



# Delivering Sustainable Energy

Foundation to Low Carbon Economy

# ABOUT THIS REPORT

**This Sustainability Report 2018 represents our fifth report as a private company. While we are not required to adhere to the corporate reporting standards of public listed companies, we continue to embrace voluntary disclosure of our sustainability practices to share our commitment to creating long-term value. We also strive to improve our reporting every year and are pleased to disclose further details on the progress of our sustainability agenda in our report this year.**

## Reporting Standards

We pride ourselves in adopting global best practices in our sustainability activities as well as in its reporting. In line with this, we have prepared this report in accordance with the Global Reporting Initiative (GRI) Standards: Core option. The full list of our GRI disclosures and relevant references are available in the GRI content index on pages 70-104 of this report.

As our operations are also guided by the United Nations Sustainable Development Goals (SDGs), in this report we also indicate our progress in contributing to the 17 targets identified under the SDGs.

## Reporting Scope and Boundaries

Unless otherwise stated, this report covers the entirety of our operations in Sarawak, including our subsidiaries, during the period 1 January to 31 December 2018. This report was produced by taking into account feedback from our stakeholders, and inputs from our evaluation of our operations against developments in the local and global energy industry as well as the economy.

## Assessment of Material Matters

Our Materiality Issues were identified following an assessment of the most important matters to our business and stakeholders. The Materiality Issues and accompanying materiality matrix is available on page 12 of this report.

## Assurance

Selected indicators of this report have been assured by a third party. The Independent Third Party Assurance Statement can be viewed on pages 68-69 of this report.



## Feedback

We look forward to receiving feedback on this report as we continuously seek to improve our standards of reporting. Comments and inquiries on this report can be sent to:

**Phone:** 082-388 388

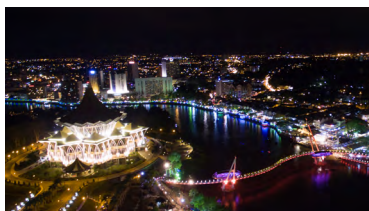
**Email:** [sustainability@sarawakenergy.com](mailto:sustainability@sarawakenergy.com)





## Foundation to Low Carbon Economy

Sarawak Energy Berhad is not just a utility company. We are a company that empowers people while taking care of the environment in which our communities live. We put smiles on the faces of indigenous communities living in remote Sarawak by providing them with non-grid power. We are committed to support the biodiversity conservation efforts of our rainforest in Sarawak. And we lead the region in generating energy that is clean, reliable, renewable as well as affordable. As we grow our business, we endeavour to make an impact on the millions of lives that we touch.



*Kuching City with Sarawak State Legislative Assembly Building and the Darul Hana Bridge.*

Renewable energy from hydropower plays an important role that provides foundation to address climate action and transition to low carbon economy by providing a reliable, clean and affordable energy while meeting the environmental, economic, and development needs of the state and country.



## Chairman's Foreword



### Feedback

This report also serves to encourage dialogue between ourselves and our stakeholders, especially our customers, suppliers and employees. We welcome your feedback, queries and suggestions on any aspect of our sustainability impacts and performance.

**This report is printed on environmentally friendly paper.**

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**Sarawak Energy is a member of**



**Global Compact**  
Network Malaysia



Please contact us at 082-388 388 or via email at [sustainability@sarawakenergy.com](mailto:sustainability@sarawakenergy.com)



Menara Sarawak Energy.

## About Sarawak Energy

Sarawak Energy Berhad is an energy utility wholly-owned by the Sarawak State Government. Our core business comprises the generation, transmission, distribution and retail of electricity in Sarawak. For over 100 years, we have provided clean and sustainable energy to support Sarawak's socioeconomic growth in line with our goal of contributing to the state's long-term development and wealth by fulfilling its requirements for reliable and renewable energy accessible to all.

Our operations are driven by three large hydropower plants in Bakun, Murum and Batang Ai. We also operate nine thermal power stations, led by our Bintulu Combined Cycle Plant registered with the United Nations under the Kyoto Protocol Agreement's Clean Development Mechanism (CDM) Scheme. Of our thermal power stations, our coal and natural gas stations are powered from indigenous sources. In our continuous effort to strengthen the reliability of our system and minimise the risk of power interruptions in the south of Sarawak by providing additional transmission capacity, we are also in the midst of developing our 500kV transmission backbone. Furthermore, since 2016 we have been exporting energy to West Kalimantan, with 3,286 GWh exported to date.

## Board of Directors



**YBhg. Datuk Amar Abdul  
Hamed bin Sepawi**

Chairman  
Non-Independent  
Non-Executive Director



**YB Tan Sri Datuk Amar Haji  
Mohamad Morshidi bin  
Haji Abdul Ghani**

Non-Independent  
Non-Executive Director



**YBhg. Tan Sri Dato Sri  
Mohd Hassan bin Marican**

Independent  
Non-Executive Director



**YBhg. Dato Sri Fong  
Joo Chung**

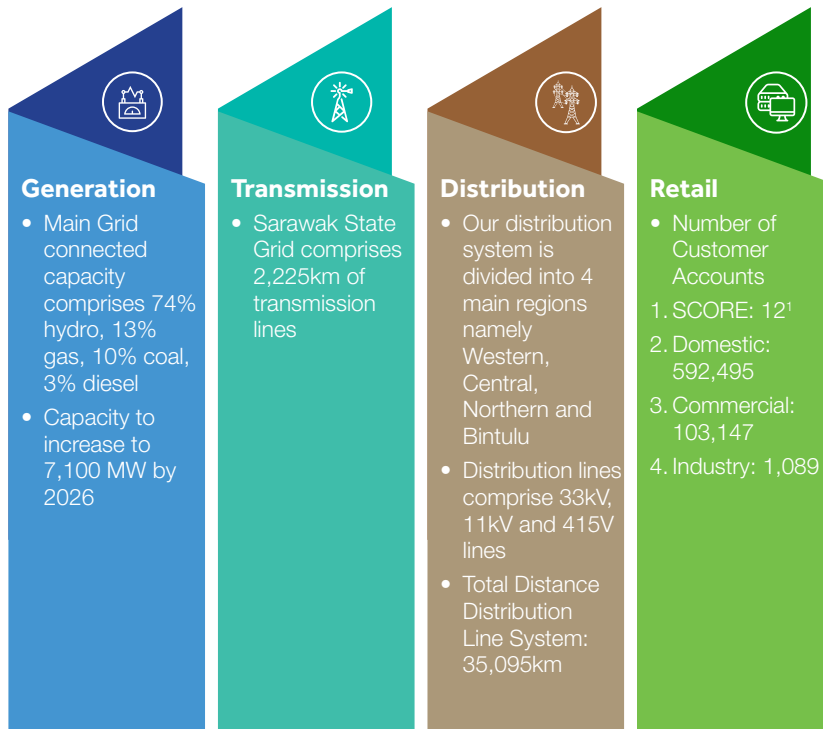
Non-Independent  
Non-Executive Director



**YB Dato' Haji Idris bin  
Haji Buang**

Non-Independent  
Non-Executive Director

# OUR SERVICES

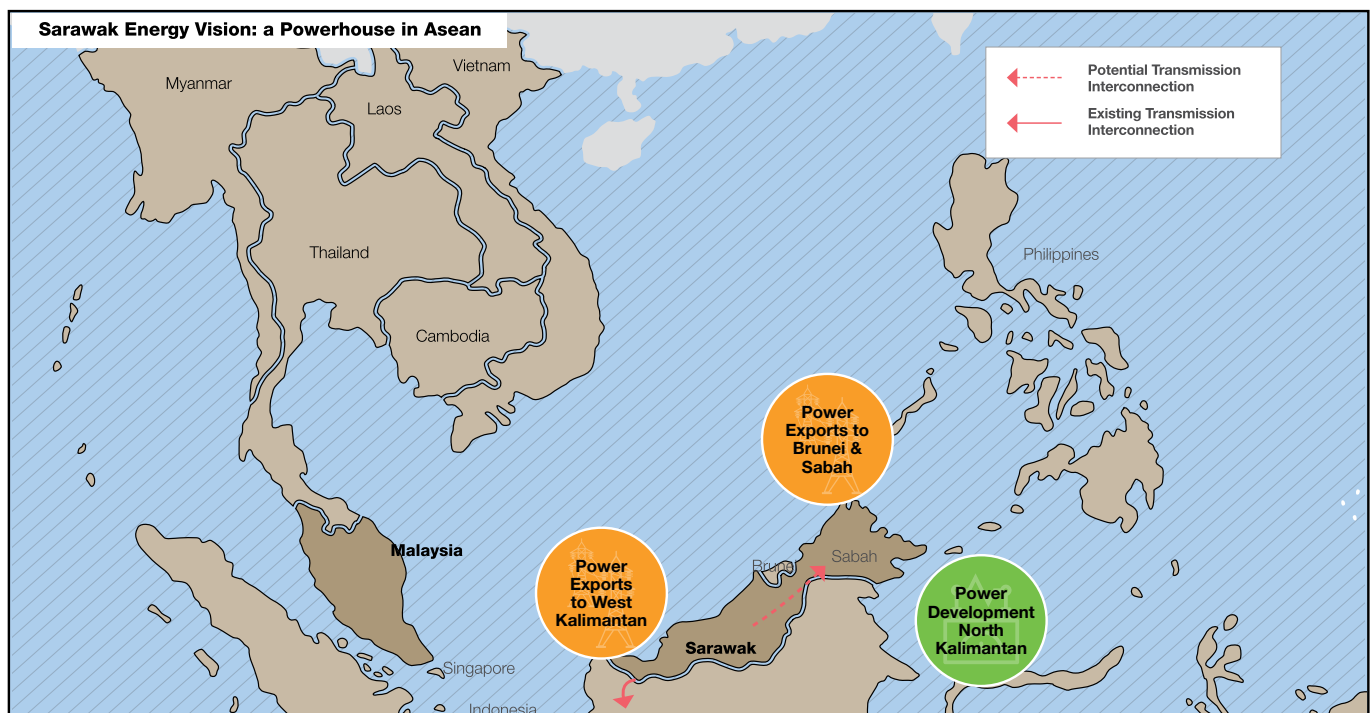


The energy we generate, transmit and distribute serves our domestic, commercial, industrial and SCORE customers. In addition to our presence in Sarawak, we have expanded our reach with the export of electricity to West Kalimantan, Indonesia since 2016.

We aspire to transform ourselves into a modern, international and agile corporation that is driven by a strong corporate ethos and supported by the nurturing of a new mindset in which sustainability is integrated into the fabric of our operations. In line with this aspiration, we have expanded our workforce by over 5,023 employees and have been provided with opportunities to connect with a network of power industry professionals from around the world. This has ensured that we are on track to increase the State's power output from approximately 5,000GWh per year in 2009 to approximately 30,000GWh per year in 2020.

**Note:**

<sup>1</sup> Based on Power Purchase Agreements (PPA) with Sarawak Energy.





Dear Shareholders,

As Sarawak's leading provider of reliable, renewable and affordable energy and the largest producer of renewable energy in Malaysia, sustainability forms a core component of Sarawak Energy's identity and our long-term strategy. For the past eight years, we have endeavoured to build on sustainability by managing economic, environmental and social pressures in alignment with our strategy to ensure we deliver positive value to our stakeholders and the environment while maintaining our relevance as a commercial entity.

Ultimately, these efforts are geared towards steering Sarawak's transition to a low carbon economy in the long-term - minimising the emission of greenhouse gases while accelerating the State's economic development.

Our efforts thus far have been marked by our contribution to decarbonising Sarawak's electricity grid, with renewable energy generation increasing from 1,248 GWh in 2011 to 20,888\* GWh in 2018. This has allowed CO<sub>2</sub> grid emission intensity to decline significantly by 72% to 193\* gCO<sub>2</sub>/kWh in 2018 from 698 gCO<sub>2</sub>/kWh in 2011, even as annual electricity demand in the State has risen 22% since 2010. Remarkably, the CO<sub>2</sub> grid emission intensity for 2018 is also 57% lower than the global average of 450 gCO<sub>2</sub>/kWh.

For the full Chairman's Foreword please visit the Sarawak Energy website at [www.sarawakenergy.com](http://www.sarawakenergy.com)



## SUSTAINABILITY AS A CORE DRIVER OF OUR BUSINESS STRATEGY

**YBHG. DATUK AMAR ABDUL  
HAMED BIN SEPAWI**

Chairman

**Note:**

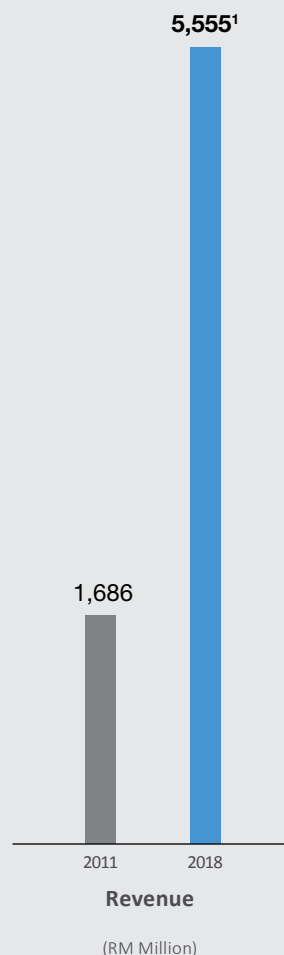
\* These main grid CO<sub>2</sub> emission intensity and net energy generated data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



We have been able to achieve these milestones by harnessing opportunities to address multiple environmental, economic and development needs and deliver value to our stakeholders. This has been in tandem with the implementation of the Sarawak Corridor of Renewable Energy (SCORE), a long-term plan from 2008 to 2030 focusing on growing the renewable energy sector through 10 high-impact priority industries.

## Economic Highlights

For the past eight years, we have endeavoured to build on sustainability by managing economic, environmental and social pressures in alignment with our strategy to ensure we deliver positive value to our stakeholders and the environment while maintaining our relevance as a commercial entity.



Prior to SCORE, Sarawak's power generation mix was predominantly from thermal sources (coal, gas and diesel fuel). Since 2011, hydropower generation has surged 1,574% to 20,888\* GWh in 2018 and now accounts for around 78% of the generation mix. The establishment of SCORE enabled our organisation to invest in hydropower projects and lay the foundation towards the transition to a low carbon economy. In turn, renewable energy coupled with energy efficient processes, low carbon technologies and the reduction of greenhouse gas emissions enhances the competitiveness and sustainability of Sarawak's economy.

In formulating and implementing our long-term strategy for sustainability, we are committed to adopting the highest standards of Corporate Governance as overseen by our Board of Directors. In line with this, we seek to continuously strengthen Sarawak Energy's accountability and transparency while safeguarding the interests of our stakeholders in accordance with the Malaysia Code on Corporate Governance as well as with international best practices.



### Electricity Sales (RM)

**4%**  
of State GDP



### Electricity Consumption Per Capita

**258%**  
since 2011



### Total Electricity Sales

**25,825**  
GWh

#### Notes:

<sup>1</sup> Includes Rental Income, Interest Received & Proceeds from Disposal of Property, Plant & Equipment.

\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



“  
**Renewable energy will continue to play an important role in providing the foundation to address climate action and drive the shift to a low carbon economy**  
”



*Solar panels on the roof tops.*

Towards this objective, Sarawak Energy embraces a compliance culture through adoption of strict governance practices through management, internal controls and implementation of stringent policies as well as practicing regular corporate reporting through our Annual Reports and Sustainability Reports. We also continue to adhere to the Hydropower Sustainability Assessment Protocol as the global standard on hydropower development.

The implementation of our sustainability agenda has nonetheless been accompanied by its own challenges. These include the continuous pursuit to achieve a balance in meeting the needs for sustainable development, stakeholders' expectations and value creation. Furthermore, in developing a low carbon economy, achieving 100% electricity penetration remains a key challenge, although we have reached 96% coverage in Sarawak.

Additionally, the use of alternative renewable energy solutions such as floating solar, solar hybrid and micro hydro remains limited, while the adoption to low carbon technologies such as electric vehicles, hydrogen technology, plant digitalisation and smart metering has yet to reach scale. In view of this, we will continue to undertake advocacy and education initiatives to raise awareness on renewable energy, in addition to our efforts in research and development to further catalyse the growth of renewable energy not only in Sarawak, but Malaysia.

As we progress on our journey of decarbonisation, we will focus on consolidating and protecting the value created from our sustainability agenda over the years. We will also continue pursuing our long-term growth strategies with a view on achieving value realisation in our next phase of growth.

There is significant correlation between electricity disclosures and socioeconomic development, such as in developed countries where 100% of the population has access to electricity and the average consumption registers at around 8,500 kWh per year per capita. In Sarawak, electricity consumption has increased by 258% from 2,600 kWh per capita in 2011 to 9,200 kWh per capita in 2018, with 78% of generation supplied by renewable energy.

Going forward, renewable energy will continue to play an important role in providing the foundation to address climate action and drive the shift to a low carbon economy by providing reliable, clean and affordable energy while meeting Malaysia's environmental, economic, and development needs.

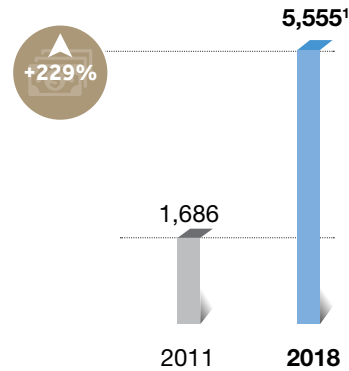
# OUR PERFORMANCE AT A GLANCE

## 2018 KEY HIGHLIGHTS

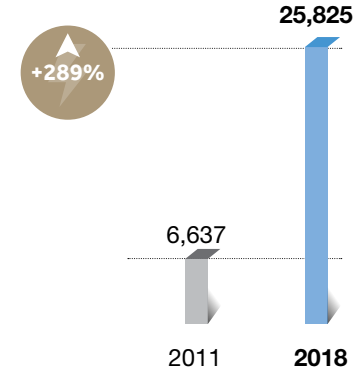
We at Sarawak Energy measure our performance not only by our ability to supply electricity to our customers, but also through the positive impact we strive to deliver for all our stakeholders. This ensures a holistic approach to attaining our company's vision of achieving sustainable growth and prosperity for Sarawak by meeting the region's need for reliable, renewable energy, allowing us to meet our business needs for financial stability, serve our customer's energy needs, contribute to environmental preservation and champion the well-being of our internal and external stakeholders.

The following is a snapshot of our performance in 2018 based on these metrics.

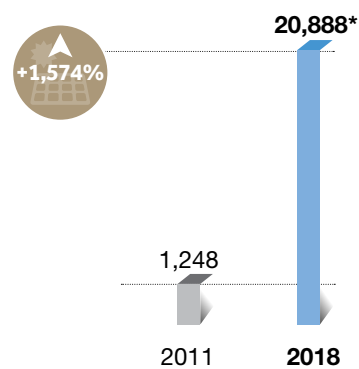
### Revenue (RM million)



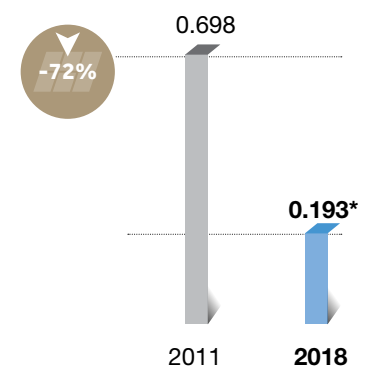
### Total Electricity Sales (GWh)



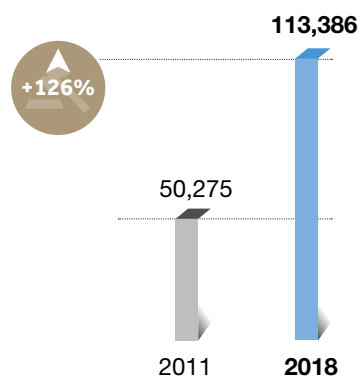
### Renewable Energy Generated (GWh)



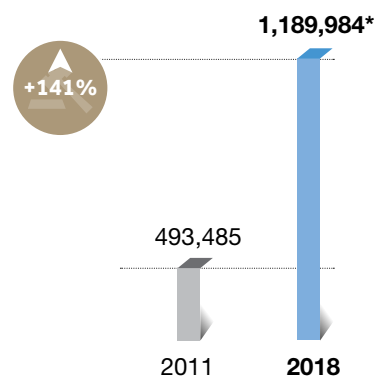
### Emission Intensity - Main Grid (tCO<sub>2</sub>eq/MWh)



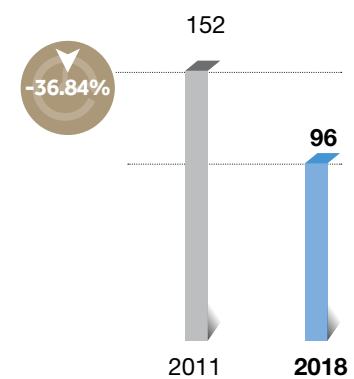
### Total Hours of Training (Hours)



### Tenders Awarded to Locals (RM '000)



### SAIDI - Distribution (Minutes per Customer)



#### Notes:

<sup>1</sup> Includes Rental Income, Interest Received & Proceed from Disposal of Property, Plant & Equipment.

\* These main grid CO<sub>2</sub> emission intensity, net energy generated and total value of tenders awarded to local companies data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



## GCEO'S OVERVIEW



For the full GCEO's  
Overview please visit  
the Sarawak Energy  
website at  
[www.sarawakenergy.com](http://www.sarawakenergy.com)

**DATU SHARBINI BIN SUHAILI**

Group Chief Executive Officer

“ For 2018, we continued to focus on 32 key issues under the Economic, Social and Environment pillars. These issues were then prioritised based on the level of importance to the Company and our stakeholders. ”

Dear Shareholders,

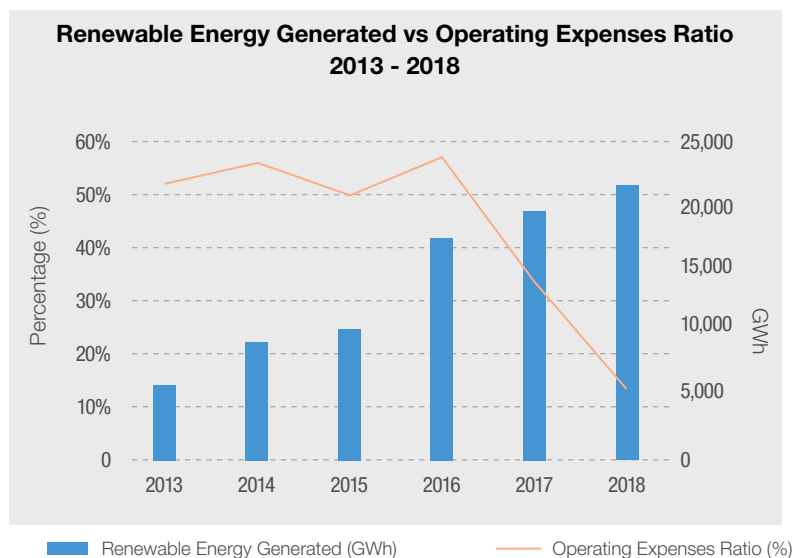
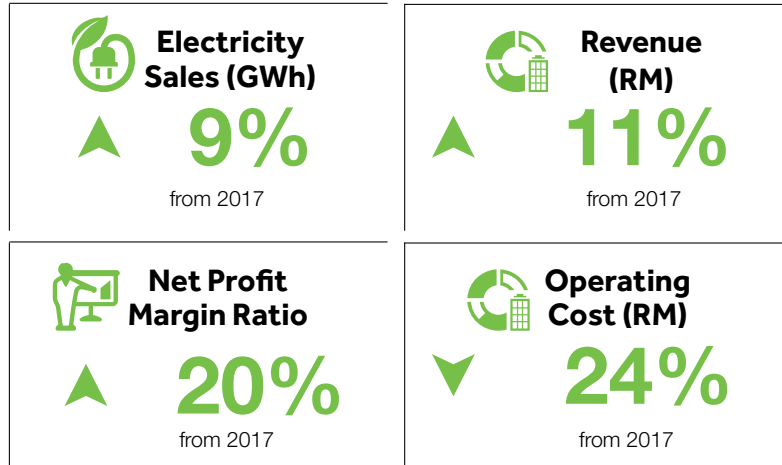
The year 2018 saw Sarawak Energy continuing to deliver on our vision of providing clean, reliable and affordable energy to the people of Sarawak as we journey on towards the development of a low carbon economy. During the year, we registered an average increase of 19% per annum in electricity sales, resulting revenue increment from RM1.69 billion in 2011 to RM5.55 billion in 2018.

This trajectory has been supported by growth of electricity sales by 230% since 2011. Significantly, during the year we attained the lowest grid CO<sub>2</sub> emission intensity of 0.193\* tCO<sub>2</sub>/MWh, representing one of the lowest in the region. In line with this, I am pleased to share that Sarawak Energy received recognition for Best Sustainability Strategy and Management as well as Best Sustainability Development Goals at the Sustainability Business Award 2018. These awards recognised Sarawak Energy's overall approach and strategy in addressing sustainability issues as well as integrating Sustainability Development Goals into our existing strategies as benchmarks or targets.

Indeed, the precision of our strategy in driving our sustainability agenda has been illustrated by our financial performance. During the year our revenue rose by 11% from 2017 as a result of an increase of our total electricity sales to 25,825 GWh. Whereby our net profit margin ratio increased from 38% in 2017 to 46% in 2018, which is supported by the reduction of operation cost by 24%.

This was supported by the growing share of our hydropower operations which require little maintenance, allowing low operation and maintenance (O&M) costs. Furthermore, the O&M costs are relatively low compared to other renewable energy solutions, accounting for between 1.5% to 2.5% of investment costs per year. As hydropower is also recognised for its extended lifecycle, the cost will be spread over time, producing a lower and more competitive levelised cost of energy (LCOE).

# RESULTS IN 2018



Overall, renewable energy generation has grown by 9% from 19,241 GWh in 2017 to 20,888\* GWh in 2018. Sarawak Energy's electricity sales has increased by 2,150 GWh from previous year. In contrast, our operating expenses ratio has declined by 21% from 2017, indicating that our operation expenses are becoming an increasingly smaller percentage of net sales. This shows that renewable energy generated is helping to lower our overall operating costs, contributing to our bottom line as well as accelerating climate action by decarbonising our CO<sub>2</sub> grid emission intensity.

**Note:**

\* These main grid CO<sub>2</sub> emission intensity and net energy generated data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



“

**we remain committed  
to achieving our  
sustainable growth  
agenda in our effort  
to deliver value to all  
our stakeholders**

”

## IDENTIFYING OUR MATERIALITY ISSUES

The development of our strategy is led by the identification of our material matters. This is undertaken by assessing the impact of our operations on our stakeholders and the environment, with a focus on the value created.

For 2018, we continued to focus on 32 key issues under the Economic, Social and Environment pillars. These issues were then prioritised based on the level of importance to the Company and our stakeholders.

We also conducted engagement with our stakeholders and narrowed down our key issues to four topical issues affecting three key stakeholder groups comprising our customers, employees and local communities. For further information on our material issues and their impacts on these stakeholder groups, please refer to the subsequent sections in this Sustainability Report.



Our strategy is also aligned with the United Nations Sustainable Development Goals (SDGs). Please refer to the subsequent pages of this Sustainability Report for our disclosures on our contributions to the SDGs.





*Night view of Kuching City Waterfront with Sarawak State Legislative Assembly Building and the iconic Darul Hana Bridge.*

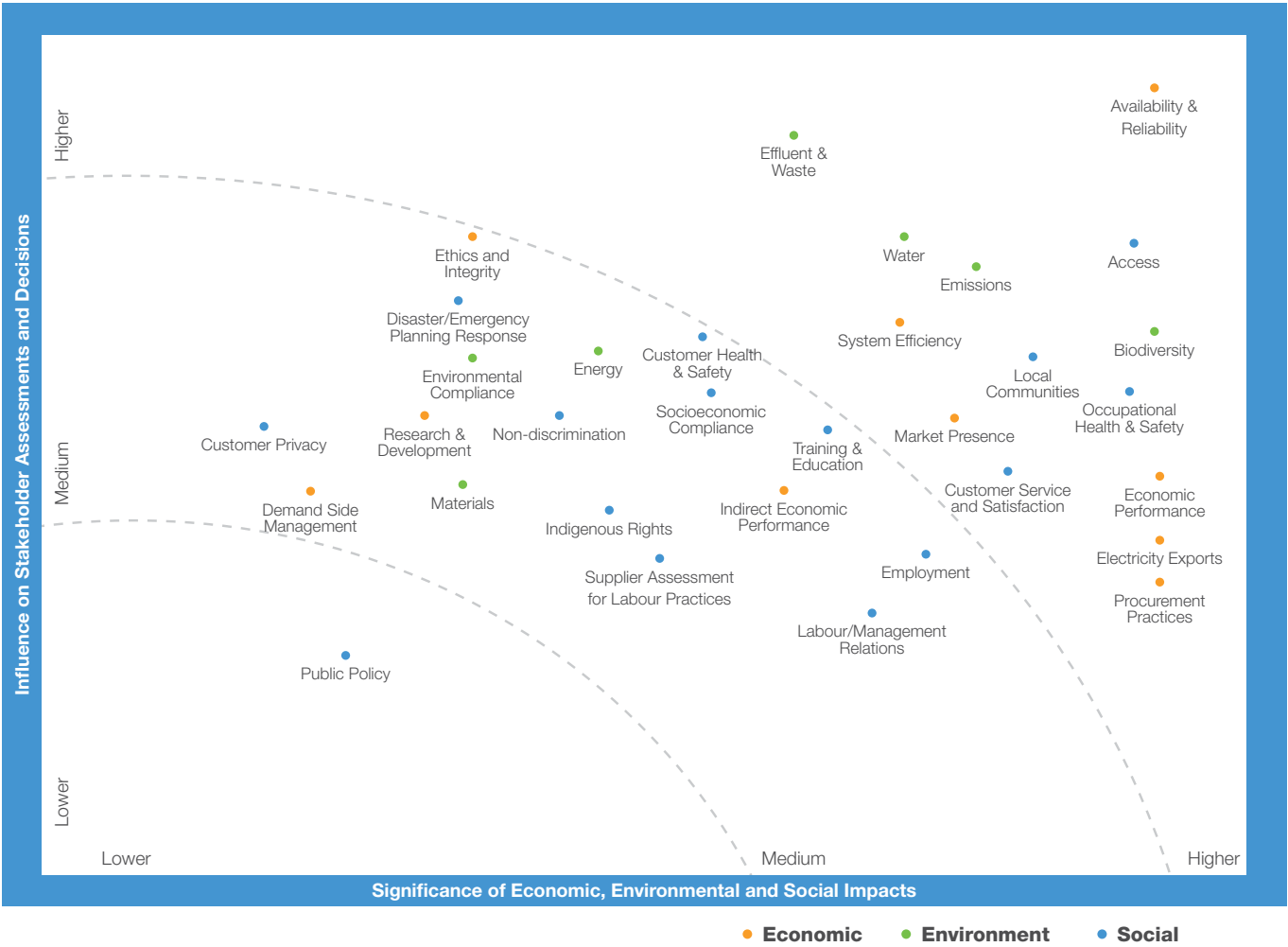
## CONTINUING OUR SUSTAINABILITY JOURNEY

In implementing our sustainability agenda, we recognise the need to adopt a holistic approach in managing long-term sustainability risks and opportunities to create value for our stakeholders while contributing to economic development for Sarawak and sustainable development on the global level.

As we seek to ensure continued sustainability moving forward, we remain guided by our long-term strategy, focusing on consolidating and protecting the value we have created in past years. Furthermore, we remain committed to achieving our growth agenda in our effort to deliver value to all our stakeholders. As we progress into the next phase of our strategy in 2020 and beyond, we will place emphasis on realising the sustainable value we have built in previous years towards building a low carbon economy. With these plans in place, we are optimistic of our ability to contribute positive outcomes to our stakeholders and for the environment for the long-term.

# OUR MATERIALITY ISSUES

## Materiality Matrix



## SDG #07 - AFFORDABLE AND CLEAN ENERGY

07 AFFORDABLE AND  
CLEAN ENERGY



Night view of Kuching Waterfront.

### SDG #07 Targets

- ✓ By 2030, ensure universal access to affordable, reliable and modern energy services.
- ✓ By 2030, increase substantially the share of renewable energy in the global energy mix.
- ✓ By 2030, double the global rate of improvement in energy efficiency.
- ✓ By 2030, enhance international cooperation to facilitate access to clean energy research and technology.

### Our Performance

**Sarawak  
Electricity Coverage**

▲ **12.60%**

since 2011

**Hydropower Average  
Availability Factor**

**94.37%**

since 2011

**SAIDI for Distribution  
(min/customer)**

▼ **37.08%**

since 2011

**SAIDI for Transmission  
(min/customer)**

▼ **92.28%**

since 2011

**Total Length - Distribution  
(km)**

▲ **31.42%**

since 2011

**Total Length - Transmission  
(km)**

▲ **102.01%**

since 2011

## SDG #13 - CLIMATE ACTION

13 CLIMATE  
ACTION



Bakun HEP and its water catchment.

### SDG #13 Targets

- ✓ Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.
- ✓ Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

### Our Performance

**Total CO<sub>2</sub> Emission (tCO<sub>2</sub>eq) -  
thermal plants**

▼ **2.34%**

since 2011

**Main Grid Emission Intensity  
(tCO<sub>2</sub>eq/MWh)**

▼ **72.35%**

since 2011

**Renewable Energy Generated  
(GWh)**

▲ **1,574.39%**

since 2011

**Total CO<sub>2</sub> Emission  
Reduction from CDM Project**

**3.26** million tCO<sub>2</sub>

since 2011



Tanjung Kidurong Combined Cycle Gas Power Plant.



**08** DECENT WORK AND  
ECONOMIC GROWTH


## SDG #08 - DECENT WORK AND ECONOMIC GROWTH



Power Plant Operators performing daily routine site checking and inspection on the operating condition of plant equipment and system at Murum HEP.

### SDG #08 Targets

- ✓ Achieve higher levels of economic productivity.
- ✓ Support productive activities, decent job creation, entrepreneurship, creativity and innovation and encourage the formalisation and growth of micro-, small-, and medium-sized enterprises.
- ✓ By 2030, achieve full and productive employment and decent work for all women and men, including for young people and person with disabilities and equal pay for work of equal value.
- ✓ By 2030, substantially reduce the proportion of youth not in employment, education or training.
- ✓ Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of child labour.
- ✓ Protect labour rights and promote safe and secure working environments for all workers.

### Our Performance

#### Tenders Awarded To Local Companies (RM)

▲ **141.14%**

since 2011

#### Total Training Hours Provided

▲ **125.53%**

since 2011

#### Electricity Sales (GWh)

▲ **289.11%**

since 2011

#### Revenue (RM)

▲ **229.48%**

since 2011

#### Total Number of Employees

▲ **42.33%**

since 2011

#### Women In Our Workforce

▲ **68.61%**

since 2011



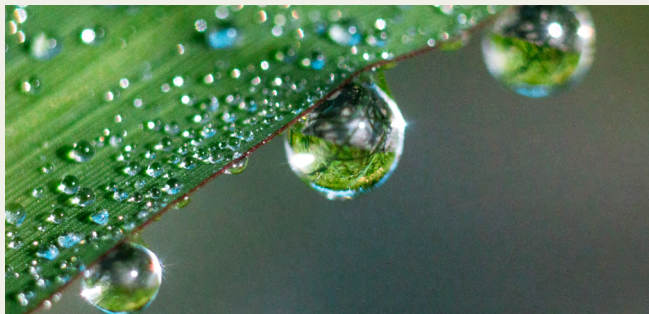
Customer Care Centre Team.



06 CLEAN WATER AND SANITATION



## SDG #06 - CLEAN WATER AND SANITATION



*Water, essential for all livings.*

### SDG #06 Targets

- ✓ By 2030, substantially increase water-use efficiency and ensure sustainable withdrawals and supply of freshwater to address water scarcity.
- ✓ By 2030, implement integrated water resource management.
- ✓ By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

### Our Performance

#### Water Volume Regulated for Electricity Generation

**47,817\* Million m<sup>3</sup>**

in 2018

Water intake by thermal plants by source:

#### Municipal

**2.43\* Million m<sup>3</sup>**

in 2018

#### Sea Water or Other Natural Water Source

**966.88\* Million m<sup>3</sup>**

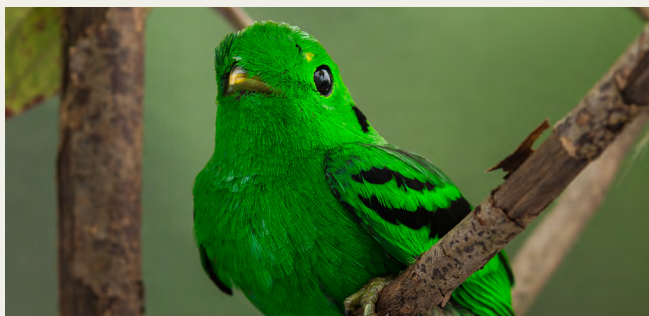
in 2018

**Supports and contributes** to the development of **state policy, procedures and guidelines** for **Integrated Watershed Management**.

15 LIFE ON LAND



## SDG #15 - LIFE ON LAND



*Green Broadbill. (Calyptomena viridis).*

### SDG #08 Targets

- ✓ By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation.
- ✓ By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands.

### Our Performance

**Support the Heart of Borneo Initiative**

#### Baleh National Park gazetted

**66,721 ha**

on 21 September 2017

**Conduct various workshops**

on watershed management

**Nurtured Flora Conservation Garden** in 2018



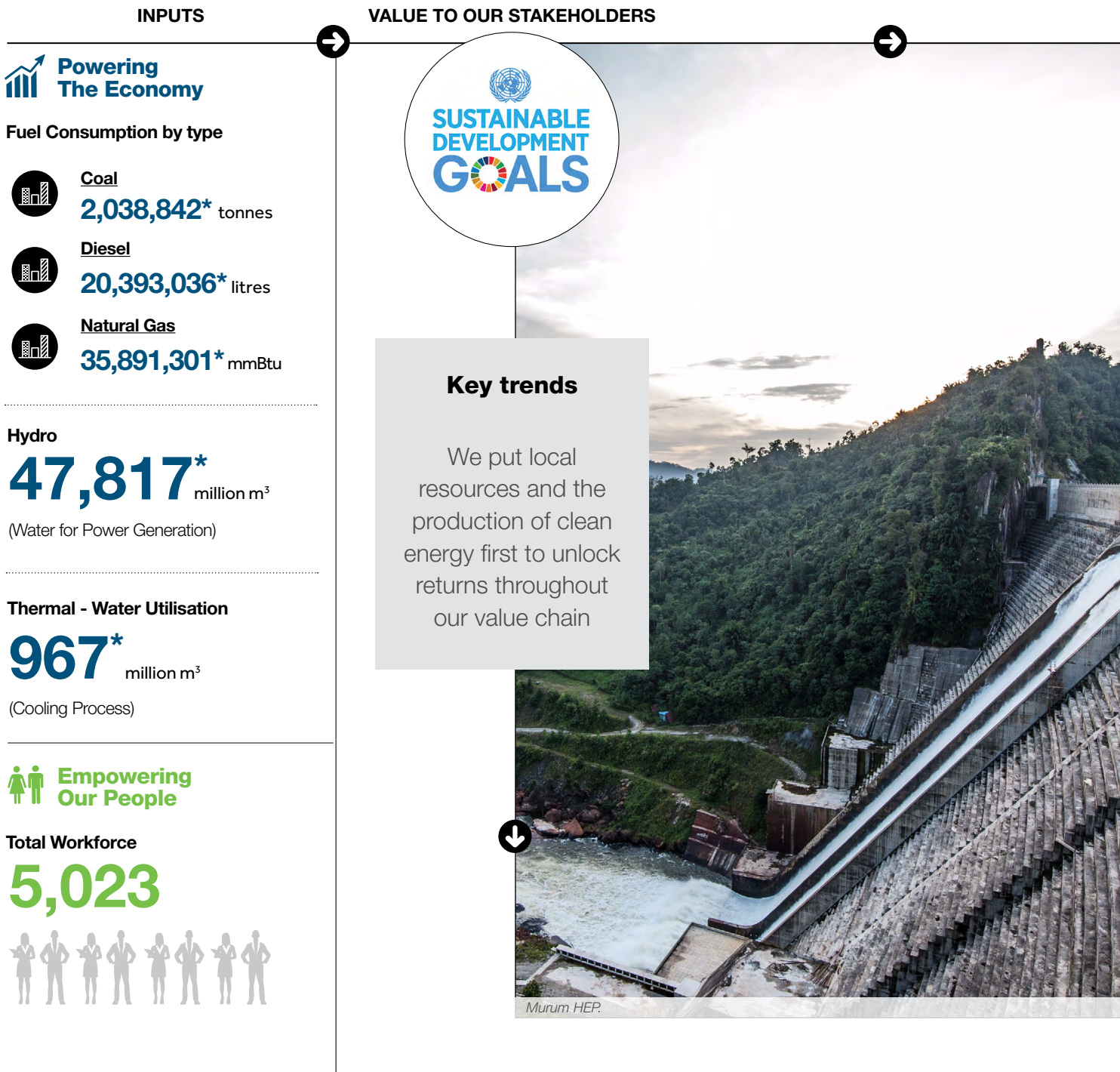
*One of the orchid flowers planted at the garden.*

#### Note:

\* These annual water volume for electricity generation and total water withdrawn by source data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

# DELIVERING VALUE TO OUR STAKEHOLDERS

As Sarawak's utility company with a deep-rooted history in the State, we view it as our responsibility to create value which contributes to the betterment of all our stakeholders and the environment.



**Note:**

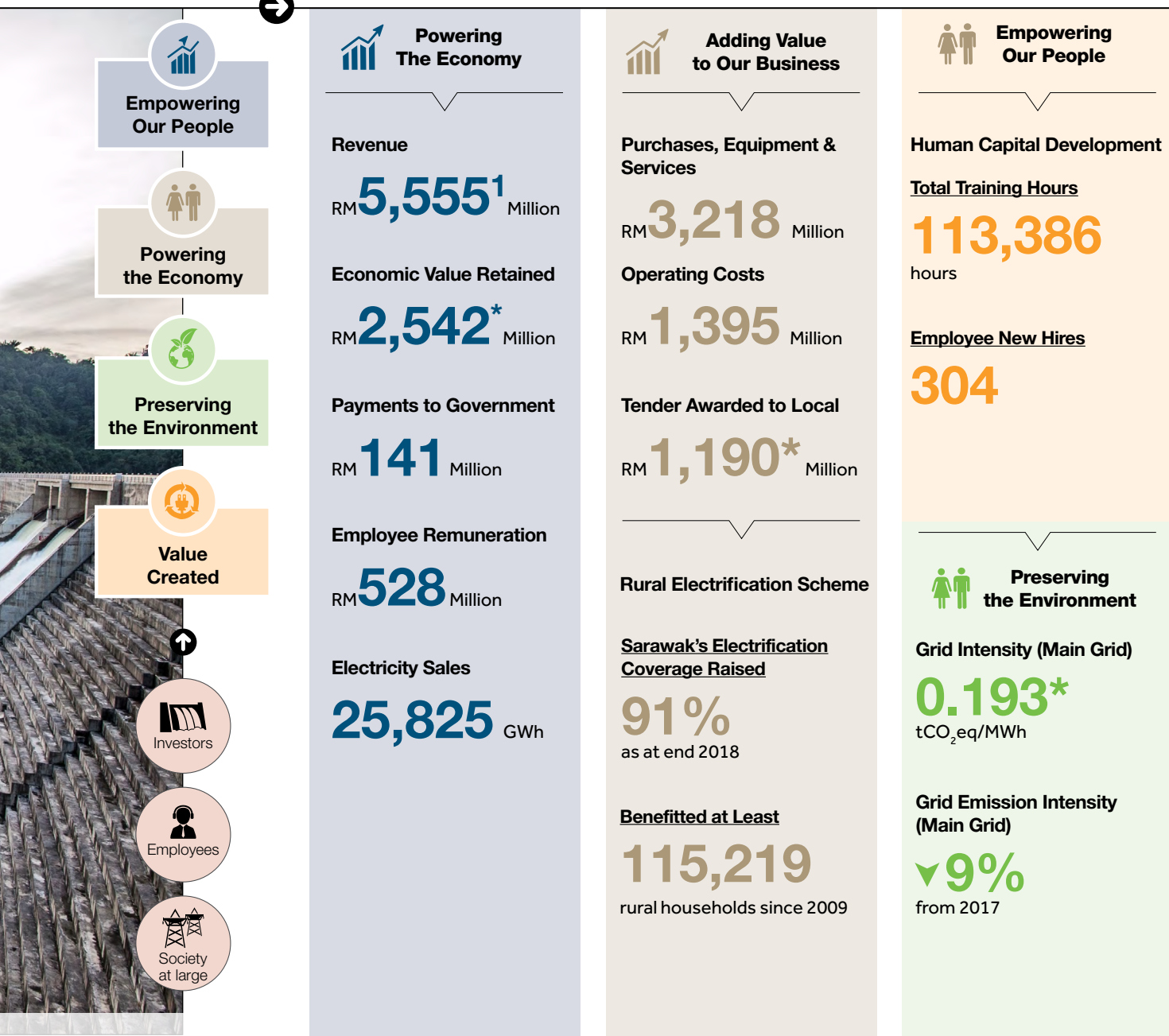
\* These fuel consumption, annual water volume for electricity generation and total water withdrawn by source data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

# DELIVERING VALUE TO OUR STAKEHOLDERS

Our business is driven by the production of renewable energy and the use of local resources to derive returns throughout our value chain. We are further guided by the protection of stakeholders' interests and environmental preservation to achieve sustainability.

## VALUE CREATION PROCESS

## OUTPUTS



### Notes:

<sup>1</sup> Includes Rental Income, Interest Received & Proceeds from Disposal of Property, Plant & Equipment.

<sup>\*</sup> These economic value retained, main grid CO<sub>2</sub> emission intensity and total value of tenders awarded to local companies data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



# CORPORATE LONG-TERM STRATEGY



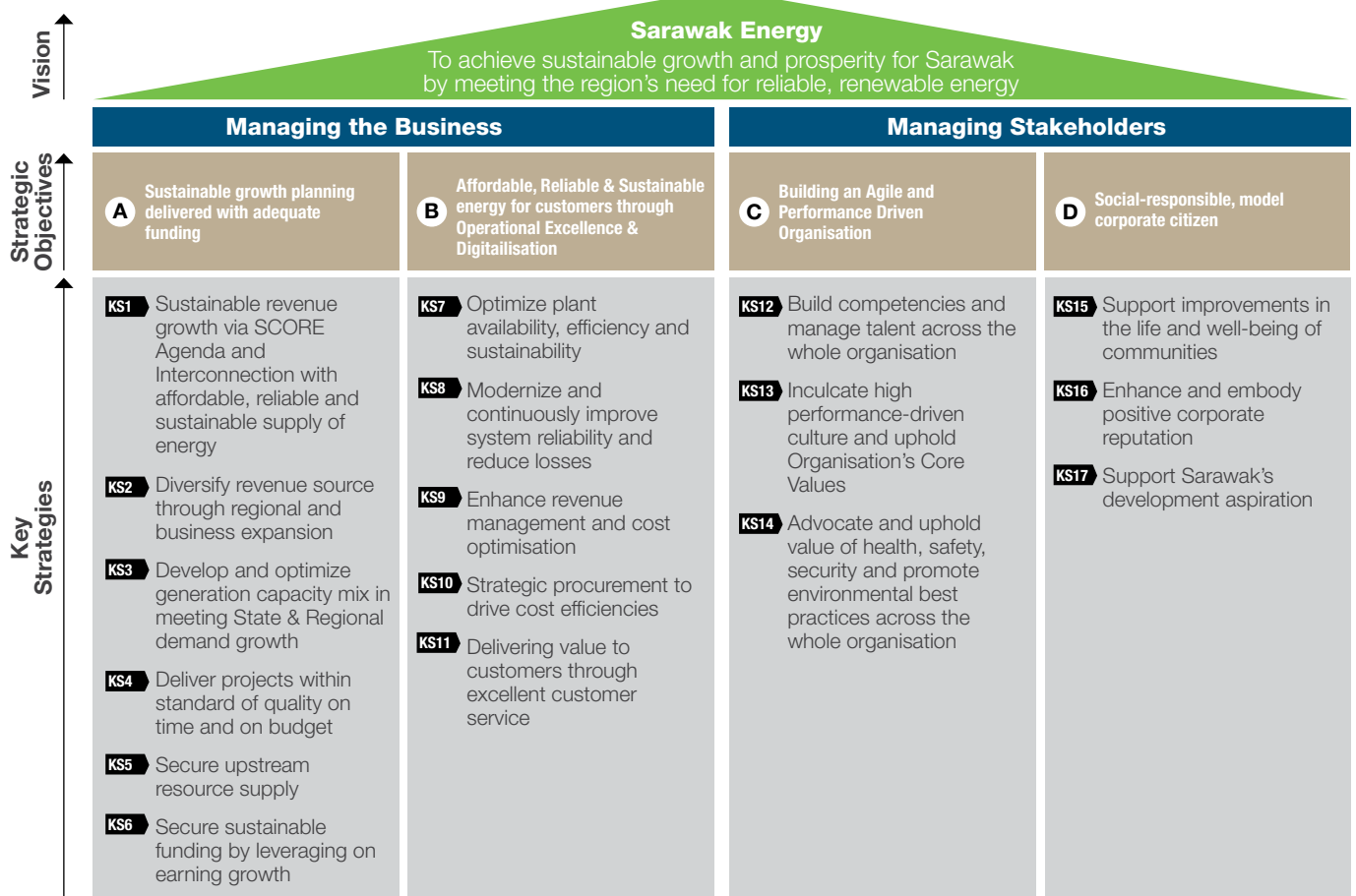
Menara Sarawak Energy is the first office building in East Malaysia to be certified as a green building and awarded a GBI Silver Rating in July 2013.

Economic sustainability forms the foundation for our organisation's ability to power the state of Sarawak for more than 100 years. During this time, we have transformed Sarawak Energy into the state's principal provider of reliable, renewable energy to meet our customers' needs while creating opportunities for shared and sustainable prosperity within and outside of our home market.

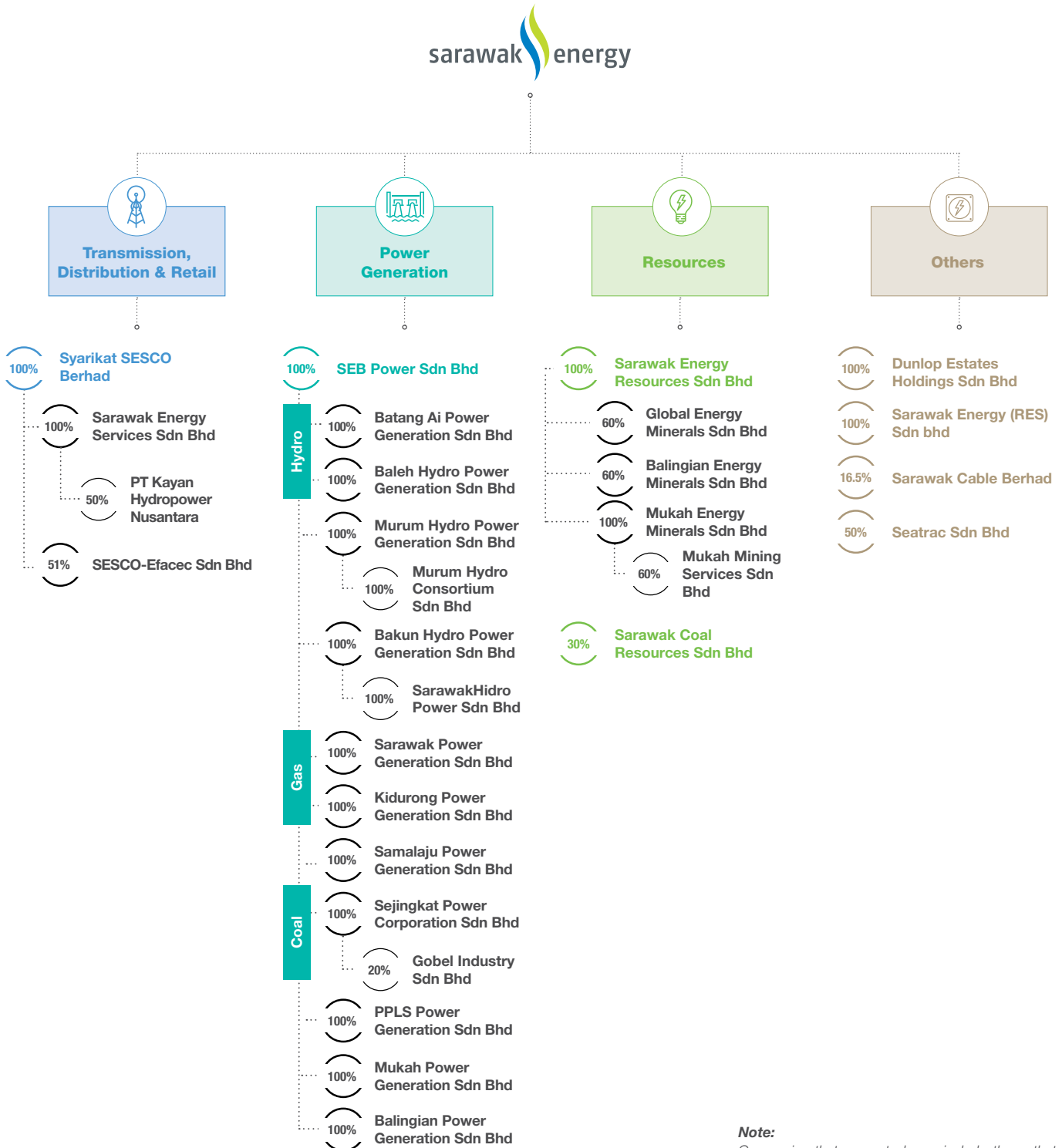
In doing so, we have been guided by our strategy map, which sets out the achievement of our vision through a two-pronged approach of managing our business and managing our stakeholders. These are further anchored on four strategic objectives, supported by 17 key strategies.

This has further been enabled by growing the proportion of renewable energy in our generation mix, allowing us to produce efficient, affordable and accessible power for our customers which also addresses increasing concerns on climate change both at the global and national levels. In line with this, we also continue to adopt the Hydropower Sustainability Assessment Protocol (HSAP) to ensure that our hydropower projects, which makes up the majority energy source of our generation mix, are developed in a sustainable manner.

## SARAWAK ENERGY STRATEGY MAP



## Our Corporate Structure



**Note:**

Companies that are not shown include those that have yet to commence operation or that are inactive, struck off or in the process of being struck off during the 2018 financial year.

## Group Executive Committee

In 2018 we restructured our management to enhance the decision-making process. The GEC was formed to deliberate on major issues, as well as to review, assess and endorse our current and future strategic direction. Comprising 13 members, the GEC meets every week to ensure we achieve our short and long-term goals, underlining our sustainable growth.



**Datu Sharbini Bin Suhaili**

Group Chief Executive Officer



**Mr. Lu Yew Hung**

Group Chief Operating Officer



**Puan Aisah Eden**

Executive Vice President,  
Corporate Services



**Mr. Lau Kim Swee**

Chief Executive Officer, SESCO



**Mr. James Ung**

Chief Executive Officer, SEB Power



**Mr. Pramod Kumar Karunakaran**

Executive Vice President,  
Project Delivery



**Mr. Ting Ching Zung**

Executive Vice President, Strategy &  
Corporate Development



**Mr. Alexander Chin**

Chief Financial Officer



**Tuan Hj. Sulaiman Abd Hamid**

Senior Vice President,  
Contract and Procurement



**Dr. Mak Anak Met**

Senior Vice President,  
Human Resources



**Mr. Nooruddin Bin Abdullah**

Senior Vice President, Legal &  
Enterprise Risk



**Mr. Nick Wright**

Vice President, Business Development



**Mdm. Sim Ko Sin**

Vice President, Information &  
Communication Technology



**Mr. Marconi Madai**

Vice President, Health, Safety,  
Security & Environment

## Sustainability Division

The Sustainability Division was formed in 2012 to oversee our sustainability efforts and to ensure these are integrated into Sarawak Energy's strategic direction. The division is responsible for the processes for the implementation, measurement and verification of the Company's sustainability performance.

**Sarawak Energy Board**



**Group Executive Committee**



**Corporate Services**



**CSR & Sustainability  
Department**



**Sustainability Division**

## HYDROPOWER SUSTAINABILITY ASSESSMENT PROTOCOL (HSAP) INTERNAL ASSESSMENT



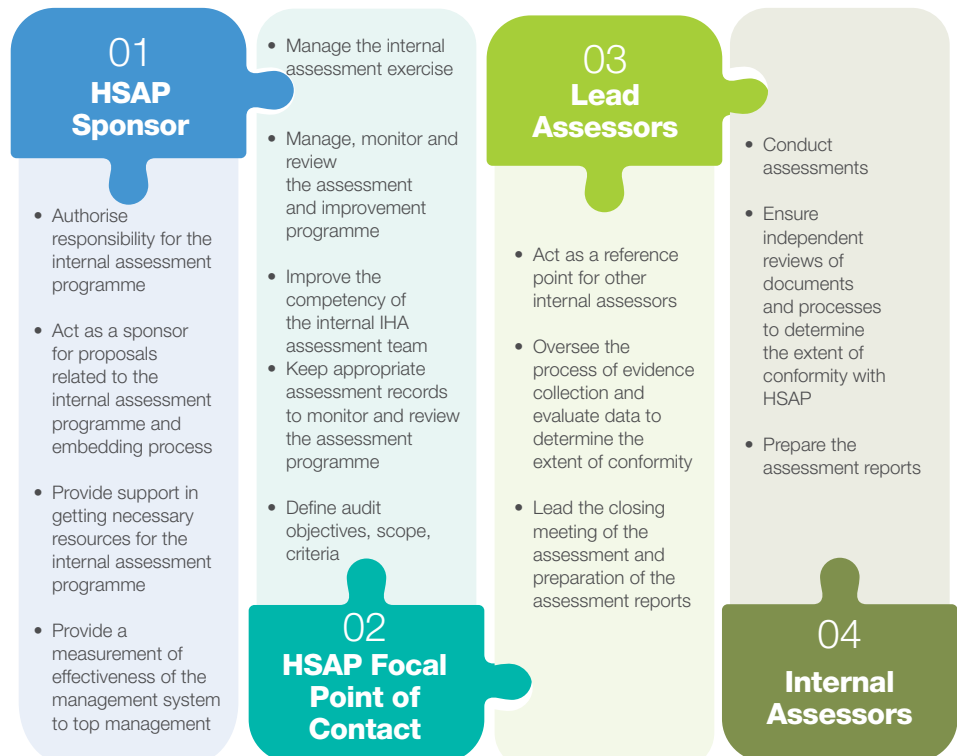
We have adopted the Hydropower Sustainability Assessment Protocol (HSAP) within our processes in stages since 2012 and implemented our internal HSAP governing structure in 2014. The protocol is a globally recognised framework used to holistically assess hydropower projects against social, environmental, technical and economic considerations.

Our internal HSAP governing structure has enabled us to firmly integrate sustainability practices into our hydropower development and operation processes. This has ensured that our hydropower development and operations are fully aligned with our sustainability agenda. Since adopting the protocol, it has served as a relevant model for guided self-assessments in attaining sustainable hydropower development based on recommendations from the World Bank.

Our Sustainability Division manages the integration of sustainability practices in our hydropower project development and operations according to the following objectives:

1. Benchmarking our internal practices/ processes against global best practices and processes
2. Identifying areas for future improvement
3. Platform to enhance the adoption of HSAP at the project and corporate levels
4. Capacity development of the project team on the Protocol
5. Enhancing the technical capabilities of Sarawak Energy's Internal Assessment Team
6. Preparing projects for official assessment
7. Sustaining our efforts to embed sustainability practices

### Roles & Responsibilities



01

### HSAP Sponsor

Head of CSR & Sustainability

### HSAP Focal Point of Contact

Sustainability Manager

02

03

### Lead Assessors

(Various Departments)

### Internal Assessors

(Various Departments)

04





# FOUNDATION TO LOW CARBON ECONOMY

*Sarawak State Legislative Assembly Building.*





Revenue

**RM 5,555<sup>1</sup>**  
million

Economic Value  
Distributed

**RM 3,012**  
million

Electricity Sales

**4%**  
of State GDP

System Average  
Interruption  
Duration Index - SAIDI  
(minutes per customer)

Transmission  
**3.65**

Distribution  
**95.81**

Renewable Energy  
Generated

**20,888\***  
GWh

*Batang Ai HEP penstock and power house.*

*Transmission lines.*

**Notes:**

<sup>1</sup> Includes Rental Income, Interest Received & Proceeds from Disposal of Property, Plant & Equipment.

\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



# FOUNDATION TO LOW CARBON ECONOMY

Sarawak Energy  
Sustainability Report  
2018



In 2018, Sarawak Energy registered a revenue of RM5.55<sup>1</sup> billion, representing a year-on-year growth of 10.53% from 2017.

**Note:**

<sup>1</sup> Includes Rental Income, Interest Received & Proceeds from Disposal of Property, Plant & Equipment.

## ECONOMIC PERFORMANCE

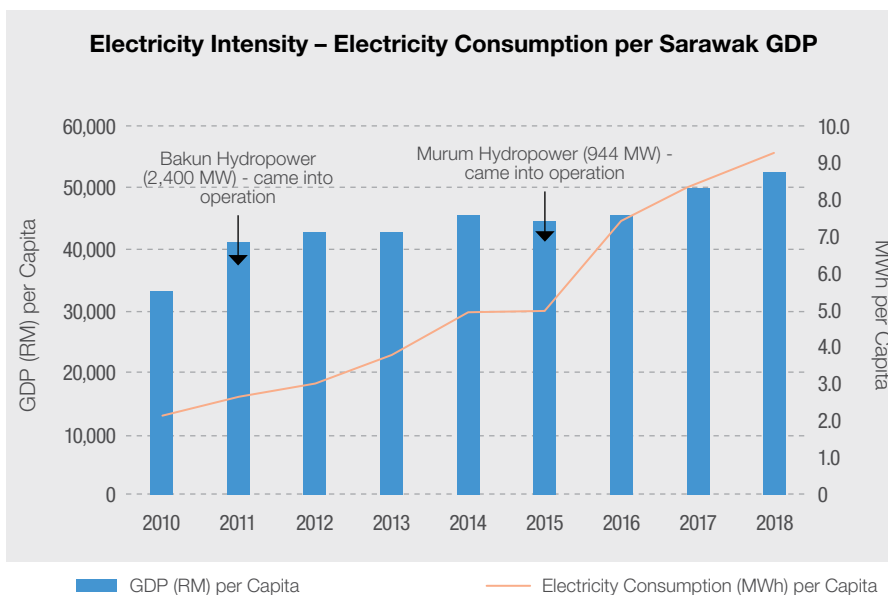
Our company registered revenue of RM5.55<sup>1</sup> billion in 2018, representing a year-on-year growth of 10.53% from RM5.03<sup>1</sup> billion in 2017. These returns were distributed to the government in the form of RM140.7 million in tax, as well as being channelled to our investors through RM949.3 million in interest paid while our employees received RM527.8 million in remuneration.

The Sarawak Corridor for Renewable Energy (SCORE) has provided us with access to invest in hydropower projects, creating a foundation towards building a low carbon economy. In turn, hydropower provides an affordable, reliable and sustainable renewable energy solution to attract foreign investment in energy intensive industries.

While a low carbon economy presents both a significant opportunity and an enormous challenge, it offers a solution to sustainable economic growth based on low carbon generation sources which minimise the output of greenhouse gas emissions. Prior to SCORE, Sarawak's power generation mix mainly originated from thermal sources such as coal, gas and diesel fuel. With the opportunities provided by SCORE, hydropower generation has increased by 1,574% from 1,248 GWh in 2011 to 20,888\* GWh in 2018, representing about 78% of the generation mix.



SCORE has provided us with access to invest in hydropower projects.



### Notes:

1. State of Sarawak GDP (2010 – 2018) at current price.
2. Department of Statistic Malaysia – GDP (2010-2018) & Population (2010-2018).
3. Sarawak Energy - Electricity Consumption (MWh).

Sarawak's GDP has grown steadily on an average of 5.3% from 2010 to 2018 (except for 2015), indicating real economic growth and robust economic output. The State's GDP per capita growth has also demonstrated a strong correlation to electricity consumption per capita, with renewable energy from hydropower forming the key driver of economic growth. From 2010 to 2018, renewable energy registered average growth of around 56% per annum, while electricity demand has also created economic multipliers for the State.

### Notes:

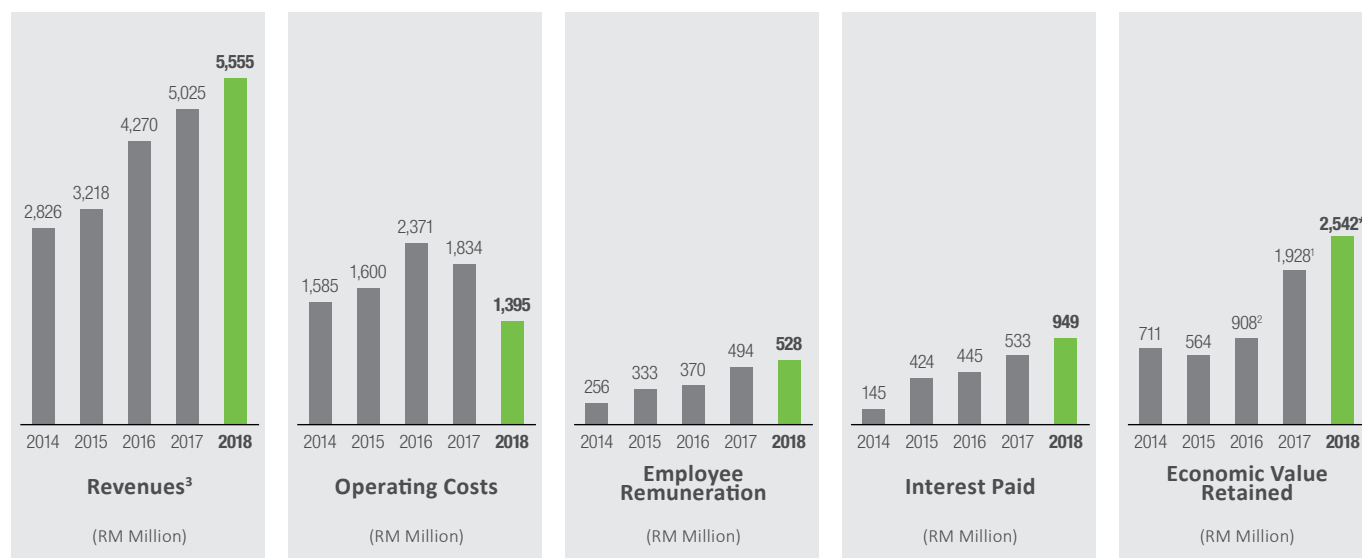
- <sup>1</sup> Includes Rental Income, Interest Received & Proceeds from Disposal of Property, Plant & Equipment.
- \* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

## We have transformed Sarawak Energy into the State's principal provider of affordable, reliable and renewable energy.

Affirming our company's financial stability, RAM Ratings ("RAM") upgraded our RM15 billion Sukuk Musyarakah Programme to AA1/Positive in 2018 and revised both the outlooks for Mukah Power Generation Sdn. Bhd.'s RM665 million Senior Sukuk Mudharabah Programme and Sarawak Power Generation Sdn. Bhd.'s RM215 million Serial Sukuk Musharakah ratings to AA2(s)/Positive. RAM also reaffirmed the AAA/Stable rating for Bakun Hydro Power Generation Sdn. Bhd.'s RM5.54 billion Sukuk Murabahah Programme.



Sarawak Energy as the provider of affordable, reliable and renewable energy.



### Notes:

<sup>1</sup> This economic value retained data has been assured by a third party for Sustainability Report 2017.

<sup>2</sup> This economic value retained data has been assured by a third party for Sustainability Report 2016.

<sup>3</sup> Includes Rental Income, Interest Received & Proceeds from Disposal of Property, Plant & Equipment.

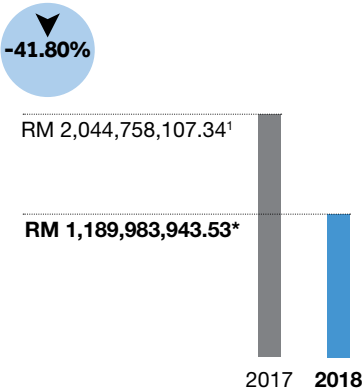
\* This economic value retained data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



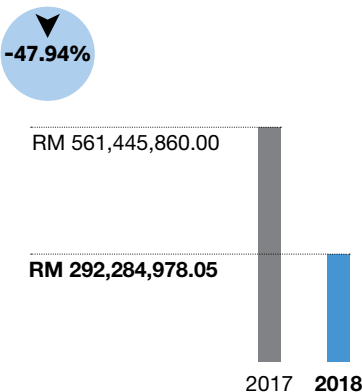
## Promoting Inclusiveness for Local Businesses

We pride ourselves in adopting procurement practices which contribute to the development of the local economy and community.

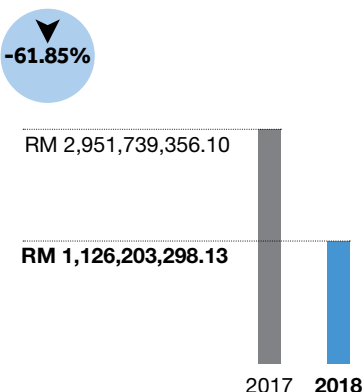
### Sarawakian (Bumi & Non-Bumi)



### Malaysian (Non-Sarawakian)



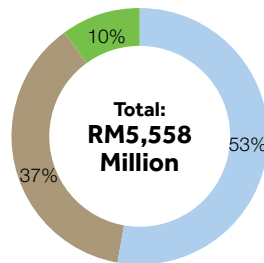
### International



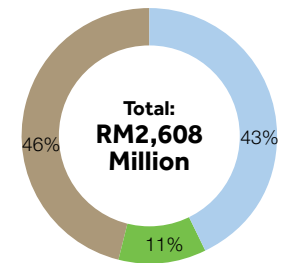
During the year, we also conducted our annual Contractor's Briefing on Business Opportunities programme throughout Sarawak, registering the attendance of 500 contractors. The programme is aimed at raising business inclusiveness for local suppliers. We also held trainings and project briefings for the local business community.

Following the introduction of the bid bond waiver for Sarawakian tenderers last year, in 2018, we further introduced a reduction of performance bond and retention sums from 10% to 5%, respectively. This resulted in lowering the maximum exposure of 10% for both, from 20% previously.

**Total Tenders Awarded by Categories in 2017**



**Total Tenders Awarded by Categories in 2018**



■ Sarawakian ■ Malaysian (Non-Sarawakian) ■ International

## Operational Performance

The stability of our economic performance remains underpinned by the efficiency and effectiveness of our electricity generation, transmission and distribution services. During the year in review, peak demand on our system reached 3,504 MW from 3,302 MW in 2017, as our total electricity sales reached 25,825 GWh from 23,675 GWh. Peak demand is expected to rise by 33% to 4,755 MW in 2022. We also committed 2,443 MW to energy intensive industries and export customers via Power Purchase Agreements (PPA) and Power Exchange Agreements (PEA) in 2018.

### Electricity Sales (GWh) - by customer type

|                                | 2018          |
|--------------------------------|---------------|
| Domestic                       | 2,368         |
| Commercial                     | 2,857         |
| Industrial                     | 2,367         |
| Public Lighting                | 110           |
| Bulk Customers                 | 18,123        |
| <b>Total Electricity Sales</b> | <b>25,825</b> |

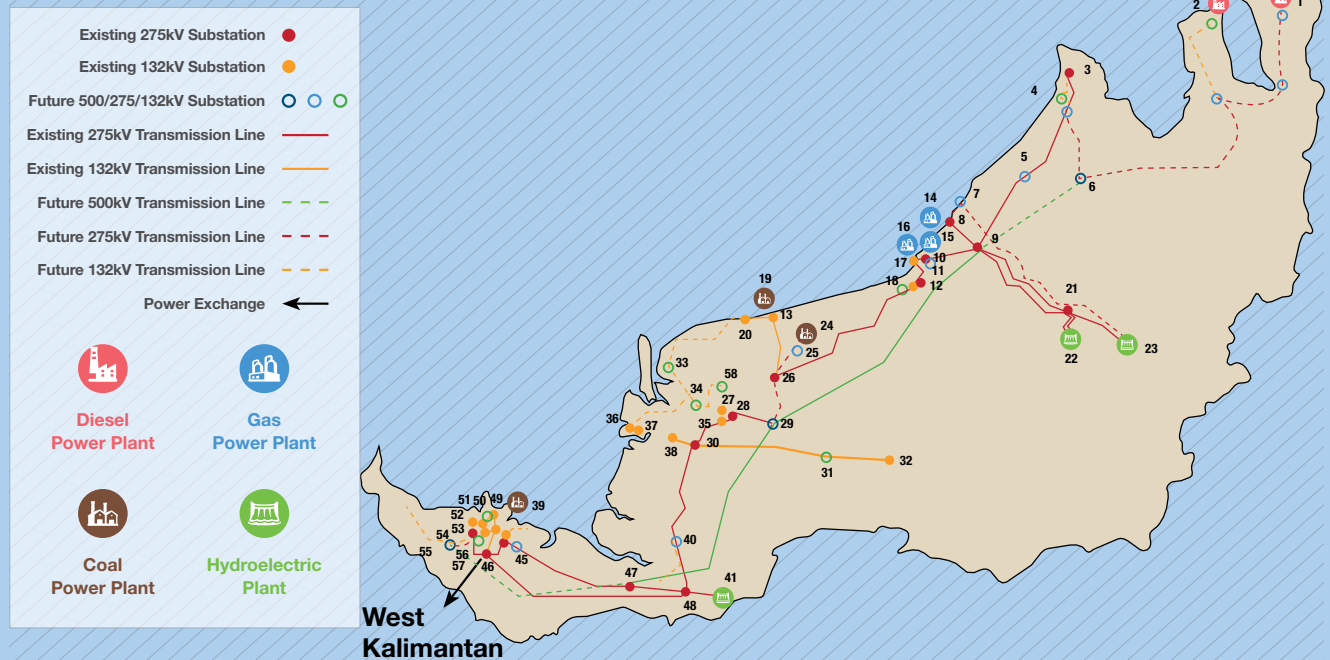
### Notes:

<sup>1</sup> This total value of tenders awarded to local companies data has been assured by a third party for Sustainability Report 2017.

\* This total value of tenders awarded to local companies data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

# FOUNDATION TO LOW CARBON ECONOMY

## Sarawak Energy Grid Electricity System



- |  |                                      |   |
|--|--------------------------------------|---|
| 1. Lawas 275/33kV S/S                            | 19. Mukah Power Generation P/S 270MW | 39. Sejingkat Power Corporation P/S 210MW |
| 2. Limbang Town 132/33kV S/S                     | 20. Petian 132/33kV S/S              | 40. Serudit 275/132/33kV S/S              |
| 3. Tudan 275/132/33kV S/S                        | 21. Murum Junction 275/33kV S/S      | 41. Batang Ai HEP 108MW                   |
| 4. Eastwood 132/33kV S/S                         | 22. Bakun HEP 2,400MW                | 42. Muara Tabuan 132/33kV S/S             |
| 5. Niah 275/33kV S/S                             | 23. Murum HEP 944MW                  | 43. Samajaya 132/33kV S/S                 |
| 6. Bunut 500/275/33kV S/S                        | 24. Balingian P/S 622MW (FUTURE)     | 44. Etinggan 275/132/33kV S/S             |
| 7. Samalaju B 275/132/33kV S/S                   | 25. Balingian 275/33kV               | 45. Etinggan B 275/132/33kV S/S           |
| 8. Samalaju 275/132/33kV S/S                     | 26. Selangau 275/132/33kV S/S        | 46. Mambong 275/132/33kV S/S              |
| 9. Similajau 500/275/33kV S/S                    | 27. Deshon 132/33kV S/S              | 47. Lachau 275/33kV S/S                   |
| 10. Bintulu 275/132kV S/S                        | 28. Oya 275/132/33/11kV S/S          | 48. Engkilili 275/33/11kV S/S             |
| 11. Bintulu B 275/132kV S/S                      | 29. Mapai 500/275/33kV S/S           | 49. Sejingkat 132/33kV S/S                |
| 12. Kemena 275/33kV S/S                          | 30. Kemantan 275/132/33/11kV S/S     | 50. Astana 132/33kV S/S                   |
| 13. Matadeng 132/33kV S/S                        | 31. Song 132/33/11kV S/S             | 51. Semariang 132kV S/S                   |
| 14. New Tanjung Kidurong CCGT P/S 400MW (Future) | 32. Kapit 132/33/11kV S/S            | 52. Mendu 132/33kV S/S                    |
| 15. Tanjung Kidurong CCGT P/S 400MW (Future)     | 33. Daro 132/33kV S/S                | 53. Matang 275/132/33kV S/S               |
| 16. Sarawak Power Generation P/S 317MW           | 34. Sg Maaw 132/33kV S/S             | 54. Transmitting 132/33kV S/S             |
| 17. Tanjung Kidurong 132/33/11kV S/S             | 35. Salim 132/33kV S/S               | 55. Tondong 500/275kV S/S                 |
| 18. Sibiyu 132/33/11kV S/S                       | 36. Tanjung Manis B 132/33/11kV S/S  | 56. Semenggo 132/33kV S/S                 |
|  | 37. Tanjung Manis 132/33/11kV S/S    | 57. Stakan 132/33kV S/S                   |
|  | 38. Sarikei 132/33/11kV S/S          | 58. Sungai Merah 132/33kV S/S             |



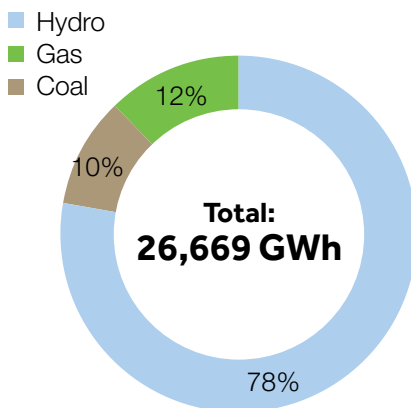


Transmission lines delivering power to the people.

## Sustaining Our Customers' Access to Low Carbon Energy

In line with our transformation into a renewable energy utility, our hydropower plants continue to represent the highest proportion of our portfolio and the only energy source we have invested in growing since 2013. As at the end of 2018, it made up 74% of our grid connected capacity, accounting for 78.32% of our grid energy mix during the year with net generation of 20,888\* GWh.

### Grid Energy Mix 2018 (GWh)



Underscoring our operational performance, we continued to register a high availability factor at an average of 93.46% and an average forced outage rate of 0.25% for our hydropower plants. Of these plants, the Batang Ai HEP recorded an availability factor of 92.10% and a recorded forced outage of 0.01% during the year; the Murum HEP registered an availability factor of 96.08% with a forced outage of 0.50% and the availability factor for the Bakun HEP was 92.23% with a forced outage rate of 0.23%.

As for our thermal plants, we recorded efficiency of 28.16%.

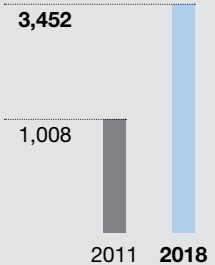
We have identified short and long-term measures in an effort to ensure continued availability and reliability of power for our customers. Over the short-term, these measures are driven by our outage management adoption plan.

**Note:**

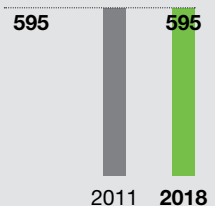
\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

### Grid Connected Power Plants Capacity (MW) - by energy source

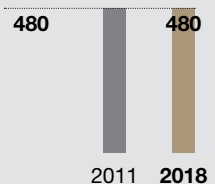
#### Hydro



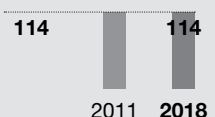
#### Gas



#### Coal



#### Diesel





Switchyard at Murum Junction 275/33 kV S/S.

In the long-term, we continue to fully meet the requirements of the State Grid Code's generation capacity planning, including reserve margin, Loss of Load Probability (LOLP) and Expected Energy Not Served (EENS). We have also put in place our Transmission Network Development to maintain the N-1 reliability requirement. This provides adequate transmission security and capacity for future system load growth from our organic customers, energy intensive loads in the SCORE region and our export of electricity, in addition to serving as the injection point for integrating future new large generation.

## Minimising Interruptions to Our Service

As further testament to the efficiency of our operations, we maintained the rate of transmission losses at 1.99% in 2018 from the same level in 2017. Our distribution losses due to technical reasons such as power dissipation in the transmission and distribution lines, transformers and measurement systems, also remained unchanged at 6.33%. Non-technical distribution losses, which are a result of electricity theft, non-payment by customers and errors in accounting and record-keeping, rose to 4.47% from 3.80%.

Our efforts to minimise the frequency and duration of interruptions by improving our asset management are reflected by our System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI). We continued to reduce these year-on-year, with Distribution SAIDI in 2018 improving to 96 minutes per customer from 110 minutes per customer in 2017 and Distribution SAIFI improving to 1.20 interruptions per customer from 1.28 interruptions per customer. At the Transmission level, SAIDI improved to 3.65 minutes per customer in 2018 from 30.96 minutes per customer in 2017, while SAIFI improved to 0.23 interruptions per customer from 0.68 interruptions per customer. We also commenced measuring SAIDI and SAIFI at the Generation level in 2018, recording 1.90 minutes per customer and 0.03 interruptions per customer, respectively.

### Notes:

<sup>1</sup> This System Average Interruption Duration Index (SAIDI) data has been assured by a third party for Sustainability Report 2015.

<sup>2</sup> This System Average Interruption Duration Index (SAIDI) data has been assured by a third party for Sustainability Report 2014.

## SAIFI (interruptions per customer)



## SAIDI (minutes per customer)







Launching of the 500kVA mobile gensets.

| Description                             | 2014  | 2015  | 2016  | 2017 | 2018 |
|---|-------|-------|-------|------|------|
| Transmission Losses (%)                 | 1.65  | 1.81  | 1.95  | 1.99 | 1.99 |
| Distribution Losses (Technical) (%)     | 10.87 | 10.87 | 10.87 | 6.33 | 6.33 |
| Distribution Losses (Non Technical) (%) | 2.08  | 1.65  | 1.03  | 3.80 | 4.47 |

In an effort to improve our system efficiency and improve distribution losses to minimise service interruptions, we undertook numerous initiatives during the year. These included continuously promoting the adoption of amorphous transformers, which are recognised for energy efficiency and lead to low losses. Our Asset Management team also evaluates different suppliers to procure the most competitive transformers. Furthermore, we are in the midst of replacing some of our existing capacitor banks at five substations, which is expected to improve the network system efficiency. Capacitor banks are used to improve the power factor of electricity.

Following the deployment of our Mobile Field Force Automation (MFFA) real-time monitoring and tracking system to three main stations in 2016, we expanded the system to other stations, including outstations in 2017 and 2018. The system which has oversight on the response time of our technical field crews when attending to customer complaints on outages and malfunctioning street lighting.

**Since 2016, we have implemented the Remote Monitoring System (RMS) to monitor status of our distribution network on a real-time basis. To date, 150 sub-stations with 554 remote sensors in Kuching, Bintulu and Miri and 41 street lighting feeders in Kuching have been installed with the RMS.**

During the year in review, we introduced the Smart Lock System to control the access of smart key users for our sub-stations and control rooms to a specific lock within a set time. This allows remote monitoring of our assets. We received the first batch of 500 smart padlocks and 50 smart keys in October 2018 and completed installation, testing and commission in November. In December, pilot users completed their training for the new system, with the locks to be introduced in stages from January 2019.

Following the completion of our Enterprise Asset Management (EAM) system in September 2018, we undertook EAM change management activities, training and rollout for our Transmission team from October to December 2018, with major adoption and stabilisation of the system targeted for the first quarter of 2019. We will also introduce the system for our Distribution operation & maintenance team in 2019.



The EAM system was developed based on energy industry best practices to support our asset management and improve productivity of our operation and maintenance personnel. It is also available as a mobile version which can be used offline. This will be beneficial for our Transmission field crew who often work on sites with little or no internet connectivity. Moving forward, EAM system for Distribution O&M team will also be rolled out to all four regions in 2019.

Our Geographical Information System (GIS) pilot project, which covers Kuching (Central Business District – CBD, and non-CBD areas), went live in May 2018. The system is available for desktop, web and mobile. The desktop version will be used by GIS staff to draw new overhead lines, underground cables and substation equipment, among others.

Meanwhile, the web version will be used by our operation and maintenance staff to obtain asset and locality information, including power analysis to determine outage areas and information on customers affected if there is a planned or forced outage. As for the mobile version, asset information is collected during site inspection and can be used to capture and save site/asset photos and GIS coordinates. The subsequent phases of this project will be implemented in 2019, covering Kuching Outstations first, followed by other regions.

During the year in review, we also received two units of 500 kVA mobile gensets which are designed to be mounted permanently on a 6x2 rigid truck. Our fleet of mobile gensets contribute to reducing our SAIDI and in 2019, we will receive another three units of 1 MVA mobile gensets to add to our fleet.

We commenced our Covered Conductor Pilot Project in 2018 in Sagah Moyan. The project aims to study the effectiveness of covered conductors against adverse weather conditions and external disturbances to improve forced outages and was tested on an 11 kV overhead



1MVA mobile gensets.

line. The first performance evaluation of the covered conductor proved successful with another assessment to be carried out in January 2019.

While we take every effort to ensure our customers enjoy continuous service, disconnections do arise as a result of late payment of electricity charges. In 2018, we recorded 11,461 disconnected accounts for the Kuching area, valued at RM49.26 million in late charges. Of these, we recovered RM31.03 million in payments from 9,542 reconnected accounts, with electricity restored within 24 hours for 9,414 of these accounts.

| Year | Total Account Disconnected | Total Amount Disconnected | Total Account Reconnected | Total Amount Reconnected |
|------|----------------------------|---------------------------|---------------------------|--------------------------|
| 2018 | 11,461                     | 49,260,770.00             | 9,542                     | 31,030,807.00            |
| 2017 | 15,783                     | 36,335,836.73             | 11,473                    | 8,897,518.36             |
| 2016 | 9,579                      | 22,014,128.63             | 6,463                     | 8,981,922.85             |
| 2015 | 8,381                      | 16,313,620.01             | 6,164                     | 7,426,324.94             |

## Length of Time between Disconnection and Arrangement of Payment

| Year | <48 Hours | 48 - 1 Weeks | 1 Weeks - 1 Month | 1 Month - 1 Years | >1 Year |
|------|-----------|--------------|-------------------|-------------------|---------|
| 2018 | 8,215     | 1,232        | 53                | 42                | 0       |
| 2017 | 10,987    | 358          | 120               | 8                 | 0       |
| 2016 | 6,175     | 208          | 44                | 36                | 0       |
| 2015 | 5,798     | 168          | 130               | 68                | 0       |

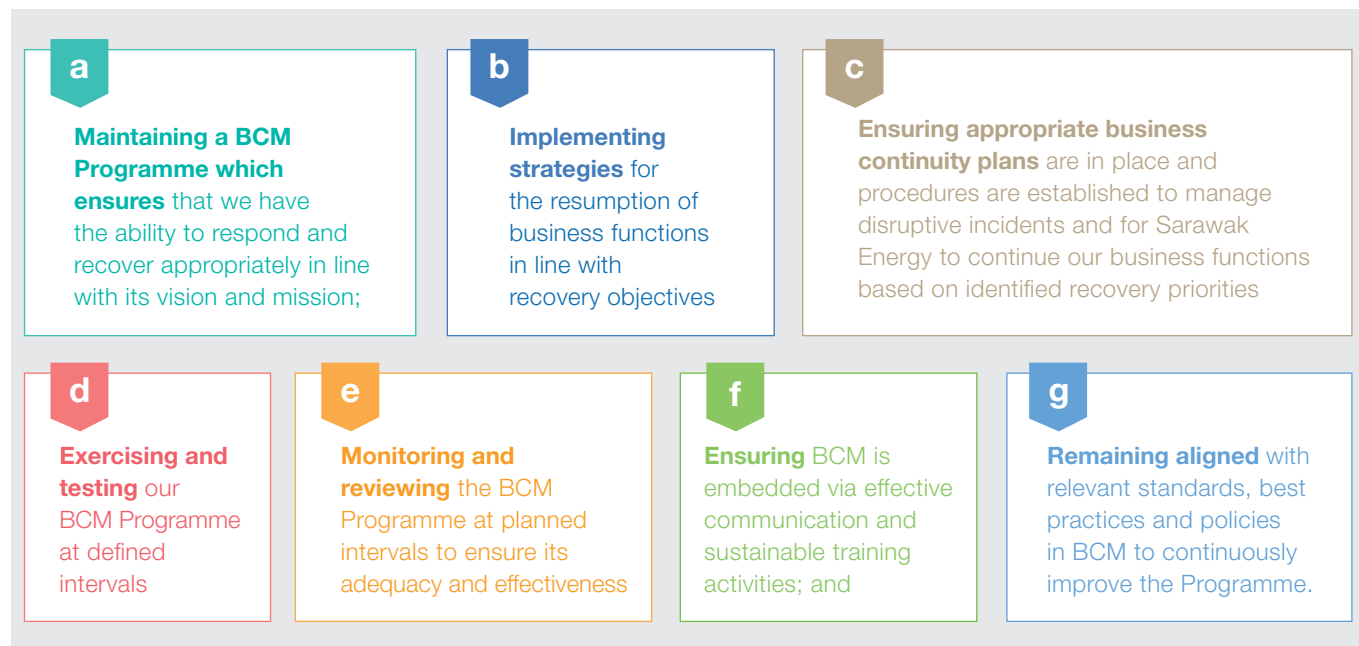
## Time Taken to Restore Electricity After Payment

| Year | <24 Hours | 24 Hours - 1 Week             | > 1 Week |
|------|-----------|-------------------------------|----------|
| 2018 | 9,414     | 128                           | 0        |
| 2017 | 8,089     | 2,256                         | 1,128    |
| 2016 | 5,925     | 320                           | 218      |
| 2015 | 6,159     | 5<br>(under customer request) | 0        |

## Business Continuity Management

Since 2016, we have established a Business Continuity Management (BCM) Framework to build our resilience for preparedness and effective response in times of crisis or disasters. The framework is benchmarked against ISO 22301:2012, ISO 22313:2012 and other relevant Malaysian and international BCM standards and guidelines.

Our BCM policy commits us to maintaining and ensuring the continuity of our services to minimise the impact to our customers in the event of a service disruption. This will be achieved by:



During the year in review, our BCM activities were focused on exercising our people in BCM and working with government agencies, with major initiatives held during the year including Crisis Simulation Exercises for the Similajau 275kV EHV substation, Bakun HEP and Tg. Kidurong Power Plant. A Crisis Simulation Exercise was also held for Group CMT, Group CMST and the Group BCM Secretariat.

## Ensuring Excellence in Serving Our Customers

Our efforts to ensure the availability and reliability of our system as well as minimise disruptions have produced continued improvements in our Customer Satisfaction Index, which increased to 94.72% in 2018 from 80.57% in 2017.

| Year                        | 2014   | 2015   | 2016   | 2017   | 2018   |
|-----------------------------|--------|--------|--------|--------|--------|
| Customer Satisfaction Index | 75.23% | 77.29% | 77.42% | 80.57% | 94.72% |

Apart from our technical initiatives, our Retail and Distribution teams have also played their part to achieve excellent service quality for our customers. This includes the introduction of 15 payment kiosks at our major customer service counters in 2017 and the opening of our new Saradise Customer Service Counter to replace the Pending Customer Service Counter during the year. Additionally, the kiosks are now equipped to accept payments for water bills.

With regard to our SEB Cares mobile application, we are in the process of introducing corporate payments via the app. The app currently allows individual users to view and manage their bills, report technical, billing and metering issues and check updates on the status of reported cases. Additionally, users can receive live updates on planned and unplanned outages for customisable areas.





# ACCELERATING CLIMATE ACTION

*Murum HEP and its water catchment.*



Emission Intensity,  
Main Grid

**0.193\***  
tCO<sub>2</sub>eq/MWh

Seawater withdrawal at Sejingkat Power Corporation coal-fired power plant.



Thermal - Water  
Withdrawn  
(Cooling Process)

**967\***  
million  
(m<sup>3</sup>)

Total CO<sub>2</sub>  
Reductions from  
Clean Development  
Mechanism Project

**473,319**  
tCO<sub>2</sub>

Hydro - Water for  
Power  
Generation

**47,817\***  
million  
(m<sup>3</sup>)

Northern Grid CO<sub>2</sub>  
Emission Intensity

**0.683\***  
tCO<sub>2</sub>eq/MWh



Emission stack of coal-fired power plant.

Total Volume of CO<sub>2</sub>  
Emission

**5.15** million  
(tCO<sub>2</sub>)

SO<sub>x</sub> and NO<sub>x</sub>  
Emission Intensity  
(Main Grid)

SO<sub>x</sub> - **6.21 x 10<sup>-5</sup> kg/kWh**  
NO<sub>x</sub> - **3.92 x 10<sup>-5</sup> kg/kWh**

**Note:**

\* These main grid CO<sub>2</sub> emission intensity, northern grid CO<sub>2</sub> emission intensity, total water withdrawn by source and annual water volume for electricity generation data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.





For the full  
Accelerating Climate  
Action please visit  
the Sarawak Energy  
website at  
[www.sarawakenergy.com](http://www.sarawakenergy.com)

*Sarawak Energy participated in a scientific expedition to explore the biodiversity gems of Upper Baleh.*

In 2018, we recorded carbon dioxide (CO<sub>2</sub>) emission intensity of 0.193\*<sup>1</sup>tCO<sub>2</sub>eq/MWh from our main grid against 0.213<sup>1</sup> tCO<sub>2</sub>eq/MWh in 2017.

**Notes:**

<sup>1</sup> This main grid CO<sub>2</sub> emission intensity data has been assured by a third party for Sustainability Report 2017.

\* This main grid CO<sub>2</sub> emission intensity data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

## OUR COMMITMENT TO ACCELERATE CLIMATE ACTION

Our environmental footprint has emerged as one of the pillars of our business strategy in recent years. This means that instead of simply managing the impact of our business on the natural environment, we have integrated environmental concerns into our operations. This is reflected by our shift into a renewable energy utility, with hydropower as the dominant component of our energy mix.

**Through this approach, in addition to our further efforts on environmental conservation and preservation, we are striving to ensure the sustainability of our business, the economy, our local communities and the environment.**

## MINIMISING THE IMPACT OF OUR USE OF RESOURCES

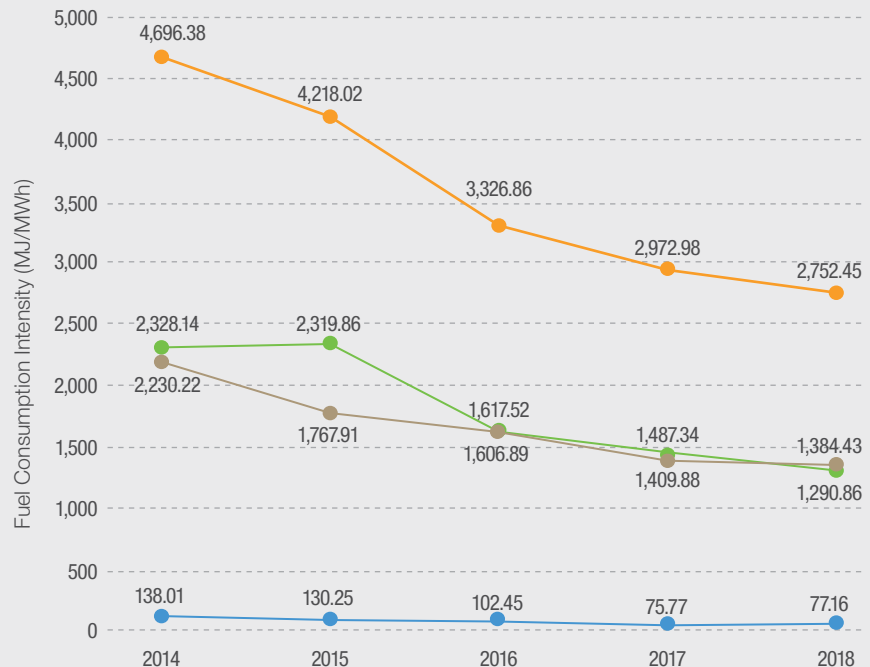
As an energy company, we are deeply cognisant of the energy that both goes into and is generated by producing our electricity. The following data discloses our scheduled waste generation intensity from 2016 to 2018 as well as the volume of water used to produce electricity at our power plants in 2018 and 2017.

### Notes:

<sup>1</sup> This total water withdrawn by source data has been assured by a third party for Sustainability Report 2017.

\* This total water withdrawn by source data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

### Fuel Consumption Intensity



**Note:** Calculated based on average annual calorific values of respective fuel type.

—●— Total Non-Renewable Fuel Consumption Intensity    
 —●— Natural Gas Consumption Intensity  
—●— Coal Consumption Intensity    
 —●— Diesel Consumption Intensity

### Total Water Withdrawal by Source 2017 & 2018

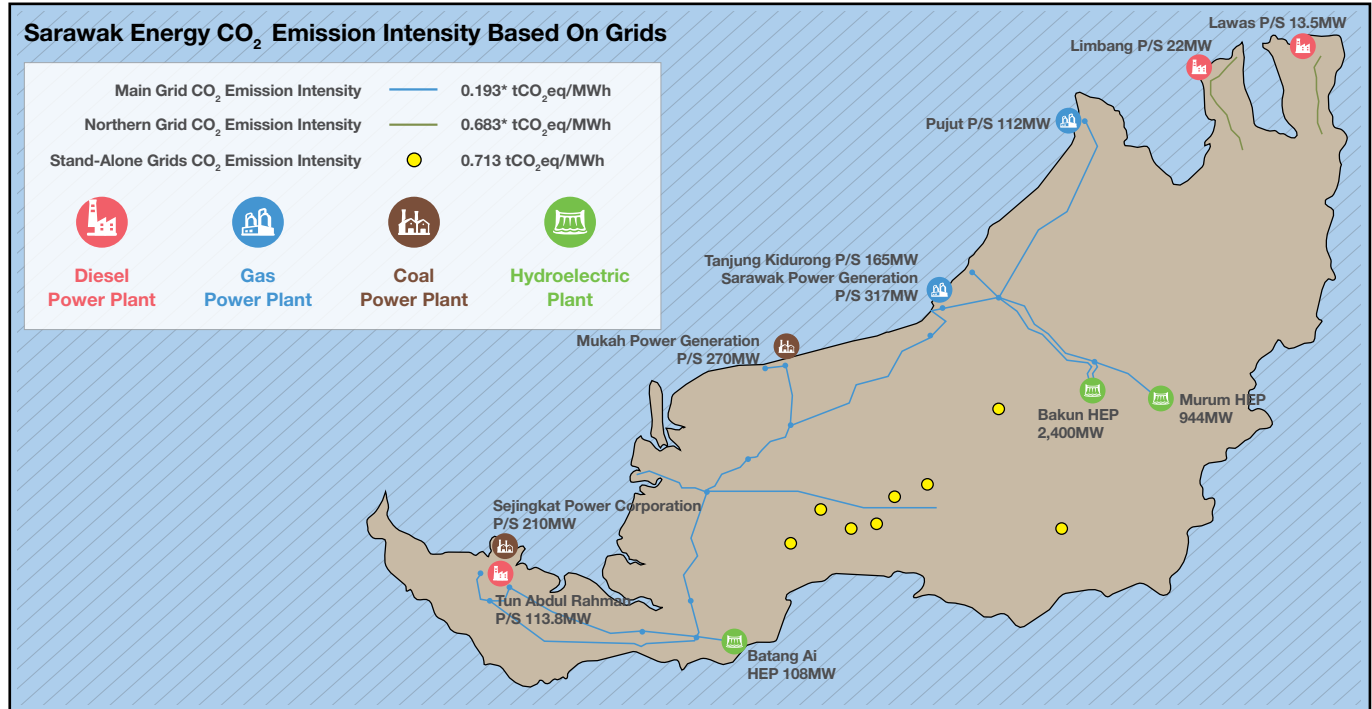
| Plant Type                   | Source                                  | Total 2018       | Total 2017                  |
|------------------------------|---|------------------|-----------------------------|
|                              |   | meter cubic (m³) |                             |
| Coal                         | Municipal                               | 2,186,120.00*    | 2,457,930.00 <sup>1</sup>   |
|                              | Sea Water or other natural water source | 739,325,453.18*  | 820,813,896.00 <sup>1</sup> |
| Combined Cycle - Natural Gas | Municipal                               | 229,836.00*      | 157,777.00 <sup>1</sup>     |
|                              | Sea Water or other natural water source | 227,489,565.60*  | 212,876,380.80 <sup>1</sup> |
| Diesel                       | Municipal                               | 13,952.50*       | 21,192.00 <sup>1</sup>      |
|                              | Sea Water or other natural water source | 69,650.00*       | 1,171,360.00 <sup>1</sup>   |

For further details on our use and management of water resources, please refer to the **Conserving Our Natural Resources** section in the subsequent pages of this chapter.



As a result of our continuous efforts to focus on the use and production of renewable energy, our main grid is recognised as having the lowest carbon footprint among electricity companies in the region. In 2018, we recorded carbon dioxide (CO<sub>2</sub>) emission intensity of 0.193\* tCO<sub>2</sub>eq/MWh from our main grid against 0.213<sup>1</sup> tCO<sub>2</sub>eq/MWh in 2017. This was achieved as 78.32% of our grid energy mix is generated from our hydroelectric plants, with a total of 20,888\* GWh of energy generated from all our hydro power plants on the main grid in 2018 from 19,241 GWh in 2017. In addition, our Northern Grid CO<sub>2</sub> emission intensity will be further reduced in 2019 with the completion of our 10MW Kota 2 Run-of-River Hydropower plant in Lawas.

## Sarawak Energy Main Grid CO<sub>2</sub> Emission Intensity 2010 - 2018 (tCO<sub>2</sub>eq/MWh)



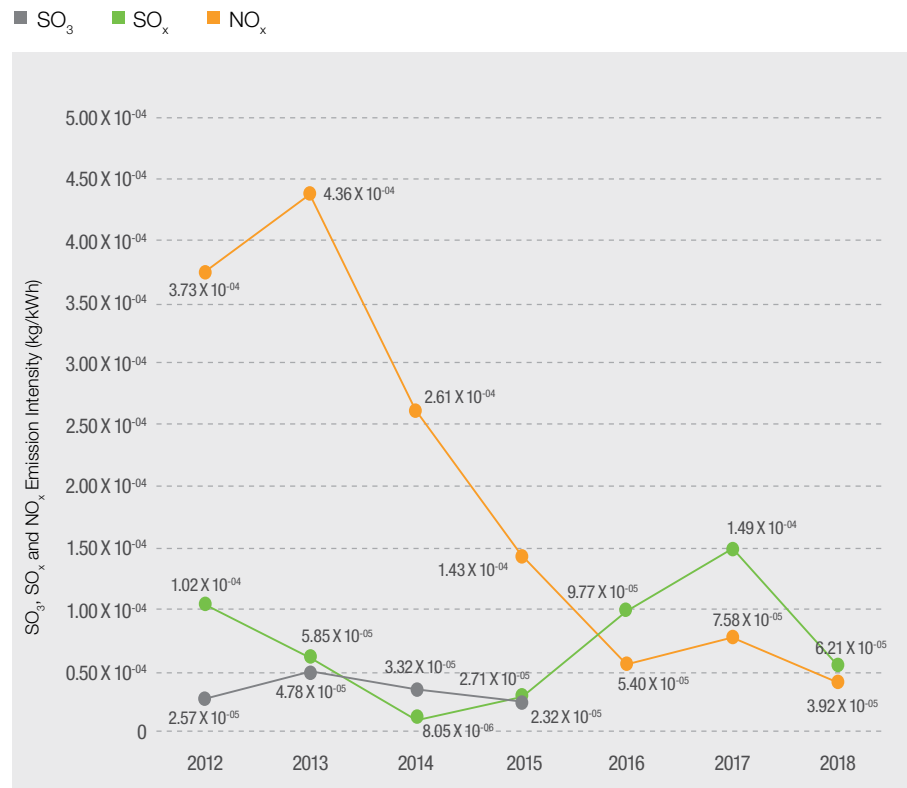
### Notes:

- <sup>1</sup> This main grid CO<sub>2</sub> emission intensity data has been assured by a third party for Sustainability Report 2017.
- <sup>2</sup> This main grid CO<sub>2</sub> emission intensity data has been assured by a third party for Sustainability Report 2016.
- <sup>3</sup> This main grid CO<sub>2</sub> emission intensity data has been assured by a third party for Sustainability Report 2015.
- <sup>4</sup> This main grid CO<sub>2</sub> emission intensity data has been assured by a third party for Sustainability Report 2014.
- \* These main grid CO<sub>2</sub> emission intensity, northern grid CO<sub>2</sub> emission intensity and net energy generated data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

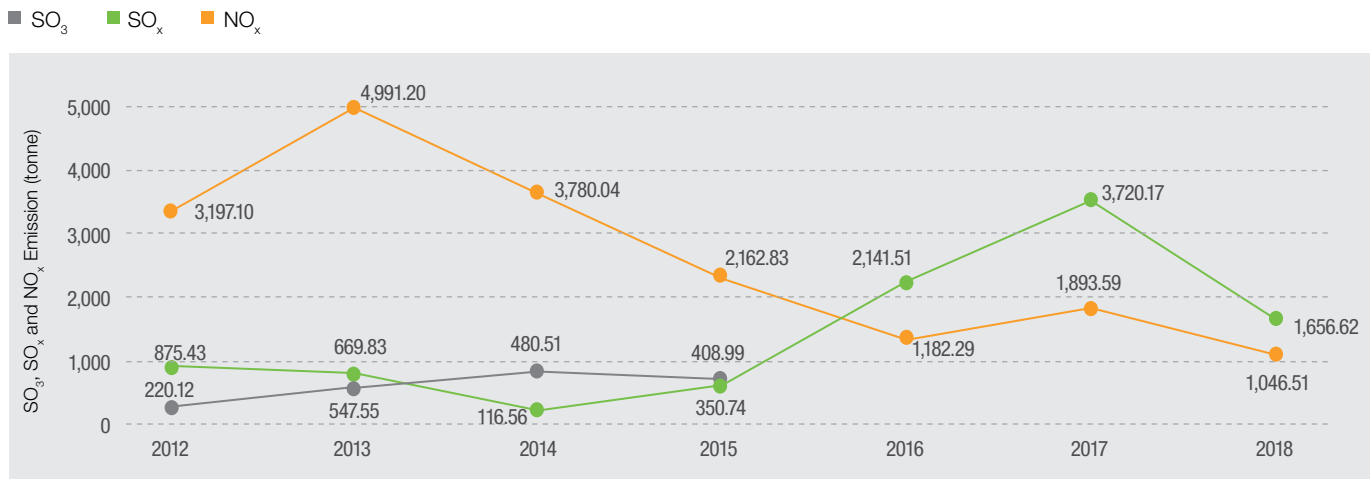
In line with our commitment to minimise our carbon footprint by employing and producing more renewable energy, we continue to retire old and small power plants and shift towards cleaner and more efficient technology. Subsequently, in 2018, we achieved a continued reduction of our CO<sub>2</sub> emissions by 473,319 tonnes from 408,520 tonnes in the previous year through carbon reduction from The Clean Development Mechanism (CDM) project.

The increase of the share of renewable energy in our generation mix has reduced the generation of other pollutants such as sulphur and nitrous oxides, which are by-products of our power plant operations. These emissions remain in line with requirements of the Environmental Quality Act. We also strive to minimise the CO<sub>2</sub> generated from our thermal plants by adopting efficient and environmentally-friendly technology such as Circulating Fluidised Bed (CFB) technology for our new Balingian Coal Fired Power Plant, and conversion from open cycle to combined cycle for our Kidurong Gas Fired Power Plant.

## Sarawak Energy Main Grid - SO<sub>3</sub>, SO<sub>x</sub> and NO<sub>x</sub> Emission Intensity 2012 - 2018



## Sarawak Energy Grid (Thermal) - Total SO<sub>3</sub>, SO<sub>x</sub> and NO<sub>x</sub> Emission 2012 - 2018



### Notes:

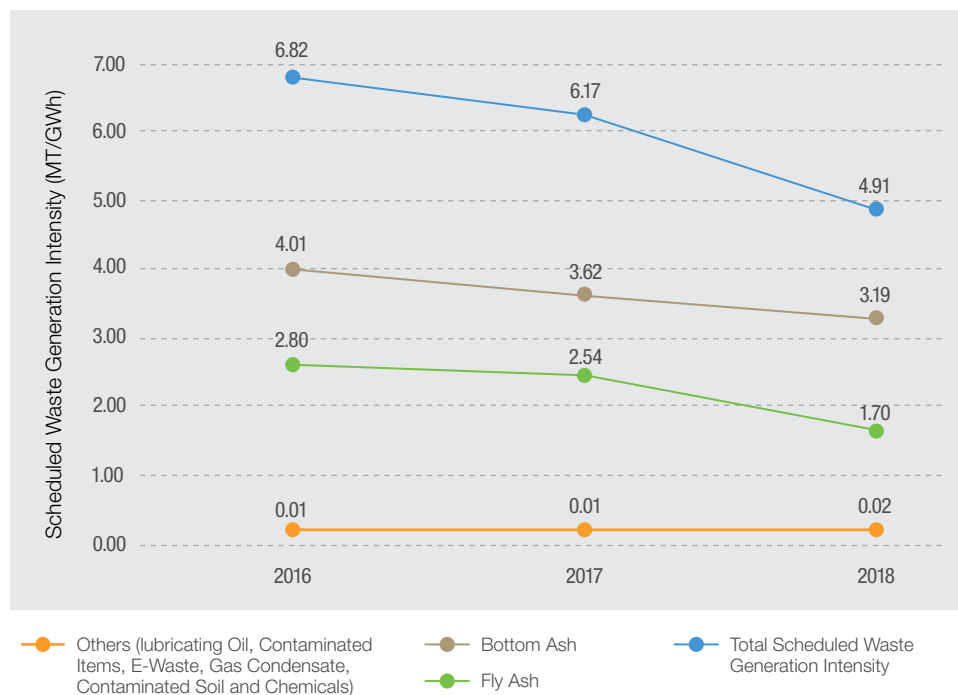
- For reporting purposes, CO<sub>2</sub> emission is calculated based on the amount of fuel used. NO<sub>x</sub>, SO<sub>3</sub> & SO<sub>x</sub> are calculated based on monthly Stack Emission Monitoring.
- Reports are conducted by third party consultants. In addition, these monthly stack emission reports will also be used to verify the CEMS measurements.
- Continuous Emission Monitoring System (CEMS) is only available at our SPC, PPLS, Bintulu, SPG and MPG power plants and the measurement results are directly connected to the Department of Environment.
- Starting in year 2016, all of the main grid thermal power plants are using SO<sub>x</sub> parameter instead of SO<sub>3</sub>.
- NO<sub>x</sub> parameter is applicable for Bintulu, SPG, Miri, Sg. Biawak, PPLS, SPC & MPG power plants.

## Responsible Waste Management

In addition to managing our emissions, we also implement disciplined disposal of our scheduled waste from our plants, which consist of oil, fly ash, bottom ash and other wastes such as contaminated items, electronic waste, gas condensate, contaminated soil and chemicals. The scheduled waste is disposed by a licensed contractor at prescribed premises in accordance with the Environmental Quality (Scheduled Waste) Regulations 2005.

The following data shows the intensity of scheduled waste generated from 2016-2018. Scheduled waste generation intensity has decreased, with a marked decline recorded from 6.17 MT/GWh in 2017 to 4.91 MT/GWh in 2018.

## Scheduled Waste Generation Intensity



Fly ash from our coal-fired power plant is recycled as a supplementary cementitious material (SCM) in the production of cement concrete.



## Adaptation to Climate Change - Conserving Our Resources

In 2018, Sarawak Energy generated 20,888\* GWh of energy by regulating 47,817\* million m<sup>3</sup> of water drawn from a 21,584 km<sup>2</sup>-sized water catchment area for our hydropower energy generation. The viability and long-term sustainability of hydropower operation is heavily dependent on land use within the catchment areas. Among the key challenges faced by hydropower operations is reservoir sedimentation, which is mainly contributed by uncontrolled activities within catchment areas. Sedimentation not only reduces the total storage capacity of reservoirs, it also impacts turbines and other mechanical equipment through abrasion.

An appropriate catchment management policy, framework, procedures and guidelines are integral to managing these risks. Currently, the Sarawak State Government is in the process of developing the policy, procedures and guidelines on integrated watershed management for Sarawak. In line with Sarawak Energy's long-term key strategies to secure upstream resource supply, we continuously play a proactive role in advocating good practices in managing water catchment and are in a strategic position to provide assistance to the State Government in developing the integrated watershed management plan from a hydropower perspective.

This integrated watershed management plan will benefit hydropower operations by ensuring a healthy catchment that contributes to good water quality and adequate water supply to the reservoir to meet growing energy demand. At the same time, it will ensure continued delivery of environmental social services for downstream needs, protecting the resilience of hydropower resources. This, in turn, enhances the capacity of hydropower to mitigate and adapt to climate change.

## FRAMEWORK FOR INTEGRATED WATERSHED MANAGEMENT



## SARAWAK ENERGY'S OBJECTIVES ON INTEGRATED WATERSHED MANAGEMENT:

**Advocate good practices in managing catchment by providing assistance to the State Government in the development of the integrated watershed management plan from the hydropower perspective.**

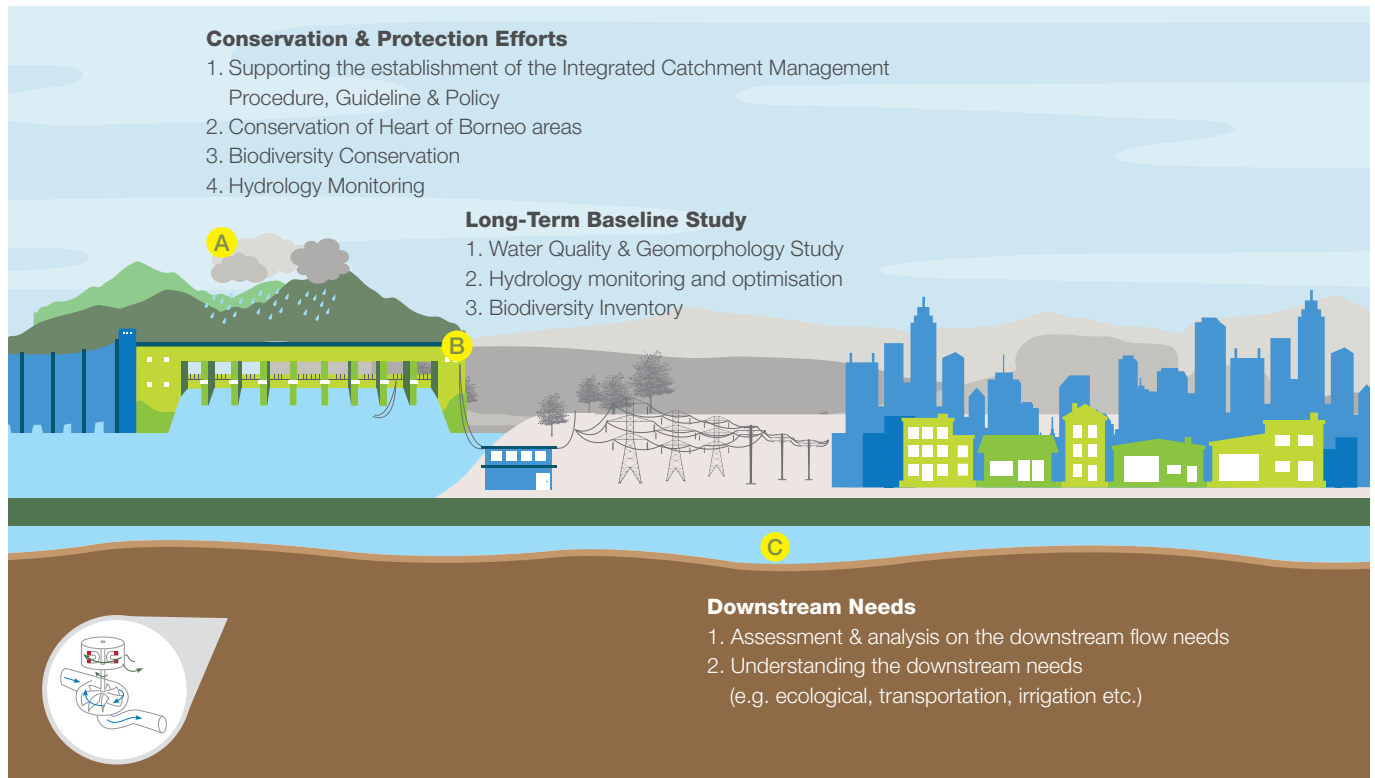
**1**  
Support the establishment and implementation of the catchment management policy.

**2**  
Create awareness on the importance of catchment management.

**3**  
Identify, develop and implement focus areas for catchment management initiatives through partnerships.

### Note:

\* These net energy generated and annual water volume for electricity generation data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



We also implement a Reservoir Management Plan to safeguard the water supply for our company and for the community. The plan monitors hydrometric data such as rainfall, the level of river water, inflow of water into our hydropower plants and sediment concentration from our 25 hydrometric stations.

During the year in review, we installed two new hydrometric stations at Belepeh (Bakun Catchment) and Mengiong (Baleh Catchment). We also undertook quality improvement of the hydrometric network system through ISO 9001:2015 certification.

## Water Inflow to Our Reservoirs

### 2018

| Major Plant | Annual Inflow (million m <sup>3</sup> ) (annual inflow from catchment) | Annual Water Volume for Energy Generation (million m <sup>3</sup> ) | Annual Energy Generated (GWh) |
|-------------|--|---|-------------------------------|
| Batang Ai   | 3,576.00   | 3,646.50*   | 481.00                        |
| Murum       | 7,737.00   | 7,932.00<br>8,022.00* (include EPS <sup>2</sup> )                   | 6,094.00                      |
| Bakun       | 40,481.00  | 36,148.11*  | 14,482.00                     |

### 2017

| Major Plant | Annual Inflow (million m <sup>3</sup> ) (annual inflow from catchment) | Annual Water Volume for Energy Generation (million m <sup>3</sup> ) | Annual Energy Generated (GWh) |
|-------------|--|---|-------------------------------|
| Batang Ai   | 3,658.00   | 3,396.73 <sup>1</sup>   | 442.32                        |
| Murum       | 10,933.00  | 7,503.32<br>7,567.19 <sup>1</sup> (include EPS <sup>2</sup> )       | 5,717.39                      |
| Bakun       | 49,794.00  | 32,961.65 <sup>1</sup>  | 13,078.27                     |

#### Notes:

<sup>1</sup> This annual water volume for electricity generation data has been assured by a third party for Sustainability Report 2017.

<sup>2</sup> Ecological Power Station.

\* This annual water volume for electricity generation data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

## BIODIVERSITY CONSERVATION

Sarawak is home to some of Malaysia's most exotic flora and fauna and we at Sarawak Energy recognise the value of protecting its distinct biodiversity. To this end, we conduct internal and community-based programmes to ensure the State's natural environment continues to flourish for a sustainable future.

### Murum Flora Conservation Garden Island

**1**  
**ESTABLISHED** in 2015, the garden showcases the rich biodiversity of the Murum area, attracting nature lovers, environmentalists and ecologists alike.

**2**  
**SERVES** as a pit-stop location for visitors during the long-distance boat-ride along the reservoir and can also be used as a biodiversity research station.

Since its launch, around 4,712 plant saplings have been planted in the garden, including Gaharu trees, the Mixed Dipterocarp species including Ensurai trees, various types of orchids, medicinal herbs such as Tongkat Ali, bamboo and some non-tree species.

### Community-based Tagang System Fishery Project

In 2015, we collaborated on the establishment of a fishery project at Sungai Lekasi in the Tegulang resettlement area. Last year, upon suggestions from the project committee for modification and improvement, we conducted a site visit with the committee's representatives and hosted a dialogue session with the community and the Department of Agriculture to highlight the requirements and challenges for the project's success.

**Following this, a new project committee was formed, with Sarawak Energy agreeing to allocate a specific budget to help empower the community with the right skills and knowledge to manage the project as well as provide training for the committee.**

We will also liaise closely with the Department of Agriculture to obtain required permits for the project and in handling the project.

## Gaharu Tree Planting Programme

During the year in review, we participated in the Gaharu Tree Planting Programme at Rh. Manggat, Menyang Taih, Batang Ai. The programme represents,

**1**  
**A CONSERVATION** effort under the Sarawak Forestry Department's Ulu Sungai Menyang Orang Utan Strategic Action Plan (USMOUSAP)

**2**  
**AN AIM TO CONSERVE** the Ulu Sungai Menyang forest to improve the livelihood of the local communities.

A total of 78 participants from Sarawak Energy, Institut Pendidikan Guru Kampus Batu Lintang, Forestry Department, WWF and local villagers of Rh. Manggat planted 1,500 Gaharu seedlings on the land of the Ulu Sungai Menyang.

### Social and Environmental Impact Assessment (SEIA) for Tg. Kidurong Combined Cycle Power Plant Project

As part of a requirement to obtain financing from the Export Credit Agency, we completed an SEIA for the Tg. Kidurong Combined Cycle Power Plant project in April 2018. The assessment was carried out in line with the requirements of the Equator Principles risk management framework and complied with national requirements as well as the Performance Standard of the International Finance Corporation (IFC). Pursuant to our submission of the assessment, an Environmental and Social Due Diligence exercise was conducted by an international independent environmental and social consultant in May 2018.

The exercise saw us receiving commendations for the quality of our team and system, the level of our cooperation with the contractor and our transparency in meeting the Sarawak Energy was commended of having a good team and system, cooperation with contractor and transparent on every aspect in meeting IFC Performance Standards and national requirements.





Northern Region team signed their pledge on zero polystyrene and reduce single-use plastic to minimize environmental impacts.

### Sarawak Energy Contractor Environmental Impact Assessment (EIA) Compliance Award 2017

As part of our efforts to encourage environmental self-regulation in project implementation, we introduced the Contractor EIA Compliance Award in 2017. The inaugural awards ceremony was held on 1 March 2018 in Sibul, recognising and highlighting efforts by contractors who met a high level of compliance with EIA assessment requirements and standards as well as conditions of approval, enforced at the Federal and State level, in undertaking projects awarded by Sarawak Energy. Fourteen contractors were presented with silver and bronze awards while seven consultants were given certificates for their efforts in observing EIA standards.

The awards were introduced to promote and encourage commitment to environmental care among our community of contractors. We hope that by serving as a platform to recognise and acknowledge the efforts of our contractors in environmental management, and in ensuring compliance with EIA conditions of approval and statutory requirements and standards, the awards will inculcate and embed good environmental practices.

## PROMOTING RESPONSIBLE CONSUMPTION

### Launch of 'Zero Polystyrene, Reduce Single-Use Plastic' Campaign

We have launched our internal three-year 'Zero Polystyrene, Reduce Single-Use Plastic' Campaign with an aim to eliminate the use of polystyrene packaging and reduce single-use plastic across our organisation, in line with World Earth Day 2018 themed 'End Plastic Pollution'.

Among activities held in conjunction with the launch was an exhibition held on our premises showcasing information related to environment management from various agencies such as Department of Environment (DOE), the Wildlife Conservation Society (WCS), World Wildlife Fund (WWF) and Majlis Bandaraya Kuching Selatan (MBKS), and a colouring contest for our staff's children. An E-waste take-back programme and a recyclable waste sale were also conducted for staff who wanted to discard their items in a sustainable manner.

We also took the campaign on a roadshow to all our four major regional offices and four power stations, with 335 of our staff attending the roadshow, which also included a pledge signing by our regional and station managers and environmental talks.

### PALS Club Programmes

We collaborated with Sarawak Natural Resources & Environment Board (NREB) to organise the annual state-level 'Pencinta Alam Sekitar' (PALS Conference Sarawak) from 10-13 July 2018 in Mukah. The event was attended by 90 students and 20 teachers from secondary schools across Sarawak. The objectives of the PALS Conference were

**1**

#### TO PROVIDE

a platform for PALS Club schools to share information

**2**

#### TO INCREASE

student awareness on the need to preserve the environment.

**3**

#### TO ESTABLISH

networking among students, teachers and environmental agencies.

Over the course of the event, participants engaged in activities including an environmental exploration race and a visit to 'lamin dama' (old house in the Melanau dialect). An exhibition was held on the final day, allowing the 20 participating schools to showcase their projects.

We have also been working with the NREB since 2016 to launch environmental education modules for the PALS Club. The modules, consisting of one each for primary and secondary schools, which will be used by teachers to guide students towards environmental conservation, were launched by YB Datu Hj Len Talif Salleh, Deputy Minister of Town Planning, Land and Environment Sarawak on 4 September 2018 at Hotel Parkcity Everly, Bintulu. Through close collaboration with the NREB and the respective schools' PALS Clubs, the module will be available to all 361 primary and secondary schools throughout Sarawak.



*Prof. Yves Prairie (right) and Cynthia Soued, a PhD student from UQAM, Canada (left) are investigating and studying the biogeochemical sciences on the production and propagation of Greenhouse Gases at Batang Ai hydropower reservoir.*

## RESEARCH AND DEVELOPMENT

Our research and development (R&D) activities are focused on finding ways to provide a reliable supply of electricity and promote sustainable development. In 2018, we approved a total R&D budget of RM4.06 million for eight projects on instruments, equipment and facilities, various monitoring systems and information management systems.

We have also embarked on a study on the development of GHG emission factor for the electricity sector in Malaysia. Currently, Malaysia does not have a dedicated emission factor for the electricity sector. The existing practice is to use the default emission factor by the Intergovernmental Panel on Climate Change (IPCC), thus putting into question the credibility of GHG emissions reported in Malaysia.

The project will analyse the emission factor of major greenhouse gases, GHG (CO<sub>2</sub>, CH<sub>4</sub>) from power plants in Malaysia; establish GHG emission factor guidelines for the power industries and regulators for GHG emissions assessment; analyse and

benchmark the GHG emission factor with other published emission factors; and assess and analyse GHG emissions from the power plants. This will allow Malaysia to develop its own emission factor for coal and gas rather than using the default value in IPCC. As the State of Sarawak uses local coal, we will also be able to know the emission factor of our coal. The project is also aimed at providing precise and emission result for future reporting.

In an effort to address and promote sustainable operations of our hydropower developments, we have teamed up with the University of Quebec in Montreal (UQAM), Canada, for a three-year collaboration field research study on GHG dynamics at the Batang Ai hydropower reservoir.

Findings of the research have allowed us to understand the biological and physical pathways responsible for GHG emissions, with carbon dioxide and methane making up the major GHG measured in the study. There are three major pathways of GHG emission being studied: (i) diffusive fluxes from the surface of the reservoir; (ii) degassing and downstream; and (iii) bubbling.

Overall, at this stage of study, our results show that Batang Ai carbon emissions are in the range of measured emissions for reservoirs globally. The emissions are also much less significant than average natural gas power plants for an equivalent power production.

Our on-going investigation of the GHG status of our reservoirs has helped us advance our knowledge of the causes, pathways and potential solutions of reservoir carbon emissions, which is an important step in our continuous effort to provide clean and sustainable energy through freshwater hydropower.





# **SOCIAL INCLUSIVENESS**

---

*Healthy catchment fulfils socioeconomic needs.*



Total Training Hours

**113,386**  
hours



*Our People.*

Lost Time Injury  
Frequency Rate  
(Operation)

**0.49**

**Electricity Tariff -**  
One of the  
Lowest in  
Southeast Asia

Total Electrification  
Coverage in 2018

**96%**

Total Number  
of Staff

**5,023**



*Capacity building for Hydropower  
Sustainability Assessment Protocol  
(HSAP) Internal Assessment Team.*

Lost Time Injury  
Frequency Rate  
(Project Execution)

**0.20**

CSR Spending

**RM 11.12**  
million



# SOCIAL INCLUSIVENESS

Sarawak Energy  
Sustainability Report  
2018



For the full Social  
Inclusiveness  
please visit the Sarawak  
Energy website at  
[www.sarawakenergy.com](http://www.sarawakenergy.com)

*Murum Resettlement Housing.*

From safeguarding the well-being of our employees to helping our local communities, we take pride in our responsibility of providing access to opportunities which contribute to the sustainability of our social fabric.

## TRANSFORMING SOCIAL OUTCOMES

As Sarawak's primary energy utility with a presence of over 100 years in Sarawak, we view social aspects as integral to our business. From safeguarding the well-being of our employees to helping our local communities, we take pride in our responsibility and contribution to the sustainability of our social fabric.

## POSITIONING OURSELVES AS AN EMPLOYER OF CHOICE

Our employees make up the pulse of our organisation, aiding in our development as Sarawak's leading reliable, renewable energy utility.

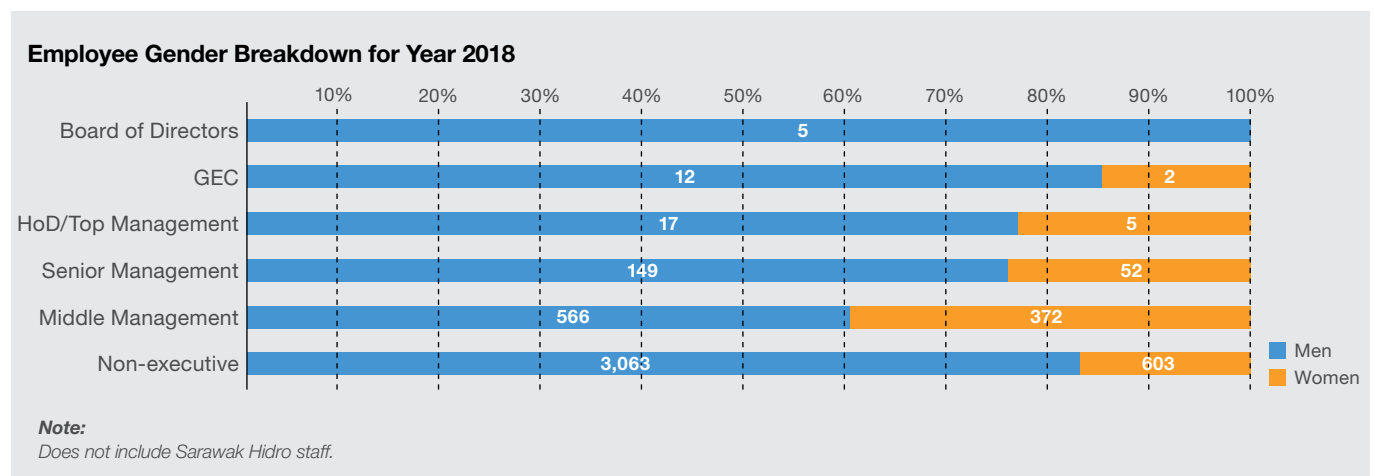
**Our recruitment in 2018 remained strong as the company continues to be an employer of choice in Malaysia. In 2018, 304 new hires joined the organization and we were also voted by Sarawak candidates as the Top 3 in the Top 10 Companies Award organized by JobStreet. This shows that the organization is one of the most preferred companies to work at and with our strong brand, the manpower strength has also increased to 5,023 in 2018.**



*Our employees are the company's greatest asset.*

## Employee Diversity

We strive to promote diversity in our workforce, with our employee breakdown by level and gender depicted as follows:



To further encourage diversity within our organisation, we established Sarawak Energy Leading Women Network (SELWN) which is aimed at positioning Sarawak Energy as a brand, partner and employer of choice for women. Under this initiative, we target for a 30% representation of women among our employees, in leadership positions and in Board positions by 2030.



As an employer of choice in Sarawak, we continue to attract interest from potential hires, especially from among youth. Of our 304 new hires during the year, the majority, or 216, comprised those up to 30 years old followed by the 31-50 years' age group (68 new hires), while we also hired 20 new employees from the over 50 years' age group. Although the number of employees who left the company increased to 215 in 2018 from 137 in 2017, our turnover rate<sup>1</sup> of 4.28% remained at an acceptable level.

## Employee Benefits

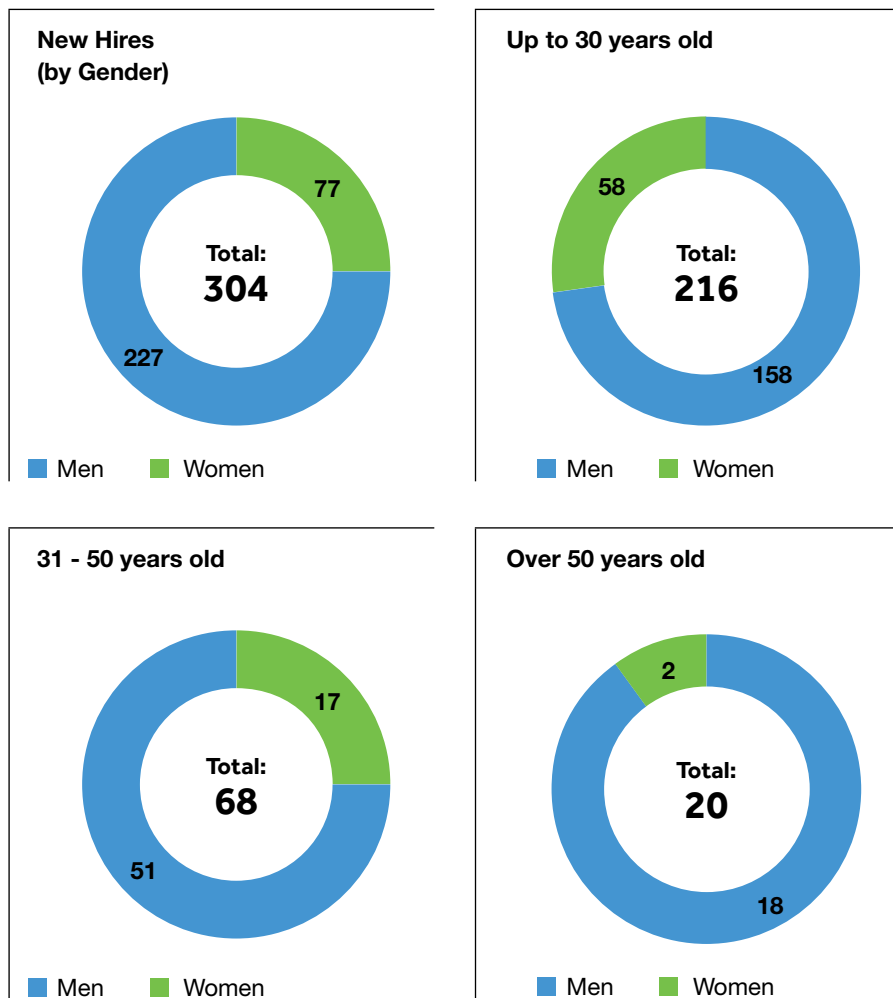
We continue to provide our employees with a wide array of benefits, subsidies, welfare and leaves. For full details on these, please refer to page 88 of the GRI Content Index.

## Optimising Our Human Resource Processes

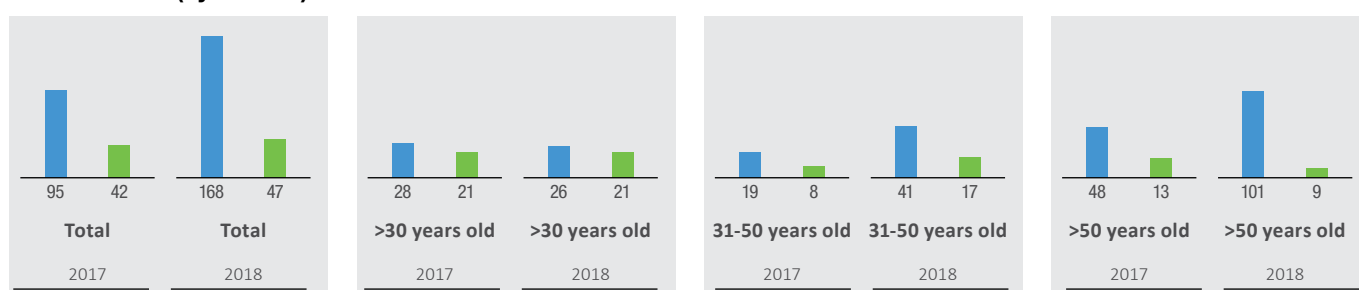
At Sarawak Energy, we believe in continuous learning of our employees not only for the benefit of our operations, but also for the human capital development needs of the industry as well as State and national economies.

In Q2 2018, we successfully implemented Sarawak Energy People System (SEPS), a platform that digitalized human resource processes. SEPS empowers employees, business leaders and HR professionals by providing a platform which allows all HR related activities to be done online which are accessible anytime, anyplace.

The integrated system has improved the efficiency and effectiveness of our human resource processes, allowing our employees to focus on their core job functions. In an effort to assist our staff in using the system, we conducted a series of staff engagements during the year, which we will undertake continuously to gain feedback for future improvement.



## Staff Turnover (by Gender)



### Note:

<sup>1</sup> In accordance to GRI standards, our employee turnover is defined as the employees who leave the organization voluntarily or due to dismissal, retirement, or death in service.



Puan Aisah, the Executive Champion of Sarawak Energy Leading Women Network (SELWN) interacting with women staff during 'Teh Tarik' Session.

## Developing Our People

We have put in place a number of processes and tools to support our employees in attaining their full potential and contribute to Sarawak Energy's as a high-performance organisation.

## THESE INITIATIVES INCLUDE:

**1**

### INDIVIDUAL DEVELOPMENT PLAN (IDP)

Introduced as a platform for employees to discuss and plan for their career growth within the organisation, identify their long-term development needs and express their aspirations and wishes, we utilise the IDP to leverage and further develop an employee's strengths, needs and career interests by identifying and implementing respective employees' development plans. The plans are reviewed from time-to-time to keep track of an employee's current development needs, changes in career interests, agreed availability for next assignment and mobility within the organisation. The IDP will also be used in Talent Council discussions where the committees recommend development plans that the employees should consider.

**2**

### DEPARTURE WINDOW

The Departure Window is an agreement between employees and their Line Managers that allows the employees to apply for a job of their choosing through Internal Open Resourcing (IOR). This aims to facilitate employees' career growth and encourage them to develop their competencies in line with Talent Management Excellence, in addition to enabling line managers to plan for their staffing needs.

**3**

### POTENTIAL ASSESSMENT TOOL (PAT) BASED ON CAPACITY, ACHIEVEMENT, RELATIONSHIPS AND ADAPTABILITY (CARA)

Introduced in the second quarter of 2017, the PAT based on CARA is used to assess the potential of the Executive-level employees to identify a talent pool of 'Ready Now' and 'Ready Later Candidates' for succession planning purposes. The exercise is carried out once every two years and for the 2017-2018 cycle, 899 staff were assessed of which 8% were identified as 'High Potentials'. Candidates undergo a series of programmes and initiatives to further develop and expose them to shape their technical/functional capacity and leadership qualities.

As the percentage of High Potential candidates is relatively lower compared to the industry benchmark of at least 20% of the workforce, we have put in place action plans for 2019 to accelerate the development of existing High Potential candidates and identify more candidates.

Further to our targeted employee development programmes, our workforce also undergoes continuous training through a variety of courses made available to them. During the year in review, we recorded 14.10 in the average hours of training per employee, from 12.82 in 2017 as our employees participated in a total of 699 internal, in-house, external and leadership courses during the year.



## Training

### Internal Courses

| No           | Course Category<br>(As per monthly Report) | No of<br>Courses |
|--------------|--|------------------|
| 1            | Chargeman                                  | 5                |
| 2            | Electrical Courses                         | 8                |
| 3            | Switching                                  | 9                |
| 4            | Wiring Installation                        | 5                |
| 5            | Mechanical                                 | 2                |
| 6            | First Aid                                  | 2                |
| 7            | Safety Awareness                           | 6                |
| <b>Total</b> |  | <b>37</b>        |

### In House Courses

| No           | Course Category<br>(As per monthly Report) | No of<br>Courses |
|--------------|--|------------------|
| 1            | Administration and Management              | 9                |
| 2            | Electrical                                 | 2                |
| 3            | Environment                                | 4                |
| 4            | Health, Safety & Environment               | 7                |
| 5            | Information Technology                     | 10               |
| 6            | Mechanical                                 | 1                |
| 7            | Quality Management                         | 11               |
| 8            | Technical                                  | 18               |
| 9            | Soft skills                                | 1                |
| <b>Total</b> |  | <b>63</b>        |

### External Courses

| No           | Course Category<br>(As per monthly Report) | No of<br>Courses |
|--------------|--|------------------|
| 1            | Administration                             | 118              |
| 2            | Civil                                      | 15               |
| 3            | Electrical                                 | 33               |
| 4            | Finance                                    | 25               |
| 5            | Health, Safety & Environment               | 60               |
| 6            | Information Technology                     | 25               |
| 7            | Legal                                      | 11               |
| 8            | Mechanical                                 | 8                |
| 9            | Technical                                  | 3                |
| 10           | Others                                     | 18               |
| <b>Total</b> |  | <b>316</b>       |

### Leadership Courses

| No           | Course Category<br>(As per monthly Report) | No of<br>Courses |
|--------------|--|------------------|
| 1            | Leadership                                 | 22               |
| 2            | Communication                              | 1                |
| 3            | Management                                 | 1                |
| 4            | Women Leadership                           | 2                |
| <b>Total</b> |  | <b>26</b>        |

For full details on the total and average hours of training participated by our employees during the year, please refer to page 91 of the GRI Content Index in this Sustainability Report.

We offer scholarships to our employees and external tertiary students as part of our focus to drive the development of local talents to meet Sarawak Energy's manpower needs. In 2018, over 70 scholarships were awarded where 14 employees were amongst the deserving recipients.

### Assessing and Rewarding Our Staff

Performance appraisal serves as a tool for two-way feedback that promotes excellence among our workforce. In 2018, 100% of our employees at all levels completed the annual performance appraisal, where positive feedbacks were given and development plans were discussed for talent recognition and continuous improvement.

Other initiatives to recognise our employees included Sarawak Energy Hall of Fame and Loyalty Service Awards. During our Leadership Conference 2018, employees who had demonstrated high performance behaviors and a winning mindset were nominated for the Chairman's and GCEO's Awards. Encik Wan Bahrain Wan Othman and the Murum Metalun Unsung Heroes team received the Chairman's Award for the individual and team category respectively, while the GCEO's Award went to Encik Bonniface Linjong and Puan Ahadiha Zamhari for the individual category and SARES and SEPS team for the team category. In addition, the Sarawak Energy Loyalty Service Awards honored more than 300 long-serving employees who had reached milestone years of service with the Company in Kuching, Sibu and Miri.

## Promoting Employee Health and Wellness

As a responsible employer which cares for the well-being of our employees, we continue to promote their health and wellness through company-wide programmes. These include our health screening programme, of which 2,310 of our staff participated in 2018. This comprised 1,676 of our male employees and 634 of our female employees. The majority of employees participating in the health screening were from the 20-39 years age group, accounting for 1,426 employees.

We also initiated our Body Mass Index (BMI) programme, setting it as a corporate KPI in 2018 and targeting a BMI of below 30 for 75% of staff from each department.

**On average, we recorded a BMI of 77% among all departments, while the departmental results showed all but four of our 20 departments achieving the BMI target for 2018**

Moving forward, we are targeting a BMI of below 30 for more than 85% of staff in each department in 2019 and more than 95% of staff in 2020.

Further promoting a healthy lifestyle among our employees, we continued to hold our annual Inter-Departmental Bowling event with selected government agencies. We also held bowling and golf friendly matches with DOSH, DOE and NREB.

For our technical staff who carry out much of our work on the ground, we have maintained the practice of regular hearing conservation programmes such as noise monitoring/ mapping and audiometric testing at all regions and power stations which may be exposed to excessive noise levels. This is in compliance with the Factory and Machinery (Noise Exposure) Regulation 1989.

## Promoting a Culture of Safety

Our field of work necessitates a large number of our workforce and contractors to participate in some high-risk activities while on the job. In view of this, we place utmost priority in ensuring the safety of our employees, contractors and others to prevent work-related accidents, injuries and illnesses. This is overseen by our Environment & Occupational Safety and Health (EOSH) Committees which are present in our 10 regional offices and nine power stations, with each regional office and power station as well as Kuching Central Store Centre, Sarawak Energy Resources and project execution unit having its own Environment & Occupational Safety & Health Committee members.

Each committee consists of a Chairman, Secretary, Representative of Employer and Representative of Employees in accordance to the Occupational Safety and Health (Safety and Health Committee) Regulations 1996, Part II, regulation 5.

For 2018, the total EOSH committee members remained the same as in 2017, as follows:

### 2018 TOTAL EOSH COMMITTEE MEMBERS

# 384

Chairman - 19  
Secretary - 19  
Employer Representative - 133  
Employees Representative - 213

In accordance with the Occupational Safety and Health (Safety and Health Committee) Regulations 1996, Part III (Functions of Safety and Health Committee), regulation 11,

## OUR EOSH COMMITTEES ARE TASKED WITH FOLLOWING RESPONSIBILITIES:

**1**

**ASSIST** in the development of safety and health rules and safe systems of work

**2**

**REVIEW** the effectiveness of safety and health programmes

**3**

**CARRY OUT** studies on the trends of accidents, near-miss accidents, dangerous occurrences, occupational poisoning or occupational diseases which occur at the place of work; reporting to us any unsafe or unhealthy condition or practices at the place of work together with recommendations for corrective action and;

**4**

**REVIEW** the safety and health policies at the place of work and make recommendations for any revision of such policies.



The committees are also responsible for inspecting the workplace and investigating accidents.

To comply with Part IV Occupational Safety and Health regulation 1996 (Safety and Health Committee) regulation 21, committee meetings may be conducted as often as necessary in line with the risks attendant to the nature of our work, at a minimum of once in three months.

Each of our EOSH committee receive support from the Health, Safety, Security and Environment (HSSE) department at our headquarters, with a member of the Corporate Organisational Health & Safety division appointed as a Corporate Environment & Occupational, Safety & Health Committee Representative and assigned to attend quarterly EOSH Committee meetings at our main power stations and regional offices.

The representative serves to assist and advise the committees in matters pertaining to the inspection of workplace findings and recommendations; and review yearly health, safety and environment activities of all regions and power stations as well as monitor HSSE statistics and the achievement of safety objectives and targets. The representative also executes the roles and responsibilities as stated under Occupational Safety and Health (Safety and Health Committee) Regulations 1996.

During the year, we also conducted quarterly Corporate Environment & Occupational Safety & Health (CEOSH) meetings involving members from our top management team. The meetings served as a platform to discuss major Health, Safety and Environment and to deliberate on corporate HSE programmes and KPIs to all Chairmen and Secretaries of the EOSH Committees as part of our effort to achieve a zero-fatality target and raise the Sarawak Energy safety culture.



Celebrating 1 million man-hours without Lost Time Injury at Tanjung Kidurong Combined Cycle Power Plant Project.

## Safety Performance

We quantify our safety performance using the Lost Time Injury Frequency Rate (LTIFR), an internationally-recognised safety standard which measures absence from work due to work-related injuries or illnesses. For 2018, we continued to measure LTIFR according to two categories: Operations, which encompasses retail, distribution, thermal and hydropower; and Project Execution, which measures the rate for any ongoing projects.

We achieved our safety performance targets for the year under Operation and Sarawak Energy Resources (SER) Department as well as for Project Execution. During the year, Operation and SER recorded a Lost-Time Injury Frequency Rate (LTIFR) of 0.49 against its target of 0.50, while Project Execution achieved LTIFR of 0.20 compared with its target of 2.00. We also continued to record zero fatalities for the year in review.

We also recorded less man-hours worked in 2018 at 10.21 million with average manpower of 3,510 workers compared to 11.73 million man-hours and 4,438 workers in 2017, as our Project Execution unit had completed the 500kV Transmission Line Project, Transmission Sub Project and Balingian Thermal Project.

Additionally, the construction of the Baleh HEP remains in its preliminary stage and therefore did not contribute much to the overall man-hours worked for 2018.

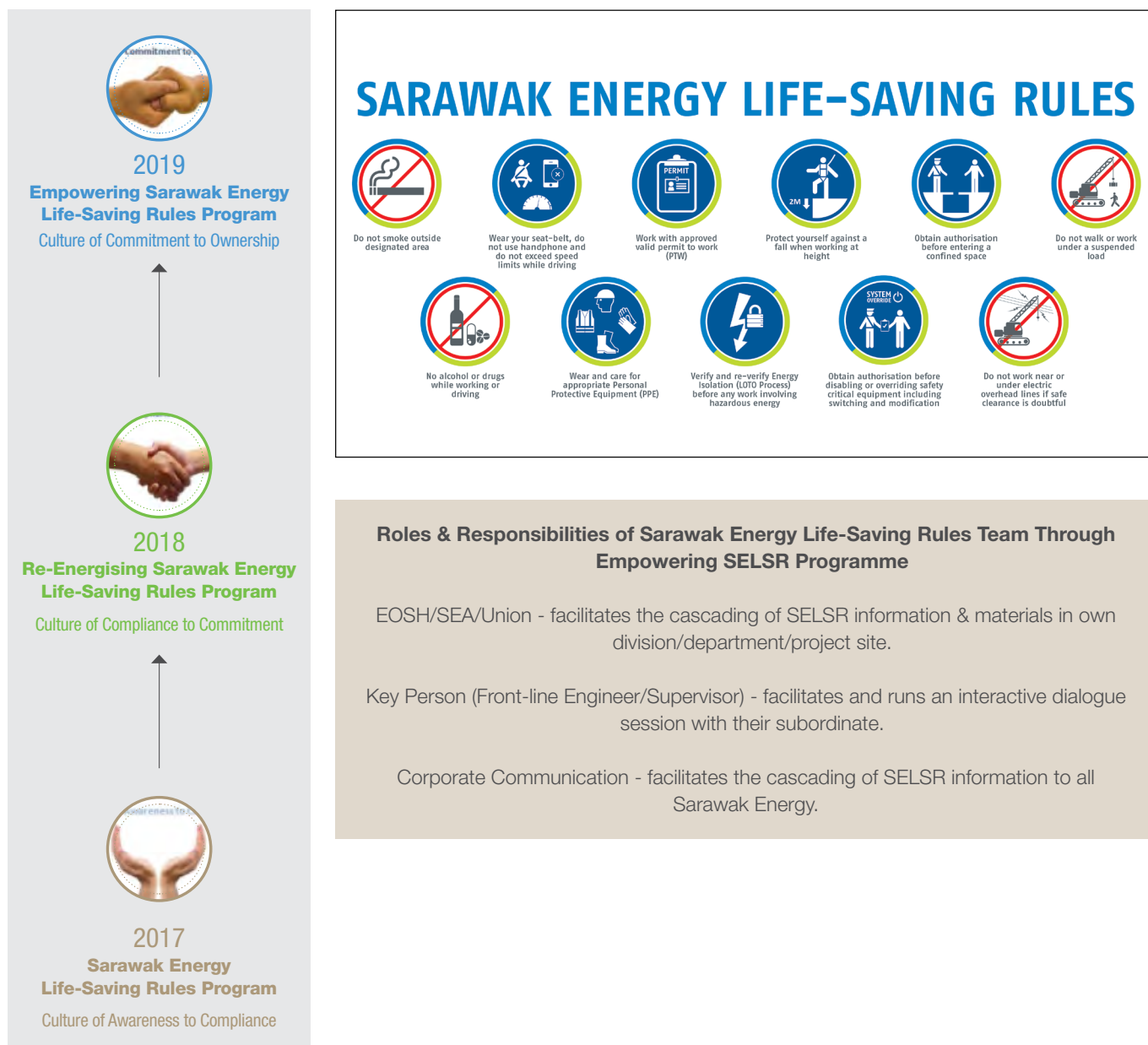
### SARAWAK ENERGY LTIFR (LOST TIME INJURY FREQUENCY RATE) TARGET & ACHIEVEMENT FOR 2018



## Safety Roadmap

Our safety practices are bound to our safety roadmap and master plan, which we commenced with the launch of Sarawak Energy Life Saving Rules (SELSR) in March 2017 to formalise our commitment to maintaining good safety practices and minimising injuries. The rules are mandatory for all employees, subsidiaries and contractors when they are on our premises or when conducting company-related business externally.

Following the roll-out of SELSR up until April 2018, we have recorded a visible reduction in SELSR-related cases as well as greater respect and discipline for rules that save lives. This indicates that our employees and contractors are shifting from a culture of awareness to a culture of compliance. For 2018, we embarked on the next step of our safety roadmap, Re-Energising Sarawak Energy Life-Saving Rules.





**Contractor Transformation Programme**

We have implemented our Contractor Transformation Programme (CTP) since February 2017 as a platform to recognise our contractors for their contribution towards HSE excellence. The initiative is in line with our HSE Excellence Key Focus Area as well as the National OSH Master Plan 2015-2020, through which the Department of Safety & Health (DOSH) and Guided Self-Regulation (GSR) introduced by the Department of Environment (DOE) have called for all Government-Linked Companies (GLCs) to lead their contractors towards self-regulating HSE practices.

The first cycle of our CTP was held from 2017-2018 and the second cycle will run from 2019-2020. The programme is aimed at inculcating a sense of partnership between us and our contractors, including RES contractors, by sharing efforts in accident prevention, regulatory compliance and best practices towards creating a culture of health safety and a deep sense of HSE ownership. Additionally, the programme enables us and our contractors to identify gaps and establish remedial measures to correct deficiencies to achieve continuous improvement.

In conjunction with the programme, we also held the CTP Award, recognising the following contractors for the efforts in HSE:

| No | Contractor                           | Award                     |
|----|--------------------------------------|---------------------------|
| 1  | Hii Hua Chuon Electrical Works       | Gold                      |
| 2  | Gabungan Binaan Jurutenaga Sdn. Bhd. | Gold                      |
| 3  | Yamaco Engineering Sdn. Bhd.         | Silver                    |
| 4  | Promace Engineering Sdn. Bhd.        | Silver                    |
| 5  | Timor Kencana Sdn. Bhd.              | Silver                    |
| 6  | Metro Glide Sdn. Bhd.                | Silver                    |
| 7  | John Ho Company                      | Bronze                    |
| 8  | High Line Electrical Works           | Bronze                    |
| 9  | Hing Lee Electrical Works Sdn. Bhd.  | Participation Certificate |
| 10 | Hii Brothers Electrical Co.          | Participation Certificate |
| 11 | Lim Aik Chai Electrical Sdn. Bhd.    | Participation Certificate |

**Reinforcing a Culture of Safety**

Our employees continued to undergo safety training during the year,

**COMPRISING THE FOLLOWING PROGRAMMES:****1****PROCESS SAFETY**

This consists of a series of training programmes focusing on process safety, a disciplined framework to manage major accident hazards associated with the release of hazardous materials or energy (steam, water, condensate, chemical, electricity and other hazardous substance).

**2****HSE  
ORIENTATION  
PROGRAMME**

This programme features a range of safety aspects important in daily operations, ensuring employees conform to regulatory guidelines and requirements, company procedures and adopt best safety practices when performing tasks.

**3****SARAWAK ENERGY  
SAFETY PASSPORT**

A training programme undertaken with the National Institute of Occupational Safety and Health (NIOSH) specifically targeting contractor staff to ensure new and current contractors receive competency and authorisation certifications. We maintain strong links with NIOSH as well as conduct a suite of safety and competency trainings such as for staff working at heights, in transportation, for switching personnel and technicians, among others.



Corporate HSE Week 2018 at Miri gas-fired power plant.

Other safety-related activities undertaken throughout the year include HSSE Audit 2018, 1 million and 2 million man-hours celebrations for the Tanjung Kidurong Power Plant Project, 13 million man-hours celebration for the Balingian Power Plant Project, routine as well as spontaneous audit inspections, accident investigations and OHSAS 18001/ISO 14001 audits, Environmental Award 2018, launch of zero plastic use and beach cleaning by contractors. We also conducted

spontaneous drug-testing at our power stations, regional offices and project sites as part of the National Anti-Drug Agensi (Agensi Anti-Dadah Kebangsaan – AADK) programme.

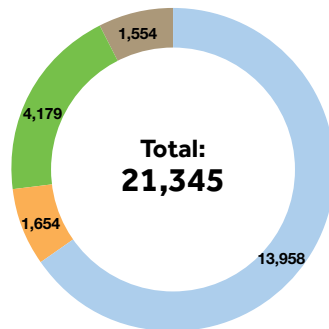
Furthermore, in addition to HSE Weeks independently held at our regional offices and power stations, we also held our annual Corporate HSE Week 2018 at the Miri Regional & Power Station on 30<sup>th</sup> October 2019.

## Community Outreach on Safety

Our emphasis on building a culture of safety is further bolstered by outreach to our communities on safety. During the year, we held 362 electrical safety awareness programmes and safety talks at schools and for annual contractors, public contractors, public utilities and agencies. We also provided an electrical safety awareness/safety talk for the Pan Borneo road widening project. The programmes took place throughout Sarawak during the course of the year, recording over 20,000 participants.

### PUBLIC SAFETY

- School
- Annual Contractor
- Public Contractor, Public Utilities, Agencies
- Pan Borneo Road Widening Project



## Uplifting Our Local Communities

As an energy utility company, our responsibility goes beyond that of our business, shareholders and employees. It is our responsibility to also ensure that we minimise any negative impact of our operations and maximise our positive impact on our local communities. In line with this, we have identified the following four areas as having the greatest potential for developing long-term sustainable partnerships that meet the needs of the communities we engage with through our business:

- Education and young people
- Community development and entrepreneurship
- Culture and heritage
- Environmental management and conservation (For reporting on our activities in this area, please refer to the Our Commitment to Improving Our Environmental Footprint chapter in this Sustainability Report)



Sarawak Energy Sponsorship Best Graduate Award 2018.

## EDUCATION AND YOUNG PEOPLE

Education initiatives are among those closest to the heart of our organisation. These initiatives not only allow us to influence better outcomes for our communities, but also help our company build a pipeline of talent for our own human capital needs, as well as those of the industry and economy.



## Campus Ambassador Programme

In a proactive approach to recruitment, we introduced the Campus Ambassador Programme to provide opportunities for our top management to work closely with selected universities in areas of mutual interest. Under this programme, we have included our top management as Campus Ambassadors to collaborate actively with the universities' Vice Chancellors. The influence of the top management in support of this programme is targeted at creating a gateway for us to build symbiotic working relationships between our organisation with selected academic institutions such as UNIMAS, Curtin University, Swinburne University and Universiti Teknologi Petronas, among others.

## Sarawak Energy Scholarship Awards

We presented the 2018 Scholarships Awards to a total of 71 recipients, comprising 57 outstanding students about to enter college or university and 14 of our employees pursuing continuing education programmes while still at work. The awards form part of our ongoing efforts to help develop Sarawak talent through an annual commitment of RM8 million.

## Baleh and Kapit

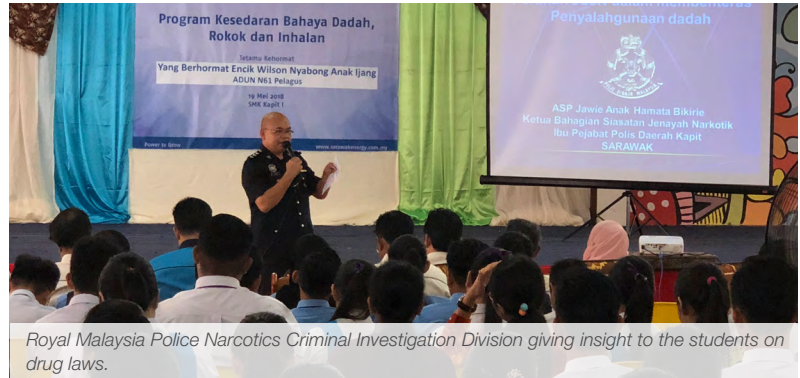
### Skills and Technical Training

We are targeting 500 youths from Baleh and Kapit to complete a skills training programme through capacity-building and skills development to maximise local participation and benefits for the local community. In 2018, 251 youth were trained and enrolled under various skills courses in civil construction, mechanical-electrical works, administration and human resources associated with the development of hydroelectric project, operation and maintenance of the facilities.

The courses comprise:

- Diploma in Occupational Safety and Health – 9 trainees
- Office Administration Support Services Level 2 - 20 trainees
- Heavy Truck Drivers Course - 160 trainees
- Baleh Women Entrepreneurship – 62 trainees

Since 2016, a total of 437 young people have attended and enrolled for the training programme.



Royal Malaysia Police Narcotics Criminal Investigation Division giving insight to the students on drug laws.

### Social Awareness Campaign

During the year, we engaged with 300 students from ten primary and secondary schools in Kapit by organising an awareness programme on drug, cigarette and inhalant abuse and the consequences including punishment under the law. The programme was held in collaboration with the Kapit District Education Office and is in line with our Corporate Social Responsibility initiatives on promoting health and safety awareness among school's students. The speakers for the campaign consisted of officers from the Sibu branch of the AADK and the Kapit branch of the Royal Malaysian Police - Narcotics Criminal Investigation Division. Students from SMK Kapit, SMK Kapit 2, SMK Selirik, SMK Baleh, SK Methodist, SK Sungai Amang, SK Kampung Baru, SJKC Hock Lam, SK Kapit and SK Sungai Kapit attended the programme.

### Study Camp Programme

In partnership with Institute of Teacher Education (Institut Pendidikan Guru - IPG) Sarawak Campus, Miri and the Kapit District Education Office, we organised a three-day study camp programme at SK Temenggong Koh, Nanga Antawau. The programme, involving students, teachers and parents, was developed to boost examination results for primary six students from Baleh sitting for their Penilaian Sekolah Rendah (PSR) examination through effective studying and examination techniques. The programme saw encouraging participation from about 250 students, teachers and parents from six schools, namely SK Temenggong Koh, SK Nanga Sempili, SK Nanga Entuloh, SK Lepong Gaat, SK Nanga Stapang and SK Nanga Kain.



A lecturer from IPG facilitating discussions among primary school students.



A science lecturer sharing exam tips to the primary school students.

## Belaga and Murum

### Sports Development for Rural Youth

The Rural Football Development Programme, organised in partnership with the Bintulu Football Association (BIFA) and Sarawak Energy involved youths from Sungai Asap, Murum, Samalaju, Tatau and Sebauh. The programme is part of our CSR initiatives for youth development in the rural areas to expose and discover their potential in and through football, encourage integration as well as strengthen friendship and the spirit of sportsmanship among the youths. As a result of this programme, five players from Murum FC under 19 years old were selected to participate in Piala Belia Sarawak in the coming year, which will further expose them to new challenges and experiences in football.

The programme helped Murum FC emerge third in the Y.B. Dato' Sri Dr Stephen Rundi Utom Cup, where it was also awarded 'Best Rural Team'. The 18 youths from Murum FC are from the Metalun Resettlement.



Student representatives posing with their newly acquired dictionaries contributed by Sarawak Energy.



Ritchie Slang receiving the award for 'Best Rural Team' on behalf of Murum FC from Dato' Sri Dr Stephen Rundi Utom.

### Tertiary Education Support

We collaborated with Kelab Belia Belaga Sarawak and Bakun Charitable Trust to organise the 'Jom Masuk U' programme in March 2018 to encourage students to enrol for tertiary education. The programme aimed to directly connect secondary school-leavers from the Apau Koyan resettled community in Bakun and Belaga to higher education institutions in Sarawak and to facilitate their application into the institutions. The programme was participated by 86 secondary school-leavers from SMK Bakun and SMK Belaga who visited six institutions of higher learning. During the programme, the youths were taken on camps tours and exposed to the opportunities and courses offered by each institution.



Students listening to a briefing at a higher learning institution in Kuching.

### Academic Incentives

By engaging and working with the communities themselves, Sarawak Energy has developed a suite of programmes that address community needs from their perspective. In 2018, a total of 25 high achieving students from SMK Bakun and SMK Belaga were presented with academic incentives. The presentation ceremony was held at SMK Bakun aimed to recognise and encourage students from Belaga who excelled on the Sijil Pelajaran Malaysia (SPM) exam. A total of 350 dictionaries were also handed over to the students and libraries of SMK Bakun and SMK Belaga during the ceremony.

### Annual School Aid Contribution

For the fifth consecutive year, we contributed school aid in the form of school uniforms, shoes, school bags and stationery, benefiting 336 students from SK Tegulang and SK Metalun from Murum. The aid is provided annually to encourage more children in Murum to attend school and reduce the financial burden for their parents.

### Batang Ai

#### Batang Ai Education Fund

We had launched the Batang Ai Education Fund at the end of 2017 to mark our greater support for the Batang Ai community. Targeted at local youth from the surrounding area of our first hydropower project site in Batang Ai, the fund is structured as a RM200,000 revolving fund and is aimed at enhancing the quality of primary and secondary learning and motivating students to work towards obtaining tertiary qualifications for a brighter future.

In 2018, 48 students from the community pursued higher education under this fund.



## Balingian

### *English Language Camp*

Some 82 pupils from 10 primary schools in Mukah and Selangau attended an English Language Camp in MRSM Mukah from 12-14 October 2018. The programme was facilitated by trainee teachers from the IPG Rajang Campus and assisted by MRSM's English Motivational Club (EMC). The programme was designed to suit the Highly Immersive Programme (HIP) Out-of-Class activities, geared towards acquiring English proficiency through the creation of an immersive English language environment outside the classroom.

## COMMUNITY DEVELOPMENT AND ENTREPRENEURSHIP

## Baleh

### *Entrepreneurship Capacity-Building for Baleh Women*

The Baleh Women Entrepreneurship Programme was organised for the second year for another group of 30 aspiring women entrepreneurs. The programme is aimed at equipping Baleh women entrepreneurship skills and exposing them to business opportunities. In addition, the programme enables women to partake in local content and benefit from the Baleh Hydroelectric Project, especially those from Baleh and surrounding Kapit areas.

The programme covers four modules: Development of Entrepreneurial Mind-Set, Getting Ready for Entrepreneurship, Starting My Own Small Business and Strategic Marketing.

## Belaga



Handing over of the new fire engine vehicle to the Persatuan Bomba Sukarela Sungai Asap.

### *Donation of Fire Engine*

We contributed a fire engine to the Sg. Asap Volunteer Fire and Rescue Department (BOMBA) Association to enable swift action in the event of a fire incident in the area. The new fire engine will facilitate the volunteers, who serve as first responders before the main unit of BOMBA arrives, in their fire-fighting operations. The vehicle complies with BOMBA specifications and we also provided training for the members of the association as well as contributed fire extinguishers and firefighting equipment to the villagers of Sg. Asap. The donations follow the immediate relief we previously provided to victims of fire in Belaga during major fire incidents in 2013, 2017 and 2018.

### *Occupational Safety and Health at School Programme*

Around 1,200 students from Sg. Asap benefited from the programme which we organised in collaboration with the National Institute of Occupational Safety and Health (NIOSH) Bintulu, the Belaga District Education Department and SMK Bakun.

The programme, which was held at SMK Bakun, aimed at supporting the Belaga community in improving safety and health through awareness programmes instilled among various age groups in the community. During the programme, students and teachers were given insight on the procedures on occupational safety around the school should an undesirable event arise. In addition, the programme provided information on the career and training opportunities in OSH industries available for school-leavers.



Students listening to NIOSH speaker during the programme.

## CULTURE AND HERITAGE

### Murum

#### Annual Batu Tungun Ritual Ceremony

We continue to partner the Murum Penan on community development programmes and events, four years after the commissioning of the Murum HEP and six years after they were resettled, to ensure the community continues to benefit from the project. The partnership includes programmes and projects in education, social and sporting activities as well as traditional celebrations that reinforce community spirit and strengthen cultural heritage.

During the year, we maintained our support for the community during the annual Batu Tungun Bungan ritual, held in October, at the Lookout Point overlooking the Murum HEP. The sacred ritual was performed by community elder Saran Joo, who was joined by Murum Penan Development Community chairman Labang Paneh as well as leaders from Murum and Belaga, including Pemanca Umek Jenio. Teachers from SK Tegulang and SK Metalun, the two primary schools at the Murum Resettlement Scheme, also attended the event.

At the same event, we also presented education incentives to 340 students from SK Tegulang and SK Metalun for academic excellence. The incentive was financed through the RM200,000 revolving Penan Education Fund in collaboration with Bakun Charitable Trust. The funds are utilised for academic incentives for students in primary and secondary schools as well as aid for students pursuing their studies at approved skills development centres or institutions of higher learning in Malaysia. Funds are also available for any other educational development programmes or provision of teaching and learning facilities as deemed necessary and as agreed by the committee.

#### Working with Community Partners at the Rainforest World Music Festival (RWMF) 2018

For the second year in a row, we sponsored Warisan Sape Telang Usan from Baram and artisans from Murum, our partners in cultural heritage, to showcase their music and crafts at the RWMF. The eight-member Warisan Sape Telang Usan troupe enchanted audiences with sape performances at daily pop-up sessions and music workshops with receptive audiences joining them in traditional dances.



Young sape players who performed throughout event.

On the crafts side, four artisans from the Penan community of the Murum Resettlement Scheme displayed and sold over 400 pieces of their handicraft at the Rainforest World Craft Bazaar, a fringe event held within the festival grounds. The activity was part of our commitment to growing sustainable livelihood opportunities for project-affected initiatives.



Weavers Bawe Adu, Zaria Ugil and Doris Lot demonstrating their weaving skill at the craft bazaar.



## TRANSPARENCY AND COMMUNITY ENGAGEMENT

As our projects often impact local communities and indigenous peoples who reside in and around our project sites, we exercise the utmost efforts and care to remain transparent and accountable to the affected communities through continuous engagement. Our goal is always to impact their lives and livelihoods for the better and this begins with in-depth stakeholder engagement to enable us to understand and the communities' needs and avoid infringing upon their rights.

We are pleased to report that as a result of our efforts, there were no identified incidents of violations involving the rights of indigenous peoples during the reporting period.

During the year in review, our transparency and community engagement activities were focused on communities affected by the development of our Baleh HEP.

### Stakeholder Engagement Plan



*Dialogue session at Rumah Tajai in Baleh.*

In September 2018, we set up a unit under the CSR & Sustainability Department to specifically oversee and further strengthen relationships between us and communities affected by our projects, with regard to the communication and consultation process. This effort is part of our commitment to embed Hydropower Sustainability Assessment Protocol (HSAP) practices in our community engagement. We are now working towards developing the Stakeholder Engagement Plan (SEP) to address community-related topics for the Baleh HEP.

We have already implemented some aspects of the SEP to address certain gaps in the communications and consultation process. As the SEP was developed mainly to guide the engagement process with affected communities, we will soon organise a workshop to share and consolidate inputs from related departments in our company. This will allow us to expand the SEP to cover a broader view of the Baleh HEP and integrate



*The community at Rumah Nyamok briefed on the latest project status of Baleh HEP.*

existing engagement plans or documents by all the various departments to form an overall strategic plan.

Grievances and complaints by stakeholders are part and parcel of a project, particularly if the project affects local community lands, assets and livelihood. These grievances must be addressed and resolved as early as possible to prevent issues from escalating into severe reputation risks for us. The SEP also includes a Grievance Mechanism to outline the processes taken to record, resolve and respond to the various forms of grievances and complaints by Baleh HEP affected communities within a stipulated timeline. In addition, the Grievance Mechanism has been designed to be readily understandable, accessible, culturally appropriate and uphold transparency through good communication.

We will also employ an annual perception survey to enable us to strategically improve our communications and stakeholder relationships to ensure we maintain the quality of our relationships with the community over the course of the project.

## Dialogue Session with Baleh HEP Community

As work progresses on Baleh HEP, we have stepped up our outreach and social investment programme for communities in the area. During the year, we held a dialogue session with residents from 15 longhouses from Sungai Gaat and Nanga Antawau, updating them on the project's progress and sharing socio-economic opportunities and benefits from the project. Held at Rumah Nyamok at Nanga Serau and Rumah Tajai at Nang Sebiro, the session was attended by more than 400 residents.

## ENSURING ACCESS TO ELECTRICITY

We view our provision of access to electricity as not only our responsibility as an energy utility, but also in meeting the population's socioeconomic right. As at the end of the year, access to electricity coverage in Sarawak had risen to 96.0% from 95.5% in 2017, with rural electricity coverage increasing to 91.0% from 89.8%.

### Sarawak State Electrification Coverage 2013-2018

| Year                                    | 2013 | 2014 | 2015 | 2016 | 2017 | 2018        |
|---|------|------|------|------|------|-------------|
| <b>Sarawak Electricity Coverage (%)</b> | 88.2 | 90.4 | 92.3 | 94.3 | 95.5 | <b>96.0</b> |
| <b>Rural (%)</b>                        | 74.5 | 79.0 | 82.8 | 87.0 | 89.8 | <b>91.0</b> |

## New Households Connected

| Grid/Non-Grid   | Year                                      | 2016   | 2017  | 2018         |
|-----------------|---|--------|-------|--------------|
| <b>Grid</b>     | <b>Rural Electrification Scheme (RES)</b> | 12,697 | 5,409 | <b>3,990</b> |
| <b>Non-Grid</b> | <b>Hybrid</b>                             | 1,224  | 966   | <b>270</b>   |
|                 | <b>SARES</b>                              | 719    | 1,124 | <b>1,448</b> |
|                 | <b>TOTAL</b>                              | 14,640 | 7,499 | <b>5,748</b> |

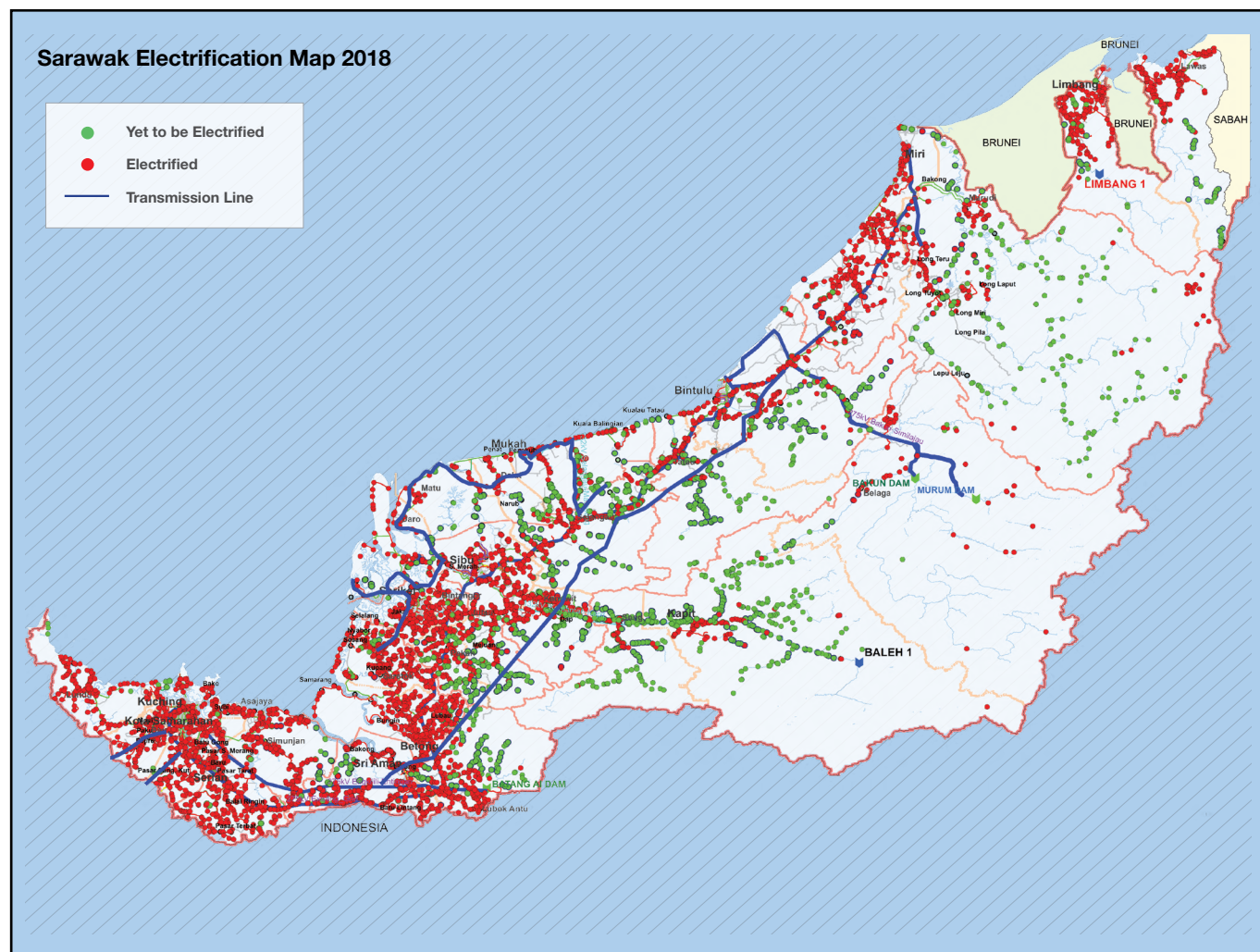
We continue to implement various electrification programmes to ensure access to electricity reaches all the people of Sarawak. The RES programme has powered up more than 115,000 households with electricity to date. More than RM3 billion has been allocated for the scheme as at the end of 2018.

Further to that, at the end of 2018 Sarawak Government has also allocated RM2.37 billion for the Rural Electrification programme through "Project Rakyat" initiative to accelerate the rural electrification rate with the target to reach 99% (State-wide coverage) by end of 2020. This targets to electrify 1,000 villages with 20,000 households.

Working with the Sarawak State Government, we also implement the Sarawak Alternative Renewable Electricity Scheme (SARES) solar project, which entered its third phase in 2018. We expect to complete electrification for 75 villages and 1,968 households under this phase having recorded an installed capacity of 1,742.86 kW by April 2019.



# SOCIAL INCLUSIVENESS



| Year                    | 2016 - 2017 Phase 1 | 2017 - 2018 Phase 2 | 2018 - 2019 Phase 3 |
|-------------------------|---------------------|---------------------|---------------------|
| Installed Capacity (kW) | 1,434.87            | 1,619.69            | 1,742.86            |
| Villages                | 58                  | 59                  | 75                  |
| Door                    | 1,369               | 1,601               | 1,968               |

Furthermore, under our CSR solar project, since 2014 we have provided seven villages and 119 households with solar power systems with an installed capacity of 123 kW. In addition to one completed project in 2018 for 54 households in Rh Andah in Batang Ai, Lubuk Antu, we also commenced a 30 kW project to provide power to 31 households in Rh Bada in Batang Ai, Ulu Engkari. The project is now undergoing testing and commissioning before its expected completion in May 2019.

In another initiative to ensure access to rural communities, we also implement mini/micro hydropower projects where feasible. In 2018 we commenced the second phase of a mini hydro project in Long Banga, Ulu Baram. The second phase of the project, which is expected for completion in April 2019, will see the installation of 2 x 160 kW capacity to add to the 2 x 160 kW of capacity installed under phase one.



*A view of the Bario Central Solar Hybrid Power Station located at Kampung Baru, Bario.*

Since 2015, we have also undertaken solar hybrid projects and as at the end of 2018 have completed 30 stations with a total solar installation capacity of 6.97 MW benefiting 2,324 households. In 2018, we completed 901.05 kW of installed capacity, covering 271 households and a population of 1,357.

| Year                    | 2015     | 2016   | 2017     | 2018   |
|-------------------------|----------|--------|----------|--------|
| Population              | 4,932    | 1,740  | >4,810   | 1,357  |
| Door                    | 786      | 263    | 1,004    | 271    |
| Installed Capacity (kW) | 2,031.89 | 774.06 | 3,267.12 | 901.05 |



# AWARDS AND RECOGNITION



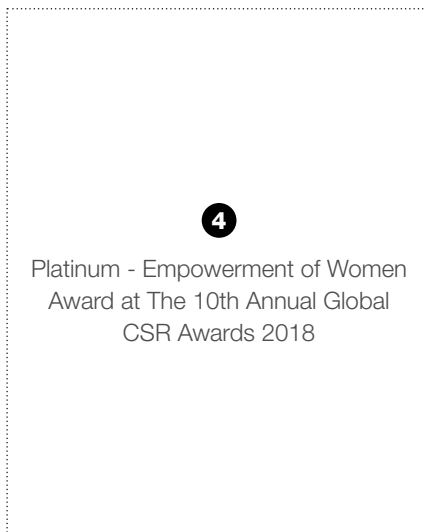
## SUSTAINABLE BUSINESS AWARDS MALAYSIA 2018

1

Best Strategy and Sustainability Management at Sustainable Business Awards Malaysia 2018

2

Best UN SDGs at Sustainable Business Awards Malaysia 2018



4

Platinum - Empowerment of Women Award at The 10th Annual Global CSR Awards 2018



3

## SUSTAINABLE BUSINESS AWARDS MALAYSIA 2018

3

Special Recognition, Sustainability in the Community at Sustainable Business Awards Malaysia 2018



4



5

Gold - Best Community Programme Award at The 10th Annual Global CSR Awards 2018



5

## AWARDS AND RECOGNITION



6

7  
1 Million Manhours Without Lost  
Time Injury - Bintulu Tanjung  
Kidurong CCPP Unit 10 & 11

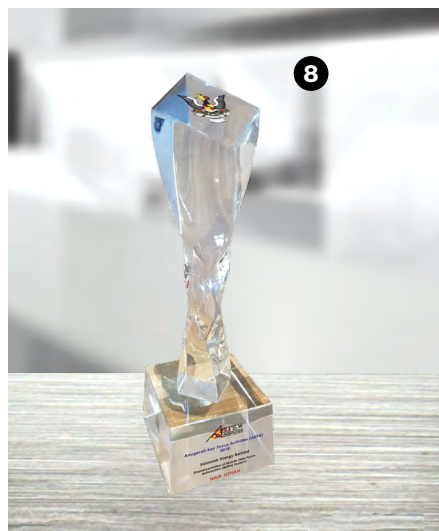


7



6

Alliance for Rural Electrification  
Awards 2018 - Category 5 -  
Government in Africa, Asia & Latin  
America



8

8  
Second Place - State Quality Civil  
Services Awards - Key Focus  
Activities Award 2018



9

9  
Third Place - State Quality Civil  
Services Awards - Customer  
Management Awards 2018



# INDEPENDENT THIRD PARTY ASSURANCE STATEMENT



## **Independent Assurance Report To Management of Sarawak Energy Berhad (2018)**

We have been engaged by Sarawak Energy Berhad ("SEB") to perform an independent limited assurance engagement on selected Sustainability Information (hereon after referred to as "Selected Information" comprising the information set out in the Subject Matter) as reported in its Delivering Sustainable Energy – Foundation to Low Carbon Economy Sustainability Report for financial year ended 2018 ("SEB Sustainability Report 2018").

### **Management's Responsibility**

Management of SEB is responsible for the preparation of the Selected Information included in the SEB Sustainability Report 2018 in accordance with the SEB's internal sustainability reporting guidelines and procedures.

This responsibility includes the selection and application of appropriate methods to prepare the Selected Information reported in the SEB Sustainability Report 2018 as well as the design, implementation and maintenance of processes relevant for the preparation. Furthermore, the responsibility includes the use of assumptions and estimates for disclosures made by SEB which are reasonable in the circumstances.

### **Our Responsibility**

Our responsibility is to provide a conclusion on the Subject Matter based on our limited assurance engagement performed in accordance with the approved standard for assurance engagements in Malaysia, International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information". This standard requires that we comply with ethical requirements, and plan and perform the assurance engagement under consideration of materiality to express our conclusion with limited assurance.

The accuracy of the Selected Information is subject to inherent limitations given their nature and methods for determining, calculating and estimating such data.

Our limited assurance report should therefore be read in connection with SEB's internal sustainability reporting guidelines and procedures on the reporting of its sustainability performance.

In a limited assurance engagement, the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement.

### **Subject Matter**

The following information collectively known as Selected Information on which we provide limited assurance consists of the management and reporting processes with respect to the preparation of the following six (6) Selected Information reported and marked with asterisks (\*) in SEB Sustainability Report 2018 as follows:

1. Main Grid CO<sub>2</sub> Emission Intensity (tCO<sub>2</sub>/MWh) for the financial year 2018:
  - Fuel consumption (FCj);
  - Net energy generated (NEGj);
  - Net calorific value (NCVj);
2. Northern Grid Emission Intensity (tCO<sub>2</sub>/MWh) for the financial year 2018:
  - Fuel consumption (FCj);
  - Net energy generated (NEGj);
  - Net calorific value (NCVj);
3. Total Water Withdrawal by Source (m<sup>3</sup>) for the financial year 2018:
  - Municipal water (m<sup>3</sup>);
  - Natural water (m<sup>3</sup>) and Operating hours (Hrs);
4. Annual Water Volume for Electricity Generation (million m<sup>3</sup>) for the financial year 2018:
  - Operating hours (Hrs);
5. Economic Value Retained (RM) for the financial year 2018; and
6. Total Value of Tenders Awarded to Local Companies (RM) for the financial year 2018:
  - Operations (RM);
  - Capital works (RM).

PricewaterhouseCoopers PLT (LLP0014401-LCA & AF 1146), Chartered Accountants, Level 10, 1 Sentral, Jalan Rakyat, Kuala Lumpur Sentral, P.O. Box 10192, 50706 Kuala Lumpur, Malaysia  
T: +60 (3) 2173 1188, F: +60 (3) 2173 1288, www.pwc.com/my

# INDEPENDENT THIRD PARTY ASSURANCE STATEMENT



## Criteria

SEB's internal sustainability reporting guidelines and procedures by which the Selected Information is gathered, collated and aggregated internally.

## Main Assurance Procedures

Our work, which involved no independent examination of any of the underlying financial information, included the following procedures:

- Inquiries of personnel responsible for the Selected Information reported in SEB Sustainability Report 2018 regarding the processes to prepare the said report and the underlying controls over those processes;
- Inquiries of personnel responsible for data collection at the corporate, division and operation unit level for the Selected Information;
- Inspection on a sample basis of internal documents, contracts, reports, data capture forms and invoices to support the Selected Information for accuracy including observation of management's controls over the processes;
- Inquiries of personnel on the collation and reporting of the Selected Information at the corporate, division and operation unit level; and
- Checking the formulas, proxies and default values used in the Selected Information against SEB's sustainability reporting guidelines and procedures.

## Independence and Quality Control

We have complied with the relevant independence requirements and other ethical requirements of the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Control 1 "Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements", and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Conclusion

Based on our limited assurance engagement, in all material aspects, nothing has come to our attention that causes us to believe that the Selected Information in the Subject Matter has not been fairly stated in accordance with SEB's internal sustainability reporting guidelines and procedures.

## Restriction of use

This report, including our conclusions, has been prepared solely for the Board of Directors and management of SEB in accordance with the agreement between us, in connection with the performance of an independent limited assurance on the Selected Information in the Subject Matter as reported by SEB in its SEB Sustainability Report 2018. Accordingly, this report should not be used or relied upon for any other purposes. We consent to the inclusion of this report in the SEB Sustainability Report 2018 and to be disclosed online at [www.sarawakenergy.com.my](http://www.sarawakenergy.com.my), in respect of the 2018 financial year, to assist the Directors in responding to their governance responsibilities by obtaining an independent assurance report in connection with the Selected Information. As a result, we will not accept any liability or assume responsibility to any other party to whom our report is shown or into whose hands it may come. Any reliance on this report by any third party is entirely at its own risk.

A handwritten signature in black ink, appearing to read 'PricewaterhouseCoopers PLT', with a stylized 'PLT' at the end.

PRICEWATERHOUSECOOPERS PLT  
LLP0014401-LCA & AF 1146  
Chartered Accountants

Kuala Lumpur  
17 September 2019



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE



This report was submitted for the GRI Materiality Disclosure Service. For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report.

| Disclosure Number                 | Disclosure Title   | Page/Direct Reference  | External Assurance | SDG linkage to Disclosure  |
|-----------------------------------|--|--|--------------------|--|
| <b>GRI 101: Foundation 2016</b>   |  |  |                    |  |
| <b>General Disclosures</b>        |  |  |                    |  |
| GRI 102: General Disclosures 2016 |  |  |                    |  |
| <b>Organizational Profile</b>     |  |  |                    |  |
| 102-1                             | Name of the organization                                     | Sarawak Energy Berhad (Sarawak Energy or the Company)  |                    |  |
| 102-2                             | Activities, brands, products, and services                   | Chairman's Foreword, p. 4-6; GCEO's Overview, p. 8-11; Organisational Profile p. 2-3; Organisation Structure, p. 19  |                    |  |
| 102-3                             | Location of headquarters                                     | Menara Sarawak Energy, No. 1, The Isthmus, 93050 Kuching, Sarawak.   |                    |  |
| 102-4                             | Location of operations                                       | Sarawak, Malaysia  |                    |  |
| 102-5                             | Ownership and legal form                                     | The principal activity of the Company is that of an investment holding company and information on the Company's structure can be found on p. 19  |                    |  |
| 102-6                             | Markets served   | In general, the Company serves two types of customers:<br><br>a) Organic – domestic, commercial, industrial and public lighting;<br>b) Bulk – SCORE customers and interconnection<br><br>See Organisational Profile, p. 2-3  |                    |  |
| 102-7                             | Scale of the organization                                    | Organisation Structure, p. 19  |                    |  |
| 102-8                             | Information on employees and other workers                   | Social Inclusiveness, p. 47, p. 49-50  |                    | No 8 - Promote inclusive and sustainable economic growth, employment and decent work for all |
| 102-9                             | Supply chain   | Organisational Profile, p. 2-3   |                    |  |
| 102-10                            | Significant changes to the organization and its supply chain | Changes are highlighted under Organisation Structure on p. 19  |                    |  |
| 102-11                            | Precautionary Principle or approach                          | Chairman's Foreword, p. 4-6; GCEO's Overview, p. 8-11  |                    |  |
| 102-12                            | External initiatives   | The following is a list of externally developed economic, environmental and social charters, principles or other initiatives to which the Company subscribes to or endorses:<br><br><ul style="list-style-type: none"> <li>• Hydropower Sustainability Assessment Protocol (HSAP)</li> <li>• UNDRIP</li> <li>• Global Reporting Initiative (GRI)</li> <li>• Equator Principles</li> <li>• IFC</li> <li>• UN Global Compact (UNGC)</li> <li>• World Commission on Dams</li> <li>• ISO14001</li> <li>• OSHA</li> </ul> |                    |  |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number             | Disclosure Title   | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure   |
|-------------------------------|--|---|--------------------|---|
| 102-13                        | Membership of associations                                 | As part of the Company's commitment towards sustainability, it signed a "Sustainability Partnership" with the International Hydropower Association (IHA) in early 2011, which requires it to use the Hydropower Sustainability Assessment Protocol as a tool to assess its performance against criteria concerning the project management of social, economic and environmental issues, as well as putting into place adequate and appropriate mitigation measures.<br><br>Sarawak Energy is a GRI Gold Community Member and is also on the Board of Advisory for the UN Global Compact Network Malaysia. |                    |   |
| <b>Strategy</b>               |  |   |                    |   |
| 102-14                        | Statement from the most senior decision-maker              | Chairman's Foreword, p. 4-6   |                    |   |
| 102-15                        | Key impacts, risks, and opportunities                      | GCEO's Overview, p. 8-11  |                    |   |
| <b>Ethics And Integrity</b>   |  |   |                    |   |
| 102-16                        | Values, principles, standards, and norms of behavior       | Chairman's Foreword, p. 4-6; Organisational Profile, p. 3; GCEO's Overview, p. 8-11   |                    | No 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels |
| <b>Governance</b>             |  |   |                    |   |
| 102-18                        | Governance structure                                       | Governance, p. 20-21  |                    |   |
| <b>Stakeholder Engagement</b> |  |   |                    |   |
| 102-40                        | List of stakeholder groups                                 | GCEO's Overview, p. 10  |                    |   |
| 102-41                        | Collective bargaining agreements                           | Terms as agreed in Collective Agreement are extended to all non-executive staff under Sarawak Energy Group (except for Bakun HEP – parented staff).   |                    | No 8 - Promote inclusive and sustainable economic growth, employment and decent work for all  |
| 102-42                        | Identifying and selecting stakeholders                     | GCEO's Overview, p. 10  |                    |   |
| 102-43                        | Approach to stakeholder engagement                         | GCEO's Overview, p. 10  |                    |   |
| 102-44                        | Key topics and concerns raised                             | GCEO's Overview, p. 10 & p. 12  |                    |   |
| <b>Reporting Practice</b>     |  |   |                    |   |
| 102-45                        | Entities included in the consolidated financial statements | Organisation Structure, p. 19   |                    |   |
| 102-46                        | Defining report content and topic Boundaries               | About This Report (See Reporting Scope and Boundaries), p. i  |                    |   |
| 102-47                        | List of material topics                                    | GCEO's Overview, p. 12  |                    |   |
| 102-48                        | Restatements of information                                | No restatements have been made.   |                    |   |
| 102-49                        | Changes in reporting                                       | Changes in the list of material topics and topic Boundaries, p. 12  |                    |   |



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title   | Page/Direct Reference  | External Assurance | SDG linkage to Disclosure |
|-------------------|--|--|--------------------|---------------------------|
| 102-50            | Reporting period   | From 1 January 2018 until 31 December 2018.<br>About This Report (See Scope of the Report)   |                    |                           |
| 102-51            | Date of most recent report                               | The Company's 2017 Sustainability Report.  |                    |                           |
| 102-52            | Reporting cycle  | The Company plans to publish its Sustainability Report on an annual basis.   |                    |                           |
| 102-53            | Contact point for questions regarding the report         | General questions regarding this report can be addressed to Sustainability Division at:<br><br>Menara Sarawak Energy,<br>Level 8, No. 1, The Isthmus,<br>93050 Kuching, Sarawak.<br><br>Tel: 082-388 388 (ext. 8816 / 8165)  |                    |                           |
| 102-54            | Claims of reporting in accordance with the GRI Standards | This report has been prepared in accordance with the GRI Standards: Core option  |                    |                           |
| 102-55            | GRI content index  | See p. 70-104  |                    |                           |
| 102-56            | External assurance                                       | Disclosures within this year's edition of the Sarawak Energy Sustainability Report that are subjected to external assurance are: (p. 68 - 69) <ul style="list-style-type: none"> <li>• Main Grid CO<sub>2</sub> Emission Intensity</li> <li>• Northern Grid CO<sub>2</sub> Emission Intensity</li> <li>• Annual Water Volume for Electricity Generation</li> <li>• Total Water Withdrawal by Source</li> <li>• Economic Value Retained</li> <li>• Total Value of Tenders Awarded to Local Companies</li> </ul> | Yes                |                           |

## Material Topics

### Economic Performance

#### GRI 103: Management Approach 2016

|       |  |  |  |  |
|-------|--|--|--|--|
| 103-1 | Explanation of the material topic and its Boundary | Foundation to Low Carbon Economy, p. 25    |  |  |
| 103-2 | The management approach and its components         | Foundation to Low Carbon Economy, p. 29    |  |  |
| 103-3 | Evaluation of the management approach              | Foundation to Low Carbon Economy, p. 25-30 |  |  |

#### GRI 201: Economic Performance 2016

|       |   |  |     |   |
|-------|---|--|-----|---|
| 201-1 | Direct economic value generated and distributed | Chairman's Foreword, p. 5<br>GCEO's Overview, p. 9; Foundation to Low Carbon Economy, p. 23<br>Delivering Value to Our Stakeholders, p. 17 | Yes | No 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture |
|-------|---|--|-----|---|

### Indirect Economic Impacts

#### GRI 103: Management Approach 2016

|       |  |  |  |  |
|-------|--|--|--|--|
| 103-1 | Explanation of the material topic and its Boundary | Foundation to Low Carbon Economy, p. 26-27<br>Uplifting Our Local Communities, p. 57-61  |  |  |
| 103-2 | The management approach and its components         | Corporate Long-Term Strategy, p. 18; Foundation to Low Carbon Economy, p. 29; Social Inclusiveness, p. 49  |  |  |
| 103-3 | Evaluation of the management approach              | Corporate Long-Term Strategy, p. 18;<br>Foundation to Low Carbon Economy, p. 26, p. 30-33;<br>Social Inclusiveness, p. 47 (see CSR Spending), p. 50-55, p. 57-65 |  |  |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                       | Disclosure Title                                   | Page/Direct Reference   | External Assurance                   | SDG linkage to Disclosure   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
|---|--|---|--------------------------------------|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|--|
| Economic Performance                    |  |   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| GRI 203: Indirect Economic Impacts 2016 |  |   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| 203-1                                   | Infrastructure investments and services supported  | <p>Delivering Value to Our Stakeholders, p. 17;<br/>Foundation to Low Carbon Economy, p. 26, p. 30-33, p. 45<br/>Social Inclusiveness, p. 47 (see CSR Spending), p.57-65</p> <p><b>Average Tariff (sen/kWh) (Year 2014 – 2018) by Customer Type</b></p> <table><tr><th>Year 2018</th><th>Average Tariff (sen/kWh) (Year 2014)</th><th>Average Tariff (sen/kWh) (Year 2015)</th><th>Average Tariff (sen/kWh) (Year 2016)</th><th>Average Tariff (sen/kWh) (Year 2017)</th><th>Average Tariff (sen/kWh) (Year 2018)</th></tr><tr><td>Organic</td><td>29.81</td><td>28.50</td><td>28.20</td><td>28.04</td><td>27.96</td></tr><tr><td>Domestic</td><td>31.26</td><td>28.24</td><td>28.30</td><td>28.21</td><td>28.27</td></tr><tr><td>Commercial</td><td>31.93</td><td>31.15</td><td>30.53</td><td>30.54</td><td>30.50</td></tr><tr><td>Public Lighting</td><td>47.08</td><td>47.09</td><td>47.12</td><td>47.18</td><td>47.17</td></tr><tr><td>Industrial</td><td>24.95</td><td>24.48</td><td>24.15</td><td>23.86</td><td>23.69</td></tr></table> | Year 2018                            | Average Tariff (sen/kWh) (Year 2014)  | Average Tariff (sen/kWh) (Year 2015) | Average Tariff (sen/kWh) (Year 2016) | Average Tariff (sen/kWh) (Year 2017) | Average Tariff (sen/kWh) (Year 2018) | Organic | 29.81 | 28.50 | 28.20 | 28.04 | 27.96 | Domestic | 31.26 | 28.24 | 28.30 | 28.21 | 28.27 | Commercial | 31.93 | 31.15 | 30.53 | 30.54 | 30.50 | Public Lighting | 47.08 | 47.09 | 47.12 | 47.18 | 47.17 | Industrial | 24.95 | 24.48 | 24.15 | 23.86 | 23.69 | <p>No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>No 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> <p>No 11 - Make cities and human settlements inclusive, safe, resilient and sustainable</p> |
| Year 2018                               | Average Tariff (sen/kWh) (Year 2014)               | Average Tariff (sen/kWh) (Year 2015)  | Average Tariff (sen/kWh) (Year 2016) | Average Tariff (sen/kWh) (Year 2017)  | Average Tariff (sen/kWh) (Year 2018) |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| Organic                                 | 29.81  | 28.50   | 28.20                                | 28.04   | 27.96                                |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| Domestic                                | 31.26  | 28.24   | 28.30                                | 28.21   | 28.27                                |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| Commercial                              | 31.93  | 31.15   | 30.53                                | 30.54   | 30.50                                |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| Public Lighting                         | 47.08  | 47.09   | 47.12                                | 47.18   | 47.17                                |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| Industrial                              | 24.95  | 24.48   | 24.15                                | 23.86   | 23.69                                |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| 203-2                                   | Significant indirect economic impacts              | <p>Chairman's Foreword, p. 6<br/>GCEO's Overview, p. 9; Foundation to Low Carbon Economy, p. 30-33, p. 45<br/>Corporate Long-Term Strategy, p. 18;<br/>Social Inclusiveness, p. 57-65</p>   |                                      | <p>No 1 - End poverty in all its forms everywhere</p> <p>No 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p> <p>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <p>No 10 - Reduce inequality within and among countries</p> <p>No 17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development</p> |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| Procurement Practices                   |  |   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| GRI 103: Management Approach 2016       |  |   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| 103-1                                   | Explanation of the material topic and its Boundary | Foundation to Low Carbon Economy, p. 27   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| 103-2                                   | The management approach and its components         | Foundation to Low Carbon Economy, p. 27   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |
| 103-3                                   | Evaluation of the management approach              | Foundation to Low Carbon Economy, p. 27   |                                      |   |                                      |                                      |                                      |                                      |         |       |       |       |       |       |          |       |       |       |       |       |            |       |       |       |       |       |                 |       |       |       |       |       |            |       |       |       |       |       |  |



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number   | Disclosure Title                                   | Page/Direct Reference   | External Assurance            | SDG linkage to Disclosure                                      |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
|---|--|---|-------------------------------|--|-----------------|--------|-----------|-----------|-----------|----------------|------------|----------------|-------------------------------|-----------------------------|--------------|---------------------------|----------------|----------------|----------------|---------------|------------------|------------------|------------------|-----------------------------------|------------|----------------|-----------------------------|-----------------------------|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| GRI 204: Procurement Practices 2016   |  |   |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| 204-1   | Proportion of spending on local suppliers          | 2018 Key Highlights, p. 7<br>Global Agenda Internalisation, p. 14 (See SDG#8)<br>Delivering Value to Our Stakeholders, p. 17<br>Foundation to Low Carbon Economy, p. 27 | Yes                           | No 12 - Ensure sustainable consumption and production patterns |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| <table border="1"> <thead> <tr> <th>Tenders Awarded</th><th>Status</th><th>Year 2016</th><th>Year 2017</th><th>Year 2018</th></tr> </thead> <tbody> <tr> <td><b>Capital</b></td><td>Sarawakian</td><td>445,710,032.50</td><td>1,620,376,421.35<sup>1</sup></td><td>625,917,773.91<sup>1</sup></td></tr> <tr> <td rowspan="2"><b>Works</b></td><td>Malaysia (Non-Sarawakian)</td><td>138,620,455.11</td><td>501,190,506.73</td><td>266,245,214.38</td></tr> <tr> <td>International</td><td>1,565,861,871.58</td><td>2,884,065,817.05</td><td>1,095,210,392.28</td></tr> <tr> <td rowspan="3"><b>Operations and Maintenance</b></td><td>Sarawakian</td><td>576,656,517.32</td><td>424,381,685.99<sup>1</sup></td><td>564,066,169.62<sup>1</sup></td></tr> <tr> <td>Malaysia (Non-Sarawakian)</td><td>83,265,176.00</td><td>60,255,353.33</td><td>26,039,763.67</td></tr> <tr> <td>International</td><td>86,858,228.00</td><td>67,673,539.04</td><td>30,992,905.85</td></tr> </tbody> </table> |  |   |                               |  | Tenders Awarded | Status | Year 2016 | Year 2017 | Year 2018 | <b>Capital</b> | Sarawakian | 445,710,032.50 | 1,620,376,421.35 <sup>1</sup> | 625,917,773.91 <sup>1</sup> | <b>Works</b> | Malaysia (Non-Sarawakian) | 138,620,455.11 | 501,190,506.73 | 266,245,214.38 | International | 1,565,861,871.58 | 2,884,065,817.05 | 1,095,210,392.28 | <b>Operations and Maintenance</b> | Sarawakian | 576,656,517.32 | 424,381,685.99 <sup>1</sup> | 564,066,169.62 <sup>1</sup> | Malaysia (Non-Sarawakian) | 83,265,176.00 | 60,255,353.33 | 26,039,763.67 | International | 86,858,228.00 | 67,673,539.04 | 30,992,905.85 |
| Tenders Awarded   | Status   | Year 2016   | Year 2017                     | Year 2018  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| <b>Capital</b>  | Sarawakian   | 445,710,032.50  | 1,620,376,421.35 <sup>1</sup> | 625,917,773.91 <sup>1</sup>                                    |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| <b>Works</b>  | Malaysia (Non-Sarawakian)                          | 138,620,455.11  | 501,190,506.73                | 266,245,214.38   |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
|   | International                                      | 1,565,861,871.58  | 2,884,065,817.05              | 1,095,210,392.28   |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| <b>Operations and Maintenance</b>   | Sarawakian   | 576,656,517.32  | 424,381,685.99 <sup>1</sup>   | 564,066,169.62 <sup>1</sup>                                    |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
|   | Malaysia (Non-Sarawakian)                          | 83,265,176.00   | 60,255,353.33                 | 26,039,763.67  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
|   | International                                      | 86,858,228.00   | 67,673,539.04                 | 30,992,905.85  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| <b>Notes:</b><br><sup>1</sup> This total value of tenders awarded to local companies data has been assured by a third party for Sustainability Report 2017.<br><sup>*</sup> This total value of tenders awarded to local companies data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.  |  |   |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| <b>Materials</b>  |  |   |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| GRI 103: Management Approach 2016   |  |   |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| 103-1   | Explanation of the material topic and its Boundary | Accelerating Climate Action, p. 37  |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| 103-2   | The management approach and its components         | Our Commitment to Accelerate Climate Action, p. 37-42   |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |
| 103-3   | Evaluation of the management approach              | Global Agenda Internalisation, p. 13 (See SDG#7), p. 15 (See SDG#6)<br>Accelerating Climate Action, p. 37-45  |                               |  |                 |        |           |           |           |                |            |                |                               |                             |              |                           |                |                |                |               |                  |                  |                  |                                   |            |                |                             |                             |                           |               |               |               |               |               |               |               |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number   | Disclosure Title                                   | Page/Direct Reference  | External Assurance                                     | SDG linkage to Disclosure   |  |                |
|---|--|--|--|---|--|----------------|
| GRI 301: Materials 2016   |  |  |  |   |  |                |
| 301-1   | Materials used by weight or volume                 | Global Agenda Internalisation, p. 15 (See SDG#6)<br>Delivering Value to Our Stakeholders, p.16<br>Accelerating Climate Action, p. 35 | Yes  | No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all |  |                |
| Category: Non-Renewable Materials Used in 2018  |  |  |  |   |  |                |
| Plant Type  |  | Volume   | Unit   |   |  |                |
| Coal  |  | 2,038,842.21*  | Tonne  |   |  |                |
| Diesel <sup>1</sup>   |  | 20,393,035.80*   | Litre  |   |  |                |
| Natural Gas   |  | 35,891,301.46*   | mmbtu  |   |  |                |
| Note:   |  |  |  |   |  |                |
| <sup>1</sup> Diesel – excluding Limbang & Lawas.  |  |  |  |   |  |                |
|   |  |  |  |   |  |                |
| Plant Type  |  | 2014   | 2015   | 2016  | 2017   | 2018           |
| Coal  |  | 2,100,509.91   | 2,166,911.46   | 2,136,639.32  | 2,228,768.01   | 2,038,842.21*  |
| Diesel  |  | 22,712,617.47  | 19,194,869.94  | 23,425,847.71   | 15,675,168.40  | 20,393,035.80* |
| Natural Gas   |  | 26,370,960.45  | 31,779,419.54  | 34,622,745.43   | 34,262,495.10  | 35,891,301.46* |
| Category: Renewable Materials   |  |  |  |   |  |                |
| Major Plant   |  | Annual Inflow (million m³) (annual inflow from catchment)  | Annual water volume for energy generation (million m³) | Annual energy generated (GWh)   | Annual water consumption (million m³) (Spillway discharge) |                |
| Batang Ai   | 2018   | 3,576  | 3,647*   | 481   | -  |                |
|   | 2017   | 3,658  | 3,397 <sup>1</sup>                                     | 442   | -  |                |
| Murum   | 2018   | 7,737  | 8,022*   | 6,094   | 432  |                |
|   | 2017   | 10,933   | 7,567 <sup>1</sup>                                     | 5,717   | 3,588  |                |
| Bakun   | 2018   | 40,481   | 36,148*  | 14,482  | 4,761  |                |
|   | 2017   | 49,794   | 32,962 <sup>1</sup>                                    | 13,078  | 16,948   |                |
| Notes:  |  |  |  |   |  |                |
| <sup>1</sup> This annual water volume for electricity generation data has been assured by a third party for Sustainability Report 2017.   |  |  |  |   |  |                |
| * These annual water volume for electricity generation data and fuel consumption data have been assured by a third party. Read the Independent Assurance Report on pages 68 - 69. |  |  |  |   |  |                |
| Water   |  |  |  |   |  |                |
| GRI 103: Management Approach 2016   |  |  |  |   |  |                |
| 103-1   | Explanation of the material topic and its Boundary | Accelerating Climate Action, p. 37   |  |   |  |                |
| 103-2   | The management approach and its components         | Accelerating Climate Action, p. 37   |  |   |  |                |
| 103-3   | Evaluation of the management approach              | Accelerating Climate Action, p. 37   |  |   |  |                |



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|-------------------|------------------|-----------------------|--------------------|---------------------------|
|-------------------|------------------|-----------------------|--------------------|---------------------------|

## GRI 303: Water 2016

|       |                            |   |     |   |
|-------|----------------------------|---|-----|---|
| 303-1 | Water withdrawal by source | Global Agenda Internalisation, p. 15 (See SDG#6)<br>Delivering Value to Our Stakeholders, p. 16<br>Accelerating Climate Action, p. 35 & p. 37 | Yes | No 6 - Ensure availability and sustainable management of water and sanitation for all |
|-------|----------------------------|---|-----|---|

### Total Water Withdrawal by Source 2017 & 2018

| Plant Type                   | Major Plant                 | Source                                  | Total 2018       | Total 2017      |
|------------------------------|-----------------------------|---|------------------|-----------------|
|                              |                             |   | meter cubic (m³) |                 |
| Coal                         | Sejingkat Power Corp + PPLS | Municipal                               | 1,386,373.00*    | 1,603,264.00¹   |
|                              |                             | Sea Water or other natural water source | 353,454,413.18*  | 366,695,496.00¹ |
| Coal                         | Mukah Power Generation      | Municipal                               | 799,747.00*      | 854,666.00¹     |
|                              |                             | Sea Water or other natural water source | 385,871,040.00*  | 454,118,400.00¹ |
| Combined Cycle - Natural Gas | SPG + Bintulu SESCO         | Municipal                               | 220,611.00*      | 145,623.00¹     |
|                              |                             | Sea Water or other natural water source | 227,489,565.60*  | 212,876,380.80¹ |
| Open Cycle - Natural Gas     | Miri SESCO                  | Municipal                               | 9,225.00*        | 12,154.00¹      |
|                              |                             | Sea Water or other natural water source | N/A              | N/A             |
| Diesel                       | Sg Bliawak SESCO            | Municipal                               | 13,952.50*       | 21,192.00¹      |
|                              |                             | Sea Water or other natural water source | 69,650.00*       | 1,171,360.00¹   |
| Diesel                       | Non Grid - Limbang          | Municipal                               | 22,992.00        | 19.44           |
| Diesel                       | Non Grid - Lawas            | Municipal                               | 656.00           | 299.00          |

## Biodiversity

### GRI 103: Management Approach 2016

|       |  |   |
|-------|--|---|
| 103-1 | Explanation of the material topic and its Boundary | Accelerating Climate Action, p. 41                |
| 103-2 | The management approach and its components         | Accelerating Climate Action, p. 41-43             |
| 103-3 | Evaluation of the management approach              | Global Agenda Internalisation, p. 15 (See SDG#15) |

### 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 | Global Agenda Internalisation, p. 15 (See SDG#6 & SDG#15)<br>Accelerating Climate Action, p. 41-43 | <p>No 6 - Ensure availability and sustainable management of water and sanitation for all</p> <p>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> <p>No 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> |
| 304-2 | Significant impacts of activities, products, and services on biodiversity   | Global Agenda Internalisation, p. 15 (See SDG#6 & SDG#15)<br>Accelerating Climate Action, p. 41-43 | <p>No 6 - Ensure availability and sustainable management of water and sanitation for all</p> <p>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> <p>No 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> |

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| Disclosure Number                 | Disclosure Title                                   | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure  |
|-----------------------------------|--|---|--------------------|--|
| Emissions                         |  |   |                    |  |
| GRI 103: Management Approach 2016 |  |   |                    |  |
| 103-1                             | Explanation of the material topic and its Boundary | Accelerating Climate Action, p. 37-38   |                    |  |
| 103-2                             | The management approach and its components         | Accelerating Climate Action, p. 37-38   |                    |  |
| 103-3                             | Evaluation of the management approach              | 2018 Key Highlights, p. 7<br>Accelerating Climate Action, p. 38-39  |                    |  |
| GRI 305: Emissions 2016           |  |   |                    |  |
| 305-1                             | Direct (Scope 1) GHG emissions                     | Accelerating Climate Action, p. 38-39<br><br>1. Gross direct (Scope 1) GHG emissions in metric tonnes of CO <sub>2</sub> equivalent | Yes                | No 3 - Ensure healthy lives and promote well-being for all at all ages<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br>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# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
|-------------------|------------------|-----------------------|--------------------|---------------------------|

Total Overall Stand-alone Grid CO<sub>2</sub> Emission (All over Sarawak)

| POWER STATION (STAND-ALONE GRID)                           | 2013             | 2014             | 2015             | 2016             | 2017             | 2018             |
|--|------------------|------------------|------------------|------------------|------------------|------------------|
| Kapit PS   | 23.99            | 121.26           | 0.00             | 55.35            | 30.09            | 72               |
| Belaga PS  | 3,095.91         | 3,283.10         | 3,636.68         | 3,700.47         | 3,505.23         | 3,031            |
| Song PS  | 0.00             | 0.00             | 0.00             | 0.00             | 0.00             | 2,705            |
| Ng Mujong PS   | 143.54           | 151.97           | 185.23           | 220.55           | 218.59           | 181              |
| Ng Ngungun PS  | 960.75           | 854.24           | 933.79           | 1,095.53         | 1,118.42         | 612              |
| Ng Jagau PS  | 158.61           | 159.97           | 178.61           | 214.01           | 226.73           | 158              |
| Ng Entawau PS  | 223.57           | 242.41           | 247.75           | 293.29           | 295.67           | 246              |
| Mulu PS  | 1,009.72         | 1,597.18         | 2,177.35         | 2,111.50         | 2,033.42         | 1,345            |
| Long Lama PS   | 2,382.71         | 2,426.75         | 2,518.51         | 2,721.80         | 2,762.67         | 2,513            |
| Pantu PS   | 725.76           | 0.00             | 0.00             | 0.00             | 0.00             | 0                |
| Banting PS   | 211.81           | 216.24           | 238.22           | 246.50           | 264.05           | 215              |
| Paloh PS   | 504.47           | 536.99           | 544.46           | 570.85           | 578.71           | 475              |
| Kg Bruit PS  | 2,263.87         | 2,409.49         | 966.12           | 8.92             | 0.00             | 0                |
| Kg Saai PS   | 794.78           | 905.70           | 268.97           | 1.82             | 0.00             | 0                |
| Bakun - Sg Asap PS   | 4,905.53         | 4,885.94         | 126.89           | 45.18            | 0.00             | 0                |
| <b>Total tCO<sub>2</sub>eq Emission (Stand-Alone Grid)</b> | <b>17,405.02</b> | <b>17,791.24</b> | <b>12,022.58</b> | <b>11,285.77</b> | <b>11,033.58</b> | <b>11,553.00</b> |

Total Net Energy Generated for Main Grids

| POWER STATION (STAND-ALONE GRID) | POWER STATION            | 2013                | 2014                | 2015                | 2016                | 2017                | 2018                 |
|----------------------------------|--------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| Coal                             | PPLS Power Generation    | 665,653.45          | 673,067.79          | 700,422.90          | 722,881.10          | 673,687.00          | 614,127.50*          |
| Coal                             | Sejingkat Power Corp.    | 670,717.36          | 677,982.14          | 702,452.10          | 720,113.20          | 684,111.00          | 593,489.90*          |
| Coal                             | Mukah Power Sdn. Bhd.    | 1,381,055.96        | 1,481,594.57        | 1,478,459.86        | 1,328,886.32        | 1,494,404.00        | 1,401,963.65*        |
| BTU-Combined Cycle               | Sarawak Power Generation | 1,770,203.95        | 1,638,149.35        | 1,026,084.62        | 2,088,595.82        | 1,738,199.00        | 2,023,026.02*        |
| BTU-Open Cycle                   | Bintulu PS               | 695,162.97          | 572,782.13          | 486,779.46          | 405,355.13          | 614,311.00          | 661,306.76*          |
| Miri-Open Cycle                  | Miri PS                  | 491,203.58          | 445,644.89          | 509,402.69          | 562,562.83          | 516,563.00          | 487,506.50*          |
| Diesel-Standby                   | Sg Biawak PS             | 5,098.36            | 37,644.93           | 22,737.11           | 33,584.08           | 16,183.00           | -567.91*             |
| <b>Total MWh</b>                 |                          | <b>5,679,095.63</b> | <b>5,526,865.80</b> | <b>4,926,338.74</b> | <b>5,861,978.48</b> | <b>5,737,458.00</b> | <b>5,780,852.42*</b> |

**Note:**

\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
|-------------------|------------------|-----------------------|--------------------|---------------------------|

| Plant Type       | Plant     | 2013                | 2014                | 2015                 | 2016                 | 2017                 | 2018                  |
|------------------|-----------|---------------------|---------------------|----------------------|----------------------|----------------------|-----------------------|
| Hydropower       | Batang Ai | 349,834.63          | 311,289.09          | 315,331.46           | 444,514.18           | 442,324.00           | 480,586.75*           |
| Hydropower       | Bakun     | 5,415,266.50        | 8,477,979.00        | 7,721,996.75         | 12,161,263.00        | 13,078,267.00        | 14,351,890.00*        |
| Hydropower       | Murum     | -                   | 167,945.87          | 2,129,021.85         | 3,437,479.87         | 5,717,385.00         | 6,053,056.70*         |
| Hydropower       | Lundu PS  | -                   | -                   | 3,965.96             | 3,236.00             | 2,618.21             | 2,852.54*             |
| <b>Total MWh</b> |           | <b>5,765,101.13</b> | <b>8,957,213.96</b> | <b>10,170,316.02</b> | <b>16,046,493.05</b> | <b>19,240,594.21</b> | <b>20,888,385.98*</b> |

**Note:**

\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

Total Net Energy Generated for Stand-Alone Grids

| Plant Type       | Plant         | 2013             | 2014             | 2015             | 2016             | 2017             | 2018             |
|------------------|---------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Diesel           | Kapit PS      | -                | -                | -                | -                | -                | 96.78            |
| Diesel           | Belaga PS     | 3,684.30         | 3,752.66         | 4,054.91         | 4144.13          | 3,969.62         | 4,238.20         |
| Diesel           | Song PS       | -                | -                | 0.00             | 0                | -                | 3,816.98         |
| Diesel           | Ng Mujong PS  | 144.69           | 154.34           | 205.38           | 243.70           | 244.37           | 250.40           |
| Diesel           | Ng Ngungun PS | 951.88           | 985.24           | 1,084.81         | 1262.96          | 1,292.73         | 858.68           |
| Diesel           | Ng Jagau PS   | 134.26           | 128.65           | 123.31           | 155.97           | 210.12           | 210.37           |
| Diesel           | Ng Entawau PS | 241.23           | 272.23           | 278.93           | 330.61           | 319.70           | 343.93           |
| Diesel           | Mulu PS       | 1,067.51         | 1,811.50         | 2,423.58         | 2262.76          | 2,110.91         | 1,877.34         |
| Diesel           | Long Lama PS  | 2,945.30         | 2,962.34         | 3,069.97         | 3301.29          | 3,283.94         | 3,519.90         |
| Diesel           | Pantu PS      | 864.01           | -                | -                | -                | -                | 0                |
| Diesel           | Banting PS    | 212.45           | 219.76           | 244.52           | 263.54           | 293.73           | 319.15           |
| Diesel           | Paloh PS      | 562.11           | 601.86           | 616.39           | 641.65           | 633.83           | 662.52           |
| Diesel           | Kg Bruit PS   | 2,507.33         | 2,699.45         | 1,064.10         | 5.56             | -                | -                |
| Diesel           | Kg Saai PS    | 885.24           | 987.13           | 289.88           | -                | -                | -                |
| <b>Total MWh</b> |               | <b>19,866.12</b> | <b>20,166.72</b> | <b>13,511.78</b> | <b>12,612.17</b> | <b>12,358.95</b> | <b>16,194.24</b> |

Total Net Energy Generated (Northern Grids)

| Plant Type       | Plant      | 2013              | 2014              | 2015              | 2016              | 2017              | 2018                |
|------------------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| Diesel           | Limbang PS | 79,535.69         | 81,769.58         | 85,331.79         | 86,650.77         | 84,837.18         | 87,494.23*          |
| Diesel           | Lawas PS   | 42,470.59         | 44,129.66         | 49,059.72         | 53,624.09         | 48,472.29         | 52,043.58*          |
| <b>Total MWh</b> |            | <b>122,006.28</b> | <b>125,899.24</b> | <b>134,391.51</b> | <b>140,274.86</b> | <b>133,309.47</b> | <b>139,537.81 *</b> |

**Note:**

\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
|-------------------|------------------|-----------------------|--------------------|---------------------------|

| Plant Type       | Plant                | 2013            | 2014            | 2015     | 2016            | 2017             | 2018              |
|------------------|----------------------|-----------------|-----------------|----------|-----------------|------------------|-------------------|
| Mini Hydro       | Lawas M/H (Kalamuku) | 3,432.32        | 3,238.58        | -        | 2,388.01        | 2,378.72         | 2,549.86*         |
| Mini Hydro       | Lawas M/H (Sg.Kota)  | 3,811.00        | 6,678.60        | -        | 4,698.30        | 8,916.80         | 8,508.60*         |
| Mini Hydro       | Sg. Kejin            | -               | -               | -        | 0.02            | -                | -                 |
| <b>Total MWh</b> |                      | <b>7,243.32</b> | <b>9,917.18</b> | <b>-</b> | <b>7,086.33</b> | <b>11,295.52</b> | <b>11,058.46*</b> |

**Note:**

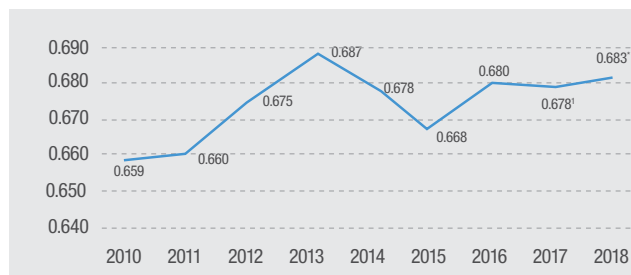
\* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.

*Data assumption:*

1. Fuel consumption, fuel Calorific Value & fuel Specific Density (for CO<sub>2</sub> emission calculations) data obtained from OpX.
2. Net Energy Generated for main grid connected power plants (using OpX data) – Request for both grid Thermal & Hydro (Batang Ai, Bakun & Murum).
3. Net Energy Generated for non-grid connected power plants (using Rural Operation data) – Request for both non grid Thermal & Mini hydro (Sg. Kejin).

|       |                         |   |     |   |
|-------|-------------------------|---|-----|---|
| 305-4 | GHG emissions intensity | Chairman's Foreword, p. 4<br>GCEO's Overview, p. 9-10<br>2018 Key Highlights, p. 7<br>Global Agenda Internalisation, p. 13 (See SDG#13)<br>Delivering Value to Our Stakeholders, p. 17<br>Accelerating Climate Action, p. 35-36, p. 38-39 | Yes | No 13 - Take urgent action to combat climate change and its Impacts<br><br>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development<br><br>No 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss |
|-------|-------------------------|---|-----|---|

**Sarawak Energy CO<sub>2</sub> Intensity for Northern Grid (2010 - 2018)**



**Notes:**

<sup>1</sup> This northern grid CO<sub>2</sub> emission intensity data has been assured by a third party for Sustainability Report 2017.

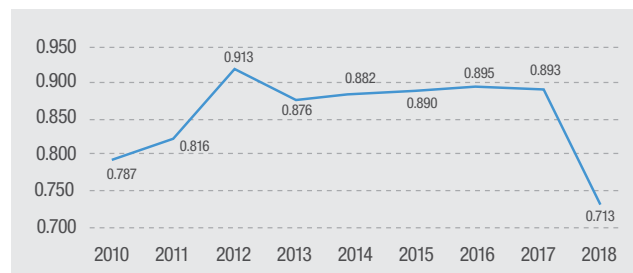
\* This northern grid CO<sub>2</sub> emission intensity data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
|-------------------|------------------|-----------------------|--------------------|---------------------------|

## Sarawak Energy CO<sub>2</sub> Intensity for Stand-alone Grids 2010 - 2018 (Whole Sarawak)



## Plants CO<sub>2</sub> Intensity (tCO<sub>2</sub>/MWh) - Main Grid

| Year | Plant (Main Grid)    | Total CO <sub>2</sub> Emission | Gross Energy Generated from Thermal | CO <sub>2</sub> Intensity (tCO <sub>2</sub> eq/MWh) |
|------|----------------------|--------------------------------|-------------------------------------|---|
| 2017 | Sejingkat Power Corp | 916,769.06                     | 727,761.85                          | 1.260   |
|      | PPLS                 | 848,625.75                     | 767,523.858                         | 1.106   |
|      | MPG                  | 1,658,355.86                   | 1,666,942.34                        | 0.995   |
|      | SPG                  | 825,960.98                     | 1,772,772.00                        | 0.466   |
|      | Bintulu SESCO        | 526,667.34                     | 621,355.60                          | 0.848   |
|      | Miri SESCO           | 533,748.96                     | 523,907.27                          | 1.019   |
|      | Sg Biawak SESCO      | 15,708.73                      | 18,255.47                           | 0.860   |
| 2018 | Sejingkat Power Corp | 854,293.99                     | 673,672.50                          | 1.268   |
|      | PPLS                 | 707,251.87                     | 675,296.00                          | 1.047   |
|      | MPG                  | 1,609,253.91                   | 1,573,521.05                        | 1.023   |
|      | SPG                  | 950,543.09                     | 2,059,519.80                        | 0.462   |
|      | Bintulu SESCO        | 545,729.43                     | 670,339.06                          | 0.814   |
|      | Miri SESCO           | 483,172.32                     | 493,843.86                          | 0.978   |
|      | Sg Biawak SESCO      | 1,151.14                       | 1,044.31                            | 1.102   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title  | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure   |
|-------------------|---|---|--------------------|---|
| 305-5             | Reduction of GHG emissions  | Global Agenda Internalisation, p. 13 (See SDG#13)<br>Accelerating Climate Action, p. 35 |                    | <p>No 13 - Take urgent action to combat climate change and its impacts</p> <p>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> <p>No 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>  |
| 305-7             | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | Accelerating Climate Action, p. 39  |                    | <p>No 3 - Ensure healthy lives and promote well-being for all at all ages</p> <p>No 12 - Ensure sustainable consumption and production patterns</p> <p>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> <p>No 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p> |

| Year | Plant (Main Grid)    | Gross Energy Generated from Thermal (kWh) | Total SOx Emission (kg) | Total NOx Emission (kg) | SOx Intensity (kgSOx/kWh) | NOx Intensity (kgNOx/kWh) |
|------|----------------------|---|-------------------------|-------------------------|---------------------------|---------------------------|
| 2017 | Sejangkat Power Corp | 727,761,852.00                            | 1,267,457.84            | 250.190                 | 1.74 x 10 <sup>-3</sup>   | 3.44 x 10 <sup>-7</sup>   |
|      | PPLS                 | 767,523,858.00                            | 763,044.42              | 225.214                 | 9.94 x 10 <sup>-4</sup>   | 2.93 x 10 <sup>-7</sup>   |
|      | MPG                  | 1,666,942,336.00                          | 1,528,744.32            | 641.900                 | 9.17 x 10 <sup>-4</sup>   | 3.85 x 10 <sup>-7</sup>   |
|      | SPG                  | 1,772,772,000.00                          | 3,299.93                | 1,841,892.013           | 1.86 x 10 <sup>-6</sup>   | 1.04 x 10 <sup>-3</sup>   |
|      | Bintulu SESCO        | 621,355,600.00                            | 152,755.93              | 858.337                 | 2.46 x 10 <sup>-4</sup>   | 1.38 x 10 <sup>-6</sup>   |
|      | Miri SESCO           | 523,907,270.00                            | 4,446.65                | 49,716.173              | 8.49 x 10 <sup>-6</sup>   | 9.49 x 10 <sup>-6</sup>   |
|      | Sg Biawak SESCO      | 18,255,470.00                             | 417.42                  | 2.540                   | 2.29 x 10 <sup>-5</sup>   | 1.39 x 10 <sup>-7</sup>   |
| 2018 | Sejangkat Power Corp | 673,672,500.00                            | 614,470.31              | 259.67                  | 9.12 x 10 <sup>-4</sup>   | 3.85 x 10 <sup>-7</sup>   |
|      | PPLS                 | 675,296,000.00                            | 479,441.87              | 234.42                  | 7.10 x 10 <sup>-4</sup>   | 3.47 x 10 <sup>-7</sup>   |
|      | MPG                  | 1,573,521,047.00                          | 495,377.29              | 402.41                  | 3.15 x 10 <sup>-4</sup>   | 2.56 x 10 <sup>-7</sup>   |
|      | SPG                  | 2,059,519,800.00                          | 35,473.30               | 1,036,442.01            | 1.72 x 10 <sup>-5</sup>   | 5.03 x 10 <sup>-4</sup>   |
|      | Bintulu SESCO        | 670,339,060.00                            | 31,551.82               | 979.77                  | 4.71 x 10 <sup>-5</sup>   | 1.46 x 10 <sup>-6</sup>   |
|      | Miri SESCO           | 493,843,860.00                            | 306.44                  | 8,190.26                | 6.21 x 10 <sup>-7</sup>   | 1.66 x 10 <sup>-6</sup>   |
|      | Sg Biawak SESCO      | 1,044,310.00                              | 0.00                    | 0.00                    | 0.00                      | 0.00                      |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number   | Disclosure Title                                   | Page/Direct Reference  | External Assurance | SDG linkage to Disclosure   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|---|--|--|--------------------|---|-----------------------------|--|--|--|--|---------------|---------------|------|------|------|-------|-----------------|------|-------|-------|--------------------|------|------|------|---------|---|------|------|-------------------|---|---|------|-----------|---|------|------|--------------|--------------|--------------|--------------|---------|-----------------|--------|--------|--------|--------------------|-------|-------|-------|---------|------|-------|------|---------|-----------|-----------|-----------|------------|-----------|-----------|-----------|----------------|------|------|-------|-------------------|------|------|------|-----------|------|---|------|--------------|-------------------|-------------------|-------------------|--------------------|--|-------------------|-------------------|-------------------|
| <b>Effluent and Waste</b>   |  |  |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| GRI 103: Management Approach 2016   |  |  |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| 103-1   | Explanation of the material topic and its Boundary | Accelerating Climate Action, p. 40   |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| 103-2   | The management approach and its components         | Accelerating Climate Action, p. 37 & 40  |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| 103-3   | Evaluation of the management approach              | Accelerating Climate Action, p. 37 & 40  |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| GRI 306: Effluents and Waste 2016   |  |  |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| 306-1   | Water discharge by quality and destination         | Global Agenda Internalisation, p. 15 (See SDG#6)<br>Delivering Value to Our Stakeholders, p. 16<br>Accelerating Climate Action, p. 35 & 37 | Yes                | No 3 - Ensure healthy lives and promote well-being for all at all ages<br><br>No 6 - Ensure availability and sustainable management of water and sanitation for all<br><br>No 12 - Ensure sustainable consumption and production patterns<br><br>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| 306-2   | Waste by type and disposal method                  | Accelerating Climate Action, p. 40   |                    | No 12 - Ensure sustainable consumption and production patterns  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| <table border="1"> <thead> <tr> <th colspan="5">Waste Quantity by Year (MT)</th></tr> <tr> <th>Type of Plant</th><th>Type of Waste</th><th>2016</th><th>2017</th><th>2018</th></tr> </thead> <tbody> <tr> <td rowspan="6">Hydro</td><td>Lubricating Oil</td><td>9.81</td><td>16.06</td><td>56.53</td></tr> <tr> <td>Contaminated Items</td><td>7.73</td><td>3.63</td><td>5.33</td></tr> <tr> <td>E-Waste</td><td>-</td><td>0.08</td><td>0.38</td></tr> <tr> <td>Contaminated Soil</td><td>-</td><td>-</td><td>0.58</td></tr> <tr> <td>Chemicals</td><td>-</td><td>0.05</td><td>0.14</td></tr> <tr> <td><b>Total</b></td><td><b>17.54</b></td><td><b>19.82</b></td><td><b>62.96</b></td></tr> <tr> <td rowspan="9">Thermal</td><td>Lubricating Oil</td><td>180.08</td><td>233.01</td><td>274.86</td></tr> <tr> <td>Contaminated Items</td><td>24.21</td><td>28.09</td><td>47.91</td></tr> <tr> <td>E-Waste</td><td>1.44</td><td>10.03</td><td>9.06</td></tr> <tr> <td>Fly Ash</td><td>63,159.42</td><td>65,152.64</td><td>46,552.92</td></tr> <tr> <td>Bottom Ash</td><td>90,614.83</td><td>92,723.06</td><td>87,253.96</td></tr> <tr> <td>Gas Condensate</td><td>2.20</td><td>8.35</td><td>15.63</td></tr> <tr> <td>Contaminated Soil</td><td>4.24</td><td>3.98</td><td>2.78</td></tr> <tr> <td>Chemicals</td><td>0.18</td><td>-</td><td>0.37</td></tr> <tr> <td><b>Total</b></td><td><b>153,986.60</b></td><td><b>158,159.16</b></td><td><b>134,157.50</b></td></tr> <tr> <td colspan="2"><b>Grand Total</b></td><td><b>154,004.14</b></td><td><b>158,178.98</b></td><td><b>134,220.45</b></td></tr> </tbody> </table> |  |  |                    |   | Waste Quantity by Year (MT) |  |  |  |  | Type of Plant | Type of Waste | 2016 | 2017 | 2018 | Hydro | Lubricating Oil | 9.81 | 16.06 | 56.53 | Contaminated Items | 7.73 | 3.63 | 5.33 | E-Waste | - | 0.08 | 0.38 | Contaminated Soil | - | - | 0.58 | Chemicals | - | 0.05 | 0.14 | <b>Total</b> | <b>17.54</b> | <b>19.82</b> | <b>62.96</b> | Thermal | Lubricating Oil | 180.08 | 233.01 | 274.86 | Contaminated Items | 24.21 | 28.09 | 47.91 | E-Waste | 1.44 | 10.03 | 9.06 | Fly Ash | 63,159.42 | 65,152.64 | 46,552.92 | Bottom Ash | 90,614.83 | 92,723.06 | 87,253.96 | Gas Condensate | 2.20 | 8.35 | 15.63 | Contaminated Soil | 4.24 | 3.98 | 2.78 | Chemicals | 0.18 | - | 0.37 | <b>Total</b> | <b>153,986.60</b> | <b>158,159.16</b> | <b>134,157.50</b> | <b>Grand Total</b> |  | <b>154,004.14</b> | <b>158,178.98</b> | <b>134,220.45</b> |
| Waste Quantity by Year (MT)   |  |  |                    |   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| Type of Plant   | Type of Waste                                      | 2016   | 2017               | 2018  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| Hydro   | Lubricating Oil                                    | 9.81   | 16.06              | 56.53   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Contaminated Items                                 | 7.73   | 3.63               | 5.33  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | E-Waste  | -  | 0.08               | 0.38  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Contaminated Soil                                  | -  | -                  | 0.58  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Chemicals  | -  | 0.05               | 0.14  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | <b>Total</b>                                       | <b>17.54</b>   | <b>19.82</b>       | <b>62.96</b>  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| Thermal   | Lubricating Oil                                    | 180.08   | 233.01             | 274.86  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Contaminated Items                                 | 24.21  | 28.09              | 47.91   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | E-Waste  | 1.44   | 10.03              | 9.06  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Fly Ash  | 63,159.42  | 65,152.64          | 46,552.92   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Bottom Ash   | 90,614.83  | 92,723.06          | 87,253.96   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Gas Condensate                                     | 2.20   | 8.35               | 15.63   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Contaminated Soil                                  | 4.24   | 3.98               | 2.78  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | Chemicals  | 0.18   | -                  | 0.37  |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
|   | <b>Total</b>                                       | <b>153,986.60</b>  | <b>158,159.16</b>  | <b>134,157.50</b>   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |
| <b>Grand Total</b>  |  | <b>154,004.14</b>  | <b>158,178.98</b>  | <b>134,220.45</b>   |                             |  |  |  |  |               |               |      |      |      |       |                 |      |       |       |                    |      |      |      |         |   |      |      |                   |   |   |      |           |   |      |      |              |              |              |              |         |                 |        |        |        |                    |       |       |       |         |      |       |      |         |           |           |           |            |           |           |           |                |      |      |       |                   |      |      |      |           |      |   |      |              |                   |                   |                   |                    |  |                   |                   |                   |



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                      | Disclosure Title                                       | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure   |
|--|--|---|--------------------|---|
| <b>Environmental Compliance</b>        |  |   |                    |   |
| GRI 103: Management Approach 2016      |  |   |                    |   |
| 103-1                                  | Explanation of the material topic and its Boundary     | Accelerating Climate Action, p. 37-38   |                    |   |
| 103-2                                  | The management approach and its components             | Accelerating Climate Action, p. 37-38   |                    |   |
| 103-3                                  | Evaluation of the management approach                  | Accelerating Climate Action, p. 40  |                    |   |
| GRI 307: Environmental Compliance 2016 |  |   |                    |   |
| 307-1                                  | Non-compliance with environmental laws and regulations | The Company was fined RM 2,000 for violating Environmental Quality (Scheduled Wastes) Regulation 2005 at Limbang Power Station on 23 <sup>rd</sup> February 2018. |                    | No 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels |
| <b>Employment</b>                      |  |   |                    |   |
| GRI 103: Management Approach 2016      |  |   |                    |   |
| 103-1                                  | Explanation of the material topic and its Boundary     | Social Inclusiveness, p. 49   |                    |   |
| 103-2                                  | The management approach and its components             | Social Inclusiveness, p. 49-51  |                    |   |
| 103-3                                  | Evaluation of the management approach                  | Social Inclusiveness, p. 49-52  |                    |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number           | Disclosure Title                         | Page/Direct Reference   | External Assurance    | SDG linkage to Disclosure |       |       |      |       |       |      |       |       |      |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
|-----------------------------|--|---|-----------------------|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|--|--|--|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|--------------|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------------|---|---|---|---|---|---|---|---|---|----|---|----|----|---|----|----------------------------|------|--|--|------|--|--|------|--|--|------|--|--|------|--|--|--|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|----|----|-----|----|----|-----|----|----|-----|----|----|-----|-----|----|-----|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----------------------------|----|---|----|----|---|----|----|----|----|----|---|----|----|----|----|-------------------|----|---|----|----|---|----|----|---|----|----|----|----|-----|---|-----|--|
| Employment                  |  |   |                       |                           |       |       |      |       |       |      |       |       |      |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| GRI 401: Employment 2016    |  |   |                       |                           |       |       |      |       |       |      |       |       |      |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| 401-1                       | New employee hires and employee turnover | <p>Global Agenda Internalisation, p. 14 (See SDG#8)</p> <p>Social Inclusiveness, p. 50</p> <p>New Hires and Turnover by Gender and Age</p> <table><tr><th>New Hires (by Gender)</th><th colspan="3">2014</th><th colspan="3">2015</th><th colspan="3">2016</th><th colspan="3">2017</th><th colspan="3">2018</th></tr><tr><th></th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th></tr><tr><td>Total number</td><td>153</td><td>85</td><td>238</td><td>172</td><td>70</td><td>242</td><td>190</td><td>68</td><td>258</td><td>278</td><td>70</td><td>348</td><td>227</td><td>77</td><td>304</td></tr><tr><td colspan="16">By age, in numbers</td></tr><tr><td>Up to 30 years old</td><td>134</td><td>66</td><td>200</td><td>145</td><td>54</td><td>199</td><td>167</td><td>56</td><td>223</td><td>244</td><td>59</td><td>303</td><td>158</td><td>58</td><td>216</td></tr><tr><td>Between 31 and 50 years old</td><td>15</td><td>19</td><td>34</td><td>27</td><td>16</td><td>43</td><td>20</td><td>12</td><td>32</td><td>20</td><td>10</td><td>30</td><td>51</td><td>17</td><td>68</td></tr><tr><td>Over 50 years old</td><td>4</td><td>0</td><td>4</td><td>0</td><td>0</td><td>0</td><td>3</td><td>0</td><td>3</td><td>14</td><td>1</td><td>15</td><td>18</td><td>2</td><td>20</td></tr></table><br><table><tr><th>Staff Turnover (by Gender)</th><th colspan="3">2014</th><th colspan="3">2015</th><th colspan="3">2016</th><th colspan="3">2017</th><th colspan="3">2018</th></tr><tr><th></th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th><th>Men</th><th>Women</th><th>TOTAL</th></tr><tr><td>Total</td><td>92</td><td>22</td><td>114</td><td>84</td><td>25</td><td>109</td><td>86</td><td>28</td><td>114</td><td>95</td><td>42</td><td>137</td><td>168</td><td>47</td><td>215</td></tr><tr><td colspan="16">By age, in numbers</td></tr><tr><td>Up to 30 years old</td><td>32</td><td>14</td><td>46</td><td>27</td><td>11</td><td>38</td><td>25</td><td>16</td><td>41</td><td>28</td><td>21</td><td>49</td><td>26</td><td>21</td><td>47</td></tr><tr><td>Between 31 and 50 years old</td><td>30</td><td>7</td><td>37</td><td>29</td><td>7</td><td>36</td><td>34</td><td>10</td><td>44</td><td>19</td><td>8</td><td>27</td><td>41</td><td>17</td><td>58</td></tr><tr><td>Over 50 years old</td><td>30</td><td>1</td><td>31</td><td>28</td><td>7</td><td>35</td><td>27</td><td>2</td><td>29</td><td>48</td><td>13</td><td>61</td><td>101</td><td>9</td><td>110</td></tr></table> | New Hires (by Gender) | 2014                      |       |       | 2015 |       |       | 2016 |       |       | 2017 |       |       | 2018 |  |  |  | Men | Women | TOTAL | Men | Women | TOTAL | Men | Women | TOTAL | Men | Women | TOTAL | Men | Women | TOTAL | Total number | 153 | 85 | 238 | 172 | 70 | 242 | 190 | 68 | 258 | 278 | 70 | 348 | 227 | 77 | 304 | By age, in numbers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Up to 30 years old | 134 | 66 | 200 | 145 | 54 | 199 | 167 | 56 | 223 | 244 | 59 | 303 | 158 | 58 | 216 | Between 31 and 50 years old | 15 | 19 | 34 | 27 | 16 | 43 | 20 | 12 | 32 | 20 | 10 | 30 | 51 | 17 | 68 | Over 50 years old | 4 | 0 | 4 | 0 | 0 | 0 | 3 | 0 | 3 | 14 | 1 | 15 | 18 | 2 | 20 | Staff Turnover (by Gender) | 2014 |  |  | 2015 |  |  | 2016 |  |  | 2017 |  |  | 2018 |  |  |  | Men | Women | TOTAL | Men | Women | TOTAL | Men | Women | TOTAL | Men | Women | TOTAL | Men | Women | TOTAL | Total | 92 | 22 | 114 | 84 | 25 | 109 | 86 | 28 | 114 | 95 | 42 | 137 | 168 | 47 | 215 | By age, in numbers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Up to 30 years old | 32 | 14 | 46 | 27 | 11 | 38 | 25 | 16 | 41 | 28 | 21 | 49 | 26 | 21 | 47 | Between 31 and 50 years old | 30 | 7 | 37 | 29 | 7 | 36 | 34 | 10 | 44 | 19 | 8 | 27 | 41 | 17 | 58 | Over 50 years old | 30 | 1 | 31 | 28 | 7 | 35 | 27 | 2 | 29 | 48 | 13 | 61 | 101 | 9 | 110 | <p>No 5 - Achieve gender equality and empower all women and girls</p> <p>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> |
| New Hires (by Gender)       | 2014                                     |   |                       | 2015                      |       |       | 2016 |       |       | 2017 |       |       | 2018 |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
|                             | Men                                      | Women   | TOTAL                 | Men                       | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Total number                | 153                                      | 85  | 238                   | 172                       | 70    | 242   | 190  | 68    | 258   | 278  | 70    | 348   | 227  | 77    | 304   |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| By age, in numbers          |  |   |                       |                           |       |       |      |       |       |      |       |       |      |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Up to 30 years old          | 134                                      | 66  | 200                   | 145                       | 54    | 199   | 167  | 56    | 223   | 244  | 59    | 303   | 158  | 58    | 216   |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Between 31 and 50 years old | 15                                       | 19  | 34                    | 27                        | 16    | 43    | 20   | 12    | 32    | 20   | 10    | 30    | 51   | 17    | 68    |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Over 50 years old           | 4  | 0   | 4                     | 0                         | 0     | 0     | 3    | 0     | 3     | 14   | 1     | 15    | 18   | 2     | 20    |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Staff Turnover (by Gender)  | 2014                                     |   |                       | 2015                      |       |       | 2016 |       |       | 2017 |       |       | 2018 |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
|                             | Men                                      | Women   | TOTAL                 | Men                       | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Total                       | 92                                       | 22  | 114                   | 84                        | 25    | 109   | 86   | 28    | 114   | 95   | 42    | 137   | 168  | 47    | 215   |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| By age, in numbers          |  |   |                       |                           |       |       |      |       |       |      |       |       |      |       |       |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Up to 30 years old          | 32                                       | 14  | 46                    | 27                        | 11    | 38    | 25   | 16    | 41    | 28   | 21    | 49    | 26   | 21    | 47    |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Between 31 and 50 years old | 30                                       | 7   | 37                    | 29                        | 7     | 36    | 34   | 10    | 44    | 19   | 8     | 27    | 41   | 17    | 58    |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |
| Over 50 years old           | 30                                       | 1   | 31                    | 28                        | 7     | 35    | 27   | 2     | 29    | 48   | 13    | 61    | 101  | 9     | 110   |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |              |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |     |    |     |     |    |     |     |    |     |     |    |     |     |    |     |                             |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |   |   |   |   |   |   |   |    |   |    |    |   |    |                            |      |  |  |      |  |  |      |  |  |      |  |  |      |  |  |  |     |       |       |     |       |       |     |       |       |     |       |       |     |       |       |       |    |    |     |    |    |     |    |    |     |    |    |     |     |    |     |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                             |    |   |    |    |   |    |    |    |    |    |   |    |    |    |    |                   |    |   |    |    |   |    |    |   |    |    |    |    |     |   |     |  |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
| <b>Employment</b> |                  |                       |                    |                           |

## New Hires and Turnover by Company

| New Hires (by Company)            | 2014 |       |       | 2015 |       |       | 2016 |       |       | 2017 |       |       | 2018 |       |       |
|-----------------------------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
|                                   | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL |
| <b>Total number</b>               | 153  | 85    | 238   | 172  | 70    | 242   | 190  | 68    | 258   | 278  | 70    | 348   | 227  | 77    | 304   |
| <b>By company, in numbers</b>     |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| <b>Sarawak Energy Berhad</b>      | 1    | 3     |       | 2    | 0     |       | 82   | 37    |       | 254  | 61    |       | 227  | 77    | 304   |
| <b>Sejingkat Power</b>            | 1    | 1     |       | 1    | 1     |       | -    | -     |       | -    | -     |       |      |       |       |
| <b>Mukah Power</b>                | 3    | 1     |       | 7    | 1     |       | -    | -     |       | -    | -     |       |      |       |       |
| <b>SESCO Headquarters</b>         | 70   | 56    |       | 93   | 51    |       | 51   | 21    |       | 1    | 4     |       |      |       |       |
| <b>SESCO Kuching</b>              | 20   | 8     |       | 10   | 5     |       | 3    | 4     |       | 10   | 1     |       |      |       |       |
| <b>SESCO Sri Aman</b>             | 5    | 0     |       | 2    | 0     |       | 1    | 0     |       | 0    | 2     |       |      |       |       |
| <b>SESCO Sarikei</b>              | 5    | 1     |       | 0    | 0     |       | 1    | 0     |       | 2    | 1     |       |      |       |       |
| <b>SESCO Sibul</b>                | 6    | 2     |       | 13   | 5     |       | 16   | 1     |       | 2    | 2     |       |      |       |       |
| <b>SESCO Bintulu</b>              | 20   | 1     |       | 18   | 2     |       | 23   | 1     |       | -    | -     |       |      |       |       |
| <b>SESCO Miri</b>                 | 22   | 12    |       | 12   | 1     |       | 8    | 3     |       | 3    | 2     |       |      |       |       |
| <b>Balingian Power Generation</b> | -    | -     |       | 14   | 4     |       | 5    | 1     |       | 1    | 2     |       |      |       |       |
| <b>Sarawak Hidro Sdn Bhd</b>      | -    | -     |       | -    | -     |       | -    | -     |       | 0    | 0     |       |      |       |       |



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|-------------------|------------------|-----------------------|--------------------|---------------------------|
| <b>Employment</b> |                  |                       |                    |                           |

| Staff Turnover (by Company)       | 2014 |       |       | 2015 |       |       | 2016 |       |       | 2017 |       |       | 2018 |       |       |
|-----------------------------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
|                                   | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL | Men  | Women | TOTAL |
| <b>Total number</b>               | 92   | 22    | 114   | 84   | 25    | 109   | 86   | 28    | 114   | 95   | 42    | 137   | 168  | 47    | 215   |
| <b>By company, in numbers</b>     |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
| <b>Sarawak Energy Berhad</b>      | 8    | 2     |       | 4    | 2     |       | 6    | 1     |       | 13   | 8     |       | 16   | 15    |       |
| <b>Sejingkat Power</b>            | 2    | 0     |       | 3    | 1     |       | 3    | 1     |       | 2    | 0     |       | 3    |       |       |
| <b>Mukah Power</b>                | 6    | 0     |       | 4    | 0     |       | 4    | 0     |       | 2    | 0     |       | 2    |       |       |
| <b>SESCO Headquarters</b>         | 32   | 10    |       | 24   | 16    |       | 37   | 17    |       | 45   | 17    |       | 52   | 8     |       |
| <b>SESCO Kuching</b>              | 13   | 3     |       | 7    | 2     |       | 13   | 3     |       | 11   | 9     |       | 18   | 2     |       |
| <b>SESCO Sri Aman</b>             | 2    | 0     |       | 0    | 0     |       | 1    | 0     |       | 0    | 0     |       | 6    |       |       |
| <b>SESCO Sarikei</b>              | 0    | 0     |       | 1    | 0     |       | 3    | 1     |       | 2    | 0     |       | 2    | 1     |       |
| <b>SESCO Sibul</b>                | 11   | 2     |       | 12   | 2     |       | 9    | 1     |       | 7    | 4     |       | 12   | 2     |       |
| <b>SESCO Bintulu</b>              | 5    | 2     |       | 13   | 1     |       | 5    | 0     |       | 4    | 0     |       | 7    | 2     |       |
| <b>SESCO Miri</b>                 | 13   | 3     |       | 16   | 1     |       | 3    | 4     |       | 8    | 4     |       | 10   | 2     |       |
| <b>Balingian Power Generation</b> | -    | -     |       | -    | -     |       | 2    | 0     |       | 1    | 0     |       | -    | -     |       |
| <b>Sarawak Hidro Sdn Bhd</b>      | -    | -     |       | -    | -     |       | -    | -     |       | 0    | 0     |       | 40   | 15    |       |

% Turnover rate 2014 = 2.74%

% Turnover rate 2015 = 2.53%

% Turnover rate 2016 = 2.55%

% Turnover rate 2017 = 2.77%

% Turnover rate 2018 = 4.28%

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| Disclosure Number      | Disclosure Title  | Page/Direct Reference | External Assurance  | SDG linkage to Disclosure  |  |
|------------------------|---|-----------------------|---|--|--|
| Employment             |   |                       |   |  |  |
| 401-2                  | Benefits provided to full-time employees that are not provided to temporary or part-time employees  |                       |   |  | No 8 - Promote inclusive and sustainable economic growth, employment and decent work for all |
|                        |   | Types of Leave        | Description   | Remarks  |  |
|                        |   | Annual                | (Executive & Management group) E1 - SG5-B = 20 days per annum<br>(Executive & Management group) E1 - SG5-B = 25 days per annum  | Service below 10 years<br>Service 10 years and above   |  |
|                        |   |                       | (Non-Executive group) NE1 – NE6 = 15 days per annum<br>(Non-Executive group) NE1 – NE6 = 16 days per annum<br>(Non-Executive group) NE1 – NE6 = 20 days per annum   | Service below 5 years<br>Service above 5 years<br>Service 10 years and above   |  |
|                        |   | Maternity             | 90 calendar days  | Limited to 5 surviving children  |  |
|                        |   | Nursing               | Maximum 90 calendar days  | Unpaid   |  |
|                        |   | Paternity             | 7 continuous calendar days  | Limited to 5 occasions   |  |
|                        |   | Hajj                  | 40 days   | Granted only once; should serve for not less than 5 continuous years   |  |
|                        |   | Unrecorded            | 30 working days per annum - maximum   | For the purpose of: <ul style="list-style-type: none"><li>Armed Forces Training</li><li>Sporting &amp; Cultural Activities</li><li>Koperasi SESCO</li><li>Examination</li><li>Deepavali – 1 day</li></ul>                                    |  |
|                        |   | Study                 | Subject to terms and conditions as determined by the Company  |  |  |
|                        |   | Compassionate         | 3 working days  | For purpose of attending the funeral of any one of the following relatives: <ul style="list-style-type: none"><li>Spouse</li><li>Children who are natural, lawfully adopted or stepchildren</li><li>Parents</li><li>Parents in-law</li></ul> |  |
|                        |   | Overtime              | Maximum of 15 working days or 120 hours per year  | For Executive group only and valid up to the current year  |  |
|                        |   | Sick                  | Non-hospitalized = 22 days<br>Hospitalized = 60 days  | Aggregate 60 days paid leave per annum   |  |
|                        |   | Prolonged Illness     | <ul style="list-style-type: none"><li>On full salary for a maximum period of 2 consecutive months</li><li>On half salary for a further period of 2 consecutive months</li><li>Unpaid prolonged illness leave for a further period of 2 consecutive months</li></ul> |  |  |
| Quarantine             | Number of days are subject to actual duration of detention granted by relevant Government authority | Paid leave            |   |  |  |
| Blood donors privilege | 1 day   |                       |   |  |  |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
| <b>Employment</b> |                  |                       |                    |                           |

## Benefits

| Type of Loan               | Entitlement (RM) | Remarks                      |
|----------------------------|------------------|------------------------------|
| Housing (Interest subsidy) | 360,000.00       | (Top management) SG1 - SG5-B |
|                            | 300,000.00       | (Managers) E5 - E8           |
|                            | 250,000.00       | (Executives) E1 - E4         |
|                            | 200,000.00       | (Non- executives) NE1 - NE6  |
| Car (Interest Subsidy)     | 170,000.00       | (Top management) SG1 - SG5-B |
|                            | 130,000.00       | (Managers) E5 - E8           |
|                            | 80,000.00        | (Executives) E1 - E4         |
|                            | 50,000.00        | (Non- executives) NE1 - NE6  |
| Motorcycle Loan            | 7,000.00         | All Staff                    |
| Computer Loan              | 3,000.00         | All Staff                    |

## House Moving Expenses Subsidy

| Salary Grade                 | Single (RM) | Married (RM) |
|------------------------------|-------------|--------------|
| (Top management) SG1 - SG5-B | 1,950.00    | 2,600.00     |
| (Managers) E5 - E8           | 1,425.00    | 1,900.00     |
| (Executives) E1 - E4         | 1,125.00    | 1,500.00     |
| (Non- executives) NE1 - NE6  | 750.00      | 1,000.00     |

## Welfare

### Natural Calamity

| Deceased Person                  | Rate (RM) |
|----------------------------------|-----------|
| Serving Employee                 | 3,000.00  |
| Spouse & Children < 21 years old | 1,000.00  |
| Parents                          | 500.00    |
| Retiree                          | 500.00    |

### Note:

As of 1<sup>st</sup> December 2018, Maternity Leave of 60 calendar days has been revised to 90 calendar days.



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                            | Disclosure Title   | Page/Direct Reference  | External Assurance | SDG linkage to Disclosure   |          |    |           |    |                         |     |                          |     |  |  |
|--|--|--|--------------------|---|----------|----|-----------|----|-------------------------|-----|--------------------------|-----|--|--|
| Occupational Health and Safety               |  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| GRI 103: Management Approach 2016            |  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 103-1  | Explanation of the material topic and its Boundary   | Social Inclusiveness, p. 53  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 103-2  | The management approach and its components   | Social Inclusiveness, p. 53-54, p. 56  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 103-3  | Evaluation of the management approach  | Social Inclusiveness, p. 55, p. 57-58  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| GRI 403: Occupational Health and Safety 2016 |  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 403-1  | Workers representation in formal joint management-worker health and safety committees  | Social Inclusiveness, p. 53<br><br>Environment & Occupational Health & Safety (EOSH) Members in 2017 & 2018: <table><tr><th>Types of Leave</th><th>Description</th></tr><tr><td>Chairman</td><td>19</td></tr><tr><td>Secretary</td><td>19</td></tr><tr><td>Employer Representative</td><td>133</td></tr><tr><td>Employees Representative</td><td>213</td></tr></table> | Types of Leave     | Description   | Chairman | 19 | Secretary | 19 | Employer Representative | 133 | Employees Representative | 213 |  | No 8 - Promote inclusive and sustainable economic growth, employment and decent work for all |
| Types of Leave                               | Description  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| Chairman                                     | 19   |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| Secretary                                    | 19   |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| Employer Representative                      | 133  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| Employees Representative                     | 213  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 403-2  | Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities | Social Inclusiveness, p. 54  |                    | No 3 - Ensure healthy lives and promote well-being for all at all ages<br><br>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all |          |    |           |    |                         |     |                          |     |  |  |
| 403-3  | Workers with high incidence or high risk of diseases related to their occupation   | Social Inclusiveness, p. 56-57 (See Reinforcing a Culture of Safety)   |                    | No 3 - Ensure healthy lives and promote well-being for all at all ages<br><br>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all |          |    |           |    |                         |     |                          |     |  |  |
| Training and Education                       |  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| GRI 103: Management Approach 2016            |  |  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 103-1  | Explanation of the material topic and its Boundary   | Social Inclusiveness, p. 51  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 103-2  | The management approach and its components   | Social Inclusiveness, p. 51  |                    |   |          |    |           |    |                         |     |                          |     |  |  |
| 103-3  | Evaluation of the management approach  | 2018 Key Highlights, p. 7<br>Global Agenda Internalisation, p. 14 (See SDG#8)<br>Social Inclusiveness, p. 47 & 52  |                    |   |          |    |           |    |                         |     |                          |     |  |  |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                     | Disclosure Title                                | Page/Direct Reference  | External Assurance | SDG linkage to Disclosure |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
|---------------------------------------|---|--|--------------------|---------------------------|--|------|--|---------------------------------------|------|--------|------|--------|------------|----|---|----|----|-----------|-----|-----|-----|-----|---------------|-------|-----|-------|-----|------|------|--|------|--|-------------------------------------|------|--------|------|--------|------------|-----|----|-----|-----|-----------|-------|-------|-------|-------|---------------|--------|-------|--------|-------|------|------|--|------|--|---------------------------------------|------|--------|------|--------|------------|------|-------|-------|-------|-----------|-------|-------|-------|-------|---------------|-------|-------|-------|-------|------|------|--|------|--|---------------------------------------|------|--------|------|--------|------------|---|---|----|----|-----------|-----|-----|-----|-----|---------------|-------|-----|-------|-----|------|------|--|------|--|-------------------------------------|------|--------|------|--------|------------|---|---|-----|-----|-----------|-------|-------|-------|-------|---------------|--------|-------|--------|-------|------|------|--|------|--|---------------------------------------|------|--------|------|--------|------------|---|---|-------|-------|-----------|-------|-------|-------|-------|---------------|-------|-------|-------|-------|--|---|
| <b>Employment</b>                     |   |  |                    |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| GRI 404: Training and Education 2016  |   |  |                    |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| 404-1                                 | Average hours of training per year per employee | <p><b>Total and Average of Hours of Training Recorded by Category and Gender (Internal Courses) for 2017 and 2018</b></p> <table> <tr> <th>Year</th><th colspan="2">2017</th><th colspan="2">2018</th></tr> <tr> <th>Total Number of Employees by Category</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th></tr> <tr> <td>Management</td><td>38</td><td>4</td><td>55</td><td>11</td></tr> <tr> <td>Executive</td><td>385</td><td>188</td><td>362</td><td>134</td></tr> <tr> <td>Non Executive</td><td>2,569</td><td>216</td><td>1,908</td><td>126</td></tr> </table><br><table> <tr> <th>Year</th><th colspan="2">2017</th><th colspan="2">2018</th></tr> <tr> <th>Total Hours of Training by Category</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th></tr> <tr> <td>Management</td><td>371</td><td>70</td><td>574</td><td>119</td></tr> <tr> <td>Executive</td><td>5,870</td><td>2,811</td><td>5,579</td><td>2,045</td></tr> <tr> <td>Non Executive</td><td>36,855</td><td>2,730</td><td>26,916</td><td>1,420</td></tr> </table><br><table> <tr> <th>Year</th><th colspan="2">2017</th><th colspan="2">2018</th></tr> <tr> <th>Average Hours of Training by Category</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th></tr> <tr> <td>Management</td><td>9.76</td><td>17.50</td><td>10.44</td><td>10.82</td></tr> <tr> <td>Executive</td><td>15.25</td><td>14.95</td><td>15.41</td><td>15.26</td></tr> <tr> <td>Non Executive</td><td>14.35</td><td>12.64</td><td>14.11</td><td>11.27</td></tr> </table><br><p><b>Total Hours of Training Recorded by Category and Gender (In-House Courses) for 2017 and 2018</b></p> <table> <tr> <th>Year</th><th colspan="2">2017</th><th colspan="2">2018</th></tr> <tr> <th>Total Number of Employees by Category</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th></tr> <tr> <td>Management</td><td>-</td><td>-</td><td>41</td><td>14</td></tr> <tr> <td>Executive</td><td>528</td><td>259</td><td>569</td><td>283</td></tr> <tr> <td>Non Executive</td><td>1,406</td><td>202</td><td>2,632</td><td>285</td></tr> </table><br><table> <tr> <th>Year</th><th colspan="2">2017</th><th colspan="2">2018</th></tr> <tr> <th>Total Hours of Training by Category</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th></tr> <tr> <td>Management</td><td>-</td><td>-</td><td>441</td><td>294</td></tr> <tr> <td>Executive</td><td>8,531</td><td>3,920</td><td>7,119</td><td>3,157</td></tr> <tr> <td>Non Executive</td><td>22,845</td><td>2,893</td><td>35,622</td><td>3,046</td></tr> </table><br><table> <tr> <th>Year</th><th colspan="2">2017</th><th colspan="2">2018</th></tr> <tr> <th>Average Hours of Training by Category</th><th>Male</th><th>Female</th><th>Male</th><th>Female</th></tr> <tr> <td>Management</td><td>-</td><td>-</td><td>10.76</td><td>21.00</td></tr> <tr> <td>Executive</td><td>16.16</td><td>15.14</td><td>12.51</td><td>11.16</td></tr> <tr> <td>Non Executive</td><td>16.25</td><td>14.32</td><td>13.53</td><td>10.69</td></tr> </table> | Year               | 2017                      |  | 2018 |  | Total Number of Employees by Category | Male | Female | Male | Female | Management | 38 | 4 | 55 | 11 | Executive | 385 | 188 | 362 | 134 | Non Executive | 2,569 | 216 | 1,908 | 126 | Year | 2017 |  | 2018 |  | Total Hours of Training by Category | Male | Female | Male | Female | Management | 371 | 70 | 574 | 119 | Executive | 5,870 | 2,811 | 5,579 | 2,045 | Non Executive | 36,855 | 2,730 | 26,916 | 1,420 | Year | 2017 |  | 2018 |  | Average Hours of Training by Category | Male | Female | Male | Female | Management | 9.76 | 17.50 | 10.44 | 10.82 | Executive | 15.25 | 14.95 | 15.41 | 15.26 | Non Executive | 14.35 | 12.64 | 14.11 | 11.27 | Year | 2017 |  | 2018 |  | Total Number of Employees by Category | Male | Female | Male | Female | Management | - | - | 41 | 14 | Executive | 528 | 259 | 569 | 283 | Non Executive | 1,406 | 202 | 2,632 | 285 | Year | 2017 |  | 2018 |  | Total Hours of Training by Category | Male | Female | Male | Female | Management | - | - | 441 | 294 | Executive | 8,531 | 3,920 | 7,119 | 3,157 | Non Executive | 22,845 | 2,893 | 35,622 | 3,046 | Year | 2017 |  | 2018 |  | Average Hours of Training by Category | Male | Female | Male | Female | Management | - | - | 10.76 | 21.00 | Executive | 16.16 | 15.14 | 12.51 | 11.16 | Non Executive | 16.25 | 14.32 | 13.53 | 10.69 |  | <p>No 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</p> <p>No 5 - Achieve gender equality and empower all women and girls</p> <p>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> |
| Year                                  | 2017  |  | 2018               |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Total Number of Employees by Category | Male  | Female   | Male               | Female                    |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Management                            | 38  | 4  | 55                 | 11                        |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Executive                             | 385   | 188  | 362                | 134                       |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Non Executive                         | 2,569   | 216  | 1,908              | 126                       |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Year                                  | 2017  |  | 2018               |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Total Hours of Training by Category   | Male  | Female   | Male               | Female                    |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Management                            | 371   | 70   | 574                | 119                       |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Executive                             | 5,870   | 2,811  | 5,579              | 2,045                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Non Executive                         | 36,855  | 2,730  | 26,916             | 1,420                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Year                                  | 2017  |  | 2018               |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Average Hours of Training by Category | Male  | Female   | Male               | Female                    |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Management                            | 9.76  | 17.50  | 10.44              | 10.82                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Executive                             | 15.25   | 14.95  | 15.41              | 15.26                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Non Executive                         | 14.35   | 12.64  | 14.11              | 11.27                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Year                                  | 2017  |  | 2018               |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Total Number of Employees by Category | Male  | Female   | Male               | Female                    |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Management                            | -   | -  | 41                 | 14                        |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Executive                             | 528   | 259  | 569                | 283                       |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Non Executive                         | 1,406   | 202  | 2,632              | 285                       |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Year                                  | 2017  |  | 2018               |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Total Hours of Training by Category   | Male  | Female   | Male               | Female                    |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Management                            | -   | -  | 441                | 294                       |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Executive                             | 8,531   | 3,920  | 7,119              | 3,157                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Non Executive                         | 22,845  | 2,893  | 35,622             | 3,046                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Year                                  | 2017  |  | 2018               |                           |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Average Hours of Training by Category | Male  | Female   | Male               | Female                    |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Management                            | -   | -  | 10.76              | 21.00                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Executive                             | 16.16   | 15.14  | 12.51              | 11.16                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |
| Non Executive                         | 16.25   | 14.32  | 13.53              | 10.69                     |  |      |  |                                       |      |        |      |        |            |    |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |     |    |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |      |       |       |       |           |       |       |       |       |               |       |       |       |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |    |    |           |     |     |     |     |               |       |     |       |     |      |      |  |      |  |                                     |      |        |      |        |            |   |   |     |     |           |       |       |       |       |               |        |       |        |       |      |      |  |      |  |                                       |      |        |      |        |            |   |   |       |       |           |       |       |       |       |               |       |       |       |       |  |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------|------------------|-----------------------|--------------------|---------------------------|
| <b>Employment</b> |                  |                       |                    |                           |

## Total Hours of Training Recorded by Category and Gender (External Courses) for 2017 and 2018

| Year                                  | 2017 |        | 2018 |        |
|---------------------------------------|------|--------|------|--------|
| Total Number of Employees by Category | Male | Female | Male | Female |
| Management                            | 120  | 55     | 77   | 32     |
| Executive                             | 444  | 286    | 330  | 263    |
| Non Executive                         | 197  | 229    | 227  | 223    |

| Year                                | 2017  |        | 2018  |        |
|-------------------------------------|-------|--------|-------|--------|
| Total Hours of Training by Category | Male  | Female | Male  | Female |
| Management                          | 302   | 108    | 1,463 | 427    |
| Executive                           | 1,091 | 1,024  | 5,775 | 4,039  |
| Non Executive                       | 575   | 442    | 3,493 | 3,031  |

| Year                                  | 2017 |        | 2018  |        |
|---------------------------------------|------|--------|-------|--------|
| Average Hours of Training by Category | Male | Female | Male  | Female |
| Management                            | 2.52 | 1.96   | 19.00 | 13.34  |
| Executive                             | 2.46 | 3.58   | 17.50 | 15.36  |
| Non Executive                         | 2.92 | 1.93   | 15.39 | 13.59  |

## Total Hours of Training Recorded by Category and Gender (Leadership Courses) for 2017 and 2018

| Year                                  | 2017 |        | 2018 |        |
|---------------------------------------|------|--------|------|--------|
| Total Number of Employees by Category | Male | Female | Male | Female |
| Management                            | -    | 5      | 158  | 89     |
| Executive                             | 256  | 198    | 109  | 89     |
| Non Executive                         | 252  | 58     | 15   | 9      |

| Year                                | 2017  |        | 2018  |        |
|-------------------------------------|-------|--------|-------|--------|
| Total Hours of Training by Category | Male  | Female | Male  | Female |
| Management                          | -     | 105    | 3,129 | 1,547  |
| Executive                           | 3,548 | 2,759  | 2,135 | 1,624  |
| Non Executive                       | 3,528 | 812    | 210   | 126    |

| Year                                  | 2017  |        | 2018  |        |
|---------------------------------------|-------|--------|-------|--------|
| Average Hours of Training by Category | Male  | Female | Male  | Female |
| Management                            | -     | 21.00  | 19.80 | 17.38  |
| Executive                             | 13.86 | 13.93  | 19.59 | 18.25  |
| Non Executive                         | 14.00 | 14.00  | 14.00 | 14.00  |

404-2      Programs for upgrading employee skills and transition assistance programs      Social Inclusiveness, p. 51

No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                         | Disclosure Title   | Page/Direct Reference  | External Assurance | SDG linkage to Disclosure   |
|---|--|--|--------------------|---|
| <b>Employment</b>                         |  |  |                    |   |
| 404-3                                     | Percentage of employees receiving regular performance and career development reviews | 100%   |                    | No 5 - Achieve gender equality and empower all women and girls<br><br>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all |
| <b>Indigenous Rights</b>                  |  |  |                    |   |
| GRI 103: Management Approach 2016         |  |  |                    |   |
| 103-1                                     | Explanation of the material topic and its Boundary                                   | Social Inclusiveness, p. 57  |                    |   |
| 103-2                                     | The management approach and its components   | Social Inclusiveness, p. 57-62   |                    |   |
| 103-3                                     | Evaluation of the management approach  | Social Inclusiveness, p. 57-62   |                    |   |
| GRI 411: Rights of Indigenous People 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. |                    | No 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture   |
| <b>Local Communities</b>                  |  |  |                    |   |
| GRI 103: Management Approach 2016         |  |  |                    |   |
| 103-1                                     | Explanation of the material topic and its Boundary                                   | Social Inclusiveness, p. 58, p. 62-63  |                    |   |
| 103-2                                     | The management approach and its components   | Social Inclusiveness, p. 58 & 62   |                    |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                 | Disclosure Title   | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure   |
|-----------------------------------|--|---|--------------------|---|
| <b>Local Communities</b>          |  |   |                    |   |
| 103-3                             | Evaluation of the management approach  | Social Inclusiveness, p. 58-63  |                    |   |
| 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. |                    | No 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels |
| <b>Customer Privacy</b>           |  |   |                    |   |
| GRI 103: Management Approach 2016 |  |   |                    |   |
| 103-1                             | Explanation of the material topic and its Boundary                                       | Foundation to Low Carbon Economy, p. 33   |                    |   |
| 103-2                             | The management approach and its components   | Foundation to Low Carbon Economy, p. 33   |                    |   |
| 103-3                             | Evaluation of the management approach  | Foundation to Low Carbon Economy, p. 33   |                    |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

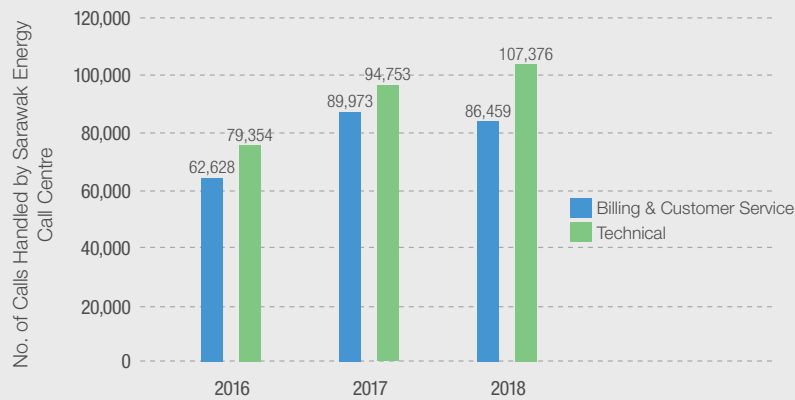
| Disclosure Number       | Disclosure Title | Page/Direct Reference | External Assurance | SDG linkage to Disclosure |
|-------------------------|------------------|-----------------------|--------------------|---------------------------|
| <b>Customer Privacy</b> |                  |                       |                    |                           |

## GRI 418: Customer Privacy 2016

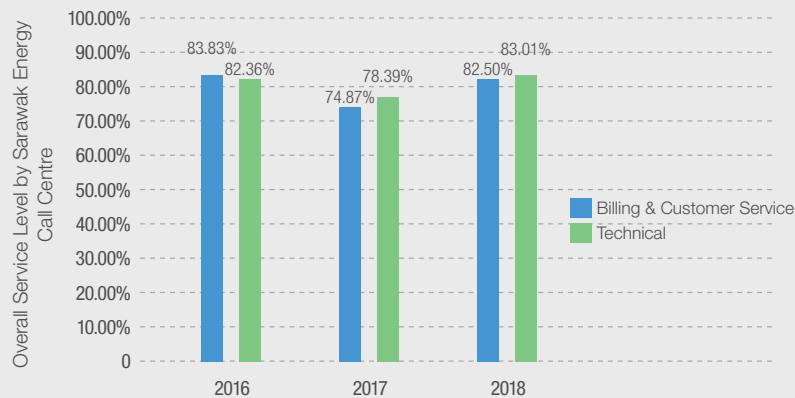
|       |  |  |  |  |
|-------|--|--|--|--|
| 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | <p>There were no substantiated complaints regarding breaches of customer privacy and losses of customer data in 2018.</p> <p><b>Number of Calls Handled by Sarawak Energy Call Centre and Overall Service Level by Sarawak Energy Call Centre</b></p> <p>At Customer Care Centre, we aim to give our customers the optimal services that they may feel valued and fairly treated. In line with that, our executives are trained to handle both billing and technical enquiries that meet the various needs of our customers.</p> <p>In terms of billing, we offer assistance to customers that covers new applications, billing and meter related issues and general enquiries. Similarly, we also attend to technical enquiries such as outages, faulty street lights and other technical issues.</p> |  |  |
|-------|--|--|--|--|

No 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

**Customer Service - No. of Calls Handled by Sarawak Energy Call Centre 2016 - 2018**



**Customer Service - Overall Service Level by Sarawak Energy Call Centre 2016 - 2018**





# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                            | Disclosure Title  | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure   |
|--|---|---|--------------------|---|
| <b>Socioeconomic Compliance</b>              |   |   |                    |   |
| GRI 103: Management Approach 2016            |   |   |                    |   |
| 103-1  | Explanation of the material topic and its Boundary                                | Delivering Value to Our Customers, p. 17  |                    |   |
| 103-2  | The management approach and its components  | Social Inclusiveness, p. 61   |                    |   |
| 103-3  | Evaluation of the management approach   | Social Inclusiveness, p. 61   |                    |   |
| GRI 419: Socioeconomic Compliance 2016       |   |   |                    |   |
| 419-1  | Non-compliance with laws and regulations in the social and economic area          | <p>During the year under review, Sarawak Energy did not incur any fines for non-compliance with:</p> <ul style="list-style-type: none"> <li>i. Products and services on information and labeling</li> <li>ii. Marketing communications including advertising, promotions and sponsorships</li> </ul> <p>However, on 9<sup>th</sup> January 2018, SESCO was fined RM25,000 at the Sessions Court Sri Aman by the Department of Safety and Health under Section 15 of the Occupational Safety and Health Act 1994. The fine was due to a fatality incident which occurred during maintenance work in Betong, involving an employee of SESCO's contractor in 2016.</p> |                    | No 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels |
| <b>ELECTRIC UTILITIES SECTOR DISCLOSURES</b> |   |   |                    |   |
| <b>Organizational Profile</b>                |   |   |                    |   |
| GRI 103: Management Approach 2016            |   |   |                    |   |
| 103-1  | Explanation of the material topic and its Boundary                                | Organisational Profile, p. 3  |                    |   |
| 103-2  | The management approach and its components  | Organisational Profile, p. 3<br>Foundation to Low Carbon Economy, p. 29   |                    |   |
| 103-3  | Evaluation of the management approach   | Organisational Profile, p. 3<br>Chairman's Foreword, p. 5<br>Foundation to Low Carbon Economy, p. 28 & 29   |                    |   |
| G4 Sector Disclosure: Organizational Profile |   |   |                    |   |
| EU1  | Installed Capacity, Broken Down by Primary Energy Source and by Regulatory Regime | Foundation to Low Carbon Economy, p. 28   |                    | No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                                       | Disclosure Title  | Page/Direct Reference   | External Assurance                                      | SDG linkage to Disclosure       |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|---|---|---|---|---------------------------------|--|------|------|--------------|--------|----------------------------------|------------------------------------|---------------------------------|------|---------------|--------|--------|---------|------|-----------|----|-----------|------------|------|-----------|----|----------|-----------|-------------|-----|---------|--------|---------|------|-------------------------|-----|--------|---------|------|-----------------|----|--------|---------|------|------------------------------|----|----------|-----------|------------|----|----|---|----|------|-----------------------|--------|--------|---------|----------|------------------------|-------|--------|---------|----------|--------------------|--------|----------|-----------|---------------|----|----|---|----|----------|--------------------|-----|-------|--------|-------------------------------|--|----------------|------------------|------------------|-----|---|
| EU2   | Net Energy Output Broken Down by Primary Energy Source and by Regulatory Regime   | Foundation to Low Carbon Economy, p. 29 <table border="1"> <thead> <tr> <th colspan="3">Major Grid Generation by Plants (GWh), by Energy Source</th><th>2017</th><th>2018</th></tr> </thead> <tbody> <tr> <td colspan="5"><b>Hydro</b></td></tr> <tr> <td></td><td>Batang Ai HEP</td><td></td><td>442.32</td><td>480.59*</td></tr> <tr> <td></td><td>Bakun HEP</td><td></td><td>13,078.27</td><td>14,351.89*</td></tr> <tr> <td></td><td>Murum HEP</td><td></td><td>5,717.39</td><td>6,053.06*</td></tr> <tr> <td colspan="5"><b>Coal</b></td></tr> <tr> <td></td><td>Sejangkat Power (SPC 1)</td><td></td><td>684.11</td><td>593.49*</td></tr> <tr> <td></td><td>PPLS-PG (SPC 2)</td><td></td><td>673.69</td><td>614.13*</td></tr> <tr> <td></td><td>Mukah Power Generation (MPG)</td><td></td><td>1,494.40</td><td>1,401.96*</td></tr> <tr> <td colspan="5"><b>Gas</b></td></tr> <tr> <td></td><td>Miri Pujut Open Cycle</td><td></td><td>516.56</td><td>487.51*</td></tr> <tr> <td></td><td>Bintulu 1-5 Open Cycle</td><td></td><td>614.31</td><td>661.31*</td></tr> <tr> <td></td><td>SPG Combined Cycle</td><td></td><td>1,738.20</td><td>2,023.03*</td></tr> <tr> <td colspan="5"><b>Diesel</b></td></tr> <tr> <td></td><td>Blawak Power Plant</td><td></td><td>16.18</td><td>-0.57*</td></tr> <tr> <td colspan="3"><b>TOTAL ENERGY GENERATED</b></td><td><b>24,975.43</b></td><td><b>26,666.4*</b></td></tr> </tbody> </table> <p><b>Note:</b><br/>* This net energy generated data has been assured by a third party. Read the Independent Assurance Report on pages 68 - 69.</p> | Major Grid Generation by Plants (GWh), by Energy Source |                                 |  | 2017 | 2018 | <b>Hydro</b> |        |                                  |                                    |                                 |      | Batang Ai HEP |        | 442.32 | 480.59* |      | Bakun HEP |    | 13,078.27 | 14,351.89* |      | Murum HEP |    | 5,717.39 | 6,053.06* | <b>Coal</b> |     |         |        |         |      | Sejangkat Power (SPC 1) |     | 684.11 | 593.49* |      | PPLS-PG (SPC 2) |    | 673.69 | 614.13* |      | Mukah Power Generation (MPG) |    | 1,494.40 | 1,401.96* | <b>Gas</b> |    |    |   |    |      | Miri Pujut Open Cycle |        | 516.56 | 487.51* |          | Bintulu 1-5 Open Cycle |       | 614.31 | 661.31* |          | SPG Combined Cycle |        | 1,738.20 | 2,023.03* | <b>Diesel</b> |    |    |   |    |          | Blawak Power Plant |     | 16.18 | -0.57* | <b>TOTAL ENERGY GENERATED</b> |  |                | <b>24,975.43</b> | <b>26,666.4*</b> | Yes | No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all<br><br>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development |
| Major Grid Generation by Plants (GWh), by Energy Source |   |   | 2017  | 2018                            |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| <b>Hydro</b>  |   |   |   |                                 |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Batang Ai HEP   |   | 442.32  | 480.59*                         |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Bakun HEP   |   | 13,078.27   | 14,351.89*                      |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Murum HEP   |   | 5,717.39  | 6,053.06*                       |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| <b>Coal</b>   |   |   |   |                                 |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Sejangkat Power (SPC 1)   |   | 684.11  | 593.49*                         |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | PPLS-PG (SPC 2)   |   | 673.69  | 614.13*                         |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Mukah Power Generation (MPG)  |   | 1,494.40  | 1,401.96*                       |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| <b>Gas</b>  |   |   |   |                                 |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Miri Pujut Open Cycle   |   | 516.56  | 487.51*                         |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Bintulu 1-5 Open Cycle  |   | 614.31  | 661.31*                         |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | SPG Combined Cycle  |   | 1,738.20  | 2,023.03*                       |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| <b>Diesel</b>   |   |   |   |                                 |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
|   | Blawak Power Plant  |   | 16.18   | -0.57*                          |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| <b>TOTAL ENERGY GENERATED</b>                           |   |   | <b>24,975.43</b>  | <b>26,666.4*</b>                |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| EU3   | Number of Residential, Industrial, Institutional and Commercial Customer Accounts | Organisational Profile, p. 3 <table border="1"> <thead> <tr> <th colspan="5">Grid / Non Grid No. of Customers Ending 2018</th></tr> <tr> <th>Grid</th><th>Tariff</th><th>No. of Active Customers' Account</th><th>No. of Inactive Customers' Account</th><th>Total No. of Customers' Account</th></tr> </thead> <tbody> <tr> <td>Grid</td><td>C1</td><td>92,615</td><td>6,496</td><td>99,111</td></tr> <tr> <td>Grid</td><td>C2</td><td>21</td><td>1</td><td>22</td></tr> <tr> <td>Grid</td><td>C3</td><td>37</td><td>1</td><td>38</td></tr> <tr> <td>Grid</td><td>DOM</td><td>552,067</td><td>22,759</td><td>574,826</td></tr> <tr> <td>Grid</td><td>I1</td><td>902</td><td>28</td><td>930</td></tr> <tr> <td>Grid</td><td>I2</td><td>41</td><td>3</td><td>44</td></tr> <tr> <td>Grid</td><td>I3</td><td>90</td><td>3</td><td>93</td></tr> <tr> <td>Grid</td><td>I4</td><td>12</td><td>0</td><td>12</td></tr> <tr> <td>Grid</td><td>PL</td><td>10,242</td><td>254</td><td>10,496</td></tr> <tr> <td>Non Grid</td><td>C1</td><td>3,746</td><td>230</td><td>3,976</td></tr> <tr> <td>Non Grid</td><td>DOM</td><td>16,645</td><td>1,024</td><td>17,669</td></tr> <tr> <td>Non Grid</td><td>I1</td><td>22</td><td>0</td><td>22</td></tr> <tr> <td>Non Grid</td><td>PL</td><td>249</td><td>3</td><td>252</td></tr> <tr> <td colspan="2"><b>GRAND TOTAL</b></td><td><b>676,689</b></td><td><b>30,802</b></td><td><b>707,491</b></td></tr> </tbody> </table>  | Grid / Non Grid No. of Customers Ending 2018            |                                 |  |      |      | Grid         | Tariff | No. of Active Customers' Account | No. of Inactive Customers' Account | Total No. of Customers' Account | Grid | C1            | 92,615 | 6,496  | 99,111  | Grid | C2        | 21 | 1         | 22         | Grid | C3        | 37 | 1        | 38        | Grid        | DOM | 552,067 | 22,759 | 574,826 | Grid | I1                      | 902 | 28     | 930     | Grid | I2              | 41 | 3      | 44      | Grid | I3                           | 90 | 3        | 93        | Grid       | I4 | 12 | 0 | 12 | Grid | PL                    | 10,242 | 254    | 10,496  | Non Grid | C1                     | 3,746 | 230    | 3,976   | Non Grid | DOM                | 16,645 | 1,024    | 17,669    | Non Grid      | I1 | 22 | 0 | 22 | Non Grid | PL                 | 249 | 3     | 252    | <b>GRAND TOTAL</b>            |  | <b>676,689</b> | <b>30,802</b>    | <b>707,491</b>   |     |   |
| Grid / Non Grid No. of Customers Ending 2018            |   |   |   |                                 |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | Tariff  | No. of Active Customers' Account  | No. of Inactive Customers' Account                      | Total No. of Customers' Account |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | C1  | 92,615  | 6,496   | 99,111                          |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | C2  | 21  | 1   | 22                              |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | C3  | 37  | 1   | 38                              |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | DOM   | 552,067   | 22,759  | 574,826                         |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | I1  | 902   | 28  | 930                             |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | I2  | 41  | 3   | 44                              |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | I3  | 90  | 3   | 93                              |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | I4  | 12  | 0   | 12                              |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Grid  | PL  | 10,242  | 254   | 10,496                          |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Non Grid  | C1  | 3,746   | 230   | 3,976                           |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Non Grid  | DOM   | 16,645  | 1,024   | 17,669                          |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Non Grid  | I1  | 22  | 0   | 22                              |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| Non Grid  | PL  | 249   | 3   | 252                             |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |
| <b>GRAND TOTAL</b>                                      |   | <b>676,689</b>  | <b>30,802</b>   | <b>707,491</b>                  |  |      |      |              |        |                                  |                                    |                                 |      |               |        |        |         |      |           |    |           |            |      |           |    |          |           |             |     |         |        |         |      |                         |     |        |         |      |                 |    |        |         |      |                              |    |          |           |            |    |    |   |    |      |                       |        |        |         |          |                        |       |        |         |          |                    |        |          |           |               |    |    |   |    |          |                    |     |       |        |                               |  |                |                  |                  |     |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number         | Disclosure Title   | Page/Direct Reference   | External Assurance        | SDG linkage to Disclosure |                   |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
|---------------------------|--|---|---------------------------|---------------------------|-------------------|----------|--|--|--|--------|-------------------|--|-------------------|--|-------------------|--|----------|----------|----------|----------|----------|----------|------------|------|-------|-------|-------|-------|-------|-------------|-------|------|-------|------|-------|------|------------|------|-------|------|------|-------|------|----------|-------|-------|------|-------|-------|------|------------|-------|------|------|------|-------|------|---------|------|-------|------|------|-------|-------|------------|------|------|------|------|------|------|-------|--------|-------|--------|-------|--------|-------|---------------------------|--|--|--|--|--|--------------------------|--|-------|-------|-------|--|--|---------------|---|--|-------|---|-------|------------------|---|--|---|-----|-----|------------|---|-------|--|-----|-------|---|
| EU4                       | Length of Above and Underground Transmission and Distribution Lines by Regulatory Regime | <div>Organisational Profile, p. 3</div> <div><div>Distribution Lines</div><table><thead><tr><th colspan="7">Newly Constructed in 2018</th></tr><tr><th rowspan="2">Region</th><th colspan="2">33kV Distribution</th><th colspan="2">11kV Distribution</th><th colspan="2">415V Distribution</th></tr><tr><th>O/H (km)</th><th>U/G (km)</th><th>O/H (km)</th><th>U/G (km)</th><th>O/H (km)</th><th>U/G (km)</th></tr></thead><tbody><tr><td>WR Kuching</td><td>0.00</td><td>31.66</td><td>12.89</td><td>35.39</td><td>38.75</td><td>39.16</td></tr><tr><td>WR Sri Aman</td><td>61.44</td><td>4.25</td><td>76.83</td><td>4.41</td><td>27.36</td><td>3.72</td></tr><tr><td>CR Sarikei</td><td>0.00</td><td>11.28</td><td>3.05</td><td>5.24</td><td>18.03</td><td>2.71</td></tr><tr><td>CR Sibul</td><td>26.29</td><td>12.32</td><td>2.10</td><td>17.21</td><td>18.00</td><td>8.92</td></tr><tr><td>NR Bintulu</td><td>26.50</td><td>8.36</td><td>0.00</td><td>6.36</td><td>29.22</td><td>7.84</td></tr><tr><td>NR Miri</td><td>0.00</td><td>10.50</td><td>3.60</td><td>5.88</td><td>87.77</td><td>18.16</td></tr><tr><td>NR Limbang</td><td>0.00</td><td>0.00</td><td>8.04</td><td>0.00</td><td>0.72</td><td>0.00</td></tr><tr><td>TOTAL</td><td>114.23</td><td>78.37</td><td>106.51</td><td>74.49</td><td>219.85</td><td>80.51</td></tr></tbody></table><div><div>Transmission Lines</div><table><thead><tr><th colspan="5">Newly Constructed in 2018</th></tr><tr><th rowspan="2"></th><th colspan="2">500kV energized at 275kV</th><th rowspan="2">275kV</th><th rowspan="2">132kV</th><th rowspan="2">Total</th></tr><tr><th colspan="2"></th></tr></thead><tbody><tr><td>Overhead (km)</td><td>-</td><td></td><td>36.16</td><td>-</td><td>36.16</td></tr><tr><td>Underground (km)</td><td>-</td><td></td><td>-</td><td>1.1</td><td>1.1</td></tr><tr><td>TOTAL (KM)</td><td>-</td><td>36.16</td><td></td><td>1.1</td><td>37.26</td></tr></tbody></table></div></div> | Newly Constructed in 2018 |                           |                   |          |  |  |  | Region | 33kV Distribution |  | 11kV Distribution |  | 415V Distribution |  | O/H (km) | U/G (km) | O/H (km) | U/G (km) | O/H (km) | U/G (km) | WR Kuching | 0.00 | 31.66 | 12.89 | 35.39 | 38.75 | 39.16 | WR Sri Aman | 61.44 | 4.25 | 76.83 | 4.41 | 27.36 | 3.72 | CR Sarikei | 0.00 | 11.28 | 3.05 | 5.24 | 18.03 | 2.71 | CR Sibul | 26.29 | 12.32 | 2.10 | 17.21 | 18.00 | 8.92 | NR Bintulu | 26.50 | 8.36 | 0.00 | 6.36 | 29.22 | 7.84 | NR Miri | 0.00 | 10.50 | 3.60 | 5.88 | 87.77 | 18.16 | NR Limbang | 0.00 | 0.00 | 8.04 | 0.00 | 0.72 | 0.00 | TOTAL | 114.23 | 78.37 | 106.51 | 74.49 | 219.85 | 80.51 | Newly Constructed in 2018 |  |  |  |  |  | 500kV energized at 275kV |  | 275kV | 132kV | Total |  |  | Overhead (km) | - |  | 36.16 | - | 36.16 | Underground (km) | - |  | - | 1.1 | 1.1 | TOTAL (KM) | - | 36.16 |  | 1.1 | 37.26 | No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all |
| Newly Constructed in 2018 |  |   |                           |                           |                   |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| Region                    | 33kV Distribution  |   | 11kV Distribution         |                           | 415V Distribution |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
|                           | O/H (km)   | U/G (km)  | O/H (km)                  | U/G (km)                  | O/H (km)          | U/G (km) |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| WR Kuching                | 0.00   | 31.66   | 12.89                     | 35.39                     | 38.75             | 39.16    |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| WR Sri Aman               | 61.44  | 4.25  | 76.83                     | 4.41                      | 27.36             | 3.72     |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| CR Sarikei                | 0.00   | 11.28   | 3.05                      | 5.24                      | 18.03             | 2.71     |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| CR Sibul                  | 26.29  | 12.32   | 2.10                      | 17.21                     | 18.00             | 8.92     |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| NR Bintulu                | 26.50  | 8.36  | 0.00                      | 6.36                      | 29.22             | 7.84     |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| NR Miri                   | 0.00   | 10.50   | 3.60                      | 5.88                      | 87.77             | 18.16    |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| NR Limbang                | 0.00   | 0.00  | 8.04                      | 0.00                      | 0.72              | 0.00     |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| TOTAL                     | 114.23   | 78.37   | 106.51                    | 74.49                     | 219.85            | 80.51    |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| Newly Constructed in 2018 |  |   |                           |                           |                   |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
|                           | 500kV energized at 275kV   |   | 275kV                     | 132kV                     | Total             |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
|                           |  |   |                           |                           |                   |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| Overhead (km)             | -  |   | 36.16                     | -                         | 36.16             |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| Underground (km)          | -  |   | -                         | 1.1                       | 1.1               |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |
| TOTAL (KM)                | -  | 36.16   |                           | 1.1                       | 37.26             |          |  |  |  |        |                   |  |                   |  |                   |  |          |          |          |          |          |          |            |      |       |       |       |       |       |             |       |      |       |      |       |      |            |      |       |      |      |       |      |          |       |       |      |       |       |      |            |       |      |      |      |       |      |         |      |       |      |      |       |       |            |      |      |      |      |      |      |       |        |       |        |       |        |       |                           |  |  |  |  |  |                          |  |       |       |       |  |  |               |   |  |       |   |       |                  |   |  |   |     |     |            |   |       |  |     |       |   |



# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number                                | Disclosure Title   | Page/Direct Reference   | External Assurance | SDG linkage to Disclosure   |
|--|--|---|--------------------|---|
| <b>Availability and Reliability</b>              |  |   |                    |   |
| GRI 103: Management Approach 2016                |  |   |                    |   |
| 103-1  | Explanation of the material topic and its Boundary   | Foundation to Low Carbon Economy, p. 29   |                    |   |
| 103-2  | The management approach and its components   | Foundation to Low Carbon Economy, p. 25, p. 29-30   |                    |   |
| 103-3  | Evaluation of the management approach  | Foundation to Low Carbon Economy, p. 29 & 33  |                    |   |
| G4 Sector Disclosure: Availability & Reliability |  |   |                    |   |
| EU10   | Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime | Foundation to Low Carbon Economy, p. 27 (See Operational Performance) & p. 29 (See Sustaining Our Customers' Access to Low Carbon Energy) |                    | No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all |
| <b>System Efficiency</b>                         |  |   |                    |   |
| GRI 103: Management Approach 2016                |  |   |                    |   |
| 103-1  | Explanation of the material topic and its Boundary   | Foundation to Low Carbon Economy, p. 29   |                    |   |
| 103-2  | The management approach and its components   | Foundation to Low Carbon Economy, p. 29   |                    |   |
| 103-3  | Evaluation of the management approach  | Foundation to Low Carbon Economy, p. 30-31  |                    |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number  | Disclosure Title  | Page/Direct Reference   | External Assurance   | SDG linkage to Disclosure                                    |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
|--|---|---|--|--|--|--|--|------|----------------------|-------|-------|-------|------|------|-------|-------|-------|------|-----|-------|-------|-------|------------------------------|-----|-------|-------|-------|--------------------------|---------------|-------|-------|-------|--------------------------|------------|-------|-------|-------|------------------|-----------------|-------|-------|-------|-------------------|---------------|-------|-------|-------|-------------------|-------------|-------|-------|-------|--|--|
| G4 Sector Disclosure: System Efficiency  |   |   |  |  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| EU11   | Average generation efficiency of thermal plants by energy source and by regulatory regime | Foundation to Low Carbon Economy, p.29-31<br><br><b>Average generation efficiency (%) of thermal plants by energy source</b><br><table> <tr> <th>Plant Type</th><th>Major Plant</th><th>Total Average Energy Efficiency<sup>1</sup> (%) – Year 2016</th><th>Total Average Energy Efficiency<sup>1</sup> (%) – Year 2017</th><th>Total Average Energy Efficiency<sup>1</sup> (%) – Year 2018</th></tr> <tr> <td>Coal</td><td>Sejingtak Power Corp</td><td>28.60</td><td>26.42</td><td>26.39</td></tr> <tr> <td>Coal</td><td>PPLS</td><td>33.52</td><td>30.19</td><td>31.80</td></tr> <tr> <td>Coal</td><td>MPG</td><td>31.68</td><td>33.49</td><td>32.70</td></tr> <tr> <td>Combined Cycle - Natural Gas</td><td>SPG</td><td>40.90</td><td>38.22</td><td>38.59</td></tr> <tr> <td>Open Cycle - Natural Gas</td><td>Bintulu SESCO</td><td>17.95</td><td>20.94</td><td>21.70</td></tr> <tr> <td>Open Cycle - Natural Gas</td><td>Miri SESCO</td><td>20.81</td><td>20.89</td><td>21.89</td></tr> <tr> <td>Diesel - Standby</td><td>Sg Biawak SESCO</td><td>31.68</td><td>31.19</td><td>24.05</td></tr> <tr> <td>Diesel - Non Grid</td><td>Limbang SESCO</td><td>35.50</td><td>37.08</td><td>34.88</td></tr> <tr> <td>Diesel - Non Grid</td><td>Lawas SESCO</td><td>35.30</td><td>36.30</td><td>34.69</td></tr> </table> | Plant Type   | Major Plant  | Total Average Energy Efficiency <sup>1</sup> (%) – Year 2016 | Total Average Energy Efficiency <sup>1</sup> (%) – Year 2017 | Total Average Energy Efficiency <sup>1</sup> (%) – Year 2018 | Coal | Sejingtak Power Corp | 28.60 | 26.42 | 26.39 | Coal | PPLS | 33.52 | 30.19 | 31.80 | Coal | MPG | 31.68 | 33.49 | 32.70 | Combined Cycle - Natural Gas | SPG | 40.90 | 38.22 | 38.59 | Open Cycle - Natural Gas | Bintulu SESCO | 17.95 | 20.94 | 21.70 | Open Cycle - Natural Gas | Miri SESCO | 20.81 | 20.89 | 21.89 | Diesel - Standby | Sg Biawak SESCO | 31.68 | 31.19 | 24.05 | Diesel - Non Grid | Limbang SESCO | 35.50 | 37.08 | 34.88 | Diesel - Non Grid | Lawas SESCO | 35.30 | 36.30 | 34.69 |  | <p>No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <p>No 12 - Ensure sustainable consumption and production patterns</p> <p>No 13 - Take urgent action to combat climate change and its impacts</p> <p>No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> |
| Plant Type   | Major Plant   | Total Average Energy Efficiency <sup>1</sup> (%) – Year 2016  | Total Average Energy Efficiency <sup>1</sup> (%) – Year 2017 | Total Average Energy Efficiency <sup>1</sup> (%) – Year 2018 |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Coal   | Sejingtak Power Corp  | 28.60   | 26.42  | 26.39  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Coal   | PPLS  | 33.52   | 30.19  | 31.80  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Coal   | MPG   | 31.68   | 33.49  | 32.70  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Combined Cycle - Natural Gas   | SPG   | 40.90   | 38.22  | 38.59  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Open Cycle - Natural Gas   | Bintulu SESCO   | 17.95   | 20.94  | 21.70  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Open Cycle - Natural Gas   | Miri SESCO  | 20.81   | 20.89  | 21.89  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Diesel - Standby   | Sg Biawak SESCO   | 31.68   | 31.19  | 24.05  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Diesel - Non Grid  | Limbang SESCO   | 35.50   | 37.08  | 34.88  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| Diesel - Non Grid  | Lawas SESCO   | 35.30   | 36.30  | 34.69  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |
| <b>Note:</b><br><sup>1</sup> Total average energy efficiency for Sarawak Energy thermal power plants connected to Main and Northern grids. |   |   |  |  |  |  |  |      |                      |       |       |       |      |      |       |       |       |      |     |       |       |       |                              |     |       |       |       |                          |               |       |       |       |                          |            |       |       |       |                  |                 |       |       |       |                   |               |       |       |       |                   |             |       |       |       |  |  |

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|-------------------|------------------|-----------------------|--------------------|---------------------------|
|-------------------|------------------|-----------------------|--------------------|---------------------------|

G4 Sector Disclosure: System Efficiency

EU12 Transmission and distribution losses as a percentage of total energy

Global Agenda Internalisation, p. 13 (See SDG#7)  
Foundation to Low Carbon Economy, p. 30 (See Minimising Interruptions to Our Service) & p. 31

## Total Number of Transmission Tripping and Tripping Intensity at Transmission (Year 2014 – 2018)

Total Distance of Distribution and Transmission lines:

| Total Distance                                | 2014             | 2015             | 2016             | 2017             | 2018             |
|---|------------------|------------------|------------------|------------------|------------------|
| <b>Distribution - 33kV, 11kV, 415kV (km)</b>  | 30,483.11        | 31,719.87        | 32,802.64        | 34,421.06        | 35,095.00        |
| <b>Transmission – 132kV, 275kV 500kV (km)</b> | 1,607.80         | 1,678.65         | 1,743.90         | 2,187.59         | 2,224.85         |
| <b>TOTAL</b>                                  | <b>32,090.91</b> | <b>33,398.52</b> | <b>34,546.54</b> | <b>36,608.65</b> | <b>37,321.15</b> |

Total Number of Transmission Tripping and Tripping Intensity at Transmission:

| Total Distance                                       | Year         | 2014      | 2015      | 2016      | 2017      | 2018      |
|--|--------------|-----------|-----------|-----------|-----------|-----------|
| <b>Number of Transmission Tripping</b>               | Substation   | 52        | 44        | 56        | 21        | 22        |
|  | Transmission | 22        | 38        | 20        | 56        | 58        |
|  | <b>TOTAL</b> | <b>74</b> | <b>82</b> | <b>76</b> | <b>77</b> | <b>80</b> |
| <b>Transmission Tripping Intensity (Tripping/km)</b> |              | 0.046     | 0.049     | 0.044     | 0.035     | 0.036     |

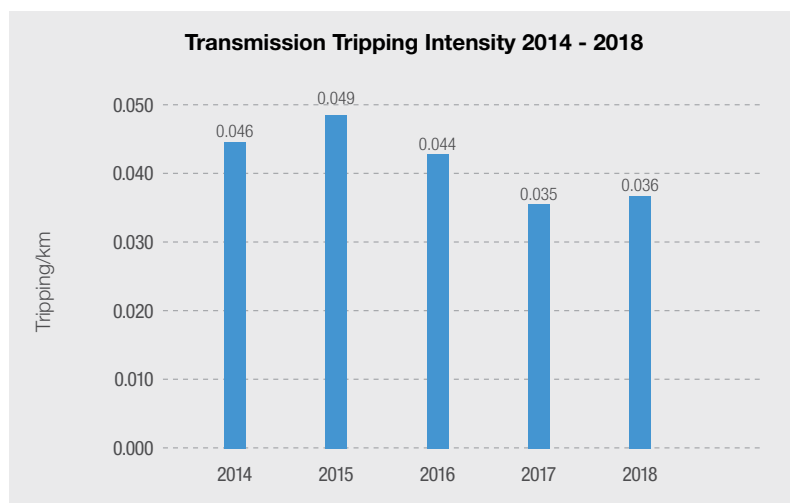
No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all

No 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

No 12 - Ensure sustainable consumption and production patterns

No 13 - Take urgent action to combat climate change and its impacts

No 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development





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| Disclosure Number                         | Disclosure Title   | Page/Direct Reference  | External Assurance       | SDG linkage to Disclosure   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
|---|--|--|--------------------------|---|--|--|------|------|------|------|---|--------|-------|-------|-------------------|-------|-----|-----|-------|-----|-------|-------|-------|--------|-------|-------|--|---|
| Access                                    |  |  |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| GRI 103: Management Approach 2016         |  |  |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| 103-1                                     | Explanation of the material topic and its Boundary   | Social Inclusiveness, p. 63  |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| 103-2                                     | The management approach and its components   | Social Inclusiveness, p. 63-65   |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| 103-3                                     | Evaluation of the management approach  | Delivering Value to Our Stakeholders, p. 17<br>Social Inclusiveness, p. 63-65  |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| G4 Sector Disclosure: Access              |  |  |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| EU26                                      | Percentage of population unserved in licensed distribution or service areas  | Chairman's Foreword, p. 6<br>Global Agenda Internalisation, p. 13 (See SDG#7)<br>Delivering Value to Our Stakeholders, p. 17<br>Social Inclusiveness, p. 63-65<br>• State electricity coverage – 96%<br>• Rural electricity coverage – 90.8% (115,219 of rural households electrified in 2018)<br><table><tr><th colspan="4">NEW HOUSEHOLDS CONNECTED</th></tr><tr><th>YEAR</th><th>2016</th><th>2017</th><th>2018</th></tr><tr><td>Normal Rural Electrification Scheme (RES)</td><td>12,697</td><td>5,409</td><td>3,990</td></tr><tr><td>Hybrid Programmes</td><td>1,224</td><td>966</td><td>270</td></tr><tr><td>SARES</td><td>719</td><td>1,124</td><td>1,448</td></tr><tr><td>TOTAL</td><td>14,640</td><td>7,499</td><td>5,748</td></tr></table> | NEW HOUSEHOLDS CONNECTED |   |  |  | YEAR | 2016 | 2017 | 2018 | Normal Rural Electrification Scheme (RES) | 12,697 | 5,409 | 3,990 | Hybrid Programmes | 1,224 | 966 | 270 | SARES | 719 | 1,124 | 1,448 | TOTAL | 14,640 | 7,499 | 5,748 |  | No 1 - End poverty in all its forms Everywhere<br><br>No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all |
| NEW HOUSEHOLDS CONNECTED                  |  |  |                          |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| YEAR                                      | 2016   | 2017   | 2018                     |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| Normal Rural Electrification Scheme (RES) | 12,697   | 5,409  | 3,990                    |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| Hybrid Programmes                         | 1,224  | 966  | 270                      |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| SARES                                     | 719  | 1,124  | 1,448                    |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| TOTAL                                     | 14,640   | 7,499  | 5,748                    |   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| EU27                                      | Number of residential disconnections for non-payments, broken down by duration of disconnection and by regulatory regime | Foundation to Low Carbon Economy, p. 32  |                          | No 1 - End poverty in all its forms Everywhere<br><br>No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| EU28                                      | Power outage frequency   | Foundation to Low Carbon Economy, p. 30  |                          | No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all   |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |
| EU29                                      | Average power outage duration  | 2018 Key Highlights, p. 7<br>Global Agenda Internalisation, p. 13 (See SDG#7)<br>Foundation to Low Carbon Economy, p. 23, 30 & 32  |                          | No 1 - End poverty in all its forms Everywhere<br><br>No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all |  |  |      |      |      |      |   |        |       |       |                   |       |     |     |       |     |       |       |       |        |       |       |  |   |

# GRI CONTENT INDEX FOR 'IN ACCORDANCE' - CORE

| Disclosure Number            | Disclosure Title  | Page/Direct Reference  | External Assurance    | SDG linkage to Disclosure   |                       |                             |                       |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
|------------------------------|---|--|-----------------------|-----------------------------|-----------------------|-----------------------------|-----------------------|--|-----------|--|-----------------------------|-----------------------|-----------------------------|-----------------------|-----------------------------|-----------------------|------|----------------------|--------------------|--------|-------|-------|-------|--------|------|------|--------------------|--------|-------|--------|-------|--------|------|-----|--------------------|--------|-------|--------|-------|--------|------------------------------|-----|--------------------|--------|-------|----------|-------|-------|--------------------------|---------------|--------------------|--------|-------|--------|-------|--------|--------------------------|------------|--------------------|--------|-------|----------|-------|--------|------------------|-----------------|--------------------|--------|-------|--------|-------|----------|-------------------|---------------|-------|-----------|-------|--------|-------|----------|-------------------|-------------|--------------------|-------|-------|-------|-------|------|------------|-------------|-----------|--|-----------|--|-----------|--|------------------|-----------------------|------------------|-----------------------|------------------|-----------------------|-------|---------------|--------------------|--------|-------|-------|-------|------|-------|-----------|--------------------|------|-------|-------|-------|--------|-------|-----------|---|---|-------|----------|-------|-------|--|
| EU30                         | Average plant availability factor by energy source and by regulatory regime | <p>Global Agenda Internalisation, p. 13 (See SDG#7)</p> <p>Foundation to Low Carbon Economy, p. 29 &amp; 33</p> <p><b>Average plant equivalent availability factor (%) and Forced Outage (Hours) by energy source (Thermal Power Plants)</b></p> <table><tr><th rowspan="2">Plant Type</th><th rowspan="2">Major Plant</th><th colspan="2">Year 2016</th><th colspan="2">Year 2017</th><th colspan="2">Year 2018</th></tr><tr><th>Equivalent Availability (%)</th><th>Forced Outage (Hours)</th><th>Equivalent Availability (%)</th><th>Forced Outage (Hours)</th><th>Equivalent Availability (%)</th><th>Forced Outage (Hours)</th></tr><tr><td>Coal</td><td>Sejingkat Power Corp</td><td>88.00<sup>1</sup></td><td>398.86</td><td>85.91</td><td>62.01</td><td>88.45</td><td>340.77</td></tr><tr><td>Coal</td><td>PPLS</td><td>90.85<sup>1</sup></td><td>194.75</td><td>90.48</td><td>217.80</td><td>88.63</td><td>433.95</td></tr><tr><td>Coal</td><td>MPG</td><td>70.14<sup>1</sup></td><td>881.14</td><td>80.63</td><td>784.57</td><td>79.33</td><td>547.42</td></tr><tr><td>Combined Cycle - Natural Gas</td><td>SPG</td><td>82.53<sup>1</sup></td><td>678.08</td><td>71.88</td><td>1,050.09</td><td>88.61</td><td>87.63</td></tr><tr><td>Open Cycle - Natural Gas</td><td>Bintulu SESCO</td><td>85.22<sup>1</sup></td><td>582.48</td><td>87.58</td><td>963.93</td><td>91.17</td><td>196.93</td></tr><tr><td>Open Cycle - Natural Gas</td><td>Miri SESCO</td><td>80.97<sup>1</sup></td><td>486.39</td><td>75.47</td><td>1,365.65</td><td>77.96</td><td>712.03</td></tr><tr><td>Diesel - Standby</td><td>Sg Biawak SESCO</td><td>98.05<sup>1</sup></td><td>228.46</td><td>92.24</td><td>992.93</td><td>87.12</td><td>4,106.30</td></tr><tr><td>Diesel - Non Grid</td><td>Limbang SESCO</td><td>87.60</td><td>11,143.50</td><td>97.87</td><td>145.50</td><td>95.08</td><td>1,336.00</td></tr><tr><td>Diesel - Non Grid</td><td>Lawas SESCO</td><td>55.38<sup>1</sup></td><td>97.00</td><td>72.30</td><td>29.00</td><td>76.26</td><td>0.00</td></tr></table> <p><b>Average plant availability factor (%) and Forced Outage (Hours) by energy source (Hydro Power Plants)</b></p> <table><tr><th rowspan="2">Plant Type</th><th rowspan="2">Major Plant</th><th colspan="2">Year 2016</th><th colspan="2">Year 2017</th><th colspan="2">Year 2018</th></tr><tr><th>Availability (%)</th><th>Forced Outage (Hours)</th><th>Availability (%)</th><th>Forced Outage (Hours)</th><th>Availability (%)</th><th>Forced Outage (Hours)</th></tr><tr><td>Hydro</td><td>Batang Ai HEP</td><td>92.54<sup>1</sup></td><td>147.19</td><td>94.80</td><td>35.97</td><td>92.10</td><td>3.90</td></tr><tr><td>Hydro</td><td>Murum HEP</td><td>96.33<sup>1</sup></td><td>0.00</td><td>95.19</td><td>48.24</td><td>96.08</td><td>170.94</td></tr><tr><td>Hydro</td><td>Bakun HEP</td><td>-</td><td>-</td><td>93.56</td><td>1,662.82</td><td>92.23</td><td>23.37</td></tr></table> | Plant Type            | Major Plant                 | Year 2016             |                             | Year 2017             |  | Year 2018 |  | Equivalent Availability (%) | Forced Outage (Hours) | Equivalent Availability (%) | Forced Outage (Hours) | Equivalent Availability (%) | Forced Outage (Hours) | Coal | Sejingkat Power Corp | 88.00 <sup>1</sup> | 398.86 | 85.91 | 62.01 | 88.45 | 340.77 | Coal | PPLS | 90.85 <sup>1</sup> | 194.75 | 90.48 | 217.80 | 88.63 | 433.95 | Coal | MPG | 70.14 <sup>1</sup> | 881.14 | 80.63 | 784.57 | 79.33 | 547.42 | Combined Cycle - Natural Gas | SPG | 82.53 <sup>1</sup> | 678.08 | 71.88 | 1,050.09 | 88.61 | 87.63 | Open Cycle - Natural Gas | Bintulu SESCO | 85.22 <sup>1</sup> | 582.48 | 87.58 | 963.93 | 91.17 | 196.93 | Open Cycle - Natural Gas | Miri SESCO | 80.97 <sup>1</sup> | 486.39 | 75.47 | 1,365.65 | 77.96 | 712.03 | Diesel - Standby | Sg Biawak SESCO | 98.05 <sup>1</sup> | 228.46 | 92.24 | 992.93 | 87.12 | 4,106.30 | Diesel - Non Grid | Limbang SESCO | 87.60 | 11,143.50 | 97.87 | 145.50 | 95.08 | 1,336.00 | Diesel - Non Grid | Lawas SESCO | 55.38 <sup>1</sup> | 97.00 | 72.30 | 29.00 | 76.26 | 0.00 | Plant Type | Major Plant | Year 2016 |  | Year 2017 |  | Year 2018 |  | Availability (%) | Forced Outage (Hours) | Availability (%) | Forced Outage (Hours) | Availability (%) | Forced Outage (Hours) | Hydro | Batang Ai HEP | 92.54 <sup>1</sup> | 147.19 | 94.80 | 35.97 | 92.10 | 3.90 | Hydro | Murum HEP | 96.33 <sup>1</sup> | 0.00 | 95.19 | 48.24 | 96.08 | 170.94 | Hydro | Bakun HEP | - | - | 93.56 | 1,662.82 | 92.23 | 23.37 | <p>No 1 - End poverty in all its forms everywhere</p> <p>No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all</p> |
| Plant Type                   | Major Plant   | Year 2016  |                       |                             | Year 2017             |                             | Year 2018             |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
|                              |   | Equivalent Availability (%)  | Forced Outage (Hours) | Equivalent Availability (%) | Forced Outage (Hours) | Equivalent Availability (%) | Forced Outage (Hours) |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Coal                         | Sejingkat Power Corp  | 88.00 <sup>1</sup>   | 398.86                | 85.91                       | 62.01                 | 88.45                       | 340.77                |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Coal                         | PPLS  | 90.85 <sup>1</sup>   | 194.75                | 90.48                       | 217.80                | 88.63                       | 433.95                |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Coal                         | MPG   | 70.14 <sup>1</sup>   | 881.14                | 80.63                       | 784.57                | 79.33                       | 547.42                |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Combined Cycle - Natural Gas | SPG   | 82.53 <sup>1</sup>   | 678.08                | 71.88                       | 1,050.09              | 88.61                       | 87.63                 |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Open Cycle - Natural Gas     | Bintulu SESCO   | 85.22 <sup>1</sup>   | 582.48                | 87.58                       | 963.93                | 91.17                       | 196.93                |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Open Cycle - Natural Gas     | Miri SESCO  | 80.97 <sup>1</sup>   | 486.39                | 75.47                       | 1,365.65              | 77.96                       | 712.03                |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Diesel - Standby             | Sg Biawak SESCO   | 98.05 <sup>1</sup>   | 228.46                | 92.24                       | 992.93                | 87.12                       | 4,106.30              |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Diesel - Non Grid            | Limbang SESCO   | 87.60  | 11,143.50             | 97.87                       | 145.50                | 95.08                       | 1,336.00              |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Diesel - Non Grid            | Lawas SESCO   | 55.38 <sup>1</sup>   | 97.00                 | 72.30                       | 29.00                 | 76.26                       | 0.00                  |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Plant Type                   | Major Plant   | Year 2016  |                       | Year 2017                   |                       | Year 2018                   |                       |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
|                              |   | Availability (%)   | Forced Outage (Hours) | Availability (%)            | Forced Outage (Hours) | Availability (%)            | Forced Outage (Hours) |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Hydro                        | Batang Ai HEP   | 92.54 <sup>1</sup>   | 147.19                | 94.80                       | 35.97                 | 92.10                       | 3.90                  |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Hydro                        | Murum HEP   | 96.33 <sup>1</sup>   | 0.00                  | 95.19                       | 48.24                 | 96.08                       | 170.94                |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |
| Hydro                        | Bakun HEP   | -  | -                     | 93.56                       | 1,662.82              | 92.23                       | 23.37                 |  |           |  |                             |                       |                             |                       |                             |                       |      |                      |                    |        |       |       |       |        |      |      |                    |        |       |        |       |        |      |     |                    |        |       |        |       |        |                              |     |                    |        |       |          |       |       |                          |               |                    |        |       |        |       |        |                          |            |                    |        |       |          |       |        |                  |                 |                    |        |       |        |       |          |                   |               |       |           |       |        |       |          |                   |             |                    |       |       |       |       |      |            |             |           |  |           |  |           |  |                  |                       |                  |                       |                  |                       |       |               |                    |        |       |       |       |      |       |           |                    |      |       |       |       |        |       |           |   |   |       |          |       |       |  |

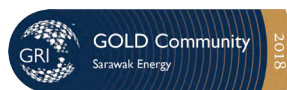
**Notes:**

- <sup>1</sup> This equivalent availability factor (thermal and hydro power plants) data has been assured by a third party for Sustainability Report 2016.
- Sarawak Energy Hydro operation is using Availability Factor (AF).

| Disclosure Number                            | Disclosure Title   | Page/Direct Reference  | External Assurance  | SDG linkage to Disclosure   |  |
|--|--|--|---|---|--|
| Research & Development                       |  |  |   |   |  |
| GRI 103: Management Approach 2016            |  |  |   |   |  |
| 103-1  | Explanation of the material topic and its Boundary   | Foundation to Low Carbon Economy, p. 45                                      |   |   |  |
| 103-2  | The management approach and its components   | Foundation to Low Carbon Economy, p. 45                                      |   |   |  |
| 103-3  | Evaluation of the management approach  | Foundation to Low Carbon Economy, p. 45                                      |   |   |  |
| G4 Sector Disclosure: Research & Development |  |  |   |   |  |
| (Former EU8)                                 | Research and development activity and expenditure aimed at providing reliability electricity and promoting sustainable development | Foundation to Low Carbon Economy, p. 45 (See under Research and Development) |   | No 7 - Ensure access to affordable, reliable, sustainable and modern energy for all |  |
|  |  | Research and Development Projects for 2018                                   |   |   | No 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation<br><br>No 17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development |
|  |  | No.  | Name of Project 2018  | Approved Budget (RM)  |  |
|  |  | 1.   | PLS-180084 (Transformer Oil & Lubricating Oil Laboratory-Instruments, Equipment & Facilities) | 500,000.00  |  |
|  |  | 2.   | PLS-160156 (Remote Monitoring System)   | 100,000.00  |  |
|  |  | 3.   | PLS-180082 (REN Electrical & Mechanical Tools 2018)   | 17,000.00   |  |
|  |  | 4.   | PLS-160192 (Rural Solar Hybrid Monitoring – Leonics)  | 100,000.00  |  |
|  |  | 5.   | PLS-160210 (Lightning Monitoring System)  | 2,000,000.00  |  |
|  |  | 6.   | PLS-150002 (Purchase of Equipment for Weather Monitor)  | 183,000.00  |  |
|  |  | 7.   | PLS-180080 (Balingian Raw Water Monitoring)   | 175,000.00  |  |
| 8.   | PLS-180083 (Laboratory Information Management System (LIMS) Software)  | 980,000.00   |   |   |  |







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Menara Sarawak Energy,  
No. 1, The Isthmus,  
93050 Kuching,  
Sarawak, Malaysia.