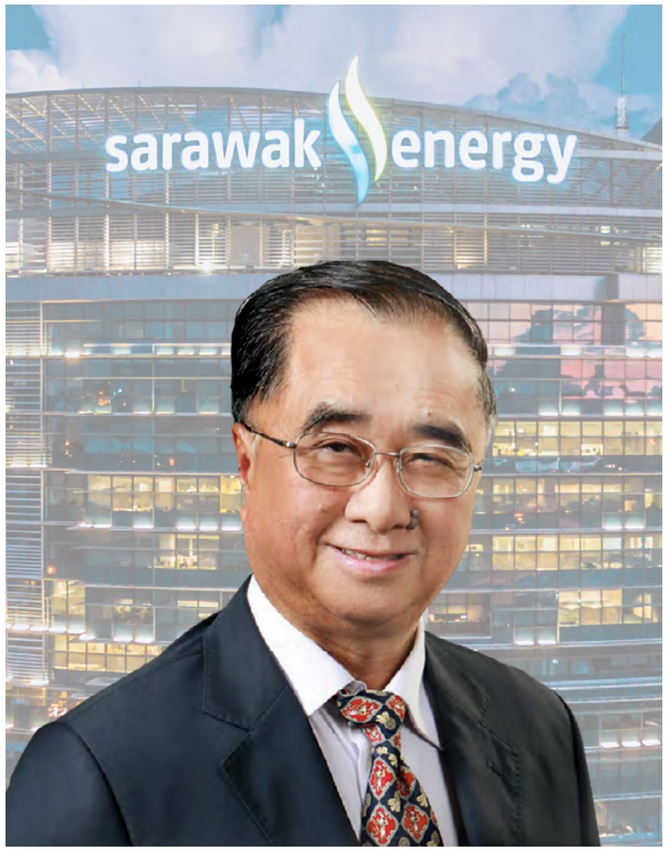
He was also previously the Chairman of Singapore Power, and a director with Khazanah Nasional Berhad, ConocoPhillips, Sembcorp Industries, Bank Negara Malaysia and Malaysia-Thailand Joint Authority.

Tan Sri Dato Sri Mohd Hassan also serves as a board member on several other private limited companies.

A COMMITMENT TO GOVERNANCE

Board of Directors Profile

2-9



YBHG. DATO SRI FONG JOO CHUNG

Non-Independent, Non-Executive Director

Age: 75
Gender: Male
Nationality: Malaysian

Meeting Attendance: 5/5

Yang Berbahagia Dato Sri Fong Joo Chung joined the Board of Sarawak Energy Berhad on 31 January 1996. He is a Non-Independent Non-Executive Director and has attended all Board meetings held in 2023.

Dato Sri Fong received his LLB (Hons) from the University of Bristol, U.K., in June 1971. He was subsequently called to the Bar at Lincoln's Inn, London, in November of the same year. In 1972, he began his professional career at Reddi & Co. Advocates in Kuching. He was appointed the State Attorney-General, Sarawak in August 1992. He officially retired on 31 December 2007 but was retained by the Sarawak Government as the State Legal Counsel. He also served as a Councillor with the Kuching Municipal Council and Council of Kuching City South. He is a founding member and past President of the Advocates' Association of Sarawak.

Dato Sri Fong was conferred the award of Panglima Jasa Negara (PJN) by Yang di-Pertuan Agong, Malaysia in 1999 and Panglima Gemilang Bintang Kenyalang (PGBK) by Yang di-Pertua Negeri, Sarawak in 1994.

He was also conferred the Panglima Negara Bintang Sarawak (PNBS) in 2017.

Dato Sri Fong sits on the boards of several other subsidiaries of the Sarawak Energy Group besides holding directorships in Bintulu Port Holdings Berhad and Sarawak Cable Berhad.

Board of Directors Profile

2-9

YB DATO' HAJI IDRIS BIN HAJI BUANG

Non-Independent, Non-Executive Director

Age: 69
Gender: Male
Nationality: Malaysian

Meeting Attendance: 5/5

Yang Berhormat Dato' Haji Idris bin Haji Buang joined the Board of Sarawak Energy Berhad on 24 June 2000. He is a Non-Independent Non-Executive Director and has attended all Board meetings held in 2023.

Dato' Haji Idris graduated with LLB (Hons) from the University of Buckingham, and was subsequently called to the Bar and qualified as a Barrister at Lincoln's Inn, London, U.K. He is the proprietor of Idris-Buang & Associates (since 1985), a legal firm located in Kuching, Sarawak. He was formerly the Chief Political Secretary to the YAB Chief Minister of Sarawak, a position he held from August 2000 to August 2006. He was appointed Senator of the Dewan Negara on 28 November 2005 and was reappointed to another three-year term on 29 November 2008.

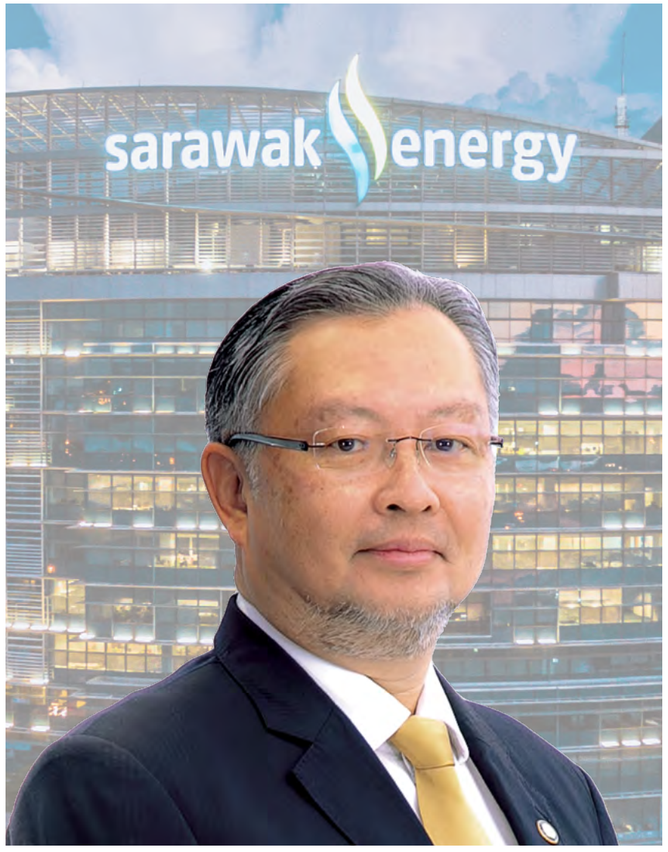
He was elected as a State Legislative Assemblyman in 2016 and appointed as the Deputy Speaker of the State Legislative Assembly in 2022.

Dato' Haji Idris also sits on the boards of several other subsidiaries of the Sarawak Energy Group and other private limited companies.

A COMMITMENT TO GOVERNANCE

Board of Directors Profile

2-9



YBHG. DATO SRI DR. HAJI WAN LIZOZMAN BIN WAN OMAR

Non-Independent, Non-Executive Director

Age: 59
Gender: Male
Nationality: Malaysian

Meeting Attendance: 5/5

Yang Berbahagia Dato Sri Dr. Haji Wan Lizozman bin Wan Omar joined the Board of Sarawak Energy Berhad on 1 October 2021. He is a Non-Independent Non-Executive Director and has attended all Board meetings held in 2023.

Dato Sri Dr. Haji Wan Lizozman graduated with a Bachelor of Sciences in Economic & Political Science from Northern Illinois University, Dekalb, USA in 1985. He pursued his studies and in 1987 completed a Master of International Affairs (Economic Development) from the School of International & Public Affairs, Columbia University, New York City, USA. Later, he obtained his PhD in Business Studies from Universiti Malaysia Sarawak in 2014.

He formerly served at the Sarawak Economic Development Corporation. During his tenure here from 2003 to 2012, he took on several roles including the Director of Entrepreneur Development Division, Director for the Tourism & Leisure Division, Deputy General Manager as well as Managing Director for Sara Resorts Sdn Bhd. In 2012, he was appointed as the Permanent Secretary for the Ministry of Housing Sarawak before taking on the role of Permanent Secretary for the Ministry of Urban Development and Natural Resources in 2017. He was appointed as the Deputy State Financial Secretary in 2019 and in 2021 he became the State Financial Secretary.

Dato Sri Dr. Haji Wan Lizozman is the Chairman of two state government-linked companies. He is the director of various State-owned Companies and a Board Member of the Sarawak Economic Development Corporation, Sarawak Timber Industry Development Corporation and Petroleum Sarawak Berhad.

Board of Directors Profile

2-9

YB DATUK AMAR HAJI MOHAMAD ABU BAKAR BIN MARZUKI

Non-Independent, Non-Executive Director

Age: 59
Gender: Male
Nationality: Malaysian

Meeting Attendance: 2/2

Datuk Amar Haji Mohamad Abu Bakar bin Marzuki joined the Board of Sarawak Energy Berhad on 2 October 2023 as a Non-Independent Non-Executive Director.

He graduated from the University Kebangsaan Malaysia (UKM) with a Bachelor of Arts and subsequently obtained a Master of Science from the University Putra Malaysia in 1999. He has also attended professional training programmes such as the Senior Executive Fellows Leadership Programme from Harvard School of Government University of Harvard, Boston, USA.

Serving the Sarawak Foundation for more than two decades, Datuk Amar Haji Mohamad Abu Bakar started as an Assistant Director [Higher Education], progressing to multiple roles within the Foundation. In his final years of service with the Sarawak Foundation, he was the Director, Secretary of the Board of Trustees and Treasurer of the Bakun Charitable Trust Fund.

In 2016, he was appointed as the Director of State Planning Unit at the Chief Minister's Department for two years, before taking the position of Deputy State Secretary for Socio-Economic Transformation under the same department. He now serves as the Sarawak State Secretary under the Department of Premier of Sarawak.

Datuk Amar Haji Mohamad Abu Bakar has been honoured with multiple awards for his state and civil service including Datuk Amar Bintang Kenyalang (DA), Panglima Negara Bintang Kenyalang (PNBS), Darjah Jasa Bakti Sarawak (DJBS) and many more.

Our Management Team

2-9, 2-28

YBHG. DATUK HAJI SHARBINI BIN SUHAILI

Group Chief Executive Officer

Yang Berbahagia Datuk Haji Sharbini Suhaili is Group CEO of Sarawak Energy. Under Datuk Haji Sharbini's stewardship, Sarawak Energy continues to advance hydropower which predominantly contributes to the installed generation capacity in Sarawak, powering residential, commercial and industrial activities, and supporting the government's economic growth strategy. In accelerating rural electrification, Sarawak Energy is delivering on Sarawak's mission to achieve 100% electrification coverage by 2025, together with the Ministry of Utility & Telecommunication.

Datuk Haji Sharbini is strongly committed to managing Sarawak Energy's business to minimise any negative impact of its operations and maximise the positive impact of what it does for the community, as a socially responsible corporate citizen. Datuk Haji Sharbini is also a strong advocate of safety as a key focus area for the corporation.

Sarawak Energy has been an International Hydropower Association (IHA) member and sustainability partner since 2010. On the IHA Board since 2017, Datuk Haji Sharbini is also a director of Petroleum Sarawak Berhad, a wholly government-owned petroleum company. In 2018, he was conferred the Darjah Jasa Bakti Sarawak (D.J.B.S) which carries the title Datu, on the occasion of His Excellency the Governor of Sarawak's birthday. Subsequently, he was conferred the Panglima Gemilang Bintang Kenyalang (P.G.B.K) which carries the title Datuk in 2023.

Datuk Haji Sharbini holds a Bachelor of Engineering (Hons) from the University of Leeds, UK, and a Masters in Business Administration (MBA) from Henley Management College, UK.

IR. JAMES UNG SING KWONG

Group Chief Operating Officer

Ir. James Ung Sing Kwong is the Group Chief Operating Officer of Sarawak Energy, a position he was appointed to in January 2022.

In this role, Ir. James is responsible for the vision and strategy of the group's operating units and oversees the execution of critical and transformative operational strategic initiatives while maintaining engineering and operational excellence. He is a member of the Group Executive Committee and also chairs the Group Operations Management Committee.

A mechanical engineer by profession, Ir. James has worked with Sarawak Energy's group of companies since 1990, growing his expertise in technical and leadership roles in power generation and power plant project management. Over the past thirty years, his extensive experience included roles as technical engineer and power station management for coal, gas and hydro plants in the power generation business and new power plant development.

Prior to this appointment, he was the Chief Executive Officer of SEB Power Sdn Bhd, the generation arm of Sarawak Energy.

Ir. James holds a Bachelor's Degree in Mechanical Engineering from the University of South Alabama, USA. He is a Fellow of the International Hydropower Association (IHA) and a registered Professional Engineer (PE) by the Board of Engineers Malaysia.

Our Management Team

2-9

LAU KIM SWEE

Chief Executive Officer, SESCO

Lau Kim Swee is the Chief Executive Officer of SESCO and is responsible for the reliability and security of the power system as well as oversight of end-user customer care.

Lau has served with Sarawak Energy for more than 30 years in various roles. Prior to his last appointment as Senior Vice President, Distribution, he held the retail portfolio and was responsible for the Company's significant success in combating power theft, saving the Company RM40 million and winning Sarawak Energy the first prize in the 2012 Key Focus Award from the Sarawak Government. Lau also brought visible change to the Company's customer service approach, spearheading Sarawak Energy's 24-7 Customer Care Centre in 2013 and other customer-oriented initiatives.

Born and raised in Kuching, Lau holds a Bachelor's Degree in Electrical and Computer Systems Engineering from Monash University in Melbourne, Australia.

TAN KOK KIONG

Chief Financial Officer

Tan Kok Kiong assumed the role of Chief Financial Officer with Sarawak Energy on 1 July 2022.

He is responsible for the financial risk management of the Sarawak Energy Group, developing our financial and strategic plans by leveraging financial data and metrics to drive Group performance. He is also overseeing the ongoing development of financial control systems that have been designed to preserve the Group's assets while ensuring that financial results are reported accurately in a timely manner, complying with all relevant regulations.

Kok Kiong's broad and deep experience in financial and commercial roles at the national and international levels over the past 30 years will ensure strong leadership continuity for Finance. He has provided strong and tangible commercial steers in Sarawak Energy's new business ventures. He also leads the Commercial Acumen workstream of the Company's Commercial Excellence Key Focus Area.

A COMMITMENT TO GOVERNANCE

Our Management Team

2-9

IR. PRAMOD KUMAR KARUNAKARAN

Executive Vice President, Project Delivery

Ir. Pramod Kumar Karunakaran joined Sarawak Energy as the Executive Vice President for Project Delivery in July 2018.

He has extensive leadership experience in business, operations, and project delivery with demonstrated successes in oil, gas, petrochemicals, and power industries. He successfully led operations and project delivery excellence efforts culminating in record operating and project delivery performances. He is accomplished in leading transformation, capability building, and negotiations in the areas of oil, gas, petrochemicals, and power.

Ir. Pramod also has extensive Board experience in both public listed and private limited companies. He obtained a Bachelor of Science (B.Sc. Hons) in Communications (Electronics) Engineering from Leeds Beckett University, a Certificate In International Management from INSEAD and a Professional Engineer Certification in Instrumentation & Control from the Board of Engineers Malaysia.

IR. BUNYAK ANAK LUNYONG

Chief Executive Officer, SEB Power

Ir. Bunyak Anak Lunyong is the Chief Executive Officer for SEB Power Sdn Bhd, a wholly-owned subsidiary of Sarawak Energy, responsible for all of the power generation business (hydro, coal, gas and hydrogen).

Ir. Bunyak started his career as an electrical engineer with SESCO in 1987 and brings to Sarawak Energy over 35 years of experience in electrical engineering, project management, engineering, construction, commissioning, operations, maintenance and asset integrity from his various roles in Royal Dutch Shell, Bakun Management Sdn Bhd, Proven Transmission Sdn Bhd and Siemens Power Generation Sdn Bhd, including a six-year assignment in Nigeria with Shell.

Prior to rejoining Sarawak Energy in 2020 to lead Project Controls and Performance Management in Project Delivery, Ir. Bunyak was the Operation Excellence Lead for Shell Malaysia's upstream operations.

He holds a Bachelor of Science in Electrical Engineering from the University of Houston, Texas, USA and is a member of the Institute of Engineers, Malaysia as well as the Board of Engineers Malaysia.

Our Management Team

2-9

DR. MAK MET

Senior Vice President,
Human Resources

Dr. Mak Met joined Sarawak Energy from Shell Malaysia Exploration and Production where he headed Human Resources for Shell's upstream businesses in Malaysia. Dr. Mak has a background in mechanical engineering and served in SESCO for five years before moving to Shell in the 1990s.

With over 30 years of experience and a Doctorate in Human Resources, he brings to Sarawak Energy a strong understanding of people and leadership development, in-depth knowledge of HR functions, frameworks and processes of a company that serves as a global benchmark for talent development and a passion for building Sarawakian talent.

Dr. Mak works with the Group Executive Committee and Human Resources team to build and develop the talent pipeline, ensure the Company attracts and retains the best talent and resources, and at the same time develop people so that the organisation is ready to deliver on its commitments to Sarawak.

HAJAH SITI AISAH BINTI ADENAN

Senior Vice President,
Corporate Services

Hajah Siti joined Sarawak Energy as an electrical engineer in 1990 under the operating arm, Sarawak Electricity Supply Corporation (SESCO). In her 30 years of service, she has undertaken diverse roles in technical and non-technical fields including stints as Regional Manager for Sibu and Bintulu; Vice President of People & Leadership Development and Vice President for Distribution – the first woman to hold this key technical position.

Her diverse career experience has allowed her to grow her knowledge as a technical specialist and broaden her management and leadership skills.

In Hajah Siti's current role, she leads the support functions of Sarawak Energy – overseeing Corporate Shared Services; Corporate Communication; Sustainability; and Government Relations, Event Management and Protocol.

She is also the Executive Champion for the Sarawak Energy Leading Women Network (SELWN), playing an active role in the network's activities including as a pioneer in the Women Mentoring Women programme.

Hajah Siti graduated from George Washington University, Washington DC, USA with a degree in Electrical Engineering.

A COMMITMENT TO GOVERNANCE

Our Management Team

2-9

NICK JAMES ARNETT WRIGHT

Senior Vice President,
Business Development

Nick Wright joined Sarawak Energy in June 2010. As Senior Vice President of Business Development, he led the negotiation of the Power Exchange Agreement with Indonesian national utility Perusahaan Listrik Negara (PLN) – governing the interconnection between Sarawak and West Kalimantan, which commenced operations in early 2016.

He is also leading the negotiation of similar agreements for Sarawak to export power to Brunei and Sabah and secured a deal with Malaysia's national oil company, PETRONAS, to supply 250 million standard cubic feet a day of natural gas to Sarawak.

For the four years prior to joining Sarawak Energy, Nick was the Senior Advisor for Energy, Water and Mining to the Minister for Energy and Resources, Tasmania, Australia.

Nick holds a Master of Business Administration (MBA) from the Graduate School of Business, University of New England. He also has a Bachelor of Arts (with First Class Honours) in Government and Economic Policy, as well as a Bachelor of Laws, from the University of Tasmania.

MARCONI MADAI

Senior Vice President,
Health, Safety, Security and Environment

Marconi Madai is the Senior Vice President of Health, Safety, Security and Environment, a position he was appointed to in January 2021. He leads a multidisciplinary team to drive excellence in health, safety and environment in Sarawak Energy as well as ensure business continuity management in line with the Group's business objectives.

Marconi has extensive industry experience, having served in management positions in the chemical industry in Malaysia, where he developed standard operating procedures, oversaw compliance to standards, managed business risks and drove initiatives on human resources and CSR.

Marconi graduated with a Bachelor of Science degree in Chemical Engineering from the University of Utah, Salt Lake City, USA in 1997.

Our Management Team

2-9

SIM KO SIN

Chief Digital Officer,
Information and Communication Technology

Sim Ko Sin joined Sarawak Energy as the Vice President for Information and Communication Technology in April 2018 and became the Chief Digital Officer for Information and Communication Technology in January 2021.

In line with the increased importance of information and communications technology as an enabler for the business, Sim is responsible for driving Sarawak Energy's ICT functions. These include ICT Strategy and Planning, Applications, Telecommunications and IT Infrastructure, Information Management, Operations, as well as Information Security and Risk Management.

Sim has worked in the energy industry for over 20 years and has extensive international experience, particularly in the Asia-Pacific, U.K. and China. She has well-rounded industrial experience and knowledge as well as IT services management expertise.

Sim has a Bachelor's Degree in Computer and Mathematical Sciences from the University of Western Australia and an MBA from Imperial College London, UK. She is also a certified project management professional.

YUSRI BIN SAFRI

Senior Vice President,
Contract and Procurement

Yusri bin Safri is the Senior Vice President for Contract and Procurement, a position he was appointed to on 1 February 2023.

In this role, he is responsible for ensuring the effective execution of and compliance with procurement strategies and policies of the Group – a critical aspect of Sarawak Energy's supply chain and vendor management process. In this role, he oversees three divisions: Contract and Procurement Governance, Vendor Participation and Capital Works.

Yusri joined Sarawak Energy in 1996 as an electrical engineer in Kuching before moving on to various technical positions throughout Sarawak. He has held leadership positions in both operations and corporate functions, effectively managing complex technical challenges and stakeholder matters as part of his business delivery. Prior to his current role, he served as Vice President of Distribution and has also headed Retail for Sarawak Energy.

Yusri holds a Bachelor of Electrical Engineering from Universiti Teknologi Malaysia, Johor Bahru.

A COMMITMENT TO GOVERNANCE

Our Management Team

2-9

DR. CHEN SHIUN

Senior Vice President,
Strategy and Corporate Development

Dr Chen Shiun is the Senior Vice President for Strategy & Corporate Development in Sarawak Energy. Prior to undertaking this role, he was the Vice President for Rural Electrification overlooking the progress of Sarawak's rural electrification initiative to ensure full electrification for the State by 2025.

Upon joining Sarawak Energy in 2008, he established the research and development department, focusing on improving generation, transmission and distribution system's performance and exploring new energy solutions. Dr Chen holds a Bachelor's Degree in Engineering and a PhD (Power Systems) from the University of Canterbury, New Zealand. Before returning to Sarawak in 2008, he served as an associate professor with Nanyang Technological University of Singapore for over 10 years.

GEORGE ALBERT WILLIAM CHAPMAN

Senior Vice President,
Legal and Compliance

George Chapman assumed the role of Senior Vice President for the Legal & Compliance Department on 1 December 2023, leading the team overseeing the legal, corporate secretarial, land & wayleave, as well as integrity & compliance aspects of Sarawak Energy's functions and operations.

A seasoned legal professional, George was a legal practitioner until he joined Sarawak Energy in 2012. In his previous roles from Senior Legal Officer to General Manager for Legal, he demonstrated legal acumen, strategic decision-making and strong leadership qualities.

George received his primary and secondary education at St. Joseph's School, Kuching. He subsequently attained a Bachelor of Laws, L.L.B (Hons) from the University of London, UK and was in private practice from 1995 to 2012. He is also a certified adjudicator, empanelled with the Asian International Arbitration Centre, Malaysia.

Our Management Team

2-9

ALVIN LIM KHIOK LEONG

Chief Operating Officer,
Sarawak Energy Resources

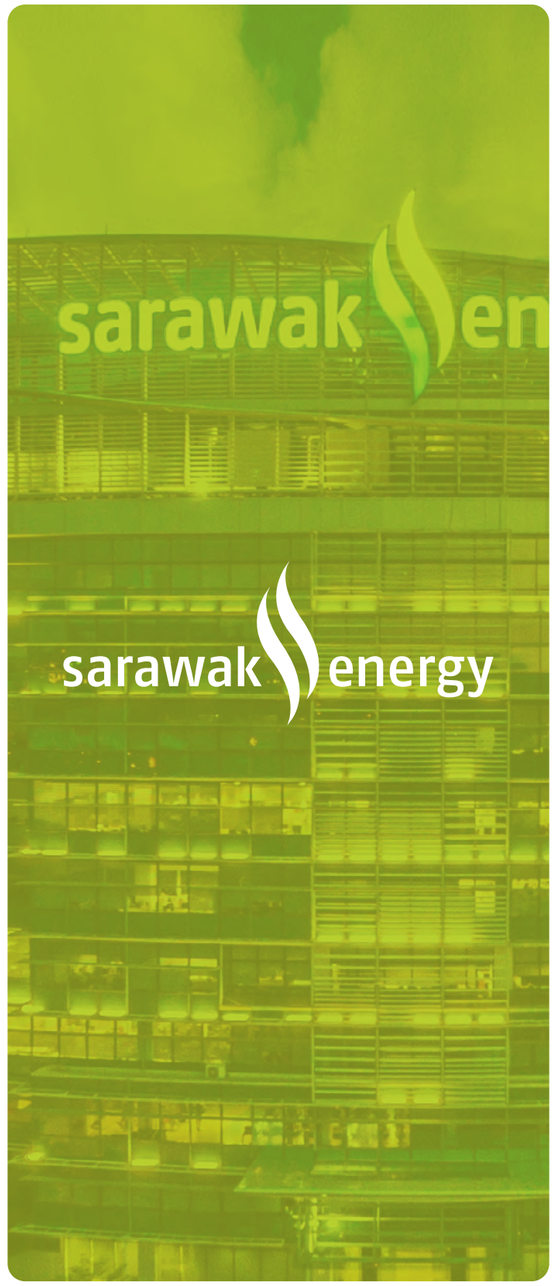
Alvin Lim is the Chief Operating Officer of Sarawak Energy Resources and is responsible for consolidating Sarawak Energy's upstream resource activities.

Alvin has served with Sarawak Energy for over 25 years in various roles, ranging from technical to corporate management positions. Starting as an electrical engineer, he joined Sarawak Electricity Supply Corporation (SESCO), a wholly-owned subsidiary of the Sarawak Energy Group.

Prior to his appointment as Chief Operating Officer of Sarawak Energy Resources, Alvin served as General Manager for Planning and Strategy, which was during a time when the Company was experiencing significant growth.

He led the Group's development strategies in areas such as system planning, key accounts and corporate development.

Born and raised in Kuching, Alvin holds a Bachelor's Degree in Electrical and Electronics Engineering (Hons) from the University of Tasmania, Australia.



Statement of Corporate Governance

2-9, 2-10, 2-11, 2-12

The Sarawak Energy Berhad Board of Directors ('Board') is committed to ensure that the highest standard of Corporate Governance is practiced throughout the Group with the objective of strengthening the Group's corporate accountability and safeguarding the interests of its stakeholders.

The Board is pleased to present a statement to the Shareholders on how the Group has applied the principles of good governance while taking into consideration the best practices set out in the Malaysian Code of Corporate Governance.

The Board of Directors

The Board's principal responsibilities for corporate governance are to set out the strategic direction of the Group and establish the objectives as well as to guide Management towards the achievement of its objectives and goals.

The Board consists of seven (7) members, whereby six (6) of the members are Non-Independent Non-Executive Directors and one (1) member is an Independent Non-Executive Director. The Directors collectively have a wide range of experience and expertise drawn from various industries and in the areas of business, accounting, economics, legal as well as public administration. Their expertise, experience and background are vital for the strategic direction of the Group.

The profiles of the Directors are set out on pages 44 to 50 of the Annual and Sustainability Report.

The Chairman's responsibility is to ensure the effectiveness and efficiency of the Board meetings and their conduct, whereas the role of the Independent Non-Executive Director is to ensure that the views provided are professional and independent and that the advice and judgment made on issues and decisions are in the best interest of stakeholders and the Group.

The Group has put in place, the Sarawak Energy Berhad Group Manual of Authority, which provides a consistent and formal framework for approving matters. It sets out clear lines of accountability and responsibility over which the Sarawak Energy Berhad's Board of Directors reserve authority and those which it has delegated to Management.

The Board meets at least four (4) times in a year, with additional meetings held as and when required. There were five (5) Board meetings held during the financial year ending 31 December 2023. A summary of the attendance of each Director at the Board meetings in 2023 is as follows:

DATUK AMAR ABDUL HAMED BIN SEPAWI *Non-Independent Non-Executive Chairman*	Meetings Attended	% of Attendance 100
TAN SRI DATUK AMAR HAJI MOHAMAD MORSHIDI BIN HAJI ABDUL GHANI *Non-Independent Non-Executive Director*	Meetings Attended	% of Attendance 100
TAN SRI DATO SRI MOHD HASSAN BIN MARICAN *Independent Non-Executive Director*	Meetings Attended	% of Attendance 80
DATO SRI FONG JOO CHUNG *Non-Independent Non-Executive Director*	Meetings Attended	% of Attendance 100
DATO' HAJI IDRIS BIN HAJI BUANG *Non-Independent Non-Executive Director*	Meetings Attended	% of Attendance 100
DATO SRI DR. HAJI WAN LIZOZMAN BIN WAN OMAR *Non-Independent Non-Executive Director*	Meetings Attended	% of Attendance 100
DATUK AMAR HAJI MOHAMAD ABU BAKAR BIN MARZUKI *(Appointed on 2 October 2023)* *Non-Independent Non-Executive Director*	Meetings Attended	% of Attendance 100

Statement of Corporate Governance

2-9, 2-10, 2-11, 2-12, 2-15, 2-17, 2-18

Supply of Information

The Board and its Committees have full and unrestricted access to all information within Sarawak Energy pertaining to the Group's business and affairs.

All the Directors are notified of the Board meetings within a stipulated time prior to the date of the meetings. The Directors are also provided with an agenda and a set of Board papers prior to each Board meeting to enable them to be well-informed and properly briefed before the meeting.

In most instances, senior management of the Group is invited to attend the Board meetings and external advisors are sometimes also invited to provide further information and to clarify issues that may be raised by the Board.

Board members also have access to the Company Secretary to obtain any further details they may require. Directors may also seek independent professional advice on any matter connected with the discharge of their responsibilities if deemed necessary and appropriate, whether as a full Board or individually in their capacity as a Director, at the Company's expense.

Re-election of Directors

In accordance with the Company's Constitution, all Directors appointed by the Board are subject to election by Shareholders at the first Annual General Meeting after their appointment. One-third (1/3) of the remaining Directors are required to submit themselves for re-election by rotation at each Annual General Meeting. All Directors must submit themselves for re-election at least once every three (3) years.

Directors' Training

The Directors have the option to attend various programmes organised by course providers to enhance their knowledge and skills to enable them to carry out their role as Directors effectively. The Company informs Directors of relevant courses and will make the necessary arrangements for their attendance.

Additionally in 2023, the Company Secretary updated the Directors on evolving regulatory changes and developments in corporate governance through the Directors' Refresher Series, initiated in 2021.

An induction programme was developed and implemented in 2022 to brief newly appointed Directors on the Group and its corporate governance requirements as well as on the roles and responsibilities of Directors.

Board Committees

The following Committees have been established to assist the Board in the execution of its responsibilities. These Committees have written terms of reference approved by the Board that set out their authority and duties.

1. Board Audit and Risk Committee (BARC)

The BARC plays an important role in reviewing the Group's financial management as well as reporting and assessing the integrity of the Group's accounting procedures and financial controls. The BARC is responsible for the review of accounting policies and the presentation of external financial reporting including the Group's interim results and its disclosures. It also oversees the activities of the internal audit function and ensures an objective and professional relationship is maintained with the External Auditors and that conflicts of interest, if any, are avoided. The BARC has full access to both Internal and External auditors, who in turn, have access to the Chairman of the BARC at all times.

The BARC members are appointed by the Board from its non-executive members and comprise one independent non-executive director and two non-independent non-executive directors of the Board.

The Chairman of the BARC, Tan Sri Dato Sri Mohd Hassan bin Marican is a Fellow of the Institute of Chartered Accountants in England and Wales, a Member of the Malaysian Institute of Accountants and Malaysian Institute of Certified Public Accountants.

During the financial year under review, the BARC convened five (5) meetings. The attendance records of the members are as follows:

	Meetings Attended	% of Attendance
TAN SRI DATO SRI MOHD HASSAN BIN MARICAN *Independent Non-Executive Director*	●●●●○	80
TAN SRI DATUK AMAR HAJI MOHAMAD MORSHIDI BIN HAJI ABDUL GHANI *Non-Independent Non-Executive Director*	●●●●●	100
DATO' HAJI IDRIS BIN HAJI BUANG *Non-Independent Non-Executive Director*	●●●●●	100
DATO SRI DR. HAJI WAN LIZOZMAN BIN WAN OMAR *Non-Independent Non-Executive Director*	●●●●○	80

Statement of Corporate Governance

2-9, 2-10, 2-11, 2-12, 2-20, 2-21

The Vice President/Head of Internal Audit and the Group Company Secretary, who serves as the Secretary of the BARC, were present at all the meetings. Representatives from the External Auditors, Group Chief Executive Officer/Chief Financial Officer and other members of senior management and external parties also attended specific meetings upon invitation.

Summary of Activities of the BARC

During the financial year ending 31 December 2023, the BARC carried out the following main activities:

- Reviewed and recommended the Quarterly Group Management Reports and Audited Financial Statements of the Company to the Board for approval;
- Reviewed and endorsed the External Auditor's Audit Plan, Scope of Work and Fees for the Company and recommended the same for approval by the Board;
- Reviewed the Quarterly Enterprise Risk Management Report – Updates on Sarawak Energy Berhad's Risk Profiles, Key Strategic and High Risks and Key Mitigation Actions taken by Management to address the risks;
- Reviewed and noted the strategic risk for SCORE and export customers' demand;
- Reviewed and approved the enhancement to Sarawak Energy Berhad's Risk Management Frameworks with regard to risk appetite and risk organisation;
- Reviewed and endorsed the BARC Reports, Statement on Risk Management and Internal Controls, and Corporate Governance Statement for inclusion in Sarawak Energy's Annual and Sustainability Report;
- Reviewed and endorsed Sarawak Energy's quarterly Integrity and Fraud Control Report;
- Reviewed and discussed Sarawak Energy Group Annual Revenue and Capital Budget and Year End Estimates and recommended the same for submission to the Board;
- Reviewed and endorsed the Report of Sarawak Energy Forex Hedging Committee on the hedging activities transacted during the year;
- Reviewed and noted the status updates on Sarawak Energy's insurance coverage and initiatives;
- Reviewed and approved/noted the Group Internal Audit Plans, KPIs Achievement and Quarterly Internal Audit Update Reports;
- Reviewed and deliberated reports issued by the External Auditors and Group Internal Audit on significant findings and remedial actions taken by Management to address the issues raised; and
- Reported to the Board on its activities and any significant issues and remedial actions taken by Management arising from the audits undertaken by the External and Internal Auditors on specific areas and reports/papers presented by Management at each BARC meeting.

2. Governance, Nomination and Remuneration Committee (GNRC)

The responsibilities of the GNRC are to identify potential candidates for Directorships to the Board and make recommendations for all new or re-appointments of members of the Board. Further, the GNRC also makes recommendations on the Company's framework for remuneration and its cost as well as determine specific remuneration packages on behalf of the Board and the terms and conditions of employment for the Group's employees.

The GNRC's additional duties are to provide remuneration input on contracts of employment with executive directors and senior management, determine the terms of any compensation in the event of early termination of employment contracts, make recommendations on human resource policies from time to time and discuss and approve the revision of the Group's organisation structure as and when needed.

The GNRC also acts as a disciplinary committee to decide and recommend disciplinary action for senior staff misconduct to the Board for approval.

The composition of the GNRC members for the financial year ended 31 December 2023 is as follows:

i) **Tan Sri Datuk Amar Haji Mohamad Morshidi bin Haji Abdul Ghani**
(Non-Independent, Non-Executive Director) – Chairman

ii) **Tan Sri Dato Sri Mohd. Hassan bin Marican**
(Independent, Non-Executive Director)

iii) **Dato Sri Fong Joo Chung**
(Non-Independent, Non-Executive Director)

iv) **Dato' Haji Idris bin Haji Buang**
(Non-Independent, Non-Executive Director)

Statement of Corporate Governance

2-9, 2-10, 2-11, 2-12

The GNRC held five (5) meetings during the financial year ended 31 December 2023. The attendance record of the members is as follows:

TAN SRI DATUK AMAR HAJI MOHAMAD MORSHIDI BIN HAJI ABDUL GHANI
Non-Independent Non-Executive Director
Meetings Attended: ●●●●●
% of Attendance: 100

TAN SRI DATO SRI MOHD HASSAN BIN MARICAN
Independent Non-Executive Director
Meetings Attended: ●●●●○
% of Attendance: 80

DATO SRI FONG JOO CHUNG
Non-Independent Non-Executive Director
Meetings Attended: ●●●●●
% of Attendance: 100

DATO' HAJI IDRIS BIN HAJI BUANG
Non-Independent Non-Executive Director
Meetings Attended: ●●●●●
% of Attendance: 100

3. Bumiputera Participation Board Committee (BPBC)

The responsibility of the BPBC is to ensure the participation of local and Bumiputera service providers or contractors in Sarawak Energy's contract and procurement activities in line with the State government's vision to maximise local and Bumiputera participation and content in contract and procurement in Sarawak.

BPBC has formulated an overall plan and is implementing the plan to ensure that Sarawak Energy's current and potential contractors are fully aware of the opportunities and incentives available. The objective of these initiatives is to expand the pool of qualified local Bumiputera contractors that can participate in Sarawak Energy's projects.

The composition of the BPBC members for the financial year ending 31 December 2023 is as follows:

i) **Dato' Haji Idris bin Haji Buang** - Chairman

Representations from Public Sector

ii) **Tuan Dzulkornain bin Masron** - Member

Representations from Bumiputera Business Chambers

iii) **Datu Haji Abang Helmi bin Tan Sri Ikhwan** - Member

iv) **Dato Allan Keripin Nangkai** - Member

v) **Datuk Mutang Tagal** - Member

vi) **Ir. Haji Talhah@Talha Affendi** - Member

Representations from Professional and Entrepreneurial Group

vii) **Datu Haji Wan Kassim bin Tuanku Zubir** - Member

viii) **Dr. Simon Sinang Bada** - Member

ix) **Tuan Stell Sindau** - Member

x) **Tuan Haji Sulaiman bin Abdul Hamid**
(Appointed on 16th August 2023) - Member

xi) **Ir. Haji Zawawi bin Haji Embong**
(Deceased on 18th May 2023) - Member

Statement of Corporate Governance

2-9, 2-10, 2-11, 2-12

The BPBC held six (6) meetings during the financial year ending 31 December 2023. The attendance record of the members is as follows:

DATO' HAJI IDRIS BIN HAJI BUANG
Chairman
Meetings Attended: ●●●●●●
% of Attendance: 100

DATU HAJI ABANG HELMI BIN TAN SRI IKHWAN
Member
Meetings Attended: ●●●●○○
% of Attendance: 66.7

DATU HAJI WAN KASSIM BIN TUANKU ZUBIR
Member
Meetings Attended: ●●●●●○
% of Attendance: 83.3

DATO ALLAN KERIPIN NANGKAI
Member
Meetings Attended: ●●●●○○
% of Attendance: 66.7

DATUK MUTANG TAGAL
Member
Meetings Attended: ●●●●○○
% of Attendance: 66.7

DR. SIMON SINANG BADA
Member
Meetings Attended: ●●●●●○
% of Attendance: 83.3

TUAN STELL SINDAU
Member
Meetings Attended: ●●●●●●
% of Attendance: 100

TUAN DZULKORNAIN BIN MASRON
Member
Meetings Attended: ●●●●○○
% of Attendance: 66.7

IR. HAJI TALHAH@TALHA AFFENDI
Member
Meetings Attended: ●●●●●●
% of Attendance: 100

TUAN HAJI SULAIMAN BIN ABDUL HAMID
Member
Meetings Attended: ●●●●●●
% of Attendance: 100

IR. HAJI ZAWAWI BIN HAJI EMBONG
Member
Meetings Attended: ●●●●●●
% of Attendance: 100

Notes:
1. *Ir. Haji Zawawi bin Haji Embong passed away on 18 May 2023.*
2. *Tuan Haji Sulaiman bin Abdul Hamid was appointed as a BPBC member on 16 August 2023.*

Management Committee

The Group Executive Committee ('GEC') is established to provide a Senior Management meeting and decision-making forum on specific matters as well as for reporting, information sharing, establishing cooperation or collaboration amongst the various departments or cross functions and finding resolutions to issues.

The GEC shall also function as the Executive Risk Committee ('ERC') for the Group, to promote risk discussion at the top management level.

The GEC has written terms of reference approved by the Board, and their authority and duties are set out as follows:

a) Monitor and evaluate political, economic and business conditions and formulate measures to ensure that any potential material impact is identified and managed;

b) Review, decide on or endorse strategic decisions and policy discussions or such other matters that require submission to, or further deliberation on a decision from, the Board of Directors, Board Committees or Subsidiary Company Boards;

c) Review, decide on or endorse strategic directions of the Sarawak Energy Group, including Decision Gates on projects, new business directions and the like;

d) Review, decide on or endorse strategic directions and policies relevant to the Sarawak Energy Group (such as Human Resources and leadership development, implementation of management leadership, change management and continuous improvement programmes and initiatives for the Sarawak Energy Group);

e) Review, decide on or endorse strategic directions and policies for Key Performance Indicators ('KPIs') for the Sarawak Energy Group;

f) Review, decide on or endorse issues of timely importance to the Sarawak Energy Group (such as Corporate Risk, Health, Safety, Security and Environment, Customer related issues, land access concerns and the like);

g) Manage and regularly review the operational and financial performance of the Sarawak Energy Group;

h) Optimise and allocate the Sarawak Energy Group's resources;

i) Discuss and debate Sarawak Energy Group's corporate culture and set ways forward to address any issues or encourage beneficial developments;

Statement of Corporate Governance

2-9, 2-12

j) Function as the ERC for the Group and oversee the establishment, implementation and consistent adoption and communication of the Group's risk management framework, which includes policies, processes and procedures to identify, analyse, evaluate, monitor and report on significant financial and non-financial risks, and respond to changes in the Group's internal and external environments;

k) Endorse any changes to the Group's Risk Management Framework to Board Audit and Risk Committee and Sarawak Energy Board for approval;

l) Set the risk appetite within which the Board expects Management to operate and ensure that actions are taken in a timely manner when risks are outside acceptable tolerance ranges;

m) Monitor the range of risk exposure against risk appetite tolerance;

n) Deliberate and provide directives, where applicable, on risk appetite metrics and tolerance range, portfolio of key risks and risk issues highlighted to the ERC, through regular reports;

o) Ensure that controls are in place to mitigate and manage the key risks of the Group;

p) Provide reasonable assurance that any adverse impact arising from a foreseeable future event or situation on the Group's objectives is mitigated and managed; and

q) Consider other matters as required by the Board;

As of 31 December 2023, the GEC comprises the following members:

i) **Datuk Haji Sharbini bin Suhaili**
(Group Chief Executive Officer) - Chairman

ii) **Ung Sing Kwong, James**
(Group Chief Operating Officer)

iii) **Lau Kim Swee**
(Chief Executive Officer, Syarikat SESCO Berhad)

iv) **Bunyak Anak Lunyong**
(Chief Executive Officer, SEB Power Sdn. Bhd.)

v) **Pramod Kumar Karunakaran**
(Executive Vice President, Project Delivery)

vi) **Tan Kok Kiong**
(Chief Financial Officer)

vii) **Dr Mak Anak Met**
(Senior Vice President, Human Resource)

viii) **Siti Aisah Bt. Adenan**
(Senior Vice President, Corporate Services)

ix) **Nick Wright**
(Senior Vice President, Business Development)

x) **Sim Ko Sin**
(Chief Digital Officer, Information and Communication Technology)

xi) **Marconi Madai**
(Senior Vice President, Health, Safety, Security and Environment)

xii) **Alvin Lim Khiok Leong**
(Chief Operating Officer, Sarawak Energy Resources)

xiii) **Yusri bin Safri**
(Senior Vice President, Contract & Procurement)
(Appointed on 1 February 2023)

xiv) **Dr. Chen Shiun**
(Senior Vice President, Strategy and Corporate Development)
(Appointed on 1 September 2023)

xv) **George Albert William Chapman**
(Senior Vice President, Legal & Compliance)
(Appointed on 1 December 2023)

xvi) **Haji Sulaiman bin Haji Abdul Hamid**
(Senior Vice President, Contract and Procurement)
(Retired on 31 March 2023)

xvii) **Ting Ching Zung**
(Executive Vice President, Strategy and Corporate Development) (Resigned on 31 August 2023)

xviii) **Jacob James Paul**
(Senior Vice President, Legal, Land and Company Secretary)
(Retired on 30 November 2023)

Statement of Corporate Governance

2-9, 2-12, 2-14

The management meetings held during the financial year ending 31 December 2023 are as follows:

Management Meetings Held	
GEC meetings	13
Special GEC meetings	10
GEC Strategic Risk Workshop	1
GEC Technology Council meetings	1
Group Digital Council meetings	3
GEC HSSE Council meetings	4
Rural Electrification Steering Committee	3
Group Investment Committee	7
Special Group Investment Committee	2
GEC Kaltara Hydro Steering Committee	8
Special GEC Kaltara Hydro Steering Committee	4

GEC Sub-Committees

Within our organisational framework, GEC sub-committees, including the Technology Council, Digital Council, HSSE Council, Rural Electrification Steering Committee, Investment Committee, and KALTARA Hydro Steering Committee, play vital roles in addressing specific operational aspects. Operating within defined parameters, these committees engage in detailed discussions, reviews, and decision-making to enhance organisational efficiency. Accountable to higher governance bodies, these sub-committees are integral to ensuring focused attention on key areas crucial for our sustained success.

Tender Committees

Tender committees are established to approve the award of tenders in line with the procurement Limits of Authority approved by the Board.

Confidentiality of Information

Under the Company's Enterprise Information Management guidelines, documents are to be classified based on the confidentiality or sensitivity of their contents. For documents classified as Confidential, Secret or High Secret, there are stipulated guidelines to be adhered to.

Staff or external parties privy to information or documents classified as 'Confidential' or higher are required to sign a Secrecy Oath or Confidentiality Agreement.

Accountability and Audit

Financial Reporting

The Directors are responsible for ensuring that the annual financial statements of the Group are drawn up in accordance with the applicable approved accounting standards in Malaysia and the provisions of the Companies Act, 2016.

The Board is also responsible to provide and present a balanced and meaningful assessment of the Group's financial performance and prospects, primarily through the annual financial statements and quarterly financial results as well as the Chairman's Statement and Review of Operations in the Annual and Sustainability Report. The Board is assisted by the Board Audit and Risk Committee in overseeing the Group's financial reporting processes and the quality of its financial reporting.

Relationship with Auditors

Through the BARC, the Board has established a formal, transparent and appropriate relationship with the Group's Auditors, both External and Internal. The BARC meets regularly with External and Internal Auditors to discuss the yearly audit plan, quarterly financial results, annual financial statements and internal audit reports, and at every Board meeting convened, the Chairman of the BARC briefs the Board on significant matters discussed and deliberated at each BARC meeting and makes recommendations for the Board's approval and endorsement.

Statement of Corporate Governance

2-12, 2-14, 2-27

Internal Controls

Information on the Group's internal controls system is presented in the Statement of Risk Management and Internal Control as set out on pages 67 to 73 of this Annual and Sustainability Report.

Directors' Responsibility Statement

The Board is responsible for ensuring that the financial statements are prepared in accordance with the Companies Act, 2016 and the applicable approved accounting standards set by the Malaysian Accounting Standards Board to present a true and fair, balanced and understandable assessment of the Group's financial position and results. In this Annual and Sustainability Report, an assessment is provided in the Directors' Report of the Audited Accounts.

The BARC reviews the statutory compliance and scrutinises the financial aspects of the Audited Accounts prior to deliberation at the Board level.

Additional Compliance information

To the best of the Directors' knowledge:

- Material Contracts

  Neither the Company nor its subsidiaries entered into any material contracts not in the ordinary course of business during the financial year ending 31 December 2023.

- Sanctions/Penalties

  There were no material sanctions and/or penalties imposed on the Company and its subsidiaries, Directors or Management by any relevant regulatory authorities during the financial year ending 31 December 2023.

- Revaluation Policy on Landed Properties

  The Group did not adopt any revaluation policy on landed properties during the financial year ending 31 December 2023.

Statement on Risk Management and Internal Control

2-13, 2-16

As part of its commitment to good corporate governance, Sarawak Energy Berhad ('Sarawak Energy') has voluntarily adopted the best practices for Sarawak Energy's Board of Directors ('Board') to provide a statement in its Annual and Sustainability Report on the state of risk management and internal control as a 'Group', which refers to Sarawak Energy and its subsidiaries.

The Group's risk management framework and system of internal control apply to Sarawak Energy and its subsidiaries while associated companies and joint ventures are excluded because the Group does not have full management control over them. Nonetheless, the Group, through its Board representations, exercises the power to participate in policy decisions of the associated companies and joint ventures.

Sarawak Energy's Board is pleased to present the following statement that has been prepared in accordance with the best practices recommended by the Statement on Risk Management and Internal Control: Guidelines for Directors of Listed Issuers (2012) and Principle B of the Malaysian Code of Corporate Governance. This statement outlines the nature and scope of the risk management and internal control systems within the Group during the year under review.

The Statement on Risk Management and Internal Control outlines the structure and processes that have been implemented to ensure the adequacy, effectiveness, and integrity of the risk management framework and system of internal control of the Group during the financial year ended 31 December 2023.

Board

The Board has an overall responsibility for the Group's risk management framework and system of internal control to provide reasonable assurance of efficient operations, effective internal checks and compliance with laws and regulations.

The ongoing process for identifying, evaluating, monitoring, and managing the significant risks faced by the Group is periodically reviewed by the Board during the financial year under review. However, the Board recognises that the Group's system of internal control is designed to manage rather than eliminate the risk of failure to achieve its objectives, hence it can only provide reasonable but not absolute assurance against material misstatement, fraud, or loss.

The Board Audit and Risk Committee ('BARC') assists the Board in reviewing the adequacy and effectiveness of the system of internal controls in the Group as part of the governance and risk management processes.

Management

The Group Executive Committee ('GEC') led by the Group Chief Executive Officer ('GCEO') is responsible for overseeing the establishment, implementation, and consistent adoption and communication of the Group's risk management framework, which includes policies, processes and, procedures to identify, analyse, evaluate, monitor and report on significant financial, and non-financial risks, and respond to changes in the Group's internal and external environments.

The GEC also functions as the Executive Risk Committee ('ERC') for the Group, to promote risk discussion at the Top Management level.

Business Units, Corporate Support Functions, and Individuals

The following are led by the respective GEC members and supported by Risk Controllers. They are responsible for:

- Identifying and assessing risks, implementation of appropriate control measures and action plans to mitigate and control these risks whilst balancing risks and opportunities
- Timely reporting and communication of risks under their purview
- Reviewing and updating of the Risk Appetite Statement ('RAS') metrics and ensuring risk-taking activities are within the Group's tolerance range
- Embedding of risk-informed decision-making and culture

Statement on Risk Management and Internal Control

2-13, 2-16, 2-29

Enterprise Risk Management ('ERM')

ERM is responsible for:

- Setting the overall risk management standards and providing a risk management framework, inclusive of policies, procedures, processes, and guidelines
- Providing risk advisory and support to the business units and corporate support functions to effectively manage risks
- Managing risk aggregation across business units and corporate support functions and providing GEC, BARC, and Board with a comprehensive corporate-level view (reporting) of risk
- Driving performance management in terms of Key Risk Indicators, i.e. RAS metrics and risk reports on breaches and mitigation

With changes in the overall risk landscape, business aspirations and how the business (including risks) is being managed, the risk governance, operating model, and organisation structure were enhanced to clearly articulate the risk-related roles and responsibilities of the 3 Lines to ensure effective risk management, thereby avoiding organisational blind spots and overlapping actions.

Risk Management Framework

In addition to discharging its duties and responsibilities in maintaining a robust and sound system of internal control, the Board has approved the Risk Management Framework for the Group to provide guidance relating to the implementation of enterprise risk oversight and management processes. This framework, in alignment with the ISO 31000:2018 guidelines, guides the execution of enterprise-wide risk oversight and management activities. It outlines processes for identifying, assessing, mitigating, controlling, monitoring and reviewing risks.

The framework ensures that significant risks are continuously identified and that instituted controls are efficaciously applied by the management to manage risk exposure at levels that are tolerable and acceptable to the Group, consistent with its risk appetite and risk management practices.

Risk Management Process

The Group implements the ERM process to identify potential unfavourable events that may adversely affect the Group's business objectives and strategies as well as to prioritise risks within the Group's risk appetite.

The following is the summary of the tools and processes that ensure effective risk management in the Group:

- The Group's RAS articulates strategic and business risks that the Group is willing to accept to achieve its strategic ambitions. The Board determines the Group's risk appetite and tolerance which provides early warning of increasing risk exposures and potential risk events. The Group RAS metrics are monitored and reported on a quarterly basis to the ERC, BARC and the Board
- The Group's Strategic Risk Profile consists of strategic and emerging risks with corresponding risk mitigations. This allows sufficient management oversight, the ability for timely intervention or mitigation of risks, as well as enabling risks to be appropriately considered in business decision-making. The profile is presented to BARC and the Board
- The Group Risk Impact and Likelihood Parameters and Matrix, which is aligned with the Group's risk appetite, are used to guide the assessment and prioritisation of risks that are identified during planning initiatives, projects and operations, thereby developing appropriate mitigation and resolution plans
- To enable comprehensive identification and prioritisation of risks throughout the Group, a top-down and bottom-up risk review process was implemented
- Sarawak Energy Enterprise Risk ('SEERisk') serves as the single source of truth for enterprise risk information and facilitates the identification, assessment, monitoring and mitigation of enterprise risk. This streamlines the risk review process across the Group with timely review and updates of risks and mitigation actions, enhances the visibility of risks and the progress of mitigation plans, speeds up work processes through online approvals, monitoring and reporting, among others
- In supporting the above enhancements and implementation of the enterprise risk system and as part of inculcating a risk-conscious culture within the Group, risk awareness and education programmes have been conducted for appointed Risk Controllers and other employees through internal engagement sessions and risk-sharing sessions with other leading risk practitioners

A COMMITMENT TO GOVERNANCE

Statement on Risk Management and Internal Control

2-13

Key Risks of the Group

The Group's strategic risk profile identifies critical risks that could potentially hinder the achievement of the Group's strategic objectives. The following are the main categories of risks outlined in the Group's Strategic Risk Profile.

Risk Description	
1. Major and Strategic Investments	Quality of investment decisions in delivering value targets.
2. Project Delivery	Delay in scheduled completion of projects leading to cost overrun and inability to meet customer demand.
3. Cybersecurity	Cyber-attacks resulting in operation disruptions, confidentiality, and integrity breaches and loss of information and data.
4. Human Capital	Competency and capacity gaps to meet new areas of business.
5. Operational	Failure to ensure a reasonable level of grid system reliability, stability, and security.

System of Internal Controls

Internal control is an integral part of risk management. The Sarawak Energy Control Framework, which serves as an overarching framework, captures the various components of controls and how the controls are implemented by the Group to provide reasonable assurance that Sarawak Energy will achieve its goals and fulfil external obligations and commitments.

The details of the Group's system of internal control are as follows:

Corporate Structure

- The Group's Organisational and Management Structure and Guidelines formally define the line of responsibility for all aspects of the Group's affairs, which is aligned with its strategic and operational requirements. The structure and guidelines will be reviewed and updated as and when needed to reflect the changing business environment and operating activities within the Group.

Limits of Authority

- The Sarawak Energy Berhad Group Manual of Authority ('MOA') serves as a means of governing and safeguarding the Group in key approval matters for strategic and critical financial and non-financial matters as well as sets a sound framework of authority and accountability to facilitate timely, effective, and quality decision-making. The MOA was reviewed and updated in 2023 to ensure the continued relevance and appropriateness of its contents.

Policies, Procedures and Guidelines ('PPG')

- Under the custody of the Governance and Regulatory Unit of the Legal Division, the Group's Policy Central was established as a centralised portal for the Group's PPG. These documents are consistently reviewed and enhanced when necessary to ensure relevance and effectiveness.
- The Group strives to implement and maintain best practices, some of which have been recognised and awarded with various International Organisation for Standardisation ('ISO') Management System certifications. Integrated Management System and Assurance ('IMSA') is realising the integrated management system ('IMS') in managing the Conformance & Compliance Assessment ('CCA') formerly known as ISO Internal Audit for all ISO Management Systems subscribed by the Group. The corporate-wide internal assessments are conducted at planned intervals by IMSA Division to ensure compliance with ISO standards requirements, internal PPG, statutory and regulatory requirements, as well as the adequacy and effectiveness on the implementation of the established management system including Quality, Environmental, Occupational, Safety & Health, Information Security, Asset Management, 5S, HSS and any other subscribed standard/protocol in the future.

Statement on Risk Management and Internal Control

2-13

Strategy, Planning and Appraisal

- Sarawak Energy established strategy, planning, and appraisal processes that align with its purpose and vision. These processes translate the Group's purpose and vision into actionable strategies, develop and implement plans in line with those strategies, and evaluate performance against objectives.
- Senior Management prepares and presents the business plans and budgets to the Board annually for approval and updates on the progress on a quarterly basis.
- Measurement of performance is regularly monitored through reports incorporating key project progress, financial and operational key performance indicators, and departmental initiatives by the GCEO to the Board.

Financial Management

- Finance Policies and Procedures covering key processes, including Invoice to Pay, Record to Report, Planning, Budgeting and Forecasting, Order to Cash, Taxation, Treasury, Corporate Finance, and Investor Relations, where relevant, have been reviewed and enhanced to ensure compliance and control.
- The BARC reviews the statutory annual financial statements and the quarterly group management reports and recommends them to the Board for approval.
- Assessment of the adequacy of insurance coverage for employees and assets is conducted annually to safeguard against any contingent incidents that could result in material losses.

Human Resources Management

- The suite of Human Resources Policies, Procedures and Guidelines encompasses areas of human resources management such as recruitment, onboarding, employee development, benefits and remuneration, among others and is supported by the promotion of a high-performance culture to enable the Group to achieve its strategic goals and objectives.

Procurement Management

- Procurement Policies and Procedures are updated and in place to govern the procurement activities within the Group.

Customer Management

- Sarawak Energy has implemented control measures to oversee and enhance the efficiency and security of customer interactions across various platforms. The SEB cares mobile app and the integrated 24/7 Customer Care Centre are subjected to stringent controls, ensuring the integrity of services, billing and payment processes, outage reporting and customer service matters.

Health, Safety, Security and Environment ('HSSE') Management

- Sarawak Energy's dedication to achieving HSSE Excellence is guided by key focus areas in Health, Safety, Security, and Environment. Our commitment revolves around:

1. **Cultivating a healthy and productive workforce**
2. **Ensuring zero harm to people by achieving zero fatalities and zero Loss Time Injury (LTI)**
3. **Preventing intrusion at all guarded power stations, substations, and offices, and**
4. **Achieving zero harm to the environment by maintaining 100% compliance with internal and external environmental regulatory frameworks and laws**

- Sarawak Energy is committed to fostering a robust HSSE culture built on the foundation of core behaviours i.e. Assess, Comply, and Empower – which the Group actively demonstrates to embed in the hearts and minds of all employees.
- The foundational drivers of HSSE at Sarawak Energy also include strong leadership, exemplified by leaders exhibiting the right HSSE behaviours. The Group aims to embed a culture where individuals take safety upon themselves, fostering a genuine desire to maintain a safe environment.
- Critical activities are conducted with the right competency by competent personnel. Proper stakeholder engagement is integral, contributing to actual performance, which is measured through various performance tools.

Sustainability Strategy and Governance

- A Sustainability Strategy and Roadmap which provides the Group with strategic direction and delineates various action plans integrated across all business functions are in place to improve the sustainability performance of the Group.

A COMMITMENT TO GOVERNANCE

Statement on Risk Management and Internal Control

2-13

- The Sustainability Strategy focuses on five (5) main themes:

Theme 1	**Sustainability Leadership**
Theme 2	**Sustainable Growth**
Theme 3	**Business Resilience**
Theme 4	**Climate Action**
Theme 5	**Workforce and Supply Chain**

- Aligned with the Sustainability Strategy under Theme 1: Sustainability Leadership, Sarawak Energy strengthened its governance and oversight of sustainability through the establishment of the Group Sustainability Committee ('GSC').
- The GSC assumes responsibility for ensuring a proper and effective implementation of the strategy, roadmap, and plan. This includes setting of appropriate targets and Key Performance Index ('KPI'). The GSC reports to and advises the GEC on matters pertaining to sustainability.

Cybersecurity and Data Management

- The Group acknowledges the benefits of Information Technologies ('IT') in enhancing operations but is aware of cybersecurity threats. Mitigation measures include well-defined IT policies, employee training on cybersecurity, secure remote access, role-based data access, updated anti-virus software, proactive vulnerability management, ISO 27001 certification, and deployment of firewalls and secure email gateways. These efforts signify the Group's commitment to a resilient cybersecurity posture.
- Sarawak Energy is dedicated to upholding customer privacy rights and protecting personal data. A notable contribution includes active involvement in formulating the Personal Data Protection Code of Practice for the Utilities Sector (Electricity), providing guidance for processing and handling customers' personal data.
- In addition, the Group also enhanced the use of information and communication technology by implementing mobile device management information security control to protect company data and implement digital literacy and a comprehensive cyber security awareness campaign aimed at developing employees' digital capabilities and competencies.

Project Management

- The Sarawak Energy Project Model ('SEPM') is a business process that facilitates prudent management of investments more than RM50 million. As a stage-gated process, SEPM ensures the assessment of commercial viability, effective front-end planning and design, contracting and final investment decisions. All capital works projects of more than RM50 million undertaken by the Group shall comply with the requirements as defined in the SEPM.

Business Continuity Management ('BCM')

- The Board acknowledges the significance of instituting a holistic BCM Framework and Crisis Management Plan for the Group to build and enhance organisational resilience with the capability and capacity to create an effective response and recovery process that safeguards the interests of its key stakeholders, reputation, and value-creating activities.
- The Group has implemented the BCM Framework and Crisis Management Plan. It is also continuing its rollout of the BCM implementation roadmap and related programmes.
- Additionally, Crisis Simulation Exercises, BCM Awareness and Refresher Training, as well as Business Impact Analysis/ Business Continuity Plan documentation review workshops were conducted to enhance business resiliency by building organisational capability and capacity for effective emergency responses and systematic recovery strategies to maintain business continuity.

Legal

- Significant contracts and legally enforceable agreements are reviewed by the Legal Division prior to finalisation and execution.

Integrity and Compliance

The Integrity and Compliance Division, led by the Chief Integrity and Compliance Officer ('CICO'), was established to provide independent oversight of integrity, fraud, bribery and corruption control, and compliance within Sarawak Energy Group.

Statement on Risk Management and Internal Control

2-13, 2-15, 2-16, 2-23, 2-24, 205-2, 3-3

Demonstrating the Group's unwavering commitment to integrity and zero tolerance for fraud, bribery, and corruption, as well as compliance with laws, regulations, and internal PPG, the Group has implemented a series of controls, including:

- Collaboration between Internal Audit, Enterprise Risk Management, Integrity and Compliance Division and other assurance partners on Integrated Risk Assurance to share on assurance, risk, and compliance matters
- Implementation of action plans to mitigate the risk of Non-Compliance with Regulations and PPGs
- All regulatory non-compliance or breaches of laws and regulations are reported to the BARC on a quarterly basis
- Conducting regular engagement sessions and awareness sessions such as the Governance & Compliance Programme, addressing topics like 'Accountability and Integrity' in efforts to cultivate a strong culture of good governance and compliance
- Ongoing engagements with the Malaysian Anti-Corruption Commission ('MACC') to exchange knowledge, discuss issues and challenges, and collaborate in efforts against fraud, corruption, and bribery
- Revision 3.0 of the Fraud, Bribery & Corruption Risk Management Framework ('FBCRM')
- Enhancement of the Sarawak Energy Ethics Channel ('SEEC'), accessible to both Sarawak Energy employees and the public
- Implementation of Fraud, Bribery, and Corruption Risk registers and clinics to address identified risks
- Annual signing of the Sarawak Energy Integrity Pledge for the GEC, existing employees as well as new recruits as part of its recruitment and onboarding process
- Carrying out the Annual Sarawak Energy Integrity Survey ('SEIS')
- Conducting Annual Mandatory Online Anti-Fraud, Bribery, and Corruption ('ABC') training
- Conducting briefings to tenderers and third parties on Zero Tolerance to Fraud, Corruption and Bribery, and ABC Policy
- Continuous training, education, and Governance and Compliance programmes, including awareness briefing on Zero Tolerance to Fraud, Corruption, and Bribery, ABC Policy, PPG on Gift, Entertainment and Hospitality ('GEH') Policy, Conflict of Interest ('COI') Policy, and Whistleblowing Policy
- Continual implementation of the Integrity, Fraud, and Corruption roadmap, along with regular reviews of internal PPGs, aimed at fostering an integrity and compliance-driven culture
- Conducting compliance awareness training/clinic to reinforce the importance of compliance with regulations and PPGs

Internal Audit Function

The BARC, assisted by the Group Internal Audit ('GIA'), provides the Board with the assurance it requires on the adequacy and effectiveness of the system of internal controls. The BARC has an oversight function for all activities carried out by the GIA.

The head of GIA has the relevant qualifications and experience to lead and manage the internal audit ('IA') function which includes overseeing the planning, execution, and reporting of GIA activities - assuring the Board, BARC and senior management that the Group's internal control systems are operating effectively.

As part of its mandate, the GIA conducts regular and systematic audits of the Group's operations, including financial, operational, information technology ('IT'), project, and compliance audits. The Group's internal auditors conduct their functions according to the standards set by recognised professional bodies, i.e., the Institute of Internal Auditors ('IIA') International Professional Practices Framework ('IPPF'), and IA activities are conducted based on the IA charter and IA framework.

In the past year, GIA has conducted a comprehensive risk assessment and developed an annual audit plan that covers key business processes, high-risk areas, emerging risks, and regulatory requirements. GIA has also strengthened its collaboration and communication with the BARC, Board, senior management, and other stakeholders to ensure that audit findings and recommendations are effectively communicated and acted upon.

Furthermore, GIA has also successfully undergone an External Quality Assessment ('EQA') conducted by PricewaterhouseCoopers. This assessment validates the GIA's commitment to upholding the highest standards of internal auditing and confirms its general conformance to the IPPF.

Additionally, as part of the ongoing Quality Assurance & Improvement Program ('QAIP'), GIA has conducted peer reviews on selected audit engagements and a comprehensive full self-assessment. These reviews are instrumental in ensuring the quality and effectiveness of the internal audit function. Through these rigorous assessments, GIA has identified areas of strength and opportunities for improvement, ultimately enhancing the value it brings to the Group.

The Group's IA function has played a vital role in evaluating and improving the effectiveness of the Group's risk management, control, and governance processes. GIA will continue to enhance its capabilities to ensure that the Group has a robust and effective internal control system that supports our business objectives and safeguards the interests of our stakeholders.

Statement on Risk Management and Internal Control

2-13, 2-14, 2-16, 2-17, 2-23, 2-24, 3-3

Conclusion

The Board has obtained assurances from the GEC through a statement of assurance that to the best of their knowledge and belief, the Group's risk management and internal control system is operating adequately and effectively, in all material aspects. Where weaknesses were identified, rectification steps have been put in place.

To the best of their knowledge and belief, the Board is of the view that the risk management and internal control system in place for the year under review and up to the date of approval of this statement for inclusion into the Annual and Sustainability Report, is adequate and effective to safeguard shareholders' investment, the interests of customers, regulators and employees, and the Group's assets.

Review of the Statement by External Auditor

The external auditors have reviewed this Statement on Risk Management and Internal Control pursuant to the scope set out in Audit and Assurance Practice Guide 3, Guidance for Auditors on Engagements to Report on the Statement on Risk Management and Internal Control included in the Annual Report (AAPG3) issued by the Malaysian Institute of Accountants (MIA) for inclusion in the Sarawak Energy's Annual and Sustainability Report for the year ended 31 December 2023, and reported to the Board that nothing has come to their attention that causes them to believe that the statement intended to be included in the Annual and Sustainability Report is not prepared, in all material respects, in accordance with the principle disclosures required by paragraphs 41 and 42 of the Statement on Risk Management and Internal Control: Guidelines for Directors of Listed Issuers nor is the Statement factually inaccurate.

AAPG3 does not require the external auditors to consider whether the Directors' Statement on Risk Management and Internal Control covers all risks and controls or to form an opinion on the adequacy and effectiveness of the Group's risk management and internal control system including the assessment and opinion by the Directors and management thereon.

The report from the external auditors was made solely for and directed solely to the Board in connection with their voluntary adoption of the best practices recommended by the Statement on Risk Management and Internal Control: Guidelines for Directors of Listed Issuers (2012) and Principle B of Malaysian Code of Corporate Governance which is for the Board to make a statement in its Annual and Sustainability Report about the state of risk management and internal control as a Group and for no other purpose or parties. The external auditors do not assume responsibility to any person other than the Board in respect of any aspect of this report.

This statement is made in accordance with the resolution of the Board dated 30 May 2024.

Our Strategic Roadmap

3-3

With the completion of SEE 2022, Sarawak Energy has witnessed significant growth across the organisation, including innovation, governance, interconnections, financials and our sustainability footprint. To keep up this momentum, we established SEE 2025 to continue creating value for our stakeholders. The year in review marks the start of the strategic roadmap's new phase which involves refreshed KFAs. Known as KFA 3.0, we are confident that these six key focus areas will steer us towards our goal of becoming a top quartile sustainable digital utility.

PAST – SEE 2020

- Renewable energy leader in Malaysia – transitioning 60% hydro in Sarawak generation capacity mix
- Reached 99% state-wide electrification
- Achieved SAIDI of below 80 minutes for the first time in 100 years
- Cultivated a high-performance culture organisation, consistently scoring more than 80% in employee engagement

PRESENT – SEE 2025

- Expanding our renewable energy footprint
- Strengthening Borneo & ASEAN Grid Interconnection
- Emerging technology foresight and adoption
- Towards full coverage of electrification
- Progressing towards becoming digital utility powerhouse
- Excelling in talent and capability building
- Catalysing Sarawak's growth and development strategy

FUTURE

- Investment for interconnection across the Region
- Expanding beyond Sarawak through joint ventures
- Regional Hub & Leader in clean, renewable energy
- Maintain at least 60% of renewable energy in our generation mix
- Partner of choice for utility and energy players

Our Strategic Roadmap

2-22

SEE 2025 – Towards Establishing a Sustainable Digital Utility

Sarawak Energy is taking the next step in our growth journey as we continue to expand regionally and internationally, investing in new innovations and technologies to be a top quartile and sustainable digital utility that is fully aligned with the Sarawak Government's PCDS 2030 as well as environmental, social, and governance (ESG) principles.

The organisation is dedicated to materialising these sustainability aspirations through the expansion of our renewable energy footprint while pursuing regional interconnections across Borneo and ASEAN.

To support the initiatives under the SEE 2025 to become a Sustainable Digital Utility, we have established a Sarawak Energy Digitalisation Roadmap, anchored on five key strategies. These strategies revolve around building a robust digital foundation for the organisation while nurturing a digital culture to ensure that we are up to date in our expertise. By leveraging data as strategic assets, we believe that it will enable us to grow a smart business.

Under KFA 3.0, we will continue to emphasise HSSE Excellence through a wide range of relevant initiatives and programmes to safeguard our people's overall wellbeing. We remain committed to maintaining high standards of health, safety, security and environmental compliance.

Sarawak Energy is fully committed to timely completion of our projects to ensure Project Delivery Excellence, with the aim of achieving the 1st quintile in the IPA's benchmarking. Under the Operational Excellence focus area, we aim to optimise existing processes and introduce newer, more efficient ones while simultaneously improving our response time in key services to improve customer satisfaction.

We will also continue to advance Commercial Excellence in Sarawak Energy by promoting a commercial mindset to all employees, emphasising the importance of value-based decision making in all aspects of the business. The Company is working to ensure that all our people understand that commercial matters are a collective responsibility, not a departmental one.

Acknowledging that our talents are our greatest asset, and under the Talent Management Excellence key focus area, we are continuously developing our people through various training and learning programmes – supplemented by important competency and development frameworks such as our Individual Development Plan and Competence Assurance Framework. This will ensure significant bench strength, with potential leaders ready to ascend in the organisation.

Sarawak Energy is confident that by consistently developing our people to reach their professional and personal goals, we will be able to maintain the high performance culture that has made the organisation a success. In addition to proactive employee engagement and a commitment to continuous improvement, we are also intensifying our efforts in upholding Diversity, Equity and Inclusions (DEI) principles in the Company.

As we look forward to SEE 2025, Sarawak Energy remains focused on realising our regional renewable energy powerhouse ambitions – seeking partnerships and collaborations with like-minded organisations across the region.

DATUK HAJI SHARBINI SUHAILI
Group Chief Executive Officer

Report Card 2023

EU30

GENERATION OPERATIONAL EXCELLENCE

Equivalent Available Factor (Weighted Average)

	COAL		GAS		HYDRO	
	WEAF	FOR	WEAF	FOR	WEAF	FOR
2019	77.49%	10.53%	91.06%	0.38%	93.41%	1.28%
2020	82.07%	2.94%	79.23%	1.14%	94.74%	0.49%
2021	78.8%	5.05%	79.4%	5.99%	95.2%	0.42%
2022	78.18%	5.11%	79.11%	11.91%	94.91%	0.45%
2023	**69.27%**	**11.26%**	**79.87%**	**3.05%**	**94.30%**	**0.88%**

Notes:
- *Equivalent Available Factor (EAF) is weighted.*
- *2023 is 12 months rolling average up to December.*
- *Forced Outage Rate (FOR) is a simple average.*
- *2023 is the average for January to December.*

Report Card 2023

EU28, EU29, 3-3

NETWORK AND CUSTOMER SERVICE EXCELLENCE

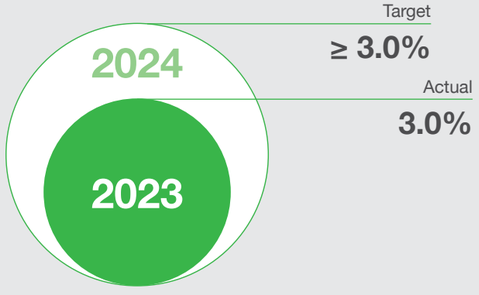
Indicator	Actual 2023	SEE 2025 KFA Target
System Average Interruption Duration Index (SAIDI)	81.89[a]	< 60 minutes
System Average Interruption Frequency Index (SAIFI)	1.18[a]	< 1 time
Age of Debtors > 42 days	23.87%	< 20%
Non-Technical Losses	1.48%	< 2%
Street Lighting Repair	94.21%	90% < 24 hours
Release of Connection Charges	84.92%	90% ≤ 14 days
Service Call Attendance	93.62%	90% < 45 minutes
Service Line Installation	94.22%	90% < 7 days
Service Cable Installation	94.13%	90% < 7 days
Customer Satisfaction Index	97.26%	> 90%

Note:
[a] *SAIDI & SAIFI include generation, transmission and distribution level.*

COMMERCIAL EXCELLENCE

Value Optimisation

Return on Assets



High Performance Culture

Sarawak Energy Employee Survey (SEES)

Employee engagement score was **91%** in 2023 against target score of ≥ 80%.

SEE2025 Key Focus Areas' Targets

2-27

HEALTH

2%

Waist to Height (WtHR) Ratio

< 0.5

2% improvement from baseline

SAFETY

ZERO

Loss Time Injury (LTI) & Fatalities

SECURITY

ZERO

Intrusions at All Guarded
Power Stations, Substations and Offices

ENVIRONMENT

100%

Compliance with Regulatory Laws

GENERATION EXCELLENCE

	EAF	FOR
COAL	≥ 87%	≤ 2%
GAS	≥ 89%	≤ 2%
HYDRO	≥ 93%	≤ 1%

Notes:
- *EAF – Equivalent Availability Factor.*
- *FOR – Forced Outage Rate.*

NETWORK & CUSTOMER SERVICE EXCELLENCE

SAIDI **Overall < 60 min** **Urban < 25 min** **Rural < 120 min**	SAIFI **Overall < 1 time** **Urban < 0.5 time** **Rural < 2.5 times**
Customer satisfaction index **> 90%**	Non-technical losses **< 2%**
Age of debtors **> 42 days < 20%**	**90%** Resolution of Key Services
Street lighting repair **< 24 hours**	Service call **< 45 minutes**
Release of connection charge **≤ 14 days**	Service Line/Cable Installation **< 7 days**

SEE2025 Key Focus Areas' Targets

TIMELY COMPLETION

70%

of projects are
completed on time

COST DISCIPLINE

1. Within **1st quartile benchmark**
2. **CAPEX execution** within **≥ 90%** and **≤ 105%**

QUALITY

1. **No malfunction/major equipment failure** during Defect Liability Period
2. **Conformance to Audit Criteria**
   80%
3. **Audit non-conformance closeout**
   90%

VALUE OPTIMISATION

Return on Assets (ROA)
≥ 3%

We know that Sarawak Energy is a great place to work when:

- Our people demonstrate Winning Behaviours.
- Our culture enables the delivery of aspirational targets for all key focus areas.
- Employees share their positive experiences as indicated by the SEES scores.

Score target above

80%

1. Employee Engagement
2. Continuous Improvement
3. Diversity & Inclusiveness

- We receive external recognition.

SUSTAINABLE TALENT BENCH STRENGTH

2 'Ready Now' & 2 'Ready Later' successors for critical positions:

95%

INDIVIDUAL DEVELOPMENT PLAN (IDP)

For every employee

98%

COMPETENCE ASSURANCE FRAMEWORK (CAF)

95%

Self-assessment

95%

Subject Matter Expert (SME) assessment

Our People

404-2, 2-7, 3-3

Sarawak Energy's Talent Management Excellence & People Strategy

Sarawak Energy is supported by a multidisciplinary workforce from diverse backgrounds, with each employee possessing and contributing their unique skills, knowledge and experiences to the organisation's vision of meeting the region's need for reliable and renewable energy.

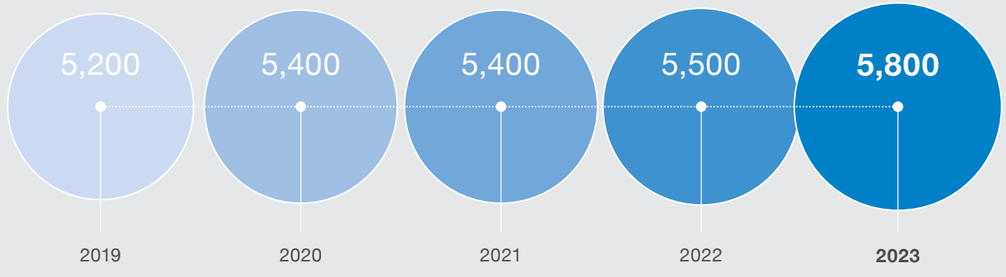
We believe that talents at all levels can be nurtured and inculcated with valuable traits such as agility, creativity and innovativeness. This creates the path for a progressive and sustainable organisational culture, underpinned by Sarawak Energy's five core values.

As one of the enablers in Sarawak Energy's strategic roadmap, the Talent Management Excellence (TME) provides a holistic approach towards talent management. To realise TME excellence, we implement a 2023-2028 Game Plan themed 'Making TME Contagious' through sharpening and optimising our talent ecosystem. There are 5 game changers that we focus on namely competencies and expertise building; inspire sustainable leadership; enhance employee wellbeing; provide recognition and reward; and cultivate a learning mindset.

Embedded within our approach are the following components:

Our People's Strategy | **5 Game Changers** | **TME Ecosystem** | **TME Aspiration**

Headcount (Workforce)



Our People

404-2, 3-3

TME Ecosystem

Our TME Ecosystem consists of all our products, services and initiatives which drive our efforts to provide the best for our people and nurture a high-performing workforce.

Our People Strategy

Our People Strategy undertakes the approach of 'Let's Acquire, Develop & Deploy our talents'. This focuses on the acquisition of the right talents, effective development and deployment of talents into roles that maximise their potential.

Our People Strategy is centred on nine people priorities:

THE NINE PEOPLE PRIORITIES

A — ACQUIRE

- Robust workforce plan
- Fit for purpose resourcing plan
- Positive onboarding and integration

D — DEVELOP

- Accelerated capability building
- Deepen our competitive and differentiating competencies
- Reward, coach and mentor our people

D — DEPLOY

- Right person, right place, right time
- Open access to opportunities
- Robust organisation effectiveness and succession plan

Our People

404-2, 3-3

Acquire

Talent acquisition is integral in building a robust workforce for the organisation to meet current and future demands. To this end, we strive to acquire and engage talents through a fit-for-purpose resourcing plan, followed by an onboarding and integration experience.

In line with this resourcing plan, we undertake various avenues to access top talent pools including:

Scholarship Programme

Our scholarship programme is a platform for us to develop young talents in Sarawak as well as to build the capabilities of our people, in alignment with the company's social investment pillars of 'Education and Young People'.

Since 2014, Sarawak Energy has awarded a total of 1,058 scholarships and 83.73% of our scholars have been recruited into the Company. With this programme, we are helping to develop the future workforce of Sarawak and realise their potential. This sets them on a path to contribute towards the development of a brighter, more prosperous high-income society within Sarawak in line with the Sarawak Government's Post COVID-19 Development Strategy (PCDS) 2030.

Achievements in 2023:

- We have awarded 207 exceptional students and employees this year, to empower them to further their education both locally and overseas
- We have awarded scholarship to 16 employees, giving them the opportunity to further their education and enhance their competency. This reflects our commitment to fostering continuous learning and development among our workforce
- A total of RM16 million was allocated for our undergraduate and postgraduate scholarships

Partnership with Universiti Tenaga Nasional (UNITEN)

We continued our strong partnership with Tenaga National Berhad (TNB) this year by enrolling our diploma scholarship recipient in the UNITEN Mechanical and Electrical Engineering Diploma Programme. An allocation of RM5 million was set aside for this UNITEN diploma programme.

This collaboration with UNITEN continues to provide us with the opportunity to access TNB's expertise in power utility and knowledge to build the capability of our future workforce.

The beneficiaries of this UNITEN diploma scholarship programme are 44 Malaysian Certificate of Education (SPM) leavers who will undergo fast-tracked and tailored courses, as well as workplace learning programmes consistent with the requirements of the power utility industry.

The 27 first-batch recipients of the Diploma in Electrical Engineering scholarship at UNITEN have successfully graduated from the 2.5-year programme, completed their mandatory apprenticeship, and acquired their electrical competency in L1 Chargeman and First Aid.

Internships

The Sarawak Energy internship programme is part of our efforts to develop students and prepare their workforce readiness by offering our interns real-world experiences across our multidisciplinary roles. Additionally, through the internship programme, we are able to strategically source our talent pipeline for the future.

We enrolled 775 interns throughout various departments, not only providing them with valuable exposure but also actively investing in building a dynamic and diverse workforce.

Our People

404-2, 3-3

Sarawak Energy (SE01) Programme

In cultivating an enterprise-first mindset among our employees, we offered integrated blended-learning experiences to expand technical, safety, leadership and commercial skills and knowledge. The collective efforts resulted in over 650 employees benefitting from our comprehensive programme series.

We facilitated the seamless integration of 410 new joiners into Sarawak Energy through our 'Welcome to Sarawak Energy (SE01)' programme, ensuring a smooth transition into the Company's culture and alignment with our organisational values.

Onboarding and Integration Process

Sarawak Energy remains dedicated to refining and enhancing our onboarding processes to ensure a seamless experience for all our talents upon entering the organisation. Our onboarding process includes interactive briefings designed to introduce new joiners to the company, impart essential knowledge and policies, and facilitate networking with colleagues from different departments.

An Onboarding system is also established internally for new joiners to access the tools and resources needed to assimilate their onboarding journey with us. This year, our onboarding survey has recorded a satisfaction rate of 87%.

Develop

Our commitment towards providing our talents with opportunities for growth, while future-proofing our workforce with the necessary skills and mindsets, is amplified through the various development programmes and initiatives implemented under our People Strategy.

Individual Development Plan (IDP)

To nurture our talents effectively for future roles by optimising their potential, we tailor our development programmes to meet their needs through the Individual Development Plan (IDP).

IDP is a tool for our employees to drive their career development by setting short and long-term plans in Sarawak Energy and prioritising action plans to close competency gaps. It also provides the supervisor and line managers a platform to discuss and agree on development opportunities to grow employee's talents.

In 2023, we exceeded our TME target of 95% as we recorded 98% IDP completion. We have continued to exceed in this area for the last three years reflecting the positive response from our employees in utilising and valuing IDP as a career development tool.

Competence Assurance Framework (CAF) and Competence Assurance (CA) Assessment

Our IDP works in tandem with our CAF and CA Assessment to develop careers. The CAF framework outlines the competency standards required for roles within the organisation while the CA Assessment evaluates an individual's competency level by the verified Subject Matter Experts (SMEs). When combined, employees can better plan for their career progression and development.

We reported the highest CAF assessment rate in the last three years, with 93% assessments by SMEs, indicating the proactiveness of our people and their commitment to a growth mindset. Consequently, this has led to an increase in the number of employee progressions approved during the year under review with the highest number of progressions at 52% of Non-Executives and 48% of Executives recorded.

Additionally, we have seen a continuous increase in the progression of female talent over the last three years: 16% in 2021; 29% in 2022; and 30% in 2023.

Our People

404-2, 3-3

Business Support Bridging Programme - Non-Technical

The programme is applicable for business support and non-technical employees, aiming to support their progression into Executive roles. An upskilling initiative that is well-received by our employees, the first batch commenced in June 2022 with 32 participants. Among these participants, seven employees successfully completed and progressed to Executive positions.

The second batch of 22 participants is enrolled and currently undergoing development. This programme highlights our success in upskilling the workforce and exemplifies our commitment to supporting our people's career advancement.

Technician Foundation Programme (TFP) & Technical Executive Programme (TEP)

TFP was developed to cater to junior non-executive employees while TEP for the senior non-executive employees. Both programmes offer systematic interventions to foster active learning behaviours and encourage self-directed learning, upskilling and expanding the technical competencies of these individuals.

As of December 2023, a total of 47% or 55 learners have completed the TFP while 3% completed the TEP.

Accelerated Development Programme (ADP)

The ADP accelerates talent development by pairing and job-shadowing candidates with experienced ADP alumni, who will guide them through a series of targeted learning interventions. Using the dynamic 70:20:10 learning model, candidates actively address functional and leadership gaps, equipping themselves with the expertise to excel and thrive.

By embracing diversity, equity and inclusiveness values, Sarawak Energy can unlock a wider range of strengths, skills, and perspectives, ensuring that the best talents are identified, nurtured, and given equal opportunities for growth and advancement. This inclusive approach encourages candidates to engage, contribute, and develop, empowering them to emerge as future-ready leaders.

In-House Leadership Development Programmes – Core & Focus Leadership

Each programme has various modules that are developed to enhance the skillsets and mindsets of our employees, better preparing them for the future working environment. This includes skills such as the art of negotiation and influence, change management, digital skills, and becoming an effective communicator.

We saw a total of 225 participants in the Core Leadership programme and 363 employees for the Focus Leadership programme.

In-House Programme – Facilitation & Intervention

Our in-house programme consists of The Art of Facilitation Series and Facilitation Gym. Both programmes aspire to see professional facilitation widely utilised across Sarawak Energy to address challenges at the group, divisional, departmental and community levels. The programme also aims to cultivate a pool of active internal facilitators within the Company who are ready to commit and contribute. Apart from individual skill development, the programme also positively influences leadership, project outcomes, knowledge sharing, and the overall organisational culture. In recording a continuous annual increase, the programme saw 223 participants since its inception in 2021.

Sarawak Energy Mentoring Programme (SEMP)

As part of our leadership development effort, the Sarawak Energy Mentoring Programme was established to inspire and empower employees through learning from experienced leaders. The programme focuses on empowerment whereby mentor and mentees can tailor their mentoring experience and style to suit their development needs.

Under the SEMP, the Apprentice Programme was introduced for senior executives and engineers to enhance leadership, mentoring, and coaching skills. In 2023, 27 apprentices were selected for the mentorship journey, both mentoring non-executives and being mentored by chosen leaders. This initiative prepares non-executives for executive roles and fosters a culture where leaders develop leaders.

Since 2017, we have had 1,500 mentees, and 98 mentors enrolled into the programme.

Beyond skills and leadership development, we are also committed to developing people with a commercial mindset. This mindset is one of the key ingredients in future-proofing our workforce, ensuring they are equipped with the relevant skills and mindsets.

OUR PERFORMANCE

Our People

404-2, 3-3

SE02 Introduction to Sarawak Energy Business & SE03 Commercial Acumen Fundamentals

Our in-house programmes leverage the SMEs who are integrated within a Matrix Organisation of Experts (MOE) structure. This knowledge-sharing model enables us to build competency and deployment organisation-wide.

The participation rate for both programmes has continued to increase over the last three years, reflecting the proactiveness of our employees in upgrading their competencies and capabilities.

Under SE02, 81 employees were tasked to develop a business case proposal and pitch this to senior management. While SE03 was participated by 162 employees.

Business Smart People, People Smart Business (BSP PSB)

BSP PSB is an initiative supported by proactive efforts to disseminate information to our colleagues across Sarawak through direct outreach across various locations. This is to ensure our people understand the Company's goals and policies and stay aligned with the Sarawak Energy Excellence strategic roadmap.

Throughout 2023, the BSP PSB was conducted at the Sibu Regional Office, Tanjung Kidurong Power Plant Bintulu, Bakun Power Generation and Miri Regional Office.

Deploy

Under this approach, we focus on the deployment of talents into the right roles that maximise their potential, at the right time. This begins with strengthening and building up the capabilities of our talent pipeline.

Achievements in 2023:

- We reported 95% Ready Now and 96% Ready Later in the period of two to three years for successors of Critical Positions. Over the last three years, we have continued to meet targets in this area, reflecting our commitment to ensuring that our organisation can continue to operate optimally to meet the current energy needs and a sustainable talent pipeline with the right skills to meet future demands
- 335 employees were appointed SMEs, which is fundamental in cultivating technical and functional capabilities. Moreover, they actively contribute to future-proofing our talent pipeline by providing mentorship, coaching, curating learning content, and fostering the overall growth and development of our talents
- SMEs are also key collaborators in various in-house programmes, one example is the Leadership Conference 2023 – 'Inspirational Leadership in Focus'. This conference brought SMEs and EAGLES (Exceptional Apprentice for GEC Leaders) together to curate the in-house leadership conference centred on the theme of Inspirational Leadership. Successful conference with 1,246 employees attending online and virtually from across the state
- Licence to Operate - Underscoring commitment to safety and compliance – we reached a significant milestone in 2021 when we achieved full compliance with targets set by our BARC committee for EIU and DOSH certifications

5 Game Changers

Our 5 Game Changers are mindsets that employees must strive to adopt, activate, and amplify within their day-to-day roles:

- Competence and Expertise Building
- Inspiring and Sustainable Leadership
- Employee Wellbeing
- Recognition and Reward
- Learning Mindset

The year 2023 was an impactful year for Sarawak Energy as we were voted as a 'Greater Place to Work' by our Sarawak Energy Employee Survey 2023.

Our scores exceeded local and global benchmarks:

Overall Score	Employee Engagement
87%	91%
Continuous Improvement	**Diversity & Inclusiveness**
84%	84%

Our People

2-23, 2-24, 3-3

High Performance Culture

Diversity, Equity & Inclusion (DEI)

DEI is a key component of the organisation's success as it impacts the overall employee experience and engagement. We adopt a multi-pronged approach by embedding DEI into our processes as well as championing it as our culture. Through the years, we have rolled out several initiatives to embed DEI across Sarawak Energy.

2021

- We introduced our DEI Framework, with DEI as one of our guiding principles in succession planning and we have set a target of 50:50 in terms of gender and ethnicity. The framework is applicable to strategies, approaches and tools that challenge the conventional way of working and encourage an inclusive work environment.
- We appointed 59 ambassadors, comprising employees from various levels, to raise awareness, promote and engage colleagues in addressing unconscious biases and practising DEI.

2022

- The DEI Community was established to facilitate ongoing learning, share best practices, and collaborate on innovative DEI initiatives throughout the organisation.

2023

- The ADP pool achieved the DEI target of ≥50% in gender and ethnicity.

Male 50%	Bumiputera 52%
Female 50%	Non-Bumiputera 48%

- Our progress and efforts resonate with our people as we have seen an increasing trend over the last three years in our annual Sarawak Energy Employee Survey (SEES). This year, we scored 84% in the DEI category.

Inspiring and Sustainable Leadership

As we continue to foster a high performing culture and collaboration, Sarawak Energy established peer-to-peer networking groups to create a supportive community where colleagues can inspire and encourage one another.

By acting as a dynamic support system, the group will promote leadership development through shared experiences and mutual guidance, connecting individuals across various levels and departments to drive continuous learning and professional advancement.

Sarawak Energy Leading Women Network (SELWN)

A professional networking platform for female employees, SELWN continues to amplify its efforts in making Sarawak Energy a conducive workplace with equitable opportunities for women – in line with UN SDG No. 5 on gender equality. We have set our target of achieving 30% of women in decision-making positions in line with SDG 15 and we are on track to meeting the target with 29% of leaders being women.

Among the notable initiatives undertaken in 2023:

- SELWN benchmarks against other industry players to adopt best practices in women empowerment programmes and initiatives
- Women Mentoring Women (WMW) programme under SELWN empowers women role models to promote new perspectives, instil confidence and a culture of learning and exchange to nurture mentees. We welcomed 45 participants in 2023. Since inception, we have recorded 70 mentors and 187 mentees to date
- Joint effort between Employee and Industrial Relations division to promote safe working environments through Zero Tolerance for Sexual Harassment across the organisation

Our People

2-26, 2-29, 403-3

Sapphire Young Professional Network

This year, the Young Professional Network was rebranded as the Sapphire Young Professional Network – a two-year programme tailored for Executive 1 employees with under two years of tenure at Sarawak Energy. In its inaugural year, we marked the induction of 241 Sapphires members.

This initiative enhances capacity building, and promotes creativity and innovation among the Sapphires. It supports holistic growth, offers invaluable networking opportunities, and underscores our commitment to nurturing emerging talents. This network enables Sarawak Energy to bolster our organisational capabilities and drive sustainable success.

Employee Wellbeing

Sarawak Energy will continue to prioritise employee wellbeing as part of our purposeful efforts to make Sarawak Energy a greater place to work. Our ongoing commitment ensures that our employee's wellbeing remains a high priority.

We conducted the Corporate Mental Health Survey (DASS-21) for employees which showed significant improvements from the previous year with an increase of 12% from 2022. The results apply across depression, anxiety and stress dimensions, which remains within the benchmark of the energy industry.

Additionally, our physical wellbeing has demonstrated positive results, as seen in the 4.89% improvement in waist-to-height ratio (WtHR) measurement.

Naluri App and Other Wellbeing Programmes

In ensuring our people's wellbeing is holistically addressed, we introduced the Naluri App – a digital coaching application which offers a range of virtual healthcare solutions and around-the-clock services. The app enables a personalised healthcare journey and mental health goals through 24/7 remote consultations and counselling, self-guided lessons, and health tools.

The app is further supported by the Sarawak Energy Support Group (SESG) which comprises 16 mental health first aiders who are trained employees that can offer initial assistance and guidance to other colleagues – reflecting our proactive measures in providing various forms of assistance.

We also conducted Weekly Healthy Living Thursday (Physical Workout), webinars by Naluri, C.A.R.E programme (structured workshops on how to provide mental health first aid to colleagues at work) and empathetic leadership sessions (how to create a more empathetic culture in a top-down manner).

Recognising Our People

To acknowledge the contribution of our people towards our Key Focus Areas and strategic objectives, we launched the Sarawak Energy Hall of Fame (SeHOF) in 2017. Since then, we awarded 1,526 SeHOF recipients for their exemplary performance.

Sarawak Energy's efforts in creating a positive and supportive work environment were also recognised through the external awards we won:

HR Asia

Best Company to Work for in Asia 2023 & Digital Transformation Award 2023.

Brandon Hall Awards

Learning and Development category: Gold in 'Best Advance in Competencies and Skill Development' and the 'Best Advance in Creating a Learning Strategy'.

A Healthy, Safe and Secure Workplace

2-29, 403-4, 403-7, 3-3

Sarawak Energy is dedicated to fostering a generative health, safety, security, and environment (HSSE) culture among our workforce. We firmly believe that we must prioritise the wellbeing of all employees and contractors, safeguard our assets, and mitigate any adverse environmental impacts of our operations.

By implementing effective and ongoing improvement initiatives, our aim is to establish HSSE practices that set the benchmark for excellence industry-wide. This commitment ensures our continued ability to operate responsibly while enhancing productivity. As we expand our reach beyond Sarawak's borders, a robust HSSE culture becomes essential in earning international recognition, credibility and trust.

Our actions are guided by our five value drivers, ensuring that we consistently deliver results and create lasting value for our stakeholders:

Leadership, Behaviour and Culture
Work with a clear purpose and our core values in demonstrating strong HSSE leadership and exemplary conduct

System and Structure
Build an effective organisational structure, management system and integrated governance at our workplace

Competency
Recognise risks in operational activities and apply the right measures to control and manage those risks

Stakeholder Engagement
Involve our stakeholders and integrate HSSE as part of our everyday business

Performance Management
Monitor our performance and report findings as part of continuous improvement

We are also committed to achieving:

SAFETY

Zero Harm to People
attaining zero fatalities, zero LTI and zero injuries

HEALTH

2% improvement from baseline for WtHR ratio of 0.5 or less across the entire workforce
ensuring a healthy and productive workforce

SECURITY

Zero Intrusion
at all guarded power stations, substations, and offices

ENVIRONMENT

Zero Harm to the Environment
100% compliance with federal and state environmental regulatory laws

A Healthy, Safe and Secure Workplace

2-29, 403-2, 403-3, 403-4, 403-5, 403-6, 3-3

Strengthening Our HSSE Governance

Sarawak Energy recognises that robust Health, Safety, Security and Environment (HSSE) governance is a critical pillar of our comprehensive risk management strategy. To ensure effective implementation, we have instituted HSSE Management Systems, which integrate our Health, Safety and Environment (HSE) Management system and our Security Management System.

As part of our commitment to building robust governance, we have implemented diverse initiatives to reinforce the importance of HSSE governance throughout our organisation. We continued to provide employees with comprehensive training to foster generative HSSE cultural behaviours and integrate these practices into their daily operations.

Throughout the year, we have actively enhanced our workforce's understanding of the Permit to Work (PTW) system by conducting targeted training sessions and workshops aimed at bolstering workplace safety. Additionally, during HSSE Excellence Week, we emphasised the critical importance of proactive HSSE risk management through a series of informative talks and discussions.

ENVIRONMENT, OCCUPATIONAL SAFETY AND HEALTH (EOSH) COMMITTEES

Safety remains an uncompromising priority and a fundamental aspect of Sarawak Energy's organisational culture. We are steadfast in our commitment to preventing work-related accidents, injuries, and illnesses among our employees, contractors, and stakeholders. To uphold this commitment, Environmental, Occupational Safety, and Health (EOSH) Committees have been established across our operations, including regional offices, power stations, mining sites, and project delivery. This initiative is in line with Section 30 of the Occupational Safety and Health Act 1994, which mandates the creation of workplace safety and health committees.

Each committee includes a Chairman, Secretary, and representatives from both the employer and employees, as per the Occupational Safety and Health (Safety and Health Committee) Regulations 1996, Part II, Regulation 5.

For the year 2023, the composition of EOSH Committees is as follows:

Chairman	Employer Representative
23	262
Secretary	**Employees Representative**
23	282

The committee's duties and responsibilities, as stipulated in the Occupational Safety and Health (Safety and Health Committee) Regulations 1996, Part III (Functions of Safety and Health Committee), Regulation 11, include:

a) Assisting in the creation of HSE (Health, Safety, and Environment) regulations and establishing safe work systems.
b) Assessing the effectiveness of current HSE programmes.
c) Analysing trends in accidents, near-miss incidents, dangerous occurrences, occupational poisonings, or diseases within the workplace. Any observed unsafe or unhealthy conditions or practices shall be reported to the employer, along with recommendations for corrective measures.
d) Reviewing workplace HSE policies and suggesting necessary revisions to the employer.

Additional responsibilities include:

- **Conducting workplace inspections (Regulation 12).**
- **Investigating workplace accidents (Regulation 13).**

Committee meetings will be held as frequently as necessary, considering the risks associated with the nature of the work performed. Meetings occur at least quarterly, but not less than once every three months.

A Healthy, Safe and Secure Workplace

2-29, 403-3, 403-4, 403-5, 403-6, 3-3

ENVIRONMENT, OCCUPATIONAL SAFETY AND HEALTH (EOSH) COMMITTEES

In addition, the Corporate Environment, Occupational Safety and Health (CEOSH) meeting was established, comprising key personnel from various business units. Chaired by the Senior Vice President of HSSE, this platform addresses major Health, Safety, Security, and Environment issues. It also facilitates discussions on corporate yearly HSSE programmes and Key Performance Indicators (KPIs) with all committee Chairpersons and Secretaries, aiming to achieve the HSSE Excellent target. Furthermore, it aligns with our aspiration to become best-in-class through cultural transformation for sustainable performance, as reflected in our HSSE slogan: 'Saving Lives, Raising Standards, Nurturing Culture'.

HSE Committee
HSE Committee to drive HSE Performance at every level

SAFETY

Safety is an integral part of our organisational culture, and we remain steadfast in our commitment to preventing work-related accidents, injuries, and illnesses for our employees, contractors, and stakeholders.

We actively engage with our contractors through our Contractor Transformation Programme (CTP), enabling them to improve their HSE performance and support our Goal Zero target. Our CTP Outreach Forum featured insights from the Department of Occupational Safety & Health (DOSH) and the Department of Environment (DOE) Sarawak on OSHA (Amendment) 2022 and Scheduled Waste Management. The event aimed to share the latest HSSE updates and reinforce industry collaboration towards achieving Best-in-Class HSSE performance. Additionally, we assisted annual contractors in enhancing their HSE performance through gap analysis and mentoring, focusing on adopting the HSE Management System. This initiative supports our commitment to ensuring everyone working with Sarawak Energy returns home safely.

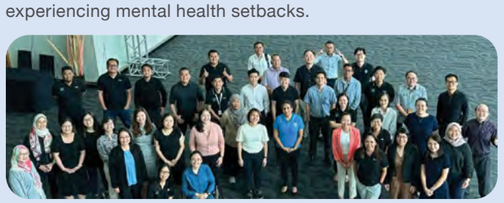
We also held the HSE Excellence Awards, merging the Contractor Environmental Impact Assessment (EIA) Compliance Award (CECA) and the CTP into one event. The ceremony honoured 32 contractors for their outstanding HSE performance, highlighting Sarawak Energy's dedication to promoting high safety standards and recognising significant contributions to HSE excellence at our worksites.

HEALTH

As employee wellbeing and productivity is interconnected, we have implemented a broad range of occupational health programmes to support their physical and mental health. Our comprehensive approach to health and wellness is designed to create a supportive and healthy work environment, ensuring our employees feel valued and cared for.

We introduced waist-to-height ratio (WtHR) as the new corporate health indicator to encourage staff to reduce their waistlines. This metric, offering several benefits over BMI, allows individuals to quickly assess their health risk. Across the organisation, there was an average improvement of 4.89% in WtHR values, reflecting the commitment of our employees.

To safeguard our employees' mental health, we conducted a corporate mental health survey using DASS-21, continued to run the Employee Wellbeing Programme and certified Mental Health First Aiders (MHFA) to provide support for those experiencing mental health setbacks.



A Healthy, Safe and Secure Workplace

2-23, 403-2

SECURITY

Sarawak Energy prioritises the security of our operations and assets, enabling a safe and secure environment for our employees, contractors, and stakeholders. To this end, we have attained several security accomplishments in 2023 including zero intrusions at all guarded substations, a testament to the success of our efforts to protect Company assets from vandalism or theft.

In 2023, we successfully gazetted several key point installations at Batang Ai HEP, Murum Junction EHV Substation, Samalaju A EHV Substation, Similajau EHV Substation and Engkelili EHV Substation, ensuring these areas are protected.

Additionally, we remain guided by the Sarawak Energy Security Golden Rules (SGR) to enhance the efficiency of our management systems, optimise personnel performance and strengthen site protocols and security governance. The SGR is integral to our initiative to foster a security-conscious culture within the organisation, further reinforcing our commitment to a secure and safe operational environment.

Key Achievements

103
security personnel received their progression

Presented on Envisioning Security Excellence in Sarawak Energy at the 34th Malaysia Auxiliary Police Association (MAPA) Annual Conference 2023

Implemented proactive security measures to enhance the security of our assets

Supported vegetation clearing along the easement corridor of the 500kV Similajau to Mapai Transmission Line (Tower 310 to Tower 311)

ENVIRONMENT

We are committed to mitigating the adverse impacts of our projects and operations by conserving the environment and diverse ecosystems via a suite of relevant programmes focused on enhancing environmental awareness and ensuring organisational compliance. Through these efforts, we have fostered a corporate-wide sense of environmental responsibility, with all employees being committed to meeting regulatory standards and contributing positively to the communities and ecosystems in which we operate.

During the year, Sarawak Energy established the Circularity Framework to support our Sustainability Strategy and Roadmap, which focuses on waste reduction, resource efficiency, emission reduction, green energy and energy efficiency, highlighting our commitment to sustainable development.

As part of our commitment to environmental stewardship, we made great progress in our Tree Planting, Protection and Habitat Restoration Campaign 2021-2030, exceeding our yearly target of 50,000 by planting and protecting a collective total of 70,959 trees. In collaboration with the various authorities, non-profit organisations and communities such as Forest Department Sarawak (FDS), Sarawak Forestry Corporation (SFC), Councils and Jawatan Kuasa Komuniti Kampung (JKKK), this campaign aims to plant and protect 500,000 trees by 2030, with a total of 127,746 trees were planted as of end of 2023.

A Healthy, Safe and Secure Workplace

To cultivate a sense of ownership of HSSE among our contractors and power stations, we recognise them with the annual Best Station Awards and HSE Excellence Awards. The HSE Best Station Awards acknowledge exceptional HSE compliance among main regions, power stations, rural operations, and small offices across the organisation. Determined through rigorous assessment, the HSE Best Station Awards highlight a strong commitment to high HSE standards and compliance measures, promoting a culture of HSE responsibility in all operational areas. The awards not only celebrate outstanding performance but also encourage continuous improvement in HSE practices. They are presented during Corporate HSSE Excellence Week 2023.

HSE Excellence Awards 2022

- Contractor EIA Compliance Award (CECA) – seven contractors were awarded
- Contractor Transformation Programme (CTP) Award 2022 - 32 contractors were awarded

HSE Best Station Awards

- Best Power Station - Miri Power Station
- Best Regional Office - Sri Aman Regional Office
- Best Rural Operation - Paloh Power Station
- Small Office Category - Serian Office

Awards and Accolades

In 2023, we were recognised for our diverse contributions to HSSE excellence with various awards.

Health & Safety

41st Malaysian Society for Occupational Safety and Health (MSOSH) Awards

Gold Merit Award

Murum Hydroelectric Plant (HEP) and Sibu Regional Office

Gold Class 1 Award

Batang Ai Hydro Power Generation, Bakun Hydro Power Generation, Sejingkat Power Corporation, Mukah Power Generation, Miri Power Station, Limbang Power Station, Lawas Power Station, Miri Regional Office, Kuching Regional Office and Balingian Energy Minerals

Gold Class II Award

Balingian Power Generation, Kuching Power Station, Tg. Kidurong Power Station, Sri Aman Office, Sarikei Office, Bintulu Regional Office and Limbang Office

Silver Award

Mukah Petian Office

Sarawak Energy Resources received a **Five-Star Award** for the Sustainable Development Indicators (SDI) audit conducted by Jabatan Mineral dan Geosains (JMG) Malaysia

Environment

Sarawak Energy's Digitalised Waste Management 3R Programme was shortlisted as a finalist for the Sarawak Digital Economy Award 2023, under the Environmental Sustainability Award category

Prime Minister Hibiscus Award Cycle 2023

Overall national-level best performer (Challenge Trophy)

Bakun HEP

Excellent Achievement Award in Environmental Performance

Bakun HEP and Mukah Power Generation

Notable Achievement Award in Environmental Performance

Sejingkat Power Corporation

A Healthy, Safe and Secure Workplace

403-4, 403-5, 403-6, 403-7, 3-3

Inculcating a Culture of HSSE

We continue to cultivate and emphasise a strong HSSE culture within the Company through various OSH activities,

A Day with HSSE

A Day with HSSE, part of the Re-energising HSSE programmes under HSSE Excellence KFA 3.0, aims to nurture a generative HSSE culture through strong leadership traits. In 2023, over 30 hybrid sessions were conducted, engaging more than 85% of Sarawak Energy staff across various departments. Key activities included HSSE Randau Sessions for workplace safety improvement and feedback, and briefing sessions covering topics like the HSE Culture Survey 2021 results, Hearts & Minds inspirational sharing, insights into HSE Generative Culture, Security Golden Rules (SGR), and updates on the new Sarawak Energy Life Saving Rules and OSHA (Amendment) 2022.

Power Plants & Regional Offices HSSE Week 2023

Aligned with our strategic roadmap to achieve HSSE Excellence, HSSE Week is celebrated annually across Sarawak Energy's Power Plants and Regional Offices. It promotes Health, Safety, Security, and Environment at work, raising awareness among staff and contractors on the importance of HSSE values with the theme "Saving Lives, Raising Standards, Nurturing Culture". The week features activities such as HSE talks, first aid training, firefighting drills, blood donation drives, HSSE quizzes, and exhibitions to refresh knowledge on HSSE procedures and practices HSSE.

Unannounced Planned Visit (UPV)

The Unannounced Planned Visit (UPV) programme involves surprise inspections at Sarawak Energy or contractor facilities to assess the effectiveness of health and safety systems. In 2023, four UPVs were conducted at Bau Network Station, Samalaju A & B Transmission Substations, Matang Transmission Substation, and Tondong Transmission Substation. Findings were categorised according to the Sarawak Energy's Group Impact Parameter and registered in the SEACE - HSE Solutions (Action Tracking System Module) for monitoring purposes.

HSSE Top Management Walkabout

Our HSSE management team conducts proactive walkabouts to identify on-ground hazards and facilitate two-way communication, promoting a generative HSSE culture. These walkabouts include reviewing documentation, site inspections, and interviews to ensure compliance with HSSE standard requirements. They conclude with open discussions on findings and corrective actions.

Contractor Transformation Programme (CTP) Partnership Drive

During this drive, our team will assist and educate selected annual contractors to enhance their HSE performance based on HSE gap analysis results. We also mentor and guide them in adopting the HSE Management System (HSEMS) to prepare for the HSE Assurance process by the Department of Occupational Safety and Health (DOSH). This partnership aims to achieve our Goal Zero target, ensuring everyone working with Sarawak Energy returns home safely.

Drug Screening Test

To ensure a safe and healthy work environment, we conducted the Drugs Screening Programme at Murum HEP and Bakun HEP on 22 November 2023, and at Bintulu Power Station and Bintulu Regional Office on 23 November 2023. The programme was coordinated by the Occupational Safety Section of the HSSE Department and the Employees and Industrial Relations (E&IR) Division of the Human Resources Department, with assistance from the National Anti-Drugs Agency from Bintulu.

A Healthy, Safe and Secure Workplace

403-1, 403-2, 403-4, 403-5, 3-3

SEACE HSE Solutions Briefing and Online Showcase Demo

Refresher training, conducted by our SEACE Champions across the regions, educated end users on relevant modules, particularly the HSE Observation module. This module empowers employees to actively report HSE incidents, promoting a safe workplace. Accessible to all Sarawak Energy staff, it streamlines incident management and facilitates the reporting of Unsafe Acts and Conditions (UAUC), transitioning from conventional to effective online reporting to enhance HSE excellence efforts.

Process Safety Management Awareness

In-house knowledge sharing included updates on Hazardous Area Classification (HAC) and Process Safety Fundamentals at Balingian Energy Minerals. HAC focuses on preventing and mitigating flammable and explosive hazards through risk assessment and energy-limiting devices. Participants from Miri Power Station, Sejingkat Power Station, and Bakun HEP learned best practices for hazardous environments.

External Stakeholder Engagement

In 2023, our Occupational Safety Team organised Electrical Safety Awareness Talks in various sectors: 62 sessions in schools for 9,091 students, 43 sessions in longhouses and villages for 1,842 attendees, and 81 sessions for public contractors and government agencies with 1,630 participants. Additionally, 306 sessions briefed 3,844 contractors on HSSE induction and requirements. These talks educate external stakeholders on electrical safety precautions and ensure our contractors comply with HSE standards, preventing serious injuries and fatalities.

Routine Audit and Inspection

Our Occupational Safety Team conducted over 700 OSH audits and inspections, covering Safe Work Procedures, PSSR, PTW, HIRARC, and tool and machinery checks. These comprehensive assessments identified potential hazards and implemented preventive measures, reflecting our dedication to fostering a culture of HSSE Excellence.

Zero Leak Drive

The Zero Leak Drive Initiative by eight major power plants focuses on process safety to safeguard system performance despite equipment deterioration. This proactive approach manages risks and ensures process safety compliance, reinforcing Sarawak Energy's reputation as a sustainable power developer. In 2023, Mukah Power Generation achieved RM210,748.00 in OPEX savings by addressing lube oil leaks from 2020 to 2022. The initiative's success demonstrates shared responsibility and promotes continuous HSSE improvement.

Standardisation and Improvement of LOTO Policy, Procedure, and Guideline

Effective 1 December 2023, the new Lockout-Tagout (LOTO) Procedure applies to all Sarawak Energy operational Business Units and contractors, starting with Sarawak Energy Resources (SER) and major stations for SEB Power. This procedure ensures hazardous energy is controlled and isolated per the Sarawak Energy Life-Saving Rules (SELSR) Procedure: Verify and re-verify energy isolation (LOTO process) before any work involving hazardous energy. In Q4 2023, a LOTO pilot rollout was conducted at Sejingkat Power Corporation and Balingian Power Generation, outlining roles and responsibilities between Operation, Maintenance and Management teams. Future LOTO programmes will cover energy isolations, new certificates, key management, and remedial actions.

A Healthy, Safe and Secure Workplace

403-3, 403-4, 403-5, 403-7, 403-10

Health Programme

The Occupational Health Section manages risks from workplace health hazards such as noise, chemicals, ergonomics, heat, lighting, and psychosocial factors. Built on the pillars of Protect, Prevent, and Promote, this section addresses Industrial Hygiene, Occupational Health, and Employee Wellbeing.

Industrial Hygiene

Sarawak Energy reinstated and operationalised its seven in-house audiometric booths, which had been dormant due to COVID-19 restrictions since 2020. Occupational Health (OH) has resumed in-house audiometry testing for noise-exposed staff at power stations, previously conducted by external panel hospitals during the pandemic.

A pilot fit-testing in the Northern Region, in collaboration with 3M, was conducted to assess the feasibility and effectiveness of quantitative fit testing methods to ensure staff are adequately protected against noise hazards. Regular hearing conservation talks are also held to increase awareness among workers regarding noise hazards.

Approximately 300 staff underwent annual medical health surveillance to monitor their well-being amidst exposure to chemicals hazardous to health (CHTH), reflecting our commitment to holistic healthcare. Major power stations maintained valid noise risk assessment and chemical health risk assessment reports, demonstrating adherence to essential governance practices.

Stakeholder Engagement: Hearing Conservation Administrator Training & Engagement with DOSH

The first Hearing Conservation Administrator training was held at the Miri Regional Office in November. This training aimed to equip regional and power stations' SHOs with the necessary knowledge of the legal roles and responsibilities of the appointed Hearing Conservation Administrator, fulfilling the Industrial Code of Practice for Management of Occupational Noise Exposure and Hearing Conservation 2019. A productive stakeholder engagement session was also conducted with representatives from DOSH, including Occupational Health Doctor Dr. Tiong Ling Rong and the acting chief for the Industrial Hygiene section, Mr. Tsai Chang Yee.

Occupational Health

Good occupational health practice is essential to safeguarding our workforce, ensuring they can perform at their best while fostering a safe and productive working environment. Our commitment to occupational health reflects our responsibility to protect our employees, recognising that their wellbeing is integral to the sustained success of our operations. By carrying out occupational health activities, we ensure that our employees are equipped with the necessary knowledge and resources to ensure their wellbeing.

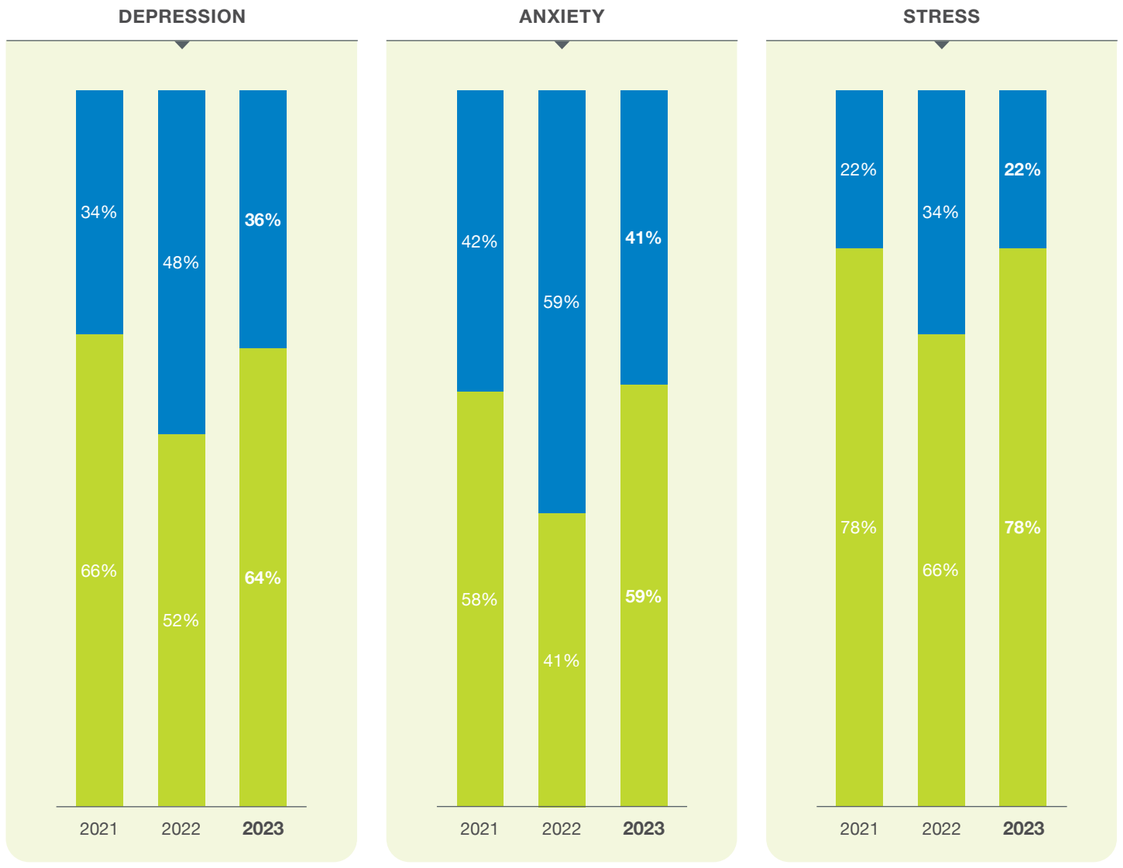
OUR PERFORMANCE

A Healthy, Safe and Secure Workplace

403-3, 403-4, 403-5, 403-7, 403-10

Employee Wellbeing

In line with UN SDG No.3, the 2023 corporate mental health survey conducted through DASS-21 showed a significant 12% improvement across all dimensions from 2022 to 2023.



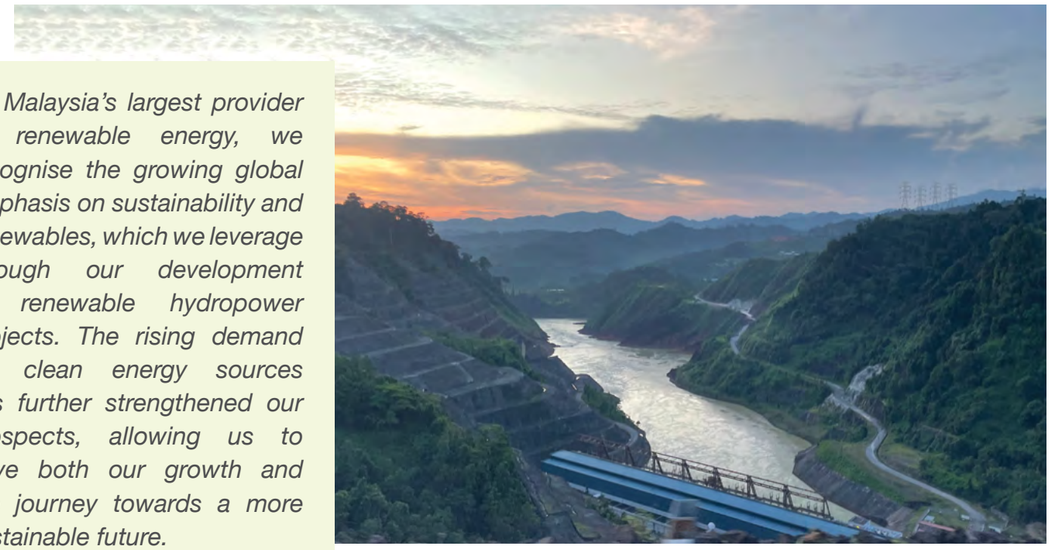
To enhance our Employee Wellbeing Programme, Sarawak Energy subscribed to Naluri, a digital health and wellness app accessible to all staff. This platform provides access to multidisciplinary coaches, wellness assessments, webinars, and mental health support. The Sarawak Energy Support Group has 16 employees certified as Mental Health First Aiders (MHFA), who offer confidential first aid and interventions for mental health issues, with plans for expansion. Professional counselling services are available through the Employee Assistance Programme in collaboration with UNIMAS, connecting users to certified counsellors of their choice.

To raise awareness, at least 15 health talks were conducted throughout the year. The Mental Health Advocacy Course (C.A.R.E.) and Empathetic Leadership Workshop targeted managers to foster supportive, people-focused leadership. Additionally, the "Trim and Gleam 2023" health campaign promoted the corporate Waist-to-Height Ratio (WtHR) goal with three mini physical challenges, encouraging participants to push their limits and achieve personal milestones.

OUR PERFORMANCE

Delivering Sustainable Growth

2-23, 2-25



As Malaysia's largest provider of renewable energy, we recognise the growing global emphasis on sustainability and renewables, which we leverage through our development of renewable hydropower projects. The rising demand for clean energy sources has further strengthened our prospects, allowing us to drive both our growth and the journey towards a more sustainable future.

Sarawak Energy aligns its energy development initiatives with UN SDG No. 7, aiming to ensure universal access to affordable, reliable, sustainable, and modern energy. Renewable hydropower plays a critical role in driving Sarawak's sustainable growth and the region's energy transition. With a commitment to diversifying our energy generation mix, our goal is to maintain renewable hydropower as our primary generation source while expanding our portfolio of alternative renewables. By embracing this strategy, we can harness the inherent advantages of renewable hydropower to power a more sustainable and renewable energy future.

Sustainable Renewable Hydropower Development

We strictly adhere to the stringent guidelines set forth by the International Commission on Large Dams (ICOLD) to ensure the meticulous design and construction of our dams. Sarawak Energy became a sustainability partner of the International Hydropower Association (IHA) in 2011 as part of the Company's commitment towards sustainability. Under this partnership, the Company is committed to developing and operating our hydropower projects in accordance with the Hydropower Sustainability Standard (HSS), a framework to assess the performance of hydropower projects according to a set of well-defined sustainability topics encompassing environmental, social, technical, economic and cross-cutting issues.

Read more about Hydropower Sustainability on pages 134 to 140

Our commitment to maintaining the highest standards in dam construction, operation, and environmental stewardship is evident in our sustainability practices.

Baleh Hydroelectric Project

Under our Biodiversity Monitoring and Evaluation Plan (BMEP), Biodiversity Interim Monitoring (BIM) at Baleh HEP is an initiative set up to conduct assessment and monitoring on the biodiversity of terrestrial and aquatic fauna at Baleh HEP construction site.

The Baleh HEP BIM assessment assembled a multi-disciplinary team of experts and experienced individuals from various fields of interest including aquatic, avifauna, mammal, herpetofauna, and citizen science, within Sarawak Energy.

The implementation of the BIM was to address part of the requirement under the assessment criteria of the Biodiversity & Invasive Species section within the Hydropower Sustainability Standard (HSS).

Delivering Sustainable Growth

2-25, 304-2

Designed and developed by our Conservation Ecology Unit, the Biodiversity Monitoring Tool (BioMot) is a mobile application with smart and fast data entry that allows observers to record, report and monitor biodiversity sighting systematically and effectively.

This application will be used by Sarawak Energy staff and Contractors at Baleh HEP for their wildlife monitoring initiative under the Biodiversity Monitoring and Evaluation Plan (BMEP) in Baleh HEP's construction area.

Mentarang Induk Hydroelectric Project

Expanding its reach beyond Sarawak's borders, Sarawak Energy, through its joint venture company PT Kayan Hydropower Nusantara (KHN), embarked on the development of the 1,375MW Mentarang Induk Hydroelectric Project (MIHEP) in North Kalimantan, Indonesia, in 2018.

Recognised as a National Strategic Project by the Government of Indonesia, MIHEP aims to provide competitive renewable energy to Indonesia's power-intensive industries at the Tanah Kuning Industrial Park in Bulungan, North Kalimantan, thereby strengthening the country's economy. As Indonesia's first large-scale renewable hydropower development, MIHEP will also contribute to Indonesia's sustainability agenda and its efforts to achieve Net Zero emissions.

Benefitting from the collective experience and strengths of PT KHN partners – PT Kayan Patria Pratama (KPP) and PT Adaro Energy Tbk (Adaro) – along with the support of local communities and guidance from the Indonesian Central, Provincial, and Regency Governments, as well as the Sarawak Government, MIHEP has made significant progress and has advanced to the technical preparation stage for the pre-construction phase in 2023.

The year under review marked two significant milestones for MIHEP:

- The successful completion of the first phase resettlement, which involved 28 households comprising approximately 100 people, on 24 January 2023
- The groundbreaking ceremony for MIHEP, led by the President of The Republic of Indonesia, Joko Widodo, accompanied by the Premier of Sarawak, Yang Amat Berhormat Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari Abang Openg, on 1 March 2023

In the same year, MIHEP also obtained its environmental approval. This has enabled MIHEP to expedite preparations for construction, including the awarding of Engineering, Procurement, and Construction (EPC) contracts for the diversion tunnel and explosive magazine. The project is on track to reach financial close by early 2025, ensuring that it can deliver its first power by early 2030.

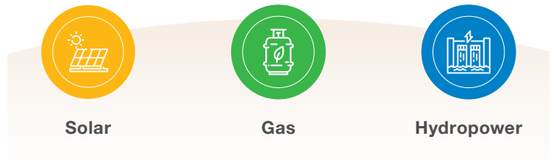
The development of MIHEP adheres to relevant Indonesian laws and adopts Good International Industry Practices (GIIP), including the Hydropower Sustainability Alliance (HSA) Hydropower Sustainability Standard, to ensure the project's sustainability and responsible hydropower development.

Indonesia's President Joko Widodo (third from left) and Sarawak Premier Yang Amat Berhormat Datuk Patinggi Tan Sri (Dr) Abang Haji Abdul Rahman Zohari bin Tun Datuk Abang Haji Openg (fourth from left) during the launch of the MIHEP. Also pictured are Bahlil Lahadalia, Indonesia's Minister for Investment (first from left), Luhut Binsar Pandjaitan, Indonesia Coordinating Minister for Maritime and Investment Affairs (second from left), Garibaldi Thohir, President Director of Adaro Energy (second from right) and Juanda Lesmana, founder of KPP Group.

Alternative Energy Development

We remain steadfast in our dedication to climate action, actively investigating alternative energy sources and exploring the various ways in which other renewables can contribute to the decarbonisation of our energy system.

Our goal is to sustain a generation mix that consists of no less than 60% renewable energy in the long run, while the remaining portion will be composed of thermal generation. By 2030, Sarawak is looking to generate a total of 10GW of energy, combining various sources such as:



Delivering Sustainable Growth

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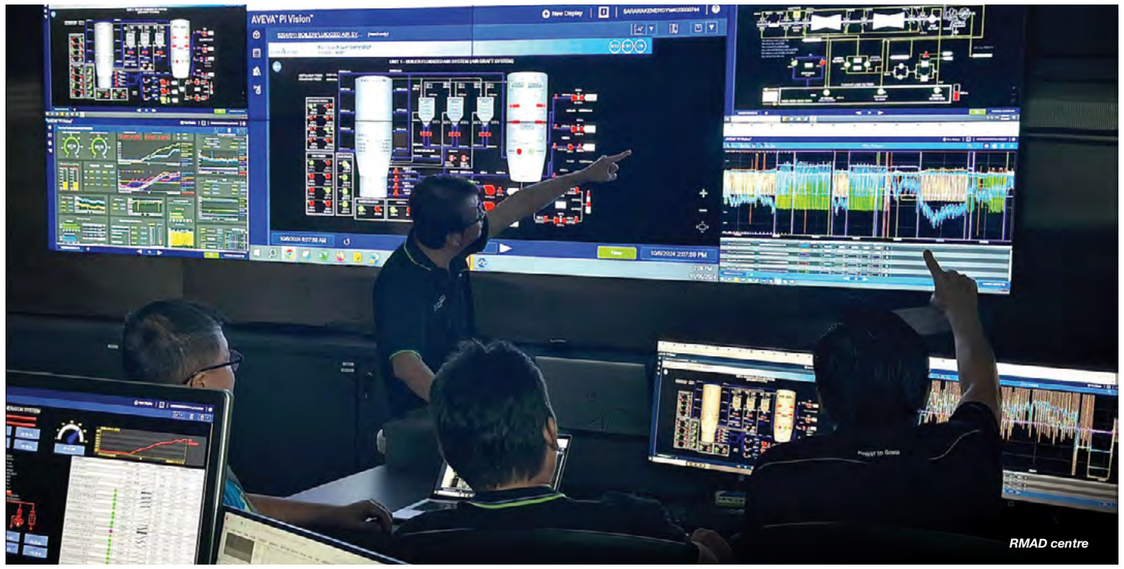


RMAD centre

Balingian Power Generation – Sarawak Energy's First Digital Power Plant

Balingian Power Generation (BPG) has been unveiled as Sarawak Energy's groundbreaking Digital Power Plant (DPP), marking a significant milestone in the company's journey towards becoming a sustainable digital utility and a testament to its digital blueprint.

The term 'Digital Power Plant Ready' (DPP Ready) refers to a power generation facility, equipment, or infrastructure that has been intricately prepared or designed to seamlessly integrate and utilise cyber security, data management, process control, asset life cycle management, data analytics, advanced monitoring and diagnostics, and digital worker technologies, with the goal of enhancing operational efficiency, reliability, and overall performance.

To be considered DPP Ready, a facility or equipment must possess the necessary hardware, software interfaces, and communication protocols required to successfully implement digital solutions and technologies.

As the pioneering power plant to be connected to the Remote Monitoring and Diagnostic (RMAD) Centre, BPG boasts a data historian equipped with early warning analytics, asset performance monitoring, and offline data management capabilities. These invaluable tools have been effectively harnessed by the collaborative efforts of the RMAD and BPG teams to enhance plant reliability and efficiency.

Reinforcing Sarawak's Power System

Sarawak Energy is committed to reinforcing our network system to ensure the continuous delivery of reliable power supply to our customers, thereby minimising supply interruptions over the long term. Our efforts are aimed at enhancing the resilience and efficiency of our power infrastructure, reflecting our dedication to serving the increasing energy needs of Sarawak effectively.

Entinggan 240MVA Transformer

Delivering Sustainable Growth

203-1, 3-3

In 2023, we successfully commissioned four substations in Bintulu, Kemuyang, Pusa, and Sarikei Town. The Bintulu Power Station 33kV Substation project was particularly challenging due to system limitations and operational constraints. Through meticulous planning and coordination, Sarawak Energy was able to ensure minimal disruptions and smooth completion.

Two significant transmission projects were also commissioned this year. The Marudi Junction-Eastwood 132kV Transmission Line, commissioned on 1 August 2023, is part of the Northern Agenda projects and provides a secondary ring to the 132kV network supplying Miri Town and supporting its organic growth. Meanwhile, Phase 1 of the Kuching Network Reinforcement, commissioned in November 2023, includes the installation of a third power transformer at Entinggan 275/132/33kV Substation, a third power transformer at Mambong 275/132/33kV Substation, and third and fourth power transformers at Samajaya 132/33kV Substation. The completion of these projects has resolved immediate system constraints in Kuching, catering to the increasing load demand from customers in the Samajaya Industrial Park area.

Initiatives for Grid System Reliability and Process Improvements in 2023

Focus Area: Grid System Reliability

Commissioning of STATCOM at Tondong 275kV Substation

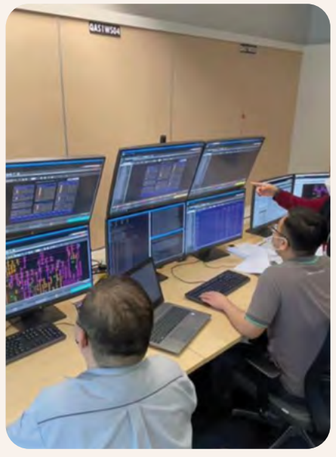
Sarawak Energy's first-ever STATCOM enhances grid reliability and efficiency by providing dynamic voltage support, strengthening system resilience, and reducing the risk of major blackouts or poor power quality during system interruption.

Launching of the New SCADA Energy Management System (EMS)

The new SCADA/EMS replaces the legacy GE XA21 SCADA system, enhancing features such as multi-system environment, interactive interface, historian playback, real-time and study applications, power network analysis, contingency analysis, and grid network optimisation.

Launching of Online Dynamic Security Assessment (DSA) Transient Security Assessment Tool

This tool strengthens grid operations by providing advanced forecasts on system conditions and risks, conducting thorough system security evaluations every 10-15 minutes, and alerting system operators of potential security risks.



Delivering Sustainable Growth

203-1, 3-3

Reinforcement and Reorganisation Efforts in 2023

Sarawak Energy continuously strives to enhance the reliability and efficiency of the power supply to meet the growing demands and expectations of its customers. Through a series of strategic projects focusing on reinforcement, system and load reorganisation, and other critical improvements, we aim to ensure a robust and resilient power infrastructure. Below is a summary of our efforts in this area for 2023:

Reinforcement Projects
11kV Underground Cable from Petian to Mukah Town Zone Substation: Completed in January 2024, diverting loads to improve reliability.
33kV Underground Cable from Daiken to Bintulu Port 33/11kV Substation: Diverting load to improve reliability.
Alternative Source to Selepong: Commissioned in March 2023, extending 33kV overhead line. 33kV Line Extension from Selalang to Sg Pasir: Completed in November 2023, enhancing reliability.
Bunut Load Reorganisation: Completed in March 2023, installing a 5MVA transformer to improve voltage and reliability.
Bakam 33/11kV Substation Permanent Supply: Completed in November 2023, enhancing reliability with an underground cable.
Conversion of Overhead Line to Aerial Cable at Ulu Trusan: Completed in December 2023, converting 2km of overhead line to improve reliability.
Convert 11kV Overhead Line to Underground at Jalan Bukit Aup: Completed in October 2023, improving supply reliability.
Permanent Supply to Siburan 33/11kV Substation: Commissioned in February 2023, enhancing reliability and capacity.
Permanent Supply to Asajaya 33/11kV Substation: Completed in November 2023, improving supply reliability and capacity.
Puncak Borneo System Reinforcement: Completed in March 2023, converting 11kV overhead lines to underground cables to improve reliability.
Replacement of 11kV Switchgear at Sibu Town 33/11kV Substation: Completed in December 2023, enhancing reliability.
System Reinforcement at Tambirat: Fully commissioned in September 2023, upgrading from a 1MVA to a 2.5MVA transformer. HT 33kV Overhead Line from Sungai Maaw to Tanjung Manis: Completed in November 2023, improving system stability.

System and Load Reorganisation
Dalat Load Reorganisation: Completed in March 2023, improving system reliability.
Deshon to Oya Load Reorganisation: Completed in July 2023, relieving load and meeting N-1 contingency criteria.
Kidurong Industrial Area Load Reorganisation: Completed in March 2023, providing N-1 to oil and gas, and industrial customers.
Load Reorganisation at Medan Raya: Completed in July 2023, transferring 2MW of load to relieve Kuching 132kV ring.
Reorganisation of Supply to Tebakang: Ongoing, laying new 33kV underground cable to relieve load.
Selirik Load Reorganisation: Completed in December 2023, reorganising 11kV distribution system.
System Reorganisation at Rayang: Completed in June 2023, redirecting power source and decommissioning Kpg Rayang Substation.
System Reorganisation at Serian to Tapah: Completed in April 2024, transferring load to a new 11kV underground cable.
System Reorganisation at Simunjan: Completed in October 2023, reorganising the 11kV system for better protection.
Tatau Reorganisation: Diverting feeders to Tatau 33/11kV Substation.
Temudak Waterwork Supply Reorganisation: Completed in December 2023, providing reliable supply with a new ring feeder. Pulau Bruit Source Diversion to Daro EHV Substation: Completed in October 2023, shortening circuit length and improving reliability.

Delivering Sustainable Growth

201-4, 203-2, 3-3

Rural Electrification Efforts

We are approaching our goal of full domestic electrification by 2025, with only a few remote areas left to electrify. Our efforts are guided by the Accelerated Rural Electrification Masterplan, which includes several key programmes:

Rural Electrification Scheme (RES) Last Miles
Extends existing distribution lines to connect rural households to the grid.

Rural Power Supply Scheme (RPSS)
Introduces transmission and distribution substations at strategic rural locations to expand the State Grid into remote communities.

Medium Voltage Covered Conductor (MVCC)
Establishes reliable distribution lines, primarily connecting main 33kV substations, to ensure a more reliable power supply and provide alternative sources to existing lines.

Sarawak Alternative Rural Electrification Scheme (SARES)
Provides stand-alone solar power systems to very isolated villages and longhouses not accessible by road or connected to the grid.

Solar Hybrid and Mini-hydro Hybrid Project
Combines solar and mini-hydro technologies with diesel-generator sets to deliver reliable electricity to remote rural villages.

In 2023, we made significant progress in the following areas:

The RES Last Miles programme connected

1,730 households

in approximately 67 villages.

SARES electrified 11 remote villages and 163 households, bringing reliable electricity to over

15,000 households

in 548 villages.

Additional Late Applicants Funds Programme

The Additional Late Applicants Funds (ALAF) programme is an initiative conceptualised by the Sarawak Government in 2018 to help reduce the financial burden for eligible new rural homeowners needing electricity connection. The ALAF programme made significant progress in 2023, connecting 5,608 households, with a total of 17,417 households connected since 2018.

Currently, 4,383 households are undergoing ALAF implementation, with 509 households ready for survey. Phases 1 to 4 of the ALAF projects are expected to be completed by 2025. Additionally, 6,182 households in ALAF Phase 5 are awaiting commencement, pending confirmation of funding by the Ministry of Utility and Telecommunication.

In addition, between 2019 and 2023, we provided electricity to 27,951 rural households in Sarawak. Since January 2022, through the RES Last Miles and SARES programmes, we have electrified 6,727 households in new areas.

Delivering Sustainable Growth

203-2, 3-3

Standalone Solar Hybrid Power Stations

When grid solutions are not feasible for particularly remote areas of Sarawak's interior, the Malaysian government implements off-grid utility-scale projects that use dual generation sources to supply power.

Currently, the following projects have been implemented:

- 35 solar hybrid stations
- 1 mini-hydro hybrid power station
- 1 mini-hydro hybrid power station under implementation, expected to be commissioned by 2025

Sarawak Energy manages the operation and maintenance of these solar hybrid power stations after their completion.

It is projected about 60% of the isolated grid remains off-grid by 2030. In 2023, 27 households under SARES solar system at Sri Aman area were successfully connected to the grid. The yearly projection is shown in table below:

Year	Total number of HH in isolated grid	Number of HH connected to grid	Number of HH remained off-grid	HH remained off-grid (%)
2023	14,903	132	14,771	99
Year	**Total number of HH in isolated grid**	**Number of HH planned to be connected to grid**	**Number of HH remained off-grid**	**HH remained off-grid (%)**
2025	14,860	356	14,504	98
2030	11,844	4,734	7,110	60

Rural School Electricity Supply

Through our partnership with the Federal Ministry of Education, Ministry of Utility and Telecommunication Sarawak, Sarawak Education Department, and Sarawak Public Works Department, the Rural School Electricity Supply programme has extended the grid to 122 rural schools. In 2023, 116 schools were connected to the grid, allowing teachers and students to operate in a more conducive environment with a reliable and secure electricity supply, eliminating their reliance on diesel generators. Efforts are ongoing to connect an additional six schools by 2024.

Rural Street Lighting ('Lampu Jalan Kampung') Programme

Under the 'Lampu Jalan Kampung' (LJK) programme, we have installed 55,301 streetlights in 6,097 villages across the state. In 2023, the Federal Ministry of Rural and Regional Development (KKDW) awarded LJK Phase 8 to Sarawak Energy, which involves installing 2,798 units of 75W LED bracket-type street lighting over eighteen months, from September 2023 to March 2025. Sarawak Energy aims to complete the installation by February 2025.

Research and Development

In response to the pressing need for sustainable energy sources in the face of environmental challenges, Sarawak Energy has embarked on a research and development journey to harness the power of flowing water, called hydrokinetic energy. This initiative aims to develop green and sustainable energy solutions, marking a pivotal moment in Sarawak Energy's commitment to sustainability.

Sarawak Energy's hydrokinetic projects can provide local communities with access to clean and sustainable energy, reducing dependence on polluting fossil fuels and improving air quality and public health. Simultaneously, the system can contribute to the sustainable development of local communities by enhancing energy security, resilience, and environmental sustainability.

In 2023, through our research and development (R&D) efforts, we successfully produced two versions of hydrokinetic turbine prototypes. Both prototype models have undergone successful functional testing at Sungai Sarawak Kiri near Kampung Danu, Bengoh. Additionally, both prototypes were showcased during the Generation Week organised by SEB Power in December 2023.

Hydrokinetic 1/2

OUR PERFORMANCE

Delivering Sustainable Growth

203-1, 3-3

Why Hydrokinetic Energy?

1 Renewable and Sustainable

Hydrokinetic energy harnesses the natural flow of water, making it a renewable resource that can be replenished over time without depletion. By utilising this sustainable energy source, we decrease reliance on fossil fuels and contribute to long-term environmental sustainability.

2 Predictable and Reliable

Unlike some other renewable energy sources like solar and wind, hydrokinetic energy offers a consistent and dependable power generation profile. The steady flow of water in rivers ensures a reliable source of electricity generation.

3 Decrease Greenhouse Gas Emissions

By displacing electricity generation from fuel-based power plants, hydrokinetic energy helps decrease greenhouse gas emissions. This aids in mitigating climate change and minimising the environmental impacts associated with burning fossil fuels, such as air pollution and carbon dioxide emissions.

4 Diversifying Energy Mix

Integrating hydrokinetic energy into the energy mix diversifies our sources of electricity generation. This diversification enhances energy security, resilience, and stability by reducing dependence on a single energy source or fuel type, thereby mitigating the risks associated with supply disruptions or price fluctuations.

5 Environmentally Friendly

Hydrokinetic energy production is environmentally friendly compared to conventional fossil fuel-based power generation. It has minimal direct environmental impacts, such as air and water pollution, and does not require fuel extraction, transportation, or combustion, reducing habitat disruption and ecosystem degradation. Additionally, hydrokinetic systems can be designed and operated in a way that minimises adverse effects on aquatic ecosystems.

Harnessing hydrokinetic energy presents challenges, such as developing robust turbines that can withstand varying water conditions and operate reliably. Sarawak Energy is committed to investing in research and development to enhance turbine designs and improve performance through computational modelling, prototype testing, and iterative refinement. Additionally, identifying suitable locations with adequate water flow and minimal environmental constraints is crucial. Sarawak Energy addresses this by using advanced measuring technologies, numerical modelling techniques, and field measurements to conduct comprehensive site assessments and evaluate resource potential.

Moving forward in 2024, Sarawak Energy aims to improve and upscale current hydrokinetic turbine prototypes to produce site worthy systems with a target generation capacity of up 1kW or 24 kWh per day per unit of turbine. The upscaled version will be installed at a selected site as a pilot project which will be developed in collaboration with the Sarawak Alternative Rural Electrification Scheme (SARES) team. On-going and future initiatives will focus on several improvement features, including enhanced debris protection and removal, increased capacity, component standardisation, and research on integrating hydrokinetic operation with existing solar energy systems, energy storage systems, hydrogen production, potable water pumping and air pumping for aeration application.

OUR PERFORMANCE

Powering Our Community

413-1, 3-3

Sarawak Energy and the Community

In maintaining our social licence to operate, we translate our corporate social responsibility (CSR) commitment into action through diverse programmes geared towards benefitting the communities that we serve. We partnered with various strategic partners to empower and uplift the communities and vulnerable groups. In 2023, we invested RM20.87 million in social investment initiatives to support community building.

To ensure the sustainability of our projects, our annual social investment programmes holistically cover the four key areas below:

Education and Young People

Environmental Management and Conservation

Culture and Heritage

Community Development and Entrepreneurship

Powering Our Community

413-1, 3-3

EDUCATION AND YOUNG PEOPLE

Sarawak Energy emphasises education and young people as we want to develop a competent, innovative, and resilient talent pool of Sarawakians. We believe that by investing in education, it can not only uplift the socio-economic status of individuals but also offers youth in our communities opportunities for personal and professional growth. This, in turn, enables them to make contributions to the society and for the nation's economic development.

Programme	Description
Powering Young Minds Through Education	We are committed to promoting education, especially to Sarawakians in the community we serve, through supporting a range of educational initiatives and providing financial support via bursaries and education funds. **2023's Contributions:** • **Education Fund:** Sarawak Energy continues to contribute to the revolving education funds set up by Bakun Charitable Trust for the communities in Bakun, Belaga (Murum), Batang Ai and Baleh. We have contribution a total of RM900,000 in 2023. • **Supporting Future Workforce:** Three of Sarawak Energy's Baleh Skills Training Programme students graduated with a Diploma in Occupational Safety and Health at Fajar International College. The programme was launched in 2016 to equip youths in Baleh and Kapit with the necessary skills to enhance job marketability through a structured competency development programme. More than 700 youths have completed this programme since its introduction. • **Empowering Youth:** A Sarawak Energy Young Adults Workshop was conducted as part of the 'People Smart Business, Business Smart People' initiative to inspire the youths through knowledge-sharing sessions. Starting with the children of employees, this workshop aims to guide, motivate and boost confidence among young adults as they make major decisions regarding their tertiary education or working life through sharing tips on the requirements for university and career guidance. • **Education Incentives:** Sarawak Energy awarded academic excellence incentives to 44 SPM & STPM 2022 high achievers from SMK Belaga and SMK Bakun in line with our commitment to support the development and education of the neighbouring communities near our projects and operations. Since 2017, 298 recipients have benefitted from the programme. • **School Essentials:** Over 300 students from SK Tegulang and SK Metalun in Murum received school uniforms, stationaries and other school essentials in their preparation for the new term – this initiative was to ease the financial burden of parents in this remote area and encourage student attendance at school.
SCIENCE 2023	In line with Sarawak Energy's social investment efforts in education and young people, our flagship Sarawak Community Innovation and Engineering Convention (SCIENCE) is held annually to generate interest in Science, Technology, Engineering and Mathematics (STEM) among students across Sarawak. SCIENCE by Sarawak Energy, organised by The Learning Curve, has become a highly anticipated event in Sarawak's science education calendar since its inception in 2018. It aims to nurture a culture of innovation and scientific inquiry among young people and promote scientific literacy and awareness in the community. The programme this year brought together 160 students representing more than 16 schools from five STEM communities in Kuching, Padawan and Serian, and received more than 500 guests and visitors at the event.

Powering Our Community

413-1

ENVIRONMENTAL MANAGEMENT AND CONSERVATION

Our conservation efforts are formed to conserve our biodiversity including the native flora and fauna species, in accordance with the UN SDG Goal No. 15 – Life on Land and we also aim to increase environmental awareness amongst society.

In 2023, we have completed the following initiatives:

Programme	Description
CSR Outreach and Tree Planting Programme at SK Lusong Laku	As part of our social investment pillars of education and young people as well as environmental management and conservation, Sarawak Energy organised a CSR Outreach and Tree Planting Programme at SK Lusong Laku, Belaga. **Donated** **Six smart televisions and learning materials** **to enhance the learning experience of students** **Conducted talks on** **electrical safety and environmental awareness** **Planted** **50 fruit trees** **within the school compound**
Sarawak Energy Tree Planting, Protection and Habitat Restoration Campaign 2021 to 2030	We continued to give back to nature and protect our biodiversity through tree planting activities conducted across Sarawak, including but not limited to: **Sarawak Energy Power Plants** • Partnered with the Forest Department of Sarawak (FDS) to plant a total of 600 Gelam seedlings and 80 seedlings from flowering and fruit tree species at Mukah Power Generation. • Planted 847 mangrove trees at Sejingkat Power Corporation with FDS, MBSB bank and EcoKnights. • Planted 500 trees at the Balingian Power Plant Operator Village together with the local communities and volunteers from SK Sungai Duan.

Powering Our Community

413-1

Programme	Description
Sarawak Energy Tree Planting, Protection and Habitat Restoration Campaign 2021 to 2030	**Schools and Education Institutes** • Planted a total of 200 ornamental and fruit trees in the school compound of Kolej Datu Patinggi Abang Haji Abdillah, in collaboration with the teachers and students. • Planted 150 trees at SMK Penrissen, together with the school's Landscape and Nursery students and volunteers from SEGI College. • Planted 204 trees at Sekolah Kebangsaan Pendidikan Khas Kuching. • Planted 50 seedlings at SK Gersik in Kuching. • Planted 2,000 seedlings at Centre for Technology Excellence Sarawak (CENTEXS) in Lundu together with the students and CENTEX management. **Forest Serves and Sanctuary** • Planted more than 2,700 seedlings of various fruit and ornamental trees at Sabal Forest Reserve, in collaboration with FDS and the local communities. • Planted 200 seedlings of diverse species at Samunsam Wildlife Sanctuary together with Sarawak Forestry Corporation.
Kelab Pencinta Alam Sekitar (PALS) Train-the-Trainers Workshop	Sarawak Energy and the Natural Resources and Environment Board (NREB) jointly organised a Kelab Pencinta Alam Sekitar (PALS) Train-the-Trainers Workshop in September for a total of 73 PALS teachers. The workshop aimed at enhancing the capabilities of PALS teachers in delivering environmental education and fostering stronger relationships between schools and government agencies towards this goal. The workshop comprises various outdoor and indoor modules like Eco-Friendly User, Plogging, Eco-Brick Study and Green Practice. Talks by invited facilitators on topics like the utilisation of waste materials for the production of goods were also held.
Beach Cleaning	To keep our land and sea clean, a beach cleaning programme was held at the Kala Dana Beach in Mukah. The collective effort of 70 volunteers from Sarawak Energy, Mukah Regional Office, Dalat and Mukah District Council saw a total of 410.57kg of waste cleared from the beach. This was the third programme held in Mukah following past beach cleaning programmes held in 2019 and 2022.
Environmental Management Awareness Programme	Sarawak Energy, in collaboration with SFC, organised an Environmental Management Awareness Programme at SMK Three River in Mukah. A total of 180 students participated in the programme which aimed to educate and raise awareness on environmental conservation as well as to enhance student's creativity and critical thinking skills through their participation in the impact and assessment mini project. Students were able to present their innovative model projects which were made from recycled items and eco-friendly materials created based on the given topics on the environmental best conservation management in waste disposal, palm oil plantation, beach pollution, manufacturing and timber industry.

Powering Our Community

413-1

CULTURE AND HERITAGE

We hold the importance of Culture and Heritage preservation closely to our organisational values as it fosters a sense of identity, continuity, and pride within our community.

In the year under review, we have accomplished:

Programme	Description
Supporting Artisans at the London Craft Week 2023	Playing our role in developing the community that are impacted by our projects, Sarawak Energy supported our Baleh artisans from Rh. Unggam and Rh. Laso, Ng. Antawau in their participation at the London Craft Week 2023. The artisans held a pua kumbu weaving demonstration with the Tun Jugah Foundation, which was graced with a visit by His Majesty Yang di-Pertuan Agong XVI Al-Sultan Abdullah Ri'ayatuddin Al-Mustafa Billah Shah and Her Majesty Raja Permaisuri Agong Tunku Azizah, as well as King Jigme Khesar and Queen Jetsun Pema of the Kingdom of Bhutan. **Contributions in 2023:** • We provided a platform for our artisans to share their extensive knowledge and experience in indigenous crafts at the Malaysian Craft event at the High Commission of Malaysia. • Our artisans were connected with like-minded craft organisations such as Tenun Pahang Diraja, Tun Jugah Foundation, Malaysian Handicraft Development Corporation and Centre for Technology Excellence Sarawak at the event – enhancing their knowledge to improve their handicrafts.
Annual Batu Tungun Blessing Ceremony 2023	The annual Batu Tungun Blessing Ceremony 2023 is a cultural ceremony by the Penan community in Murum that holds significant traditions. The rock formation, Batu Tungun holds spiritual importance for generations of Penan and is an integral part of the indigenous heritage of the community. Together with the Penan community, we organised and supported this yearly event, exemplifying the company's commitment to preserving heritage sites.
Belaga Regatta 2023	After a five-year hiatus, the Belaga Regatta 2023 made a comeback year this year. Sarawak Energy was one of the sponsors of this week-long event and also provided support to its district council in organising the programmes for the event. The regatta showcases the rich cultural heritage and uniqueness of the indigenous Orang Ulu people in the Belaga district through the dances, food and practices. It provides Belaga the visibility to local, national and international visitors who attended the event.

Powering Our Community

203-1, 203-2, 413-1

COMMUNITY DEVELOPMENT AND ENTREPRENEURSHIP

To further bolster the socio-economic development of communities impacted by our projects, we have taken measures to uplift the standards of living in these affected areas.

Programme	Description
Eye Vision Programme	We extended our contribution to Sarawak's healthcare system by contributing two fundoscopy machines to the Serian Divisional Health Office. With the new machines, patients with diabetes or eye diseases can experience a more comfortable eye screening with improved diagnosis. This donation builds on the success of the first Eye Vision Programme held in Kapit and Baleh in 2017. Sarawak Energy later expanded the programme to cover the communities of Sungai Asap, Murum, Mukah and Balingian. As such more than 300 individuals have undergone the eye screening test, nearly 200 individuals have undergone surgery treatment from the programme. We sponsored cataract operations for the communities of Kapit, Baleh, Murum, Bakun, Balingian, Sri Aman & Lubok Antu.
Supporting Fire Fighting and Fire Relief Efforts	We provide annual funding for our local community partner, Persatuan BOMBA Sukarela Sg. Asap (PBSSA), for its operations and maintenance which includes procuring and refilling fire extinguishers; and providing precautionary training and fire drills for the volunteer firefighters from respective longhouses in Bakun. This commitment to instil good health and safety practices proved instrumental during the 2023 fires at Uma Baha, Belaga, and Uma Nyaving, Sungai Asap. The PBSSA, as one of the first responders, played a crucial role in extinguishing the fires and ensuring the victims' safety, underscoring the importance of preparedness and proper equipment. In both incidents, Sarawak Energy responded immediately to provide relief assistance to the fire victims. **Provided fire relief, food and essential supplies** **Uma Baha** 100 residents from 16 households **Uma Nyaving** 100 residents from 15 households

Powering Our Community

203-1, 203-2, 413-1

Programme	Description
Hari Kraf Kebangsaan (HKK) 2023	Sarawak Energy supported six artisans under the Handicraft Enhancement Programme, one of our efforts to preserve local culture and heritage, at the HKK 2023. The artisans are Selin Anak Gelang and Shenny Asan from Murum, Jane Kiong and Connie Hurang from Bakun, as well as Josefine Midong and Selin Anak Eram from Baleh. During the HKK 2023, Her Majesty Raja Permaisuri Agong Tunku Hajah Azizah Aminah Mainunah Iskandar visited the handicraft booth and purchased items from the artisans.
Women Handicraft Skills Training for Bakun and Murum Communities	Sarawak Energy's CSR team collaborated with the Jawatankuasa Rekreasi Wanita Murum (JRWM) to conduct a Women Handicraft Skills Training for the community of Bakun Resettlement Scheme (BRS) and Murum Resettlement Scheme (MRS) at Dewan Serbaguna, Sungai Asap. The workshop focused on improving the community's sewing techniques in finishing handicraft works and expanding income generation opportunities for BRS and MRS women through handicrafts. The sewing techniques can be applied to raw rattan products such as handbags, clutch bags, seminar bags and tote bags to enhance the product's value. **Engaged certified trainer from** Malaysia Handicraft Development Centre **The workshop was attended by** 19 participants
Empowering Women Through Artisan Development Programme	As part of our cultural heritage and community development initiatives, Sarawak Energy held the Sugu Tinggi Skills Training Programme for artisans from longhouses near Bukut, Balingian as part of our continuous effort to further enhance the artisans' crafting skills and knowledge sharing. Sugu Tinggi is a Iban women's headgear which is an important aspect of traditional Iban attire during cultural ceremonies and festivals. The two-day training was attended by 20 artisans who learned about the inception of Sugu Tinggi to its final form, the art of crafting Sugu Tinggi and the importance for the local artisans to continue this traditional craft as it symbolises the Iban community's culture and heritage. Sarawak Energy strives to provide opportunities for local artisans to expand their creativity and promote their products to a wider market throughout Sarawak and beyond.
Agriculture Training for Community at Rh.Nyaun Bukut, Balingian	In collaboration with Kolej Komuniti Mas Gading Kuching, 12 participants from Rh.Nyaun farm committee attended the training. This agriculture training programme is part of SEB's CSR initiatives to instil and empower a sustainable social economic for the community. With the acquired skills, the farm committee members would be able to set up their farm and participate in business opportunities under Balingian Power Generation and in the Bukut area. These two days of training are also intended to provide career advancement in a specific field or a transition into entrepreneurship.

Powering Our Community

2-26, 2-29, 411-1, 413-1, 3-3

Community Relations Initiatives in 2023:

Every year, we engage with local community representatives and leaders to discuss CSR initiatives and action plans to improve the overall wellbeing of the community. Among the discussions include grievances, job opportunities, skill training, infrastructure and services, along with providing support for cultural heritage. Additionally, we keep them updated on our projects and operations:

Bakun
- Community Engagement with Belaga Action Community (BAC) – 4 December 2023
- Community Engagement with Balui Lake Native Association and Peng Maren Maren Uma – 25 November 2023

Murum
- Community Engagement with Murum Penan Development Community – 20 December 2023
- Outreach Sessions with Belaga Stakeholders on Dam Safety Awareness (DAMSA) – 1 to 2 March 2023

Balingian
- Dialogue with Iban Community Leaders in Bukut – 16 December 2023

Batang Ai
- Engaging Community Leaders at Batang Ai – 11 May 2023 & 18 Dec 2023

Other related activities
- Stakeholder Engagement with community on Bakun-Murum 3rd & 4th Circuit 275kv TLP - 23 March 2023
- Community Dialogue with Uma Badeng, Dangang, and Belaga – 27 August 2023
- Outreach Session with Government Stakeholders and Community Leaders in Belaga – 17 October 2023

With our consistent support, there were no reported incidents of violations involving the rights of indigenous peoples during the reporting period.

Recognition of Our CSR Efforts

As a testament to our strong commitment to contribute to our society, our ongoing CSR efforts have been acknowledged by national and international organisations. Among the notable recognitions received including:

'Best Community Programme' Gold Award at the 15th Annual Global CSR & ESG Summit & Awards

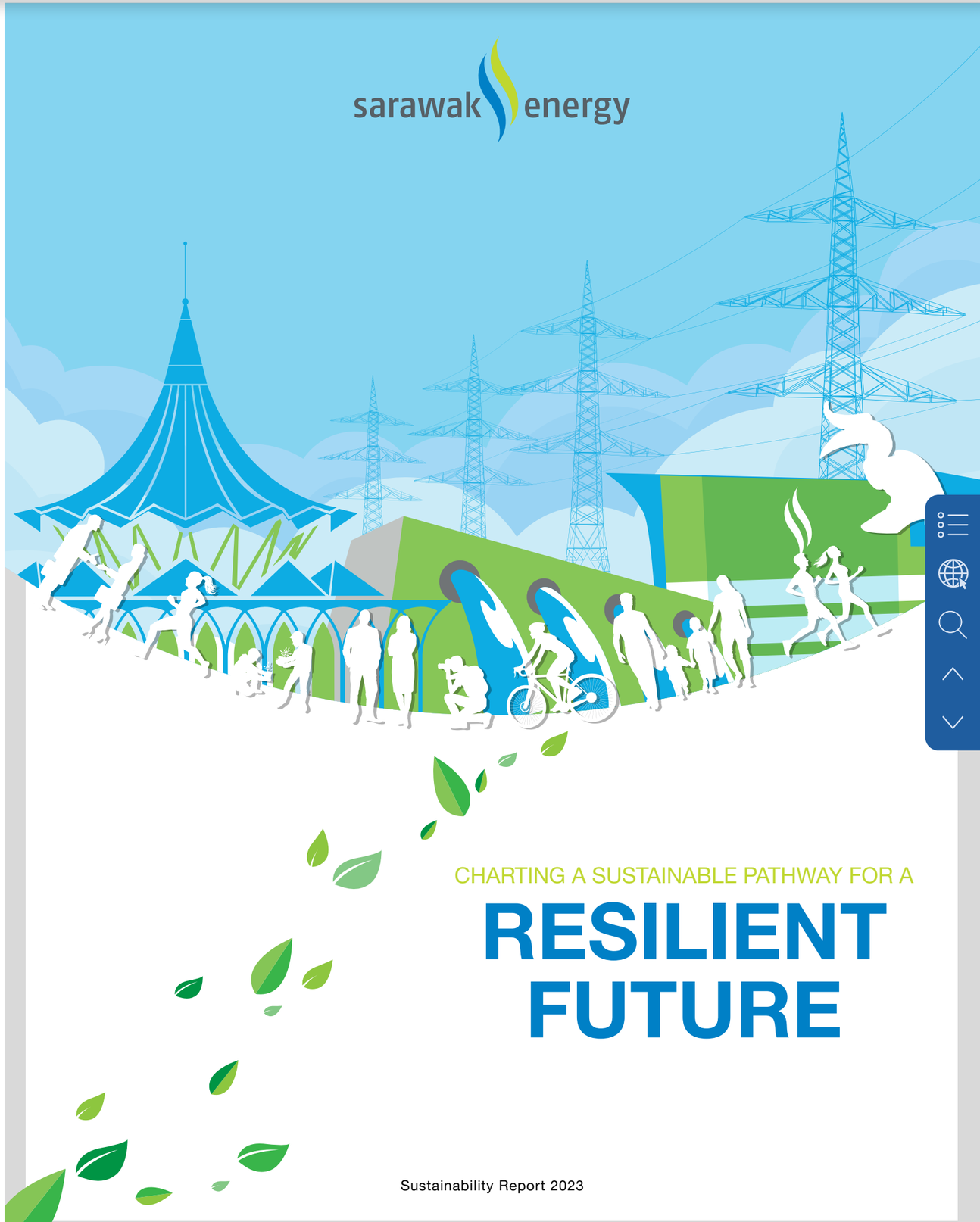
The Batang Ai Education Fund, under the Bakun Charitable Fund, received the Gold Award for 'Best Community Programme' awards during the ceremony held in Da Nang, Vietnam on 29 August. This recognition is a testament to our commitment in supporting and developing Batang Ai's youth through education. By working with the community to encourage further education, Sarawak Energy enhances the employability of young people and improves their social and economic standing. Since 2018, over 235 students have benefited from the Batang Ai Education Fund, which provided them with an incentive to begin their tertiary education.

Recognition of Our Sustainability Efforts

Sustainability Awards by the United Nations Global Compact Network Malaysia and Brunei (UNGCMYB)

Sarawak Energy's steadfast commitment and efforts to transform its sustainability strategies into actionable initiatives earned the state-owned energy development company and utility a series of accolades at the Forward Faster Sustainability Awards 2023 by UNGCMYB on 26 November.

Additionally, our Group CEO, Datuk Haji Sharbini was nominated for the award alongside corporate leaders from Malayan Banking Berhad, Perlabuhan Tanjung Pelepas Sdn Bhd, HSBC Amanah Malaysia Berhad and Pos Malaysia Berhad. This acknowledgement reflects Sarawak Energy's effort and commitment in embedding sustainable principles and practices in its processes, a fundamental imperative required to align with global frameworks that support sustainable development.



Our Performance Overview

204-1, 305-4, EU29

At Sarawak Energy, we are committed to reaching our goal of state-wide electrification by 2025 through reliable and renewable energy supply. This includes our contributions towards national and global sustainability agenda. While we are focused on financial growth to enrich our stakeholders and the region, we are also balancing our business with greater environmental and social impacts by prioritising sustainability. From engaging our communities to preserving Sarawak's natural resources, we endeavour to contribute to Sarawak's prosperity and fulfil the region's energy need. We evaluate our performance and map our actions against our key sustainability pillars of Economic, Environmental and Social.

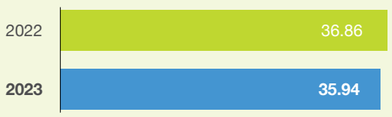
2023 HIGHLIGHTS

Total Electricity Sales *(GWh)*

+5.54%

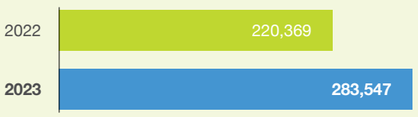
Operating Costs Ratio *(%)*

-2.50%



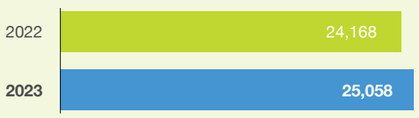
Total Hours of Training *(Hours)*

+28.67%



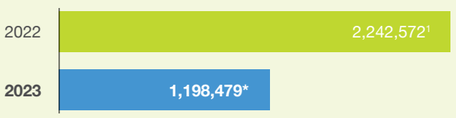
Renewable Energy Generated - Main Grid *(GWh)*

+3.68%



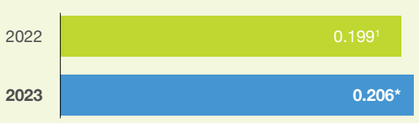
Tenders Awarded to Local Sarawakian Companies *(RM'000)*

-46.54%



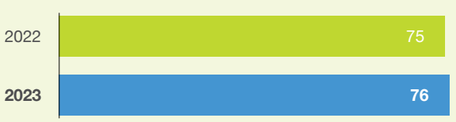
Emissions Intensity - Main Grid *(tCO_2eq/MWh)*

+3.52%



SAIDI - Distribution *(Min/customer)*

+1.33%



SETTING DIRECTION INTO BUSINESS' PURPOSE

Our Performance Overview

Sarawak Energy's science-based greenhouse gas emissions reduction targets

conform with SBTi Criteria and Recommendation (Version 5.0) and have been validated and approved by Science Based Targets initiative

The first large corporation in Malaysia

to receive the validation and approval from SBTi

Signed the Memorandum of Collaboration (MOC) with Bursa Malaysia, HSA and IREC

during the 28th United Nations Climate Change Conference of Parties (COP28) in Dubai to launch a REC trading platform on Bursa Carbon Exchange by Q3 2024

Supported various industries in obtaining the Renewable Energy Certificate (REC) with 2023 witnessing a record-breaking year with approximately

5 million RECs signed, reaching to a total of 6.8 million RECs committed since 2019

Placing Priority and Value - Materiality Topics

2-26, 2-29, 3-1

Sarawak Energy's approach to sustainability is centred on key material issues that are most significant to our business and stakeholders. Identifying our sustainability issues enable us to anticipate risks and capture opportunities that will allow us to continue creating sustainable value. We determine our material matters through various sources including stakeholder feedback, surveys, thought leadership perspectives and social media coverage.

In 2023, we reviewed our material matters and found that they were still relevant with the current sustainability landscape. Our last full materiality assessment was conducted in 2018 according to the GRI Standards. A total of 32 material matters were identified based on our Economic, Environmental and Social impacts, as shown in the materiality matrix below. Going forward, we plan to conduct a double materiality assessment next year to determine issues that are most material to us from a financial perspective and to the environment and our stakeholders from an impact perspective.

REVIEW OF MATERIAL ISSUES

Reviewing and updating material issues that are in line with any development in:

- Business landscape
- Internal policies
- Key Performance Indicators (KPIs)
- Local and global trends
- Regulatory requirements
- Stakeholder feedback

STAKEHOLDER ENGAGEMENT

Prioritising and engaging with stakeholders through continuous dialogue to gain valuable insights to meet the needs of stakeholders and develop strategies and initiatives

PRIORITISING MATERIAL ISSUES

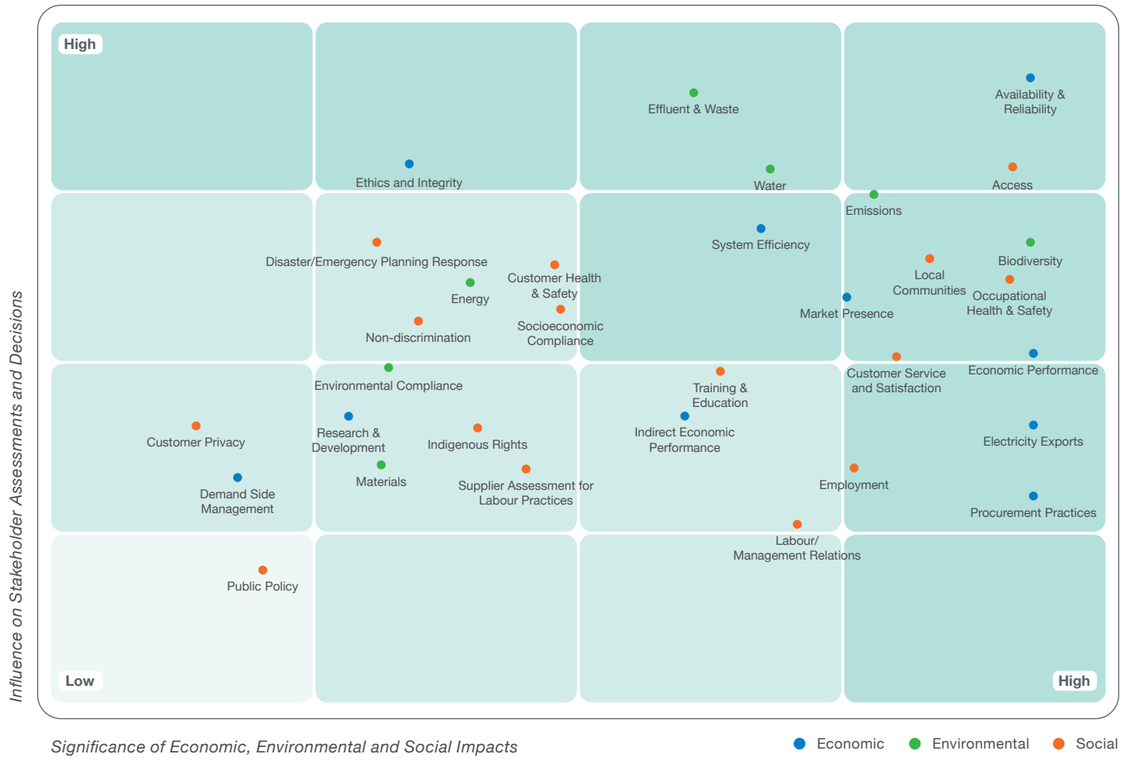
Identifying material issues before prioritising the issues that are in line with the Company's business needs

SETTING DIRECTION INTO BUSINESS' PURPOSE

Placing Priority and Value - Materiality Topics

3-2

Our materiality matrix is shown below:



Deepening our Commitment to Sustainability

Reporting on our significant impacts on the economy, environment and people has enabled us to further deepen our commitment to addressing the issue of human rights across our supply chain. This is testament in our signing of the Letter of Commitment of The Ten Principles of the United Nations Global Compact (UNGC)[a] as part of the outcome of our Sustainability Strategy and Roadmap roll-out in 2022.

In addition, we are among the global companies that have pledged to support the UNGC's Business Ambition for 1.5°C. Our main grid CO_2eq emission intensity is within the 2°C and 1.5°C targets in accordance with Paris Agreement. Read more about our commitment to the SBTi in Embarking on 1.5°C Pathway Journey on page 141.

Note:

[a] *For more information on The Ten Principles of the UNGC, refer to https://unglobalcompact.org/what-is-gc/mission/principles*

Creating Sustainable Value

2-6, 2-7, 301-1, EU2, 3-3

Sarawak Energy delivers returns throughout its value chain by producing renewable energy using local resources. The Company further upholds stakeholders' interests and climate action to ensure sustainability of not only its businesses, but also of its communities and the planet.

I INPUT

POWERING LOW-CARBON ECONOMY

Electricity Generated & Fuel Consumption by Type:

Hydro
25,058.75 GWh*

Hydro
Total Annual Water Volume for Energy Generation
57,017.86 Million m³*

Natural Gas
5,429.38 GWh*

Coal
3,201,032.55 Tonnes*

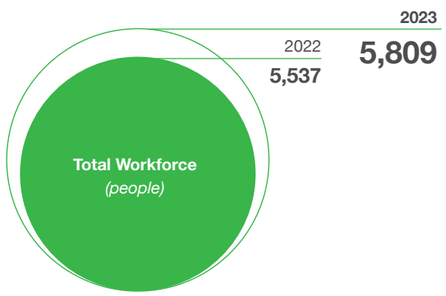
Diesel
29,023,942.56 Litres*

Coal
3,952.76 GWh*

Natural Gas
47,502,815.02 MMBtu*

Thermal – Water Utilisation
1,147 Million m³*
(Cooling process)

EMPOWERING OUR PEOPLE



II VALUE TO OUR STAKEHOLDER

SUSTAINABLE DEVELOPMENT GOALS

We put local resources and the production of clean energy first to unlock returns throughout our value chain

VALUE CREATION PROCESS

1 Empowering Our People

2 Powering The Economy

3 Preserving The Environment

4 Value Created

Investors

Employees

Society at Large

III OUTPUT

Powering The Economy

- Operating Costs Ratio - **35.94%**
- Economic Value Retained (RM Million) - **2,585.00***
- Payments to the Government (RM Million) - **358.20**
- Employee Remuneration (RM Million) - **778.20**
- Electricity Sales - **33,011 GWh**

Empowering Our People & Society

Human Capital Development
- Total workforce - **5,809 people**
- Total Training Hours - **283,547 hours**
- Employee New Hires - **437**

Adding Value to Our Business

- Total Assets (RM Million) - **44,051**
- Operating Costs (RM Million) - **2,632.70**
- Tenders Awarded to Local Sarawakian Companies (RM Million) - **1,198***
- Sarawak's Rural Electrification Coverage (%) - **98.38%***
- Return on Assets - **3.0 %**
- Benefitted at least **142,996 Rural Households Since 2019**

Preserving The Environment

- Grid Emissions Intensity (Main Grid) - **0.206 tCO_2eq/MWh***
(3.52% increased from 2022)

SETTING DIRECTION INTO BUSINESS' PURPOSE

Creating Sustainable Value

2-6, 201-1, 203-2, 204-1, 305-4, 401-1, EU26

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 2-25, 305-4, 3-3

Our Sustainability Strategy and Roadmap is focused on five key themes which are:

Grid Emissions Intensity (Main Grid)
0.206
tCO_2eq/MWh*

Grid Emissions Intensity (Northern Grid)
0.691
tCO_2eq/MWh*

Total CO_2 Emissions (Main Grid)
7.08
million tCO_2eq

Total CO_2 Reduction from Clean Development Mechanism Projects
226,330
tCO_2eq

Note: *Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.*

Status: *Completed* | *On-going* | *Yet To Start*

5 Key Themes	Strategies	Action Plans				Timeline
Sustainability Leadership	1 Sustainability Governance 2 Sustainable Business Model 3 Sustainable Business 4 Sustainability Performance	1 ✓ GEC Sustainability Council … Capability building (Board, & GEC Members) … Sustainability Board Committee	2 II Board Agenda - Sustainability Topics … Embedding Sustainability elements into the business model	3 … Setting Sustainability direction … Embed sustainability requirements' business process ✓ High-Level Commitment toward Sustainability	4 … Overall Sustainability Performance & Monitoring … Sustainable performance targets in corporate KPI	Q3 2022 ▼ Q2 2024
Sustainable Growth	1 Energy Transition 2 Sustainable Hydropower 3 Low-Carbon Technology 4 Performance & Evaluation	1 ✓ Corporate Business Ambition 1.5°C, SBTi & Net Zero – Governance & Progress … Explore other variable renewable energy sources … Exploring new low-carbon technology … Future generation and electrification … Support climate action beyond Sarawak Energy – towards a low-carbon and circular economy	2 ✓ Strong Governance and dedicated team to ensure compliance with HSS & San José Declaration … Hydropower Sustainability Standard Certification by 2030	3 II Develop data scientists to enable decision making … Disruptive technology to enhance the adoption of low-carbon technologies (Demand & Supply Side)	4 … Holistic and integrated performance evaluation … Value creation assessment	Q3 2022 ▼ Q4 2025
Business Resilience	1 ESG Data Analysis 2 Sustainable Financing 3 SEB Infrastructure (G,T & D) 4 Environment, Social and Governance	1 … Robust ESG data collection and monitoring … Single source/centralised data for ESG … Third-party assurance & assessment	2 II Competitive Financing II ESG Credentials - premium market (e.g. ESG Rating) II Incorporate ESG in investment decisions	3 … Improve the resilience of the power generation and power delivery infrastructure	4 … Sound environment and social sustainability management, and reporting structure … Strong and robust data governance II Integration of sustainability requirements and integrated management system	Q1 2023 ▼ Q4 2024
Climate Action	1 Climate Mitigations & Adaptations 2 Reporting Standards 3 Climate Change Impacts 4 Progress Updates	1 II Climate change requirements as part of business decision making (Corporate and project level) … Climate action beyond Sarawak Energy aligns the energy sector towards a low-carbon and circular economy … Integrated Catchment Management and Policy	2 ✓ Adopt international standards in reporting climate action	3 … Robust assessment and management of climate transition and physical risks	4 … Progress monitoring and review	Q3 2022 ▼ Q4 2025
Workforce and Supply Chain	1 Engagement and Awareness 2 Capacity Development 3 Supply Chain 4 Sustainability Culture	1 … Engagement with working-level Executives/ Non-Executives Staff for awareness and buy-in across the company's working-level training	2 … Introduce sustainability-related competencies	3 … Advocating suppliers toward embracing sustainability practices … Integrated Sustainability elements into Supplier evaluation & selection … Sustainability readiness & performance	4 II Overarching policy on Sustainability … Embedding sustainability elements into staff job descriptions	Q3 2023 ▼ Q4 2025

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 2-25, 3-3

Sarawak Energy's Sustainability Strategy & Roadmap

2-9, 2-13, 2-16, 3-3

Sustainability Leadership

SUSTAINABILITY GOVERNANCE

As part of our commitment to lead with sustainability, we review and enhance our governance periodically to ensure that sustainability is governed with a tone from the top.

In 2023, we strengthened the governance and oversight of our sustainability by establishing a Group Sustainability Committee (GSC), which succeeds the CSR Steering Committee. We are currently in the midst of developing a Board Sustainability Committee, which is targeted to be fully established by Q4 2024. Read more about our Sustainability Governance in The International Financial Reporting Standards (IFRS) S2 Climate-Related Disclosures on page 148.

Notes:
[1] *Effective Sept 2023.*
[2] *Board Sustainability Committee targeted to be established in Q4 2024.*

Sarawak Energy's Sustainability Strategy & Roadmap

2-22, EU4, EU12, EU26, EU29, EU30

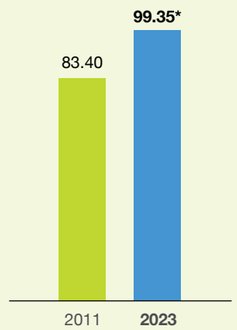
Embracing the SDGs from Within

The 17 United Nations Sustainable Development Goals (UN SDGs) are an urgent call for all countries to form a global partnership and act to end critical issues that affect people and the environment. This call to action recognises the necessity of aligning our strategies with efforts to improve quality of life, reduce inequality and stimulate economic growth while addressing climate change. In support of the UN SDGs, we have identified six SDGs where our business can make a positive impact:

7 - AFFORDABLE AND CLEAN ENERGY

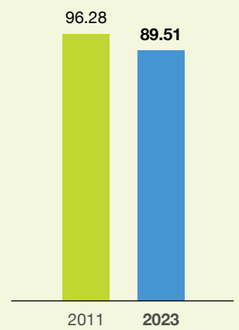
Sarawak Electricity Coverage *(%)*

+19.12%



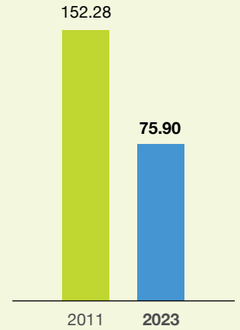
Hydropower Average Availability Factor *(%)*

-7.03%



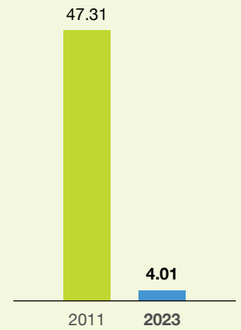
SAIDI for Distribution *(Min/customer)*

-50.16%



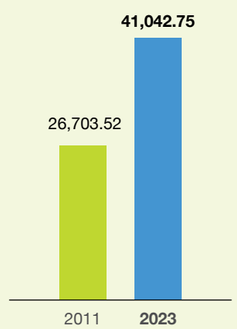
SAIDI for Transmission *(Min/customer)*

-91.52%



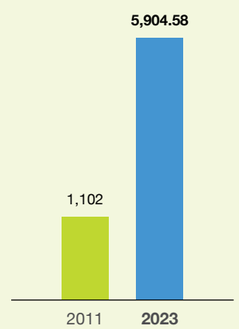
Total Length - Distribution *(km)*

+53.70%



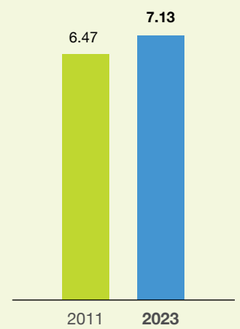
Total Length - Transmission *(km)*

+435.81



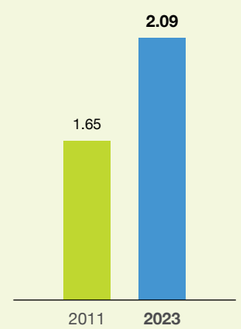
Distribution Losses (Technical) *(%)*

+10.20%



Transmission Losses *(%)*

+26.67%



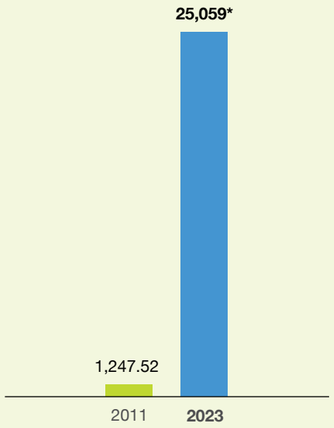
Sarawak Energy's Sustainability Strategy & Roadmap

305-4, 305-5

13 - CLIMATE ACTION

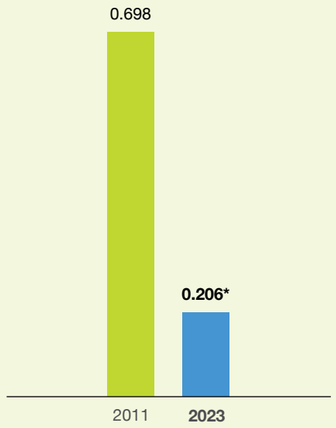
Renewable Energy Generated *(GWh)*

+1,908.71%



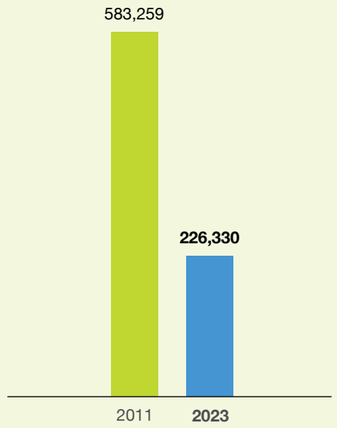
Main Grid Emissions Intensity *(tCO_2eq/MWh)*

-70.49%



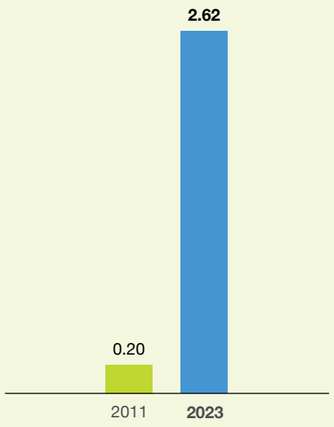
Total CO_2 Emissions Reduction *(tCO_2)*

-61.20%



Renewable Energy to Non-Renewable Energy Generated Ratio

+1,210%

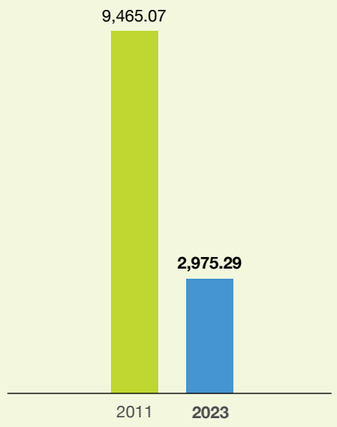


Total Scheduled Waste Generation Intensity *(t/GWh)*

+104.25%

Total Fuel Consumption Intensity *(MJ/MWh)*

-68.57%



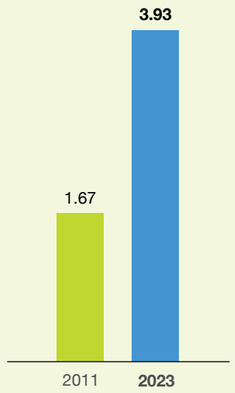
Sarawak Energy's Sustainability Strategy & Roadmap

2-7, 204-1

8 - DECENT WORK & ECONOMIC GROWTH

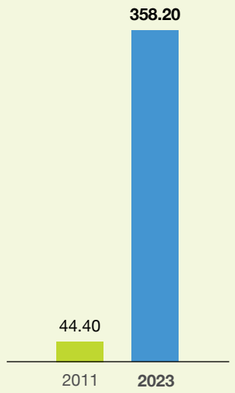
Electricity Sales/GDP[a] *(%)*

+135.33%



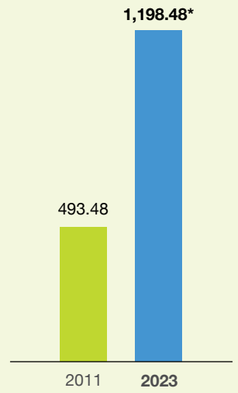
Tax Paid to Government *(RM Mil')*

+706.76%



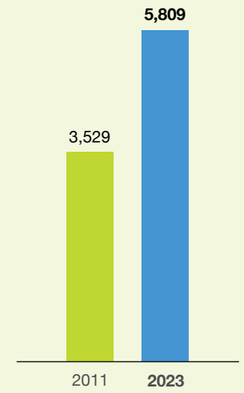
Tenders Awarded to Local Sarawakian Companies *(RM Mil')*

+142.86%



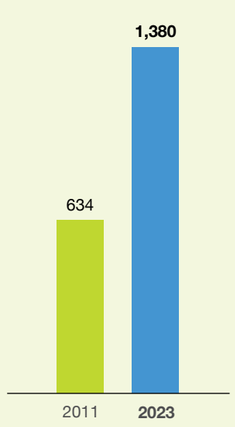
Total Number of Employees *(No.)*

+64.61%



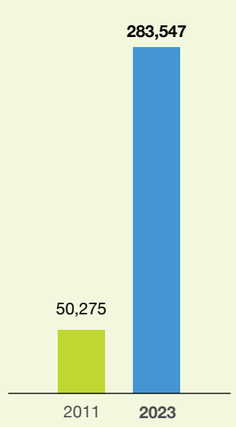
Total Number of Women in Workforce *(No.)*

+117.67%



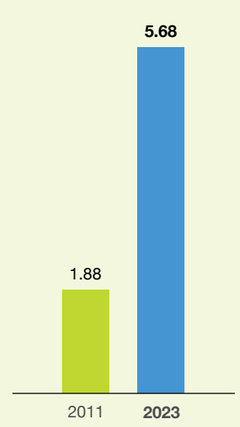
Total Training Hours Provided *(Hours)*

+463.99%



Electricity Sales/Number of Employees *(GWh/Staff)*

+202.13%



Note:

[a] GDP for State of Sarawak in 2022 is based on current prices.

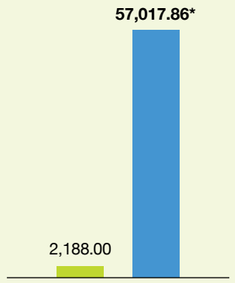
Sarawak Energy's Sustainability Strategy & Roadmap

2-28, 304-1, 3-3

6 - CLEAN WATER AND SANITATION

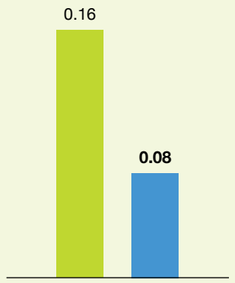
Water Volume Regulated by Hydropower Plants for Electricity Generation *(Million m^3)*

+2,505.94%



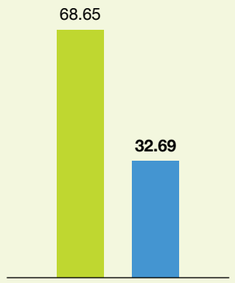
Water Intake Intensity by Thermal Plants by Source for Cooling Process - Municipal Water *(m^3/MWh)*

-50.00%



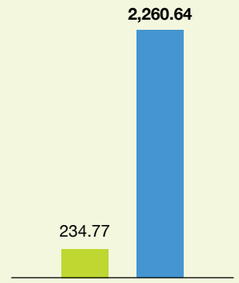
Water Intake Intensity by Thermal Plants by Source for Cooling Process - Sea Water or Other Natural Water Source *(m^3/MWh)*

-52.38%



Water Volume Intensity Regulated by Hydropower Plants for Electricity Generation *(m^3/MWh)*

+862.92%



We are a member of the state's Integrated Watershed Management Committee that supports and contributes to the development of the state policy, procedures and guidelines for Integrated Watershed Management.

15 - LIFE ON LAND

- Supported the Heart of Borneo (HoB) Initiative
- Gazetted the Baleh National Park
- Conducted various workshops on watershed management
- Nurtured the Flora Conservation Garden

17 - PARTNERSHIPS FOR THE GOALS

- Formed partnerships to conserve and protect HoB areas
- Collaborated with government agencies, NGOs such as WWF and universities in developing an Integrated Catchment Management Policy, Procedures, Guidelines and Plan
- Collaborated with local universities on our Environmental Sustainability Programme
- Partnered with the International Hydropower Association (IHA), UNGC Network Malaysia & Brunei, and the Global Reporting Initiative (GRI) to champion the global sustainability agenda within a local context

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 3-3

Fostering Business Resilience

CLIMATE ACTION STEWARDSHIP THROUGH SUSTAINABLE SOLUTIONS

Human activities continue to be the main driver of climate change, causing long-term shifts in temperatures and weather patterns. Heat-trapping gases caused by the burning of fossil fuels such as coal, oil and gas have altered weather conditions and contributed to natural disasters, affecting the growth of a nation and economic activities.

This shift has driven Sarawak Energy to fortify our business through innovative solutions, enabling us to contribute to Sarawak's sustainability, financial growth and social development. We continue to focus on digitalisation and hydropower usage as renewable energy source to supply Sarawak with clean, dependable and affordable electricity.

In 2023, the renewable energy share in Sarawak's generation mix continued to grow to 25,059* GWh from 1,248 GWh in 2011. This has enabled Sarawak to reduce its main grid CO_2 emissions intensity by 70%, 54% lower than the global average of 450 gCO_2eq/kWh.

Other and Variable Renewable Energy

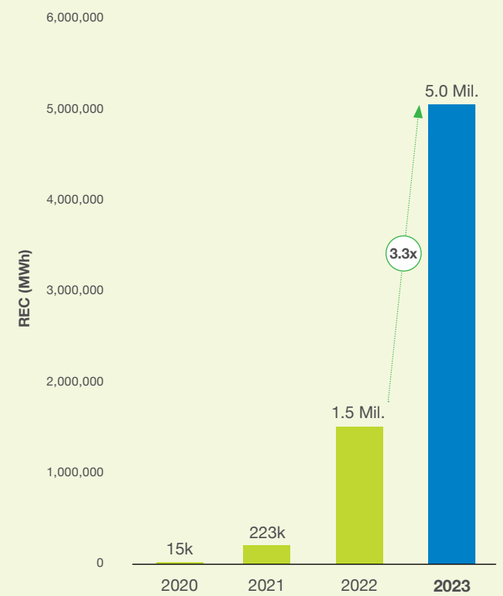
Renewable Energy Certificate (REC)

The REC mechanism was launched in 2019 to enable corporates in Sarawak to procure credible renewable energy. It serves as a vital tool in facilitating corporate participation in the global transition towards low-carbon economy. The REC mechanism has enabled Sarawak Energy to support various industries, including manufacturing industries, electronics, pharmaceuticals, and food and beverage in their sustainability efforts to reduce Scope 2 GHG emissions.

In 2022, Murum Hydroelectric Plant was officially registered with the International Renewable Energy Certificate (I-REC) registry. We aim to continuously collaborate with REC registries and corporate organisations across all sectors to further improve the development of the REC mechanism in Sarawak. Our efforts support our vision for the REC to catalyse the development of renewable energy through increasing sustainability awareness and advocating more renewable energy usage in the industries to advance Sarawak's transition to a low-carbon economy.

In 2023, the number of RECs issued rose significantly by about 232% to more than five million RECs (MWh) from previous year, a testament to higher sustainability awareness amongst corporates. This increased the total number of certificates issued to 6.8 million RECs since 2019.

Total Volume: 6.8 Mil. RECs as at Dec 2023



Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 203-1, 3-3

We aim to continuously expand the offering of the RECs to support the acceleration of the transition to a low-carbon economy. In 2023, we signed a Memorandum of Collaboration (MOC) with Bursa Malaysia, Hydropower Sustainability Alliance and the I-REC Standard Foundation during the 28th United Nations Climate Change Conference of Parties (COP28) in Dubai, United Arab Emirates, on 4 December 2023.

The four-way MOC helped to expand the accessibility of Sarawak Hydro RECs to a broader market in Malaysia via Bursa Carbon Exchange. Additionally, this collaboration will further promote renewable energy awareness amongst Malaysian industry players, facilitate adoption of renewable energy, strengthen all parties' capabilities and emphasise on sustainable hydro labelling.

Disruptive Technologies/Digitalisation

Integrating Digital Technologies

As we operate in a dynamic environment, Sarawak Energy continues to cater to the demands of our stakeholders by adopting new technologies and innovations. Supported by strategies and tools, we are able to operate efficiently and contribute to a global digital economy while staying competitive at the same time.

Incorporating technology and digitalisation into our supply chain

- **EFFICIENCY IMPROVEMENT**
- **RESOURCE ALLOCATION OPTIMISATION**
- **LOWER OPERATIONAL COSTS**

We have embarked on a digital transformation journey to achieve our Vision 2022 regional powerhouse ambitions, empowering us towards becoming a digital utility by 2025. To this end, we have invested in new technologies, processes and initiatives to form high performance, supporting our six Key Focus Areas. This will enhance system performance, driving the transformation of business operations and process automation across all our activities.

Sarawak Energy's digitalisation journey is anchored on five strategic pillars

- **STAYING AHEAD OF THE CURVE**
- **SMART BUSINESS**
- **DATA AS OUR STRATEGIC ASSETS**
- **A MODERNISED, NEW WAY OF WORKING**
- **A ROBUST AND FIT-FOR-PURPOSE DIGITAL FOUNDATION**

Empowering for Transformation

We support the Sarawak Government's five-year Sarawak Digital Economy Strategy by driving a digital grid transformation to lead the utility industry's digital revolution. We are systematically digitising and modernising processes, technologies, skill sets, and competencies across our core and support functions. Consequently, we developed and implemented the Sarawak Energy Digitalisation Blueprint in 2018.

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 203-1, 3-3

Sarawak Energy's Journey Towards Becoming a Digital Utility by 2050 Through World-Class Operational Excellence

DIGITAL UTILITY

Ahead of the Curve | Smart Business | Data as Strategic Assets | New Way of Working | Robust & 'fit-for-purpose'

Smart Business

Smart Grid & Smart Retail
- Distribution Automation
- Advanced Metering Infrastructure & Smart Meters
- Smart Asset Performance Management
- Mobile Field Force Automation
- Virtual Assist/Counter (Carina)
- e-Billing

Digital Power Plants
- Remote Monitoring and Diagnostic Centre (RMAD)
- Generation Control Centre (GCC)
- Generation Transformation (GENX)
- Generation Digital Innovation

Data as Strategic Assets

MyPortal
- Sarawak Energy KFA Dashboard
- Digitalisation (e-Signature, Resource Central)
- Retail Fraud Analytics
- Revenue Intelligence
- Digital Customer Experience
- Generation Transformation (GENX)
- Dynamic Water Dispatch Management
- Online Vibration Monitoring
- Online Dissolved Gas

Unlock business insights, information at fingertips anytime on any device

Enterprise New Way of Working

Workplace Modernisation
- Microsoft 365, Teams, Video Conferencing, Virtual Events
- Digital People CELL (SEDAP)

Enterprise Applications Modernisation
- Pinnacle Programme (SEPS, CONCUR, etc.)
- FINX (SAP S/4 HANA Migration)
- GenesysX Programme
- Project Delivery Control Tower
- Corporate Service
- HSSE, SEACE, etc.

Optimised, automated and centralised processes, driving sustainability

Digital Foundation

Infrastructure Refresh
- PC Refresh
- Internet and Network Bandwidth Enhancement DC/DR expansion
- Core Backbone Communication Technology Upgrade

Standardisation/Simplification
- DC rationalisation
- Hardware, Wi-Fi System standardisation
- PC, mobile, printer standardisation
- Service improvement and automation

Strengthening Cybersecurity
- ThinkSecure
- OT network security (ICS, USB scanners)
- Enhance access control (Multifactor Authentication)
- Upgrade Security Monitoring system (SIEM)

To ensure reliability, stability, speed, security and cost-effectiveness

2018-2019 | **2020-2021** | **2022 AND BEYOND**

Read more about Digital Foundation on page 36.

The five trends that are critical in Sarawak's grid transformation:

- Increased distribution of clean renewable energy in generating electricity
- Growing supply and demand, presenting additional opportunities for customers to participate in the electricity market
- Growing demand for a more resilient and reliable grid, protected against weather disruptions and cyber and physical attacks
- Rise of interconnected electricity information and control systems
- Ageing electricity infrastructure

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 3-3

Advancing Smart Business

Our business expansion is pivoted on our ability to operate sustainably and provide our customers with accessibility, reliability and affordability. To materialise these objectives, we are guided by Sarawak Energy's business digitalisation blueprints and roadmaps for each of our core businesses including:

DIGITAL POWER PLANT | **SMART GRID** | **SMART RETAIL**

DIGITAL POWER PLANT

- Our Generation Operation Excellence initiative, part of our Generation Transformation, enhances workforce and asset productivity by leveraging on innovative digital technologies, helping us navigate risks effectively.
- We continue to increase our efforts in enhancing operating hours by understanding and improving plant performance and health. Additionally, we prioritise operational safety through newly developed technologies.

A Remote Monitoring & Diagnostic Centre (RMAD)

- We have established a centralised centre that connects all power stations, leveraging advanced analytic tools and insights from Subject Matter Experts (SMEs). This setup enables our plants to achieve optimal performance with enhanced reliability, efficiency, productivity, and profitability

Generation Control Centre (GCC)

- Our control room operators can oversee multiple plants from a central location, enabling us to achieve workforce optimisation and enhancing operational agility

Enterprise Asset Management (EAM) System

- We enhance our existing business processes by developing our asset management strategy to align an asset's life cycle with the ISO 55001 Asset Management standards

Computerised Maintenance Management System (CMMS)

- Our decision-making processes are enhanced through accurate reporting and efficient dashboarding with the help of business intelligence tools

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 3-3

SMART GRID

- The demand for renewable energy has increased the level of complexity for grid operations, affecting the efficiency and cost of manual operation, monitoring, security of the network and other manual assets
- To remain competitive, we have invested our resources into modernising our grid and operations by digitalisation to ensure a secure and reliable smart power grid
- Smart grid technology allows us to:

Improve safety and efficiency in our operations

Protect our resources while striving for optimised performance

Meet customer needs

SMART GRID FOCUS

Monitoring & Control
SCADA, DMS/ADMS

Security
IT/OT Cybersecurity

Supply Reliability
SAIDI, SAIFI

Data Analytics
Smart Meter Coverage, Data Analytics Application

Customer Empowerment & Satisfaction
Real-Time Data to Customers, Customer Satisfaction Feedback

Key Smart Grid Initiatives For The Years Ahead

Advanced Metering Infrastructure & Smart Meters

Benefits
- Automatic meter reading
- Outage, tampering & energy theft detection
- Remote disconnection/ connection
- Power quality monitoring
- Enhanced digital experience for customers

Mobile Field Force Automation

Benefits
- Concise information flow between field crew (FC) and Customer Care Centre (CCC)
- Monitoring work order progress
- Tracking FC performance on response and restoration

Distribution Remote Monitoring System

Benefits
- Sensors for substation and pillar doors and loss of supply (transformer), remote sensing earth fault indicator, street lighting status
- Automated detection and alerts via SMS and email
- Faster restoration

Geographical Information System

Benefits
- Network assets visibility
- Availability of asset information linking to customer information

Substation Smart Surveillance System

Benefits
- Real-time monitoring of substations and assets with alert notifications
- Cases of theft and vandalism have reduced significantly after installation

Distribution Automation

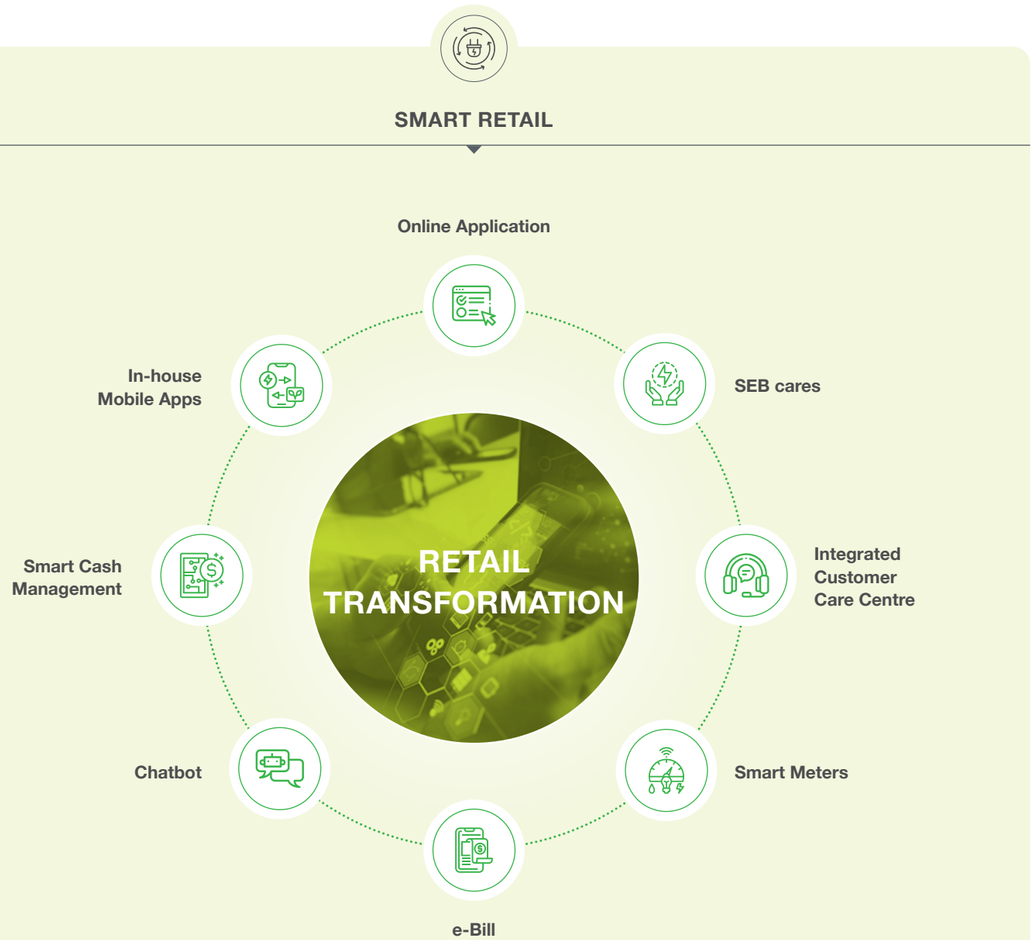
Benefits
- Remote fault indication
- Safe remote operation
- Faster fault isolation and service restoration

Online Asset Monitoring

Benefits
- Real-time monitoring of asset condition
- Early detection of anomalies and alert notifications

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 203-1, 203-2, 3-3



- Embracing technological innovations has enabled our retail services to provide optimal customer experiences.
- By enhancing convenience, we continue to further implement automated customer service operations.

Smart Meters

- We aim to equip 70% of our customers in Kuching with Smart Meters by 2026, expanding to Miri, Sibu, Bintulu, Sri Aman, Betong, Sarikei, Mukah, Kapit, and Limbang by 2029.
- To date, 44,655 Smart Meters have been installed throughout Sarawak.

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 203-1, 203-2, 3-3

Supporting Sarawak's Digital Economy

In line with Sarawak's Digital Economy, we are advancing high-speed connectivity through our robust fibre optics infrastructure. This is testament in our collaborate with the Sarawak Multimedia Authority (SMA) and Sarawak Digital Economy Corporation (SDEC) to expand and optimise bandwidth and connectivity coverage across the State, leveraging our 500kV network. This will position Sarawak as a digital leader in the region.

Sarawak Energy Fibre Optic Network

More than 6,500 km of fibre optic connections have been installed by Sarawak Energy since 2020 including the Optical Ground Wire (OPGW), All Dielectric Self Supporting (ADSS), and Optical Underground (OPUG) fibres. Additionally, we have also erected more than 6,000 transmission towers and 400,000 distribution poles.

Note:
Points of connection on the map are approximate.

Sarawak Energy's Sustainability Strategy & Roadmap

2-23, 2-25, 3-3

Sustainable Growth

SUSTAINABLE HYDROPOWER: ACCELERATING TOWARDS A JUST TRANSITION

Our hydropower projects and operations align with the UN SDGs, international best practices and good governance, ensuring we embed the correct principles in managing, empowering and protecting indigenous people by supporting their needs and livelihoods.

This includes respecting their dignity, human rights, aspirations, culture, lands, knowledge, practices and natural resources-based livelihoods. Our commitment to developing sustainable hydropower contributes to the economy, the protection of natural resources, environmental stewardship and social accountability.

As part of our ongoing dedication to enhancing our HEP's performance and upholding good governance, Sarawak Energy established a Sustainability Partnership with the International Hydropower Association (IHA) in 2011. This initiative demonstrates our commitment to sustainability and involves the development and operation of our hydropower projects in alignment with the Hydropower Sustainability Tool (HST) and the Hydropower Sustainability Standard (HSS).

Hydropower Sustainability Standard (HSS)

The Hydropower Sustainability Standard is a robust assessment and certification framework that ensures accountability in hydropower development. It charts a path for harnessing hydropower's potential to drive positive impact, benefiting both communities and our environment. The Standard propels the responsible growth of this essential energy source, balancing progress with safeguarding our world.

Source:
Hydropower Sustainability Alliance website.

Hydropower Sustainability Assessment Tools (HST)

The three complementary tools that constitute the HSS framework are:

Hydropower Sustainability Assessment Protocol (HSAP)
Provides a structured approach to assessing the sustainability of hydropower projects

Hydropower Sustainability ESG Gap Analysis Tool (HESG)
Identifies and addresses gaps in ESG performance

Hydropower Sustainability Guidelines on Good International Industry Practice (HGIIP)
Outlines best practices to ensure hydropower projects adhere to high sustainability standards

Together, these tools enable us to implement the following:

- Managing and addressing sustainability risks and opportunities
- Meeting the expectations and requirements of investors and lenders
- Benchmarking our performance against international best practices

Through this robust framework, we aim to not only align with global sustainability standards but also to enhance the overall sustainability performance of our hydropower projects.

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-23, 2-25, 3-3

Safeguarding Sustainability Best Practices in Hydropower

Our commitment to advancing sustainable practices in generating hydropower is led by the Sarawak Energy HSS Internal Assessment Team. Established in 2014 and endorsed by the Sarawak Energy Executive Management Committee, the assessment team is a multidisciplinary group with representatives from various departments. Each member of the team has direct or indirect involvement in the development and operation of hydropower projects.

The team has received comprehensive training and is skilled in conducting internal assessments at various stages of a hydropower project, from the Early Stage to the Preparation Stage, Implementation Stage and Operation Stage. They had also conducted assessments on an international level including in Indonesia, Nepal, New Zealand and Tajikistan demonstrating the credibility of our homegrown certified assessors.

Our long-standing commitment to sustainable hydropower development is underpinned by the need for a robust governance process that ensures fair and transparent assessments. Additionally, it is crucial that the company maintains the necessary capacity and capability to support our growth and success. These efforts align with our Key Focus Areas and Core Values.

This is also aligned with Sarawak Energy's commitment to the San José Declaration on Sustainable Hydropower with the following principles:

Sustainable hydropower delivers ongoing benefits to communities, livelihoods and the climate

Moving forward, the only acceptable form of hydropower is sustainable hydropower

Sustainable hydropower necessitates collaborative efforts among stakeholders

To provide robust oversight and effective management of our initiatives, the Group Sustainability Committee oversees all activities and is supported by the HSS Sponsor which champions HSS initiatives. Sustainability efforts and practices are communicated across departments by the HSS Single Point of Contact, while lead assessors head assessment processes and internal assessors conduct daily evaluation in compliance with sustainability standards. The number of accredited assessors increased to six assessors in 2023 from four assessors in 2022.

Our Internal HSS Assessment Team conducted HSS Assessment, for Sunkoshi-2 Hydropower Project in Nepal with Accredited Assessors from Hydropower Sustainability Alliance.

HSS Internal Assessment Team

As of December 2023, the number of internal assessment team is as follows:

4	18	51
HSS Accredited Assessors	**Provisionally Accredited Assessors**	**HSS Certified Users**

Our internal assessors strive to:

- Act as change agents within their departments to continually embed sustainability practices in our business processes
- Conduct internal assessments for hydropower projects using the HST prior to official evaluations
- Develop and enhance internal capabilities

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 3-3

CAPACITY DEVELOPMENT ROADMAP FOR SARAWAK ENERGY'S INTERNAL ASSESSMENT TEAM

1 Knowledge
Internal Assessor

- Undergo Hydropower Sustainability Tools (HST) Training
- Pass as Certified User of HST
- Participate in Internal Capacity Development Workshop
- Attend ISO Internal Audit Training
- Conduct or participate in Internal Assessment as an assessor or Local Support Team

1–2 years

2 Skill
Provisionally Accredited Assessor

- Attend Official Accredited Assessor Course
- Pass the Official Accredited Assessor Course's Examination
- Conduct Internal Assessment (Topic Lead)
- Specialises in specific HS topic
- Lead Internal Assessment
- Become IRCA-certified Lead Auditor

3–4 years

3 Mastery
Accredited Assessor

- Conduct Official Assessment (HSAP/HESG/HSS)
- Able to master all HS topics

> 4 years

Climate Action Mitigation

Advancing Carbon Sequestration Efforts at Batang Ai

The Batang Ai Dam is one of our largest projects that has generated positive ecological impacts to the local community. Since our collaboration with the Forest Department Sarawak (FDS) to initiate a forest landscape restoration at the site in 2021, we have sequestered 229,260kg of CO_2.

Objective
To restore vegetation on the degraded lands adjacent to the Batang Ai Dam, thereby enhancing the local environment and improving water catchment functions

Tree planting
Strategic cultivation of indigenous timber trees, fruit-bearing trees and non-timber forest species such as rattan. This selection was made in consultation with and at the request of the local community, ensuring that the reforestation efforts were aligned with local needs and preferences

Key Highlights

- Cultivated **6,000** indigenous tree species, including Belian, Gaharu, Engkabeng, Kapur and Meranti
- Preserved and rehabilitated over **6+ ha.** of forest
- Provided forestry training to **7 longhouse** communities
- Engaged more than **200 individuals** through restoration awareness campaigns
- Enhanced key **biodiversity and ecosystem** services through four targeted projects
- Educated over **100 youths** on environmental conservation

Sarawak Energy's Sustainability Strategy & Roadmap

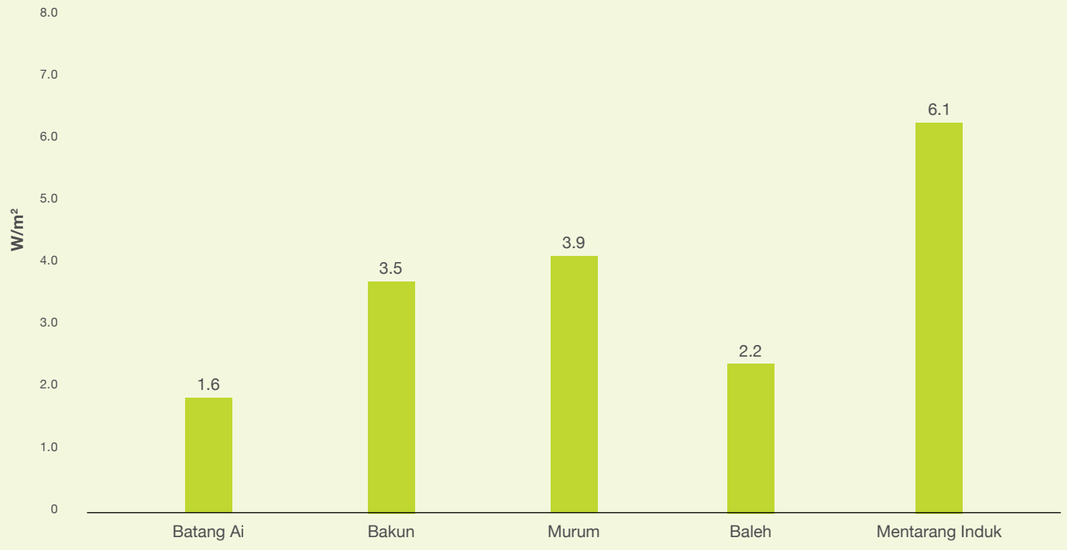
2-25, 305-4, 3-3

Measuring Carbon Outputs in Our Hydropower Projects

Power density serves as a key metric for emissions intensity. The correlation between power density and emissions intensity implies that projects exceeding 5 W/m² typically demonstrate emissions intensity levels below 100 gCO_2eq/kWh. To predict the net GHG emissions of reservoirs, we execute a meticulous evaluation, verification and documentation of each reservoir's carbon footprint. This procedure employs the G-res Tool, an online platform developed in collaboration with the IHA and UNESCO Chair for Global Environmental Change.

POWER DENSITY AT SARAWAK ENERGY'S HYDROPOWER PROJECTS

Hydro-power Project	G-res ID	Power Density (W/m^2)	Allocated Emissions Intensity (gCO_2eq/kWh)
Batang Ai HEP	3.02155	1.6	176.5
Bakun HEP	3.02158	3.5	39.9
Murum HEP	3.02157	3.9	29.4
Baleh HEP	3.112265	2.2	89.5
Mentarang Induk HEP[a]	3.02156	6.1	30.6



Notes:
The power density of a hydropower facility is its nameplate capacity divided by the surface area of its reservoir.
1. Power Density (W/m^2) – The ratio of installed capacity to total reservoir surface area.
2. Allocated Emissions Intensity (gCO_2eq/kWh) - The life cycle emission rate of greenhouse gases (CO_2 + CH_4) relative to the intensity of power production.

Sarawak Energy's Sustainability Strategy & Roadmap

Research on Bioremediation to Mitigate GHGs in Hydropower Reservoirs

The global concern over carbon footprint and GHG emissions from hydropower reservoirs has been a long-standing issue, and it is also evident in Sarawak Energy's operations. As a responsible organisation committed to global citizenship, Sarawak Energy's Limnology & Gases unit (Environmental Sciences Division, R&D) has been conducting extensive research to address this challenge. These long-term studies include in-house measurements and align with the Sustainable Development Goals (SDGs) and international best practices such as the Hydropower Sustainability Standard (HSS).

Our intensive studies, coupled with the use of the G-res Tool, have revealed that GHG emissions are released from hydropower reservoirs. This prompted our team to identify the need for active mitigation measures. Aligned with the company's commitment to the 1.5°C pathway and Malaysia's 2050 "Race to Zero" decarbonisation goal, we propose bioremediation as a proactive solution to this long-standing issue faced by Sarawak Energy.

On 20 June 2023, the Environmental Sciences Division (R&D) officially entered into a research agreement with Curtin University Malaysia for a project titled Bioremediation for Mitigation of Greenhouse Gases in Hydropower Reservoirs. This research involves developing a lab-scale prototype using bioremediation, a process driven by microorganisms, for the potential mitigation of GHG emissions in hydropower reservoirs.

All research activities are currently being conducted by the Environmental Sciences Division (R&D) and researchers from Curtin University Malaysia utilising the Sarawak Biovalley Pilot Plant (SBPP) for laboratory-scale studies.

Sarawak Energy-Curtin University Malaysia Research MoA Handover Ceremony.

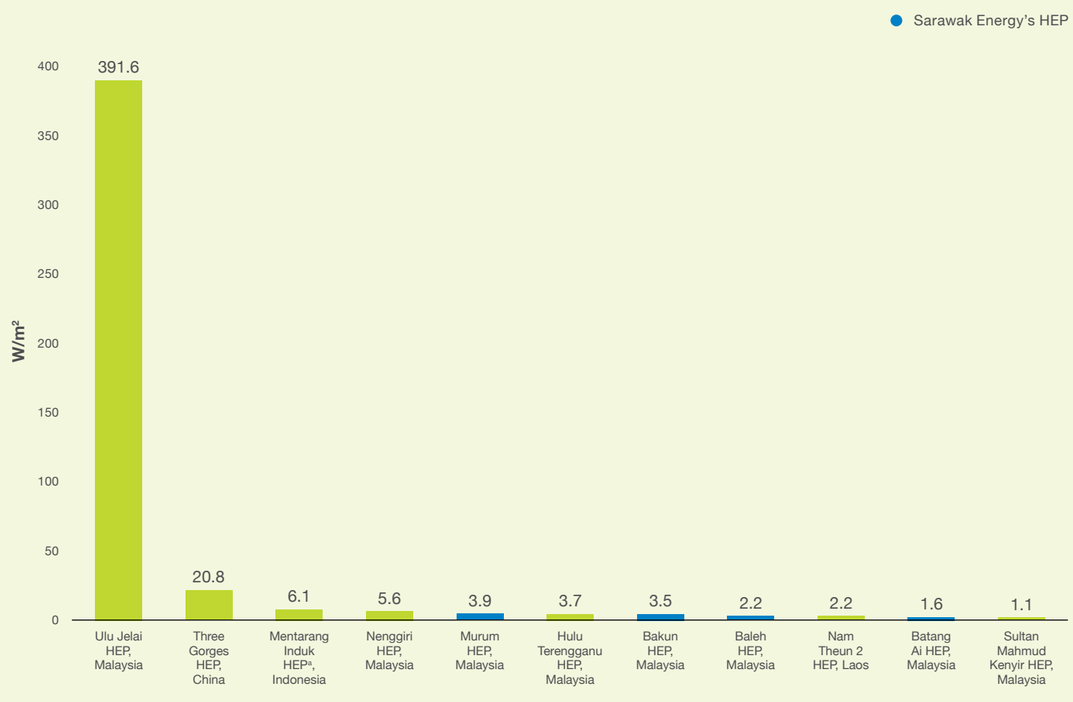
SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-25, 3-3

International Comparison of HEPs' Power Density (W/m²)

Hydro-power Project	Power Density (W/m²)
Ulu Jelai HEP, Malaysia	391.6
Three Gorges HEP, China	20.8
Mentarang Induk, Indonesia	6.1
Nenggiri HEP, Malaysia	5.6
Murum HEP, Malaysia	3.9
Hulu Terengganu HEP, Malaysia	3.7
Bakun HEP, Malaysia	3.5
Baleh HEP, Malaysia	2.2
Nam Theun 2 HEP, Laos	2.2
Batang Ai HEP, Malaysia	1.6
Sultan Mahmud Kenyir HEP, Malaysia	1.1

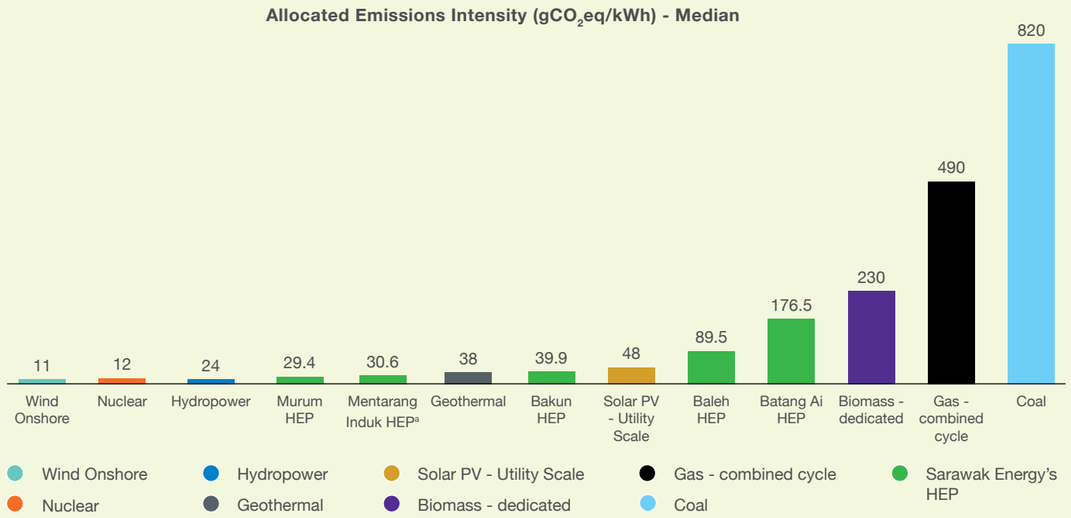


Note:
[a] *Mentarang Induk HEP is a joint venture project in Kalimantan Utara, Indonesia between Sarawak Energy & KPP Group.*

Sarawak Energy's Sustainability Strategy & Roadmap

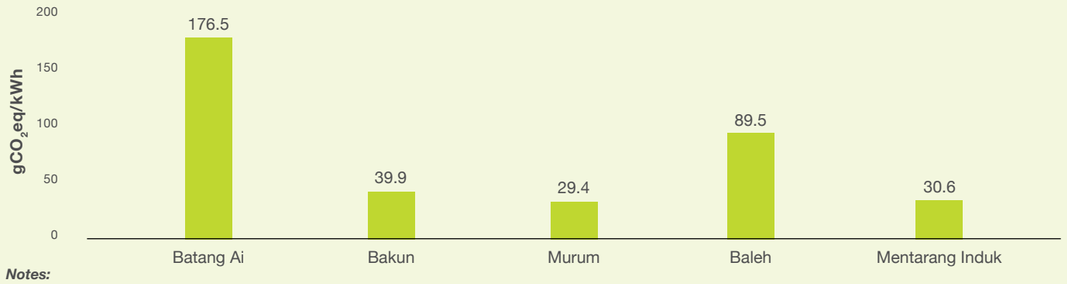
2-25, 305-4, 3-3

COMPARISON OF ALLOCATED EMISSIONS INTENSITY (gCO_2eq/kWh) BY TECHNOLOGIES – MEDIAN



Sarawak Energy's HEPs Allocated Emissions Intensity (gCO_2eq/kWh) - Project Life Cycles

Hydro-power Project	Allocated Emissions Intensity (gCO_2eq/kWh)
Batang Ai HEP	176.5
Bakun HEP	39.9
Murum HEP	29.4
Baleh HEP	89.5
Mentarang Induk HEP[a]	30.6



Notes:

1. *Source: Hydropower Criteria – Development of Eligibility Criteria for the Climate Bonds Standard & Certification Scheme; Hydro-Background-Paper-Mar 2021-release3(1).pdf (climatebonds.net).*
2. *Sources: IPCC (2014), IPCC Working Group III – Mitigation of Climate Change, Annex III: Technology – specific cost and performance parameters; IPCC Working Group III Mitigation of Climate Change, Annex II Metrics and Methodology.*
3. *Include albedo effect.*

[a] *Menterang Induk HEP is a joint venture project in Kalimantan Utara, Indonesia between Sarawak Energy & KPP Group.*

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 2-25

EMBARKING ON 1.5°C JOURNEY

We are committed to setting science-based emissions reduction targets across relevant scopes, in line with the Paris Agreement to pursue efforts to limit the global temperature increase to 1.5°C above pre-industrial levels by 2030. This underpins our commitment to the legally binding agreement adopted at the UN Framework Convention on Climate Change.

In 2023, Sarawak Energy became the first large corporation in Malaysia to receive the Science Based Target initiative (SBTi) validation and approval, confirming that our emissions reduction targets are consistent with the Paris Agreement's 1.5°C. This marked a significant milestone, as we lead Malaysia's industries and corporations towards Net Zero carbon emissions by 2050. It also underlines the increasing need to support the transition to a low-carbon economy with long-term goals to balance different interests with potential large-scale investments, as we race against time to limit global temperature rise.

2,079
Companies with approved targets (as of Nov 2023)

2,151
Companies with commitments to set targets

36,8 tn
USD market cap

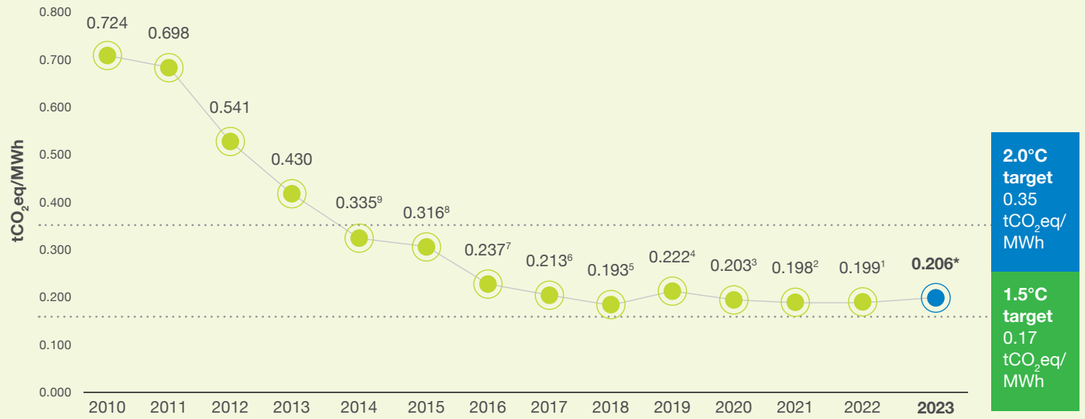
Approved Science Based Targets initiative (SBTi)
We are the first large corporation in Malaysia to receive this validation and approval from SBTi

Sarawak Energy's Sustainability Strategy & Roadmap

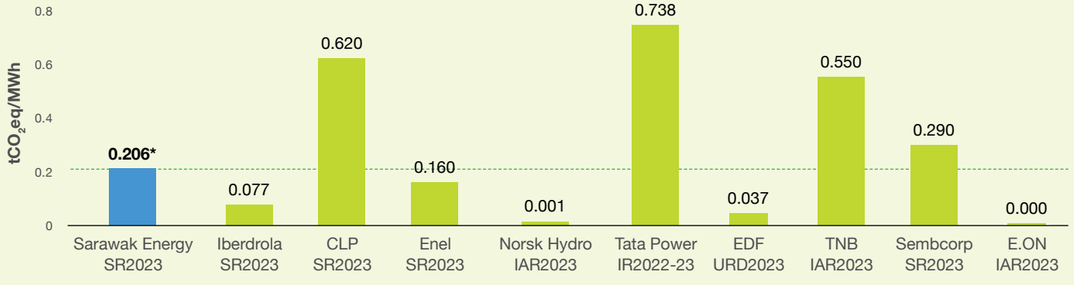
2-24, 2-25, 305-4

Since 2014, we have achieved 2°C for our Main Grid CO_2 emissions intensity. In 2023, we continued to maintain the emissions intensity within the 2°C and 1.5°C targets, in accordance with the Paris Agreement.

Main Grid CO_2 Emissions Intensity within the 2°C and 1.5°C Targets in Accordance with the Paris Agreement



International Comparison of CO_2 Emission Intensity for Power Utility Companies



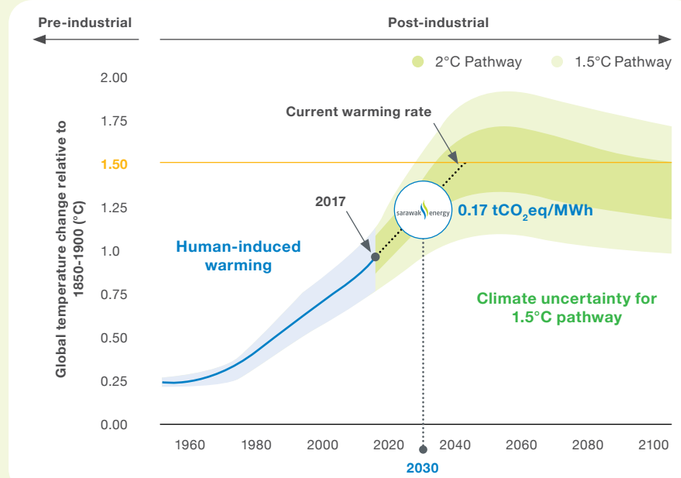
Note:
Published Annual, Sustainability & Integrated Report 2023.

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 2-25, 305-4

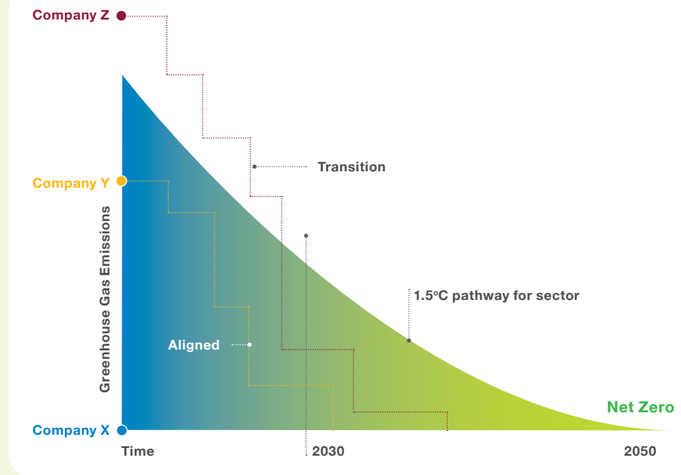
EMBARKING ON 1.5°C PATHWAY JOURNEY –
LIMITING GLOBAL WARMING TO 1.5°C ABOVE PRE-INDUSTRIAL LEVELS

Global Commitment – Paris Agreement



Source: *Climate Bond Initiatives https://www.climatebonds.net/climate-bonds-standard-v4*

Global Commitment level to Corporate Commitment Level



Source: *The Intergovernmental Panel on Climate Change (IPCC).*

GHG emissions have risen since the pre-industrial era, leading to global temperature increases

By 2017, human-induced warming caused a **1°C rise** in global average temperature.

Paris Agreement targets capping global temperature rise at **1.5°C**

Sarawak Energy aligns with the Paris Agreement by aiming to limit carbon intensity to **0.17 tCO_2eq/MWh** by 2030

Companies that commit to SBTi needs to set the target and is within the **1.5°C and Net Zero** pathway

Each company committed to SBTi will have their own specific targets

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 2-25, 203-1, 203-2, 3-3

Workforce and Supply Chain

BUILDING A SUSTAINABLE SUPPLY CHAIN ECOSYSTEM

Sustainable supply chains are vital for contributing to world-wide efforts of limiting global temperature rise to 1.5°C above pre-industrial levels. At Sarawak Energy, we are committed to building a sustainable supply chain in our endeavour to reduce indirect Scope 3 GHG emissions. This is in line with the rising demand for sustainable supply chains, which are essential for accelerating the transition to a low-carbon economy.

In 2023, we rolled out two sustainability programmes for our vendors to enhance their sustainability performance and ensure more resilient and sustainable suppliers for Sarawak Energy. Local vendors, specifically in Kuching, Samarahan and Serian, were screened according to Construction Industry Development Board (CIDB) and Sarawak Energy Vendor Appraisal & Awards (SEVAA) grading before they were selected for the programmes to determine their readiness to adopt sustainable practices.

The programmes, ESG Start and Sustainable Supply Chain Movement, involved about 100 participants in 2023 and is elaborated in the following infographics:

ESG START

- A capacity building programme aimed at upgrading Small and Medium-sized Enterprises (SMEs) sustainability maturity level.
- Interactive and participatory, involving facilitator led sharing, case studies, practitioner sharing and tool-driven exercises.
- Participants discuss challenges and solutions, including exchange experiences and perspectives about sustainability in their respective organisations.

Objectives

i. To create awareness among vendors on embarking on sustainability journey.
ii. To elevate vendors' understanding on the future ESG requirements.
iii. To support Sarawak Energy's in achieving our 1.5°C Business Ambition by 2030.

Benefits to Suppliers

i. Facilitating the integration of sustainable process across the organisation in a scalable manner.
ii. Equipping SMEs with requisite knowledge, resources and tools to evaluate their existing sustainable performance.
iii. Mapping their future sustainable objectives with their business objectives.
iv. Providing SMEs with a Sustainability Action Plan, upon completion of the programme, to aid in adoption of sustainable practices in their respective organisations.

Key Result Areas

i. Sustainability Action Plan.
ii. Scope 1 and 2 Carbon Footprint Report.

Outcomes

2023 (1st Batch)

19 SMEs trained

12 completed the SME ESG Start Assessment

16 graduated and certified[a]

Note:
[a] *Submission of Sustainability Action Plan is required to be certified.*

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 2-25, 203-1, 203-2, 3-3

SUSTAINABLE SUPPLY CHAIN MOVEMENT

- A collaboration between Sarawak Energy – UNGCMYB - ALLIANCE BANK – BURSA Malaysia to enable an ecosystem to incentivise Sarawak Energy's suppliers to transition towards decarbonisation pathways.
- Suppliers are provided with training from UNGCMYB on calculating GHG emissions and using Bursa Malaysia's ESG disclosure platform.
- Suppliers who complete the programme receive financial incentives such as loan discounts and other offerings from Alliance Bank.

Objectives

i. To reduce Scope 3 GHG emissions for Sarawak Energy by enabling and rewarding suppliers who adopt sustainability and improve their carbon footprint.
ii. To help Sarawak Energy's suppliers build business resilience and competitiveness via ESG improvements.

Benefits to Suppliers

i. Strengthening their relationship with Sarawak Energy through commitments to reducing emissions (thereby reducing Sarawak Energy's Scope 3 GHG emissions).
ii. Gaining access to financial incentives such as better rates, tax benefits and available grants.
iii. Reducing operational costs through use of renewable energy and improvement of energy efficiency.
iv. Boosting suppliers' ESG profiles amongst investors, providing them with a competitive edge in securing business deals in the future.

Value proposition

i. Better financing and deposit rates.
ii. Exclusive green solution offers.
iii. Training and advisory resources.

Key Result Areas

i. Financial incentives for Sarawak Energy's suppliers to disclose Scope 1 & Scope 2.
ii. Digital disclosure platform on Sarawak Energy's Scope 3 GHG emissions data.

Outcomes

2023 (1st Batch)

79[a] SMEs attended the briefing session

38 completed SME PROGRESS Climate Assessment

Note:
[a] *Number of individuals (not companies)*

ESG Start Assessment	2	3	4	2	1	12
Assessment outcome	Laggard	Beginner	Intermediate	Advanced	Leader	Total
PROGRESS Climate Assessment	12	14	9	2	1	38

Climate Action

HARNESSING CLIMATE-RELATED OPPORTUNITIES

As a provider of energy services, our business faces considerable exposure to climate change effects such as floods and storms. These events have the potential to disrupt our power lines, generation facilities, and distribution systems, influencing our long-term financial performance. We strive to keep our stakeholders informed of our climate action and mitigation, including physical and transitional risks and opportunities, by adopting the globally recognised climate-related risks and opportunities standards.

In line with our commitment, we actively monitor the developments in the international ESG reporting standards. In June 2023, two new sustainability disclosure standards, IFRS S1[a] and IFRS S2[b], were released by the International Sustainability Standards Board (ISSB). These new standards are built on existing frameworks and incorporated with various leading initiatives such as the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD), Integrated Reporting (IR), the Sustainability Accounting Standards Board (SASB) and the Climate Disclosure Standards Board (CDSB).

In response to the latest changes, Sarawak Energy is committed to transitioning to the adoption of International Financial Reporting Standards (IFRS) and has incorporated selected IFRS S2 climate-related disclosures into this year's reporting as we embark on the transitional journey. Our dedication to adopting the latest reporting disclosure standards reflects our commitment to further making sustainability a core part of our corporate strategy. This includes integrating risk and opportunity assessment process into our governance, as well as disclosing our strategies and metrics in relation to material sustainability issues.

Notes:
[a] *IFRS S1 covers General Requirements for Disclosure of Sustainability-related Financial Information.*
[b] *IFRS S2 covers Climate-related Disclosures.*

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

3-3

The International Financial Reporting Standards (IFRS) S2 Climate-Related Disclosures

This section serves as a tool to inform investors and stakeholders of our approach towards climate change and its impacts on our business. We adopt the four pillars of the IFRS S2, providing a consistent structure to facilitate analysis and disclosing transparent, reliable and consistent climate-related information to our stakeholders.

IFRS S2 Requirements	
Governance	**The objective of climate-related financial disclosures on governance is to enable users of general-purpose financial reports to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee climate-related risks and opportunities.** The Group Sustainability Committee (GSC) ensures that Sarawak Energy's disclosures on climate risks and opportunities are in line with the requirements of the IFRS S2.
Risk Management	**The objective of climate-related financial disclosures on risk management is to enable users of general-purpose financial reports to understand an entity's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process** We have undertaken a climate scenario analysis encompassing five scenarios sourced from the World Bank's Climate Change Portal to identify and mitigate physical and transition risks
Strategy	**The objective of climate-related financial disclosures on strategy is to enable users of general-purpose financial reports to understand an entity's strategy for managing climate-related risks and opportunities** The foundation of our climate action strategy lies in a five-pronged approach, addressing key areas aimed at minimising and mitigating climate-related risks across our operational framework
Metrics and Targets	**The objective of climate-related financial disclosures on metrics and targets is to enable users of general-purpose financial reports to understand an entity's performance in relation to its climate-related risks and opportunities, including progress towards any climate-related targets it has set, and any targets it is required to meet by law or regulation** Our approach to carbon emission management includes monitoring and reporting on Scope 1, Scope 2, and Scope 3 GHG emissions according to global reporting standards. Sectoral Decarbonisation Approach (SDA) trajectory of the Science Based Targets initiative (SBTi) tool is used - This helps Sarawak Energy to monitor and ensure the Company remains on course with its validated and approved science-based GHG emissions reduction targets.

Sarawak Energy's Sustainability Strategy & Roadmap

2-9, 2-12, 2-13, 2-16, 2-24, 3-3

Governance

In 2023, Sarawak Energy strengthened its governance and oversight of sustainability by establishing a Group Sustainability Committee (GSC), which succeeds the CSR Steering Committee. Going forward, we target to establish a Board Sustainability Committee (BSC) by the end of 2024. BSC's Terms of Reference (ToR) has been approved by the Board, and GSC's ToR was approved by the GCEO, underlining our commitment to sustainability governance.

Board Sustainability Committee

The BSC's role is crucial in setting Sarawak Energy's overarching sustainability direction, strategy and roadmap. The BSC has oversight on the management's execution of Sustainability Strategy, Roadmap and Plan.

Group Sustainability Committee (GSC)

The GSC is responsible for ensuring a proper and effective implementation of Sarawak Energy's Strategy, Roadmap and Plan.

Terms of Reference

The BSC & GSC ensure that:

- Sustainability strategy and plan of the Company support long-term value creation with a proper implementation action plan;
- Sustainability consideration and requirements have been properly embedded into Sarawak Energy's business and decision-making process;
- Proper monitoring and measurement (end to end) from strategy to the implementation phase has been properly developed, implemented, and monitored;
- Ongoing and emerging sustainability issues, risks, and opportunities relevant to the Company are well-understood and managed through a strategic and holistic approach; and
- The Company remains resilient and is able to maintain the confidence of its stakeholders.

Responsibilities

- Govern and set the Company's strategic direction and objectives for sustainability, and ensure that they are aligned with the corporate strategy and vision;
- Exercise oversight on management's implementation of sustainability strategies, standards, initiatives and plans;
- Oversee sustainability performance of the Company to meet established objectives;
- Review the effectiveness and adequacy of the sustainability-related frameworks & policies;
- Monitor sustainability targets and Key Performance Indicators of the Company and their implementation;
- Advise the Board of Directors on matters pertaining to sustainability; and
- Acts as a guiding body to enhance sustainability practices and performance throughout the organisation.

- Set the Company's sustainability targets and Key Performance Indicators (KPIs);
- Review, challenge and approve sustainability-related corporate strategy and roadmap, corporate planning and direction, and disclosures, and monitor their performance and effective execution;
- Monitor and assess management processes and planning, and ensure its compliance with sustainability best practices; and
- Advise the Group Executive Committee on matters pertaining to sustainability.throughout the organisation.

To demonstrate our commitment towards Sarawak Energy's sustainability agenda, we have established a comprehensive Sustainability Strategy and Roadmap and incorporated them into our Key Performance Index (KPI). We remain steadfast in our efforts to deepening the integration of sustainability across Sarawak Energy's business units and corporate functions through integrated inter-departmental relationships that are in harmony with our business priorities, striving to achieve our corporate goals. Refer to Sarawak Energy's Sustainability Strategy & Roadmap on pages 120 to 121.

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 3-3

Upholding Sarawak Energy's Sustainable Hydropower

- Benchmarking our internal practices/processes against global best practices and processes
- Enhancing the adoption of HSAP practices at project and corporate levels
- Enhancing the technical capabilities of Sarawak Energy's Internal Assessment Team
- Identifying areas for future improvement
- Sustaining our efforts to embed sustainability practices
- Developing hydropower sustainability proficiencies
- Preparing projects for official assessment

SARAWAK ENERGY INTERNAL HYDROPOWER SUSTAINABILITY STANDARD (HSS) GOVERNANCE STRUCTURE

Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 3-3

ROLES AND RESPONSIBILITIES

HSS SPONSOR
HEAD OF CORPORATE SERVICES

- Act as a sponsor for proposals in relation to the internal and official assessment programme, including assessment for certification, and embedding process
- Provide support in getting necessary resources for the whole internal and official assessment programmes
- Provide inputs on the effectiveness of the HSAP/HESG/HSS assessment system to top management

HSS FOCAL POINT OF CONTACT
HEAD OF SUSTAINABILITY

- Define audit objectives, scope, and criteria
- Conduct an assessment and plan for the HSAP/HESG/HSS internal and official assessments needs & programmes including budget requirement
- Monitor and review the effectiveness of the assessment programmes for continuous improvement
- Ensure the internal assessment meets the HSAP/HESG/HSS principles and requirements
- Authorise responsibility for the internal and official assessment programmes
- Develop, review and implement the competence development plan for the whole internal IHA assessment team
- Sign off the internal assessment findings and improvement opportunities before presenting them to top management

LEAD ASSESSORS (CERTIFIED ASSESSORS)
VARIOUS DEPARTMENTS

- Lead the internal assessment processes (e.g. evidence preparation, assessment team, assessment plan)
- Lead the opening and closing meeting of the assessment and preparation of the assessment reports
- Act as a reference point to other internal assessors
- Manage and prepare for the internal assessment exercise
- Oversee the systematic, independent, and documented process for obtaining evidence and evaluating it objectively to determine the extent of conformity
- Keep appropriate assessment records to monitor and review the specific assessment programme
- Provide advisory support on areas related to embedding hydropower sustainability best practices
- Provide support for an official assessment (HSAP/HESG/HSS assessments)

INTERNAL ASSESSORS (PROVISIONALLY ACCREDITED ASSESSORS/CERTIFIED USERS)
VARIOUS DEPARTMENTS

- Carry out internal assessment according to tasks assigned by lead assessor
- Systematically and independently review documents and processes to obtain assessment evidence and evaluate it objectively to determine the extent of conformity
- Follow auditing approaches in conducting the assessment
- Prepare internal assessment reports
- Verifies conformity to requirements and identifies improvement opportunity on specific topic
- Provide advisory support on areas related to embedding hydropower sustainability best practices
- Provide support for an official assessment (HSAP/HESG/HSS assessments)

Sarawak Energy's Sustainability Strategy & Roadmap

3-3

Navigating Climate Risks and Embracing Opportunities

Rising global temperatures and precipitation levels can lead to extreme weather events, which may disrupt our operations and pose various challenges to our stakeholders. To adapt to climate change, we remain committed to seizing the opportunities presented by climate change and keeping our stakeholders informed of our climate action.

Risks	Impact of climate change on power generation (hydropower & thermal)	Impact of climate change on power infrastructure (transmission & distribution)	Impact of climate change on power delivery	Financial impact of climate change

Opportunities

- Clear approach and planning towards GHG reduction, mitigation and adaptation
- Fostering the adoption of low-carbon technology (technical & policy)
- Increasing the adoption of disruptive technologies
- Improving the resilience of electricity infrastructure
- Increasing the integration of other renewable energy sources with hydrowpower
- Increasing other green generation
- GHG mitigation and adaption beyond the power sector

Table 1: *High-level Strategic Risks and Opportunities Arising from Climate Change.*

Sarawak Energy's Sustainability Strategy & Roadmap

3-3

Strategy

Climate Action Strategy

Our approach is driven by a comprehensive strategy encompassing five key areas across our operations aimed at mitigating and minimising climate-related risks as we transition to renewable energy and work towards a low-carbon economy. The primary goal of our climate action strategy is to mitigate risks stemming from the physical impacts of climate change, including rising temperatures, shifts in weather patterns, and the heightened frequency and severity of extreme weather events.

Strategy	Key Areas
Developing a holistic approach and plan towards GHG mitigation and adaptation for the power sector in Sarawak	• GHG mitigation and adaptation for the power sector in Sarawak
Exploring other renewable energy sources	• Integration of other renewable energy sources (renewable and variable renewable energy) • Small- and large-scale green hydrogen production • Innovative energy extraction for future energy resources (renewable and alternative energy)
Developing an integrated approach in improving resilience of power generation to climate change	• Statewide flood modelling – adaptation to climate change • Catchment Management – adaptation to climate change for hydropower and water resources • Greenhouse gas (GHG) emissions' measurement from large-scale hydropower reservoirs • Improving the accuracy and method of GHG emissions' estimation
Assessment and planning on disruptive technology in enhancing the adoption of low-carbon technology	• Integration of disruptive technology • Guidelines and policies on interconnection within the distributed resources into the local system • Establishing energy efficiency and energy management
Supporting climate action beyond the power sector that is aligned with energy sector directions	• Enhancing the energy sector's role in the adoption of low-carbon/smart/green city framework and circular economy • Conservation and protection of catchment/operation areas via integrated catchment management and carbon sequestration

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

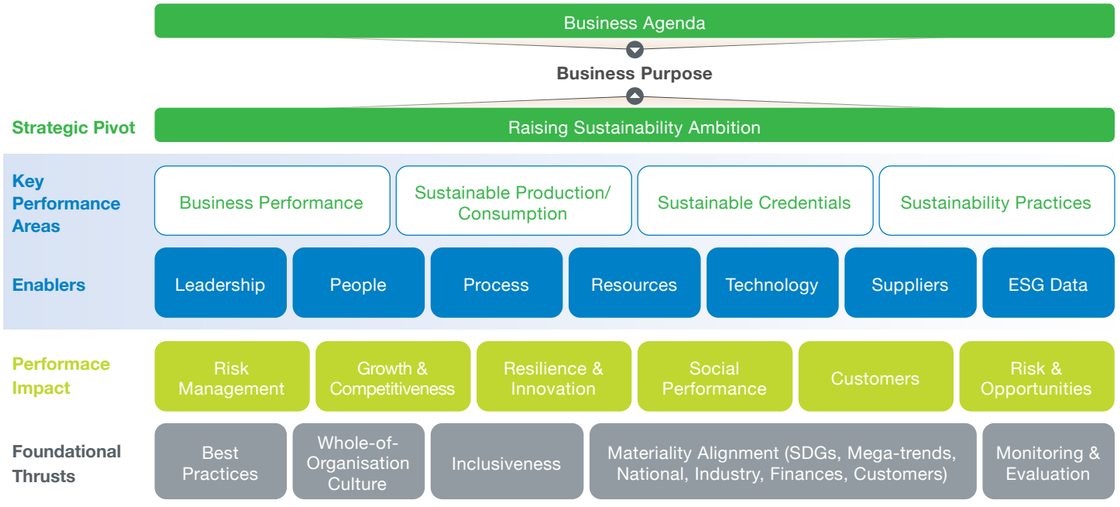
3-3

Sarawak Energy's Sustainability Performance and Climate Change – Internal and External Factors

We adopt a holistic strategy in risk mitigation, which considers both internal and external factors. This includes meticulously identifying and evaluating the strategic impact of ESG issues on our business and stakeholders, covering both emerging internal and external ESG risks and opportunities as we pursue our strategic and business objectives.

Sarawak Energy's Sustainability Strategy Framework

To fulfil our sustainability agenda, we base our actions on a framework centred around a sustainability strategy, emphasising four primary focus areas and supported by seven key enablers.



Risk Management

Climate Action Strategy

To enhance our climate resilience, we conducted a climate scenario analysis in 2021. Utilising data from the World Bank's Climate Change Knowledge Portal, the analysis covered five climate scenarios projecting mean temperatures and average precipitation levels over five probable conditions and time periods (short and medium-short term). The findings from the analysis indicated potential increases in average air temperature and rainfall in Sarawak from 2021 to 2030. Additionally, the projections suggested rising maximum sea levels, which could heighten the risk of floods. The 2021 analysis also anticipated periods of dry spells in Sarawak from 2045 to 2055[a].

Parameter	Observed (1970 - 2000)	Projected for 2030	Projected for 2050
Average Annual Temperature	24.8 - 26.2°C	25.6 - 26.8°C (0.6 to 0.8°C increase)	26.4 - 27.5°C (1.3 to 1.6°C increase)
Average Annual Rainfall	3,551 - 3,907mm	3,597 - 4,144mm (1 to 6% increase)	3,574 - 4,124mm (1 to 5% increase)
Parameter	**Observed Rate (1993 - 2010)**	**Projected for 2030**	**Projected for 2050**
Sea Level Rise	3.82 - 5.11mm/year	0.04 - 0.12m	0.15 - 0.22m

Table:
Observed and Projected Climate Change and Sea Level Rise in Sarawak.

Note:
[a] *Source: Malaysia Third National Communication and Second Biennial Update Report to the UNFCCC.*

The data from our projections depicts the variability and distribution of the most likely projected changes in the climate system associated with the current selection of Shared Socioeconomic Pathways (SSPs). The SSPs aim to inform future climate conditions by examining distinct emissions, mitigation strategies, and developmental trajectories.

Period		2020-2039				2040-2059			
Scenario	**Historical (Reference Period: 1995-2014)**	**SSP1-2.6**	**SSP2-4.5**	**SSP3-7.0**	**SSP5-8.5**	**SSP1-2.6**	**SSP2-4.5**	**SSP3-7.0**	**SSP5-8.5**
Mean Temp. (°C)	25.81	26.37	26.39	26.34	26.48	26.64	26.87	26.98	27.31
Average Largest 1-Day Precipitation (mm)	48.35	51.44	50.98	50.46	51.5	52.43	53.67	53.49	54.69
Average Largest 5-day Cumulative Rainfall (mm)	131.3	137.2	137.18	139.63	137.82	139.98	141.5	141.16	144.99

Table:
Projected Sarawak Climate Scenario 2020 – 2059.

Notes:
1. *Source: Sarawak Climate Scenario Based on World Bank Climate Change Knowledge Portal (WBCCKP).*
2. *Data presented is Coupled Model Intercomparison Project 6 (CMIP6), derived from the Sixth phase of the CMIPs. The CMIPs form the data foundation of the IPCC Assessment Reports. CMIP6 supports the IPCC's Sixth Assessment Report.*
3. *Projection data is presented as multi-model ensembles which represent the range and distribution of the most plausible projected outcomes of change in the climate system for a selected Shared Socioeconomic Pathways (SSPs).*
4. *Shared Socioeconomic Pathways (SSPs) are meant to provide insight into future climates based on defined emissions, mitigation efforts, and development paths.*

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

3-3

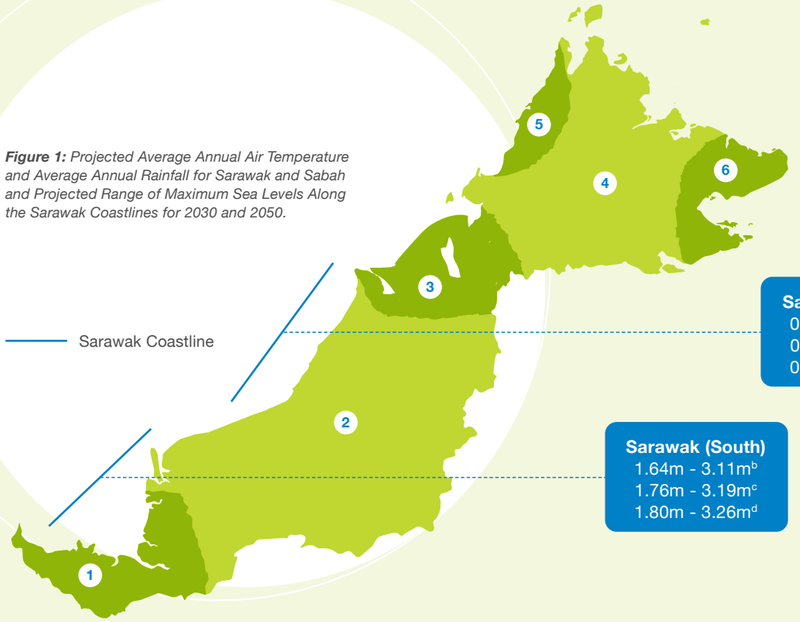


Figure 1: *Projected Average Annual Air Temperature and Average Annual Rainfall for Sarawak and Sabah and Projected Range of Maximum Sea Levels Along the Sarawak Coastlines for 2030 and 2050.*

1 Southern Sarawak
Average Annual Air Temperature: 26.2°C[a]
2030: 26.8°C (+2.6%)
2050: 27.5°C (+5.3%)
Average Annual Rainfall: 3,907mm[a]
2030: 4,144mm (+61%)
2050: 4,124mm (5.5%)

2 Central Sarawak
Average Annual Air Temperature: 24.8°C[a]
2030: 25.6°C (+3.4%)
2050: 26.4°C (+6.3%)
Average Annual Rainfall: 3,551mm[a]
2030: 3,597mm (+1.3%)
2050: 3,578mm (+0.8%)

3 Northern Sarawak
Average Annual Air Temperature: 25.3°C[a]
2030: 26.1°C (+3.1%)
2050: 26.9°C (+6.0%)
Average Annual Rainfall: 3,538mm[a]
2030: 3,628mm (+2.6%)
2050: 3,574mm (+1.0%)

4 Central Sabah
Average Annual Air Temperature: 24.3°C[a]
2030: 25.3°C (+4.3%)
2050: 25.7°C (+6.0%)
Average Annual Rainfall: 2,264mm[a]
2030: 2,338mm (+3.3%)
2050: 2,284mm (+0.9%)

5 West Coast Sabah
Average Annual Air Temperature: 26.0°C[a]
2030: 26.5°C (+1.9%)
2050: 26.9°C (+3.5%)
Average Annual Rainfall: 3,532mm[a1]
2030: 3,392mm (-3.9%)
2050: 3,549mm (+0.5%)

6 East Coast Sabah
Average Annual Air Temperature: 26.1°C[a]
2030: 26.9°C (+3.1%)
2050: 27.4°C (+5.0%)
Average Annual Rainfall: 2,320 mm[a]
2030: 2,434mm (+4.9%)
2050: 2,375mm (+2.3%)

Notes:
[a] *Historical data (average annual air temperature & average annual rainfall: year 1970 - 2000).*
[b] *Current (year 2016) sea level;* [c] *year 2030 sea level;* [d] *year 2050 sea level.*
Source: Malaysia's Third National Communication and Second Biennial Update Report to the UNFCCC.

Sarawak Energy's Sustainability Strategy & Roadmap

201-2, 3-3

TRANSITION – RISKS & OPPORTUNITIES

Timescale: Short to Medium Term (1-5 years)

Type of Risks: Transition Risks

Strategy Response

Risks and Opportunities	Planning and Response
Corporate • Enhancing carbon inventory (Scope 1, 2, 3)[a] for better access to relevant data in managing climate-related risks for effectively measuring and evaluating climate-related risks • Quantifying the climate change impact risks • Enhancing carbon emissions reporting, structure and governance of climate-related risks and climate-related financial disclosures • Renewable energy incentives • Access to new financing platforms • Regulatory and policy frameworks to drive climate-related initiatives • Stringent legal/market requirements on climate change (cost of carbon) • Cost to transition to low-carbon technology **Generation** **Hydropower & Thermal Generation (Development & Operation)** • Embedding climate change risks in hydropower development at design stage • Understanding and quantifying the risks of climate change • Clear & practical approach and planning towards mitigation of and adaptation to climate risks • Technology advancement – efficiency improvement • Other Renewable Energy Sources **Other Renewable Energy Sources** • Integration of other renewable energy sources with hydropower generation • Aligning with global, national and state goals and targets in GHG emissions reduction **Transmission & Distribution** • Assessment of climate change risks in hydropower development at design stage • Climate change impacts on electricity infrastructure and delivery	**Better assessment, reporting and governance of climate change risks** • Detached from non-renewable generation sources • Integrated approach in improving the resilience of electricity assets and infrastructure to climate change risks (including upstream resources) • Holistic and consolidated approach to investment in energy efficiency improvement and adoption of low-carbon technology that is aligned with longer-term emissions reduction initiatives • Resilience of electricity delivery system via efficient, smart & flexible system infrastructure • Advancement in development of flexible system infrastructure as platform for integrating other new renewable energy capacity • Advocating best practices in managing climate risks - ahead of the regulatory frameworks • Meeting the growing expectations of stakeholders (e.g. shareholders, financial institutions, customers and general public)

Table 4:
Climate-Related Transition Risks & Opportunities and Impacts on Business Strategy and Financial Planning.

Note:
[a] *Guided by International Financial Reporting Standards (IFRS) and Science Based Targets initiative (SBTi) standards & requirements.*

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

201-2, 3-3

PHYSICAL – RISKS & OPPORTUNITIES

Timescale: Long Term (>5 years)

Type of Risks: Physical Risks

Strategy Response

Risks and Opportunities	Planning and Response
Corporate • Stringent legal/market requirements on climate change (cost of carbon) **Generation** • Extreme weather events impacting generation assets • Extreme weather events impacting hydropower generation • Rising sea levels impacting power assets and infrastructure • Rising mean temperatures impacting plant efficiency & reliability **Transmission & Distribution** • Extreme weather events impacting electricity delivery, system reliability and efficiency • Rising mean temperatures impacting the power delivery efficiency	• Improving the resilience of electricity assets, infrastructure and upstream resources • Increasing the resilience of electricity delivery system to climate change • Integrating other new renewable energy capacity • Detailed climate modelling studies to assess vulnerability of specific resilience improvement plans • Enhancing demand side management to better understand changes in demand patterns • Establishing a clear linkage between financial planning and carbon intensity • Establishing solid governance of climate change issues • Climate change as one of the core elements in corporate planning

Table 5:
Climate-Related Physical Risks & Opportunities and Strategic Response.

Metrics And Targets

Our management of carbon emissions involves meticulous monitoring of relevant disclosures and metrics. We demonstrate our commitment to transparency by disclosing the Scope 1, Scope 2, and Scope 3 of our GHG emissions, adhering to global standards. Since 2022, we have achieved the 2°C target outlined in the Paris Agreement. Sarawak Energy remains committed to promoting the energy transition and meeting the goals set to achieve our 1.5°C business ambition. Up until 2023, significant investments include:

RM 6.8 billion*
allocated to renewable energy, aimed at delivering 3,355MW of renewable installed capacity by the end of 2023.

RM 3.2 billion*
dedicated to networks, grid extension, grid interconnection, and system reliability improvements.

RM 99 million*
invested in EV chargers, the Sejingkat microalgae cultivation facility, and a hydrogen pilot plant.

Sarawak Energy's Sustainability Strategy & Roadmap

305-1, 305-2, 305-3

Category - Greenhouse Gas Emissions

Absolute Scope 1, Scope 2, and Scope 3 GHG Emissions (tCO_2eq)

Scope 1 Emissions	Unit	2021	2022	2023
Main Grid	tCO_2eq	5,976,874.06[2]	6,483,137.99[1]	**7,083,870.39***
Northern Grid	tCO_2eq	100,595.84[2]	104,238.93[1]	**126,725.74***
Stand-alone Grid	tCO_2eq	8,818.18[2]	9,958.58[1]	**7,109.53***
Company-owned Vehicle	tCO_2eq	3,766.89	2,112.89[1]	**2,025.50***
SUM	tCO_2eq	**6,090,054.97**	**6,599,448.39**[1]	**7,219,731.17***

Note:
Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.

Scope 2 Emission	Unit	2021	2022	2023
Building Electricity Consumption (Offices & Substations)	tCO_2eq	11,991.48[2]	12,809.41[1]	**13,635.19***

Note:
Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.

Scope 3 Emission	Unit	2021	2022	2023
Business Air Travel	tCO_2	252.41[2]	1,922.01[1]	**3,866.82***

SEB's relevant Scope 3 category based on SBTi

Upstream categories

Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel - and energy-related activities (not included in Scope 1 or Scope 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting

Downstream categories

Category 9 : Downstream transportation and distribution
Category 11 : Use of sold products
Category 15 : Investments

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

305-3

Scope 3 Categories	Unit	2020	2021	2022	2023
Category 1: Purchased goods and services	tCO_2eq	51,017.84	62,439.76	73,843.71	**71,412.68**
Category 2: Capital goods	tCO_2eq	211,373.65	243,456.29	232,293.51	**256,077.68**
Category 3: Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	tCO_2eq	1,391,123.18	1,491,236.75	1,638,047.91	**1,735,100.15**
Category 4: Upstream transportation and distribution	tCO_2eq	The upstream transportation and distribution are included in Category 3			
Category 5: Waste generated in operations	tCO_2eq	6.59	13.61	8.70	**9.27**
Category 6: Business air travel	tCO_2eq	565.13[3]	252.42[2]	1,922.01[1]	**3,866.82***
Category 7: Employee commuting	tCO_2eq	2,113.84	2,137,801.86	2,175,121.07	**4,015,870.00**
Category 9: Downstream transportation and distribution	tCO_2eq	Data has been calculated in Scope 1			
Category 11: Use of sold products	tCO_2eq	-	172,423.70	156,993.33	**-**
Category 15: Investments	tCO_2eq	Investment to JV company - no emission yet as the project is at early stage			

Note:
Measurement of Scope 3 emissions for categories 1, 2, 3, 4, 5, 7, 9, 11 & 15 began in the year 2020, with 2021 serving as baseline data for SBTi validation.

SF_6 consumption (Tonne)

Category	2021	2022	2023
Generation Level	17.63	17.63	**17.63**
Transmission Level	43.52	44.35	**48.24**
Distribution Level	13.92	14.45	**14.48**
Total	**75.07**	**76.43**	**80.35**

Cost of fuel (RM)

Category	2021	2022	2023
	Cost of Fuel (RM)	Cost of Fuel (RM)	Cost of Fuel (RM)
Main Grid (Thermal & Hydro)	1,405,313,739	1,689,161,675	**1,808,427,491**
Northern Grid (Thermal & Hydro)	84,519,368	156,714,589	**159,039,468**
Stand-Alone Grid (Thermal)	8,562,663	16,220,429	**11,901,249**
Company Owned Vehicles - Diesel & Petrol Fuel	507,732.66	3,503,585.07	**3,279,796.29**

Sarawak Energy's Sustainability Strategy & Roadmap

201-2, 305-4, 3-3

Scope 1 & Scope 2 intensity (tCO_2eq/MWh)

Scope 1 Emission Intensity	Unit	2021	2022	2023
Normalised by Gross Energy	tCO_2eq/MWh	0.196	0.197	**0.204**
Normalised by Net Energy	tCO_2eq/MWh	0.201	0.201	**0.208**

Scope 2 Emission Intensity	Unit	2021	2022	2023
Normalised by Gross Energy	tCO_2eq/MWh	0.000387	0.000382	**0.000385**
Normalised by Net Energy	tCO_2eq/MWh	0.000395	0.000391	**0.000394**

Direct emissions (Scope 1) Intensity (tCO_2eq/RM Millions of Revenue)

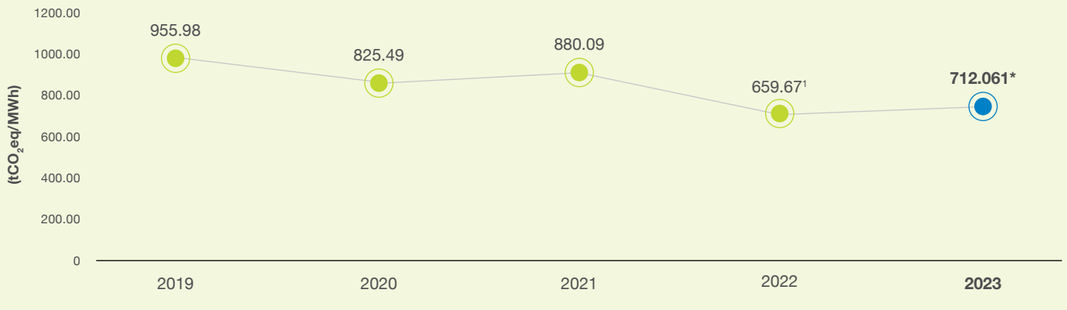
Year	Total tCO_2eq Emissions (Scope 1)	Revenue (RM Million)	Direct Emissions (Scope 1) Intensity (tCO_2eq/RM Million)	Unit
2022	6,599,448.39[1]	6,964.87	947.53[1]	tCO_2eq/RM Millions of Revenue
2023	**7,219,731.17***	**7,147.20**	**1,010.15***	**tCO_2eq/RM Millions of Revenue**

Note:
Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.

Direct emissions (Scope 1) intensity (tCO_2eq/RM Millions of Total Investment$_{LCG}$)

Year	Total tCO_2eq Emissions (Scope 1)	Total Investment$_{LCG}$ (RM Million)	Direct emissions (Scope 1) intensity (tCO_2eq/RM Millions of Total Investment$_{LCG}$)	Unit
2022	6,599,448.39[1]	10,004.17[1]	659.67[1]	tCO_2eq/RM Millions of Revenue
2023	**7,219,731.17***	**10,139.17***	**712.06***	**tCO_2eq/RM Millions of Revenue**

Direct emissions (Scope 1) intensity (tCO_2eq/RM Millions of Total Investment$_{LCG}$)



Notes:
1. *Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.*
2. *$_{LCG}$ Low-Carbon Generation.*

Sarawak Energy's Sustainability Strategy & Roadmap

2-19, 201-2, (Former EU8), 3-3

Category – Transition Risks

Amount and extent/percentage of assets or business activities vulnerable to climate-related transition risks

Percent of revenue from coal mining

	2021	2022	2023
Revenues (RM Million)	6,152.60	7,060.80	**7,324.40**
Sales of Coal (RM Million)	18.89	18.24	**-**
Sales of Coal/Revenue (%)	0.31	0.26	**-**

Category – Climate-related Opportunities

Proportion of revenue, assets, or other business activities aligned with climate-related opportunities

Number of (1) zero-emissions vehicles (ZEV), (2) hybrid vehicles, and (3) plug-in hybrid vehicles sold

Electric Car 5

Electric Scooter 19

Hydrogen SUV 2

Renewable Energy Generation Intensity (RM Millions of Electricity Sales Revenue$_{ES}$/MWh)

Scope 1 Emission Intensity	Unit	2019	2020	2021	2022	2023
Renewable energy generation intensity	Millions of Revenues from Electricity Sales (RM) $_{ES}$/MWh	0.00026	0.00026	0.00026	0.00029[1]	**0.00028***

Notes:
1. *Revenue from products or services that support the transition to a low-carbon economy (Hydropower).*
2. *$_{ES}$ Electricity Sales.*
3. *Year 2014 – Murum HEP commissioned.*
4. *Year 2015 – Lundu PS commissioned.*
5. *Year 2017 – Bakun HEP acquired from the Ministry of Finance.*

Category - Capital Deployment

Amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities

Annual capital invested in R&D for low-carbon products/services

Category	2019	2020	2021	2022	2023
Investment in R&D of low-carbon products/ service over Revenue (%)	0.06	0.12	0.13	0.08	**0.13**

Category - Remuneration

Proportion of executive management remuneration linked to climate considerations

- The remuneration for the board of directors of government-linked companies is recommended and approved by the board of directors and shareholders, respectively subject to the limits set by the Majlis Mesyuarat Kerajaan Negeri. Any revision to the remuneration requires the approval of the Majlis Mesyuarat Kerajaan Negeri.
- Corporate Sustainability Strategy & Roadmap has been approved and was part of Sarawak Energy's corporate KPI in 2022 entailing the following five (5) key themes: Sustainability Leadership Sustainability Growth Business Resilience Climate Action Workforce and Supply Chain.

Sarawak Energy's Sustainability Strategy & Roadmap

301-1, 306-3, 3-3

I INPUT

FUEL CONSUMPTION

	COAL	NATURAL GAS	DIESEL
2021	2,940,286.82 Tonne[2]	32,806,349.50 MMBtu[2]	26,313,382.07 Litres[2]
2022	3,087,236.06 Tonne[1]	42,464,815.69 MMBtu[1]	27,887,522.36 Litres[1]
2023	**3,210,032.55 Tonne***	**47,502,815.02 MMBtu***	**29,023,942.56 Litres***

FUEL CONSUMPTION INTENSITY

	COAL	NATURAL GAS	DIESEL	TOTAL
2021	1,566.85 MJ/MWh	1,115.95 MJ/MWh	75.13 MJ/MWh	2,757.92 MJ/MWh
2022	1,524.41 MJ/MWh	1,336.91 MJ/MWh	72.64 MJ/MWh	2,933.96 MJ/MWh
2023	**1,478.16 MJ/MWh**	**1,414.69 MJ/MWh**	**82.44 MJ/MWh**	**2,975.29 MJ/MWh**

WATER WITHDRAWAL INTENSITY BY SOURCE

	MUNICIPAL WATER WITHDRAWAL INTENSITY	SEA WATER OR OTHER NATURAL WATER SOURCE WITHDRAWAL INTENSITY
2021	0.08 m³/MWh	33.10 m³/MWh
2022	0.08 m³/MWh	37.11 m³/MWh
2023	**0.08 m³/MWh**	**32.69 m³/MWh**

WATER REGULATED INTENSITY FOR HYDROPOWER

	WATER VOLUME REGULATED BY HYDROPOWER PLANTS FOR ELECTRICITY GENERATION
2021	2,274.27 m³/MWh
2022	2,246.65 m³/MWh
2023	**2,260.64 m³/MWh**

SCHEDULED WASTE GENERATION

Category	Unit	2021	2022	2023
Fly Ash	Tonne	152,605.28	158,790.28	**157,163.64**
Bottom Ash	Tonne	243,874.85	288,116.33	**285,832.79**
Others (Used Oil, Contaminated Items, E-Waste, Gas Condensate, Contaminated Soil and Chemicals)	Tonne	653.06	420.96	**440.27**
TOTAL	**Tonne**	**397,133.19**	**447,327.57**	**443,436.70**

Sarawak Energy's Sustainability Strategy & Roadmap

305-1, 305-2, 305-3, 305-4, EU2

II OUTPUT

Scope 1 Emissions	Unit	2021	2022	2023
Main Grid	tCO_2eq	5,976,874.06[2]	6,483,137.99[1]	**7,083,870.39***
Northern Grid	tCO_2eq	100,595.84[2]	104,238.93[1]	**126,725.74***
Stand-alone Grid	tCO_2eq	8,818.18[2]	9,958.58[1]	**7,109.53***
Company-owned Vehicle	tCO_2eq	3,766.89	2,112.89[1]	**2,025.50***
TOTAL	tCO_2eq	**6,090,054.97**	**6,599,448.39[1]**	**7,219,731.17***

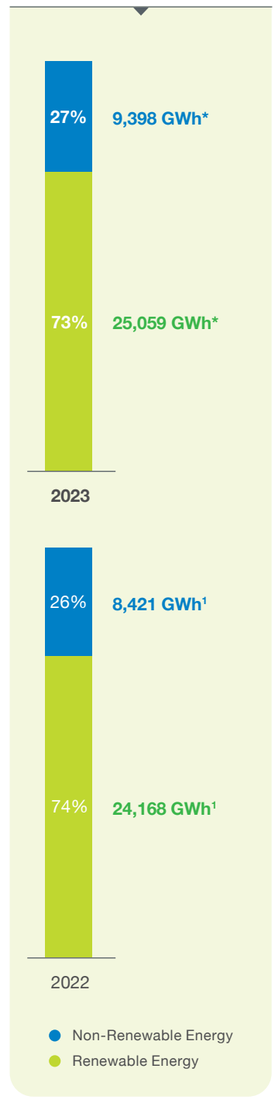
Scope 2 Emission	Unit	2021	2022	2023
Building Electricity Consumption (Offices & Substations)	tCO_2eq	11,991.48[2]	12,809.42[1]	**13,635.19***

Scope 3 Emission	Unit	2021	2022	2023
Business Air Travel	tCO_2	252.42[2]	1,922.01[1]	**3,866.82***

Scope 1 and Scope 2 Emission Intensity	Unit	2021	2022	2023
Scope 1 Emission Intensity (normalised by gross energy)	tCO_2eq/MWh	0.196	0.197	**0.204**
Scope 1 Emission Intensity (normalised by net energy)	tCO_2eq/MWh	0.201	0.201	**0.208**
Scope 2 Emission Intensity (normalised by gross energy)	tCO_2eq/MWh	0.000387	0.000382	**0.000385**
Scope 2 Emission Intensity (normalised by net energy)	tCO_2eq/MWh	0.000395	0.000391	**0.000394**

Scheduled Waste Generation Intensity				
Type of Waste	**Unit**	**2021**	**2022**	**2023**
Fly Ash	t/GWh	5.20	5.08	**4.94**
Bottom Ash	t/GWh	8.31	9.22	**8.98**
Others (Used Oil, Contaminated Items, E-Waste, Gas Condensate, Contaminated Soil and Chemicals)	t/GWh	0.02	0.01	**0.01**
Total Scheduled Waste Generation Intensity	t/GWh	13.54[2]	14.32[1]	**13.93***

GENERATION MIX



Sarawak Energy's Sustainability Strategy & Roadmap

305-1, 305-2, 305-3, 305-4, 3-3

The Science Based Targets Initiative (SBTi)

Setting the Pace for 1.5°C Pathway

Sarawak Energy is dedicated to setting science-based emission reduction targets that align with the goals of the Paris Agreement. Our aim is to contribute to global efforts to limit the temperature increase to 1.5°C above pre-industrial levels by 2030. In 2023, Sarawak Energy was the first large corporation in Malaysia to receive the science-based targets validation and approval from SBTi that our emissions reduction targets are consistent with the Paris Agreement's 1.5°C target. This milestone serves as a compelling call to other businesses in Malaysia to aim for achieving Net Zero carbon emissions by 2050. As we urgently pursue this ambitious goal, meticulous long-term planning, strategic coordination to harmonise diverse interests, and substantial investments to facilitate the transition will be crucially important.

1.5°C TARGETS

In 2023, we have already achieved

2°C

as committed under Paris agreement.

Our Main Grid CO_2eq emission intensity is within the

2°C and 1.5°C

targets in accordance with Paris Agreement

Moving forward, we aim to achieve the

1.5°C

targets

Setting Science-Based Climate Targets – SBTi Tool

The trajectory of Sarawak Energy's carbon intensity reduction aligns closely with its current business plan and long-term decarbonisation strategy. As part of this commitment, we also commit to significantly reducing our Scope 1 and Scope 2 GHG emissions from power generation by 80.3% per tCO_2eq per MWh by 2030. This reduction equates to lowering grid emission intensity to 0.17 tCO_2eq/MWh against the baseline year of 2020. Additionally, we are committed to decreasing absolute Scope 3 GHG emissions from the use of sold products by 42%, equivalent to 100,006 tCO_2eq by 2030, compared to 2021 baseline year.

To guide our decarbonisation efforts, we employ the Sectoral Decarbonisation Approach (SDA) trajectory provided by the SBTi tool. This approach ensures transparency and facilitates a clear comparison, enabling us to remain steadfast on our path towards our decarbonisation goals.

SETTING DIRECTION INTO BUSINESS' PURPOSE

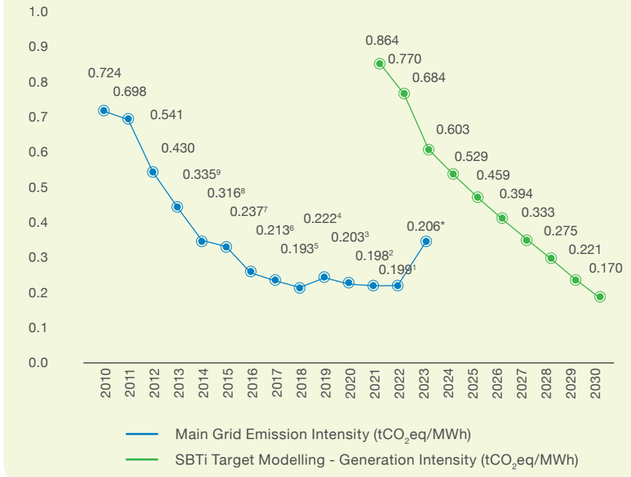
Sarawak Energy's Sustainability Strategy & Roadmap

305-1, 305-2, 305-3, 305-4, 3-3

I

WHERE WE ARE?

MAIN GRID EMISSION INTENSITY VS SBTi TARGET MODELLING (tCO_2eq/MWh)



Sarawak Energy has committed to reduce Scope 1 and 2 GHG emissions from power generation by 80.3% per tCO_2eq per MWh (0.17 tCO_2eq/MWh) by 2030 since 2020 via:

Scope 1 and 2 GHG emissions from power generation by 80.3% per tCO_2eq per MWh (0.17 tCO_2eq/MWh) by 2030 since 2020 via:

- Increasing renewable energy share in term of capacity and generation mix
- Diversifying our renewable energy resources
- Ensuring energy efficiency in our operations
- Adoption of low carbon technology
- Responsible production and consumption
- Decarbonisation of the supply and demand sides

Sarawak Energy has also committed to a 42% reduction in absolute Scope 3 GHG emissions from the use of sold products (Category 11) by 2030 since 2021 by:

- Reduction on use of sold products
- Reducing carbon emission in our value chain

II

HOW MUCH EMISSIONS TO BE REDUCED?
(ABSOLUTE & INTENSITY)

TARGETS APPROVED AND COMMITTED BY YEAR 2030

0.17
tCO_2eq/MWh
(emission intensity)

or

80.3%
(absolute emission) Reduction
In Scope 1 and 2 GHG emissions by 2030 since 2020

42%
reduction
in absolute Scope 3 GHG emissions from the use of sold products (Category 11) by 2030 since 2021

Sarawak Energy's Sustainability Strategy & Roadmap

2-6, 2-24, 3-3

HOW WE ARE GOING TO ACHIEVE THE 1.5°C TARGET

KEY ACTION PLANS TOWARD 1.5°C SCIENCE-BASED TARGETS

Governance
- Climate requirements embedded into our policy, procedure, planning, investment decision & operation
- Incentive to enable the adoption of low carbon technology
- Capacity development - workforce & supply chain

Carbon Offset
- Exploring offset mechanism (CCUS)
- Developing nature-based supply side

Use of Product Sold
- Reduce sale of coal

Planning Generation
- Low carbon generation technology
- RE capacity and generation mix

Operation Efficiency-Generation
- RE availability
- Digitalisation and automation
- Energy efficiency (e.g, energy audit, retrofitting, improve heat rate etc.)
- Advance process control Co-firing (with RE)
- Condition based monitoring
- Optimising RE

Build Environment
- Low carbon design
- Adoption low carbon technology

Responsible Production/ Consumption
- Circularity
- Green procurement
- Decarbonisation of Sarawak Energy value chain

Operation Efficiency - Transmission
- Transmission technical & non-technical losses
- Improvement of SAIDI/SAIFI
- Digitalisation and automation
- Fleet management

Adoption of Low Carbon Technology
- Smart grid
- Superconductor
- Efficient equipment
- Infrastructure preparedness

Build Environment
- Low carbon design
- Adoption low carbon technology

Responsible Production/ Consumption
- Circularity
- Green procurement
- Decarbonisation of Sarawak Energy value chain

Operation Efficiency - Distribution
- Distribution technical & non-technical losses
- Improvement of SAIDI/SAIFI
- Digitalisation and automation
- Fleet management

Adoption of Low Carbon Technology
- Smart grid
- Efficient equipment
- Distributed generation
- Infrastructure preparedness

Build Environment
- Low carbon design
- Adoption low carbon technology

Responsible Production/ Consumption
- Circularity
- Green procurement
- Decarbonisation of Sarawak Energy value chain

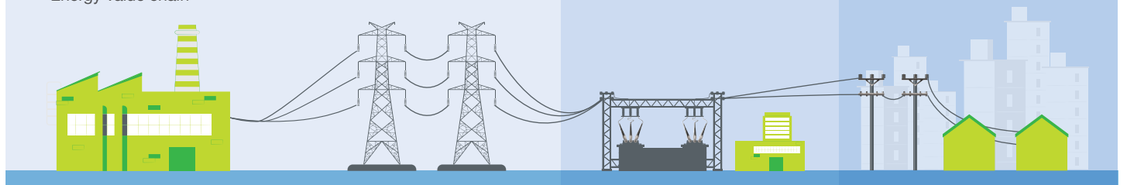
Operation - Retail & Value Chain
- Digitalisation and automation
- Fleet management

Workforce
- Behavioral change and sustainability culture
- Access to low carbon technology/mobility

Penetration of Low Carbon Technology
- Digitalisation

Responsible Production/ Consumption
- Green procurement
- Decarbonisation of Sarawak Energy value chain

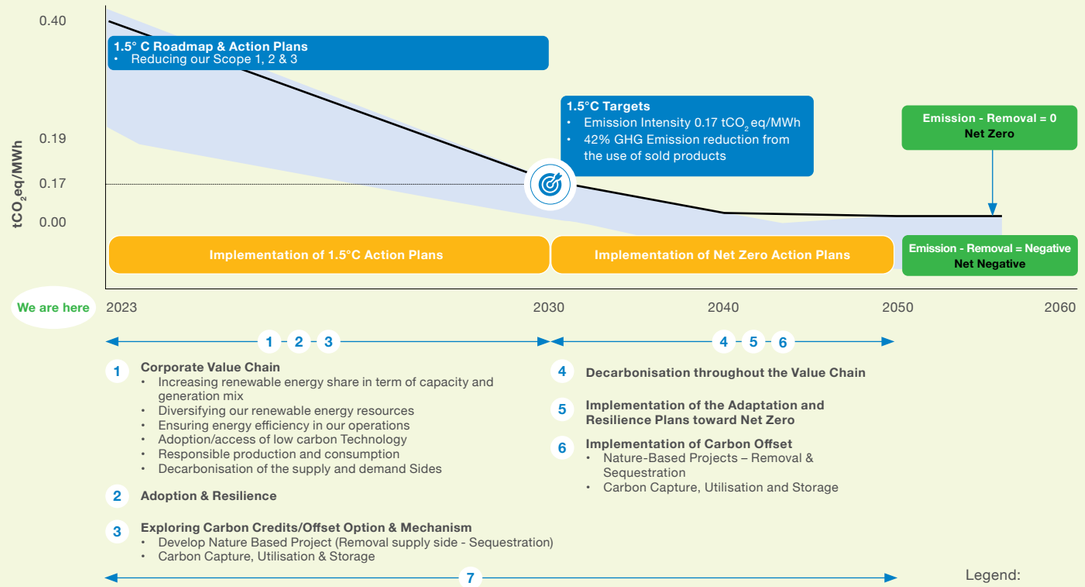
Circularity in demand side
- Access to RE technology
- Distributed generation
- Penetration of low carbon technology
- Energy efficiency



Sarawak Energy's Sustainability Strategy & Roadmap

2-24, 305-4, 3-3

Sarawak Energy's 1.5°C Roadmap and Action Plans towards Science-Based Targets



Sarawak Energy's Emission Intensity vs SBTi Targets (2020-2023)

In 2023, Sarawak Energy continued to meet its Science-Based Targets aligned with the 1.5°C pathway.

Year	Sarawak Energy Emission Intensity	SBTi Target Emission Intensity	% Difference (Sarawak Energy vs SBTi Targets)
2020	0.208[3]	0.864	122% lower
2021	0.198[2]	0.770	118% lower
2022	0.199[1]	0.684	110% lower
2023	**0.206***	**0.529**	**88% lower**

Sarawak Energy's 1.5°C Business Ambition Roadmap and Action Plans Development Workshop

In May and June of 2023, Sarawak Energy conducted a comprehensive corporate-wide workshop aimed at developing a structured, integrated, and holistic 1.5°C Business Ambition Roadmap and Action Plans. This pivotal event brought together over 200 employees, including members of the Group Executive Committee (GEC), GEC-1, and middle management, representing 16 departments.

During the workshop, participants engaged in several critical activities related to climate action. They assessed the current carbon footprint of the power utility, meticulously identifying key sources of emissions and gaining a profound understanding of the specific challenges within the relevant operations. Armed with this baseline understanding, the roadmap was drafted to outline targeted actions and milestones. These initiatives are designed to guide Sarawak Energy in its transition towards a low-carbon and sustainable energy model, underscoring the company's commitment to environmental stewardship and proactive climate action.


The workshop was facilitated by Mr. Faroze Nadar, Executive Director of the United Nations of Global Compact Malaysia & Brunei (UNGCMYB).


Group discussion activity during the workshop.

SETTING DIRECTION INTO BUSINESS' PURPOSE

Sarawak Energy's Sustainability Strategy & Roadmap

305-1, 305-2, 305-3, 305-4, EU2, 3-3

Providing Decarbonisation Value Beyond Sarawak

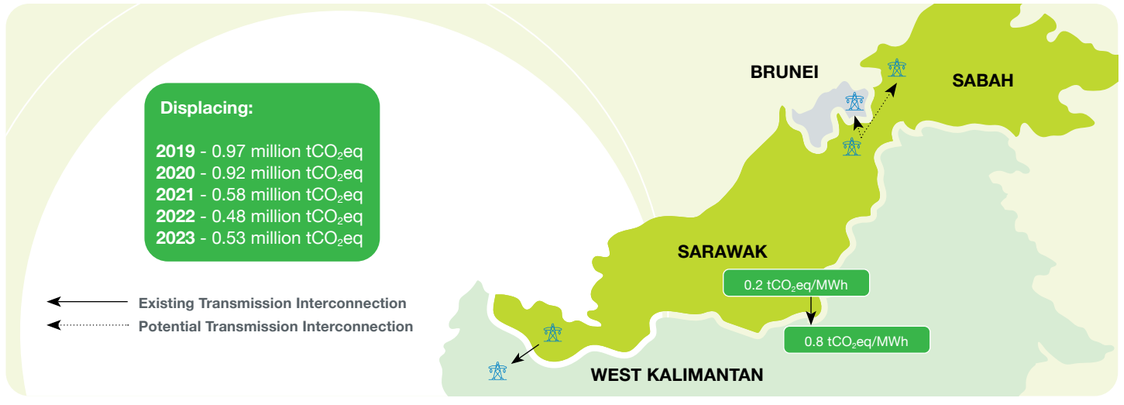
In our efforts to reduce carbon emissions across diverse sectors of our environment, economy and society, we are dedicated to mitigating global warming and achieving a sustainable, low-carbon future. Our commitment extends beyond Sarawak as we contribute to the global initiative to limit temperature rise to 1.5°C.

To lead the industry in sustainability and renewable energy, Sarawak Energy's electricity generation mix includes hydro, coal, gas and diesel, serving the economic needs of our customers in Malaysia and Indonesia. In 2023, renewable energy mix from hydropower had risen to 73%, a significant increase from 17% in 2011. This highlights our focus on meeting energy demands with clean hydropower, contrasting with fossil fuels like coal, gas and diesel. During the year, electricity sales increased slightly to 33,011 GWh (6% up from 31,278 GWh in 2022), reflecting our commitment to meeting customer demand.

Our journey in decarbonisation began with the construction of the Sarawak-West Kalimantan Interconnection in 2016, linking the Mambong 275 kV substation in Sarawak to the Bengkayang 275 kV substation in West Kalimantan. As of 2023, we have exported a total of 9,166 GWh of energy to West Kalimantan, offsetting 5.43 million tCO_2eq, equivalent to sequestering carbon in 15,295 hectares of tropical forest.

Sarawak Energy's Generation Mix (2011 vs 2023)

Source	2011 (GWh)	%	2023 (GWh)	%
Hydro	1,248	16.51%	**25,059***	**72.73%**
Coal	3,067	40.58%	**3,953***	**11.47%**
Gas	3,170	41.94%	**5,429***	**15.76%**
Diesel	73.48	0.97%	**15***	**0.04%**
Total	**7,558**	**100.00%**	**34,456***	**100.00%**



Note:
West Kalimantan grid – using conservative estimation based on diesel emission factor of 0.8 tCO_2eq/MWh (IPCC 2016).

Furthermore, as part of our commitment to minimise our carbon footprint, we have intensified our initiatives to decrease emissions across Scopes 1, 2 and 3.

Scope 1 Emissions

Main, Northern, Stand-alone Grids and Company-owned Vehicles

7,219,731.17 tCO_2eq*

Scope 2 Emissions

Buildings and Offices

13,635.19 tCO_2eq*

Scope 3 Emissions

Business Air Travel

3,866.82 tCO_2*

Notes:
1. *Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.*
a *Scope 3 emissions – Business air travel is calculated using ICAO Carbon Emissions Calculator as on 16 May 2024.*

OUR APPROACH TO SUSTAINABILITY

Sarawak Energy and the Economy

201-1, 3-3

Operating Costs Ratio

35.94%

Renewable Energy Generated

25,059 GWh*

Economic Value Distributed

RM4,739.40 Million

Achieving Sustainable Economic Growth for Sarawak and the Region.

Sarawak Energy maintains a steadfast commitment to environmentally friendly business practices, harnessing renewable sources to ensure clean and reliable electricity for the state and region. Our proactive approach and robust capabilities in fostering sustainable economic activities across our supply chain empower both the state and its residents to maximise the advantages derived from these initiatives.

Charting a Sustainable Course for Sarawak

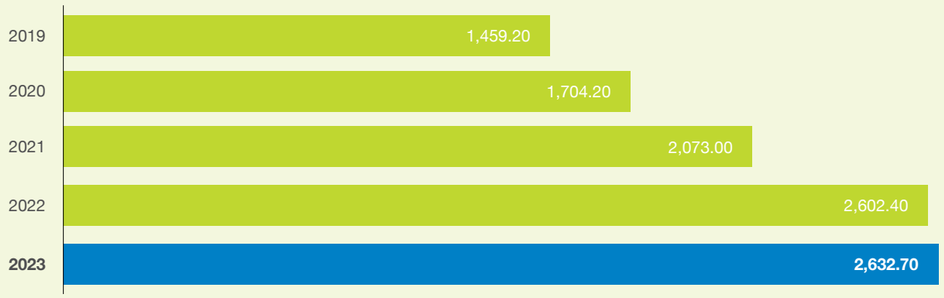
During the year under review, Sarawak Energy distributed RM4.73 billion through operating costs, employee remuneration, interest payments and taxes. This led to an economic value retained of RM2.59 billion*, slightly lower from RM2.64 billion[1] in 2022.

Sarawak Energy and the Economy

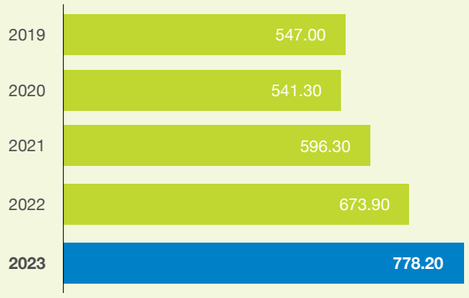
201-1

ECONOMIC VALUE DISTRIBUTED

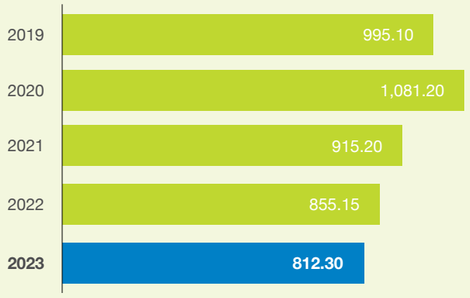
Operating Costs *(RM Million)*



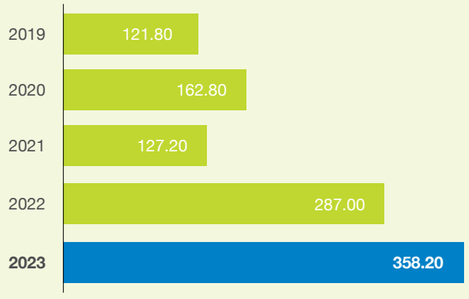
Employee Remuneration *(RM Million)*



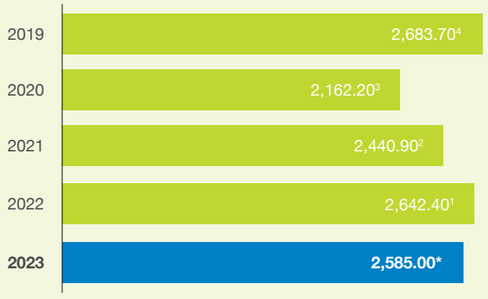
Payments to Capital providers - Interest Paid *(RM Million)*



Payments to the Government - Income Taxes Paid (Net of Refunds) *(RM Million)*



Economic Value Retained *(RM Million)*



Sarawak Energy and the Economy

Electricity Sales *(GWh)*
+5.54%
From 2022

Net Profit Margin Ratio
-52.26%
From 2022

Operating Costs Ratio
35.94%

Operating Costs *(RM)*
+1.16%
From 2022

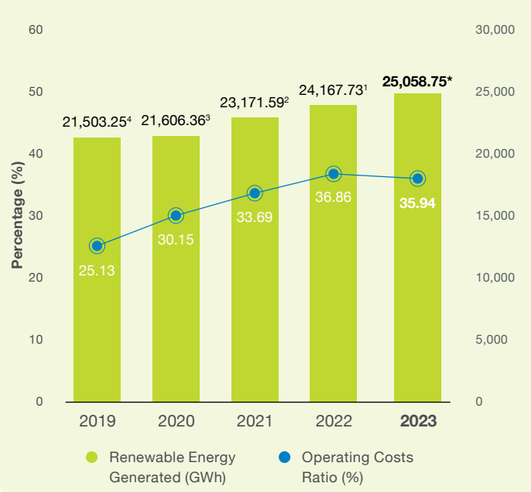
Electricity Sales (RM) Per Sarawak GDP[a]
4%

Electricity Consumption Per Capita
+4.17%
From 2022

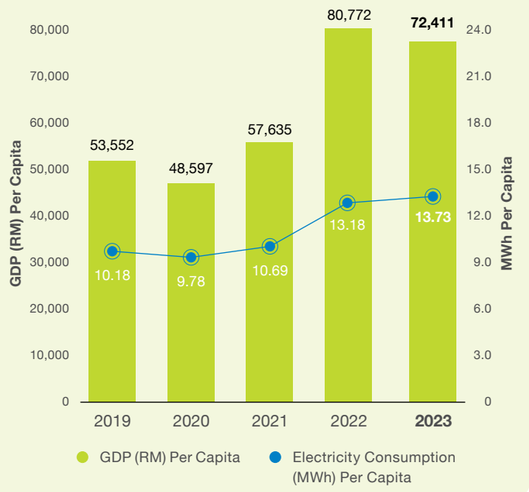
Total Electricity Sales *(GWh)*
33,011

Note:
[a] *GDP for State of Sarawak in 2023 is based on current prices.*

Renewable Energy Generated vs Operating Costs Ratio 2019-2023



Electricity Intensity – Electricity Consumption Per Sarawak GDP 2019-2023



Electricity Sales (GWh)

By Customer Type	2019	2020	2021	2022	2023
Domestic	2,401	2,620	2,867	2,916	**3,099**
Commercial	2,768	2,584	2,620	2,973	**3,199**
Industrial	2,297	2,329	2,298	2,656	**3,029**
Public Lighting	104	109	109	113	**117**
Bulk Customers	19,620	18,569	20,696	22,620	**23,567**
Total Electricity Sales	27,190	26,211	28,590	31,278	**33,011**

Sarawak Energy and the Economy

204-1, EU10, 3-3

Forecasted Demand to Increase to ~5,000MW by 2025

Committed Demand (MW)	2019	2020	2021	2022	2023
Organic Customers	1,426	1,440	1,523	1,647	**1,726**
Bulk Customers (incl. export)	2,424	2,478	2,880	2,894	**3,000**
Total Committed Demand (MW)	3,850	3,918	4,403	4,541	**4,726**

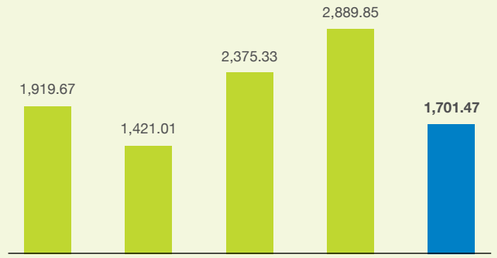
Malaysian vs International *(RM Million)*

Status	2019	2020	2021	2022	2023
Malaysian	1,568	1,265	1,818	2,511	**1,470**
International	352	156	557	379	**231**
Overall Total	1,920	1,421	2,375	2,890	**1,701**

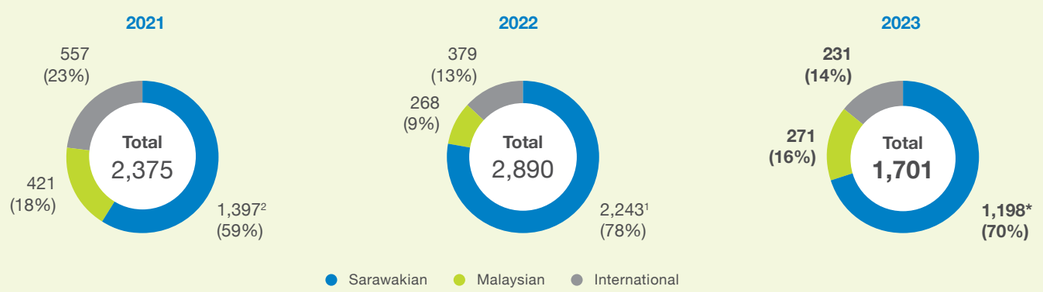
Fostering Local Economic Growth Through Strategic Partnerships

Sarawak Energy is dedicated to catalysing sustainable development in Sarawak by actively facilitating investor attraction and bolstering local businesses. As the primary energy provider for Sarawak, we consistently nurture relationships with State's vendors and enterprises to streamline operations and enhance connectivity. In 2023, we awarded the majority of our projects to Sarawakian and Malaysian (non-Sarawakian) entities, valued at RM1,470 million. Sarawakian firms demonstrated strong performance, securing 70% of these projects valued at RM1,198 million*, highlighting our proactive approach in driving business growth and fostering local economic development. The total value of our projects decreased in 2023 due to no new major works were awarded as compared to 2022 (mostly long-term contract).

Total Tenders Awarded by Sarawak Energy (Malaysia & International) 2019-2023 *(RM Million)*



Tenders Awarded	Status	2019	2020	2021	2022	2023
Capital Works	Sarawakian	416,366,166.99[4]	114,555,097.49[3]	335,983,187.44[2]	295,198,815.38[1]	**254,790,542.37***
	Malaysian (Non-Sarawakian)	274,575,584.00	44,542,098.60	226,103,506.14	32,522,488.80	**90,342,509.10**
	International	299,412,243.00	117,782,423.00	528,705,566.15	100,626,345.66	**145,318,205.15**
Operations and Maintenance	Sarawakian	822,335,735.58[4]	1,037,245,113.37[3]	1,061,052,945.37[2]	1,947,373,513.08[1]	**943,688,077.61***
	Malaysian (Non-Sarawakian)	54,243,444.92	68,301,534.66	194,827,901.20	235,672,775.79	**181,527,068.79**
	International	52,732,516.13	38,580,626.30	28,660,053.82	278,455,646.61	**85,804,593.19**

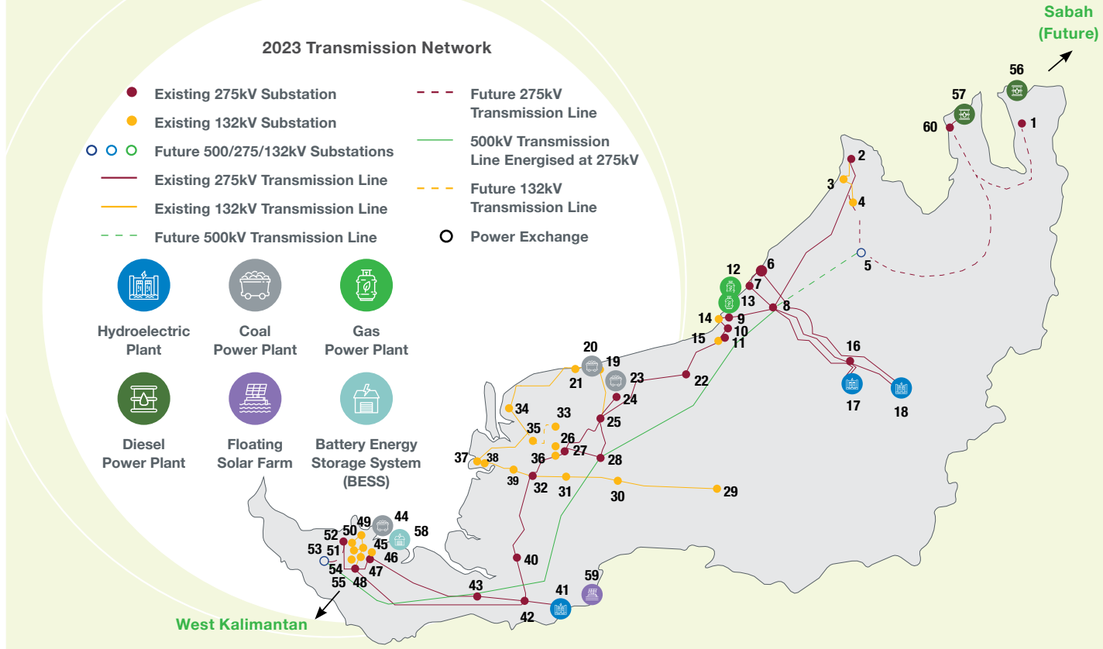


Sarawak Energy and the Economy

203-1, EU1, EU10

Powering Up Sarawak

In 2023, Sarawak experienced a 4% increase in energy demand compared to 2022, reflecting growth across all sectors. Sarawak Energy anticipates this electricity demand will increase to approximately 5,000MW by 2025.



1	Lawas 275/33kV S/S	21	Petian 132/33kV S/S
2	Tudan 275/132/33kV S/S	22	Tatau 275/132/33kV S/S
3	Eastwood 132/33kV S/S	23	Balingian P/S 578MW
4	Marudi Junction 275/132/33kV S/S	24	Balingian 275/33kV
5	Bunut 500/275/33kV S/S	25	Selangau 275/132/33kV S/S
6	Samalaju B 275/132/33kV S/S	26	Deshon 132/33kV S/S
7	Samalaju 275/132/33kV S/S	27	Oya 275/132/33/11kV S/S
8	Similajau 500/275/33kV S/S	28	Mapai 500/275/33kV S/S
9	Bintulu 275/132kV S/S	29	Kapit 132/33/11kV S/S
10	Bintulu B 275/132kV S/S	30	Song 132/33/11kV S/S
11	Kemena 275/132/33kV S/S	31	Kanowit 132/33/11kV S/S
12	Tanjung Kidurong CCGT P/S 826MW	32	Kemantan 275/132/33/11kV S/S
13	Sarawak Power Generation P/S 280MW	33	Sg. Merah 132kV S/S
14	Tanjung Kidurong 132/33/11kV S/S	34	Daro 132/33kV S/S
15	Sibiyu 132/33/11kV S/S	35	Sg. Maaw 132/33kV S/S
16	Murum Junction 275/33kV S/S	36	Salim 132/33kV S/S
17	Bakun HEP 2,520MW	37	Tanjung Manis B 132/33kV S/S
18	Murum HEP 944MW	38	Tanjung Manis 132/33/11kV S/S
19	Matadeng 132/33kV S/S	39	Sarikei 132/33/11kV S/S
20	Mukah Power Generation P/S 243MW	40	Serudit 275/132/33kV S/S
		41	Batang Ai HEP 94MW
		42	Engkilili 275/33/11kV S/S
		43	Lachau 275/33kV S/S
		44	Sejingkat Power Corporation P/S 80MW
		45	Muara Tabuan 132/33kV S/S
		46	Samajaya 132/33kV S/S
		47	Entinggan 275/132/33kV S/S
		48	Mambong 275/132/33kV S/S
		49	Sejingkat 132/33kV S/S
		50	Astana 132/33kV S/S
		51	Mendu 132/33kV S/S
		52	Matang 275/132/33kV S/S
		53	Tondong 500/275/33kV S/S
		54	Semenggo 132/33kV S/S
		55	Stakan 132/33kV S/S
		56	Lawas P/S 15.6MW
		57	Limbang P/S 22MW
		58	BESS 60MW
		59	Batang Ai Floating Solar 50MW
		60	Limbang Town 275kV S/S

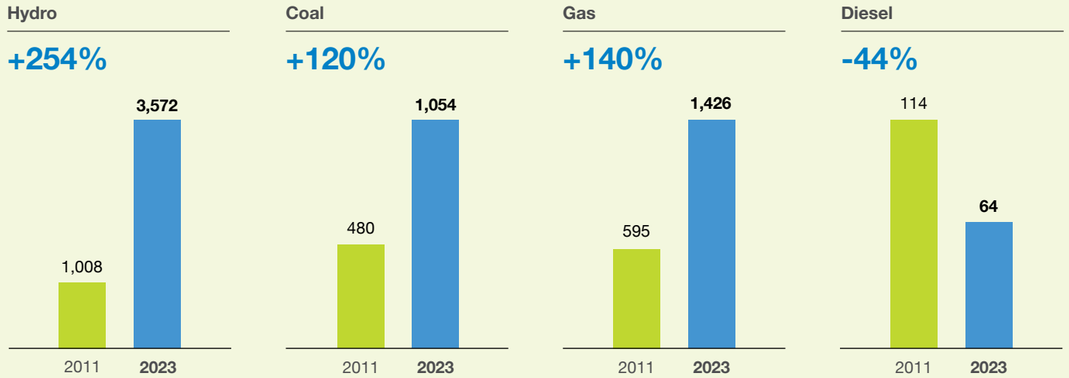
Sarawak Energy and the Economy

EU1, EU30

Realising a Low-Carbon Economy

In 2023, Sarawak Energy's grid-connected power plant capacity increased to 6,116MW, up from a total installed capacity of 5,996MW in 2022.

GRID CONNECTED POWER PLANT CAPACITY (MW) - BY ENERGY SOURCE



Establishing Reliability and Trust

We take pride in our track record as a dependable energy supplier, ensuring robust power supply across plant, transmission and distribution stages. This underscores our ongoing commitment to excellence in delivering exceptional service to our customers.

Hydropower Plant Average Availability Factor

89.51%

Coal-Fired Power Plant Equivalent Availability Factor

67.18%

Gas-Fired Power Plant Equivalent Availability Factor

74.31%

Diesel-Fired Power Plant Equivalent Availability Factor

90.57%[a]

Notes:

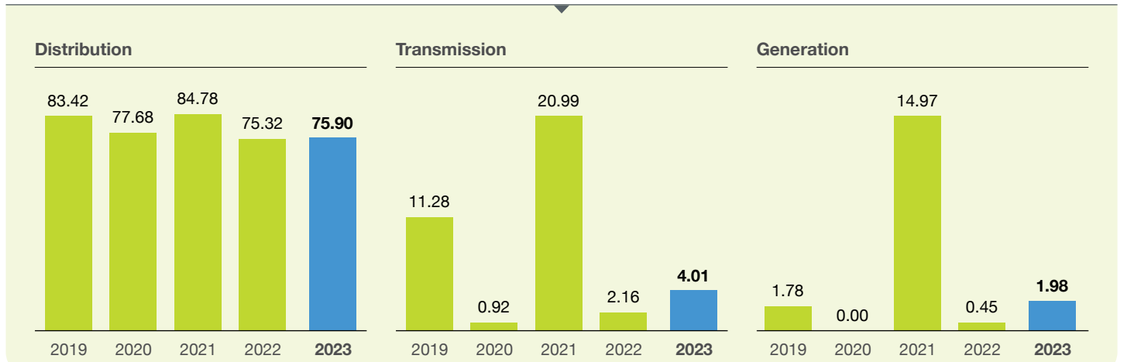
1. Equivalent Availability Factor (EAF) and Availability Factor (AF) using simple average.

[a] Consists of Sg. Biawak, Limbang & Lawas Diesel-Fired Power Plants.

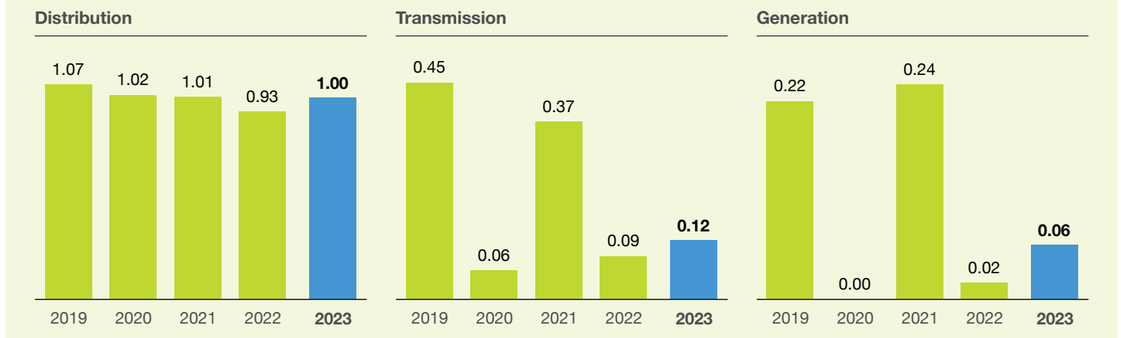
Sarawak Energy and the Economy

EU28, EU29

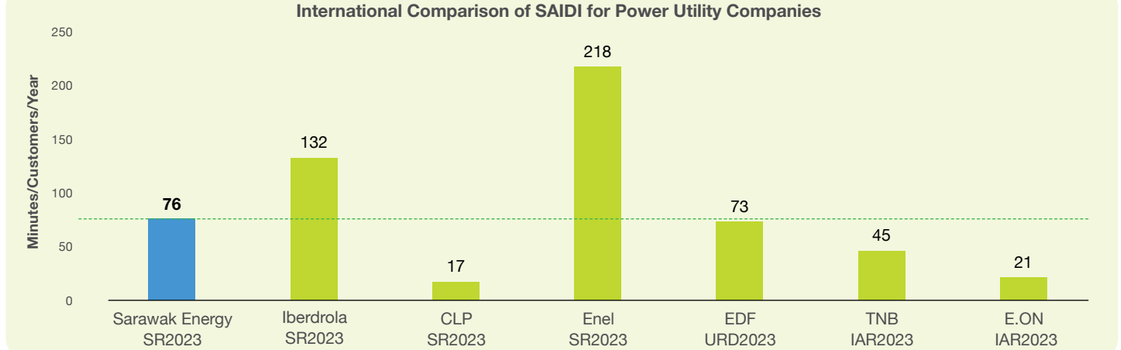
EU 29 SAIDI



EU 28 SAIFI



International Comparison of SAIDI for Power Utility Companies



Note:

Published Annual, Sustainability & Integrated Report 2023.

Sarawak Energy and the Economy

EU12, 3-3

Transmission and Distribution Losses

During the year under review, we have maintained a consistent transmission and distribution losses through initiatives aimed at boosting system efficiency and combating power theft. These efforts included replacing and refurbishing transmission lines and transformers, introducing new injection points, installing energy-efficient amorphous transformers, and restoring capacitor banks.

In 2023, we have successfully reduced the Non-Technical Loss (NTL) rate to 1.48% compared to the previous year of 2.35%, attributed to the implementation of new strategies and the unwavering commitment of our team to combat electricity theft in the State.

Despite the challenges encountered in 2023, our electricity theft operations persisted, focusing on thorough meter inspections at shophouses, residential areas, meters at gateposts, and HV meters. Throughout the year, we conducted a total of 52 successful Executive Action (EA) operations and released 19 press releases to raise public awareness about power theft.

No. of Cases and Losses (RM) Due to Cable Theft

Year	2019	2020	2021	2022	2023
Losses (RM)	2,114,769.76	214,147.00	1,280,148.44	1,332,565.56	**2,925,010.08**
No. of Cases	588	148	123	187	**153**

Notably, the rise in electricity theft related to cryptocurrency mining operations posed a significant challenge, exacerbated by the surge in cryptocurrency values and reduced meter inspections during the Control Movement Order (MCO). To address this issue, we intensified our efforts to target illegal cryptocurrency mining premises. As a result, we conducted raids on 41 cryptocurrency mining operations across the state, uncovering instances of tampered meters, illegal wirings, or direct connections to service lines without meters.

As we move forward, our focus remains unwavering on combating electricity theft and illegal cryptocurrency mining operations. Through continued vigilance and the implementation of proactive measures, we are committed to safeguarding the integrity of our electrical infrastructure and protecting the interests of our stakeholders.

In 2023, estimated monthly losses due to electricity theft related to cryptocurrency mining reached RM539,200. To address this issue, various strategies were implemented, including collaboration with the Ministry of Utility and Telecommunications (MUT), Malaysian Anti-Corruption Commission (MACC), and Royal Malaysia Police (PDRM) to conduct raids and seize cryptocurrency mining rigs. Offenders were prosecuted in court to deter future theft.

PDRM conducted five raids, seizing a total of 219 cryptocurrency mining servers, while Sarawak Energy conducted 36 raids, resulting in the seizure of 1,262 mining servers. Additionally, to enhance detection capabilities, a drone equipped with a thermal camera was deployed to identify cryptocurrency mining premises. To operate the drone effectively, team members underwent intensive drone Remote Control Operator Certificate (RCOC-B) training to obtain the necessary licenses.

As of December 2023, a total of 12 competent drone pilots from the Retail Department have been trained across the region, ensuring that the team is equipped with the latest technology and expertise to combat electricity theft effectively.

Distribution losses can be categorised into technical and non-technical losses. The former results from power dissipation in system components such as transmission and distribution lines, transformers, and measurement systems. Meanwhile, non-technical losses stem from external factors and include electricity theft, non-payment by customers, and errors in accounting and record-keeping.

In 2023, non-technical losses decreased to 1.48% from 2.35% in 2022, while technical losses stood at 7.31% in 2023 an increase from 2022's 7.17%.

Year	2019	2020	2021	2022	2023
Transmission Losses (%)	2.17	2.32	2.51	2.52	**2.09**
Distribution Losses (Technical) (%)	6.59	6.47	6.29	7.17	**7.31**
Distribution Losses (Non-Technical) (%)	4.41	4.05	4.32	2.35	**1.48**

OUR APPROACH TO SUSTAINABILITY

Sarawak Energy and the Economy

Sarawak Energy is committed to reducing our technical and non-technical losses to ensure that seamless energy supply. To this end, we have implemented the Technical Losses Management System for Distribution Technical Losses estimation development, which reduces errors in calculation and allows for better monitoring and accurate data.

Combating Power Theft in 2023

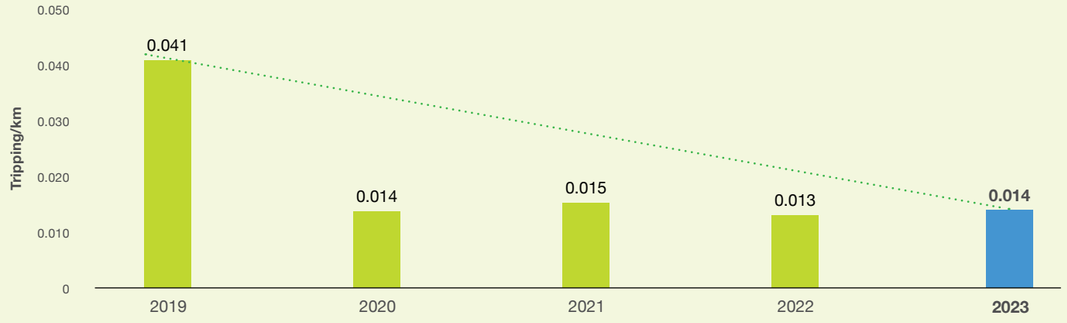
- **Electricity theft operations**
- **Heightened public awareness through Power Theft Campaign**
- **Prosecute the electricity theft offenders in Court**
- **Enhancement of Fraud Detection Analytics**
- **Collaborations with authorities and agencies**
- **Disconnection of illegal online gambling**

NUMBER OF TRANSMISSION TRIPPING

Total Number of Transmission Tripping and Tripping Intensity at Transmission

Year	2019	2020	2021	2022	2023
Substation	29	15	12	15	**7**
Transmission	69	53	64	49	**74**
Total	**98**	**68**	**76**	**64**	**81**
Transmission Tripping Intensity (Tripping/km)	**0.041**	**0.014**	**0.015**	**0.013**	**0.014**

Transmission Tripping Intensity *(Tripping/km)*



Sarawak Energy and the Economy

EU27

The number of disconnected accounts in Kuching, Sibu, Sarikei, Bintulu, Miri, Limbang, and Lawas surged from 13,608 in 2022 to 19,428 in 2023. After receiving RM22.23 million, we reconnected 17,446 accounts and restored power to 15,233 accounts within 24 hours of payment.

Summary of Payment and Reconnection by Categories

Year	<48 Hours	48 – 1 Week	1 Week – 1 Month	1 Month – 1 Year	>1 Year
2019	13,669	1,188	233	32	0
2020	9,401	973	144	276	0
2021	7,857	516	390	480	0
2022	8,698	1,043	618	671	9
2023	**14,917**	**1,623**	**614**	**288**	**10**

Year	<24 Hours	24 Hours – 1 Week	>1 Week
2019	14,841	397	24
2020	9,047	891	89
2021	8,695	326	90
2022	10,178	531	562
2023	**15,233**	**1,651**	**568**

Breakdown of Disconnected and Reconnected Accounts

Year	Total Accounts Disconnected	Total Amount Disconnected (RM)	Total Accounts Reconnected	Total Amount Reconnected (RM)
2019	7,961	48,033,995	6,253	22,334,925
2020	11,312	35,567,618	9,135	18,939,264
2021	8,808	19,431,684	7,267	12,675,901
2022	13,608	27,490,239	11,413	13,870,686
2023	**19,428**	**25,919,227**	**17,446**	**22,233,667**

Power Theft Arrears Bill Recovery

Continuous efforts were undertaken to recover electricity theft arrears bills issued. From 2008 to 2022, a significant sum totalling approximately RM179.24 million was successfully recovered. In 2023, RM16.19 million was recovered from arrear customers, compared to RM13.61 million in 2022.

We will continue to deter power theft through collaborations with local enforcement agencies and research and development. This includes partnering China Light Power (Hong Kong) in researching and developing of a fraud analytics model to improve power theft identification and detection. Internally, we will keep enhancing the knowledge of our meter inspection teams across the region to ensure efficiency in combatting power theft.

Sarawak Energy and the Economy

403-2

Business Continuity Management (BCM)

Sarawak Energy's BCM Framework complies with both local and international standards and guidelines including the ISO 22301:2019, and ISO 22313:2012. Established in 2016, the framework aims to safeguard stakeholders' interests, protect the Company's reputation, and ensure the continuity of value creation. Additionally, the BCM framework enables us to closely collaborate with authorities during crises or disasters.

Sarawak Energy's BCM Policy Statement

Sarawak Energy is dedicated to maintaining and ensuring the continuity of our services through our BCM Programme, minimising the impact on stakeholders in the event of any service disruptions.

BCM Implementation

Our BCM framework continues to include emergency response, business continuity plan (BCP) training, testing and improvements in 21 locations.

WHY BCM

1 Customers and Stakeholders	2 Environment	3 Company's Reputation and Brand	4 Financial
• Readiness to respond in a timely manner to major emergencies and crises safeguard the interests of key stakeholders • Increase customers and stakeholders' confidence and trust • Minimise threats to life, health & safety	• Reduce potential impact of environment risks • Achieve sustainable development • Safe working environment	• Safeguard Company's reputation and brand • Manage and mitigate critical operational risks improve business continuity and resiliency • Aligned with international BCM standards and best practices	• Prevent losses to Company (revenue and assets) • Reduce insurance premium and duration of any disruption • Comply with legal requirements and statutory obligations

Milestones Achieved

In 2023, we continued carrying out emergency response training such as fire drills, evacuation drills, dam safety emergency drills and business recovery exercises. We also conducted crisis simulation desktop walkthrough exercises, organised workshops and site visits to improve the knowledge on BCM and risk management practices. We continued enhancing our BCM implementation by:

Enhancing efforts in emergency response and crisis management

Benchmarking against international best practices, such as organising a benchmarking visit to "Singapore Power" (SP)

Creating awareness and capability building, including identifying areas for improvement

Sarawak Energy and the Economy

403-2, 418-1, 3-3

Dam Safety and Emergency Drills

We ensure that our employees continue to stay up to date in safety procedures through Dam Safety Emergency drills. These drills are in line with established protocols that mitigate the risk of incidents and LTIs.

In 2023, there were no critical issues for all dams identified that are detrimental to dam safety integrity. All dams have been monitored through dam safety programmes guided by International Commission on Large Dams (ICOLD) and Malaysia Dam Safety Management (MYDAMS). This is conducted through routine inspection and bi-annual inspections for all three dams comprising a team from different units to provide a fresh view of dam performance and condition.

A five yearly dam safety review has been carried out at Bakun and Murum Dam by an international consultant, and the final report was completed in 2023, citing no major issue has been found with the consultant assessment rated "fair to good" on the overall condition and performance for both dams. The dam safety unit has two certified dam safety inspectors by Entura Hydro Tasmania who are actively involved in monitoring the performance of the three main dams at Sarawak.

During the year under review, the following activities were conducted:

Disaster/Emergency Planning & Response

- Outreach Session with Belaga District Disaster Management Committee (DDMC) on Dam Safety Awareness (DAMSA)
- Outreach Session with Belaga Action Committee (BAC) Head Leaders on Dam Safety Awareness (DAMSA)
- MKN Latih Amal Ex-Red Tilapia 2023 Batang Ai Hep/Batang Ai DSEP Drill Exercise
- Bakun DSEP Workshop and Tabletop Exercise
- Murum DSEP Workshop and Tabletop Exercise

In-House Dam Safety Training Programmes

- On-Site Training KMIDam – Post-Earthquake Assessment System (Bighorn) at Bakun
- Survey Training on Using Global Navigation Satellite System (GNSS) with Bakun DS at Bakun
- Sharing Session about Instrumentation for Baleh HEP
- Dam Safety Emergency Plan Workshop was held physically for Bakun, Murum and Batang Ai
- Generation Connect - Sharing on the Dam Design and Surveillance

Customer Service Excellence

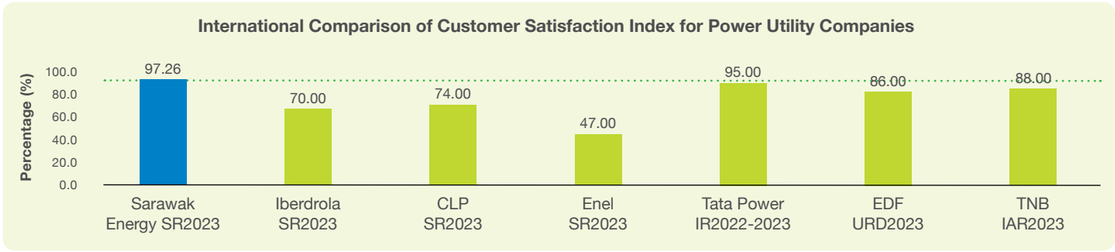
Our customers service teams play a crucial role in enabling Sarawak Energy to fulfil the needs of our customers. Apart from social and mass media, we also engage our clients through our customer service platforms, Sarawak Energy Cares (SEB cares) web and mobile. These platforms were developed to provide convenience to customers in terms of billing and meter reading, payments, enquiries and reporting of technical issues. We take steps to build innovative solutions through digitalisation, in line with Sarawak's digital transformation initiatives. This also enables us to support sustainable practices, through reducing paper usage.

In 2023, our Customer Satisfaction Index (CSI) rating rose from the previous year's 97.15% to 97.26%. Our Customer Care Centre (CCC), which consistently engages with our customers to address their needs and issues, maintained top-notch customer service excellence. We will continue to improve customer experience through digital platforms while using social and mass media advertisements to raise awareness about our mobile app and online facilities.

Sarawak Energy and the Economy

3-3

Year	2019	2020	2021	2022	2023
Customer Satisfaction Index (%)	95.08	95.20	96.51	97.15	**97.26**



Note:
Published Annual, Sustainability & Integrated Report 2023.

Enhancing Our E-Customer Experience (eCX)

Our eCX system, launched in 2020, streamlines online power supply applications and supports Sarawak's digital transformation by reducing paper usage. It offers a seamless, contactless experience for customers, featuring services like Change of Name, Supply Upgrading/Downgrading, and Meter Testing through Sarawak Energy's corporate website and the SEB cares platform.

The system also facilitates bulk electricity supply applications by electrical consultants and internal wiring contractors, aligning with the Sarawak Digital Transformation Roadmap and promoting digitalisation during the pandemic.

Advantages of eCX

- **Standardised practices, processes and understanding across all regions**
- **Online processes, reducing paper usage**
- **Information storage in a centralised portal**

Our chatbot, Carina, which was launched in 2020, has been uploaded in our Voice Response (IVR) in our telephony system. The feature guides customers to Carina for further assistance, empowering customers to find information and solutions independently. Despite the negative effects on our service level, the experience also highlighted opportunities for process improvement and reinforced the importance of effective communication in managing customer expectations during periods of change.

In 2023, Carina achieved a Customer Service Rating of 81.40%.

2023

87,921 Carina users

2022

27,927 Carina users

Our Salesforce CRM, which was fully implemented in 2021, has now entered its mature phase with ongoing minor adjustments to enhance processes such as case management. Previously managed by the Fulfilment Team, enquiry cases are now handled by our Customer Care Centre Executives (CCE). Specific case statuses and sub-statuses in the CRM are updated regularly, allowing case owners, including CCEs and team leads, to monitor and follow up on cases until they are resolved and closed.

Sarawak Energy and the Economy

3-3

Payment Kiosks

In 2023, we have installed three units of multi-service payment kiosks at three different shopping malls in Kuching as a pilot project before we launch more in other regions. To date, we have a total of 30 payment kiosks statewide.

Sarawak Energy Mobile App SEB cares

The SEB cares mobile app was developed to enhance customer payment efficiency and improve overall user experience. Additionally, the app delivers updates, event notifications, and programme alerts.

In the year under review, we upgraded SEB cares to a different platform, presenting a fresh, modern, and enhanced user interface and functionality. The new version of SEB cares features online version of some services that previously can only be done at the counter such as Change of Name, Request for Meter Testing and Request for Internal Wiring Testing. The development of the new app is still ongoing, and more features will be added from time to time.

To date, SEB cares continues to record an increase in user registration with 431,000 user registrations in 2023, an increase of 35% from 2022.

SEB CARES REGISTERED USERS

2021
275,364
users

2022
318,755
users

2023
431,000
users

Managing Our Assets

To elevate our operational efficiencies and drive our performance, we have implemented measures aimed at strengthening our assets to align with the needs and expectations of our customers. We are committed to refining and enhancing various processes that are integral to our operations.

Mobile Field Force Automation (MFFA)

- To observe and assess the response time of technical field crew, including the operational teams in Kuching, Bintulu, Miri and Sibu
- Since 2016, the system has been integrated into our auditing performance monitoring and enhancement features
- MFFA Mobile App Offline Mode and Replatform
  - In 2023, the implementation of offline mode for the application had been completed, allowing users to continue using the app to update work orders even without Internet connection. The initiative aimed to resolve the challenge faced by users with poor or limited Internet connection
  - The MFFA app platform was also upgraded to support the offline mode feature

Enterprise Asset Management System (EAM)

- Fully extended to Rural Operations since 2021
- In 2023, the enhancements made were:
  - Completed the Oil Sampling job plan
  - Improved Work Order Tracking page
  - Increased the capacity work order attachment for larger space

Geographical Information System (GIS)

- Facilitates the Distribution and Retail departments by presenting the distribution of network assets and customers' locations via a web application
- In 2023, the GIS System team continued holding hands-on training for regional GIS Operators to enhance their knowledge on open-source software to update and upkeep near real-time the dataset into centralised spatial data repository
- The GIs team will continue exploring the ArcGIS Utilities Network Extension to model our distribution network for power source/outage tracing capability

Sarawak Energy and the Environment

303-1, 303-2, 303-3, 305-7, 3-3

Hydro

Water for Power Generation
57,017.86 million m^3*

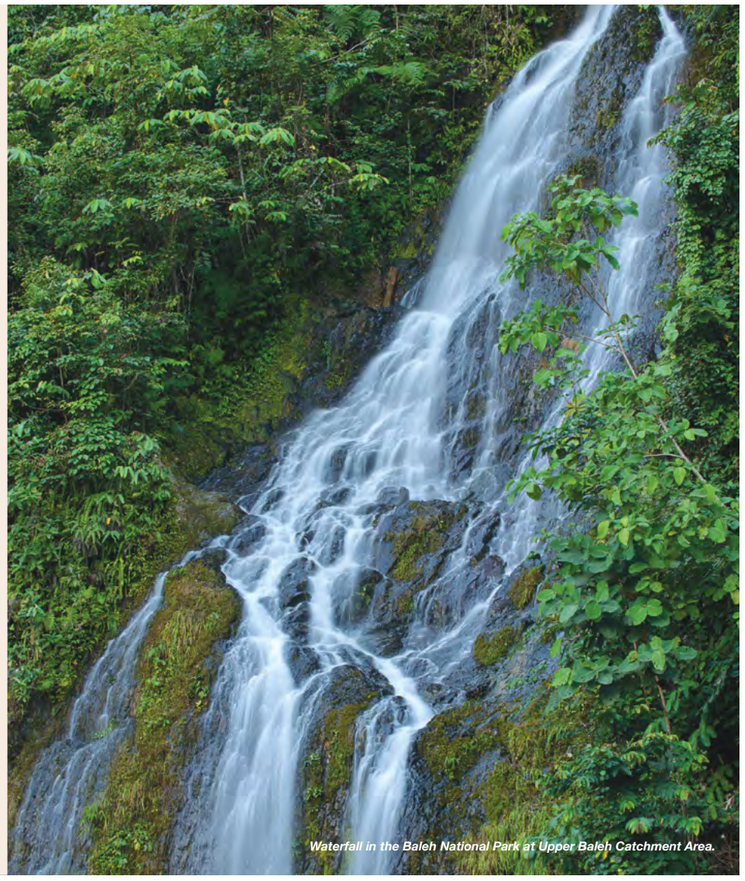
Total Annual Water Volume Intensity for Energy Generation
2,260.64 m^3/MWh

Thermal

Water Withdrawal (Cooling process)
1,147 million m^3*

Seawater or Other Natural Water Source Withdrawal Intensity
32.69 m^3/MWh

SO_x and NO_x Emissions Intensity (Main Grid)
SO_x: 8.88 x 10-5
$kgSO_x$/kWh
NO_x: 7.10 x 10-5
$kgNO_x$/kWh


Waterfall in the Baleh National Park at Upper Baleh Catchment Area.

Water Management

Water is fundamental to all our operational processes and activities. It serves as the primary energy source for our hydroelectric facilities and is essential for the cooling systems in our thermal power plants. As water is a finite resource, the responsible stewardship of water is paramount to ensuring equitable access, social well-being and sustainable development. To this end, we are deeply committed to the responsible use and sustainable management of water resources to mitigate water shortage and combat climate change.

Sarawak Energy and the Environment

303-1, 303-2, 304-1, 304-2

SARAWAK ENERGY'S INTEGRATED CATCHMENT MANAGEMENT STRATEGY – SAFEGUARD UPSTREAM WATER RESOURCES

Catchment Management Policy, Procedures and Guidelines For Hydropower

Sarawak Energy

(Catchment Management)

MANAGEMENT	TECHNICAL
Good Practices in Catchment Management	Water Resource, Hydrology & Sedimentation
Hydropower Sustainability Standard (HSS)	Reservoir Storage & Lifespan
Addressing Sustainability Issues – Long-Term Risks	Maintenance
Realignment – International, National & State Levels	Biodiversity
Advocating and Communicating Good Catchment Management Practices	Social & Environment

The scope of work for the Catchment Management Study consists of three main components:

Overview of the Overall Catchment Management Study

1 Catchment Management Policy

- Conservation & Gazettement
- Land Use

2 Catchment Management Procedures & Guidelines

- Socio-economic & Livelihood
- Conservation Planning & Priority Conservation Area
- Stakeholder Engagement
- Management Practices
- Catchment Management Roadmap

3 Catchment Management Initiatives

- Inventory of Biodiversity – Heart of Borneo (HoB)
- Information & Monitoring - Common Baselines
- Sedimentation Management
- Ecosystem Services
- Monitoring Land Use
- Environmental Flow

Sarawak Energy and the Environment

301-1, 3-3

Hydro Plant	Data	Unit	2019	2020	2021	2022	2023
Batang Ai	Annual Inflow	million m³	2,852.00	4,255.00	3,651.00	3,277.00	**3,160.20**
	Annual Water Volume for Energy Generation	million m³	2,844.00[4]	3,974.38[3]	3,617.61[2]	3,534.20[1]	**3,512.34***
Murum	Annual Inflow	million m³	8,183.00	9,993.00	9,660.00	10,791.00	**9,129.00**
	Annual Water Volume for Energy Generation	million m³	7,482.00	8,321.00	8,506.00	9,416.00	**9,228.00**
		million m³ (include EPS)	7,532.00[4]	8,548.94[3]	8,583.01[2]	9,496.38[1]	**9,291.93***
Bakun	Annual Inflow	million m³	40,373.00	55,730.00	49,894.00	50,884.00	**43,249.27**
	Annual Water Volume for Energy Generation	million m³	38,827.00[4]	36,965.72[3]	40,874.51[2]	41,636.95[1]	**44,213.59***
Total Annual Water Volume for Energy Generation		million m³	49,203.00[4]	49,489.05[3]	53,075.13[2]	54,667.53[1]	**57,017.86***
Total Annual Water Volume Intensity for Energy Generation (Hydro Main Grid gross energy)		m³/MWh	2,271.48	2,275.56	2,274.27	2,246.65	**2,260.64**

Paving the Way for a Green Energy Revolution

As we endeavour to create a more sustainable future, it is imperative to implement significant initiatives to reduce our carbon footprint while addressing the growing energy demands. Our commitment is centred on the efficient management of our resources, the mitigation of risks and the optimisation of power generation. In 2023, we implemented the following initiatives:

Long Kebuho Rainfall Station

A new rainfall station has been established at Long Kebuho, located upstream of the Bakun Hydroelectric Plant (HEP), marking a significant enhancement to the hydrometric network across the Murum-Bakun catchment area. The site work for its establishment commenced as planned on 8 December 2023 and was successfully completed by 12 December 2023, adhering to the designated timeline.

This newly established station significantly augments our capabilities for hydrological data collection, operating in real-time to provide crucial monitoring and recording of essential data. All collected data are securely stored in the Aquarius Database server, ensuring accurate and reliable access for ongoing and future analyses.

Long Kebuho Rainfall Station

GENERATION ASSET MANAGEMENT INITIATIVES

Men at Work at Murum HEP.

Generation Asset Assurance

- Attained the ISO55001:2014 Certification at all eight major power stations
- Completed essential procedures including Procedure, Practice, Guideline (PPG) – Bypass Management, Foreign Material Exclusion (FME) and Measuring Equipment Calibration & Verification
- Conducted Asset Health Condition Assessments across all major power stations and facilitated the closure of FM Global Risk recommendations, specifically addressing recommendations for Boiler & Machinery (105) and Fire Safety (115)

Enterprise Asset Management (EAM)

- Onboarded schedulers for coal plants
- Introduced a Document Controller role at SEB Power
- Increased training and improvements
- Optimised data and transactions, enhancing document registration through digitisation
- The SERAPI SAP S/4 projects is on schedule and integrated with other recognised modules

Generation Asset Assurance (GAA)

- Conducted a record number of 22 GENCON sessions, the highest participation since its inception in 2021
- Completed training in hydroelectric operations for all levels of hydroelectric operations
- Provided valuable support to Subject Matter Experts (SMEs) in structuring and developing their skills, reinforcing organisational capabilities and ensuring readiness to meet operational demands

ENHANCING THE PERFORMANCE OF OUR HYDRO PLANTS

Batang Ai HEP.

Batang Ai HEP

- Attained an availability factor of 79.94%, surpassing the targeted 77%, demonstrating robust operational reliability. The forced outage rate was maintained at 0.63%, below the targeted 1.00%
- Completed automation work for Units 1 and 4, and a major overhaul for Unit 1

Bakun HEP

- Surpassed its target, achieving an availability factor of 95.37%, exceeding the targeted 90%, underscoring its operational reliability. The forced outage rate remained low, averaging at 0.29%, well below the 1.00% target
- In 2023, we installed an Automatic Tube Cleaning System (ATCS) to optimise heat exchanger efficiency by automating cleaning processes and enhanced the ventilation system to mitigate hydrogen sulphide (H_2S) effects in critical areas. Units 2 and 8 also underwent preventive maintenance and inspection to bolster safety and reliability

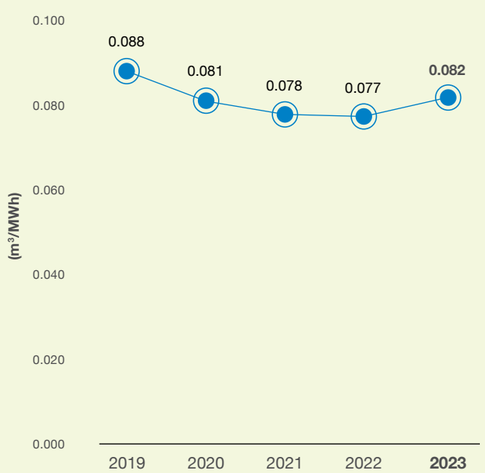
Water Withdrawal

In the reporting year, water withdrawal (municipal) escalated by +12% in 2023 from 2022 was due to heavy usage of water during construction activities. Our cooling processes at thermal power plants rely on water sourced from the sea.

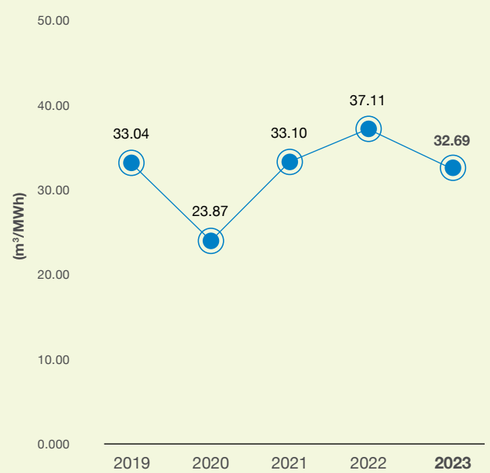
Plant Type	Source	Unit	2019	2020	2021	2022	2023
Coal	Municipal	m^3	2,204,029.00[4]	2,007,712.00[3]	1,965,834.00[2]	2,110,812.00[1]	**2,218,185.00***
	Sea Water or other natural water source	m^3	724,178,991.74[4]	569,688,758.40[3]	528,585,158.70[2]	507,079,011.12[1]	**440,665,880.40***
Natural Gas	Municipal	m^3	353,319.00[4]	279,765.00[3]	435,583.00[2]	434,769.00[1]	**621,529.00***
	Sea Water or other natural water source	m^3	241,935,030.72[4]	104,047,121.52[3]	491,928,176.88[2]	729,470,134.50[1]	**710,796,682.00***
Diesel	Municipal	m^3	6,896.13[4]	1,731.51[3]	4,417.00[2]	5,673.66[1]	**7,469.06***
	Sea Water or other natural water source	m^3	-[4]	-[3]	-[2]	-[1]	**-***

Water Withdrawal Intensity by Source (Thermal Plants MWh)	Unit	2019	2020	2021	2022	2023
Municipal Water Withdrawal Intensity (Thermal)	m^3/MWh	0.088	0.081	0.078	0.077	**0.082**
Sea Water or Other Natural Water Source Withdrawal Intensity (Thermal)	m^3/MWh	33.04	23.87	33.10	37.11	**32.69**

Municipal Water Withdrawal Intensity (Thermal)



Sea Water or Other Natural Water Source Withdrawal Intensity (Thermal)



Sarawak Energy and the Environment

2-27, 306-1, 306-2, 3-3

Sarawak Energy's Circularity Framework

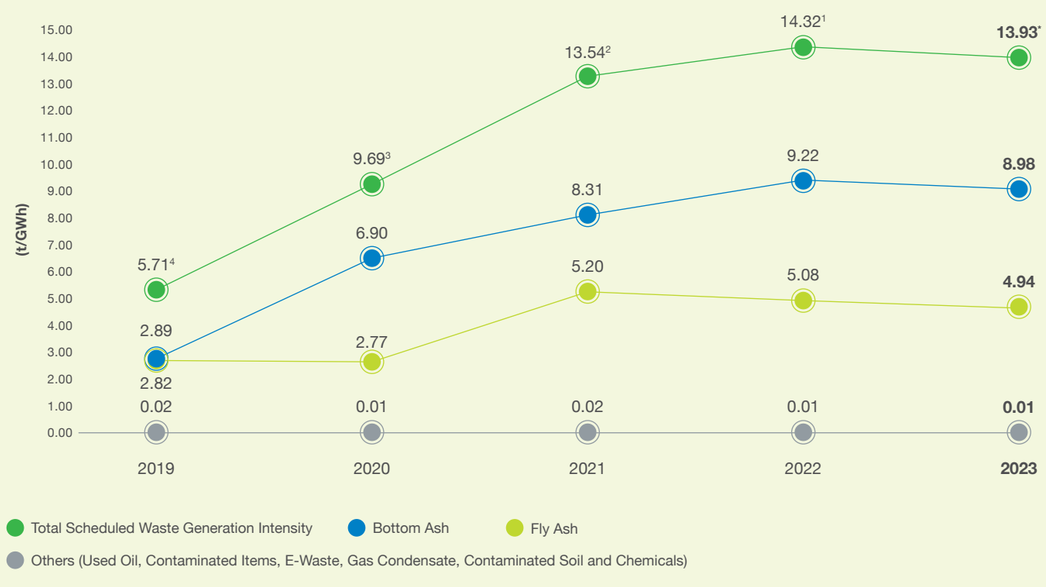
In addition to our emission reduction efforts, we strive to mitigate the impacts of our emissions by reducing and managing energy, waste and resource consumption. In the year under review, we established a Circularity Framework to support our Sustainability Strategy and Roadmap. This framework aligns with our commitment to sustainable development and enables all business units to implement circularity practices, maximising positive impacts while minimising negative environmental impacts. The framework focuses on five strategic goals:

Through this framework, we aim to support climate action beyond Sarawak Energy, advancing our organisation's transition towards a low-carbon economy.

Responsible Waste Management

In our commitment to environmental sustainability, we remain dedicated to the responsible disposal of our scheduled waste in accordance with the Environmental Quality (Scheduled Wastes) Regulation 2005. Monthly inventory reporting is consistently enforced across our operations, and we collaborate with external contractors for the collection and responsible disposal of our scheduled waste. In 2023, there were no instances of fines or penalties due to non-compliances with regulatory requirements.

Scheduled Waste Generation Intensity



Sarawak Energy and the Environment

2-27, 305-7, 3-3

Parameter	Unit	Year 2019	2020	2021	2022	2023
Total SO_x & NO_x Emissions						
SO_x	tonne	454.33	3,589.52	858.73	2,639.73	**3,060.32**
NO_x	tonne	2,307.27	5,433.16	2,251.75	3,528.49	**2,443.38**
SO_x & NO_x Emissions Intensity						
SO_x	kg/kWh	0.000017	0.00013	0.000028	0.000081	**0.000089**
NO_x	kg/kWh	0.000085	0.00020	0.000075	0.00011	**0.000071**

Ensuring Environmental Compliance

Sarawak Energy has set an ambitious goal of achieving 100% environmental compliance by 2023 as part of our commitment to Health, Safety and Environment (HSE) Excellence under our Key Focus Area (KFA). To align with this objective, we have implemented an Internal Environmental Compliance Audit (IECA) for all 11 of our major project developments that have received Environmental Impact Assessment (EIA) or Environmental Management Plan (EMP) approval. The IECA is designed to promote self-regulated environmental compliance and strengthen overall environmental management, fostering exemplary environmental practices in power project development.

The IECA serves as an early detection system for identifying non-compliance issues, ensuring that corrective actions are swiftly undertaken and preventive measures are established before any inspections by external third-party auditors or regulatory bodies such as the Natural Resources and Environment Board (NREB) or the Department of Environment (DOE). These audits are conducted bi-annually for substation, transmission line, coal mining and Samalaju Combined Cycle Power Plant projects, and annually for the Baleh Hydroelectric Project.

In 2023, all Sarawak Energy EIA projects successfully recorded zero penalties or fines from both Federal and State environmental authorities. However, on 13 January 2023, the NREB issued a stop work order for the Proposed Quarry B and Quarry C Licence for stone removal (Baleh HEP projects) at Batang Baleh, Ulu Sg. Putai, Kapit Division, Sarawak. This order was subsequently lifted on 20 April 2023.

Driving Compliance Through Environmental Training

To achieve environmental excellence across our operations, it is crucial to elevate the skills and knowledge of our contractors in environmental management and regulatory compliance. Therefore, we offer comprehensive training sessions and workshops covering a diverse array of topics relevant to our business and operational needs. These include environmental management practices, adherence to regulatory requirements, erosion and sediment control measures, and effective scheduled waste management.

During the year, we conducted training for the following:

Environmental Training for Project Sites

Organised by the EIA of the HSSE Department, the training encompassed a range of topics, including Environmental Management Guidelines for Construction Sites, Scheduled Waste Management Requirements, and Erosion and Sediment Control. A total of 194 participants attended the training sessions, to integrate robust environmental management practices into daily operational routines, allowing contractors to minimise environmental impacts through their work. Additionally, it provides an opportunity for contractors and Sarawak Energy to collaboratively address environmental challenges, engage in problem-solving and implement proactive measures for environmental improvement, particularly in areas such as scheduled waste management, erosion and sediment control at project sites. This initiative underscores Sarawak Energy's commitment to achieving 100% environmental regulatory compliance and reinforces our role in ensuring meticulous planning, execution, monitoring and auditing of environmental mitigation measures on-site.

Environmental Training for SKG 4 Project Delivery Academy

Approximately 50 participants attended the environmental training session held on 22 August 2023. This event marked the first in-person environmental training of 2023, organised by the EIA section of the HSSE Department, in collaboration with the Project Delivery Department and Sejingkat Power Corporation of SEB Power. The transition to a physical format underscores the importance of this training in refreshing and reinforcing participants' knowledge of effective environmental management practices, particularly concerning the management of scheduled waste at project sites.

Sarawak Energy and the Environment

2-27, 3-3

In addition to our training initiatives, we also took steps to ensure compliance with environmental laws and regulations by enhancing and establishing comprehensive guidelines. In 2023, we updated the Environmental Management Guidelines for Construction to reflect current best practices. We also introduced the Erosion and Sediment Control Plan (ESCP) Guideline in Q4 of 2022 and endorsed the Environmental Management Guidelines for Coal Mining in November 2023. These measures underscore our commitment to maintaining high standards of environmental compliance and sustainable practices across our operations.

Biodiversity Conservation

Biodiversity conservation is essential for maintaining the health of our planet and safeguarding the well-being of humanity. It is a collective responsibility that demands unified efforts to protect and restore the diversity of life on Earth. This includes creating protecting areas, restoring degraded ecosystems, managing the use of natural resources and mitigating the impacts of climate change. In alignment with this vision, Sarawak Energy is committed to preserving critical flora and fauna within Sarawak.

Our Biodiversity Conservation Committee (BCC) is responsible for coordinating and enhancing biodiversity conservation initiatives throughout Sarawak Energy. It bolsters our capacity in research and conservation, in line with our objectives and international best practices, including the HSAP[a], HESG[b], ESMS[c] and the UN SDGs.

Furthermore, the BCC actively advocates for and recommends policies to relevant government stakeholders, while promoting environmental and social innovation in line with international best practices and Sarawak's strategic vision. The BCC is chaired by department heads who report directly to the Group Executive Committee and convene quarterly.

Notes:
[a] *Hydropower Sustainability Assessment Protocol.*
[b] *Hydropower Sustainability ESG Gap Analysis Tool.*
[c] *Environmental and Social Management System.*

Group Executive Committee

Biodiversity Conservation Committee

Chairman : SVP HSSE

Secretariat : EIA & Environment

Head of HSE

Head of Research & Development

Head of Sustainability

Asset Owner : Head or Nominees of SEB Power, SESCO, SER

Head of Project Delivery or Nominees

Objectives of the BCC

- **To streamline biodiversity conservation initiatives across the organisation, fostering environmental excellence**
- **To optimise positive impacts and mitigate adverse impacts of our projects and operations on biodiversity through the implementation of effective conservation measures**
- **To build internal capacities and explore emerging areas of biodiversity research, laying a strong foundation for our conservation efforts**
- **To promote, design, implement and oversee biodiversity conservation measures in alignment with regulatory standards and international best practices, benchmarking against global organisations such as the IUCN, among others**

Sarawak Energy and the Environment

3-3

BCC Key Focus Areas

- **BIODIVERSITY CONSERVATION POLICY & GOVERNANCE**
- **BIODIVERSITY KNOWLEDGE CREATION & MANAGEMENT**
- **PROTECTION & CONSERVATION OF BIODIVERSITY**
- **CONSERVATION EDUCATION & PUBLIC AWARENESS (CEPA)**
- **COLLABORATION & PARTNERSHIP IN BIODIVERSITY CONSERVATION**

In 2023, the BCC updated its roadmap and targets to further benchmark against international good practices, safeguarding its licence to operate and accelerating growth. The review and update of the roadmap was conducted through a day-long workshop with 25 participants from across departments, including HSSE, R&D, Corporate Services, Sustainability, Project Delivery, SEB Power and Sarawak Energy Resources. The workshop aimed to form collaborative action plans and initiatives aligned with the respective strategies outlined under the roadmap for 2023 – 2024, as well as discussions on roadmaps and deliverables for 2025 and beyond.

Focusing on policies, procedures and guidelines for biodiversity conservation, the roadmap addresses environmental impacts and the management of biodiversity conservation across all business units. It also explores innovative conservation technologies and new methodologies through dedicated research, and it actively advocates for the gazettement of national parks within hydropower catchment areas.

Updated Roadmap and Targets (2023)

Environmental Excellence: Meeting International Good Practices, Maintaining our Licence to Operate and Accelerating Growth

2023-2024	2025 and Beyond
Centre of Excellence for Biodiversity Conservation (Strengthen and Deepen the Framework/Impact)	**Breaking New Ground (Explore Potential Business Diversification)**
• Develop an integrated biodiversity ecosystem and value network • Explore potential partnerships and collaborations with benchmark organisations, higher national and international learning institutes and NGOs • Strengthen existing governance framework on biodiversity conservation and embed biodiversity conservation as part of ESMS in relevant projects and business of Sarawak Energy	• Develop Biodiversity Digital Dashboard • Advocate and recommend gazettement of high conservation value areas within hydropower catchment or Sarawak Energy operation area • Explore new technologies and conservation methodologies through research • Develop specialised disciplines of Subject Matter Expert (SME) and experts who can provide expert services beyond Sarawak Energy • Leverage ecotourism as potential business diversification to alternative sustainable livelihood for communities

Sarawak Energy and the Environment

304-1, 304-2

Corporate Biodiversity Policy, Procedure & Guideline (PPG)

Established in 2022, the PPG is aligned with the BCC Roadmap and Sarawak Energy's Key Focus Areas for achieving HSSE Excellence and exceeding environmental compliance. The PPG outlines the company's policy statement and provides comprehensive guidelines and procedures to guide the organisation, stakeholders and Community, Environment and Public Affairs (CEPA) in identifying critical biodiversity issues and managing impacts through various approaches. These approaches include the Biodiversity Management Plan, Biodiversity Monitoring and Evaluation Plan and Biodiversity Action Plan.

The PPG will be implemented throughout the entire lifecycle of projects, guided by key reference documents such as the International Hydropower Association's (IHA) guide on Biodiversity and Invasive Species. It is accessible to all Sarawak Energy entities, projects and employees, embedding biodiversity excellence in project development and operational activities.

In 2023, we rolled out the PPG for internal stakeholders through various sessions. These sessions were attended by colleagues from SESCO, SEB Power, Sarawak Energy Resources, Project Delivery, Corporate Communication, Research & Development, Sustainability and HSSE. The primary objective was to inform and brief our internal stakeholders on the content of the PPG, as well as to clarify the roles and objectives of the BCC.

Nurturing Biodiversity in Our Projects

During the reporting period, we implemented significant efforts to enhance our ongoing projects and initiated various activities to disseminate knowledge and raise awareness on the importance of biodiversity conservation.

MURUM CONSERVATION GARDEN

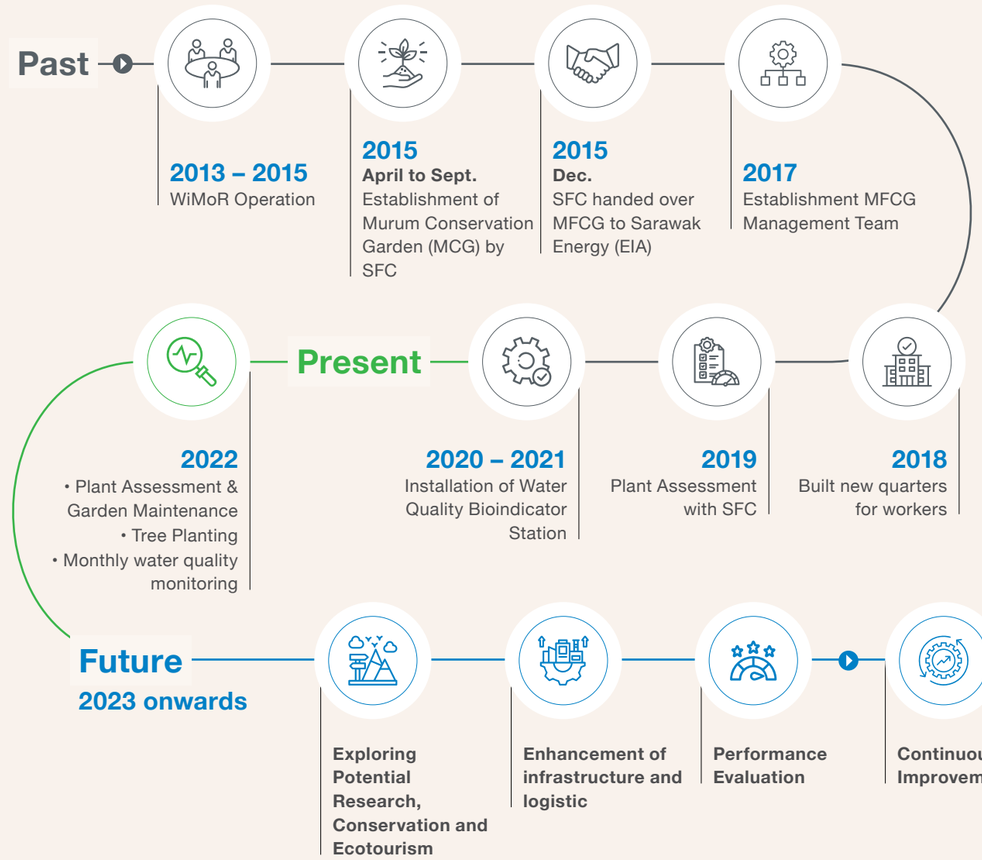
- In 2015, a collaborative partnership was established with the Sarawak Forestry Corporation (SFC) to develop and maintain a conservation garden, which houses a diverse collection of significant plant species
- In 2022, an additional 200 plants were introduced, increasing the total to 1,728 plants
- Currently there are 28 Ensurai and 10 Gaharu seedlings placed under nursery care. Additional seedlings will be planted in 2024
- The delegation from Balai Taman Nasional Kayan Mentarang (BTNKM) commemorated their visit by planting 500 tree seedlings in September 2023
- Going forward, we will explore the feasibility of collaborating on research initiatives for the Conservation Learning Hub, investigate the potential for ecotourism and educational tourism, while enhancing infrastructure and logistics

Types of Plants	Total as of 2022	Target Planted in 2023
Trees		
Gaharu	363	30
Ensurai	310	50
Tongkat Ali	128	10
Belian	5	10
Keruing	5	10
Meranti	20	20
Nyatoh	5	10
Engkabang	15	20
Non - Trees		
Orchids	280	20
Ethno - Botanical Plants	154	10
Bamboo	243	10
Total	**1,528**	**200**
Overall Total		**1,728**

Sarawak Energy and the Environment

3-3

Roadmap of Murum Conservation Garden



Sarawak Energy and the Environment

413-1, 3-3

SUNGAI LEKASI TAGANG SYSTEM

- The local community actively conducts regular fish stock assessments and oversees the controlled fishing system known as Tagang
- Sarawak Energy has collaborated closely with the Department of Agriculture (DoA) to empower the local community with essential skills and knowledge to ensure project success. This partnership has facilitated regular fish stock assessments, Ensurai tree planting and skills development initiatives within the community
- The Tagang committee has identified a need for additional training and exposure for all members and have proposed restructuring the committee. Consequently, on 5 December 2023, Sarawak Energy and the Department of Agriculture (DoA) conducted a dialogue session with the communities to assess their perspectives through surveys and questionnaires
- The survey indicates that 100% of respondents are satisfied with the implementation and support provided by the local government and Sarawak Energy. Findings from the surveys also shows that 100% of the community members have benefitted from the implementation of the Sg. Lekasi Tagang system

Fish Stock Assessment 2023

Fish Growth Measurement record (as of 2023)				
	Average Weight (gm)			Growth Rate (%) Based on 2021
Species	2021	2022	2023	
Semah	765.00	781.30	**795.00**	3.92%
Kulong	418.30	406.80	**438.30**	4.78%
Adong	220.30	266.70	**300.30**	36.31%
Boeng	-	-	**210.00**	-

Note: *Yearly data on fish growth trend (Average Weight as of 2023).*

Sarawak Energy and the Environment

3-3

SARAWAK ENERGY R&D INITIATIVES ON BIODIVERSITY CONSERVATION

Since 2013, Sarawak Energy has actively engaged in comprehensive environmental and biodiversity assessments within its hydropower project areas. This initiative, known as the Hydropower Environmental Sustainability Programme (HESP), has played a pivotal role in minimizing negative environmental impacts and maximizing positive contributions to the ecosystem. Building on the success of HESP, Sarawak Energy further solidified its commitment to environmental research and monitoring through the Sarawak Energy Hydro Environmental Sciences Research Blueprint which was established in 2018. This blueprint provides a strategic roadmap for enhancing the scientific foundation of the company's environmental initiatives.

Recognizing the transformative potential of technology, Sarawak Energy has implemented a range of digital and technological solutions to enhance environmental monitoring and research. This integration has significantly improved the efficiency, accuracy, and scope of our environmental data collection and analysis.

Sarawak Energy utilises advanced technological tools and applications to monitor wildlife populations and habitat conditions within the project areas. These innovative approaches provide valuable data for understanding ecological responses to hydropower development and informing sustainable management practices. The adoption of drones for aerial surveys, remote sensors for real-time data acquisition, camera traps for wildlife monitoring, and eDNA analysis for biodiversity assessment has allowed for more precise and comprehensive environmental monitoring.

eDNA analysis is a powerful non-invasive technique that detects species by extracting their DNA from environmental samples. This innovative approach allows us to assess species presence and distribution, particularly for elusive aquatic species that are challenging to observe directly.

eDNA Sampling Using Smith-Root Sampler at Bakun HEP Reservoir.

Release Tagged Fish at Sg. Gayum, Baleh.

Sarawak Energy and the Environment

2-29, 3-3

SARAWAK ENERGY BIODIVERSITY DAY

- In conjunction with International Biodiversity Day celebrated annually on 22 May, Sarawak Energy successfully organised a virtual half-day biodiversity awareness programme on 28 June 2023. Themed "Biodiversity Matters: Be Part of the Solution", the event aimed to raise awareness about biodiversity among Sarawak Energy staff
- The programme featured knowledge-sharing sessions and talks by various speakers from Forest Research Institute (FRIM), Forest Department of Sarawak (FDS) and Sarawak Forestry Corporation (SFC) on the importance and management of biodiversity, in celebration of the International Day of Biological Diversity (IDB)

PERJANJIAN KERJASAMA STRATEGIS (PKS) WORKSHOP ON BIODIVERSITY MANAGEMENT FOR MIHEP

- A workshop to finalise the Perjanjian Kerjasama Strategis (PKS) between Balai Taman Nasional Kayan Mentarang (BTNKM) and PT Kayan Hydropower Nusantara (PT KHN) was held from 1 to 3 February 2023 in Bogor, Indonesia
- The workshop aimed to reach an agreement with BTNKM on the technical and legal aspects of the Biodiversity Management and Monitoring Plan for managing the impacted area within the national park
- The BCC Working Level Team (EIA and R&D), along with representatives from Adaro, KPP and BTNKM, worked on finalising the Rencana Pelaksanaan Program (RPP), Rencana Kerja Lima Tahunan (RKL) and Rencana Kerja Tahunan (RKT) focused on biodiversity aspects
- Sarawak Energy Legal, Adaro Legal, the appointed Legal Counsel, Adnan Kelana Haryanto & Hermanto (AKHH) and the Direktorat Jenderal Konservasi Sumber Daya Alam dan Ekosistem (KSDAE) legal team worked on finalising the legal agreement of the PKS. The PKS between BTNKM and PT KHN was finalised and signed on 3 February 2023
- This strategic cooperation under Indonesian law aims to manage the impact of the Mentarang Induk HEP reservoir inundation in TNKM, covering an area of 243 hectares

STUDY VISIT BY BALAI TAMAN NASIONAL KAYAN MENTARANG (BTNKM) DELEGATION

- The Sarawak Energy team, consisting of members from HSSE, R&D, Business Development and Project Delivery of MIHEP, hosted a study visit for representatives from Balai Taman Nasional Kayan Mentarang (BTNKM) and Kementerian Lingkungan Hidup dan Kehutanan Indonesia
- This study visit was part of the activities under the Perjanjian Kerjasama Strategis (PKS) between PT KHN and BTNKM, focusing on knowledge sharing regarding biodiversity and social management for hydropower development. The event involved activities including a biodiversity knowledge sharing session, visits to Sarawak Energy's Species Survival Programme and Bakun Hydropower Station, tree planting activity at the Murum HEP reservoir area and community engagement session on the Bakun HEP development
- These programmes and activities were organised to provide the delegation with relevant information and references to facilitate their preparation for executing the terms and conditions specified in the PKS signed in February 2023

Sarawak Energy and the Environment

3-3

Promoting Eco-Consciousness

We are committed to promoting environmental awareness among communities and stakeholder groups. During the year, we implemented several initiatives to instil a sense of responsibility among people, encouraging sustainable practices and addressing the current environmental challenges to ensure a sustainable tomorrow.

SARAWAK ENERGY TREE PLANTING, PROTECTION AND HABITAT RESTORATION CAMPAIGN 2021-2030

- This campaign is a comprehensive 10-year initiative aimed at planting and/or protecting 500,000 trees across Sarawak by 2030
- Sarawak Energy conducted a workshop on our Tree Planting, Protection and Habitat Restoration Campaign 2021-2030 in collaboration with the Forest Department Sarawak (FDS). The workshop aimed to generate and explore ideas for enhancing collaboration between the two parties to achieve our ambitious tree planting and protection goals
- A tree planting programme "Leaf Life 1.0" was also jointly organised with UPMKB at Nirwana Forest, where participants planted 700 plant saplings from various species including Kapur (*Dryobalanops beccarii*), Meranti Tembaga (*Shorea leprosula*) and Meranti Batu (*Shore dasphylla*)
- In 2023, we have surpassed our annual target by planting and protecting a total of 70,959 trees:

54,337
Trees Planted

16,622
Trees Protected

Tree Planting Programme "Leaf Life 1.0".

Sarawak Energy Celebrates Sarawak-Level Earth Day 2023 Themed "Invest in Our Planet".

Sarawak Energy and the Environment

3-3

GO GREEN – BEACH CLEANING PROGRAMMES

- **Beach Cleaning Programme at Lutong Beach, Miri –** The HSSE department organised a beach cleaning event which was participated by approximately 160 volunteers, including Sarawak Energy staff, Miri City Council (MCC) members and students from Curtin University. A total of 622.40kg of waste was collected at Lutong Beach
- **Beach Cleaning Programme at Kala Dana Beach, Mukah –** Around 70 participants from Sarawak Energy joined forces with staff from the Dalat & Mukah District Council (MDDM) in this initiative, collecting a total of 410.57kg of waste

Beach Cleaning Programme with the Community.

BORNEO ENVIRONMENT CONFERENCE (BENCONF) 2023

- The conference was held at the Imperial Hotel, Kuching, from 15 to 16 November 2023 under the theme "Knowing and Managing Climate Change". This collaborative event was organised by the Natural Resources and Environment Board Sarawak, Institut Kimia Malaysia (IKM) Sarawak Branch and Sarawak Energy's HSSE Department, in partnership with the Ministry of Energy and Environmental Sustainability Sarawak (MEESty)
- BEnConf 2023 aimed to raise awareness among stakeholders and the public about the causes and impacts of climate change. It also focused on sharing adaptation strategies to mitigate climate change effects and highlighted community-led initiatives in response to climate challenges

Borneo Environment Conference (BEnConf) 2023.

ECOLUTION CHALLENGE 2023

- Ecolution Challenge 2023 returned for its second season, presenting a new array of challenges and enticing rewards. This year's theme, "Green Starts from Workplace", emphasised how employees can promote sustainability and cultivate an eco-friendly lifestyle within their work environment
- Five new challenges were introduced this year, involving a tree-planting challenge, terrarium building challenge, plogging challenge, carpooling challenge and photography challenge. A total of 201 staff participated in this year's event

Green Starts in the Workplace.

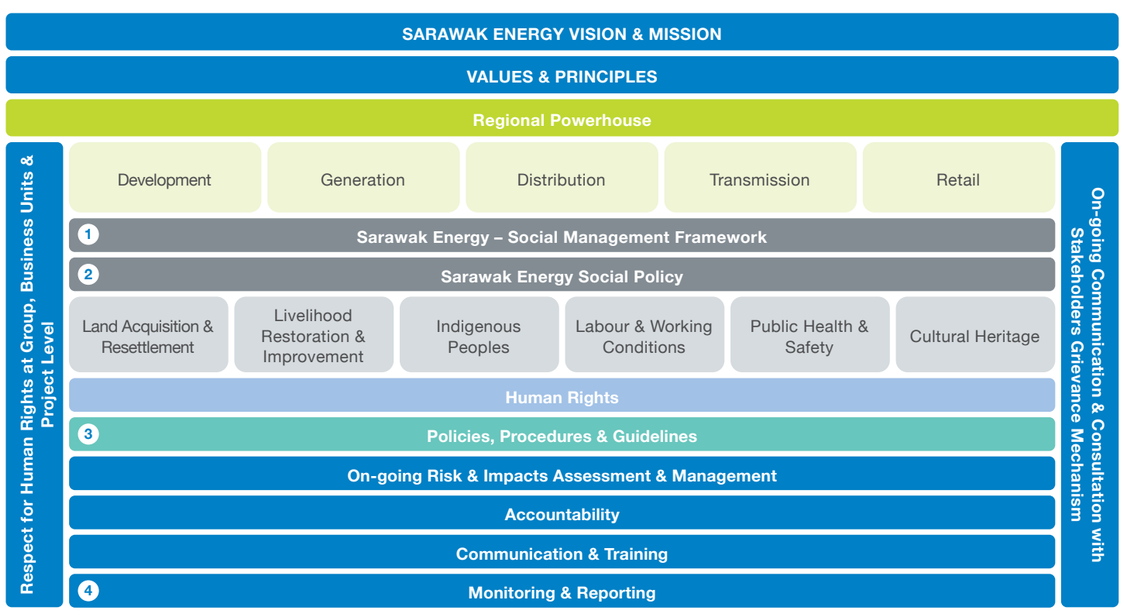
Sarawak Energy and the People

2-24

As an energy provider, our stakeholders, employees, vendors and the communities where we operate, are crucial to our business, supplying the resources, insights and support essential for our success and long-term viability. To this end, we are committed to engaging with our stakeholders and managing social impacts and risks holistically to promote sustainability.

Empowering Our Approach to Social Governance

In December 2022, Sarawak Energy established its Social Management Framework which guides us in the management of social risks and impacts arising from our operations and activities. This framework, approved by the Group Executive Committee (GEC) and incorporates Sarawak Energy's Social Policy, outlines our corporate commitments, guiding principles and overall strategy in relation to social aspects.



1 **Foundation to systematic & strategic management of social risk & opportunities**
- Strengthen governance & accountability

2 **Corporate commitments**
- Guiding principles
- Basis for company's overall strategy in respective social aspects

3 Required **measures to be implemented** (with additional guidance for decision making) in accordance with local & international good practices

4 Against meaningful **social performance indicators**

Sarawak Energy and the People

3-3

Background

- Despite having a strong foundation and reputation in terms of Corporate Social Responsibility, the Company's management of social issues that (1) are impacted by our activities and (2) affect our competitiveness was inadequate.
- There is a need for a corporate structure adjustment to strengthen the governance and accountability for social sustainability, through:
  - Establishment of specific function at corporate level to manage & monitor social impacts & performance
  - Firming up commitment on social sustainability
- The Social Management Framework (SMF) was approved by the Group Executive Committee (GEC) on 5th December 2022, after several rounds of stakeholder engagements and discussions.

Objective

- With the objective of reaching higher level of social sustainability, Social Management Framework is developed to provide an overview of the way in which we should proactively manage our social risks and impacts to ensure sustainable social development.
- The document forms a foundation for self-governance and provides key principles in the way we manage our social risks in a structured, holistic and integrated manner.
- Apart from strengthening the governance and accountability for social sustainability, the SMF also aims to:
  - Form the foundation towards a strategic management of the business' social risks and opportunities;
  - Provide better transparency in the management of material social issues; and
  - Provide an overview on how to meet stakeholders' and business growth requirements (e.g., financiers, investors and rating agencies) on international best practices.

Key Milestones

Key Milestone	Date
Establishment of Social Performance (Interim) Team	1 March 2022
Establishment of ESG Governance & E&S Performance Unit	1 May 2023
Approval of the following social policies, procedures and guidelines: **1. Sarawak Energy Social Policy** **2. Land Acquisition and Resettlement Policy, Procedures & Guidelines (PPG)** **3. Livelihood Restoration & Community Development PPG** **4. Cultural Heritage PPG**	18 May 2023

OUR APPROACH TO SUSTAINABILITY

Sarawak Energy and the People

2-12, 3-3

Governance & reporting structure for social performance of Sarawak Energy Berhad (per approved SMF)

Roles	Responsibilities
(Management Oversight) **Sustainability Committee (i.e., Group Sustainability Committee[1] & Board Sustainability Committee[2])**	• Report on social performance to Board • Oversee management processes to **ensure compliance** with social policies, procedures and guidelines • Advisor to Sarawak Energy's Board of Directors on matters pertaining **sustainability (transition & physical) risks**, including social sustainability
(Corporate Function) **ESG Governance, E&S Performance Unit**	• Lead the application and embedding of social policies, procedures and guidelines in respective business unit across all social aspects • Provide guidance and strategic support to other relevant business units • **Monitor, assess and review overall social performance** against appropriate **KPIs**, at corporate level • Provide **periodic reporting** and **structured & systematic documentation** to top management • Update top management on the key social performance issues, risks and area of improvement
(Business Units)	• **Identification, assessment and management** of social risks and impacts of activities, and/or opportunities/contributions • Develop social management plan and implement mitigation measures and controls • **Monitor and track delivery and evaluate effectiveness** of action plans/mitigation measures • **Checking of progress and outcomes** towards meeting long-term social objectives • Internal and external (where applicable) reporting to gain feedback • Implement continuous improvement measures/corrective actions

Notes:
[1] Formed in 2023, succeeding the CSR Steering Committee.
[2] Formal establishment of the Board Committee is expected by 2024.

Sarawak Energy Social Policy[a]

- **Land Acquisition & Resettlement PPG**
- **Livelihood Restoration & Community Development PPG**
- **Cultural Heritage PPG**
- **Disclosure Policy**
- **Stakeholder Management Policy**

Note:
[a] These policies, procedures and guidelines are non-exhaustive.

Additionally, our Social Policy aligns with our mission to uphold the highest ethical and corporate standards, integrate best practices into our operations and proactively manage social risks. We believe that our policies, procedures and guidelines will establish clear corporate commitments, reduce inefficiencies and enhance the overall social performance of our people.

Sarawak Energy and the People

2-7, 401-1, 3-3

Cultivating the Best Talent at Sarawak Energy

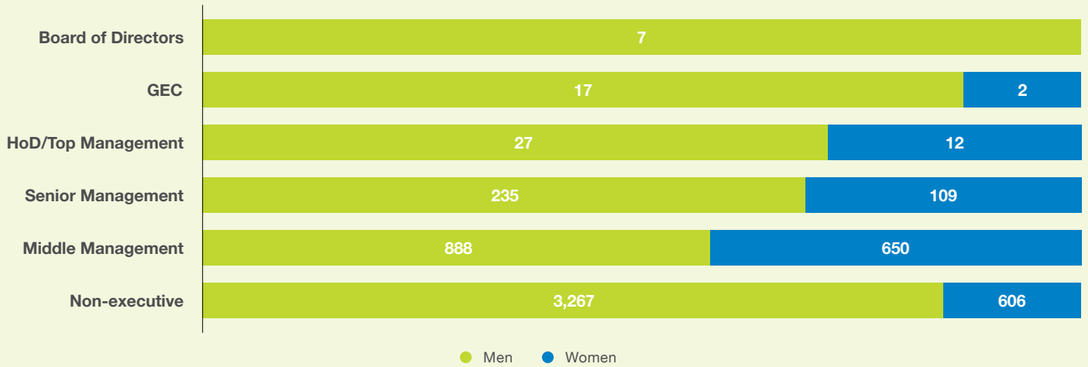
Our employees are the cornerstones of our business, driving innovation, productivity and growth. Their skills, dedication and hard work are crucial for achieving our corporate goals and delivering exceptional products and services. Consequently, we invest in their training, development, safety and well-being to cultivate a motivated and engaged workforce. This ensures higher morale, lower turnover and enhanced performance. We firmly believe that the success and sustainability of our organisation are tied to the commitment and capabilities of our talent pool.

Promoting Workplace Equality

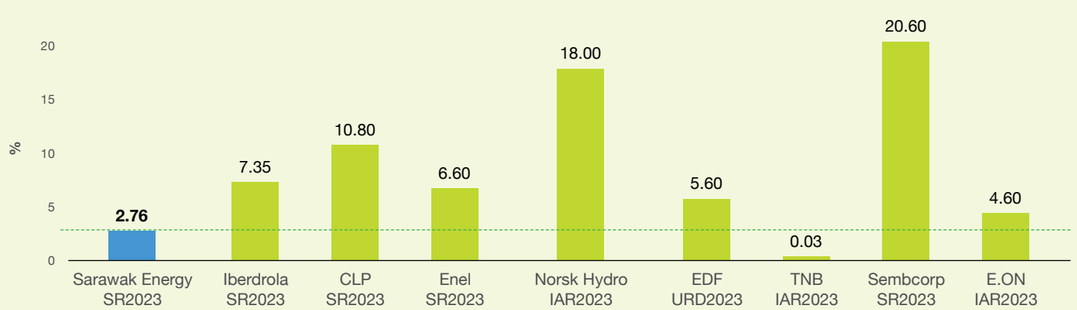
In 2023, our workforce grew from 5,537 to 5,809 employees, with 437 new hires joining our team. Among these, 130 were women and 307 were men. Throughout the year, we experienced a turnover of 165 employees. For a detailed breakdown of new hires and staff turnover by gender and age, please refer to pages 239 to 241 in Our Performance Data section.

The statistics below reflect our workforce growth:

Employee Breakdown by Gender for Year 2023



International Comparison of Turnover Rate for Power Utility Companies



Note:
Published Annual, Sustainability & Integrated Report 2023.

Sarawak Energy and the People

2-7, 404-1

At Sarawak Energy, Diversity, Equity and Inclusiveness (DEI) is a key component of our success as it impacts overall employee experience and engagement. We employ a multi-faceted approach to embedding Diversity, Equity, and Inclusion (DEI) into our processes and champion it as a key initiative. The following are some of the ways we promote DEI in our organisation:

DEI is a guiding principle in succession planning and we have set a target of 50:50 gender and ethnic representation

We have had a DEI Framework in place since 2021, ensuring that we provide an inclusive work environment

59 DEI ambassadors are actively raising awareness and addressing biases in the workplace

The DEI Community of Practice facilitates ongoing learning, shares best practices and collaborates in innovative DEI initiatives throughout the organisation

Our Accelerated Development Programme (ADP) achieved our DEI target with a gender balance of 50% male and 50% female and an ethnic representation of 48% non-Bumiputera and 52% Bumiputera in 2023

Our DEI efforts are reflected in the positive feedback from our annual employee survey, with an increasing trend over the past three years culminating in an 84% DEI SEES score in 2023

Empowering Women in the Workplace

The Sarawak Energy Leading Women Network (SELWN) continues to champion a workplace with equal opportunities for women. In support of the Sustainable Development Goal (SDG) to achieve 30% female representation in decision-making positions, we currently have 29% of women in leadership roles, demonstrating significant progress towards our target.

Highlights from SELWN activities in 2023 include:

Benchmarking our women empowerment programmes against other industry leaders

Continuing the Women Mentoring Women programme, which began in 2019 and now includes 70 mentors and 187 mentees

Collaborating with the Employee & Industrial Relations division to promote safe working environments through the Zero Tolerance for Sexual Harassment initiative across the organisation

Employee Learning & Development

Learning and development (L&D) is vital for fostering employee engagement and supporting their professional growth. We are committed to enhancing employees' skills and knowledge to enable them to perform their jobs more efficiently, while ensuring they remain competitive in the workplace. In 2023, we dedicated 283,547 hours to learning, with 162,305 of those hours conducted online/virtually. The tables below provide a detailed breakdown of participation across different categories.

Total and Average Training Hours

Year	2020	2021	2022	2023
Total Sarawak Energy Employees	5,381	5,442	5,537	**5,809**
Total Employees Who Attended Learning Activities	2,405	5,062	5,487	**5,750**
Total Learning Hours	78,103.06	166,573.86	220,368.81	**283,547**
Total Online/Virtual Learning Hours	51,556 (66% of total learning hours)	156,783.61 (94% of total learning hours)	167,332.22 (76% of total learning hours)	**162,304.96 (57% of total learning hours)**
Learning Hours per Employee (Annual)	14.51	30.61	39.79	**48.81**

Sarawak Energy and the People

2-7, 404-1

Total Learning Activities by Category

	% of Learning Hours			
Year	**2020**	**2021**	**2022**	**2023**
Technical	52	43	58.64	**56.77**
Business	39	45	29.76	**30.54**
Leadership	7	10	7.57	**7.32**
Conferences	2	2	4.03	**5.37**

Notes:
1. Y2020 data was revised to reflect additional learning hours recaptured during internal L&D learning data cleansing exercise in Y2021.
2. Starting Y2021 data includes formal learning programmes, knowledge sharing and learning activities.

Summary of Overall Average Hours of Training by Employee Category

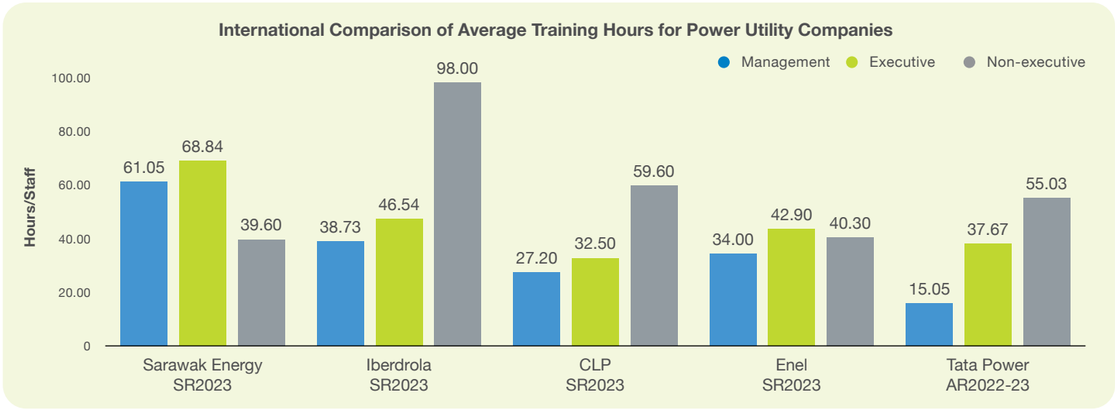
Year		**2019**	**2020**	**2021**	**2022**	**2023**
Total Number of Employees by Category	Management	145	54	49	352	**398**
	Executive	1,538	1,468	1,578	1,371	**1,538**
	Non-executive	3,338	3,864	3,815	3,814	**3,873**
Total Hours of Training by Category	Management	3,269.00	1,505.80	1,971.82	25,704	**24,299**
	Executive	28,932.00	40,945.16	87,115.35	70,987	**105,877**
	Non-executive	57,864.00	35,652.10	77,486.69	123,678	**153,371**
Average Hours of Training by Category	Management	22.54	27.89	40.24	73.02	**162.00**
	Executive	18.81	27.89	55.21	51.78	**68.84**
	Non-executive	17.33	9.23	20.31	32.43	**39.60**

Average Hours of Training Recorded by Category and Gender

		2021		**2022**		**2023**	
Year		**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Management	Average	31.10	53.02	70.52	79.08	**56.03**	**72.29**
	Total Training Hours	1,335.60	636.22	17,559.38	8,144.83	**15,407.09**	**8,892.24**
	No. of Employees	37	12	249	103	**275**	**123**
Executive	Average	54.62	56.13	53.20	49.79	**70.03**	**67.21**
	Total Training Hours	52,708.67	34,406.68	42,557.97	28,428.67	**62,187.41**	**43,689.70**
	No. of Employees	965	613	800	571	**888**	**650**
Non-executive	Average	19.14	26.47	33.51	26.65	**40.86**	**32.79**
	Total Training Hours	61,341.71	16,144.98	107,661.60	16,016.34	**133,502.98**	**19,867.89**
	No. of Employees	3,205	610	3,213	601	**3,267**	**606**

Sarawak Energy and the People

404-1, 404-2



Note:
Published Annual, Sustainability & Integrated Report 2023.

People Development

We have established a comprehensive Talent Management Excellence Roadmap which ensures that we invest in the development of our people. This approach allows us to implement effective initiatives that nurture talent across various segments within the organisation, equipping our workforce with the essential skills needed to thrive in a rapidly changing work environment. Our strong organisational learning culture has shown significant growth in recent years, as evidenced by the consistent increase in corporate-wide learning hours since 2020. In 2023, 57% of these learning hours were conducted online, underscoring our dedication to embracing digital learning methods.

During the year, we implemented the following initiatives:

Talent Management Excellence (TME) & People Strategy

To empower our workforce with the right skills, knowledge and experiences, we established Talent Management Excellence (TME) Key Focus Areas. The TME provides a holistic approach in talent management through a 2023-2028 Game Plan themed 'Making TME Contagious', which aims to build competencies and expertise, inspire sustainable leadership, enhance employee well-being, provide recognition and reward and cultivate a learning mindset. TME's People Strategy is **Acquire, Develop and Deploy**, focusing on the acquisition, development and deployment of talents and into roles that maximise their potential.

Sarawak Energy and the People

404-2

A

ACQUIRE

Talent acquisition is key to building a robust workforce to meet current and future demands. To this end, we invested in the following initiatives:

- **Scholarship**

  We awarded scholarships to 207 exceptional students and employees, aiming to cultivate future leaders across diverse academic disciplines. Among them, 16 recipients are Sarawak Energy employees, who have benefitted from educational opportunities to enhance their skills. Since 2014, Sarawak Energy has granted a total of 1,058 scholarships, with a remarkable 87.75% of bonded scholars subsequently joining our organisation. These initiatives empower Sarawak's youth, enabling them to fulfil their potential and contribute to the region's development in alignment with the Sarawak Government's Post COVID-19 Development Strategy (PCDS 2030).

  In 2023, RM16 million was allocated for undergraduate and postgraduate scholarships and RM5 million for UNITEN's diploma programme. This diploma scholarship programme supports 44 SPM leavers in fast-tracked courses and workplace learning relevant to the power utility industry. Notably, the first batch of 27 Diploma in Electrical Engineering recipients from UNITEN successfully completed their 2.5-year programme, mandatory apprenticeship and obtained L1 Chargeman and First Aid certifications.

- **Internship**

  At Sarawak Energy, our internship programme is a key component of our corporate social responsibility, aimed at nurturing students and giving them real-world experiences within our organisation. In 2023, we welcomed 775 interns into various departments, providing valuable exposure and cultivating a dynamic and inclusive workforce. This programme is crucial to our talent strategy, ensuring that we develop and maintain a strong pool of skilled individuals. Additionally, in 2023, we hired 90 interns into our organisation, demonstrating our commitment to continuous talent development.

- **Welcome to Sarawak Energy (SE01)**

  To foster an enterprise-first mindset among our employees, we provided integrated blended learning experiences to enhance technical, safety, leadership and commercial skills. As a result, over 650 employees benefitted from these comprehensive programmes. We also integrated 410 new joiners into Sarawak Energy through our Welcome to Sarawak Energy (SE01) programme, ensuring they align with our organisational values.

- **Employee Satisfaction from Onboarding and Integration**

  Our commitment to continuous improvement is evident in the results of our recent onboarding survey, which achieved a satisfaction rate of 87%. We remain dedicated to further refining and enhancing our onboarding processes to ensure an exceptional experience for all our talent.

- **Sapphire Young Professional Network**

  A two-year programme designed for Executive 1 employees with less than two years of tenure at Sarawak Energy, this initiative focuses on the holistic growth, development and networking opportunities within the organisation. In its inaugural year in 2023, we welcomed 241 participants, focusing on themes such as individual development, business acumen, environmental and societal contributions.

OUR APPROACH TO SUSTAINABILITY

Sarawak Energy and the People

404-2

D

DEVELOP

Tailoring development programmes to our employees' needs starts with their Individual Development Plan (IDP). The IDP allows employees to track their career development, capture key insights from discussions with Line Managers and prioritise action plans to close competency gaps. In 2023, we surpassed our TME target of 95% IDP completion, achieving 98%. Our IDP works alongside the Competence Assurance Framework (CAF) and Competence Assurance (CA) Assessment to support career development. Together, these tools help employees plan their career progression. In 2023, we achieved a 93% CAF assessment rate, the highest in the last three years, showcasing our employees' proactive approach and commitment to growth.

This focus on development has led to an increase in staff progressions in 2023, with 52% of progressions for Non-Executives and 48% for Executives. Additionally, we have seen a continuous rise in the progression of female talent over the past three years: 16% in 2021, 29% in 2022, and 30% in 2023.

We also organised the following initiatives to enhance development, leadership and technical knowledge:

- **Non-Executive Bridging Programme (Non-Technical)**

  A total of **54** individuals participated

  7 successfully completed and progressed to E1

- **Sarawak Energy Mentoring Programme**

  1,500 mentees and 98 mentors enrolled since its launching in 2017

- **Technician Foundation Programme (TFP) & Technical Executive Programme (TEP)**

  55 learners concluded the TFP

  2 learners completed the TEP

- **Introduction to Sarawak Energy Business (SE02) & Commercial Acumen Fundamentals (SE03)**

  81 participants (SE02)

  162 participants (SE03)

- **In-house Programme: Facilitation & Intervention**

  223 participants since inception in 2021

- **Business Smart People, People Smart Business (BSP PSB)**

  Visited **5** locations (Sibu Regional Office, Tg. Kidurong Power Plant Bintulu, Bakun HEP and Miri Regional Office) to disseminate information to colleagues on people matters and our organisational strategy

Sarawak Energy and the People

2-29, 404-2

D

DEPLOY

Deploying talent to the right roles at the right time begins with strengthening the capabilities of our talent pipeline. We have identified 95% of successors for critical positions as "Ready Now" and 96% as "Ready Later" (within 2-3 years). This consistent achievement over the past three years reflects our commitment to maintaining optimal operation and a sustainable talent pipeline equipped to meet future demands.

We have also appointed 335 Subject Matter Experts (SMEs), who play a crucial role in developing technical and functional capabilities, mentoring, coaching, curating learning content and fostering talent growth. SMEs also collaborate on in-house programmes, such as the Leadership Conference 2023 themed "Inspirational Leadership in Focus". This event brought together SMEs and EAGLES (Exceptional Apprentice for GEC Leaders) and saw participation from 1,246 employees.

Sarawak Energy People Survey 2023

In 2023, we conducted a survey, achieving the status of a 'Greater Place to Work.' Our Scores have surpassed both local and global benchmarks:

Overall Satisfaction
87%

Continuous Improvement
84%

Employee Engagement
91%

Diversity & Inclusiveness
84%

Recognising & Celebrating the Achievements of our People

The Sarawak Energy Hall of Fame (SEHOF) which was established in 2017, serves as a prestigious platform to honour employees who have made significant contributions to our Key Focus Areas and strategic objectives. To date, 1,526 individuals have been celebrated as SEHOF winners. Furthermore, in 2022, 583 employees received Long Service Awards, recognising their longstanding commitment and achievements.

Sarawak Energy bagged the following awards:

HR Asia
'Best Company to Work for in Asia 2023' & 'Digital Transformation Award 2023'

Brandon Hall Human Capital Management Awards
2 Gold Awards under Learning & Development

Sarawak Energy and the People

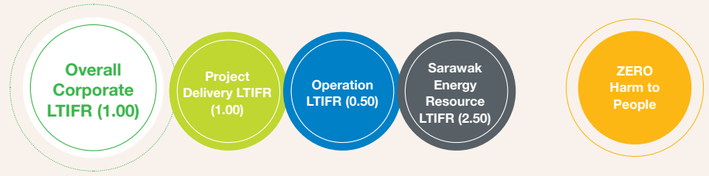
403-9, 3-3

Strengthening Our HSSE Performance

Sarawak Energy fosters a culture of HSSE Excellence by cultivating a proactive HSSE ethos that empowers employees to take full ownership of Health, Safety, Security and Environment (HSSE) responsibilities.

OUR COMMITMENT TOWARDS ZERO INJURIES & FATALITIES

Corporate KPI Safety Performance 2023 (Fatality & LTIFR - Lost Time Injury Frequency Rate)



The lost time injury frequency rate (LTIFR) measures the number of lost-time injuries per million hours worked and is a standard safety metric across various industries. As of December 2023, we continue to track and measure our LTIFR in three categories: Operations, Project Delivery, and Sarawak Energy Resources. The total man-hours worked across these categories determine the overall corporate LTIFR. Operations encompass our Corporate Functions (HR, HSSE, Finance, etc.) and core business operations and projects, including Generation (thermal and hydropower), Distribution, Transmission, Retail, and SE(RES).

Sarawak Energy Resources represents our coal mining operations, while Project Delivery pertains to our ongoing projects.

We are pleased to report that we achieved 0.329* for our Corporate Lost time Injury Frequency Rate, which was significantly lower than our overall corporate LTIFR target of 1.0 for 2023. However, despite stringent safety measures, we recorded one fatal incident involving two contractor workers who sustained severe injuries, including electrocution and burns, during vegetation clearing in Sibu. This incident was not included in our safety performance metrics because investigations by the authorities revealed that the contractors were negligent and failed to comply with the general and HSSE requirements outlined in the contract. Consequently, the contractors faced penalties imposed by DOSH.

Safety Performance 2023 (Fatality & LTIFR - Lost Time Injury Frequency Rate)

Business Units	Total Man-Hours Worked	LTI Case	Fatality Case	LTIFR
Operation	19,760,603.16*	7*	0	0.354
SER	1,876,921.00*	0*	0	0.000
PDD	8,801,014.16*	3*	0	0.341
Overall Total	30,438,538.32*	10*	0	0.329*

Rate of Fatalities as a Result of Work-related injury

Category	Employees only	Contractors only
Number of fatalities	0*	0*
Number of hours worked	13,203,675*	17,234,863*
Hours worked rate	1,000,000	1,000,000
Rate of fatalities	0.000	0.000

Rate of High-consequence Work-related Injuries (excluding fatalities)

Category	Employees only	Contractors only
Number of LTI (excluding fatalities)	3*	7*
Number of hours worked	13,203,675*	17,234,863*
Hours worked rate	1,000,000	1,000,000
Rate of high-consequence work-related injuries (excluding fatalities)	0.227	0.406
Types of work-related injury	Burnt injury (1), slip & fall (1) & injury due to wear and tear faulty gate stopper (1)	Burnt injury (2), electrical shock (2), fall from height (2) & accidental activation of the excavator bucket (1)

Note: *LTIFR figure excluding fatalities.*

Our Performance Data

201-1, 203-1, 204-1

We assess the effectiveness of our sustainability strategy and initiative by monitoring the key sustainability, or ESG performance data over five years. Our data is prepared with reference to the GRI Standards 2021 and also reports on the GRI G4 Electric Utilities Sector Disclosures (EUSD) by the Global Reporting Initiative.

Financial

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Direct Economic Value Generated							GRI 201-1
Revenue	RM Million	5,806.80	5,651.70	6,152.60	7,060.84	7,324.40	
Economic Value Distributed							
Operating Costs (RM Million)	RM Million	1,459.20	1,704.21	2,073.00	2,602.44	2,632.70	
Employee remuneration (RM Million)	RM Million	547.00	541.30	596.30	673.85	778.20	
Dividends paid (RM Million)	RM Million	-	-	-	-	158.00	
Interest paid (RM Million)	RM Million	995.10	1,081.20	915.20	855.15	812.30	
Payments to the government - Income taxes paid (net of refunds)	RM Million	121.80	162.80	127.20	286.97	358.20	
Economic Value Retained	**RM Million**	**2,683.70[4]**	**2,162.19[3]**	**2,440.90[2]**	**2,642.42[1]**	**2,585.00***	

Note:
Revenue figures include rental income, interest received & proceeds from disposal of property, plant & equipment for the Economic Value Retained calculation.

Tariff

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Average Tariff by Customer Type							GRI 203-1
Average Organic	cent/kWh	28.22	28.22	28.30	28.17	28.05	
Domestic	cent/kWh	28.47	28.81	28.96	28.81	28.91	
Commercial	cent/kWh	30.65	30.70	30.59	30.54	30.53	
Public Lighting	cent/kWh	47.20	47.27	47.28	47.70	47.65	
Industrial	cent/kWh	24.16	23.89	23.96	23.97	23.80	

Procurement

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Capital Works							GRI 204-1
Sarawakian	RM	416,366,166.99[4]	114,555,097.49[3]	335,983,187.44[2]	295,198,815.38[1]	254,790,542.37*	
Malaysia (Non-Sarawakian)	RM	274,575,584.00	44,542,098.60	226,103,506.14	32,522,488.80	90,342,509.10	
International	RM	299,412,243.00	117,782,423.00	528,705,566.15	100,626,345.66	145,318,205.15	
Operations and Maintenance							
Sarawakian	RM	822,335,735.58[4]	1,037,245,113.37[3]	1,061,052,945.37[2]	1,947,373,513.08[1]	943,688,077.61*	
Malaysia (Non-Sarawakian)	RM	54,243,444.92	68,301,534.66	194,827,901.20	235,672,775.79	181,527,068.79	
International	RM	52,732,516.13	38,580,626.30	28,660,053.82	278,455,646.61	85,804,593.19	

Our Performance Data

205-1, 205-2, 205-3

Anti-Corruption

Disclosure	Unit	2023	GRI Disclosures/ IFRS
Operations Assessed for Risks Related to Corruption			GRI 205-1
Total number of operations assessed for risks related to corruption	Number	50	
Communication and Training About Anti-Corruption Policies and Procedures			GRI 205-2
Governance body members that the organisation's anti-corruption policies and procedures have been communicated to	Number of Session[a]	21	
Employees that the organisation's anti-corruption policies and procedures have been communicated to	Number of Session[a]	27	
Business partners that the organisation's anti-corruption policies and procedures have been communicated to	Number of Session[b]	3	
Governance body members that have received training on anti-corruption	Number of Session[a]	2	
Employees that have received training on anti-corruption[c]	%[a]	100%	

Notes:
[a] *Engagement with Internal Stakeholders.*
[b] *Zero Tolerance to Fraud Bribery & Corruption (ZTFBC) Briefing to External Stakeholders.*
[c] *Completion of Mandatory Anti Bribery & Corruption E-Learning.*

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Confirmed Incidents of Corruption and Actions Taken							GRI 205-3
Total number and nature of confirmed incidents of corruption	Number	7	4	0	1	1	
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	Number	7	4	0	1	1	
Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption	Number	N/A	N/A	N/A	N/A	N/A	
Public legal cases regarding corruption brought against the organisation or its employees during the reporting period and the outcomes of such cases	Number	1	1	0	1	1	

Our Performance Data

301-1

Materials Used

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Category: Non-Renewable Materials Used							GRI 301-1
Plant Type (Main Grid)							
Coal	Tonne	3,064,825.62[4]	2,684,065.69[3]	2,940,286.82[2]	3,087,236.06[1]	3,201,032.55*	
Diesel	Litre	12,584,999.55[4]	24,301,619.57[3]	26,313,382.07[2]	27,887,522.36[1]	29,023,942.56*	
Natural Gas	mmbtu	36,756,369.74[4]	33,066,287.95[3]	32,806,349.50[2]	42,464,815.69[1]	47,502,815.02*	
Plant Type (Northern Grid)							
Diesel	Litre	40,959,417.00[4]	38,353,272.00[3]	39,435,748.00[2]	40,863,919.00[1]	47,121,041.00*	
Plant Type (Stand-alone Grid)							
Diesel	Litre	5,666,656.00[4]	3,597,926.00[3]	3,457,144.00[2]	3,904,567.00[1]	2,787,511.00*	
Category: Renewable Materials Used							
Batang Ai HEP							
Annual Inflow (annual inflow from catchment)	million m^3	2,852.00	4,255.00	3,651.00	3,277.00	3,160.20	
Annual water volume for energy generation	million m^3	2,844.00[4]	3,974.38[3]	3,617.61[2]	3,534.20[1]	3,512.34*	
Annual water regulated (Spillway discharge)	million m^3	0.00	0.00	0.00	0.00	0.00	
Murum HEP							
Annual Inflow (annual inflow from catchment)	million m^3	8,183.00	9,993.00	9,660.00	10,791.00	9,129.00	
Annual water volume for energy generation	million m^3	7,532.00[4]	8,548.94[3]	8,583.01[2]	9,496.38[1]	9,291.93*	
Annual water regulated (Spillway discharge)	million m^3	0.00	1,446.00	1,159.00	1,175.00	6.00	
Bakun HEP							
Annual Inflow (annual inflow from catchment)	million m^3	40,373.00	55,730.00	49,894.00	50,884.00	43,249.27	
Annual water volume for energy generation	million m^3	38,827.00[4]	36,965.72[3]	40,874.51[2]	41,636.95[1]	44,213.59*	
Annual water regulated (Spillway discharge)	million m^3	0.00	15,589.00	10,436.00	6,278.00	1,453.00	

SUSTAINABILITY PERFORMANCE DISCLOSURE

Our Performance Data

301-1

Cost of Materials Used

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Fuel Cost (RM) & Power Plant by Our Main Grid, Northern Grid & Stand-Alone Grid							GRI 301-1
Plant Type: Coal (Main Grid)							
Sejingkat Power Corp.	RM	62,240,358	63,965,074	46,941,917	45,351,027	39,871,865	
PPLS Power Generation	RM	73,207,127	69,420,961	62,355,174	77,450,023	73,998,822	
Mukah Power Generation	RM	136,815,314	80,100,452	83,435,903	85,905,113	94,286,946	
Balingian Power Generation	RM	76,236,790	93,326,367	146,213,300	199,080,660	211,711,152	
Total	**RM**	**348,499,589**	**306,812,854**	**338,946,294**	**407,786,823**	**419,868,785**	
Plant Type: Natural Gas (Main Grid)							
Sarawak Power Generation	RM	104,969,215	82,595,756	165,916,342	227,209,389	210,967,476	
Kidurong Power Generation	RM	-	12,593,455	198,763,919	285,328,211	393,518,731	
Bintulu PS	RM	56,669,505	56,237,474	47,281,118	102,007,412	91,138,864	
Miri PS	RM	54,433,029	65,076,152	70,473,886	57,123,718	40,111,431	
Total	**RM**	**216,071,749**	**216,502,837**	**482,435,265**	**671,668,730**	**735,736,502**	
Plant Type: Diesel (Main Grid)							
Sg Biawak PS	**RM**	**1,650,986**	**322,805**	**528,727**	**2,454,593**	**22,321,190**	
Plant Type: Diesel (Northern Grid)							
Limbang PS	RM	55,632,336	45,428,664	57,097,815	108,187,732	97,434,689	
Lawas PS	RM	35,417,332	23,783,999	27,421,553	44,331,780	61,604,779	
Total	**RM**	**91,049,668**	**69,212,663**	**84,519,368**	**152,519,512**	**159,039,468**	
Plant Type: Diesel (Stand-alone)							
Belaga PS	RM	3,624,602	3,211,011	3,150,084	5,561,759	1,234,998	
Song PS	RM	4,375,076	30,867	-	-	-	
Ng Mujong PS	RM	153,147	-	-	-	-	
Ng Jagau PS	RM	280,448	262,055	334,741	577,906	187,817	
Ng Entawau PS	RM	267,409	241,753	256,501	469,904	411,857	
Mulu PS	RM	1,753,085	991,743	844,404	1,864,707	2,583,282	
Long Lama PS	RM	2,815,294	2,314,513	2,348,843	4,726,129	4,691,742	
Banting PS	RM	345,082	289,425	322,281	544,571	537,533	
Paloh PS	RM	597,609	526,382	726,271	1,431,549	1,449,946	
Murum Resettlement PS OP	RM	518,120	432,971	579,538	1,043,904	804,074	
Total	**RM**	**14,729,872**	**8,300,720**	**8,562,663**	**16,220,429**	**11,901,249**	

Our Performance Data

303-3

Water

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Plant Type: Coal							GRI 303-3
Sejingkat Power Corp + PPLS							
Municipal	meter cubic (m^3)	1,140,932.00[4]	1,265,838.00[3]	1,133,445.00[2]	1,163,372.00[1]	1,221,203.00*	
Sea Water or other natural water source	meter cubic (m^3)	331,568,280.00[4]	348,383,088.00[3]	305,121,492.00[2]	266,940,141.12[1]	222,789,427.20*	
Mukah Power Generation							
Municipal	meter cubic (m^3)	1,063,097.00[4]	741,874.00[3]	814,465.00[2]	931,051.00[1]	968,521.00*	
Sea Water or other natural water source	meter cubic (m^3)	392,610,711.74[4]	219,655,670.40[3]	219,276,979.20[2]	235,671,120.00[1]	213,275,203.20*	
Balingian Power Generation							
Municipal	meter cubic (m^3)	-	N/A[3]	17,924.00[2]	16,389.00[1]	28,461.00*	
Sea Water or other natural water source	meter cubic (m^3)	-	1,650,000.00[3]	4,186,687.50[2]	4,467,750.00[1]	4,601,250.00*	
Plant Type: Natural Gas							
SPG (Combined Cycle) + Bintulu SESCO (Open Cycle)							
Municipal	meter cubic (m^3)	329,516.00[4]	250,223.00[3]	275,082.00[2]	232,815.00[1]	598,081.00* (with KPG)	
Sea Water or other natural water source	meter cubic (m^3)	241,935,030.72[4]	104,047,121.52[3]	87,860,036.88[2]	228,063,636.00[1]	194,278,482.00*	
KPG (Combined Cycle)							
Municipal	meter cubic (m^3)	-	-	112,863.00[2]	162,506.00[1]	-[a]	
Sea Water or other natural water source	meter cubic (m^3)	-	-	404,068,140.00[2]	501,406,498.50[1]	516,518,200.00*	
Miri SESCO (Open Cycle)							
Municipal	meter cubic (m^3)	23,803.00[4]	29,542.00[3]	47,638.00[2]	39,448.00[1]	23,448.00*	
Sea Water or other natural water source	meter cubic (m^3)	N/A[4]	N/A[3]	N/A[2]	N/A[1]	N/A*	

Our Performance Data

303-3, 305-1, 305-4, IFRS S2-29(a), 33(a)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Plant Type: Diesel							GRI 303-3
Sg Biawak SESCO							
Municipal	meter cubic (m^3)	6,896.13[4]	1,731.51[3]	4,417.00[2]	5,673.66[1]	7,469.06*	
Sea Water or other natural water source	meter cubic (m^3)	0.00[4]	0.00[3]	0.00[2]	0.00[1]	0.00*	
Non-Grid - Limbang							
Municipal	meter cubic (m^3)	40,859.00	41,251.00	43,936.00	46,726.00	67,577.00	
Non-Grid - Lawas							
Municipal	meter cubic (m^3)	2,837.00	3,700.00	4,220.00	4,683.00	5,450.00	

Note:

[a] KPG's municipal water bill started to combine with SPG & BTU in year 2023.

Climate

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Direct (Scope 1) GHG Emissions							GRI 305-1, 305-4, IFRS S2-29(a), 33(a)
Main Grid	tCO_2eq	6,348,254.39[4]	5,600,892.97[3]	5,976,874.06[2]	6,483,137.99[1]	7,083,870.39*	
Northern Grid	tCO_2eq	104,477.64[4]	97,829.99[3]	100,595.84[2]	104,238.93[1]	126,725.74*	
Stand-Alone Grid	tCO_2eq	14,453.34[4]	9,176.85[3]	8,818.18[2]	9,958.58[1]	7,109.53*	
Company-owned vehicles	tCO_2eq	5,353.45	4,167.74	3,766.89	2,112.89[1]	2,025.50*	
Total	**tCO_2eq**	**6,472,538.82**	**5,712,067.55**	**6,090,054.97**	**6,599,448.39[1]**	**7,219,731.17***	
Scope 1 Emissions Intensity							
Normalised by Gross Energy	tCO_2eq/MWh	0.220	0.201	0.196	0.197	0.204	
Normalised by Net Energy	tCO_2eq/MWh	0.225	0.206	0.201	0.201	0.208	
Direct Emissions (Scope 1) Intensity (over Revenue)[a]	tCO_2eq/ Millions of Revenue (RM)	1,143.14	1,033.70	1,006.82	947.53[1]	1,010.15*	
Direct Emissions (Scope 1) Intensity (over Total $Investment_{LCG}$)[a]	tCO_2eq/ RM Millions of Total $Investment_{LCG}$	955.98	825.49	880.09	659.67[1]	712.06*	

Our Performance Data

305-1, 305-2, 305-3, 305-4, IFRS S2-29(a), 33(a)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Energy Indirect (Scope 2) GHG Emissions							GRI 305-1, 305-2, 305-3, 305-4, IFRS S2-29(a), 33(a)
Building Electricity Consumption (Offices & Substations)	tCO_2eq	13,709.25	13,447.19[3]	11,999.62[2]	12,809.42[1]	13,635.19*	
Scope 2 Emissions Intensity							
Normalised by Gross Energy	tCO_2eq/ MWh	0.000466	0.000474	0.000387	0.000382	0.000385	
Normalised by Net Energy	tCO_2eq/ MWh	0.000477	0.000485	0.000395	0.000391	0.000394	
Other Indirect (Scope 3) GHG Emissions Relevant to Sarawak Energy							
Category 1: Purchased goods and services	tCO_2eq/ MWh	-	51,017.84	62,439.76	73,843.71	71,412.68	
Category 2: Capital goods	tCO_2eq	-	211,373.65	243,456.29	232,293.51	256,077.68	
Category 3: Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	tCO_2eq	-	1,391,123.18	1,491,236.75	1,638,047.91	1,735,100.15	
Category 4: Upstream transportation and distribution	tCO_2eq	-	The upstream transportation and distribution are included in Category 3				
Category 5: Waste generated in operations	tCO_2eq	-	6.59	13.61	8.70	9.27	
Category 6: Business air travel	tCO_2	2,582.05	565.13[3]	252.41[2]	1,922.01[1]	3,866.82*	
Category 7: Employee commuting	tCO_2eq	-	2,113.84	2,137.80	2,175.12	4,015.87	
Category 9: Downstream transportation and distribution	tCO_2eq	-	Data has been calculated in Scope 1				
Category 11: Use of sold products	tCO_2eq	-	No sale of coal	172,423.70	156,993.33	No sale of coal	
Category 15: Investments	tCO_2eq	-	Investment to JV company - no emission yet as the project is at early stage				
Total CO_2 Emissions (Main Grid)							
Sejingkat Power Corp.	tCO_2eq	679,890.56	671,849.96	462,019.95	335,052.46	261,612.76	
	tCH_4 in tCO_2eq	62.80	62.24	46.81	35.02	26.87	
	tN_2O in tCO_2eq	966.09	954.22	673.10	485.66	380.30	
PPLS Power Generation	tCO_2eq	697,347.40	650,276.32	605,853.28	571,262.26	486,389.35	
	tCH_4 in tCO_2eq	63.72	59.62	59.05	57.59	48.93	
	tN_2O in tCO_2eq	992.53	925.05	887.99	832.93	709.40	

Our Performance Data

305-1, IFRS S2-29(a), 33(a)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total Emissions (Main Grid)							GRI 305-1, IFRS S2-29(a), 33(a)
Mukah Power Generation	tCO_2eq	1,585,818.75	871,167.29	895,037.02	805,325.80	724,579.25	
	tCH_4 in tCO_2eq	145.25	79.60	88.01	79.53	75.61	
	tN_2O in tCO_2eq	2,256.25	1,239.92	1,310.06	1,177.97	1,050.59	
Balingian Power Generation	tCO_2eq	1,423,412.27	1,605,680.74	2,234,823.71	2,501,945.80	3,080,223.60	
	tCH_4 in tCO_2eq	131.96	145.95	217.07	242.57	299.51	
	tN_2O in tCO_2eq	2,021.45	2,287.15	3,277.24	3,669.97	4,516.23	
Sarawak Power Generation	tCO_2eq	950,462.21	749,873.97	600,125.08	778,083.39	712,374.87	
	tCH_4 in tCO_2eq	146.99	116.00	98.77	128.06	117.25	
	tN_2O in tCO_2eq	139.12	109.84	90.49	117.32	107.41	
Kidurong Power Generation 1	tCO_2eq	-	103,455.03	668,870.02	462,530.86	642,401.95	
	tCH_4 in tCO_2eq	-	19.32	110.13	77.70	105.73	
	tN_2O in tCO_2eq	-	23.54	100.95	59.58	96.86	
Kidurong Power Generation 2	tCO_2eq	-	-	-	364,529.62	649,141.30	
	tCH_4 in tCO_2eq	-	-	-	60.33	106.84	
	tN_2O in tCO_2eq	-	-	-	55.78	97.88	
Bintulu PS	tCO_2eq	520,329.19	520,956.75	167,782.04	312,304.24	283,045.95	
	tCH_4 in tCO_2eq	80.61	80.62	27.67	54.83	48.75	
	tN_2O in tCO_2eq	76.52	76.40	25.43	55.49	47.98	
Miri PS	tCO_2eq	488,542.53	427,168.65	341,586.19	348,464.37	224,142.23	
	tCH_4 in tCO_2eq	76.73	74.00	67.20	61.59	38.81	
	tN_2O in tCO_2eq	74.49	82.59	78.36	62.91	38.49	
Sg Biawak PS	tCO_2eq	2,451.47	464.25	776.76	3,639.19	19,959.14	
	tCH_4 in tCO_2eq	0.94	0.18	0.32	1.49	8.18	
	tN_2O in tCO_2eq	1.79	0.34	0.58	2.73	14.99	

Our Performance Data

305-1, IFRS S2-29(a), 33(a)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total Emissions (Main Grid)							GRI 305-1, IFRS S2-29(a), 33(a)
Total Emissions (Main Grid)	**tCO_2eq**	**6,348,254.39[4]**	**5,600,892.97[3]**	**5,976,874.06[2]**	**6,483,137.99[1]**	**7,083,870.39***	
	tCH_4 in tCO_2eq	**709.01**	**637.54**	**715.02**	**798.73**	**876.49**	
	tN_2O in tCO_2eq	**6,528.23**	**5,699.05**	**6,444.20**	**6,520.35**	**7,060.14**	
Total Emissions (Northern Grid)							
Limbang PS	tCO_2eq	63,744.59	64,646.28	67,682.00	71,502.75	77,991.67	
	tCH_4 in tCO_2eq	24.56	24.90	27.75	29.32	31.98	
	tN_2O in tCO_2eq	46.48	47.14	50.84	53.71	58.59	
Lawas PS	tCO_2eq	40,733.05	33,183.71	32,913.84	32,736.18	48,734.08	
	tCH_4 in tCO_2eq	15.69	12.78	13.49	13.42	19.98	
	tN_2O in tCO_2eq	29.70	24.20	24.72	24.59	36.61	
Total Emissions (Northern Grid)	**tCO_2eq**	**104,477.64[4]**	**97,829.99[3]**	**100,595.84[2]**	**104,238.93[1]**	**126,725.74***	
	tCH_4 in tCO_2eq	**40.25**	**37.68**	**41.24**	**42.74**	**51.96**	
	tN_2O in tCO_2eq	**76.18**	**71.34**	**75.56**	**78.30**	**95.20**	
Total Emissions (Stand-alone Grid)							
Belaga PS	tCO_2eq	3,700.81	3,859.01	3,603.22	3,783.97	794.07	
	tCH_4 in tCO_2eq	1.43	1.49	1.48	1.55	0.33	
	tN_2O in tCO_2eq	2.70	2.81	2.71	2.84	0.60	
Song PS	tCO_2eq	4,742.08	-	-	-	-	
	tCH_4 in tCO_2eq	1.83	-	-	-	-	
	tN_2O in tCO_2eq	3.46	-	-	-	-	
Ng Mujong PS	tCO_2eq	157.66	-	-	-	-	
	tCH_4 in tCO_2eq	0.06	-	-	-	-	
	tN_2O in tCO_2eq	0.11	-	-	-	-	
Ng Jagau PS	tCO_2eq	248.55	253.84	298.84	319.19	101.19	
	tCH_4 in tCO_2eq	0.09	0.10	0.12	0.13	0.04	
	tN_2O in tCO_2eq	0.17	0.19	0.22	0.24	0.08	
Ng Entawau PS	tCO_2eq	294.89	289.32	292.80	296.77	283.79	
	tCH_4 in tCO_2eq	0.11	0.11	0.12	0.12	0.12	
	tN_2O in tCO_2eq	0.20	0.21	0.22	0.22	0.21	

Our Performance Data

305-1, IFRS S2-29(a), 33(a)

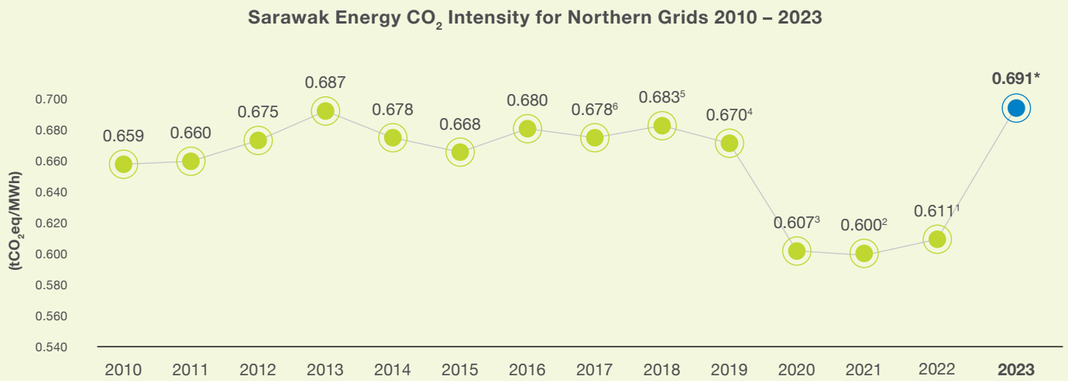
Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total Emissions (Stand-alone Grid)							GRI 305-1, IFRS S2-29(a), 33(a)
Mulu PS	tCO_2eq	1,604.22	1,005.82	896.63	1,216.42	1,617.29	
	tCH_4 in tCO_2eq	0.59	0.39	0.37	0.50	0.66	
	tN_2O in tCO_2eq	1.11	0.73	0.67	0.91	1.21	
Long Lama PS	tCO_2eq	3,081.32	2,848.51	2,759.08	3,299.35	3,198.11	
	tCH_4 in tCO_2eq	1.13	1.10	1.13	1.35	1.31	
	tN_2O in tCO_2eq	2.13	2.08	2.07	2.48	2.40	
Banting PS	tCO_2eq	314.53	297.26	287.88	303.02	314.59	
	tCH_4 in tCO_2eq	0.12	0.11	0.12	0.12	0.13	
	tN_2O in tCO_2eq	0.22	0.22	0.22	0.23	0.24	
Paloh PS	tCO_2eq	617.32	623.10	679.72	739.86	800.51	
	tCH_4 in tCO_2eq	0.23	0.24	0.28	0.30	0.33	
	tN_2O in tCO_2eq	0.43	0.45	0.51	0.56	0.60	
Total Emissions (Stand-alone Grid)	**tCO_2eq**	**14,453.34[4]**	**9,176.85[3]**	**8,818.18[2]**	**9,958.58[1]**	**7,109.53***	
	tCH_4 in tCO_2eq	**5.57**	**3.54**	**3.62**	**4.08**	**2.91**	
	tN_2O in tCO_2eq	**10.54**	**6.69**	**6.62**	**7.48**	**5.34**	
Total Emissions (Company-owned Vehicle)							
Total Emissions	**tCO_2eq**	**5,353.45**	**4,167.74**	**3,766.89**	**2,112.89**	**2,025.50**	
	tCH_4 in tCO_2eq	**11.68**	**9.10**	**8.22**	**4.61**	**4.39**	
	tN_2O in tCO_2eq	**23.70**	**18.45**	**16.67**	**9.35**	**8.97**	
Total SF_6 Consumption – by Business Level							
Generation	Tonne	17.18	17.41	17.63	17.63	17.63	
Transmission	Tonne	33.47	34.03	43.52	44.35	48.24	
Distribution	Tonne	13.06	13.62	13.92	14.45	14.48	
Total	**Tonne**	**63.71**	**65.05**	**75.08**	**76.43**	**80.35**	

Notes:

1. *Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.*
2. *Scope 3 emissions – Business air travel is calculated using ICAO Carbon Emissions Calculator as on 16 May 2024.*
3. *Measurement of Scope 3 emissions for categories 1, 2, 3, 4, 5, 7, 9, 11 & 15 began in the year 2020, with 2021 serving as baseline data for SBTi validation.*
4. *^{LCG} Low Carbon Generation.*
5. *^{a} IFRS S2 related metrics.*

Our Performance Data

305-4, EU2, IFRS S2-33(a)



Net Energy Generated

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total Net Energy Generated for Main Grids							GRI EU2 IFRS S2-33(a)
Plant Type: Hydro							
Batang Ai	MWh	386,993.39[4]	517,434.53[3]	475,024.49[2]	471,217.65[1]	467,360.36*	
Bakun	MWh	15,424,402.00[4]	14,680,879.00[3]	16,239,095.00[2]	16,549,475.00[1]	17,579,266.78*	
Murum	MWh	5,688,832.30[4]	6,406,413.20[3]	6,456,371.70[2]	7,145,655.30[1]	7,010,179.90*	
Lundu PS	MWh	3,024.10[4]	1,637.74[3]	1,094.91[2]	1,379.18[1]	1,941.20*	
Total	**MWh**	**21,503,251.79[4]**	**21,606,364.48[3]**	**23,171,586.10[2]**	**24,167,727.13[1]**	**25,058,748.23***	
Renewable energy generation intensity[a]	Millions of Revenues from Electricity Sales (RM)/ MWh	0.00026	0.00026	0.00026	0.00029[1]	0.00028*	

Our Performance Data

EU2, IFRS S2-33(a)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Plant Type: Coal							GRI EU2 IFRS S2-33(a)
Sejingkat Power Corp.	MWh	505,914.49[4]	494,902.10[3]	330,743.60[2]	181,343.10[1]	180,417.40*	
PPLS Power Generation	MWh	518,672.85[4]	516,329.80[3]	500,261.90[2]	422,287.60[1]	372,566.80*	
Mukah Power Generation	MWh	1,343,966.90[4]	770,626.40[3]	776,398.80[2]	685,932.10[1]	549,431.90*	
Balingian Power Generation	MWh	1,421,724.40[4]	1,263,976.37[3]	2,104,908.50[2]	2,556,189.00[1]	2,850,346.40*	
Total	**MWh**	**3,790,278.65[4]**	**3,045,834.67[3]**	**3,712,312.80[2]**	**3,845,751.80[1]**	**3,952,762.50***	
Plant Type: Natural Gas							
Sarawak Power Generation	MWh	2,106,253.75[4]	1,594,561.40[3]	1,073,279.19[2]	1,640,519.17[1]	1,410,958.73*	
Kidurong Power Generation 1	MWh	-	212,114.57[3]	1,626,879.19[2]	1,166,241.95[1]	1,731,097.70*	
Kidurong Power Generation 2	MWh	-	-	-	1,056,307.39[1]	1,762,904.80*	
Bintulu PS	MWh	615,465.59[4]	608,672.49[3]	204,363.70[2]	333,360.49[1]	300,127.54*	
Miri PS	MWh	535,371.43[4]	468,368.98[3]	374,955.17[2]	377,202.85[1]	224,295.50*	
Total	**MWh**	**3,257,090.78[4]**	**2,883,717.44[3]**	**3,279,477.25[2]**	**4,573,631.85[1]**	**5,429,384.26***	
Plant Type: Diesel							
Sg Biawak PS	MWh	887.78[4]	0.00[3]	0.00[2]	1,913.17[1]	15,434.50*	
Total Net Energy Generated for Northern Grids							
Plant Type: Mini Hydro							
Lawas M/H (Kalamuku)	MWh	2,012.81[4]	1,603.95[3]	786.20[2]	1,025.43[1]	481.17*	
Lawas M/H (Sg.Kota 1)	MWh	3,993.69[4]	0.00[3]	1,403.46[2]	2,728.00[1]	3,649.23*	
Lawas M/H (Sg.Kota 2)	MWh	1,849.88[4]	21,321.83[3]	26,985.88[2]	28,211.39[1]	16,248.68*	
Total	**MWh**	**7,856.38[4]**	**22,925.78[3]**	**29,175.54[2]**	**31,964.82[1]**	**20,379.08***	
Plant Type: Diesel							
Limbang PS	MWh	90,569.93[4]	91,660.87[3]	93,756.55[2]	95,730.16[1]	101,353.20*	
Lawas PS	MWh	57,466.64[4]	46,662.14[3]	44,838.54[2]	42,956.23[1]	61,609.30*	
Total	**MWh**	**148,036.57[4]**	**138,323.01[3]**	**138,595.09[2]**	**138,686.39[1]**	**162,962.50***	
Total Net Energy Generated for Stand-alone Grids							
Plant Type: Diesel							
Belaga PS	MWh	4,256.13	4,519.19[3]	4,914.29[2]	5,110.62[1]	1,057.91*	
Ng Jagau PS	MWh	218.24	232.60[3]	256.19[2]	282.62[1]	95.47*	
Ng Entawau PS	MWh	328.64	340.59[3]	342.67[2]	345.22[1]	369.87*	
Mulu PS	MWh	1,641.00	1,056.89[3]	948.10[2]	1,543.48[1]	2,075.09*	

Our Performance Data

305-4, EU2, IFRS S2-29(a)(iv), 33(a)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Plant Type: Diesel							GRI EU2 IFRS S2-33(a)
Long Lama PS	MWh	3,628.99	3,778.73[3]	3,768.35[2]	3,522.21[1]	4,200.75*	
Banting PS	MWh	342.47	335.12[3]	340.40[2]	340.21[1]	356.43*	
Paloh PS	MWh	699.00	735.61[3]	796.90[2]	804.07[1]	845.81*	
Total	**MWh**	**11,114.47**	**10,998.73[3]**	**11,366.90[2]**	**11,948.43[1]**	**9,001.33***	

Note:
[a] *IFRS S2 related metrics.*

Plants CO_2 & CO_2 Intensity (tCO_2eq & tCO_2eq/MWh) – Main Grid

Disclosure	Plant Type	Plant (Main Grid)	CO_2 Emissions (tCO_2eq)	Gross Energy Generated (MWh)	CO_2 Emissions Intensity (tCO_2eq/MWh)	GRI Disclosures/ IFRS
2019	Coal	Sejingkat Power Corp	679,890.56	553,289.86	1.229	GRI 305-4, IFRS S2-29(a)(iv), 33(a)
		PPLS	697,347.40	637,196.85	1.094	
		MPG	1,585,818.75	1,515,106.28	1.047	
		BPG	1,423,412.27	1,562,639.57	0.911	
	Natural Gas	SPG	950,462.21	2,145,919.00	0.443	
		Bintulu SESCO	520,329.19	625,274.14	0.832	
		Miri SESCO	488,542.53	541,988.30	0.901	
	Diesel	Sg Biawak SESCO	2,451.47	2,127.20	1.152	
2020	Coal	Sejingkat Power Corp	671,849.96	505,307.39	1.330	
		PPLS	650,276.32	634,529.00	1.025	
		MPG	871,167.29	858,735.07	1.014	
		BPG	1,605,680.74	1,532,546.58	1.048	
	Natural Gas	SPG	749,873.97	1,628,610.51	0.460	
		KID1	103,455.03	222,919.67	0.464	
		Bintulu SESCO	520,956.75	616,612.83	0.845	
		Miri SESCO	427,168.65	474,195.11	0.901	
	Diesel	Sg Biawak SESCO	464.25	330.20	1.406	
2021	Coal	Sejingkat Power Corp	462,019.95	372,898.69	1.239	
		PPLS	605,853.28	560,269.00	1.081	
		MPG	895,037.02	861,797.57	1.039	
		BPG	2,234,823.71	2,326,198.96	0.961	
	Natural Gas	SPG	600,125.08	1,101,259.00	0.545	
		KID1	668,870.02	1,682,655.19	0.398	
		Bintulu SESCO	167,782.04	207,738.65	0.808	
		Miri SESCO	341,586.19	380,266.89	0.898	
	Diesel	Sg Biawak SESCO	776.76	621.70	1.249	

Our Performance Data

305-4, IFRS S2-29(a)(iv), 33(a)

Disclosure	Plant Type	Plant (Main Grid)	CO_2 Emissions (tCO_2eq)	Gross Energy Generated (MWh)	CO_2 Emissions Intensity (tCO_2eq/MWh)	GRI Disclosures/ IFRS
2022	Coal	Sejingkat Power Corp	335,052.46	213,475.20	1.570	GRI 305-4, IFRS S2-29(a)(iv), 33(a)
		PPLS	571,262.26	486,652.60	1.174	
		MPG	805,325.80	779,242.85	1.033	
		BPG	2,501,945.80	2,826,894.64	0.885	
	Natural Gas	SPG	778,083.39	1,686,662.00	0.461	
		KID1	462,530.86	1,214,330.75	0.381	
		KID2	364,529.62	1,057,768.99	0.345	
		Bintulu SESCO	312,304.24	339,006.56	0.921	
		Miri SESCO	348,464.37	383,976.59	0.908	
	Diesel	Sg Biawak SESCO	3,639.19	3,083.40	1.180	
2023	Coal	Sejingkat Power Corp	261,612.76	212,964.38	1.228	
		PPLS	486,389.35	417,872.00	1.164	
		MPG	724,579.25	646,944.82	1.120	
		BPG	3,080,223.60	3,132,287.69	0.983	
	Natural Gas	SPG	712,374.87	1,451,912.00	0.491	
		KID1	642,401.95	1,771,315.80	0.363	
		KID2	649,141.30	1,821,580.67	0.356	
		Bintulu SESCO	283,045.95	305,623.60	0.926	
		Miri SESCO	224,142.23	229,510.87	0.977	
	Diesel	Sg Biawak SESCO	19,959.14	16,637.50	1.200	

Note:
Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.

Plants CO_2 & CO_2 Intensity (tCO_2eq & tCO_2eq/ MWh) – Northern Grid

Disclosure	Plant Type	Plant (Main Grid)	CO_2 Emissions (tCO_2eq)	Gross Energy Generated (MWh)	CO_2 Emissions Intensity (tCO_2eq/MWh)	GRI Disclosures/ IFRS
2019	Diesel	Limbang PS	63,744.59	93,953.17	0.678	GRI 305-4, IFRS S2-29(a)(iv), 33(a)
		Lawas	40,733.05	59,529.64	0.684	
2020	Diesel	Limbang PS	64,646.28	94,979.15	0.681	
		Lawas	33,183.71	48,450.37	0.685	
2021	Diesel	Limbang PS	67,682.00	97,218.98	0.696	
		Lawas	32,913.84	46,575.33	0.707	
2022	Diesel	Limbang PS	71,502.75	99,053.53	0.722	
		Lawas	32,736.18	44,515.03	0.735	
2023	Diesel	Limbang PS	77,991.67	104,951.50	0.743	
		Lawas	48,734.08	63,359.39	0.769	

Note:
Emissions in CO_2eq include Direct Scope 1 emissions from CO_2, CH_4 and N_2O.

Our Performance Data

305-7

Nitrogen Oxides (NO_x) & Sulfur Oxides (SO_x)

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Plant Type: Coal							GRI 305-7
Sejingkat Power Corp.							
SO_x Emissions	kg	89,848.99	378,491.95	81,348.10	-	93,072.87	
NO_x Emissions	kg	16.42	359,136.25	69,304.95	315,322.64	152,957.57	
SO_x Intensity	$kgSO_x$/ kWh	1.62×10^{-4}	7.49×10^{-4}	2.18×10^{-4}	-	4.37×10^{-4}	
NO_x Intensity	$kgNO_x$/ kWh	2.97×10^{-8}	7.11×10^{-4}	1.86×10^{-4}	1.48×10^{-3}	7.18×10^{-4}	
PPLS Power Generation							
SO_x Emissions	kg	91,591.63	735,016.78	141,190.26	276,202.52	138,357.85	
NO_x Emissions	kg	440.51	904,654.39	111,777.62	1,524,118.24	576,410.31	
SO_x Intensity	$kgSO_x$/ kWh	1.44×10^{-4}	1.16×10^{-3}	2.52×10^{-4}	5.68×10^{-4}	3.31×10^{-4}	
NO_x Intensity	$kgNO_x$/ kWh	6.91×10^{-7}	1.43×10^{-3}	2.00×10^{-4}	3.13×10^{-3}	1.38×10^{-3}	
Mukah Power Generation							
SO_x Emissions	kg	251,154.40	1,021,298.63	215,766.98	21,166.71	9,863.74	
NO_x Emissions	kg	669.96	1,134,177.51	343,351.40	-	-	
SO_x Intensity	$kgSO_x$/ kWh	1.66×10^{-4}	1.19×10^{-3}	2.50×10^{-4}	2.72×10^{-5}	1.52×10^{-5}	
NO_x Intensity	$kgNO_x$/ kWh	4.42×10^{-7}	1.32×10^{-3}	3.98×10^{-4}	-	-	
Balingian Power Generation							
SO_x Emissions	kg	-	416,981.70	309,364.12	2,304,493.51	2,783,565.87	
NO_x Emissions	kg	-	363,580.35	54,820.72	778,711.24	1,260,156.54	
SO_x Intensity	$kgSO_x$/ kWh	-	2.72×10^{-4}	1.33×10^{-4}	8.15×10^{-4}	8.89×10^{-4}	
NO_x Intensity	$kgNO_x$/ kWh	-	2.37×10^{-4}	2.36×10^{-5}	2.75×10^{-4}	4.02×10^{-4}	
Plant Type: Natural Gas							
Sarawak Power Generation							
SO_x Emissions	kg	8,765.45	14,055.59	21,690.53	19,698.94	15,037.57	
NO_x Emissions	kg	2,305,925.09	1,178,960.42	1,238,778.14	892,473.53	434,031.69	
SO_x Intensity	$kgSO_x$/ kWh	4.08×10^{-6}	8.63×10^{-6}	1.97×10^{-5}	1.17×10^{-5}	1.04×10^{-5}	
NO_x Intensity	$kgNO_x$/ kWh	1.07×10^{-3}	7.24×10^{-4}	1.12×10^{-3}	5.29×10^{-4}	2.99×10^{-4}	

SUSTAINABILITY PERFORMANCE DISCLOSURE

Our Performance Data

305-7

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Kidurong Power Generation 1							GRI 305-7
SO_x Emissions	kg	-	-	10,102.91	5,938.55	6,847.96	
NO_x Emissions	kg	-	-	16,182.00	11,649.81	8,813.80	
SO_x Intensity	$kgSO_x$/ kWh	-	-	6.00×10^{-6}	4.89×10^{-6}	3.87×10^{-6}	
NO_x Intensity	$kgNO_x$/ kWh	-	-	9.62×10^{-6}	9.59×10^{-6}	4.98×10^{-6}	
Kidurong Power Generation 2							
SO_x Emissions	kg	-	-	-	5,045.96	7,319.85	
NO_x Emissions	kg	-	-	-	6,089.95	10,914.22	
SO_x Intensity	$kgSO_x$/ kWh	-	-	-	4.77×10^{-6}	4.02×10^{-6}	
NO_x Intensity	$kgNO_x$/ kWh	-	-	-	5.76×10^{-6}	5.99×10^{-6}	
Bintulu PS							
SO_x Emissions	kg	12,003.51	1,023,678.72	77,778.18	6,501.58	5,853.43	
NO_x Emissions	kg	130.25	1,384,977.34	137,827.00	70.55	63.52	
SO_x Intensity	$kgSO_x$/ kWh	1.92×10^{-5}	1.66×10^{-3}	3.74×10^{-4}	1.92×10^{-5}	1.92×10^{-5}	
NO_x Intensity	$kgNO_x$/ kWh	2.08×10^{-7}	2.25×10^{-3}	6.63×10^{-4}	2.08×10^{-7}	2.08×10^{-7}	
Miri PS							
SO_x Emissions	kg	965.92	-	1,488.01	680.55	404.68	
NO_x Emissions	kg	83.38	107,678.46	279,706.00	58.74	34.93	
SO_x Intensity	$kgSO_x$/ kWh	1.78×10^{-6}	-	-	1.77×10^{-6}	1.76×10^{-6}	
NO_x Intensity	$kgNO_x$/ kWh	1.54×10^{-7}	2.27×10^{-4}	7.36×10^{-4}	1.53×10^{-7}	1.52×10^{-7}	

Our Performance Data

306-3

Waste

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
Waste Volume Generated from Hydro Power Plants by Category										GRI 306-3
Hydro	Bakun HEP	Used lubricating oil	SW 305	Turbine bearing and crane motor	19.80	0.20	0.00	4.40	0.85	
		Used hydraulic oil	SW 306	Power intake and governor	28.40	12.60	16.30	79.10	0.00	
		Spent mineral oil -water emulsion	SW 307	Dewatering pit - oil spill due to excursion from unit	11.80	1.38	2.25	2.00	1.29	
				SUM	**60.00**	**14.18**	**18.55**	**85.50**	**2.14**	
		Contaminated rags	SW 410	Maintenance activities	0.30	0.74	0.66	0.74	1.52	
		Contaminated oil filter	SW 410	Maintenance activities	0.01	0.00	0.39	0.01	0.27	
		Empty contaminated container	SW 409	Maintenance activities	0.02	0.36	0.07	0.02	0.18	
				SUM	**0.33**	**1.10**	**1.12**	**0.77**	**1.96**	
		Used fluorescent tube and bulbs	SW 109	Powerhouse and residential area	0.22	0.04	0.13	0.27	0.56	
		Waste of batteries containing cadmium and nickel or mercury or lithium	SW 103	Battery room/UPS room	0.34	0.00	0.10	0.00	0.00	
		Electrical and electronic waste	SW 110	Powerhouse and residential area	0.82	0.28	0.37	1.10	0.92	
				SUM	**1.38**	**0.31**	**0.59**	**1.37**	**1.48**	
		Contaminated soil disposed (if applicable)	-	-	0.00	0.00	0.00	0.00	1.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**1.00**	
		Chemicals that are discarded or off-specification	SW 429	Chemical store	0.38	0.91	0.00	0.66	0.77	
		Spent inorganic acids	SW 206	Battery room/UPS room	0.32	0.00	0.00	0.00	0.00	
				SUM	**0.71**	**0.91**	**0.00**	**0.66**	**0.77**	

SUSTAINABILITY PERFORMANCE DISCLOSURE

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
Hydro	Murum HEP	Used lubricating oil	SW 305	Diesel genset	1.12	0.22	1.05	1.87	0.30	GRI 306-3
		Used hydraulic oil	SW 306	For hydraulic system, e.g., intake gate	31.69	25.00	169.45	12.98	26.61	
		Oil water emulsion	SW 307	Lube oil contaminated with water through process (dewatering pit, lube oil contaminated with water during operation i.e. leak heat exchange tube)	3.58	9.20	70.61	1.62	0.60	
		Dirty diesel	SW 311	Cleaning of bolts and nuts and parts of the turbine	0.03	0.00	0.00	0.00	0.00	
		Used transformer oil	SW 327	-	0.00	0.00	0.00	0.00	0.00	
				SUM	**36.42**	**34.42**	**241.10**	**16.47**	**27.51**	
		Discarded Oxidant Media	SW 104	-	0.24	0.00	0.00	0.00	0.00	
		Discarded media of air circulation unit (carb)	SW 104	-	0.00	0.00	0.00	0.00	0.00	
		Discarded paint cans	SW 409	-	0.02	0.09	0.03	0.12	0.00	
		Container contaminated with SW	SW 409	-	0.74	0.05	0.00	1.51	0.03	
		Used oil filter	SW 410	-	0.11	0.05	0.12	0.22	0.03	
		Empty spray can	SW 409	-	0.01	0.01	0.01	0.01	0.00	
		Contaminated rags	SW 410	-	1.15	0.56	1.35	0.90	0.65	
				SUM	**2.26**	**0.77**	**1.51**	**2.76**	**0.71**	
		Discarded Light Bulb/Tube	SW 109	Building maintenance	0.04	0.00	0.04	0.06	0.03	
		Discarded Lead Acid Battery	SW 102	From Genset and DC Supply System	0.00	0.00	0.12	4.37	0.00	
		E-Waste	SW 110	Electrical device	0.02	0.02	0.17	0.29	0.24	
		Discarded Battery	SW 103	From DC supply	0.04	0.00	0.14	0.04	0.00	
				SUM	**0.09**	**0.02**	**0.47**	**4.75**	**0.27**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Contaminated soil disposed (if applicable)	-	-	0.00	0.00	0.67	0.00	0.00	GRI 306-3
				SUM	**0.00**	**0.00**	**0.67**	**0.00**	**0.00**	
		Spent sodium hydroxide	SW 206	-	0.00	0.00	0.00	0.00	0.00	
		Spent hydrochloric acid	SW 206	-	0.00	0.00	0.00	0.00	0.00	
		Mixture of SW and non-SW (Paints, plant maintenance)	SW 422	-	0.03	0.00	0.04	0.02	0.00	
		Obsolete laboratory chemicals	SW 430	-	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.03**	**0.00**	**0.04**	**0.02**	**0.00**	
Hydro	Batang Ai HEP	Used lubricating oil	SW 305	Maintenance activities	8.60	5.23	6.65	16.51	27.00	
		Used transformer oil	SW 327	Transformer oil maintenance	22.11	23.00	11.00	0.00	0.00	
		Used transformer oil	SW 306	Transformer oil maintenance	0.00	0.00	34.00	0.00	0.00	
				SUM	**30.71**	**28.23**	**51.65**	**16.51**	**27.00**	
		Disposed drums contaminated with chemicals	SW 409	-	0.00	0.24	0.25	4.00	23.00	
		Disposed containers contaminated with chemicals	SW 409	-	2.13	0.12	0.11	0.00	0.00	
		Contaminated rags	SW 410	Maintenance activities	3.62	0.55	0.80	6.00	14.00	
				SUM	**5.75**	**0.91**	**1.16**	**10.00**	**37.00**	
		Discarded bulbs	SW 109	-	0.30	0.56	0.50	0.04	0.00	
				SUM	**0.30**	**0.56**	**0.50**	**0.04**	**0.00**	
		Contaminated soil	SW 408	-	0.00	0.35	0.30	0.00	0.00	
				SUM	**0.00**	**0.35**	**0.30**	**0.00**	**0.00**	
		Chemicals disposed (if applicable)	SW 429	-	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
Waste Volume Generated from Coal, Gas and Diesel Fired Power Plants by Category										GRI 306-3
Coal	SPC	Used lubricating oil	SW 305	Machinery maintenance	24.19	4.39	10.94	3.98	11.56	
		Used hydraulic oil	SW 306	Machinery maintenance	9.65	6.28	5.57	13.62	17.35	
				SUM	**33.83**	**10.67**	**16.52**	**17.60**	**28.91**	
		Disposed containers, bags or equipment contaminated with chemicals, pesticides, mineral oil or scheduled waste	SW 409	-	4.00	2.41	2.09	1.42	5.23	
		Contaminated rags	SW 410	Items used for maintenance work	18.05	14.79	2.92	1.48	10.09	
				SUM	**22.05**	**17.20**	**5.01**	**2.91**	**15.31**	
		Waste of lead acid batteries in whole or crushed form	SW 102	Machinery maintenance	0.27	0.21	0.26	0.00	0.00	
		Waste of batteries containing cadmium and nickel or mercury or lithium	SW 103	Machinery maintenance	0.02	0.01	0.01	0.01	0.00	
		E-waste	SW 110	Electrical & electronic maintenance	0.51	0.13	0.04	0.12	0.04	
		Disposed fluorescent bulb	SW 109	Electrical & electronic maintenance	-	-	0.04	0.08	0.10	
				SUM	**0.80**	**0.35**	**0.35**	**0.21**	**0.14**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Contaminated soil, debris or matter resulting from cleaning-up spilled chemicals, mineral oil or scheduled waste	SW 408	-	3.73	3.70	5.02	1.26	0.96	GRI 306-3
				SUM	**3.73**	**3.70**	**5.02**	**1.26**	**0.96**	
		Chemicals that are discarded or off-specification	SW 429	-	1.74	1.72	0.47	0.60	0.00	
				SUM	**1.74**	**1.72**	**0.47**	**0.60**	**0.00**	
		Fly Ash	SW 104	Plant operation	0.00	3,529.47	5,515.16	4,057.87	2,366.36	
		Bottom Ash (Wet/bottom)	SW 104	Plant operation	0.00	63,652.00	48,827.28	38,334.90	38,940.59	
		Wet Ash (Wet and dry ashes stored in ash pond)	SW 104	Plant operation	70,589.01	-	-	-	-	
				Fly Ash **SUM**	**0.00**	**3,529.47**	**5,515.16**	**4,057.87**	**2,366.36**	
				Bottom Ash **SUM**	**70,589.01**	**63,652.00**	**48,827.28**	**38,334.90**	**38,940.59**	
Coal	MPG	Used lubricating oil	SW 305	From machine/ equipment during shutdown	11.44	21.18	3.70	9.09	18.92	
		Used hydraulic oil	SW 306	Hydraulic system (e.g., for the torch system)	0.52	0.35	0.17	7.09	0.04	
				SUM	**11.96**	**21.53**	**3.87**	**16.18**	**18.96**	
		Contaminated empty drum	SW 409	From machine/ equipment during shutdown & service	0.00	0.78	0.76	0.65	0.00	
		Contaminated rags	SW 410	Service & cleaning oil spillage	0.14	0.43	0.06	0.55	0.41	
				SUM	**0.14**	**1.21**	**0.82**	**1.20**	**0.41**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Used batteries	SW 102	From equipment, electrical & electronic parts, for genset, double AA, torchlight, for testing equipment, auxiliary equipment	0.00	0.00	0.12	6.89	0.00	GRI 306-3
		E-waste	SW 110	From machine/ equipment, laptop parts, parts of electrical (panel)	0.51	0.15	0.00	5.21	0.31	
				SUM	**0.51**	**0.15**	**0.12**	**12.10**	**0.31**	
		Contaminated soil disposed (if applicable)	-	-	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
		Discarded Chemical Waste	SW 429	Analysis and sampling, from lab	0.01	0.08	0.00	0.01	0.01	
				SUM	**0.01**	**0.08**	**0.00**	**0.01**	**0.01**	
		Fly Ash	SW 104	Plant operation	80,394.56	7,686.03	27,024.77	22,982.96	24,461.48	
		Boiler Bottom Ash Hopper	SW 204	Plant operation	8,047.50	5,099.19	2,705.17	2,556.50	2,720.97	
				Fly Ash **SUM**	**80,394.56**	**7,686.03**	**27,024.77**	**22,982.96**	**24,461.48**	
				Bottom Ash **SUM**	**8,047.50**	**5,099.19**	**2,705.17**	**2,556.50**	**2,720.97**	
Coal	BPG	Used lubricating oil	SW 305	Machinery maintenance	-	1.90	5.05	14.41	2.94	
		Used hydraulic oil	SW 306	Machinery maintenance	-	0.00	0.00	0.95	0.00	
		Waste oil or oily sludge	SW 311	Machinery maintenance & operation	-	-	-	0.27	0.00	
		Oily residue from automotive workshop, service station, oil or grease interceptor	SW 312	Machinery maintenance & operation	-	0.07	0.25	2.14	0.00	
				SUM	**0.00**	**1.97**	**5.30**	**17.77**	**2.94**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Pathogenic waste, clinical waste or quarantined materials	SW 404	Items used for swab test	-	-	-	0.11	0.00	GRI 306-3
		Disposed containers, bags or equipment contaminated with chemicals, pesticides, mineral oil or scheduled waste	SW 409	-	-	2.70	1.64	0.62	0.60	
		Contaminated rags	SW 410	Items used for maintenance work	-	0.54	1.12	2.24	0.62	
		Fibre wools	SW 201	Machinery Maintenance	-	-	0.10	1.92	1.92	
				SUM	**0.00**	**3.24**	**2.86**	**4.89**	**3.14**	
		Waste of lead acid batteries in whole or crushed form	SW 102	Machinery maintenance	-	0.00	0.11	0.21	0.00	
		Waste of batteries containing cadmium and nickel or mercury or lithium	SW 103	Machinery maintenance	-	0.00	0.01	0.00	0.00	
		Waste containing mercury or its compound	SW 109	Electrical & electronic maintenance	-	-	-	0.04	0.00	
		E-waste	SW 110	Electrical & electronic maintenance	-	0.00	0.28	0.14	0.00	
				SUM	**0.00**	**0.00**	**0.40**	**0.40**	**0.00**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Contaminated soil, debris or matter resulting from cleaning-up of a spill of chemical, mineral oil or scheduled wastes	SW 408	-	-	7.00	0.00	1.76	0.47	GRI 306-3
				SUM	**0.00**	**7.00**	**0.00**	**1.76**	**0.47**	
		Chemicals that are discarded or off-specification	SW 429	-	-	0.00	2.95	0.61	1.29	
				SUM	**0.00**	**0.00**	**2.95**	**0.61**	**1.29**	
		Fly Ash (Dry/ fly ash was last produced in July 2017. Thus, total generation is less than 2016)	SW 104	Plant operation	-	66,967.71	120,065.35	131,749.45	130,335.80	
		Bottom Ash (Wet/bottom)	SW 104	Plant operation	-	11,817.83	12,111.00	23,249.90	23,000.43	
		Wet Ash (Wet and dry ashes stored in ash pond)	SW 104	Plant operation	-	113,845.11	180,231.40	223,975.03	221,170.80	
			Fly Ash	**SUM**	**-**	**66,967.71**	**120,065.35**	**131,749.45**	**130,335.80**	
			Bottom Ash	**SUM**	**0.00**	**125,662.94**	**192,342.40**	**247,224.93**	**244,171.23**	
Natural Gas	Bintulu PS	Used lubricating oil	SW 305	Maintenance	28.20	35.20	40.50	31.67	64.95	
		Dirty Diesel	SW 421	Diesel engine, sometimes used for engine cleaning	2.60	3.97	2.60	0.00	0.30	
			SW 421	Mixture of Scheduled Waste	-	-	-	1.70	1.60	
				SUM	**30.80**	**39.17**	**43.10**	**33.37**	**66.85**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Used Paint Cans	SW 409	Maintenance	0.80	0.46	0.01	1.22	0.14	GRI 306-3
		Disposed Container Contaminated with Chemical	SW 409	Maintenance	-	-	-	-	2.46	
		Used WD-40 Spray Cans	SW 409	Maintenance	-	-	0.05	0.01	0.08	
		Used Chemical Bottles	SW 409	Maintenance	0.80	0.08	0.02	0.02	0.10	
		Contaminated rags	SW 410	Maintenance	4.21	0.20	3.50	0.75	0.00	
		Sodium Hypochlorite residue	SW 425	Maintenance	-	-	-	0.08	9.00	
		Used oil filter	SW 410	Maintenance	5.40	3.28	2.20	0.96	2.45	
		Spent Silica Gel	SW 429	Maintenance	2.10	1.43	0.61	0.00	0.00	
		Contaminated containers	SW 409	Maintenance	-	-	-	0.23	0.00	
		Spent Resin	SW 429	Maintenance	-	-	14.60	0.80	0.00	
		Contaminated matters	SW 410	Maintenance	-	-	-	2.82	5.90	
				SUM	**13.31**	**5.45**	**20.99**	**6.89**	**20.13**	
		Used Cadmium Batteries	SW 103	From control system in MCR, gas turbine	0.00	0.00	0.00	0.00	0.00	
		Chemical waste containing mercury	SW 109	Maintenance	0.00	0.00	0.00	0.00	0.00	
		Used Bulbs	SW 110	Building Maintenance	0.11	0.21	0.03	0.12	0.03	
		E-waste	SW 110	Building Maintenance	0.00	0.36	0.05	0.01	0.02	
				SUM	**0.11**	**0.57**	**0.08**	**0.13**	**0.05**	
		Contaminated soil disposed (if applicable)	-	-	0.00	0.00	7.70	4.00	1.50	
				SUM	**0.00**	**0.00**	**7.70**	**4.00**	**1.50**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Mixed Chemicals	SW 429	Maintenance	0.20	0.06	0.00	0.00	0.00	GRI 306-3
		Sludge from Interceptor	SW 312	Maintenance	-	-	19.60	0.00	0.00	
		Sludge containing metal	SW 204	Maintenance	-	-	57.20	0.00	0.00	
		Sludge containing lead	SW 204	Maintenance	3.00	0.00	0.00	0.00	0.00	
				SUM	**3.20**	**0.06**	**76.80**	**0.00**	**0.00**	
		Gas condensate	SW 421	-	0.00	0.00	0.00	0.00	1.60	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**1.60**	
Natural Gas	Miri PS	Used lubricating oil	SW 305	-	2.20	2.20	11.60	17.80	1.60	
		Used transformer oil	SW 306	-	0.40	2.60	0.80	0.60	4.20	
		Oil-water emulsion (dirty diesel, cleaning of engine, operation of gen set)	SW 307	-	0.00	0.00	0.80	0.00	0.20	
		Sludge from mineral oil storage tank (sludge from the diesel storage tank)	SW 310	-	0.00	0.00	0.00	0.00	0.00	
		Mixture scheduled waste (cleaning of gen set, collected by products)	SW 421	-	0.60	0.40	2.80	1.80	0.40	
				SUM	**3.20**	**5.20**	**16.00**	**20.20**	**6.40**	
		Contaminated drum	SW 409	-	0.04	0.03	0.06	0.02	0.00	
		Contaminated rags	SW 410	-	0.70	0.80	1.50	1.20	0.80	
		Used oil filter	SW 410	-	0.60	0.40	1.50	0.50	0.20	
				SUM	**1.34**	**1.23**	**3.06**	**1.72**	**1.00**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Used battery (gen set, acid battery)	SW 103	-	1.90	0.00	0.00	0.00	0.73	GRI 306-3
		Fluorescent tube lighting	SW 109	-	0.20	0.00	0.40	0.10	0.10	
				SUM	**2.10**	**0.00**	**0.40**	**0.10**	**0.83**	
		Contaminated soil disposed (if applicable)	SW 409	-	0.00	0.00	0.00	0.00	0.50	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.50**	
		Chemicals disposed (if applicable)	-	-	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
		Gas condensate	SW 421	-	3.40	2.40	0.60	3.20	6.40	
				SUM	**3.40**	**2.40**	**0.60**	**3.20**	**6.40**	
Diesel	Sg Biawak PS	Used lubricating oil	SW 305	From diesel engine (flushing of lube separators)	88.95	2.22	2.23	4.95	0.00	
		Used hydraulic oil	SW 306	From transformer	17.81	0.00	0.00	0.00	0.00	
				SUM	**106.76**	**2.22**	**2.23**	**4.95**	**0.00**	
		Uncured Resin waste	SW 325	Termination insulation of transformer	0.00	0.00	0.00	0.00	0.00	
		Contaminated empty drums	SW 409	-	0.18	0.00	0.00	0.00	0.00	
		Discarded chemical bottles	SW 409	Laboratory	0.00	0.04	0.00	0.01	0.00	
		Contaminated rags	SW 410	Cleaning of Diesel engine	0.01	0.03	0.00	0.05	0.00	
		Used oil filter	SW 410	Diesel engine lube oil filter	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.19**	**0.07**	**0.00**	**0.06**	**0.00**	
		Used battery acid plumbum	SW 102	From diesel fire pump (for starting)	0.00	0.00	0.02	0.00	0.00	
		Waste containing mercury or its compound	SW 109	Fluorescent tubes	0.04	0.00	0.00	0.00	0.00	
				SUM	**0.04**	**0.00**	**0.02**	**0.00**	**0.00**	

SUSTAINABILITY PERFORMANCE DISCLOSURE

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
		Contaminated soil disposed (if applicable)	-	-	0.00	0.00	0.00	0.00	0.00	GRI 306-3
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
Diesel	Limbang PS	Used lubricating oil	SW 305	Machinery maintenance	42.60	56.80	66.00	57.25	61.60	
		Dirty Diesel	SW 421	Machinery maintenance	22.80	30.40	14.20	7.90	33.80	
				SUM	**65.40**	**87.20**	**80.20**	**65.15**	**95.40**	
		Contaminated Used Drum	SW 409	Machinery maintenance	2.24	1.84	2.03	1.69	4.00	
		Contaminated Used Paint Can	SW 409	Machinery maintenance	0.40	0.15	0.00	0.00	0.00	
		Contaminated rags	SW 410	Machinery maintenance	1.30	1.80	1.90	3.15	1.90	
		Used oil filter	SW 410	Machinery maintenance	0.10	0.07	0.63	1.48	1.10	
				SUM	**4.04**	**3.86**	**4.56**	**6.32**	**7.00**	
		Lead Acid Battery	SW 102	From machine/ equipment (Fork lift, from fire hydrant pump)	0.00	0.00	0.00	0.00	0.00	
		Unused Air Conditioner (e-waste)	SW 110	From machine/ equipment	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
		Contaminated Soil	SW 408	Machinery maintenance	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	
		Chemicals disposed (if applicable)	-	-	0.00	0.00	0.00	0.00	0.10	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.10**	

Our Performance Data

306-3

Plant Type	Plant Name	Types of Waste	Waste Code	Source/Remark	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
					Waste Quantity by Year (Tonne)					
Diesel	Lawas PS	Used lubricating oil	SW 305	-	11.57	20.20	30.00	55.40	52.20	GRI 306-3
		Dirty Diesel	SW 421	-	12.49	0.00	0.00	0.00	2.00	
		Oily Residue from Station Interceptor	SW 312	-	-	-	3.00	0.00	0.00	
		Spent Hydraulic Oil	SW 306	-	-	-	-	-	1.00	
				SUM	**24.06**	**20.20**	**33.00**	**55.40**	**55.20**	
		Contaminated empty drums	SW 409	-	1.05	0.65	0.18	0.46	1.36	
		Contaminated rags	SW 410	-	1.98	1.40	0.80	0.90	1.00	
		Used Oil Filters	SW 410	-	-	-	0.00	0.00	0.90	
		Used Fuel Filters	SW 410	-	-	-	0.00	0.00	0.40	
		Used Water Separators	SW 410	-	-	-	0.00	0.00	0.20	
				SUM	**3.03**	**2.05**	**0.98**	**1.36**	**3.86**	
		E-waste disposed (if applicable)	-	-	0.00	0.00	1.86	0.00	0.00	
				SUM	**0.00**	**0.00**	**1.86**	**0.00**	**0.00**	
		Contaminated soil	SW 108	-	0.00	0.00	0.20	1.80	0.16	
				SUM	**0.00**	**0.00**	**0.20**	**1.80**	**0.16**	
		Chemicals disposed (if applicable)	-	-	0.00	0.00	0.00	0.00	0.00	
				SUM	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	

Type of Plant	Type of Waste	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
		Scheduled Waste Generation (Tonne)					
Overall	Fly Ash	80,394.56	78,183.21	152,605.28	158,790.28	157,163.64	GRI 306-3
	Bottom Ash	78,636.51	194,414.13	243,874.85	288,116.33	285,832.79	
	Others (Used Oil, Contaminated Items, E-Waste, Gas Condensate, Contaminated Soil and Chemicals)	473.72	320.27	652.97	420.96	440.27	
	Total Quantity (Tonne)	**159,504.78[4]**	**272,917.61[3]**	**397,133.10[2]**	**447,327.57[1]**	**443,436.70***	

Our Performance Data

2-27, 306-3, 401-1

Type of Plant	Type of Waste	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
		Scheduled Waste Generation Intensity (t/GWh)					
Overall	Fly Ash	2.89	2.77	5.20	5.08	4.94	GRI 306-3
	Bottom Ash	2.82	6.90	8.31	9.22	8.98	
	Others (Used Oil, Contaminated Items, E-Waste, Gas Condensate, Contaminated Soil and Chemicals)	0.02	0.01	0.02	0.01	0.01	
	Total	**5.73**	**9.68[3]**	**13.53[2]**	**14.31[1]**	**13.93***	

Environmental Compliance

Disclosure	GRI Disclosures/ IFRS
Non-Compliance with Environmental Laws and Regulations	GRI 2-27
In 2023, there is no fine/penalty/compound from environmental authorities recorded for Sarawak Energy.	

New Hires and Turnover by Gender and Age

New Hires (by Gender)	2019			2020			2021			2022			2023			GRI Disclosures/ IFRS
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	
Total	**258**	**110**	**368**	**275**	**75**	**350**	**121**	**42**	**163**	**186**	**75**	**261**	**307**	**130**	**437**	GRI 401-1
By age, in numbers																
Up to 30 years old	159	67	226	222	53	275	89	31	120	161	58	219	241	94	335	
Between 31 and 50 years old	99	43	142	45	22	67	29	11	40	18	15	33	56	33	89	
Over 50 years old	0	0	0	8	0	8	3	0	3	7	2	9	10	3	13	

Staff Turnover (by Gender)	2019			2020			2021			2022			2023			GRI disclosures/ IFRS
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	
Total	**147**	**26**	**173**	**146**	**30**	**176**	**155**	**27**	**182**	**134**	**32**	**166**	**136**	**29**	**165**	GRI 401-1
By age, in numbers																
Up to 30 years old	76	23	99	18	10	28	13	6	19	10	4	14	10	2	12	
Between 31 and 50 years old	0	0	0	22	6	28	28	11	39	36	14	50	32	10	42	
Over 50 years old	71	3	74	106	14	120	114	10	124	88	14	102	94	17	111	

Our Performance Data

401-1

New Hires (by Company)	2019			2020			2021			2022			2023			GRI Disclosures/ IFRS
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	
Total	**258**	**110**	**368**	**275**	**75**	**350**	**121**	**42**	**163**	**186**	**75**	**261**	**307**	**130**	**437**	GRI 401-1
By company, in numbers																
Sarawak Energy Berhad	**258**	**110**	**368**	**275**	**75**	**350**	**121**	**42**	**163**	**186**	**75**	**261**	**307**	**130**	**437**	

Staff Turnover (by Company)	2019			2020			2021			2022			2023			GRI Disclosures/ IFRS
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	
Total	**147**	**26**	**173**	**146**	**30**	**176**	**155**	**27**	**182**	**134**	**32**	**166**	**136**	**29**	**165**	GRI 401-1
By company, in numbers																
Sarawak Energy Berhad	34	12	46	35	11	46	37	11	48	29	12	41	30	8	38	
Sejingkat Power Generation	11	-	11	-	-	-	4	0	4	-	-	-	3	0	3	
Mukah Power Generation	3	-	3	-	-	-	2	0	2	2	1	3	2	0	2	
Syarikat SESCO Bhd	-	-	-	-	-	-	-	-	-	101	19	120	98	21	119	
SESCO Headquarters	37	10	47	37	8	45	40	6	46	-	-	-	-	-	-	
SESCO Kuching	14	1	15	36	4	40	34	6	40	-	-	-	-	-	-	
SESCO Sri Aman	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	
SESCO Sarikei	11	-	11	4	1	5	7	0	7	-	-	-	-	-	-	
SESCO Sibu	14	-	14	9	1	10	17	1	18	-	-	-	-	-	-	
SESCO Bintulu	7	1	8	5	0	5	3	2	5	-	-	-	-	-	-	
SESCO Miri	12	1	13	14	4	18	5	1	6	-	-	-	-	-	-	
Balingian Power Generation	-	1	1	-	-	-	1	0	1	-	-	-	-	-	-	
Sarawak Hidro Power Sdn. Bhd.	1	-	1	2	0	2	3	0	3	-	-	-	-	-	-	
Bakun Hydro Power Generation	-	-	-	4	1	5	2	0	2	1	-	1	3	-	3	
Sarawak Power Gen.	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	

Our Performance Data

2-7, 201-3, 401-1, 401-2

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Turnover rate	%	3.32	3.27	3.34	3.00	2.76	GRI 401-1

Benefits Provided to Full-Time Employees

Disclosure	Description	GRI Disclosures/ IFRS
Retirement Token for employees on permanent establishment and on fixed term contract of employment (Effective 7 August 2023)	The Retirement Token was extended to employees on fixed term contract of employment with effect from 7 August 2023. The Retirement Token is a token of appreciation for all the staff for their services. This token is designed to let our staffs know that Company value all their hard works and commitments towards the Company.	GRI 201-3, 401-2
Flexible Work Arrangement – Hybrid Arrangement (Effective 6 July 2023)	The Flexible Work Arrangement is a permanent feature of the organisation. This is to support our employees to work from anywhere and anytime. It can help to increase productivity as a result of saving in commuting time which at the same time contribute towards reduction in carbon footprint.	
Enhancement of medical benefits (effective 1 September 2023)	1. No yearly renewal or approval needed for medical benefit for Dependent children pursuing higher education. 2. Abolish the recovery of ward charges for all employees (including eligible retirees) and eligible dependents. 3. Removal of supply cap for long term medication collection. 4. Full cover for child delivery charges regardless of method of delivery (up to 6th child) & 5 times postnatal care after discharge. 5. Revise the limit of circumcision procedure & haemodialysis treatment to cover the actual cost. 6. Extend cancer treatment at private panel medical providers for employees (including eligible retirees) and eligible dependents. 7. Extend psychologist counselling, psychotherapy and psychiatry treatments to employees' eligible dependents as well.	

Employees

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total number of employees	Number	5,207	5,381	5,442	5,537	5,809	GRI 2-7
Total female employees	Number	1,155	1,200	1,235	1,278	1,379	
Total male employees	Number	4,052	4,181	4,207	4,259	4,430	
Permanent female employees	Number	4,052	1,156	1,182	1,216	1,315	
Permanent male employees	Number	3,947	3,961	3,958	4,023	4,169	
Contract female employees	Number	23	44	53	62	64	
Contract male employees	Number	105	220	249	236	261	

Our Performance Data

2-7, 403-4

Total Employees by Age Group

	2019			2020			2021			2022			2023			GRI Disclosures/ IFRS
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	GRI 2-7
Total Staff (by Gender)	**4,052**	**1,155**	**5,207**	**4,181**	**1,200**	**5,381**	**4,207**	**1,235**	**5,442**	**4,259**	**1,278**	**5,537**	**4,430**	**1,379**	**5,809**	
By age, in numbers																
Below 20 years old	4	1	5	3	0	3	3	0	3	0	0	0	1	0	1	
Between 21 and 25 years old	313	54	367	331	62	393	326	65	391	264	82	346	288	106	394	
Between 26 and 30 years old	904	276	1,180	860	237	1,097	776	195	971	804	176	980	817	205	1,022	
Between 31 and 35 years old	1,028	361	1,389	1,131	401	1,532	1,175	423	1,598	1,120	404	1,524	1,092	360	1,452	
Between 36 and 40 years old	532	166	698	599	190	789	683	223	906	831	266	1,097	949	336	1,285	
Between 41 and 45 years old	366	110	476	389	116	505	410	121	531	405	132	537	463	147	610	
Between 46 and 50 years old	255	75	330	266	82	348	301	84	385	340	97	437	357	108	465	
Between 51 and 55 years old	267	65	332	242	62	304	220	75	295	206	74	280	218	66	284	
Between 56 and 60 years old	361	47	408	335	50	385	293	49	342	266	46	312	220	49	269	
Above 60 years old	22	0	22	25	0	25	20	0	20	23	1	24	25	2	27	

Total Employees by Grade & Position

			2019			2020			2021			2022			2023			GRI Disclosures/ IFRS
By Grade	By Position	Unit	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	GRI 2-9
Board of Directors	Board of Directors	Number	5	0	5	5	0	5	6	0	6	6	0	6	7	0	7	
SG1 and above	GEC	Number	12	2	15	13	2	15	13	2	15	12	2	14	13	2	15	
	HoD/Top Management	Number	17	7	24	24	10	34	24	10	34	24	10	34	27	12	39	
E5-E8	Senior Management	Number	228	61	228	179	70	249	190	84	274	213	91	304	235	109	344	
E1-E4	Middle Management	Number	662	454	1,116	728	491	1,219	775	529	1,304	799	572	1,371	888	650	1,538	
NE1-NE6	Non-executive	Number	3,193	631	3,824	3,237	627	3,864	3,205	610	3,815	3,211	603	3,814	3,267	606	3,873	
Total (Excl. BoD)		**Number**		**5,207**			**5,381**			**5,442**			**5,537**			**5,809**		

Environment & Occupational Health & Safety (EOSH) Members in 2022 & 2023

Disclosure	Unit	2022	2023	GRI Disclosures/ IFRS
Members				GRI 403-4
Chairman	Number	22	23	
Secretary	Number	22	23	
Employer Representative	Number	211	262	
Employees Representative	Number	301	282	

Training

		2019		2020		2021		2022		2023		GRI Disclosures/ IFRS
Disclosure	Unit	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	GRI 404-1
Total and Average of Hours of Training Recorded by Category and Gender for 2019 - 2023												
Management	No. of Employees	95	50	42	12	37	12	249	103	275	123	
	Total Training Hours	1,713.00	1,556.00	1,019.80	486.00	1,335.60	636.22	17,559.38	8,144.83	15,407.09	8,892.24	
	Average	18.03	31.12	24.28	40.50	36.10	53.02	70.52	79.08	570.63	72.29	
Executive	No. of Employees	995	543	907	561	965	613	800	571	888	650	
	Total Training Hours	19,219.00	9,713.00	24,021.30	16,923.86	52,708.67	34,406.68	42,557.97	28,428.67	62,187.41	43,689.70	
	Average	19.32	17.89	26.48	30.17	54.62	56.13	53.20	49.79	70.03	67.21	
Non-executive	No. of Employees	2,933	405	3,237	627	3,205	610	3,213	601	3,267	606	
	Total Training Hours	51,316.00	6,548.00	30,697.05	4,955.05	61,341.71	16,144.98	107,661.60	16,016.34	133,502.98	19,867.89	
	Average	17.50	16.17	9.48	7.90	19.14	26.47	33.51	26.65	40.86	32.79	

SUSTAINABILITY PERFORMANCE DISCLOSURE

Our Performance Data

2-7, 2-9, 404-1

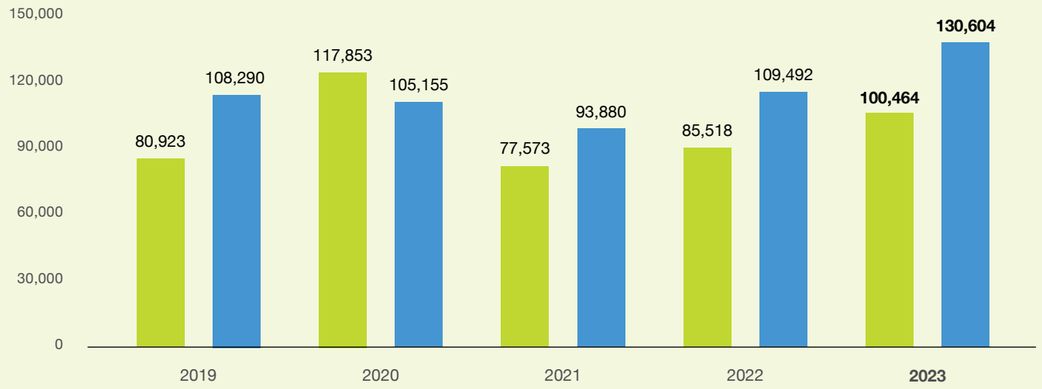
Our Performance Data

418-1

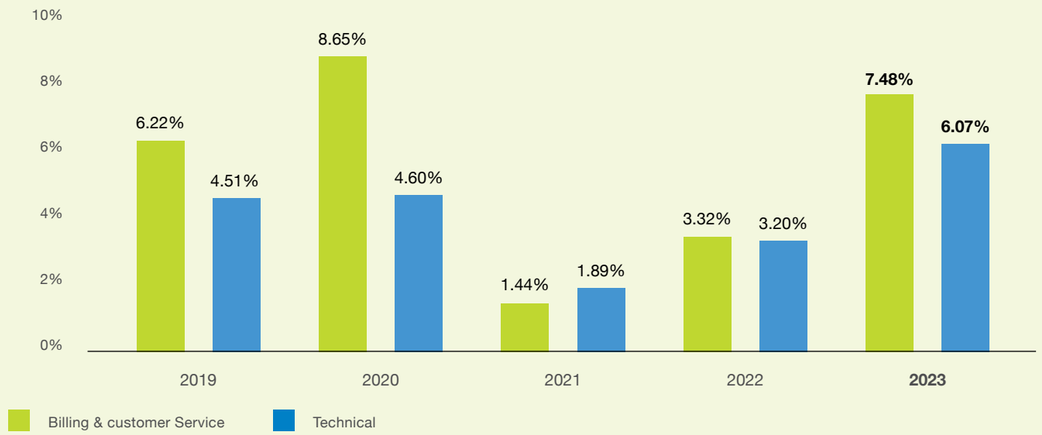
Customer Privacy

Disclosure	GRI Disclosures/ IFRS
Substantiated complaints concerning breaches of customer privacy and losses of customer data	GRI 418-1
There were no substantiated complaints regarding breaches of customer privacy and losses of customer data in 2023.	

Customer Service -
No. of Calls Handled by Sarawak Energy Call Centre 2019 - 2023



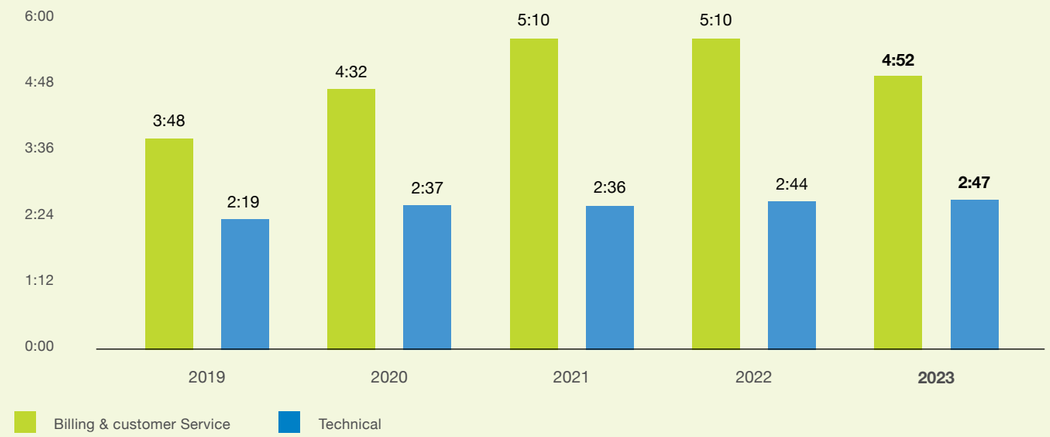
Customer Service -
Overall Abandon Rate 2019 - 2023



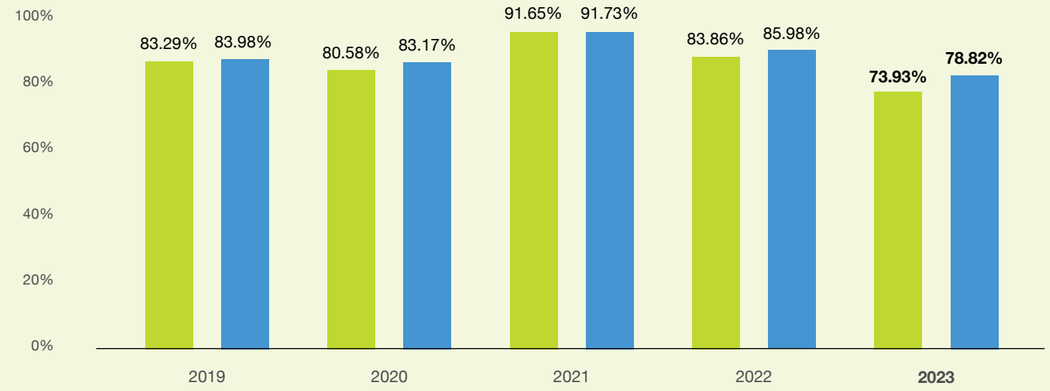
Our Performance Data

418-1

Customer Service -
Average Handling Time 2019 - 2023



Customer Service -
Overall Service Level by Sarawak Energy Call Centre 2019 - 2023



Notes:

1. *For Billing and Customer Service, our customer care executives offer assistance and handle enquiries associated with new applications, billing and meter related issues, as well as general enquires (office location, counter operating hours, tariff, etc).*
2. *For Technical, we primarily cover outages, streetlight and other technical issues such as vegetation clearing, voltage issue, slanting/broken pole or wire, vandalism etc.*

Our Performance Data

EU3, EU4

Customers' Data

Disclosure					GRI Disclosures/ IFRS
Number of Residential, Industrial, Institutional and Commercial Customer Accounts					GRI EU3
Grid/Non-Grid No. of Customers Account Ending 2023					
Grid	**Tariff**	**No. of Active Customers' Account**	**No. of Inactive Customers' Account**	**Total No. of Customers' Account**	
Grid	C1	107,042	6,597	113,639	
Grid	C2	20	0	20	
Grid	C3	41	0	41	
Grid	DOM	627,070	23,265	650,335	
Grid	I1	954	18	972	
Grid	I2	27	1	28	
Grid	I3	92	1	93	
Grid	I4	15	0	15	
Grid	PL	12,703	204	12,907	
Grid	SESCO[a]	520	12	532	
Non-Grid	C1	4,426	178	4,604	
Non-Grid	C2	1	0	1	
Non-Grid	DOM	23,354	942	24,296	
Non-Grid	I1	24	0	24	
Non-Grid	PL	315	2	317	
Non-Grid	SESCO[a]	31	7	38	
Total		**776,635**	**31,227**	**807,862**	

Note:
[a] *SESCO's office buildings.*

Transmission and Distribution Lines

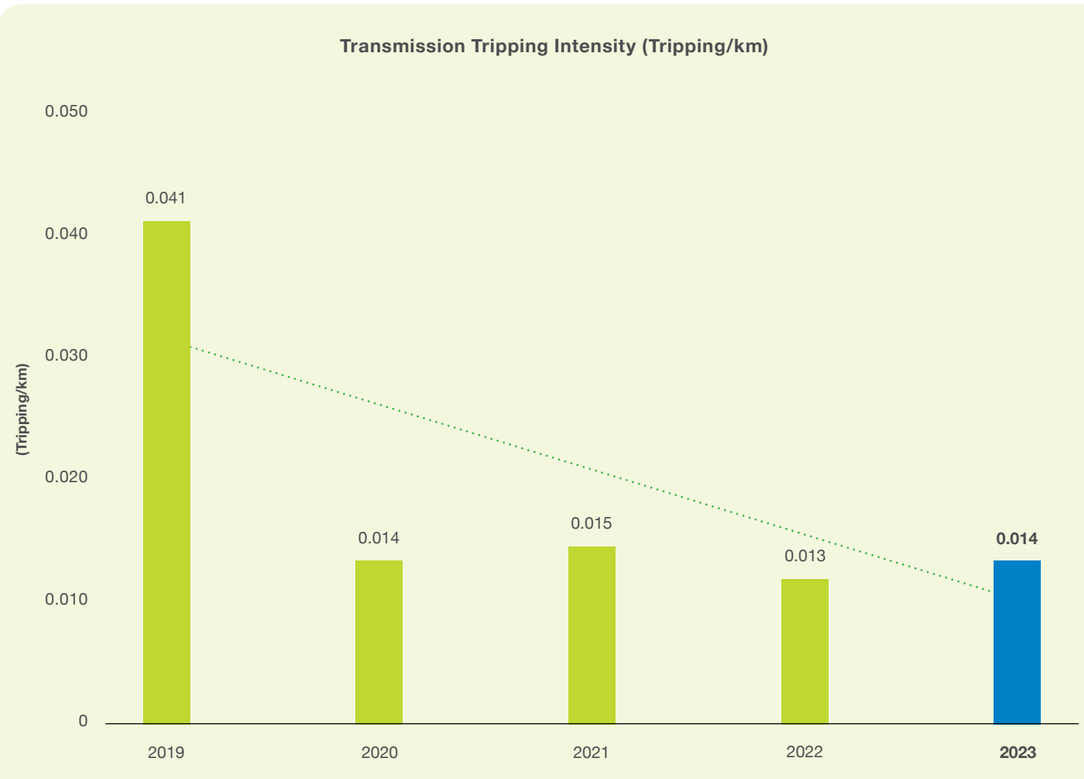
Disclosure								GRI Disclosures/ IFRS
Length of Above and Underground Transmission and Distribution Lines by Regulatory Regime								GRI EU4
Total Length of Distribution Lines in 2023								
		33kV Distribution		**11kV Distribution**		**415V Distribution**		
Region	**Unit**	**O/H**	**U/G**	**O/H**	**U/G**	**O/H**	**U/G**	
WR Kuching	km	1,166.58	851.16	2,264.73	1,970.71	5,559.29	1,786.31	
WR Sri Aman	km	869.66	64.12	1,592.96	186.07	1,503.93	105.51	
CR Sarikei	km	405.97	77.66	519.20	116.28	1,273.12	154.88	
CR Sibu	km	1,402.04	1,120.86	1,662.61	1,176.85	3,842.66	1,123.13	
NR Bintulu	km	860.78	299.75	241.42	387.60	557.44	253.64	
NR Miri	km	414.06	674.50	779.86	724.63	2,863.12	656.32	
NR Limbang	km	122.37	16.10	696.19	78.66	580.57	39.46	
Total	**km**	**5,241.46**	**3,104.15**	**7,756.97**	**4,640.80**	**16,180.13**	**4,119.25**	
Total Length of Transmission Lines in 2023								
Category	**Unit**	**500kV energised at 275kV**		**275kV**		**132kV**		
Overhead	km	1,030.88		3,635.44		1,191.32		
Underground	km	-		-		46.94		
Total	**km**	**1,030.88**		**3,635.44**		**1,238.26**		

Our Performance Data

EU12

Transmission Tripping Intensity

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total Distance							GRI EU12
Transmission	km	2,404.76	4,707.46	5,033.05	5,029.51	5,904.58	
Number of Transmission Tripping							
Substation	Number	29	15	12	15	7	
Transmission	Number	69	53	64	49	74	
Total	**Number**	**98**	**68**	**76**	**64**	**81**	
Transmission Tripping Intensity	**Tripping/ km**	**0.041**	**0.014**	**0.015**	**0.013**	**0.014**	



Our Performance Data

EU11, EU26

System Efficiency

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
Total Average Energy Efficiency							GRI EU11
Plant Type: Coal							
Sejingkat Power Corp.	%	27.25	25.11	26.83	21.18	26.84	
PPLS Power Generation	%	30.72	32.62	22.00	28.59	28.64	
Mukah Power Generation	%	31.90	33.01	32.19	32.28	29.64	
Balingian Power Generation	%	35.58	31.85	35.22	37.64	34.16	
Plant Type: Natural Gas							
Sarawak Power Generation	%	40.25	38.68	32.72	38.50	36.33	
Kidurong Power Generation 1	%	-	-	44.78	41.72	49.15	
Kidurong Power Generation 2	%	-	-	-	49.73	50.02	
Bintulu PS	%	21.22	21.03	21.85	14.11	15.30	
Miri PS	%	21.28	21.44	21.79	14.45	14.80	
Plant Type: Diesel							
Sg Biawak PS	%	22.14	17.86[a]	20.48[a]	21.68[a]	21.95	
Limbang PS	%	34.69	34.58	33.81	32.61	33.40	
Lawas PS	%	34.40	34.37	33.31	32.01	32.27	

Notes:

1. Total average energy efficiency for Sarawak Energy thermal power plants connected to Main and Northern grids.

[a] *Plant on standby mode.*

Electrification

Disclosure	Unit	2019	2020	2021	2022	2023	GRI Disclosures/ IFRS
New households connected							GRI EU26
Normal Rural Electrification Scheme (RES)	Number	5,239	3,186	4,010	3,437	1,834	
Hybrid Programmes	Number	483	70	115	13	0	
SARES	Number	3,122	3,354	1,912	2,061	161	
Total	**Number**	**8,844**	**6,610**	**6,037**	**5,511**	**1,995**	

Our Performance Data

EU30

Average Plant Availability Factor

Year	2019		2020		2021		2022		2023		GRI Disclosures/ IFRS
Category	Equivalent Availability Factor (%)	Forced Outage (Hours)	Equivalent Availability Factor (%)	Forced Outage (Hours)	Equivalent Availability Factor (%)	Forced Outage (Hours)	Equivalent Availability Factor (%)	Forced Outage (Hours)	Equivalent Availability Factor (%)	Forced Outage (Hours)	GRI EU30
Plant Type: Hydro											
Batang Ai HEP	83.83	172.22	91.40	122.04	95.89	19.04	88.78	46.24	79.94	216.97	
Murum HEP	85.09	1,076.91	94.85	250.51	93.69	295.29	98.22	187.38	93.23	596.18	
Bakun HEP	97.13	482.17	94.84	284.22	95.68	278.59	93.88	475.46	95.37	204.88	
Plant Type: Coal											
Sejingkat Power Corp	73.32	3,998.20	82.88	1,187.65	83.32	1,573.05	78.94	376.48	73.98	930.02	
PPLS	89.56	1,191.70	90.34	400.93	95.36	44.48	80.72	509.46	67.10	1,752.52	
MPG	75.43	519.98	87.73	220.67	86.36	452.72	76.67	861.27	50.08	2,411.19	
BPG	41.48	5.88	97.04	182.72	73.41	1,053.22	78.20	776.03	77.58	1,769.52	
Plant Type: Natural Gas											
SPG	88.25	252.24	72.04	282.87	61.55	877.16	92.31	1,298.48	78.48	345.85	
Bintulu SESCO	91.1	642.26	87.04	237.44	95.02	1,458.72	89.74	2,649.46	81.76	570.75	
Kidurong Power Generation 1	-	-	-	-	87.48	1,835.77	56.85	799.77	74.17	405.82	
Kidurong Power Generation 2	-	-	-	-	-	-	88.36	42.52	84.31	365.82	
Miri SESCO	93.48	273.45	88.81	2,108.05	82.32	5,446.14	56.29	21,492.05	52.82	15,869.91	
Plant Type: Diesel											
Sg Biawak SESCO	99.06	32.29	98.79	0.00	89.34	0.00	63.85	6,303.75	91.21	847.86	
Limbang SESCO	97.05	221	97.48	120.00	86.87	10,627.00	79.33	22,459.00	89.60	6,951.00	
Lawas SESCO	74.57	1,560	95.59	114.00	82.02	137.00	84.53	4,615.00	90.91	7,755.00	

Our Performance Data

(Former EU8)

R&D Expenditure

No.	Project	Approved Budget (RM)	GRI Disclosures/ IFRS
Research and Development Projects for 2023			GRI (Former EU8)
1	Battery Performance Evaluation System	40,000.00	
2	GHG Monitoring of HEPs (CP)	64,000.00	
3	Transformer Oil & Lubricating Oil Laboratory	100,000.00	
4	Hydro Env Sci Research Programmes	66,000.00	
5	Semadang Microgrid Project	4,923,017.20	
6	Development of AI Robotic System	16,000.00	
7	Integration of Smart and Low-Cost Sensor	10,400.00	
8	Development of 3D Printing System	24,000.00	
9	Solar-Hydrogen in rural electrification	232,141.47	
10	Grid Connected Energy Storage System	80,000.00	
11	Energy Efficiency and Energy Management Initiatives	102,750.00	
12	Waterpower Prototype & Research Program	20,000.00	
13	Proposed Microgrid Study - HIL Testing	418,400.00	
14	SE R&D Laboratory 2.0	2,365,760.00	
15	R&D Display Rack for Robotic	6,000.00	
16	Solid Modelling CAD software	56,000.00	
17	R&D New Laboratory	10,000.00	
18	Battery Home Solar System	240,000.00	
19	Lightning Research Study on 275kV TL	460,821.70	
Total		**9,235,290.37**	

Notes and References

Symbol	Description
*	*The data has been assured by a third party. Read the Independent Assurance Report on pages 252 - 258.*
1	*The data has been assured by a third party for Sustainability Report 2021.*
2	*The data has been assured by a third party for Sustainability Report 2020.*
3	*The data has been assured by a third party for Sustainability Report 2019.*
4	*The data has been assured by a third party for Sustainability Report 2018.*
5	*The data has been assured by a third party for Sustainability Report 2017.*
6	*The data has been assured by a third party for Sustainability Report 2016.*
7	*The data has been assured by a third party for Sustainability Report 2015.*
8	*The data has been assured by a third party for Sustainability Report 2014.*

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By Royal Charter

INDEPENDENT ASSURANCE OPINION STATEMENT

Statement No.: **SRA-MY 798241**

Sarawak Energy Berhad (SEB) Sustainability Report 2023

The British Standards Institution is independent of Sarawak Energy Berhad (hereafter referred to as "SEB" in this statement) and has no financial interest in the operation of SEB other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of SEB only for the purposes of verifying its statements relating to its environmental, social and governance (ESG), more particularly described in the scope, below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by SEB. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to SEB only.

Scope

The scope of engagement agreed upon with SEB includes the following:

The assurance covers part of the report and focuses on systems and activities during the period from 1st January 2023 to 31st December 2023 (the "**Reporting Year**"), for the following sustainability subject matter.

1. Main Grid CO_2 Emissions Intensity (tCO_2eq/MWh) for the financial year 2023:
   - Fuel consumption (FC_j)
   - Net energy generated (NEG_j)
   - Net calorific value (NCV_j)

2. Northern Grid CO_2 Emissions Intensity (tCO_2eq/MWh) for the financial year 2023:
   - Fuel consumption (FC_j)
   - Net energy generated (NEG_j)
   - Net calorific value (NCV_j)

3. Direct Emissions (Scope 1) Intensity (tCO_2eq/ RM Millions of Revenue) for the financial year 2023:
   - Main, Northern, Stand-Alone Grid and Company Owned Vehicles Emissions (tCO_2eq)
   - Revenue (RM Million)

INDEPENDENT THIRD PARTY ASSURANCE STATEMENT

Independent Third Part Assurance Statement

2-5

4. Direct Emissions (Scope 1) Intensity (tCO_2eq/ RM Millions of Total $Investment_{LCG}$) for the financial year 2023:
   - Main, Northern, Stand-Alone Grid and Company Owned Vehicles Emissions (tCO_2eq)
   - Total Investment in Low Carbon Generation (RM Millions of Total $Investment_{LCG}$)

   Note: LCG - Low Carbon Generation

5. Renewable Energy Generation Intensity (RM Millions of $Revenue_{ES}$ / MWh) for the financial year 2023:
   - $Revenue_{ES}$ (RM Million)
   - Net energy generated (NEGj) – Hydropower (MWh)

   Note: ES – Electricity Sales

6. Scope 2 - Buildings & offices (tCO_2eq) for the financial year 2023

7. Scope 3 - Business air travel (tCO_2) for the financial year 2023

8. Total Water Withdrawal by Source (m^3) for the financial year 2023:
   - Municipal water (m^3)
   - Natural water (m^3) and Operating hours (Hrs)

9. Scheduled Waste Generation Intensity (Tonne/GWh) for the financial year 2023:
   - Volume of waste generated (Tonne)
   - Gross electricity generated (GEG_j)

10. Annual Water Volume for Electricity Generation (Million m^3) for the financial year 2023:
    - Operating hours (Hrs)

11. Economic Value Retained (RM) for the financial year 2023

12. Total Value of Tenders Awarded to Local Sarawakian Companies (RM) for the financial year 2023:
    - Operations (RM)
    - Capital works (RM)

13. Loss Time Injury Frequency Rate (LTIFR) for the financial year 2023:
    - Total loss time injury cases
    - Total man hours (Hrs)

14. Sarawak Electrification Coverage (%) for the financial year 2023:
    - Rural electrification coverage (%)

Independent Third Part Assurance Statement

2-5

The evaluation of the nature and extent of the SEB's adherence to all four AA1000 AccountAbility principles and the reliability of specified sustainability performance information in this report as conducted in accordance with Type 2 Moderate Level (Limited Assurance) of AA1000AS v3 sustainability assurance engagement.

Opinion Statement

Based on our work described in the verification report, nothing has come to our attention that causes us to believe that data and information stated in the SEB's Sustainability Report is not correctly presented or with omission, in any material respects or that Inclusivity, Materiality Responsiveness and Impact based on AA1000 criteria are not correctly addressed.

We conclude that the sustainability subject matter of the Report provides a fair view of SEB's sustainability programmes and performance in the Reporting Year. We believe that the economic, social and environment performance disclosures are accurate and are supported by robust internal verification processes.

Our work was carried out by a team of sustainability report assurors in accordance the AA1000 Assurance Standard v3. We planned and performed this part of our work to obtain the necessary information and explanations. We considered to provide sufficient evidence that SEB's description of their approach to AA1000 Assurance Standard and their self-declaration of compliance with the GRI standards were fairly stated.

Methodology

Our work was designed to gather evidence on which our conclusion is based. We undertook the following activities:

- a top-level review of issues raised by external parties that could be relevant to SEB's policies to check on the appropriateness of statements made in the report.
- discussion with managers and staff on SEB's approach to stakeholder engagement. We had no direct contact with external stakeholders.
- interview with staff involved in sustainability management, report preparation and provision of report information.
- review of key organizational developments.
- review of supporting evidence for claims made in the reports.
- an assessment of the SEB's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000 AccountAbility Principles Standard.

Conclusions

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality, Responsiveness and Impact and the GRI Standards is set out below:

INDEPENDENT THIRD PARTY ASSURANCE STATEMENT

Independent Third Part Assurance Statement

2-5

Inclusivity

The Report has reflected the fact that SEB is seeking the engagement of its stakeholders. The participation of stakeholders has been initiated in developing and achieving an accountable and strategic response to sustainability. The reporting systems are being developed to deliver the required information. There are fair reporting and disclosure for economic, social and environment information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers SEB's principle of Inclusivity.

Materiality

SEB publishes sustainability information that enables its stakeholders to make informed judgments about SEB's management and performance. In our professional opinion, the report adheres to the principle of Materiality and identifies SEB's material aspects by using appropriate methods of materiality analysis and demonstrating material issues in a matrix form. Areas for enhancement of the report were adopted by SEB before the issuance of this statement.

Responsiveness

SEB has implemented practices that respond to the expectations and perceptions of its stakeholders. These include sustainability reporting for both internal and external stakeholders. In our professional opinion, SEB adheres to the principle of Responsiveness. Areas for enhancement of the Report were adopted by SEB before the issuance of this statement.

Impact

SEB has demonstrated a process on identify impacts that encompass a range of environmental, social and governance topics, and fairly represented the impacts in the report. These processes enable SEB to assess its impact and disclose them in the sustainability subject matter of the report. In our professional opinion, SEB adheres to the principle of Impact. Areas for enhancement of the report were adopted by SEB before the issuance of this statement.

GRI Sustainability Reporting Standards

SEB provided us with their declaration reporting with reference to the GRI Standards of compliance within GRI Standards-Universal Standards 2021. Based on our review, we confirm that social responsibility and sustainable development disclosures with reference to the GRI Standards are reported. In our professional opinion the declaration covers the SEB's social responsibility and sustainability issues.

Assurance Level

The moderate (limited) level of assurance provided is in accordance with AA1000 Assurance Standard v3 in our review, as defined by the scope and methodology described in this opinion statement.

Responsibility & Limitations

This Sustainability Report is the responsibility of the SEB's management as declared in the responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Competency and Independence

The assurance team was composed of Lead Auditors and Carbon Footprint Verifiers experienced in industrial sector, and trained in a range of sustainability, environmental and social standards including AA1000 AS, ISO14001, ISO14064, ISO 45001 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901

Independent Third Part Assurance Statement

For and on behalf of BSI:

Ms Evelyn Chye
Managing Director

Verifier of the Report:

Mr. Shaiful Rahman
Lead Assuror

18 August 2024

INDEPENDENT THIRD PARTY ASSURANCE STATEMENT

Independent Third Part Assurance Statement

2-5

Appendix 1: Summary of SEB's Selected Disclosures for Year 2023

Key performance indicators	Value	Units
Main Grid CO_2 Emissions Intensity (tCO_2eq/MWh) for the financial year 2023:	0.206	tCO_2eq/MWh
• Fuel consumption (FC_j)		
• Coal	3,201,032.55	Tonne
• Natural Gas	47,502,815.02	MMBtu
• Diesel	29,023,942.56	Litre
• Net energy generated (NEG_j)	34,456,329.50	MWh
• Net calorific value (NCV_j)		
• Coal	16,359.24	kj/kg
• Natural Gas	38.20	MJ/Nm^3
• Diesel	37.00	MJ/Litre
Northern Grid CO_2 Emissions Intensity (tCO_2eq/MWh) for the financial year 2023:	0.691	tCO_2eq/MWh
• Fuel consumption (FC_j) - Diesel	47,121,041.00	Litre
• Net energy generated (NEG_j)	183,341.56	MWh
• Net calorific value (NCV_j) – Diesel	37.00	MJ/Litre
Direct Emissions (Scope 1) Intensity (tCO_2eq/ RM Millions of Revenue) for the financial year 2023:	1,010.15	tCO_2eq/ RM Millions of Revenue
• Main, Northern, Stand-Alone Grid and Company Owned Vehicles Emissions (tCO_2eq)	7,219,731.17	tCO_2eq
• Revenue (RM Million)	7,147.20	RM Million
Direct Emissions (Scope 1) Intensity (tCO_2eq/ RM Millions of Total $Investment_{LCG}$) for the financial year 2023:	712.06	tCO_2eq/ RM Millions of Total $Investment_{LCG}$
• Main, Northern, Stand-Alone Grid and Company Owned Vehicles Emissions (tCO_2eq)	7,219,731.17	tCO_2eq
• Total Investment in Low Carbon Generation (RM Millions of Total $Investment_{LCG}$)	10,139.17	RM Million
Renewable Energy Generation Intensity (RM Millions of Revenue / MWh) for the financial year 2023:	0.00028	RM Millions of Revenue / MWh
• Revenue (RM Million)	7,136.21	RM Million
• Net energy generated (NEGj) – Hydropower (MWh)	25,058,748.23	MWh
Scope 2 - Buildings & offices (tCO_2eq) for the financial year 2023	13,635.19	tCO_2eq
Scope 3 - Business air travel (tCO_2) for the financial year 2023	3,866.82	tCO_2
Total Water Withdrawal by Source (m^3) for the financial year 2023:		
• Municipal water (m^3)	2,847,183.06	m^3
• Natural water (m^3)	1,146,861,312.40	m^3
• Surface Water (River Water)	4,601,250.00	m^3
• Operating hours (Hrs)	53,973	Hours

Independent Third Part Assurance Statement

2-5

Scheduled Waste Generation Intensity (Tonne/GWh) for the financial year 2023: • Volume of waste generated (Tonne) • Gross electricity generated (GEG_i)	13.93 443,436.70 31,833,916.22	Tonne/GWh Tonne MWh
Annual Water Volume for Electricity Generation (million m^3) for the financial year 2023: • Operating hours (Hrs)	57,017.87 122,933.32	Million m^3 Hours
Economic Value Retained (RM) for the financial year 2023	2,585.00	RM Million
Total Value of Tenders Awarded to Local Sarawakian Companies (RM) for the financial year 2023: • Operations (RM) • Capital works (RM)	1,198,478,619.98 943,688,077.61 254,790,542.37	RM RM RM
Loss Time Injury Frequency Rate (LTIFR) for the financial year 2023: • Employees Only • Contractors Only • Total loss time injury cases • Employees Only • Contractors Only • Total man hours (Hrs) • Employees Only • Contractors Only	0.329 0.227 0.406 10 3 7 30,438,538 13,203,675 17,234,863	LTIs / Million Man Hours (excluding fatalities) LTIs / Million Man Hours LTIs / Million Man Hours Number of Injuries Number of Injuries Number of Injuries Hours Hours Hours
Sarawak Electrification Coverage (%) for the financial year 2023: • Rural electrification coverage (%)	99.35 98.38	% %

GRI Content Index

GRI CONTENT INDEX ADVANCED SERVICE WITH REFERENCE OPTION 2024	For the Content Index – Advanced With Reference option Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting with reference to the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders.
Statement of use	Sarawak Energy Berhad has reported the information cited in this GRI Content Index for the period 1 January 2023 to 31 December 2023 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
GRI 2: General Disclosures 2021	2-1 Organisational details	Pg. 3			
	2-2 Entities included in the organisation's sustainability reporting	Pg. 2, 42			
	2-3 Reporting period, frequency and contact point	Pg. 2			
	2-4 Restatements of information	No restatement has been made in the reporting period			
	2-5 External assurance	Pg. 2, 252 - 258	Yes		
	2-6 Activities, value chain and other business relationships	Pg. 2-3, 6, 8-11, 13-19, 21-23, 27-30, 32, 36-37, 118-119, 166			
	2-7 Employees	Pg. 3, 80, 118, 125, 202-204, 241-243		8	
	2-8 Workers who are not employees	Sarawak Energy Internship Programme offers students in their final year of tertiary education (university, college, or polytechnic) the opportunity to gain valuable on-the-job experience			
	2-9 Governance structure and composition	Pg. 43-65, 122, 148, 243			
	2-10 Nomination and selection of the highest governance body	Pg. 59-63			
	2-11 Chair of the highest governance body	Pg. 59-63			
	2-12 Role of the highest governance body in overseeing the management of impacts	Pg. 59-66, 148, 201			
	2-13 Delegation of responsibility for managing impacts	Pg. 67-73, 122, 148			
	2-14 Role of the highest governance body in sustainability reporting	Pg. 65-66, 73			
	2-15 Conflicts of interest	Pg. 60, 72			
	2-16 Communication of critical concerns	Pg. 67-68, 72-73, 122, 148			

GRI Content Index

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
	2-17 Collective knowledge of the highest governance body	Pg. 60, 73			
	2-18 Evaluation of the performance of the highest governance body	Pg. 60			
	2-19 Remuneration policies	Pg. 161			
	2-20 Process to determine remuneration	Pg. 61			
	2-21 Annual total compensation ratio	Pg. 61			
	2-22 Statement on sustainable development strategy	Pg. 20-25, 27-28, 31, 75, 123			
	2-23 Policy commitments	Pg. 22, 72-73, 86, 91, 97, 134-135		16	
	2-24 Embedding policy commitments	Pg. 22, 72-73, 86, 120-121, 141-145, 148-150, 166-167, 199			
	2-25 Processes to remediate negative impacts	Pg. 97-98, 120-121, 127-137, 139-145			
	2-26 Mechanisms for seeking advice and raising concerns	Pg. 87, 112, 116			
	2-27 Compliance with laws and regulations	Pg. 66, 78, 188-190, 239		16	
	2-28 Membership associations	Pg. 3, 51, 126			
	2-29 Approach to stakeholder engagement	Pg. 2, 17-19, 22, 68, 87-90, 112, 116, 196, 208			
	2-30 Collective bargaining agreements	Terms as agreed in Collective Agreement are extended to all non-executive staff under Sarawak Energy Group.		8	
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Pg. 116			
	3-2 List of material topics	Pg. 117			
Topic: Economic Performance					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 40, 169			
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Pg. 119, 169-170, 210	Yes	2	
	201-2 Financial implications and other risks and opportunities due to climate change	Pg. 156-157, 160-161			IFRS
	201-3 Defined benefit plan obligations and other retirement plans	Pg. 241			
	201-4 Financial assistance received from government	Pg. 29, 102			

GRI Content Index

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
Topics: • Indirect Economic Performance • Public Policy					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 6, 8-9, 11, 21-23, 27-30, 32, 100-102, 104, 128-129, 132-133, 144-145			
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Pg. 6, 8-11, 13, 21-24, 27-30, 32, 99-101, 104, 110-111, 128-129, 132-133, 144-145, 173, 210		7, 9, 11	
	203-2 Significant indirect economic impacts	Pg. 6, 8-11, 27-28, 32, 34, 102-103, 110-111, 119, 132-133, 144-145		1, 2, 8, 10, 17	
Topics: • Procurement Practices • Labour/Management Relations • Market Presence					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 172			
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Pg. 114, 119, 125, 172, 210	Yes	12	
Topics: • Ethics and Integrity • Socioeconomic Compliance					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 72			
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	Pg. 72, 211		16	
	205-3 Confirmed incidents of corruption and actions taken	Pg. 211		16	
Topic: Materials					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 118			
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Pg. 118, 162, 185, 212-213	Yes	8, 12	IFRS
Topic: Water					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 183			
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Pg. 183-184		6	
	303-2 Management of water discharge-related impacts	Pg. 183-184		6	
	303-3 Water withdrawal	Pg. 183, 187, 214-215	Yes	6	
Topic: Biodiversity					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 126, 193			
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Pg. 126, 184, 192		6, 14, 15	
	304-2 Significant impacts of activities, products and services on biodiversity	Pg. 98, 184, 192		6, 14, 15	

GRI Content Index

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
Topic: Emissions					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 164-165, 168			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Pg. 158, 163-165, 168, 215-219	Yes	3, 12, 13, 14, 15	IFRS
	305-2 Energy indirect (Scope 2) GHG emissions	Pg. 158, 163-165, 168, 216	Yes	3, 12, 13, 14, 15	IFRS
	305-3 Other indirect (Scope 3) GHG emissions	Pg. 158-159, 163-165, 168, 216	Yes	3, 12, 13, 14, 15	IFRS
	305-4 GHG emissions intensity	Pg. 114, 119-120, 124, 137, 140, 142-143, 160, 163-165, 167-168, 215-216, 220, 222-223	Yes	3, 12, 13, 14, 15	IFRS
	305-5 Reduction of GHG emissions	Pg. 124		13, 14, 15	IFRS
	305-7 Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	Pg. 183, 189, 224-225		3, 12, 14, 15	
Topics: • Effluent & Waste • Environmental Compliance					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 162, 188			
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Pg. 188		12	
	306-2 Management of significant waste-related impacts	Pg. 188		12	
	306-3 Waste generated	Pg. 162, 226-239	Yes	12	
Topic: Employment					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 202			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Pg. 119, 202, 239-241		5, 8	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Pg. 241		8	
Topics: • Occupational Health & Safety • Customer Health & Safety • Disaster/Emergency Planning Response					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 34, 88-90, 93-94, 180, 209			
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Pg. 12, 94		3, 8	
	403-2 Hazard identification, risk assessment, and incident investigation	Pg. 89, 91, 94, 179-180		3, 8	
	403-3 Occupational health services	Pg. 87, 89-90, 95-96		3, 8	

GRI CONTENT INDEX

GRI Content Index

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
	403-4 Worker participation, consultation, and communication on occupational health and safety	Pg. 88-90, 93-96, 242		3, 8	
	403-5 Worker training on occupational health and safety	Pg. 89-90, 93-96		3, 8	
	403-6 Promotion of worker health	Pg. 89-90, 93		3, 8	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Pg. 88, 93, 95-96		3, 8	
	403-9 Work-related injuries	Pg. 12, 34, 209	Yes	3, 8	
	403-10 Work-related ill health	Pg. 95-96		3, 8	
Topic: Training and Education					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 80-85			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Pg. 203-205, 243		4, 5, 8	
	404-2 Programs for upgrading employee skills and transition assistance programs	Pg. 80-85, 205-208		8	
	404-3 Percentage of employees receiving regular performance and career development reviews	100%		5, 8	
Topics: • Indigenous Rights • Non-discrimination					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 112			
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	There were no identified incidents of violations involving the rights of indigenous peoples during the reporting period. Pg. 112		2	
Topics: • Local Communities • Supplier Assessment for Labour Practices					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 105-106, 112, 194			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	100% of Sarawak Energy's operations involves and includes local community engagement, impact assessments and development programs, particularly projects categorised under "prescribed activities" by the Natural Resources and Environment Board, Sarawak and Department of Environment. Pg. 105-112, 194		16	

GRI Content Index

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
Topics: • Customer Privacy • Customer Service and Satisfaction					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 180			
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	There were no substantiated complaints regarding breaches of customer privacy and losses of customer data in 2023. Pg. 180, 244-245		16	
ELECTRIC UTILITIES SECTOR DISCLOSURES					
Topics: • Electricity Exports • Energy					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 8, 118			
GRI G4 Sector Disclosures: Electric Utilities	EU1 Installed Capacity, Broken Down by Primary Energy Source and by Regulatory Regime	Pg. 8, 173-174		7	IFRS
	EU2 Net Energy Output Broken Down by Primary Energy Source and by Regulatory Regime	Pg. 118, 163, 168, 220-222	Yes	7, 14	IFRS
	EU3 Number of Residential, Industrial, Institutional and Commercial Customer Accounts	Pg. 3, 246			
	EU4 Length of Above and Underground Transmission and Distribution Lines by Regulatory Regime	Pg. 123, 246		7	
Topics: • Availability & Reliability • Demand Side Management					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 6, 8, 172			
GRI G4 Sector Disclosures: Electric Utilities	EU10 Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	Pg. 6, 8, 172-173		7	

GRI CONTENT INDEX

GRI Content Index

GRI Standard	Disclosure	Location and Direct Answers	External Assurance	SDG Linkage to Disclosure	IFRS
Topic: System Efficiency					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 130, 152, 156, 166			
GRI G4 Sector Disclosures: Electric Utilities	EU11 Average generation efficiency of thermal plants by energy source and by regulatory	Pg. 248		7, 8, 12, 13, 14	
	EU12 Transmission and distribution losses as a percentage of total energy	Pg. 123, 176, 247		7, 8, 12, 13, 14	
Topic: Access					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 6, 28-29, 34, 77			
GRI G4 Sector Disclosures: Electric Utilities	EU26 Percentage of population unserved in licensed distribution or service areas	Pg. 6, 13, 29, 119, 123, 248	Yes	1, 7	
	EU27 Number of residential disconnections for nonpayments, broken down by duration of disconnection and by regulatory regime	Pg. 178		1, 7	
	EU28 Power outage frequency	Pg. 34, 77, 175		7	
	EU29 Average power outage duration	Pg. 28, 34, 77, 114, 123, 175		1, 7	
	EU30 Average plant availability factor by energy source and by regulatory regime	Pg. 76, 123, 174, 249		1, 7	
Topic: Research & Development					
GRI 3: Material Topics 2021	3-3 Management of material topics	Pg. 103-104			
GRI G4 Sector Disclosures: Electric Utilities	(Former EU8) Research and development activity and expenditure aimed at providing reliability electricity and promoting sustainable development	Pg. 161, 250		7, 9, 17	

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Sarawak Energy Berhad | 1SarawakEnergy | Sarawak Energy

Menara Sarawak Energy
No. 1, The Isthmus, 93050 Kuching, Sarawak, Malaysia.

General Line: +6 082-388 388
Fax: +6 082-341 063

Corporate Enquiries: corpcomm@sarawakenergy.com
Sustainability Enquiries: sustainability@sarawakenergy.com