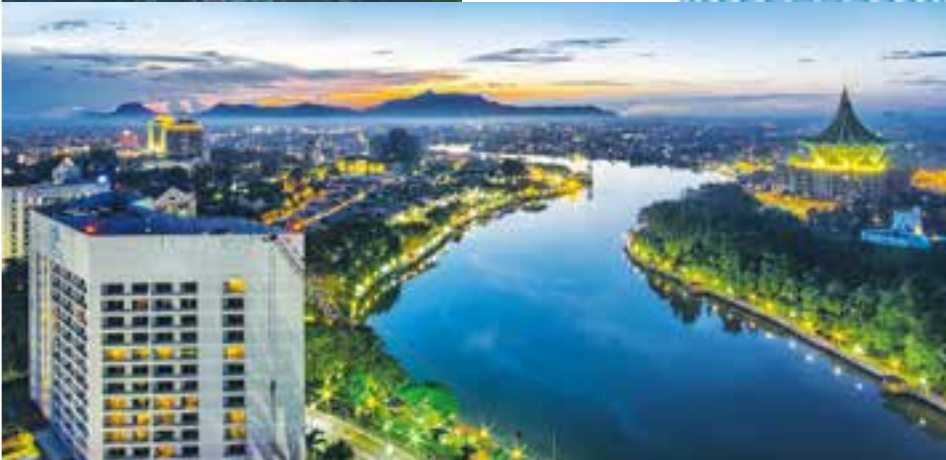


# CATALYST FOR CHANGE

## Delivering

Sustainable Energy  
Empowering Growth





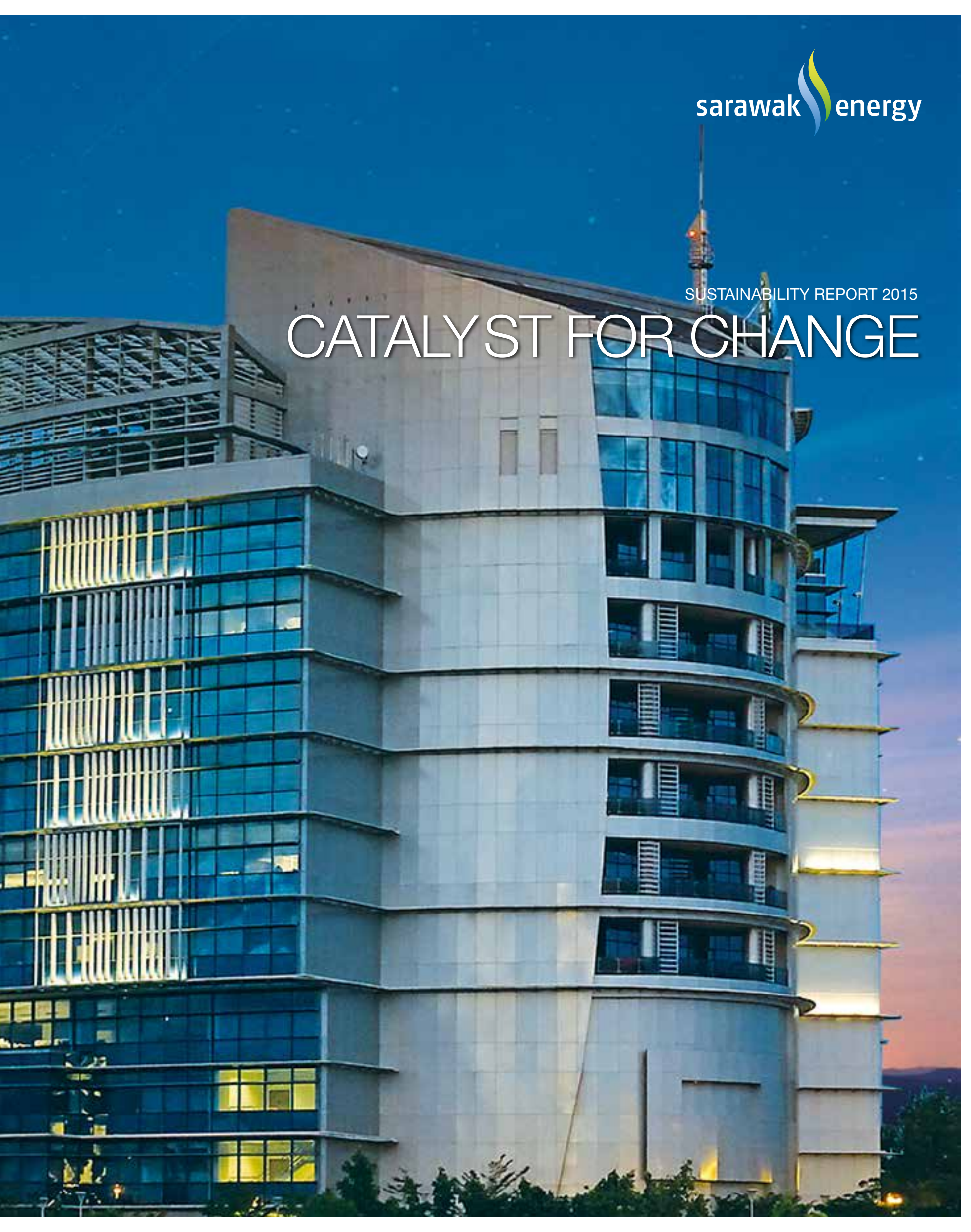
*Menara Sarawak Energy is the first office building in East Malaysia to be certified as a green building and awarded a GBI Silver Rating in July 2013.*





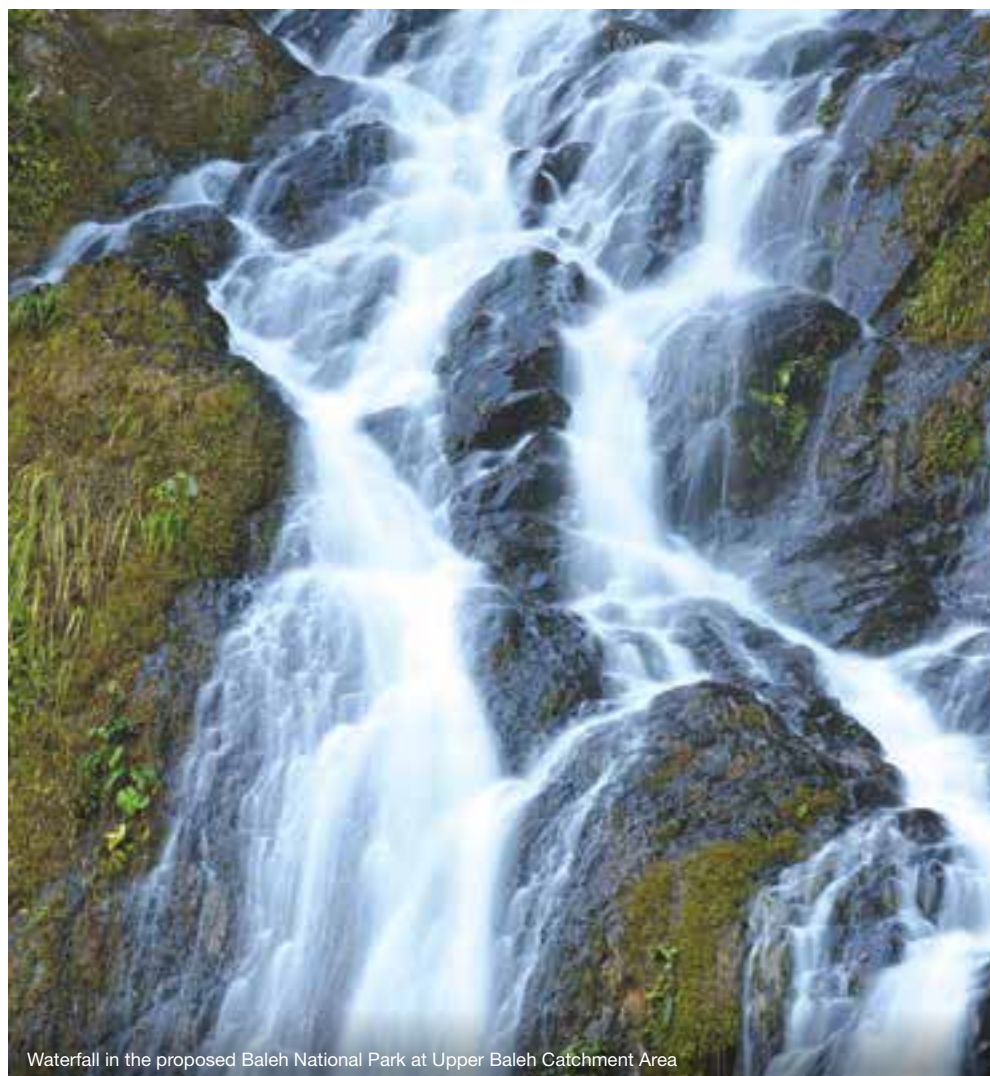
SUSTAINABILITY REPORT 2015

# CATALYST FOR CHANGE





# INSIDE THIS REPORT



Waterfall in the proposed Baleh National Park at Upper Baleh Catchment Area

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## CATALYST FOR CHANGE

"Catalyst for Change" is the theme for our Sustainability Report this year. The cover page of the report projects the Kuching cityscape and the State of Sarawak's verdant lands beyond it, anchored by an image of Sarawak Energy's headquarters located on the Isthmus of Sarawak River. This illustrates not only our physical location at the heart of the State's activities, but also our contribution as a catalyst of change for the economy, environment and community of Sarawak – depicting not just what is, but what could be as we strive to create a better future for all Sarawakians.



Sarawak Energy is a Global GRI GOLD community member.



## 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.



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

# ABOUT THIS REPORT

## SCOPE OF THE REPORT

Our Sustainability Report 2015 details our business activities and strategies, our contributions to Sarawak's development and our impact on the economy, environment and society as we strive to build a sustainable business.

We have written this report in accordance with the Global Reporting Initiative (GRI) G4 guidelines, describing our approach towards sustainability and the sustainable practices we have undertaken during the reporting period. The report covers our entire operations in Sarawak, including our subsidiaries.

Unless otherwise stated, data for this report relates to the 2015 calendar year. This is the second year we are publishing our Sustainability Report and we intend to continue doing so on an annual basis.

## STAKEHOLDER INCLUSIVENESS AND MATERIALITY

This report was developed based on inputs from our stakeholders which we collected through a range of engagement activities over the course of the reporting period. Content included in this report was selected following a materiality analysis which identified and prioritised topics which significantly impact our business and stakeholders.

In doing so, we examined all potential material topics, including those specifically impacting our sector. These were derived based on sources including the UN Sustainable Development Goals and the GRI. We also conducted an internal stakeholder survey to gain an understanding of the topics material to them. These topics were then validated and prioritised based on inputs from senior management and a stakeholder engagement workshop and analysed according to their relevance and impact on Sarawak Energy's business and stakeholders. This resulted in a list of 34 topics.

The 34 topics were subsequently approved by the Executive Management Committee in the context of sustainability drivers, stakeholder interests and business strategy. This yielded nine top priority sustainability topics, which have guided the development of our sustainability strategy and contributed to our understanding of stakeholder concerns.

## FEEDBACK

Our Sustainability Report aims to encourage dialogue between our Company and our stakeholders, especially the customers, suppliers and employees who are vital to our operations. We welcome your feedback, queries and suggestions on any aspect of our sustainability impacts and performance.

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

## ORGANISATION PROFILE

### ABOUT SARAWAK ENERGY

We are an integrated energy utility providing generation, transmission and distribution of electricity for the State of Sarawak mainly through hydropower development. In addition, Sarawak Energy also exports its electricity to Bengkayang substation in Kalimantan, Indonesia through the 275kV Sarawak-West Kalimantan interconnection transmission line. As a wholly-owned entity of the Sarawak State Government, it is our responsibility to contribute to the State's sustainable development agenda and strengthen the sustainability of its economic prosperity through the production of clean, sustainable, renewable and affordable energy which enables economic activities that enriches the lives of Sarawakians. For nearly 100 years, we have been proud to play a crucial role in supporting the businesses of our commercial and industrial customers and the homes of our domestic customers.

We believe this effort will drive the sustainability not only of our business, but also of the Sarawak economy as a whole, as we focus on utilising local resources to power other economic activities, generate employment and contribute to the socio-economic development of Sarawakians.

## OUR VISION

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

## OUR MISSION

- Pursue opportunities for growth by fully developing the Sarawak Government's SCORE agenda
- Ensure our own safety and the safety of others with a commitment to do "no harm to anyone at any time"
- Provide a reliable supply of clean, competitively priced energy to support the economic and social development of Sarawak and our partners in the region
- Operate as a business based on principles that reward our owners and employees and delight our customers
- Honour the trust placed in us by the people of Sarawak by acknowledging and respecting them and contributing to their well-being
- Set and achieve high ethical and corporate standards that are a source of pride for our employees
- Develop our people, leadership and teamwork to build an agile, open, corporate and customer-focused culture that responds to challenges and the need for change with innovation and cooperation
- Harness and utilise natural resources in a sustainable and responsible way
- Achieve operational excellence through a commitment to continual improvement and best practices

## ORGANISATION PROFILE

In recent years, this has meant harnessing renewable energy to support growth, in alignment with national economic policies such as the 10<sup>th</sup> and 11<sup>th</sup> Malaysia Plans<sup>1</sup>, as well as with the following UN Sustainable Development Goals:



### AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



### CLIMATE ACTION

Take urgent action to combat climate change and its impacts



### CLEAN WATER AND SANITATION

Ensure access to water and sanitation for all



### LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources



### GENDER EQUALITY

Achieve gender equality and empower all women and girls



### DECENT WORK AND ECONOMIC GROWTH

Promote inclusive and sustainable economic growth, employment and decent work for all



### INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote sustainable industrialisation and foster innovation



### SUSTAINABLE CITIES AND COMMUNITIES

Make cities inclusive, safe, resilient and sustainable



### RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



### LIFE ON LAND

Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss



### PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote just, peaceful and inclusive societies



### PARTNERSHIPS FOR THE GOALS

Revitalise the global partnership for sustainable development

Note:

<sup>1</sup> A comprehensive outline of Government development policies and strategies also referred to as Malaysia's 5-year plan.



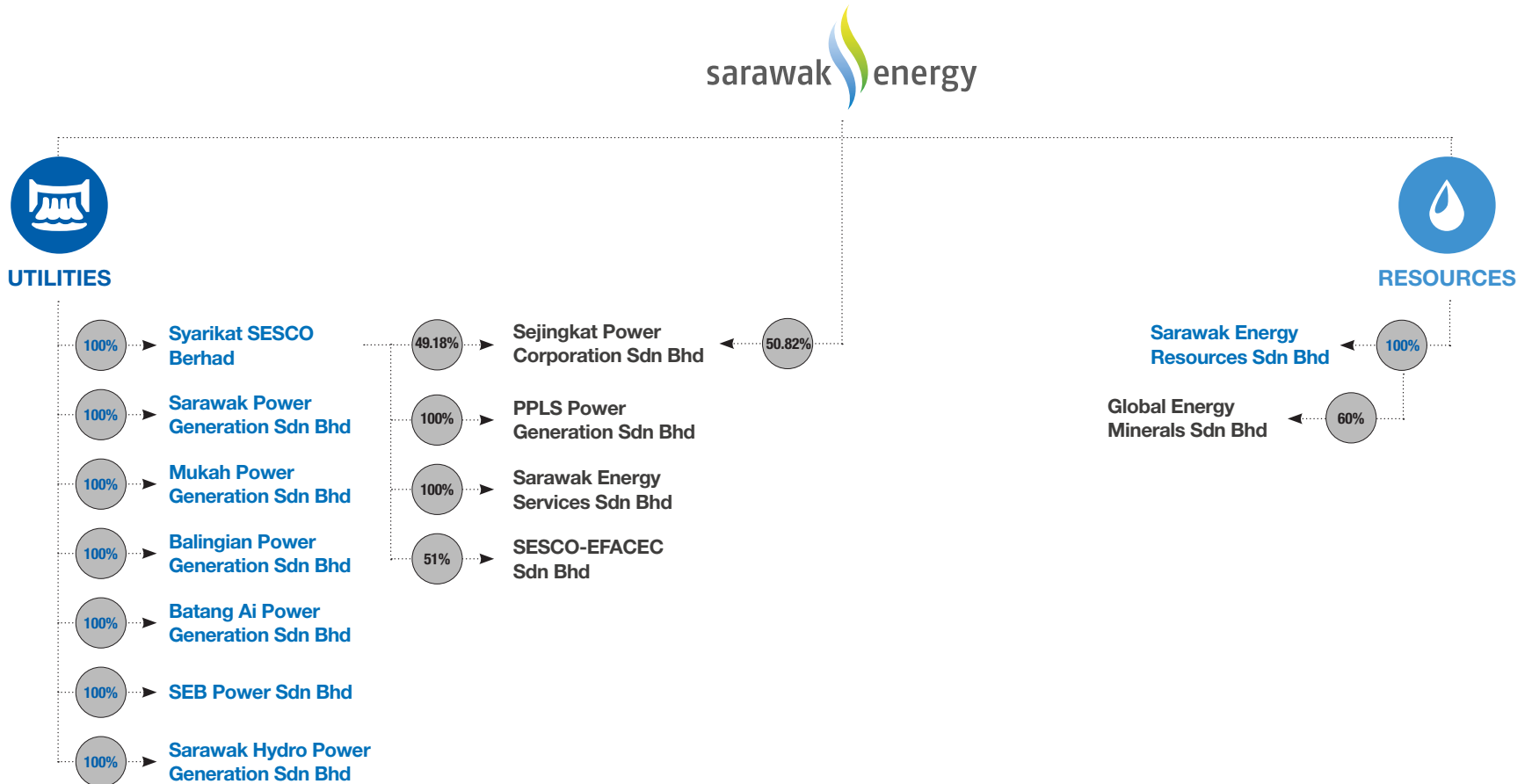
## ORGANISATION PROFILE

### BOARD OF DIRECTORS

Our Board Members - leading Sarawak Energy towards a sustainable future by providing insight and oversight on both risks and opportunities in Sustainability Issues.



### 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 2015 financial year.



## ORGANISATION PROFILE

### OUR CORPORATE FOOTPRINT

Sarawak Energy is proud to have established a presence throughout the State of Sarawak. As at the end of 2015, our generation capacity consisted of 24 power plants comprising 22 thermal stations and two hydro stations. This enabled us to record a total electricity sales of 14,038<sup>1</sup>GWh to our domestic, commercial and industrial customers as well as public lighting services during the year, increasing from 13,440<sup>2</sup>GWh in 2014.

#### ELECTRICITY SALES (GWh) - BY CUSTOMER TYPE 2015

|                                |                           |
|--------------------------------|---------------------------|
| Domestic                       | 1,940                     |
| Commercial                     | 2,390                     |
| Industrial                     | 9,619                     |
| Public Lighting                | 89                        |
| <b>Total Electricity Sales</b> | <b>14,038<sup>1</sup></b> |

Our rapid growth has been made possible by a well-trained and dedicated workforce of 4,308 employees, who work hard every day to ensure the people and industries of Sarawak receive the electricity they need to power their lives and their businesses. For more information on our workforce, please refer to “Transforming Social Outcomes - Empowering Our Workforce” on page 58 of this report.

**Notes:**

<sup>1</sup> This total electricity sales data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.

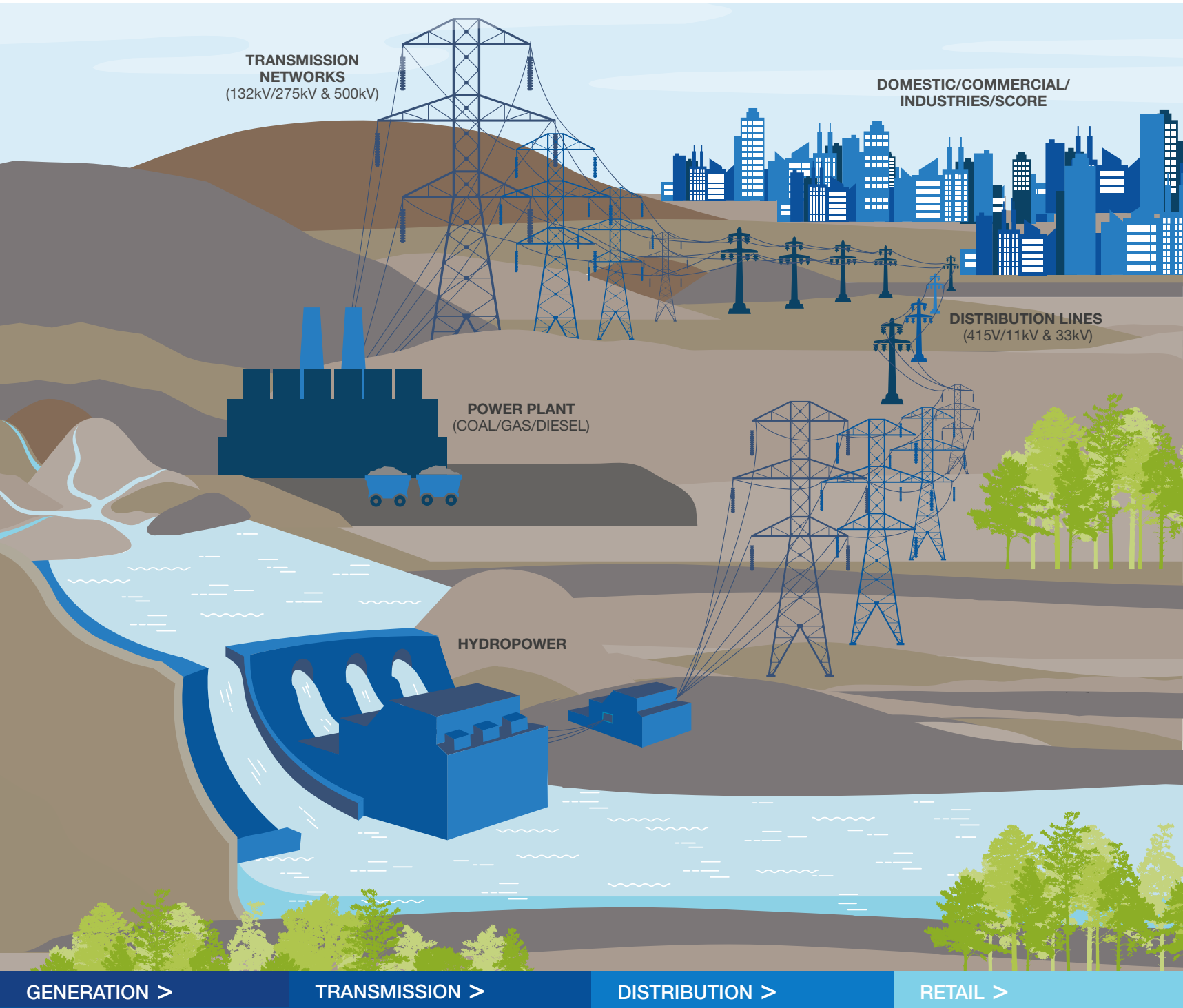
<sup>2</sup> This total electricity sales data has been assured by a third party for Sustainability Report 2014.



ORGANISATION PROFILE

OUR SERVICES

Our business is anchored on the generation, transmission and distribution of electricity to our domestic, commercial and industrial customers. We also cater to customers in the Sarawak Corridor of Renewable Energy, established by the Government to capitalise on the State’s vast energy resources to develop its energy sector and spur economic growth. In line with this, and with our strategy embarked upon in 2010 to transform into a modern, agile corporation that is responsive to economic, social and environmental trends, we have shifted our energy generation towards clean and renewable energy and improved our electricity delivery performance to ensure the long-term sustainability of our business and Sarawak’s economic development.



Our Value Chain



ORGANISATION PROFILE

GENERATION

In line with the State development agenda and with our efforts to strengthen the sustainability of our business and the Sarawak economy, Sarawak Energy is proud to stand as the only power utility in Malaysia utilising 100% local resources. Increasingly, this has meant increasing our capacity and capabilities in clean and renewable energy, such as hydropower, of which our installed capacity stood at 3,452MW in 2015. This made up the majority of our generation capacity, at 74.4% followed by gas (12.8%), coal (10.3%) and diesel (2.5%).

| GRID CONNECTED CAPACITY (MW)<br>- by energy source | 2015      |
|--|-----------|
|  | Installed |
| Hydro  | 3,452     |
| Coal   | 480       |
| Gas  | 595       |
| Diesel   | 114       |
| Total Grid Connected Capacity                      | 4,641     |



Murum Dam



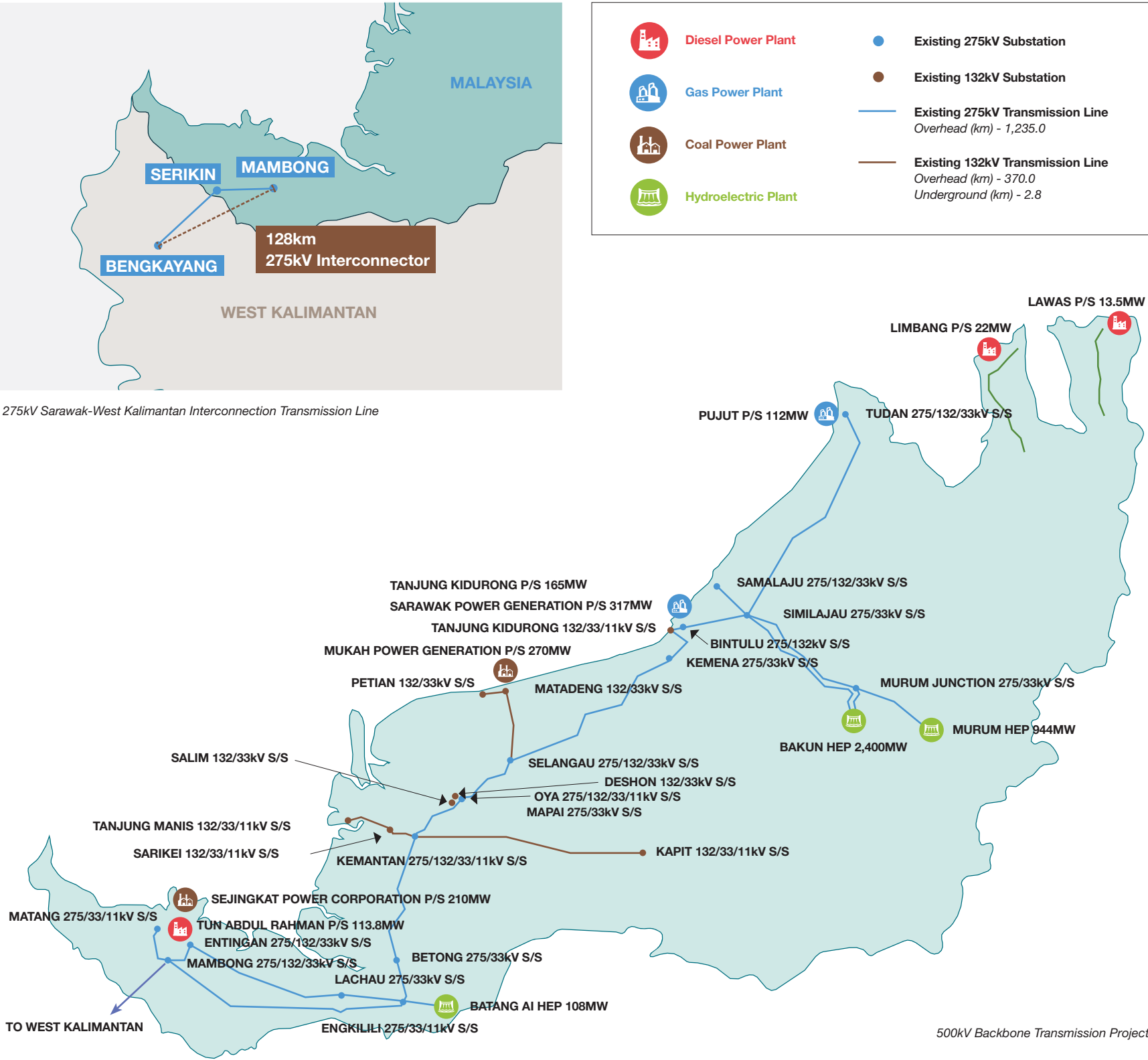
Tanjung Kidurong Power Plant



Sejingkat Coal Fired Power Plant

ORGANISATION PROFILE

TRANSMISSION & DISTRIBUTION



The energy we produce is transmitted through the Sarawak State Grid, which is operated by our Grid System Operator. The department is responsible for overseeing the State's entire power system, including power generation scheduling and dispatch. The maintenance, operation and future development of grid infrastructure is under our Transmission Department to ensure we are able to meet the State's future energy needs.

The grid is currently served by a total of 1,678.65km of transmission lines, of which 1,277.75km are made up of 275kV overhead lines. The remaining 400.9km consists of 132kV lines comprising 395.4km of overhead lines and 5.5km of underground lines. In view of future capacity needs, we are also building a 500kV backbone to support our 275kV transmission network.



## ORGANISATION PROFILE

### Transmission Lines

| Year              | 2015            |              |                 |
|-------------------|-----------------|--------------|-----------------|
|                   | 275kV           | 132kV        | Total           |
| Overhead (km)     | 1,277.75        | 395.4        | 1,673.15        |
| Underground (km)  | -               | 5.5          | 5.5             |
| <b>Total (km)</b> | <b>1,277.75</b> | <b>400.9</b> | <b>1,678.65</b> |

Our Distribution Department is responsible for ensuring the distribution performance of electricity throughout Sarawak. The Distribution Department's operations are segmented into the Western, Central and Northern regions, which operate and maintain their respective distribution assets. This enables us to achieve optimum energy output, ensuring our customers receive continuous access to electricity for their daily consumption.

Our Distribution Department is also committed in ensuring the continued growth of our business, and is responsible for connecting new customers including small businesses and large industries.



Transmission lines

### Distribution Lines

| Region       | 2015              |                 |                   |                 |                   |                 |
|--------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
|              | 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   | 1,166.03          | 413.50          | 2,120.06          | 1,636.22        | 5117.61           | 1,476.63        |
| WR Sri Aman  | 637.72            | 41.09           | 1,305.24          | 152.82          | 1,222.87          | 89.34           |
| CR Sarikei   | 246.67            | 44.84           | 646.84            | 68.78           | 1,166.24          | 94.53           |
| CR Sibul     | 755.34            | 185.31          | 1,200.54          | 755.09          | 2,791.81          | 618.12          |
| NR Bintulu   | 520.23            | 165.50          | 168.85            | 327.77          | 368.84            | 202.53          |
| NR Miri      | 418.63            | 167.64          | 747.31            | 568.80          | 2,267.79          | 557.78          |
| NR Limbang   | 43.70             | 8.90            | 551.07            | 74.36           | 568.11            | 39.04           |
| <b>Total</b> | <b>3,788.32</b>   | <b>1,026.78</b> | <b>6,739.91</b>   | <b>3,583.64</b> | <b>13,503.27</b>  | <b>3,077.97</b> |



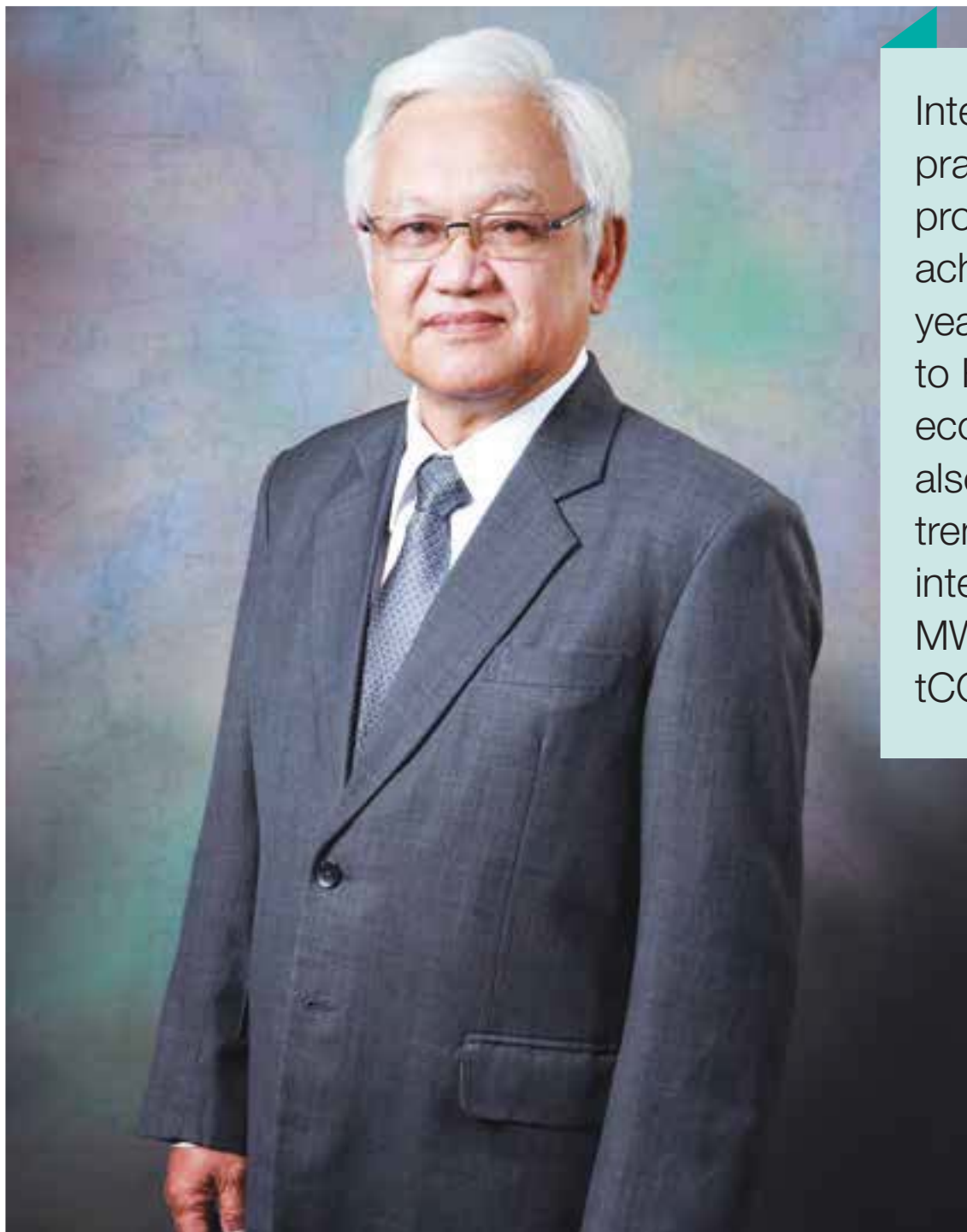
Customer Care Centre (CCC) at Wisma SESCO

### Retail

Sarawak Energy's Retail arm is responsible for engaging with our over 600,000 customers located throughout Sarawak. These customers are served on the frontline by our Customer Care Centre, which is accessible by phone 24 hours a day, seven days a week for technical and other customer service-related enquiries. This round-the-clock service is built on state-of-the-art technology which is capable of managing high call volumes, especially during outages when our customers need us the most. The system is also equipped with features including intelligent queuing call-back, broadcast announcement and a monitoring system which helps us collect information we use to continuously improve our services.

Our customers can also utilise any one of our hundreds of payment locations made available through our partnerships with other utilities, banks and retail outlets, in addition to a selection of online portals to manage their accounts anytime, anywhere.

## CHAIRMAN'S FOREWORD



Integrating sustainability practices, our business processes enabled us to achieve a 14% year-on-year growth in our revenue to RM3.22 billion. Beyond economic profits, we have also recorded a declining trend in our CO<sub>2</sub> grid emission intensity to 0.316 tCO<sub>2</sub>eq/MWh<sup>1</sup> in 2015 from 0.335 tCO<sub>2</sub>eq/MWh<sup>2</sup> in 2014.

### WE HAVE ACHIEVED A

▲ **14%** year-on-year revenue to  
**RM3.22 billion**

▲ **26%**  
in Renewable Energy Installed Capacity  
from 2014

▼ **6%**  
Operating expense ratio year-on-year

**T**he energy industry has witnessed a number of global mega trends in recent years, arising from pressing concerns on climate change and widening socio-economic inequality. These trends include carbon action, which is related to carbon reduction and energy efficiency initiatives, and the ever-pressing need to ensure access to electricity. We have also seen a growing movement for affordable and clean energy, stakeholder inclusiveness and social development, as well as environmental conservation.



## CHAIRMAN'S FOREWORD

These developments raise important considerations on how energy utilities such as Sarawak Energy Berhad run their businesses and the measures we take to ensure sustainability not just of our operations, but also of the economy, humanity and the environment as a whole.

This is why Sarawak Energy has taken critical action in recent years to improve the sustainability of our business. As detailed in this Sustainability Report 2015, we have begun to embed sustainability into our operations, using it as a tool to enhance our corporate strategy, plan and project management, as well as to serve as an overall guide on how we should conduct our business.

Some of our initiatives in this regard include our shift towards renewable energy production, focusing on hydropower to decarbonise our CO<sub>2</sub> intensity. We have also placed emphasis on utilising local resources such as coal and gas to ensure the security and reliability of energy supply that is competitively priced and adopting environmentally friendly technology to improve energy efficiency.

These efforts have clearly contributed to the long-term sustainability of our business. This year alone, we have achieved a 14% year-on-year growth in our revenue to RM3.22 billion. Beyond economic profits, we have also recorded a declining trend in our CO<sub>2</sub> grid emission intensity to 0.316<sup>1</sup> tCO<sub>2</sub>eq/MWh in 2015 from 0.335<sup>2</sup> tCO<sub>2</sub>eq/MWh in 2014. Additionally, our move towards clean energy production has resulted in a rising share of renewable energy as part of our generation mix, accounting for 74% in 2015.

As is the goal of all sustainability initiatives, we also see our efforts to conduct a sustainable business boding well for Sarawak Energy's long-term interests. A strong sustainability profile will give us a competitive advantage to ensure continued growth and it will also help us to develop our company in a sustainable manner.

Our emphasis on sustainability through renewable energy generation has also enabled us to provide electricity at the lowest tariffs in Malaysia. Additionally, as stakeholder engagement has become a part of our business process, we have gained valuable insights into their needs and concerns. This has helped us to improve our services and aid to our stakeholders, contributing to better socio-economic outcomes. Furthermore, as part of our efforts in environmental conservation, we have formed partnerships with stakeholders such as the World Wildlife Fund, Sarawak Natural Resources and Environment Board and Forestry Department in conducting activities such as our catchment management programme.

Our reporting initiative has also provided a platform in improving the efficiency of our operations. Additionally, our sustainability agenda has helped to build trust among our stakeholders, as they know that they can hold us accountable for our actions. In the long run, we expect this to improve our risk profile.

Against the wider economic backdrop, we believe our sustainability practices will catalyse change across the state. Much of our operations are aligned with the United Nations' Sustainable Development Goals (SDGs), which include important global targets on ensuring availability and sustainable management of water and ensuring access to affordable, reliable, sustainable and modern energy for all.

### Notes:

<sup>1</sup> This grid carbon emission intensity data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.

<sup>2</sup> This grid carbon emission intensity data has been assured by a third party for Sustainability Report 2014.

Hydropower plays an important role in this agenda, and we at Sarawak Energy are pleased to be able to contribute to our nation's sustainability goals through our production of hydropower.

In aligning our business with these goals, we ensure that while our operations remain largely local, our strategies keep pace with global mega trends as well as Malaysia's own sustainability and nation-building objectives. These, in turn, are guided in the medium-term by the 11<sup>th</sup> Malaysia Plan which has identified the green economy as a key thrust for the country's next stage of economic growth. Hydropower plays an important role in this agenda, and we at Sarawak Energy are pleased to be able to contribute to our nation's sustainability goals through our production of hydropower.

Our hydropower business in itself forms a vital component not only of Sarawak Energy's sustainability activities, but also of the Malaysian Government's sustainability goals. As a key pillar of the Sarawak Corridor of Renewable Energy (SCORE) agenda, hydropower creates a sustainable energy source and generates income for the State.

Additionally, with our business closely linked to national economic development, we place emphasis on creating opportunities for local procurement, job creation and economic activity which will spur local and regional growth.

As we increasingly integrate our sustainability agenda into our business processes, we expect to see this translated into more areas of our operations. We look forward to realising the social, economic and environmental outcomes from our sustainable practices with all our stakeholders for years to come.



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

## GROUP CEO'S MESSAGE



I am pleased to present Sarawak Energy's Sustainability Report 2015, which serves as a measurement of our sustainable performance as we aspire to become a leader in sustainability within the region's utility industry.



Sarawak State Legislative Assembly Building

In recent years, we have strived to incorporate the sustainability agenda at the heart of our corporate strategy. This is in line with our belief that appropriate management of our sustainability issues is critical to our vision of achieving sustainable growth and prosperity for Sarawak by meeting the region's needs for reliable, renewable energy.

This has meant adopting a holistic approach to managing the opportunities and risks of our business to create value not only for our Company, but also for all our stakeholders. To us, this value is derived from an overall corporate performance which takes into account our Company's financial and technical performance as well as our environmental and social impacts. Beyond acting as a measure of our Company's health and the well-being of our stakeholders, we also believe that sustainability practices can spur positive outcomes for all those around us, hence the theme for our Sustainability Report this year, "Catalyst for Change".

Our report this year follows the GRI's current G4 reporting standards and covers Economic, Environment and Social sustainability aspects at both the corporate and project levels where we strive to create positive outcomes and monitor the impacts of our business.

As an integral part of all our decision-making, this sustainability agenda has guided us in developing short-, medium- and long-term strategies in planning our operations to provide a reliable and high-quality customer service experience for the people of Sarawak. This has already resulted in positive change for our organisation and our stakeholders. It has also provided us with the impetus to take essential steps such as



## GROUP CEO'S MESSAGE

## SUSTAINABILITY TOPICS FOR SARAWAK ENERGY

## CORPORATE LEVEL

## ECONOMIC

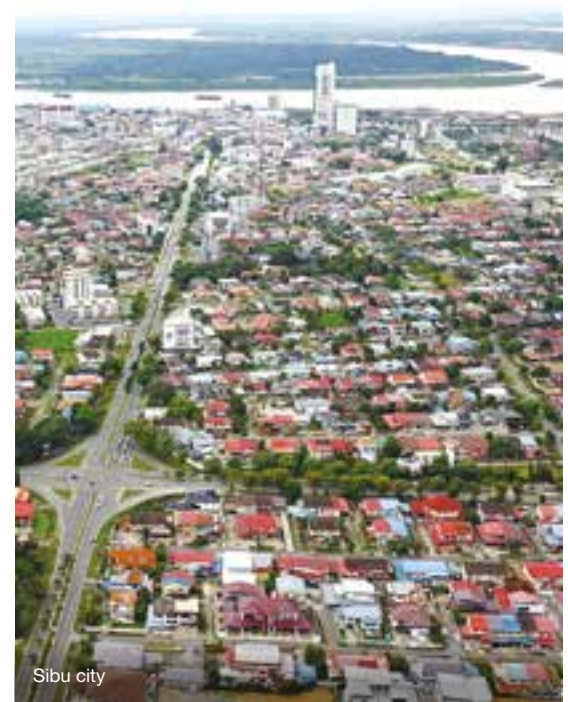
- Economic Performance
- Availability and Reliability of Energy\*\*
- Procurement Practices
- Indirect Economic Performance
- System Efficiency\*\*
- Research & Development\*\*



Bintulu Port

## ENVIRONMENT

- Water
- Compliance (EN)
- Emissions
- Materials
- Biodiversity



Sibu city

## SOCIAL

- Employment
- Occupational Health and Safety
- Disaster Emergency Response Plan

## INDIGENOUS RIGHTS

- Local Communities
- Customer Privacy
- Training & Education
- Compliance (PR)
- Access\*\*

Note:

\*\* Sector Specific aspects

our voluntary adoption of the Hydropower Sustainability Assessment Protocol to guide the development of our hydropower portfolio. I am pleased to note that this initiative surpasses legislative requirements and follows our signing of a sustainability partnership with the International Hydropower Association in 2011.

I would also like to highlight that sustainability reporting is not required for non-public listed companies. Hence, the release of our inaugural Sustainability Report in 2015, for the 2014 reporting period, was undertaken on a voluntary basis. This has made us the first energy utility in Malaysia to do so. In line with our aspiration to become a regional sustainability leader for power utility, we hope that our efforts in sustainability reporting will pave the way in encouraging transparency and accountability among our peers.

In a further measure to advocate sustainable practices within our industry, we have adopted and integrated sustainability principles and processes within our long-term, corporate-wide strategies. We have also adopted an integrated management approach in the way we manage our sustainability issues. To further chart a clear direction in our sustainability journey, we have completed our Corporate Sustainability Benchmarking Study 2015, which will form an integral part of how we carry out our business.

Underscoring the strides we have made in this area, we are heartened to note that our Sustainability Report has become the accepted method for us to measure and communicate our corporate performance to both our internal and external stakeholders. This has been further achieved by overcoming challenges in gaining buy-in from our internal stakeholders on our sustainability efforts, as well as in embedding sustainability into our corporate short-term, medium-term and long-term strategies.

Sarawak Energy, being the sole energy utility company in Sarawak, has the crucial responsibility of providing power to both the State and its people. Our role is key in helping recognise and catalyse economic opportunities, and in securing positive outcomes for all our stakeholders. We are wholly committed to playing our part in this collective effort to cement the sustainability of the economy, communities and the environment.

DATUK TORSTEIN DALE SJØTVEIT  
Group Chief Executive Officer

# MATERIALITY ISSUES

## MATERIALITY MATRIX

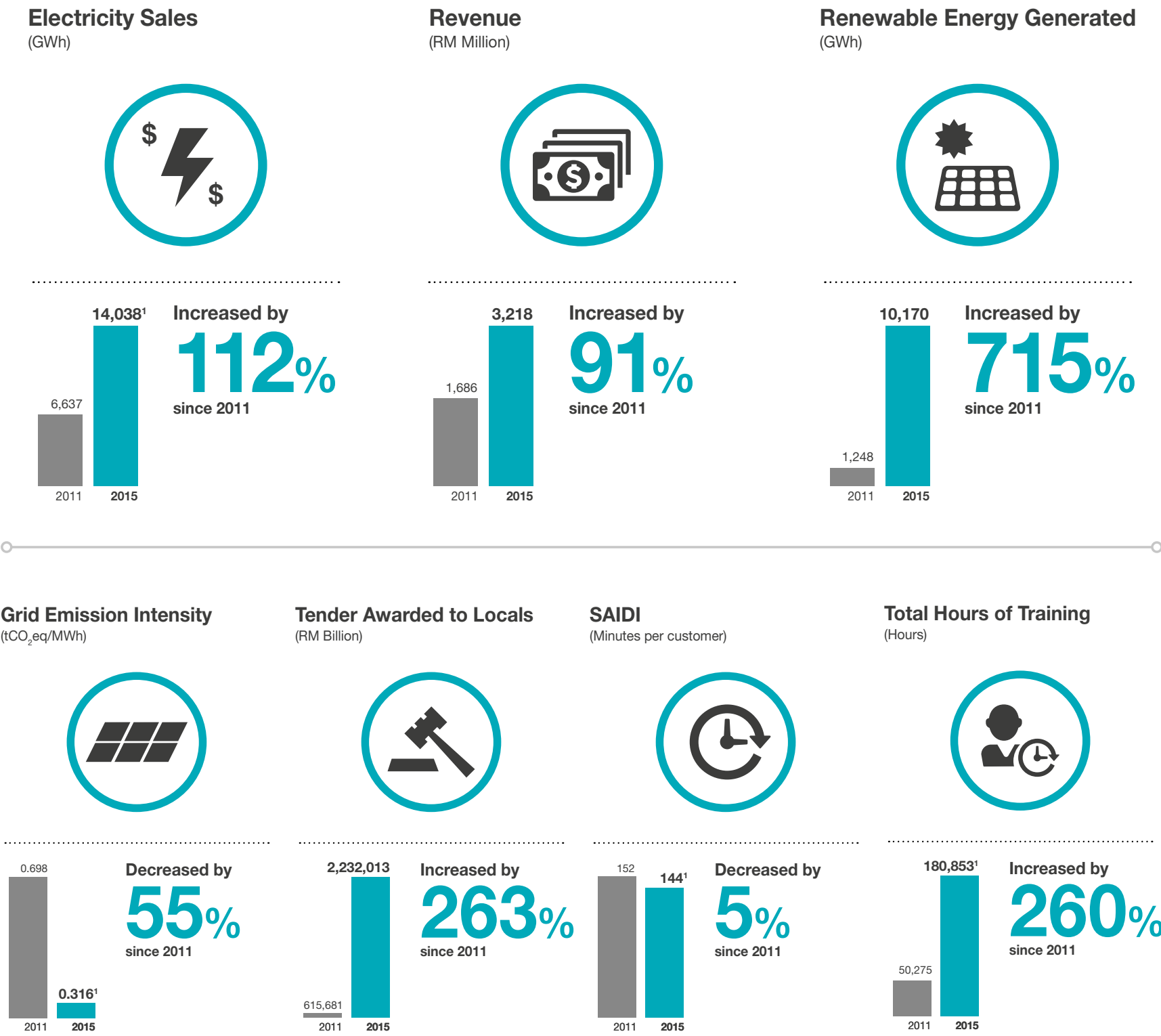


Materiality Matrix



# OUR PERFORMANCE: KEY HIGHLIGHTS 2015

## KEY HIGHLIGHTS

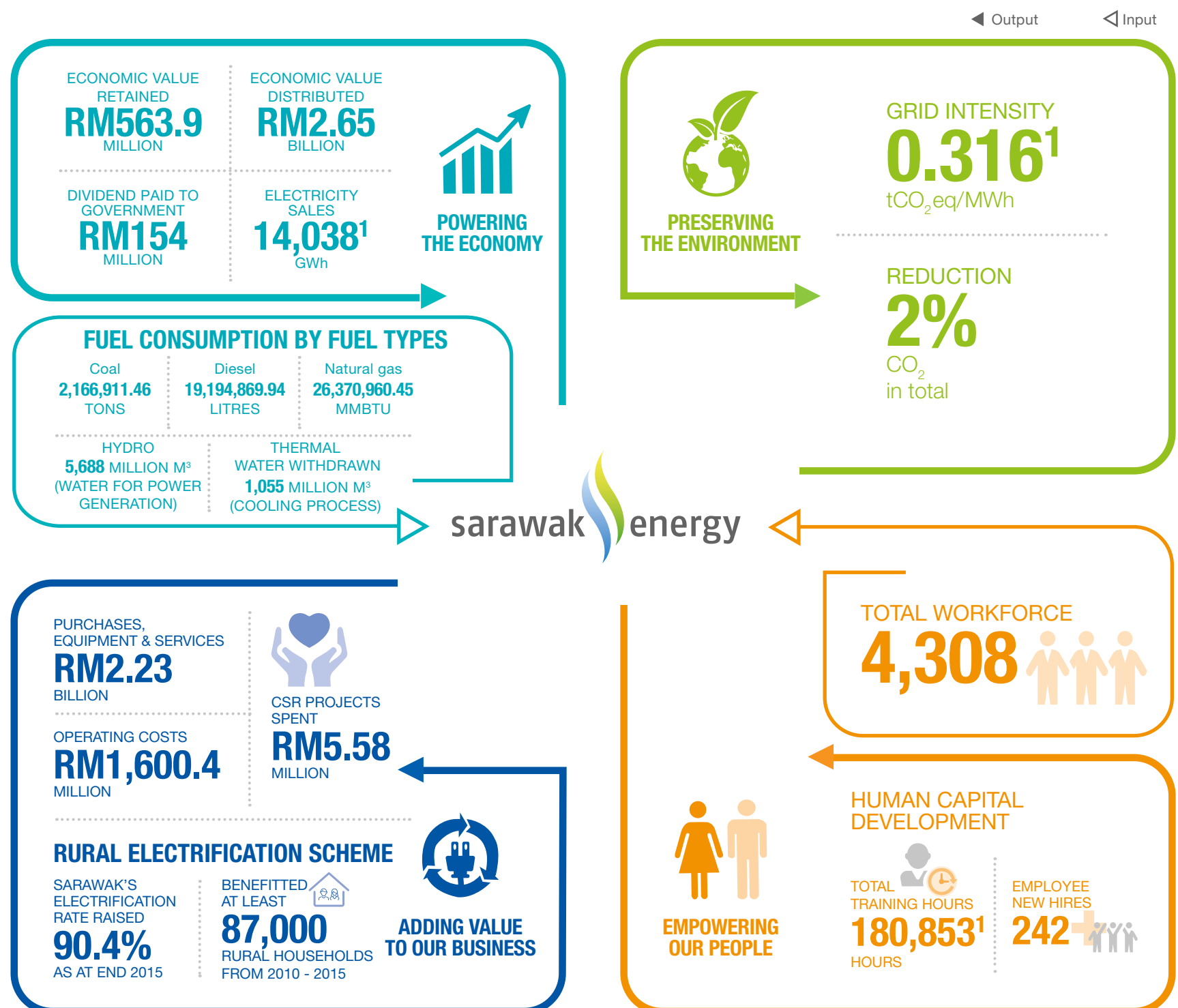


## DELIVERING VALUE TO OUR STAKEHOLDERS

As an organisation which contributes a vital component of the day-to-day lives of the people of Sarawak and the businesses operating in the State, Sarawak Energy is deeply aware of the responsibility we shoulder in creating value for our stakeholders.

This effort is guided by our commitment to utilise local resources and prioritise clean energy to generate returns throughout our value chain, ensuring the sustainability not only of our business, but also the interests of all our other stakeholders of the environment and future generations.

### OUR VALUE CREATION MODEL



Note:

<sup>1</sup> These total electricity sales, grid carbon emission intensity and total hours of training data have been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.

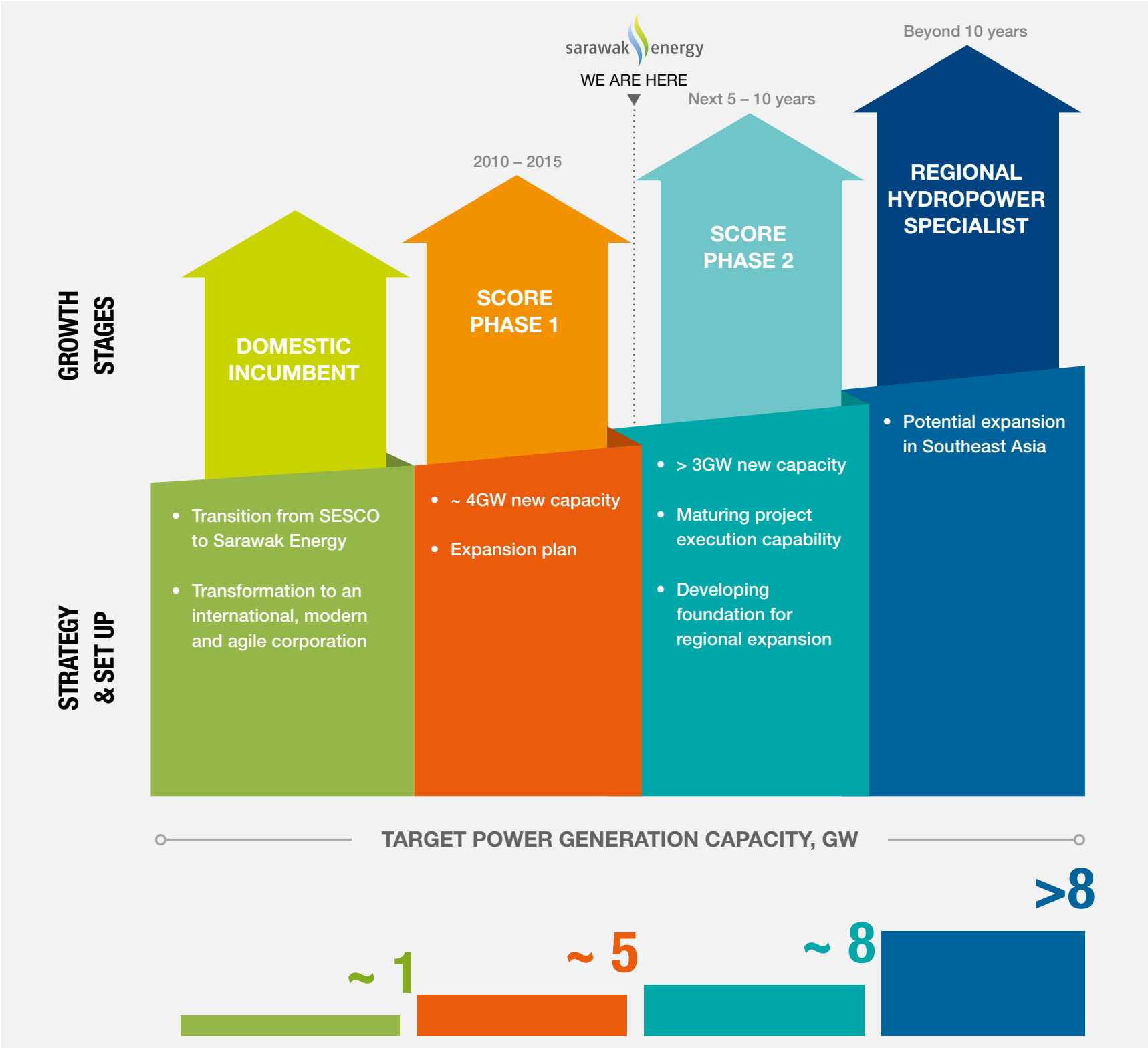


# STRATEGY STATEMENT

## SARAWAK ENERGY VISION

Sarawak Energy’s vision is to achieve sustainable growth and prosperity for Sarawak by meeting the need for reliable, renewable energy. We also target to become a regional hydropower specialist, expanding our presence in Southeast Asia by 2025.

By 2018 our journey towards this goal will see us adding a total of 4GW in new capacity as we focus on implementing phase one of the development of the Sarawak Corridor of Renewable Energy (SCORE). Over the next five to 10 years, we target to add at least 3GW of new capacity, maturing project execution capability and building the foundation for our regional expansion.



STRATEGY STATEMENT



In line with the UN's Sustainable Development Goals, Sarawak Energy has adopted the philosophy that a failure to develop is not sustainable.

Development means the process of growing, changing and progressing.

These goals are in line with our journey to transform from an established, traditional local utility into an international, modern and agile corporation and to be a model corporate citizen in our community. In order to achieve this, Sarawak Energy has embarked on developing a new commercial mindset and sustainable ways to manage our business.

In an effort to manage our rapid corporate growth, we have expanded our workforce with over 2,000 employees in the past four years. With our team now made up of more than 4,000 employees, we have provided our employees with the opportunity to connect with a network of power industry professionals from around the world. As a result, Sarawak Energy is now on track to grow Sarawak's power output by more than eightfold, from approximately 5,000GWh per year in 2009 to approximately 30,000GWh per year in 2020.

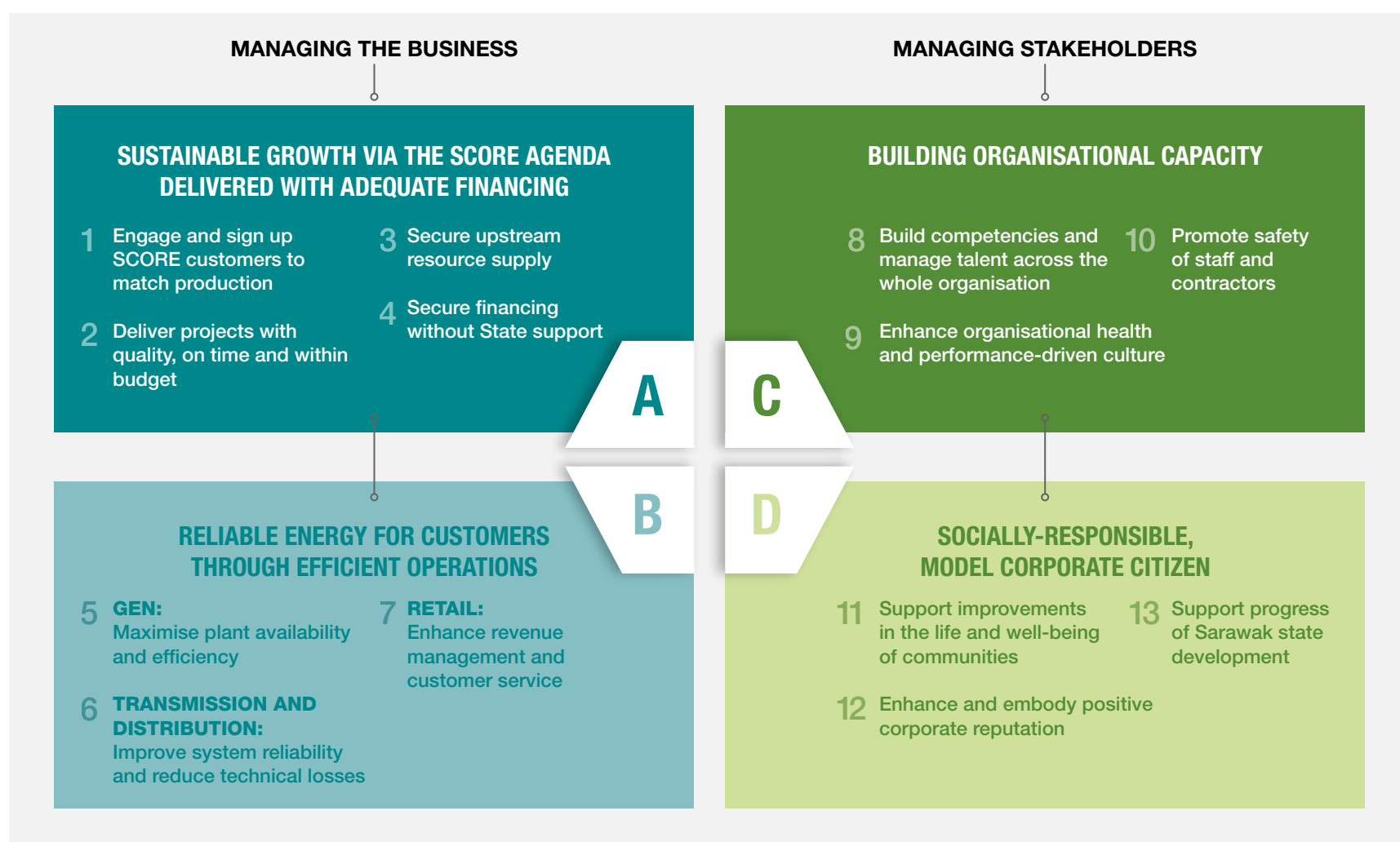


## STRATEGY STATEMENT

### CORPORATE LONG-TERM STRATEGIES

Our long-term strategies are guided by our vision to achieve sustainable growth and prosperity for Sarawak by meeting the region's need for reliable, renewable energy.

In line with this, we have identified four (4) strategic themes and thirteen (13) key strategies revolving around managing the business and stakeholders.



Sustainable operations are at the heart of our business. We must operate in a sustainable manner to create and deliver value to our stakeholders and to sustain our business in the long-term.

### SUSTAINABILITY IN MANAGING OUR CORE OPERATIONS

Energy has been the driving force for world economic growth, providing day-to-day necessities for the population in every country through generation, transmission, distribution and retailing of electricity. Due to the nature of electricity systems, the demand for electricity at any given moment must be met by consistent and reliable electricity supply and a continuous availability of the resource. Inability to meet the demand will lead to a huge loss of income to electricity producers as well as to consumers.

This scenario is no different in Sarawak, where electricity is a commodity that strongly impacts the State's economic development. In response to this, we have centred our strategic objectives in managing our core business on our involvement in the Sarawak Corridor of Renewable Energy. The SCORE concept was developed as a proactive initiative, reflecting the Government's determination to ensure a secure, long-term future for our economy and future generations. Sarawak Energy's role in SCORE is to harness the potential of the State's wealth of natural resources while taking into account the welfare of our stakeholders and the environment.

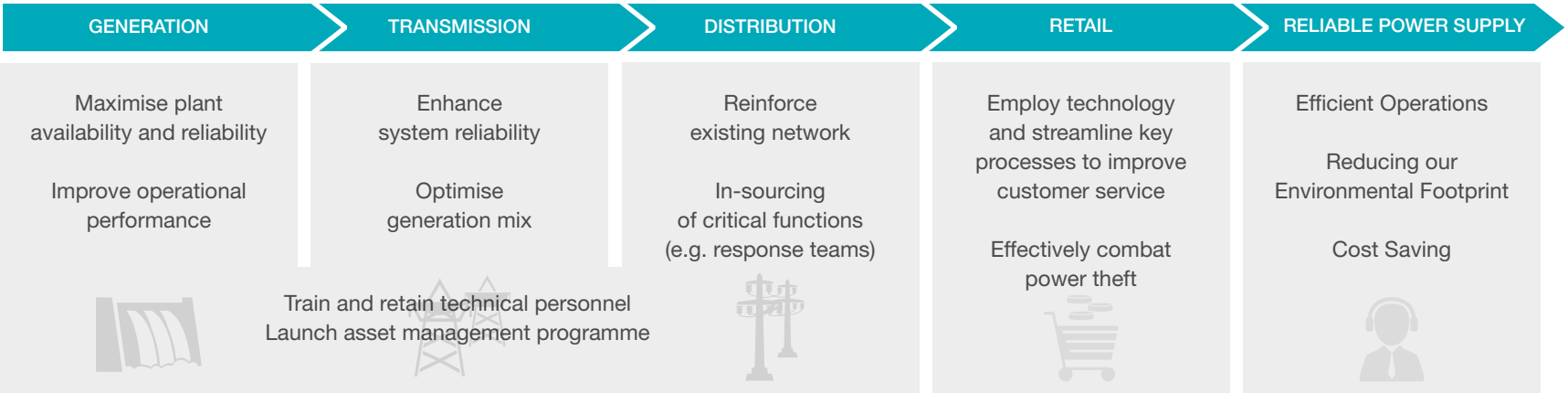
STRATEGY STATEMENT



Ensuring delivery of energy reliability to our customers via operational efficiency at Murum Junction substation

As part of our strategic objective to provide reliable and affordable energy to our customers, we have embarked on a journey in operational excellence through optimization to improve efficiency while ensuring availability across our value chain.

EFFICIENT OPERATIONS ACROSS OUR VALUE CHAIN - KEY STRATEGIES





## STRATEGY STATEMENT

### ENERGY SYSTEM PLANNING

The energy system planning process involves forecasting the future load and additional plant capacity needed to meet the load, and then providing a level of reliability in the event that some plants are down due to maintenance or breakdowns. Probabilistic methods are used to determine system reliability.

Sarawak Energy's generation planning is designed to meet the criteria in generation capacity planning as stated in the State Grid Code, such as Reserve Margin, Loss of Load Probability (LOLP) and Expected Energy Not Served (EENS).

**Reserve Margin** is an excess of generation capacity available to satisfy yearly load demand.

**Loss of Load Probability (LOLP)** is a probability of being unable to satisfy all demand with the existing generating resources.

**Expected Energy Not Served (EENS)** is energy expected not to be supplied in a year due to unavailability of energy.

### GENERATION

The aim of the generation system is to ensure there is sufficient capacity to meet the load/demand at any time. We generate power through hydro, coal and gas, capitalising on the State's abundant indigenous resources, and supplying this power to our customers throughout the State through an extensive network. A balanced generation mix is necessary to facilitate the effective development of Sarawak's energy future. This means that while we look to fully harness our hydro potential, we need to balance this with enough coal and gas plants to protect the security of the State's energy needs.



Maintaining system integrity

### THERMAL POWER PLANTS

Sarawak Energy's long-term programme on thermal power plants' availability and reliability improvement rests on two main pillars:

1. A comprehensive asset management and preventive maintenance plan
2. A shift towards higher-efficiency, cleaner energy (e.g. new CCGT, retiring diesel plants)

In addition, Sarawak Energy's Thermal Asset Management Plan is geared towards integration/consolidation of all current Thermal Asset Management programmes under Enterprise Asset Management (EAM). EAM is planned for implementation in all Operations Departments under SEB/SESCO and once implemented, will lead to ISO 55000/PAS 55 certification.

### THERMAL OPERATIONAL EXCELLENCE

In order to realise Sarawak Energy's vision of becoming a powerhouse in the ASEAN region, it is vital for the Company to improve its long-term operational efficiency. There is also a need for more cost-effective management of its thermal generation to ensure the economic competitiveness of our existing and future power plants.

**Asset Management** is defined as "systematic and coordinated activities and practices through which an organisation optimally and sustainably manages its assets and asset systems and their associated performance, risks, and expenditures over their lifecycles for the purpose of achieving its organisational strategic plan."

## STRATEGY STATEMENT

In 2012, the Thermal Operational Excellence Division was established to foster the cultivation and harmonisation of an operational excellence culture within the Thermal Department. The Operational Excellence Division is responsible for the following:

- ✓ **Change management**
- ✓ **Reliability and quality management**
- ✓ **Performance management**
- ✓ **Information and internal communications**

### LONG TERM: TOWARDS HIGH EFFICIENCY POWER PLANTS BY 2020

Moving forward, the Operations Excellence Division has embarked on a 5-year roadmap called the SEB Thermal Energy Efficiency Programme (STE<sup>2</sup>P). This programme aims to establish high-efficiency and low-emission power plants by 2020. This will align with both our corporate vision and the national agenda in the following areas:

#### New strategic objectives of Operations Key Strategies of Generation:

- ✓ **Maximise plant availability and efficiency**
- ✓ **Contribute towards the Malaysian Government's Initiative of reducing its carbon emission intensity of GDP by 40% by the year 2020 compared to the 2005 level (Copenhagen Pledge, 2009)**
- ✓ **Learning curve for the upcoming new thermal power plant project**
- ✓ **Better financial, environmental and social performances**

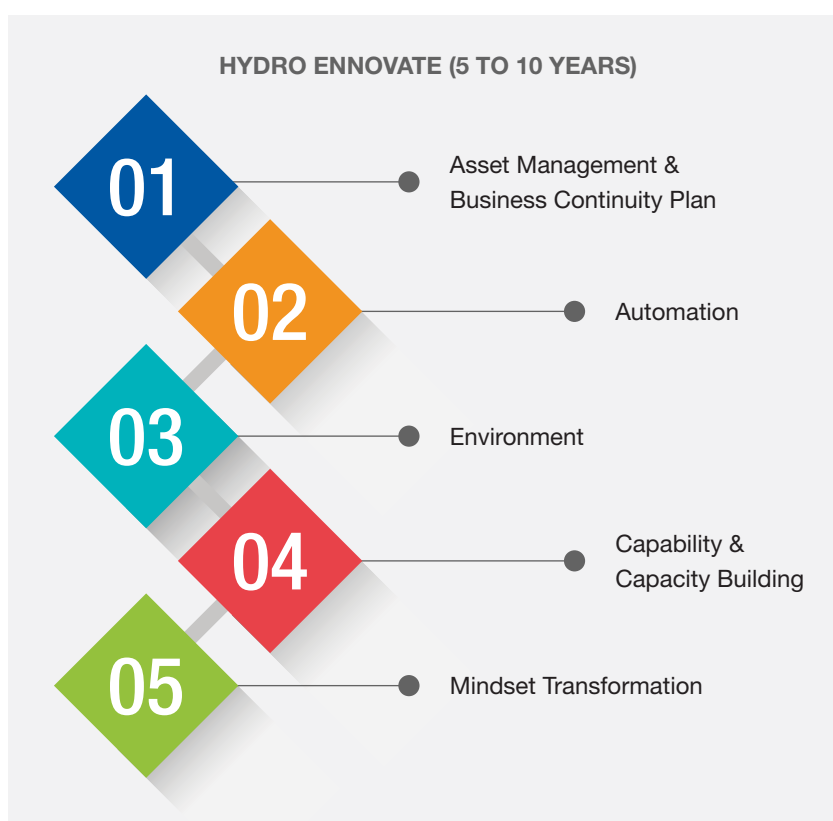


## HYDROPOWER GENERATION

The harnessing of renewable energy through hydropower development is the way forward for Sarawak Energy in providing affordable and reliable energy for the development of the State economy.

In order to continuously improve the way we manage our hydropower generation portfolio, our Hydropower Department has developed the Hydro Ennovate Programme, a 5- to 10-year initiative which is built on five Key Strategic Thrusts.

### FIVE KEY STRATEGIC THRUSTS OF HYDRO DEPARTMENT





STRATEGY STATEMENT

02 AUTOMATION

The Hydro Department plans to convert the hydroelectric power station(s) from manually-controlled operation to fully-automated control with remote control capability from the new Hydro Central Command Centre.

03 ENVIRONMENT

| WATER RESOURCES AND ENERGY              |                             |   |
|---|-----------------------------|---|
| Inflow Forecasting                      | Energy Rule Curve           | Hydrometric and Meteorological Stations |
| Discharge Measurement                   | Reservoir Operation Study   | Maintaining ISO Certifications          |
| CATCHMENT MANAGEMENT                    |                             |   |
| Water Quality Monitoring                | H <sub>2</sub> S Monitoring | Training and Workshops                  |
| Reservoir Rim and Sedimentation Studies | River Log Jam               | Stakeholders' Engagement                |
| FLOOD ANALYSIS                          |                             |   |
| Review PMP & PMF                        | Conduct Dam Break Analysis  | Develop Inundation Map                  |
| Review and update Emergency Rescue Plan | Conduct ERP Drills          |   |

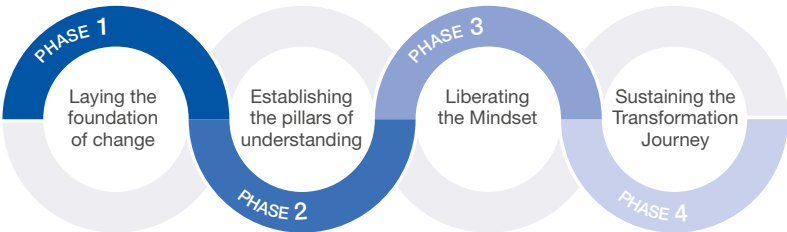
- Notes:
1. Probable Maximum Precipitation (PMP) - "Theoretically, the greatest depth of precipitation for a given duration that is physically possible for a given size storm area at a particular geographic location at a certain time of year".
  2. Probable Maximum Flood (PMF) - "The flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in the drainage basin under study".

04 CAPABILITY & CAPACITY BUILDING

Review and enhance the knowledge and skills through proper education and training to support future growth of Hydro Department. To build capacity through exposure and involvement in international engagements in hydropower business.

05 MINDSET TRANSFORMATION

MINDSET TRANSFORMATION JOURNEY



TRANSMISSION



The long-term planning for our transmission network was developed to ensure an optimal supply-demand balance within the regulator's criteria and guidelines.

This also entails various demand response and demand-side management programmes in the future to further increase operational flexibility and to optimise network reliability.

A 500kV transmission line will be the backbone of our transmission system and will enhance transmission capacity and reliability for the network from Similajau to Kuching.

## STRATEGY STATEMENT

### DISTRIBUTION

Regional distribution plans are also being carried out on an annual basis to cater for future distribution growth. Sarawak Energy has set a target of achieving a System Average Interruption Duration Index (SAIDI) of below 100 minutes by 2020.

Our Distribution Department has identified the following focus areas as part of a further measure to improve system efficiency and reliability:

1. Improve supply reliability
2. Improve customer service mindset
3. Improve street lighting response time
4. Asset standards (new technology)
5. Timeliness in releasing connection cost
6. Enhance O & M strategies, practices and performance analysis
7. Staff competency management (Production)
8. Reduction of copper theft
9. Timeliness in project implementation and closing
10. Effective inventory management
11. Effective vegetation management
12. Reduction of worst performing feeders
13. Asset management

### CORPORATE ASSET MANAGEMENT



Ensuring the equipment is in good condition

Sarawak Energy's power system is made up of capital-intensive assets which were installed gradually over decades of system expansion worth over RM10 billion. Any precursors of failure not addressed and rectified in a timely manner will eventually lead to catastrophic failure, resulting in production loss and supply interruption to customers. Hence, an asset management system is one of the vital components of Sarawak Energy's journey to achieve its vision of becoming a powerhouse in ASEAN.

In our efforts to improve our asset management practice, Sarawak Energy is pursuing an Enterprise Asset Management (EAM) system that can extract all key data onto one common platform. The data can then be transformed into useful information pertaining to the assets' condition and performance, in order to better manage the assets.

The future system is envisioned to have analytical capabilities and generate reports on asset health status. These reports will enable the Company to strategise and prioritise its asset maintenance programme, moving from being reactive to proactive by deploying preventive, predictive and reliability-centred maintenance programmes to prevent unplanned outages due to failure of critical assets.



Generator room

This new system will also enable our Operations team (responsible for acquiring, recording, inventorying, operating, maintaining and disposing of operational assets) to understand and adhere to the policies, procedures and guidelines governing such assets.

The implementation of the Enterprise Asset Management solution and the gap analysis will facilitate the Company's plan for ISO 55001:2014 compliance in the near future.

### MANAGING STAKEHOLDERS

The success of stakeholder engagement rests on ongoing two-way dialogue and an effort to understand issues from numerous viewpoints.

Our internal and external stakeholders represent a vital component of our business, impacting the type of output we produce, whether for profitable gains or for the betterment of those around us.

Our key strategies under this pillar are focused on achieving our strategic objective of building organisational capacity to maximise the Company's performance.

This is part of our aim to become a socially responsible, model corporate citizen as we seek to effect positive change for our communities and contribute to national development.

### PERFORMANCE-DRIVEN CAPABLE ORGANISATION







# GOVERNANCE

We believe that Sustainability Governance is about a strategic and overarching function that steers a company in creating long-term business values.

## GOVERNANCE

Sarawak Energy's activities are regulated by our Board of Directors and the Group Executive Committee. These bodies ensure our Company upholds the highest standards of corporate governance in all that we do under the guidance of the Malaysian Code of Corporate Governance.



**Sitting, from left to right:** Raphael Chung – Vice President, Transmission, Alexander Chin – Chief Financial Officer, Julia Shim – Chief Information Officer, Lu Yew Hung – Executive Vice President, Sarawak Energy and Chief Executive Officer of SESCO, Datuk Torstein Dale Sjøtveit – Group Chief Executive Officer, Aisah Eden – Executive Vice President, Corporate Services, Hajjah Siti Aisah Adenan – Vice President, People and Leadership Development, Victor Wong – Senior Vice President, Grid System Operator, Haji Yusri Safri – Vice President, Retail

**Standing, from left to right:** Haji Sulaiman Abdul Hamid – Vice President, Group Governance for Procurement and Contracts, Dr Chen Shiun – General Manager, Research and Development, Marconi Madai – General Manager, Corporate Risk and HSE, Peing Tajang – AGM, Corporate Communication, Shawn Liu – AGM, Capital Works, Procurement and Contracts, Lau Kim Swee – Vice President, Distribution, Nick James Arnett Wright – Vice President, Business Development, Stephanie Gae Chin – General Manager, Legal, Einar Kilde – Executive Vice President, Project Execution, Jiwari Abdullah – Senior Manager II, Corporate Social Responsibility, Ahadiah Zamhari – Manager, Corporate Communication, Tan Ah Hock – Vice President, Corporate Shared Services, Polycarp Wong – Vice President, Hydro, Alvin Lim – Vice President, Coal Resources, James Ung – Senior Vice President, Thermal (not in photo), Ting Ching Zung – Vice President Planning, Strategy and Corporate Development (not in photo)

### BOARD OF DIRECTORS

The Board of Directors is responsible for establishing Sarawak Energy's strategic direction. This includes holistic integration of environmental, social and governance considerations in the company's strategy. In setting the company's values and standards, the Board works with management for a meaningful consideration of key sustainability issues throughout the organisation.

Our Board is composed of individuals with a depth of experience and expertise in the areas of business, accounting, law, economics and public administration. Led by the Chairman, who monitors the effectiveness of the Board as well as its conduct, the Board also comprises non-independent non-executive directors who help to ensure a healthy exchange of professional and independent views. Collectively, the Board strives to provide sound advice and judgement to influence positive outcomes for both the Company and its stakeholders.

As the caretakers of shareholder interests, the Board is committed to holding the Company to account for its actions. It also strives to ensure the

Company fulfils its financial objectives while pursuing the betterment of its shareholders and all other stakeholders as well as the environment.

### GROUP EXECUTIVE COMMITTEE

In 2015, we restructured our management team to reflect our transformation into a modern, agile corporation. This resulted in the introduction of the Group Executive Committee (GEC), which was elevated from the Executive Management Committee (EMC) to improve the efficiency of the decision-making. The 10-member GEC meets on a weekly basis to deliberate on major issues, as well as to review, assess and endorse our current and future strategic direction in achieving our goals for long-term, sustainable growth.

### GROUP MANAGEMENT TEAM

The Group Management Team (GMT) consists of members of the GEC, all department heads and key management staff from relevant departments. The GMT meets quarterly to receive updates on company developments and its progress towards achieving its targets.

### SUSTAINABILITY DIVISION

The integration of sustainability into our strategic direction is overseen by our Sustainability Division, which reports to the Head of the Corporate Social Responsibility Department.

The Division coordinates, monitors and reports on our sustainability activities, trains our employees in the areas of sustainability, ensures the Company's compliance with sustainability principles and HSAP guidelines and provides relevant input on our operations to ensure we strive towards global best practices on sustainable development.

# HYDROPOWER SUSTAINABILITY ASSESSMENT PROTOCOL (HSAP) GOVERNING STRUCTURE

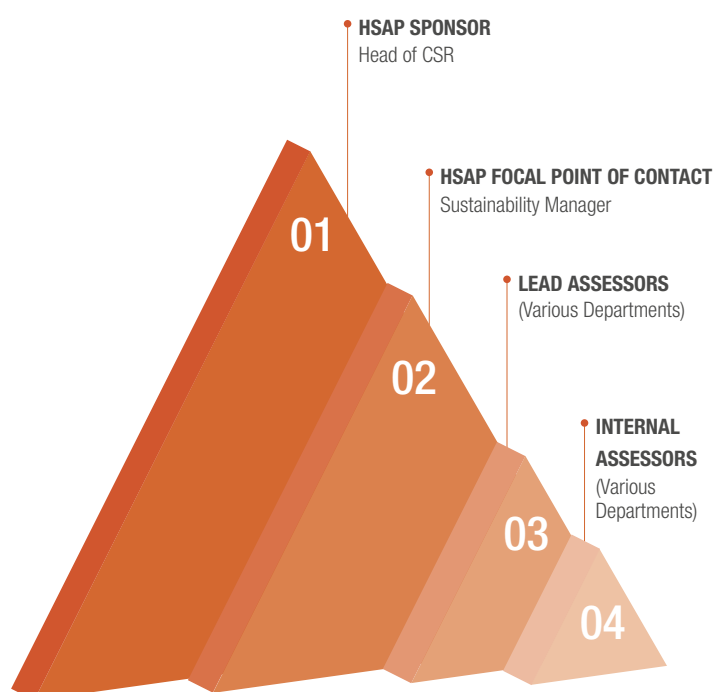
The integration of sustainability practices into our hydropower project development and operations life-cycle is managed by the Sustainability Division under the CSR Department.

In 2014, the HSAP governing structure was established to intensify our efforts to incorporate sustainability into our hydropower development and operation processes. This initiative is an essential step towards ensuring our hydropower development and operations are implemented in accordance with guidelines set in by the Hydropower Sustainability Assessment Protocol.

**“All sustainability solutions must be localised with provision depending on the context of a country.”**

**Professor John Briscoe,  
2014 Stockholm Water Prize Laureate**

## HYDROPOWER SUSTAINABILITY PROTOCOL ASSESSMENT STRUCTURE

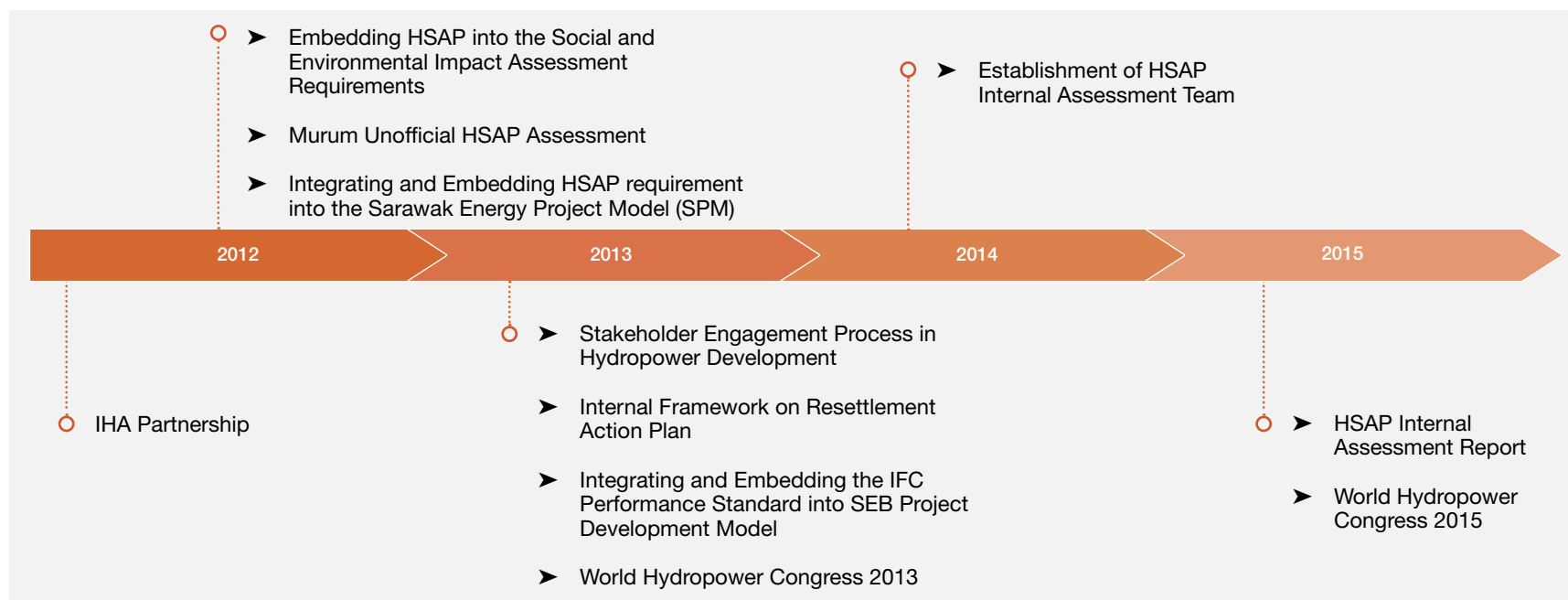


*Note:*  
Governing structure and roles & responsibility of the HSAP have been approved by Sarawak Energy's Executive Management Committee (EMC) in 2014

## ROLES & RESPONSIBILITY

- 01**
  - Authorise responsibility for the internal assessment programme
  - Acting as a sponsor for proposals in relation to the internal assessment programme and embedding process
  - Provide support in getting necessary resources for the whole internal assessment programme
  - Provide a measurement of effectiveness of the management system to top management
- 02**
  - Managing and preparing for the internal assessment exercise
  - Managing, monitoring and reviewing the assessment and improvement programme
  - Develop, maintain and improve competence development of the internal IHA assessment team
  - Keep appropriate assessment records to monitor and review the assessment programme
  - Defining audit objectives, scope, criteria
- 03**
  - Act as a reference point to other internal assessors
  - Oversee the systematic, independent and documented process for obtaining evidence and evaluating it objectively to determine the extent of conformity
  - Lead the closing meeting of the assessment and preparation of the assessment reports
- 04**
  - Conducting an assessment
  - Systematic, independent documents and process review to obtain assessment evidence and evaluating it objectively to determine the extent of conformity
  - Preparing the assessment reports

The key progress in integrating and embedding the HSAP into Sarawak Energy's Project Development Processes is illustrated below:





## ENGAGING OUR STAKEHOLDERS

As a Company that is committed to achieving sustainable growth for all, the interests and needs of our stakeholders form a vital component in establishing our strategic direction. Our key stakeholder groups comprise our customers, employees and local communities whom we engage with continuously to ensure we gain a deep understanding of what we can deliver to Sarawak and how to do so. Through various channels such as town halls and briefing sessions, customer hotlines, newsletters and workshops, we provide platforms to foster open and two-way communications with our key stakeholders.



Sarawak Energy engages with Kapit community leaders at Menara Sarawak Energy

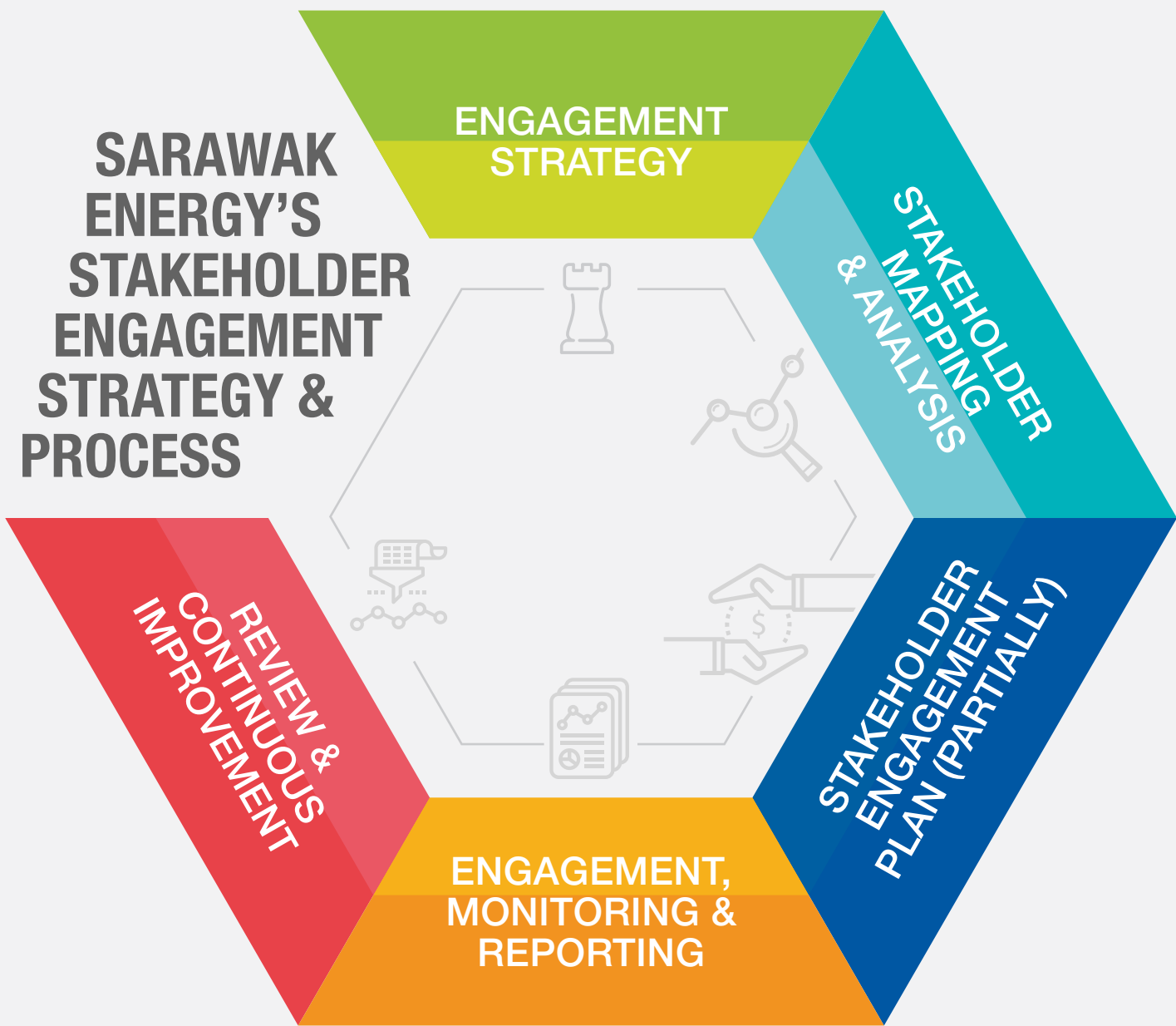


Interactive engagement with the local communities

Our stakeholder engagement activities are founded on internal surveys conducted with our employees which provide insights on the social, environmental and governance topics important to our stakeholders. We have also drawn from the materiality process utilised to determine our priority areas to identify our key stakeholder groups.

In addition to these key groups, we remain attentive to the needs of our other stakeholders comprising the public, investors and the State Government. We are proud to engage with these groups through public dialogues and one-on-one meetings, which have provided us with a deeper understanding of their concerns and promote cooperation in resolving potential issues. Most importantly, these engagements are instrumental in fostering trust between our Company and our stakeholders, which forms the foundation for a long and prosperous relationship with all the people of Sarawak.

ENGAGING OUR STAKEHOLDERS



| STAKEHOLDER GROUP | COMMUNICATIONS       |                                    |
|-------------------|----------------------|------------------------------------|
| EMPLOYEES         | • Newsletters/emails | • Surveys                          |
|                   | • Reviews            | • Dialogues                        |
| LOCAL COMMUNITIES | • Consultation       | • Activities                       |
|                   | • Public Disclosures | • Media                            |
| CUSTOMERS         | • Hotlines           | • Customer Relationship Management |
|                   | • Retail Outlets     | • Mail                             |
|                   | • Media              |                                    |



# CATALYSING ECONOMIC SUSTAINABILITY

Sarawak Energy strives to contribute to the economic development and sustainability of the State of Sarawak. This means that aside from the financial considerations which are crucial to ensuring the longevity of our business, we also seek to enable beneficial economic opportunities for all our communities to catalyse economic activity and drive growth.



## CATALYSING ECONOMIC SUSTAINABILITY

## ECONOMIC PERFORMANCE

During the reporting year, we recorded a 14% year-on-year growth in revenue to RM3.22 billion. This allowed us to distribute RM332.8 million in employee remuneration and generate returns of RM566.7 million in dividends and interest to our shareholders and capital providers. The economic value generated from our activities, in addition to RM154 million in tax, has enabled us to contribute to state and nation building.

**DIRECT ECONOMIC VALUE GENERATED, DISTRIBUTED AND RETAINED  
(MILLIONS OF RM)**

|  | 2013*        | 2014*        | 2015*          |
|--|--------------|--------------|----------------|
| <b>DIRECT ECONOMIC VALUE GENERATED</b> |              |              |                |
| Revenues                               | 2,323.2      | 2,826.3      | <b>3,217.9</b> |
| <b>ECONOMIC VALUE DISTRIBUTED</b>      |              |              |                |
| Operating costs                        | 1,242.7      | 1,585.2      | <b>1,600.4</b> |
| Employee remuneration                  | 239.5        | 255.6        | <b>332.8</b>   |
| Payments to capital providers          |              |              |                |
| Dividends paid                         | 66.4         | 88.6         | <b>142.7</b>   |
| Interest (net of amount capitalised)   | 172.8        | 145.1        | <b>424.0</b>   |
| Payments to the Government             |              |              |                |
| Income taxes paid (net of refunds)     | 19.9         | 41.3         | <b>154.0</b>   |
| <b>ECONOMIC VALUE RETAINED</b>         | <b>581.9</b> | <b>710.5</b> | <b>563.9</b>   |

Note: \* Extracted from Sarawak Energy Audited Financial Report

Further reaffirming the level of discipline we exercise in managing our financial health and investments, we have succeeded in maintaining high-quality credit ratings for Sarawak Energy Berhad's RM15 Billion Sukuk Musyarakah Programme since its first issuance in 2011, as depicted below:

**CREDIT RATINGS ACCORDED TO SARAWAK ENERGY BERHAD'S SUKUK MUSYARAKAH PROGRAMME BY RAM RATING SERVICES BERHAD**
**CREDIT RATING**

An Issue Rating for a debt-based Sukuk is the opinion of the rating agency on the creditworthiness of a particular debt-based Sukuk. A Sukuk rated AA has high safety for payment of financial obligations reflecting the issuer is resilient against adverse changes in circumstances, economic conditions and/or operating environments. For long-term ratings, AA1 indicates that the issuer ranks at the higher end of its generic rating category, in this case AA category.

**RATING OUTLOOK**

"Stable" indicates that the Credit Rating is likely to remain unchanged over the intermediate term, typically up to a 24-month period.

|      |            |
|------|------------|
| 2011 | AA1/Stable |
| 2012 | AA1/Stable |
| 2013 | AA1/Stable |
| 2014 | AA1/Stable |
| 2015 | AA1/Stable |

CATALYSING ECONOMIC SUSTAINABILITY



AVAILABILITY AND RELIABILITY

Our strong financial performance has been the result of our philosophy of providing the best services to our customers, as reflected by our continuous efforts in implementing our long-term programme to improve plant availability and reliability.

During the year, our total electricity sales from our domestic, commercial and industrial customers as well as public lighting rose to 14,038<sup>1</sup>GWh from 13,440<sup>2</sup>GWh in 2014.

In line with our commitment to harness clean and renewable sources of energy, hydropower continued to account for the highest share of our grid connected generation mix in 2015, at 74.4% (installed), recording net generation of 10,162GWh, or 67.4%, of our grid energy mix during the year. This scenario is aligned with the fourth thrust under the 11<sup>th</sup> Malaysia Plan<sup>3</sup>: pursuing green growth for sustainability and resilience through green energy in power generation.

Further details on our committed demand, grid generation capacity, grid connected capacity mix and grid energy mix are as follows:

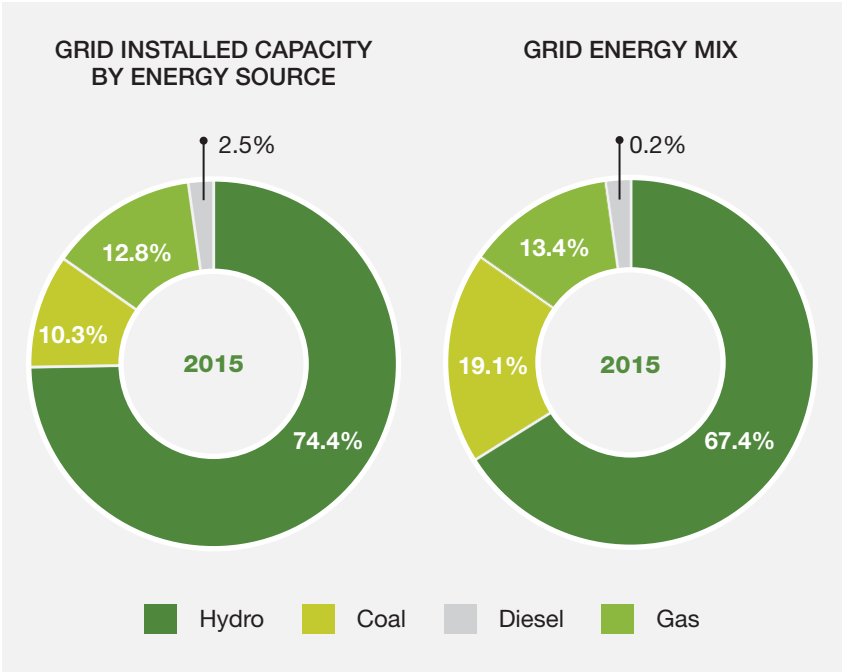
1. GRID GENERATION CAPACITY

| Grid Connected Installed Capacity (MW)<br>- by energy source |       |       |       |
|--|-------|-------|-------|
|  | 2013  | 2014  | 2015  |
| Hydro  | 1,908 | 2,744 | 3,452 |
| Coal   | 480   | 480   | 480   |
| Gas  | 595   | 595   | 595   |
| Diesel   | 114   | 114   | 114   |
| Total Grid Connected Capacity                                | 3,097 | 3,933 | 4,641 |

MANAGING OUR CORE BUSINESS – SUSTAINABLE OPERATIONS

Our operations are the heart of our business.

In order to create and deliver value to meet the expectations of our stakeholders, we strive to operate in a sustainable manner to ensure the sustainability of our business.



Notes:

<sup>1</sup> This total electricity sales data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.

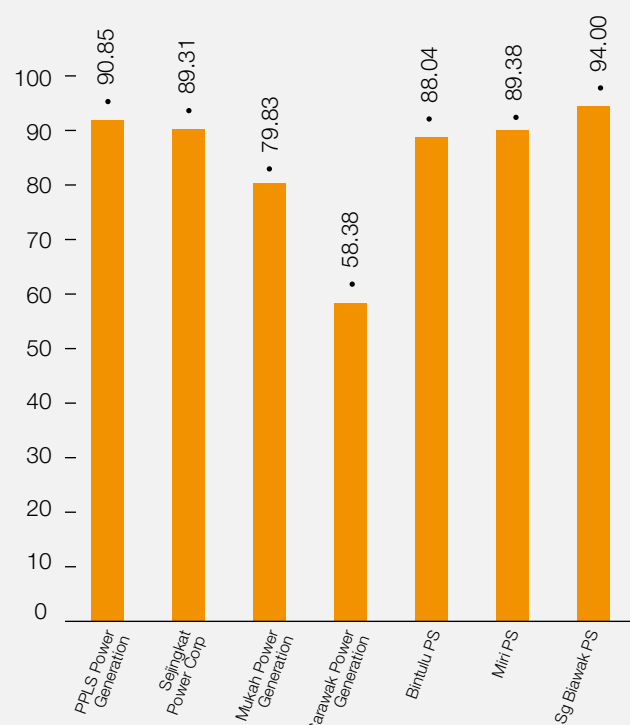
<sup>2</sup> This total electricity sales data has been assured by a third party for Sustainability Report 2014.

<sup>3</sup> 11<sup>th</sup> Malaysia Plan (2016 – 2020), Chapter 6 - Pursuing green growth for sustainability and resilience.

CATALYSING ECONOMIC SUSTAINABILITY

OUR PERFORMANCE

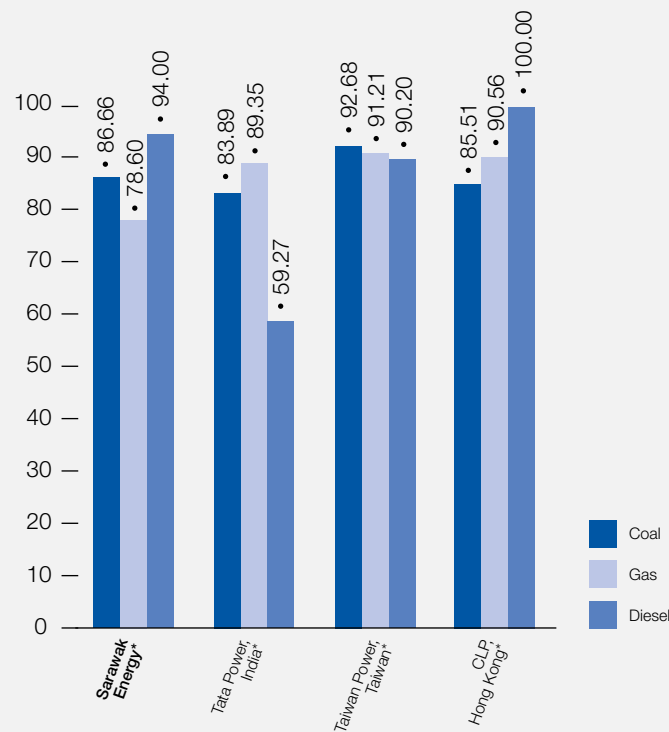
AVERAGE PLANT EQUIVALENT AVAILABILITY FACTORS<sup>1</sup>



Our staff at work

INDUSTRY BENCHMARK

INTERNATIONAL COMPARISON OF AVERAGE POWER PLANT EQUIVALENT AVAILABILITY FACTORS<sup>1</sup> / AVAILABILITY FACTORS<sup>2</sup> FOR POWER UTILITY COMPANIES



Inspection on the plant's equipment at Murum HEP power house

Note:  
\* Published Sustainability Report 2015

Remarks:  
<sup>1</sup> Equivalent Availability Factor (EAF): is the proportion of available hours less full load equivalent of de-rated hours in a period of one year (8,760 hours).  
<sup>2</sup> Availability Factor (AF): is the fraction of hours in a period of one year (8,760 hours) when a plant is available to generate electricity.



## CATALYSING ECONOMIC SUSTAINABILITY



Moving forward, our total committed demand is projected to reach 4,100MW in 2020, driven in part by the signing of the Power Purchase/Power Exchange Agreements (PPA/PEA) with the following SCORE customers:

| NO. | SCORE/BULK CUSTOMERS*                  | INDUSTRY                              |
|-----|--|---------------------------------------|
| 1   | Press Metal Sarawak Sdn Bhd            | Aluminium Smelter                     |
| 2   | Press Metal Bintulu Sdn Bhd (Ph 1)     | Aluminium Smelter                     |
| 3   | Press Metal Bintulu Sdn Bhd (Ph 2)     | Aluminium Smelter                     |
| 4   | Tokuyama (Malaysia) Sdn Bhd (Ph 1)     | Polycrystalline Silicon Manufacturing |
| 5   | Tokuyama (Malaysia) Sdn Bhd (Ph 2)     | Polycrystalline Silicon Manufacturing |
| 6   | Pertama Ferroalloys Sdn Bhd            | Manganese Smelter/Ferroalloy          |
| 7   | OM Materials (Sarawak) Sdn Bhd         | Mineral Ore and Alloy Smelter         |
| 8   | Sakura Ferroalloys Sdn Bhd             | HC FerroManganese, Silicon Manganese  |
| 9   | Comtec Solar International (M) Sdn Bhd | Solar Wafer Manufacturing             |
| 10  | Iwatani - SIG Industrial Gases Sdn Bhd | Industrial Gas Manufacturing          |
| 11  | PLN (PEA - Export to West Kalimantan)  | Interconnection                       |

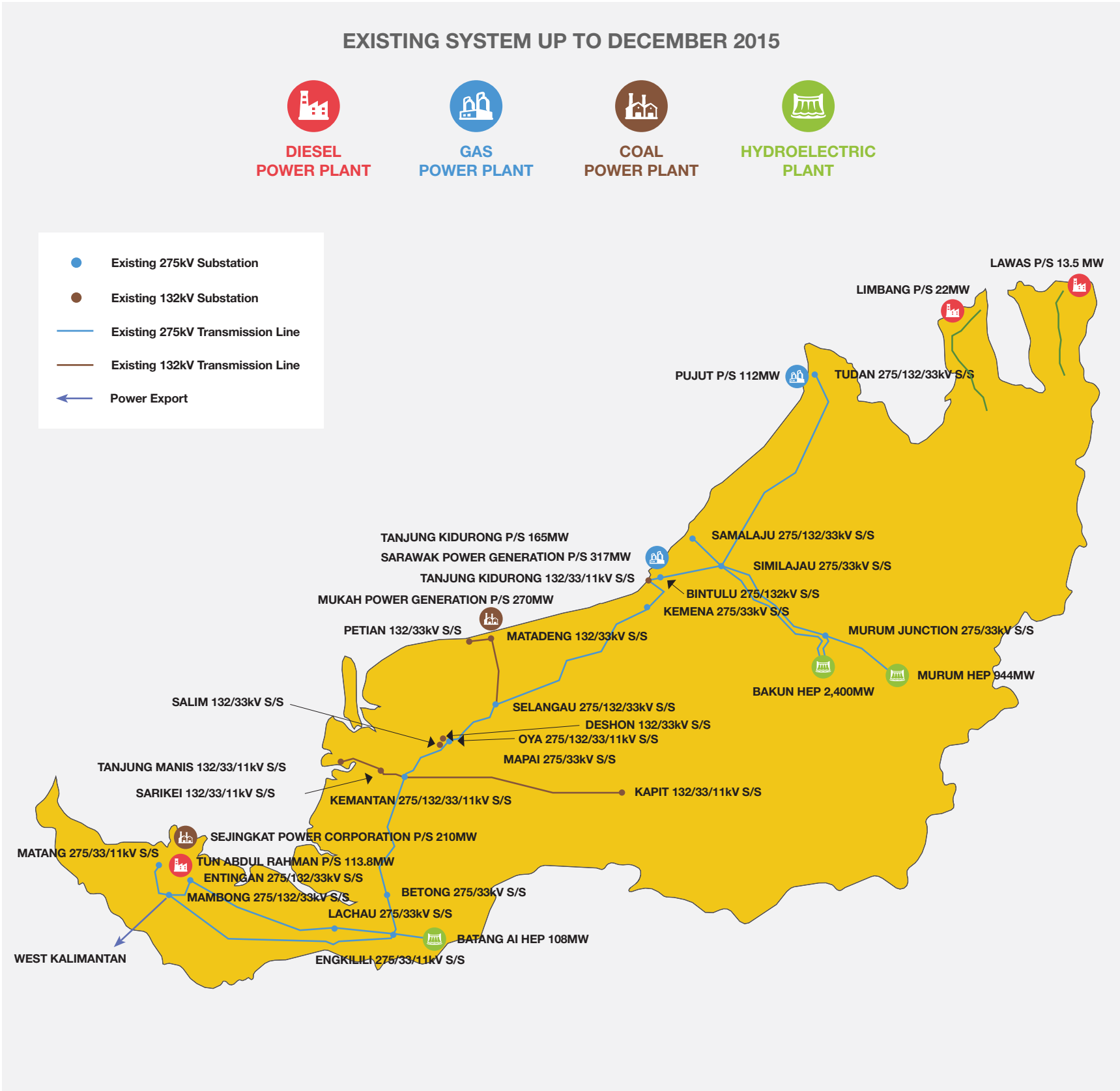
Note: \* as of 31 December 2015



By 2020, demand for electricity is expected to rise to 4,100MW. We will continue to upgrade our infrastructure and electricity system which encompasses generation, transmission and distribution. As a testament of our commitment, our 500kV Backbone Transmission Line Project will be completed in July 2017, which will also increase the State grid transmission capacity and reliability, specifically from Similajau to Kuching.

CATALYSING ECONOMIC SUSTAINABILITY

We have also put in place appropriate plans for our generation and transmission lines through to the year 2020. The capacity of our existing and future generation and transmission lines in 2015 and for the next five years is illustrated as follows:



## EXISTING AND PLANNED TRANSMISSION LINES AND SUBSTATIONS UP TO YEAR 2020





CATALYSING ECONOMIC SUSTAINABILITY

ENHANCING SERVICE QUALITY – TRANSMISSION & DISTRIBUTION

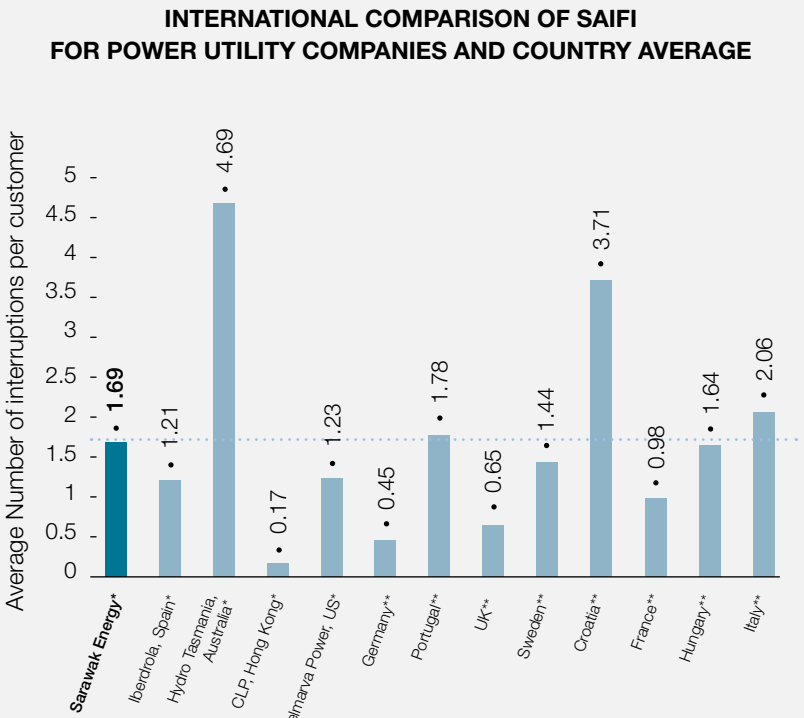
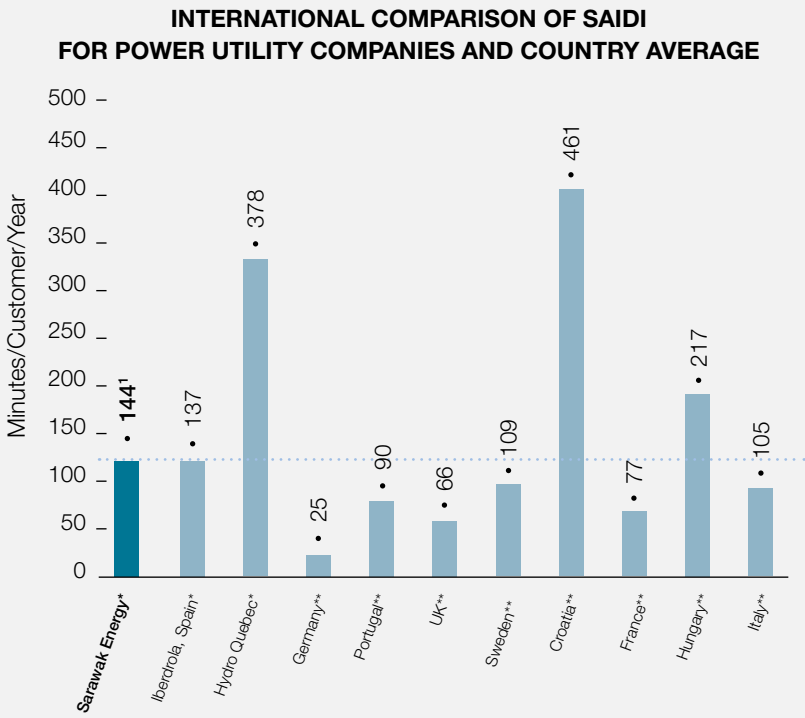
Our unyielding efforts to enhance the quality of our service is reflected by our progress in improving our system efficiency, as demonstrated in the decrease of the duration and frequency of interruptions and outages, as illustrated by our System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).

OUR PERFORMANCE

| Description                       | 2012 | 2013 | 2014             | 2015             |
|-----------------------------------|------|------|------------------|------------------|
| SAIDI (mins/customer/yr)          | 137  | 168  | 189 <sup>2</sup> | 144 <sup>1</sup> |
| SAIFI (interruptions/customer/yr) | 1.77 | 2.08 | 2.00             | 1.69             |

Notes:  
<sup>1</sup> This System Average Interruption Duration Index (SAIDI) data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.  
<sup>2</sup> This System Average Interruption Duration Index (SAIDI) data has been assured by a third party for Sustainability Report 2014.

INDUSTRY BENCHMARK - SAIDI & SAIFI



Notes:  
\* Published Sustainability Report 2015  
\*\* Council of European Energy Regulators (Ref: C14-EQS-62-03 Dated: 12 February 2015), CEER Benchmarking Report 5.2 on the Continuity of Electricity Supply Data (Calculated based on 3 years average of SAIDI & SAIFI Data)

CATALYSING ECONOMIC SUSTAINABILITY



Transmission tower



Maintaining the Distribution System

| DESCRIPTION             | 2015  |
|-------------------------|-------|
| Transmission Losses (%) | 1.81  |
| Distribution Losses (%) | 12.52 |

In 2015, we also recorded marked improvements in our SAIDI and SAIFI from 2014, which declined to 144<sup>1</sup> minutes from 189<sup>2</sup> minutes, and to 1.69 versus 2.00, respectively.

RECONNECTION

In line with our goal to ensure continuous access to electricity for our customers, Sarawak Energy has initiated efforts to keep track of our performance to reconnect power as quickly as possible in the event of disconnections due to the late payment of bills. As a start, this initiative will only involve the Kuching region.

During the year, we recorded disconnections for a total of 8,381 accounts worth RM16.31 million in the Kuching region. Of these, we were able to reconnect 6,164 accounts and recover RM7.43 million.

Depending on our success in arranging payments from these customers, our Retail Department is able to reconnect services for most customers (6,159) within 24 hours of disconnection.

The number of customers broken down by total length of time between arrangement of payment and reconnection is presented in three categories as below.

OUR PERFORMANCE

DISCONNECTIONS, PAYMENT AND RECONNECTION TIME FOR THE KUCHING REGION

| < 24 HOURS | 24 HOURS – 1 WEEK          | > 1 WEEK |
|------------|----------------------------|----------|
| 6,159      | 5 (under Customer Request) | 0        |

Notes:  
<sup>1</sup> This System Average Interruption Duration Index (SAIDI) data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.  
<sup>2</sup> This System Average Interruption Duration Index (SAIDI) data has been assured by a third party for Sustainability Report 2014.

## CATALYSING ECONOMIC SUSTAINABILITY

## SARAWAK ENERGY THERMAL ENERGY EFFICIENCY PROGRAMME



Maintenance technician performing motor-driven valve inspection at Sejingkat coal fired power plant

As part of our long-term strategy to achieve energy efficiency, we have embarked on our Sarawak Energy Thermal Energy Efficiency Programme (STE<sup>2</sup>P), a 5-year roadmap designed to transform our thermal power plants into high-efficiency plants by 2020.

Our energy efficiency programme also contributes towards the Malaysian Government's target under the 2009 Copenhagen Pledge to reduce the country's Carbon Emission Intensity per GDP by 40% from its 2005 level by 2020.

Furthermore, lessons learnt from our implementation of STE<sup>2</sup>P can be used for future thermal power plant projects and in the long term, strengthen the sustainability of our business by contributing to a healthier financial performance. In the year under review, we recorded the following efficiency levels among our thermal power plants:

**GROSS EFFICIENCY (%) FOR COAL PLANT**

| MAJOR PLANT          | PLANT TYPE | AVERAGE EFFICIENCY |
|----------------------|------------|--------------------|
| Sejingkat Power Corp | Coal       | 30.46%             |
| PPLS                 | Coal       | 34.30%             |
| MPG                  | Coal       | 32.94%             |

**GROSS EFFICIENCY (%) FOR NATURAL GAS PLANT**

| MAJOR PLANT         | PLANT TYPE         | AVERAGE EFFICIENCY |
|---------------------|--------------------|--------------------|
| SPG                 | BTU-Combined Cycle | 37.28%             |
| Bintulu Power Plant | BTU-Open Cycle     | 19.65%             |
| Miri Power Plant    | Miri-Open Cycle    | 20.66%             |

**GROSS EFFICIENCY (%) FOR DIESEL PLANT**

| MAJOR PLANT        | PLANT TYPE       | AVERAGE EFFICIENCY |
|--------------------|------------------|--------------------|
| Biawak Power Plant | Diesel - Standby | 31.30%             |

## THERMAL DEPARTMENT ACTIVITIES

During the year, the following activities were also undertaken at our thermal power plants:

**1. THERMAL SUMMIT**

Our Thermal Generation unit conducted its annual Thermal Summit in two sessions on 10-11 Dec 2015 and 17-18 Dec 2015. The agenda included an Energy Efficiency Forum which aimed to raise our employees' awareness on the importance of energy efficiency.

**2. POWER STATION SAFETY WEEK PROGRAMME**

In conjunction with the World Day for Safety and Health at Work on 28 April 2015, our Sejingkat Power Corporation organised health programmes at our power station. Activities during the event included a health talk entitled "Common Foot Problems and the Role of Orthotics" by Mr. Samuel Liew of Health Pursuit Sdn Bhd and a talk on preventing musculoskeletal injuries by Dr. Azani Hassani, an orthopaedic surgeon from the Normah Medical Specialist Centre.

**3. BIAWAK POWER PLANT**

Our Biawak power plant conducted its HSE Week on 2-6 Nov 2015. Activities during the event included environmental and safety games, a "Save the Earth" programme, a fire fighting competition, aerobics and health talks.

**4. MUKAH POWER GENERATION PLANT**

The Mukah Power Generation plant held its HSE week on 7-11 Dec 2015, conducting activities such as a fire drill, a jog-a-thon, a briefing on chemical drill procedures and a chemical spill drill.





## CATALYSING ECONOMIC SUSTAINABILITY

## SUSTAINABLE HYDROPOWER DEVELOPMENT



Group photo of Sarawak Energy and Sarawak Government delegates at IHA World Hydropower Congress 2015 in Beijing

The three-day congress aimed at advancing sustainable hydropower was held at the Kempinski Yanqi Lake complex, Beijing, China. Representatives from the Sarawak Government also attended the conference, led by YB Datuk Amar Awang Tengah Ali Hasan, the Second Minister of Resource Planning and Environment, Minister of Public Utilities and Minister of Industrial Development.

### PROMOTING SUSTAINABILITY PRACTICES IN HYDROPOWER DEVELOPMENT

Sarawak Energy has been a member of the International Hydropower Association since 2011. Since then, Sarawak Energy has been committed to incorporating the Hydropower Sustainability Assessment Protocol (the Protocol) into its project and operations life-cycle. The Protocol is a framework to assess sustainability at all stages of project implementation and is a consistent, globally-applicable methodology. The adoption of the Protocol is on a purely voluntary basis.

In our efforts to promote sustainability in hydropower development, we participated in the World Hydropower Congress 2015 in Beijing, China, a global premier event where hydropower leaders and experts converge. Sarawak Energy's delegates were led by its Group CEO, Datuk Torstein Dale Sjøtveit, and comprised personnel from the relevant departments who engaged in knowledge sharing sessions as well as enhanced networking among the industry experts.

## CATALYSING ECONOMIC SUSTAINABILITY



The session was intended to elicit a range of opinions on the need for sustainability when development priorities were highly pressing in some regions. It also sought to identify the factors that enabled development to proceed rapidly yet sustainably among others.

Also speaking at the congress was Mohamad Irwan Aman, Sarawak Energy Sustainability Manager in the session "Sustainability Performance: How does it influence decisions?". This session showcased the potential of the Hydropower Sustainability Assessment Protocol in assessing sustainability performance and providing a platform for dialogue.



## SUSTAINABILITY IN PROJECT DEVELOPMENT

Understanding the impact of our projects on the environment and social aspects is one of the critical components of our project development cycle and we have incorporated the key sustainability requirements of the Hydropower Sustainability Assessment Protocol (HSAP) as part of the scope of the Social and Environmental Impact Assessment (SEIA) Study. In other words, Sarawak Energy, on a voluntary basis, has added on additional requirements in its SEIA study that go beyond the State's statutory requirements. In addition, we have also adopted the same principles for non-hydro projects.

This commitment has been demonstrated in the approved report of the Social and Environmental Impact Assessment Study for the Baleh Hydropower Project where all the key HSAP requirements have been assessed and studied.



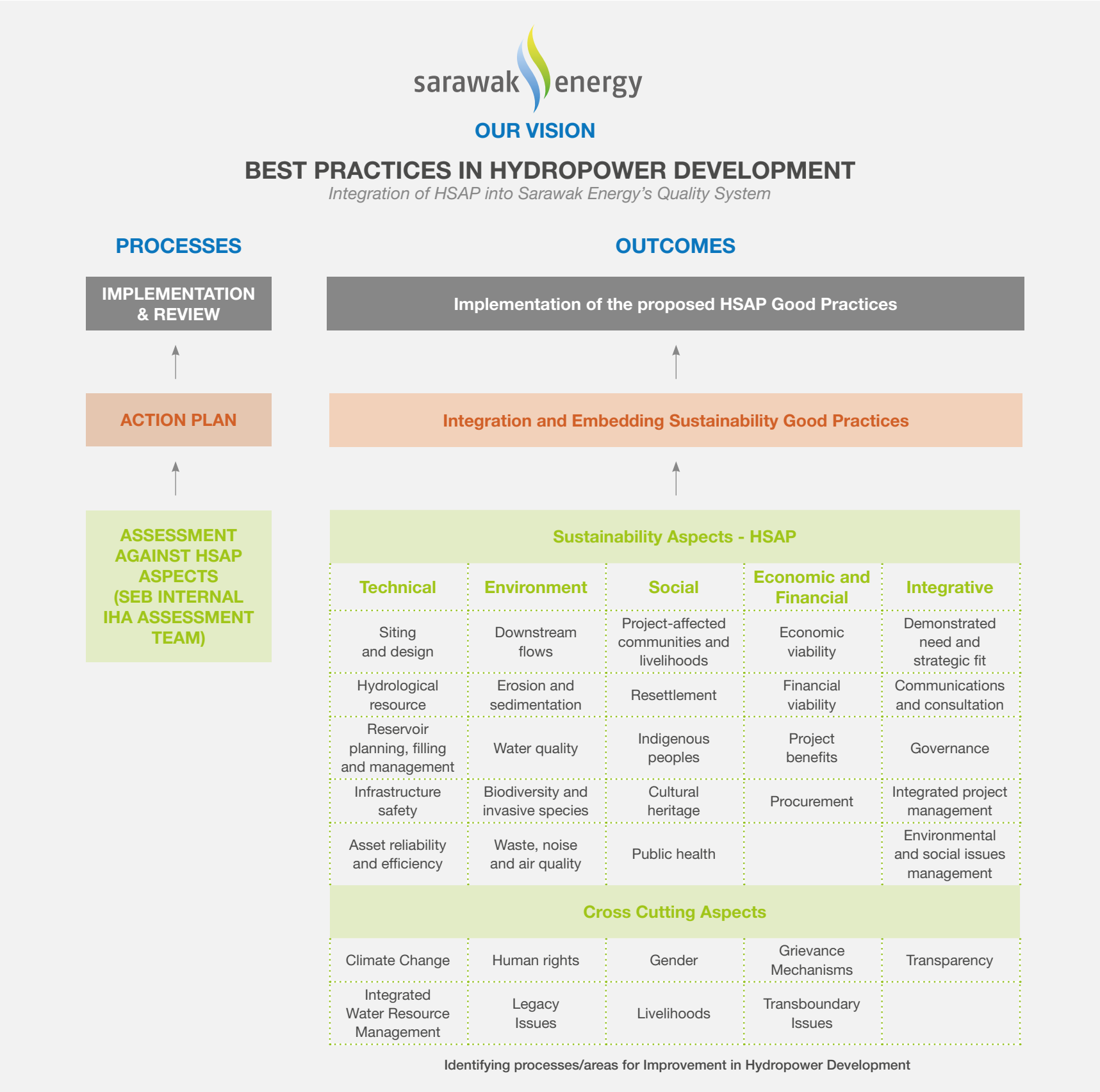


CATALYSING ECONOMIC SUSTAINABILITY

INTEGRATING AND EMBEDDING HYDROPOWER SUSTAINABILITY ASSESSMENT PROTOCOL (HSAP)  
- DEVELOPMENT OF INTERNAL ASSESSMENT TEAM

As part of our capacity building process as well as Sarawak Energy's effort to embed sustainability practices into our operations, we have developed an internal HSAP assessment team consisting of our own staff that have been trained by certified assessors to conduct an internal assessment for continuous improvement.

SUSTAINABILITY PROCESS IMPROVEMENT – LEARNING BY DOING



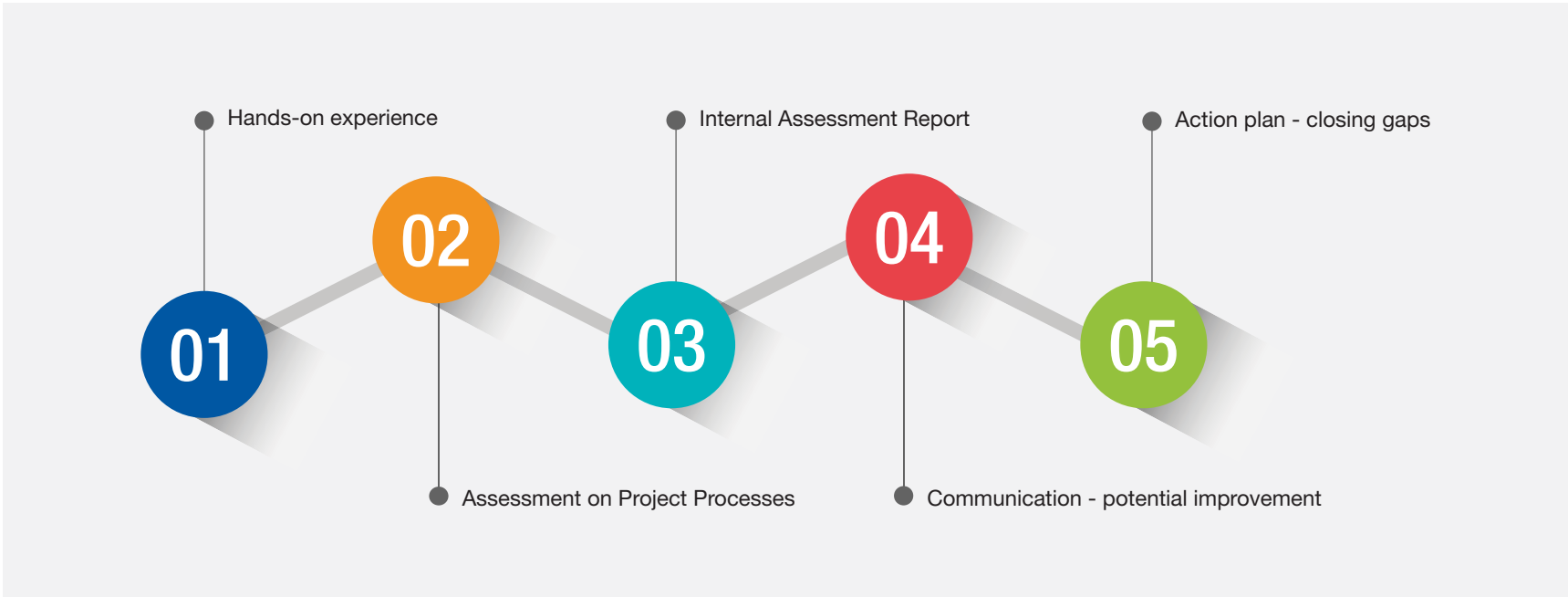


CATALYSING ECONOMIC SUSTAINABILITY

The results and recommendations from the assessment exercise form a basis for process improvement as well as provide hands-on experience to the internal assessors on the application of the HSAP in hydropower development.

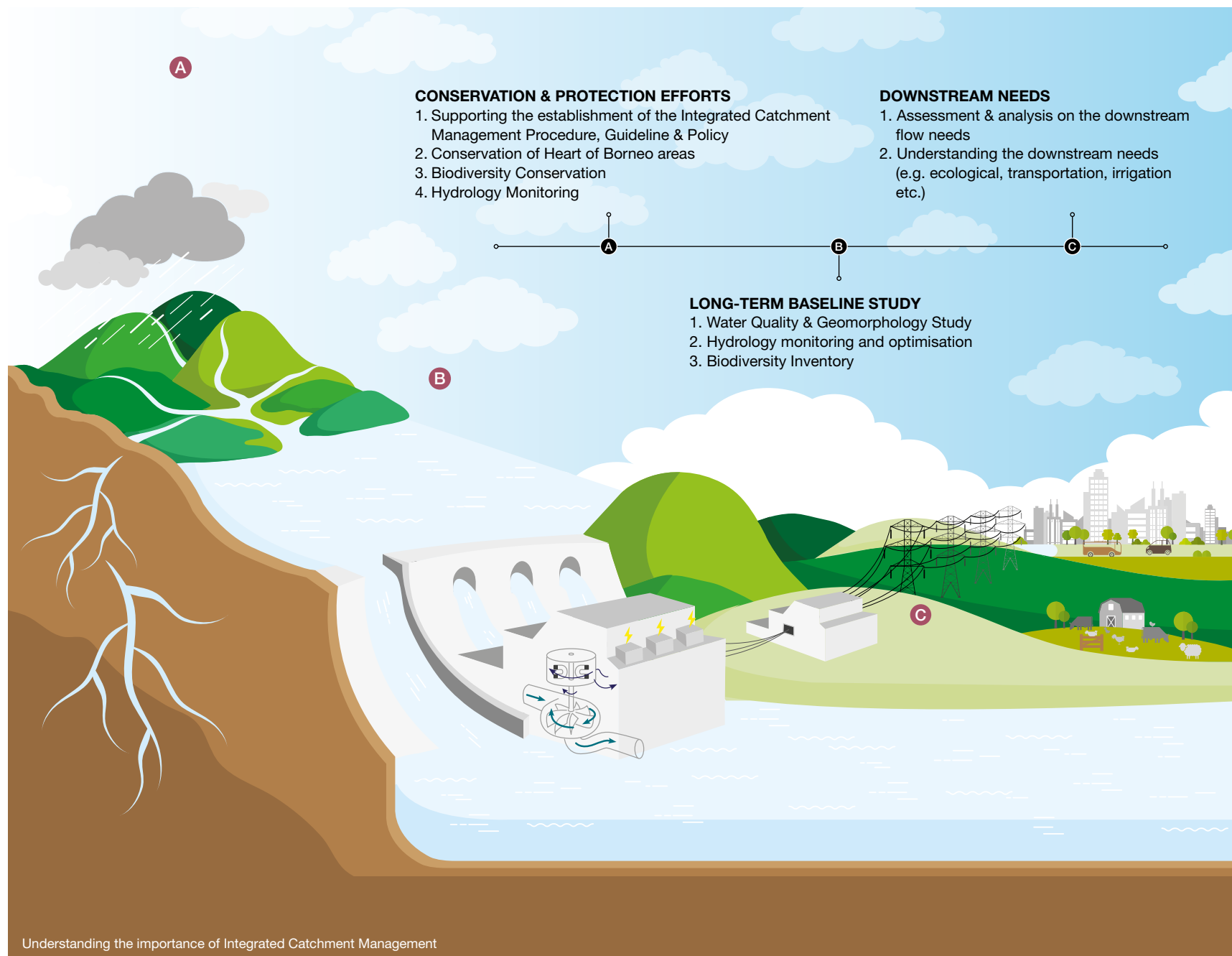
We hear & We forget  
We see & We remember  
WE DO & WE UNDERSTAND

KEY OUTCOMES OF THE INTERNAL ASSESSMENT EXERCISE



## CATALYSING ECONOMIC SUSTAINABILITY

## INTEGRATED CATCHMENT MANAGEMENT - SARAWAK ENERGY'S EFFORTS IN ENSURING LONG-TERM VIABILITY AND RELIABILITY OF WATER INFLOW FOR POWER GENERATION AND MEETING THE DOWNSTREAM NEEDS



Harnessing Integrated Catchment Management as a platform, Sarawak Energy has been able to raise its concerns on issues related to the importance of conserving the catchment areas located upstream of all existing and proposed HEPs as well as to advocate good practices in managing catchment areas for hydropower generation and downstream needs.

Conservation of catchment areas is one of the vital components in hydropower operation and development. In view of this fact, water resource is a fuel for hydropower electricity generation. All water inflows to our existing and proposed hydropower reservoirs originate from catchment areas. Once the catchment areas are properly protected and managed, they will continue to supply the expected quantity of quality water into our reservoirs to ensure the long-term sustainability of hydropower plants in generating clean and renewable energy, as well as fulfilling the other downstream needs such as irrigation, ecology and transportation.

Sarawak Energy's broad objectives in Integrated Catchment Management are:

1. The conservation and protection of catchment areas located upstream of our existing and future hydropower plants;
2. Development and establishment of catchment management plan, procedure, guidelines & policy; and
3. Collaboration with other agencies in conservation and protection efforts.

## CATALYSING ECONOMIC SUSTAINABILITY

### MANAGING OUR RESERVOIR

Our hydro environment strategy also includes water resources and energy, flood management and a Catchment Management Plan.

Furthermore, in 2015 we continued with our hydrometric network development and have put in place 22 hydrometric stations as at the end of the year.

Since 2014, we have installed two rainfall stations at the Murum catchment area, one hydrometric station at Sg. Danum and one hydrometric station downstream of the Batang Ai Hydropower Station in 2015.

During the year, we also undertook efforts to study the environmental impact on catchment areas such as river flow measurement, reservoir inspection for landslides, illegal activities and earthquakes as well as water/sediment sampling. River flow measurements were conducted 112 times during the year, while sedimentation sampling and analysis were conducted 79 times. As for reservoir inspections for landslides and illegal activities, these were undertaken from time to time.



Power turbines at Murum HEP

### PROCUREMENT PRACTICES

Sarawak Energy is committed to contributing to the economic development of our surrounding communities by providing business and employment opportunities to local contractors and skilled workers. Our procurement practices are based on the following guiding principles developed in line with recognised industry best practices and policies:

- Best Value for Money – all decisions must consider the central objective of achieving best value for money for the Company and the people of Sarawak;
- Open and Effective Competition – through clearly documented systems, processes and procedures, all contract and procurement activities will be conducted on a consistent and fair basis so as to encourage open and effective competition;
- Impartiality and Transparency of Process – all contract and procurement activities are conducted on an impartial, transparent and ethical basis, without internal or external influence;
- Enhance Opportunity for Local Content – in all contract and procurement activities, the Company will seek to enhance opportunities for Local Content.

We have also adopted a policy of prioritising local businesses where possible, providing opportunities to those within Sarawak first followed by the rest of Malaysia.

In 2015, we spent RM2.23 billion of our Operational Expenses on materials and services from Malaysian companies, of which RM1.51 billion, or close to 70%, was paid to Sarawakian companies. In contrast, RM128.86 million was spent on international suppliers for hydropower equipment which was not available from local manufacturers.

We also strive to provide equal opportunities to all local contractors, while also contributing to the Government's Bumiputera development agenda. During the year, we awarded 300 contracts to Bumiputera from Sarawak, 518 to non-Bumiputera Sarawakians and 128 to Malaysian non-Sarawakians.

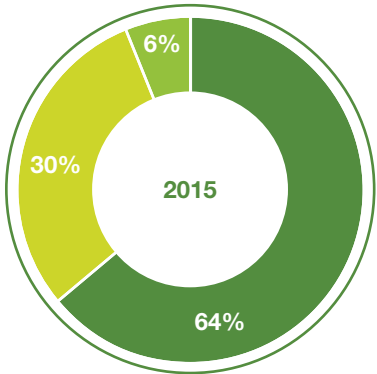


CATALYSING ECONOMIC SUSTAINABILITY

TENDERS AWARDED BY SARAWAK ENERGY

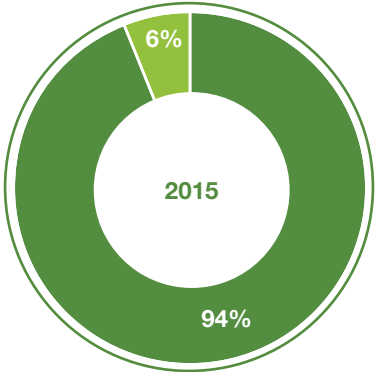
Sarawakian vs Non-Sarawakian vs International

| STATUS                     | VALUE (RM)  |               |               |               |               |
|----------------------------|-------------|---------------|---------------|---------------|---------------|
|                            | YEAR 2011   | YEAR 2012     | YEAR 2013     | YEAR 2014     | YEAR 2015     |
| Sarawakian                 | 493,484,890 | 1,159,217,853 | 1,155,661,906 | 1,036,485,969 | 1,512,493,591 |
| Malaysian (Non-Sarawakian) | 122,196,259 | 273,058,866   | 620,100,468   | 1,914,252,163 | 719,519,594   |
| International              | 44,331,403  | 344,393,007   | 25,256,863    | 57,395,043    | 128,861,301   |
| Overall Total              | 660,012,553 | 1,776,669,725 | 1,801,019,237 | 3,008,133,175 | 2,360,874,486 |

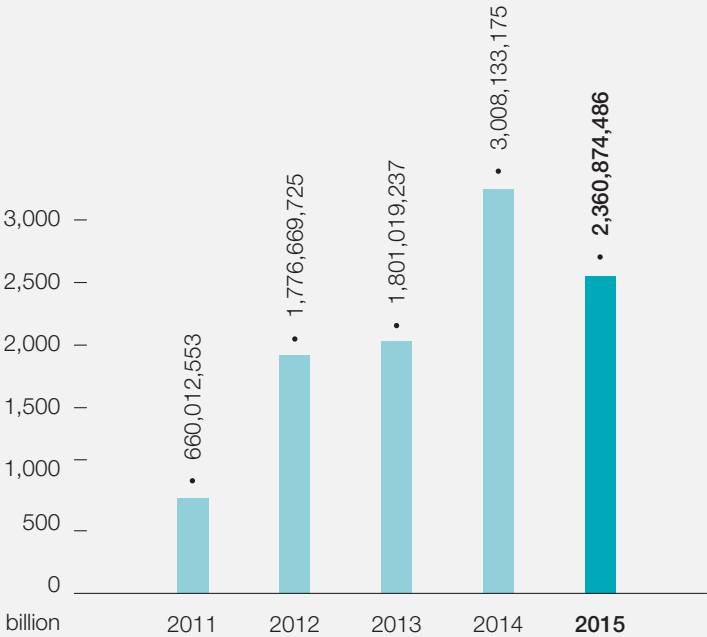


Malaysian vs International

| STATUS        | VALUE (RM)  |               |               |               |               |
|---------------|-------------|---------------|---------------|---------------|---------------|
|               | YEAR 2011   | YEAR 2012     | YEAR 2013     | YEAR 2014     | YEAR 2015     |
| Malaysian     | 615,681,150 | 1,432,276,718 | 1,775,762,374 | 2,950,738,132 | 2,232,013,185 |
| International | 44,331,403  | 344,393,007   | 25,256,863    | 57,395,043    | 128,861,301   |
| Total         | 660,012,553 | 1,776,669,725 | 1,801,019,237 | 3,008,133,175 | 2,360,874,486 |



TOTAL TENDERS AWARDED BY SARAWAK ENERGY (MALAYSIAN & INTERNATIONAL) 2011 - 2015





# IMPROVING OUR ENVIRONMENTAL FOOTPRINT

As Sarawak's primary energy company, we are acutely aware of our impact on the environment, and of how we may influence the State's natural resources and landscape for the better. In view of this, our sustainability activities are deeply rooted into our daily operations as we seek to mitigate climate change while improving environmental outcomes for the benefit of all our stakeholders.

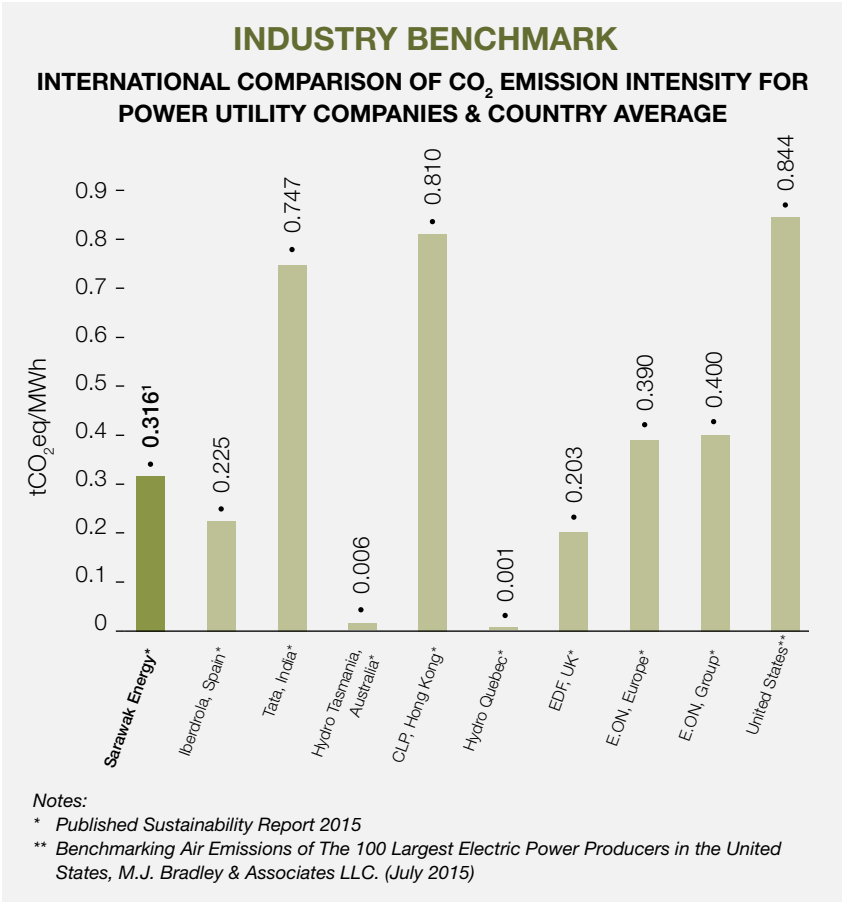
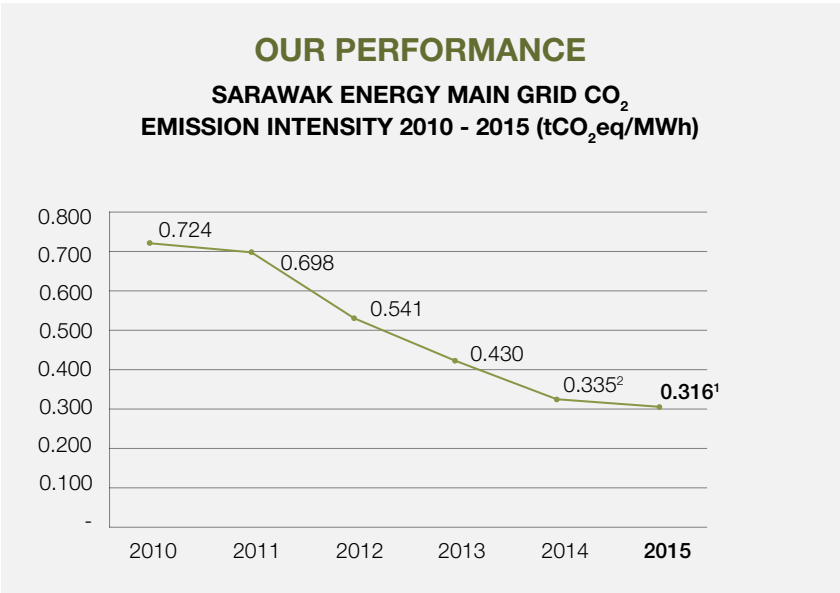


IMPROVING OUR ENVIRONMENTAL FOOTPRINT

DECARBONISING OUR ELECTRICITY GRID

With energy generation making up the core of our business, we are tremendously proud of the progress we have achieved in promoting renewable energy. This has resulted in a declining trend in our long-term CO<sub>2</sub> grid emission intensity.

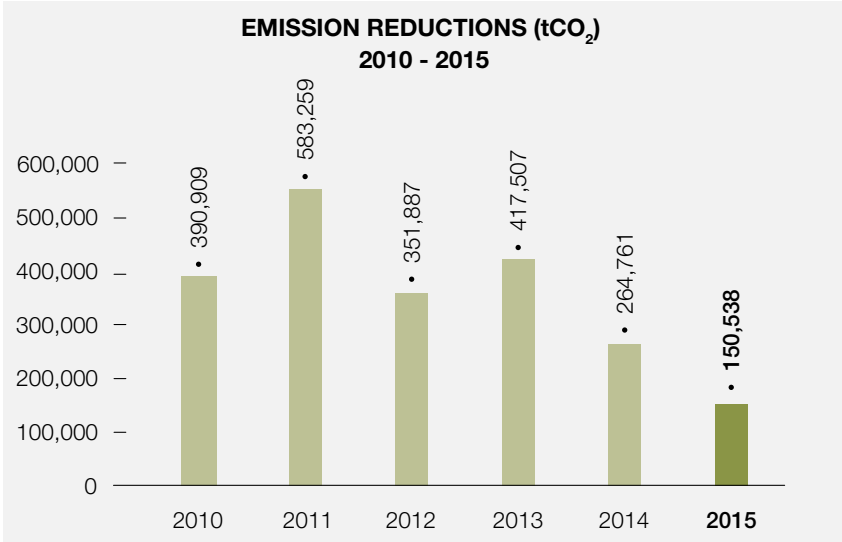
We have successfully recorded the following trend in our CO<sub>2</sub> emission intensity reductions from 2010 - 2015:



EMISSION REDUCTIONS PROJECT

As part of our strategy to improve our environmental footprint, we have taken steps to increase our share of renewable energy, retire old and small power plants to improve energy efficiency and introduce new and more efficient technology such as converting our Open Cycle Power Plants to Combined Cycle Power Plants.

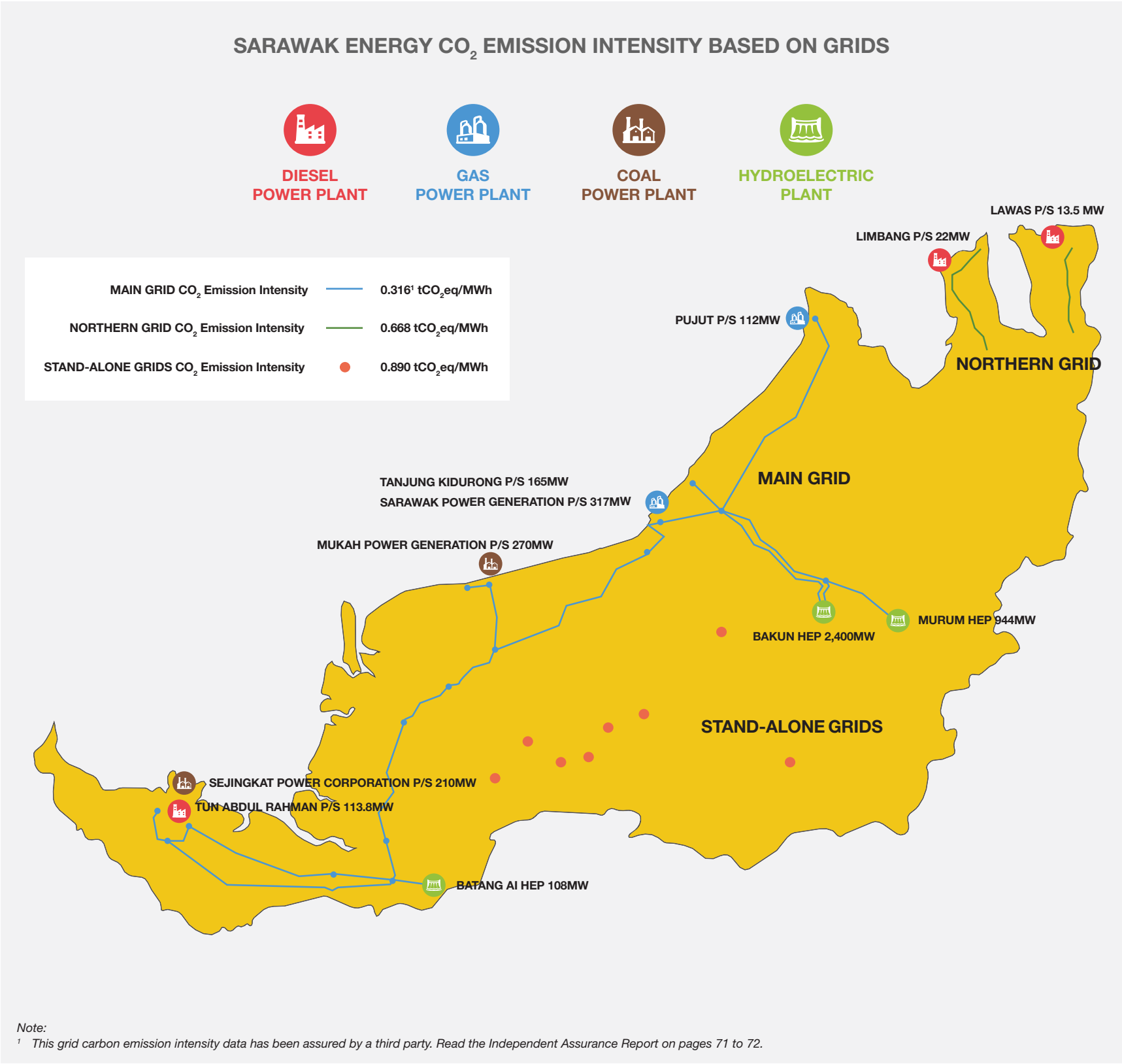
Our Bintulu Combined Cycle Plant is one of the registered Clean Development Mechanism projects with the United Nations under the Kyoto Protocol Agreement. This also represents the first CDM project for a thermal plant in Malaysia.



Notes:  
<sup>1</sup> This grid carbon emission intensity data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.  
<sup>2</sup> This grid carbon emission intensity data has been assured by a third party for Sustainability Report 2014.



IMPROVING OUR ENVIRONMENTAL FOOTPRINT

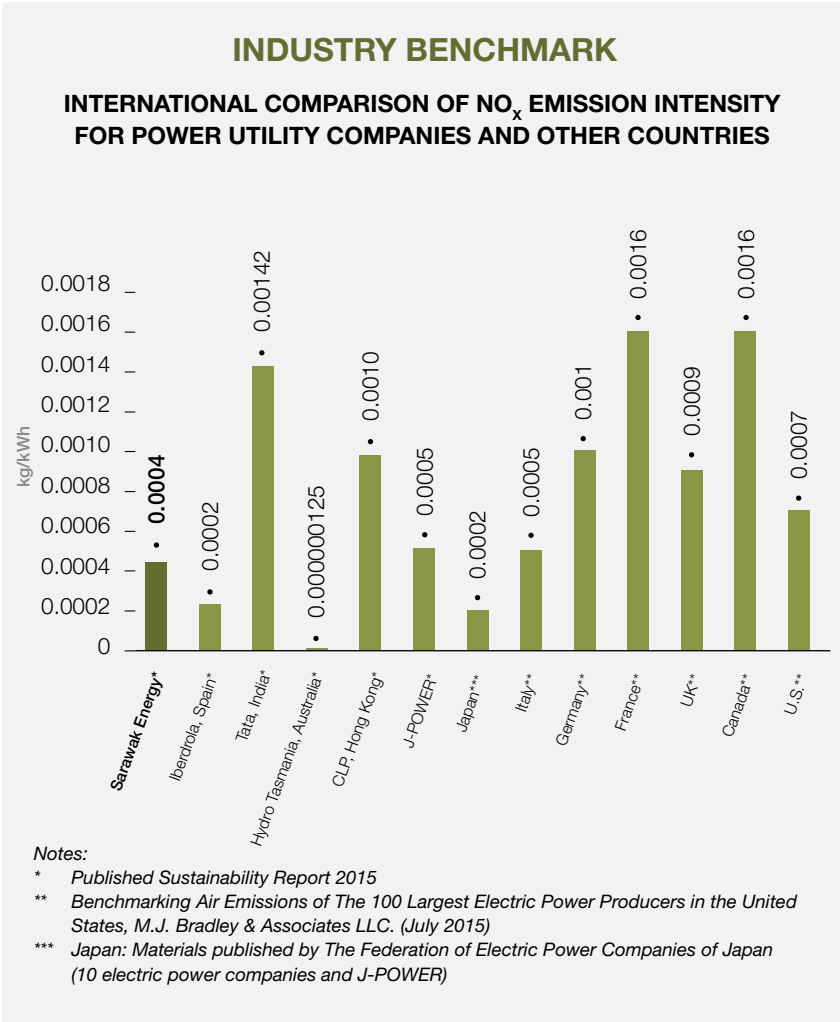
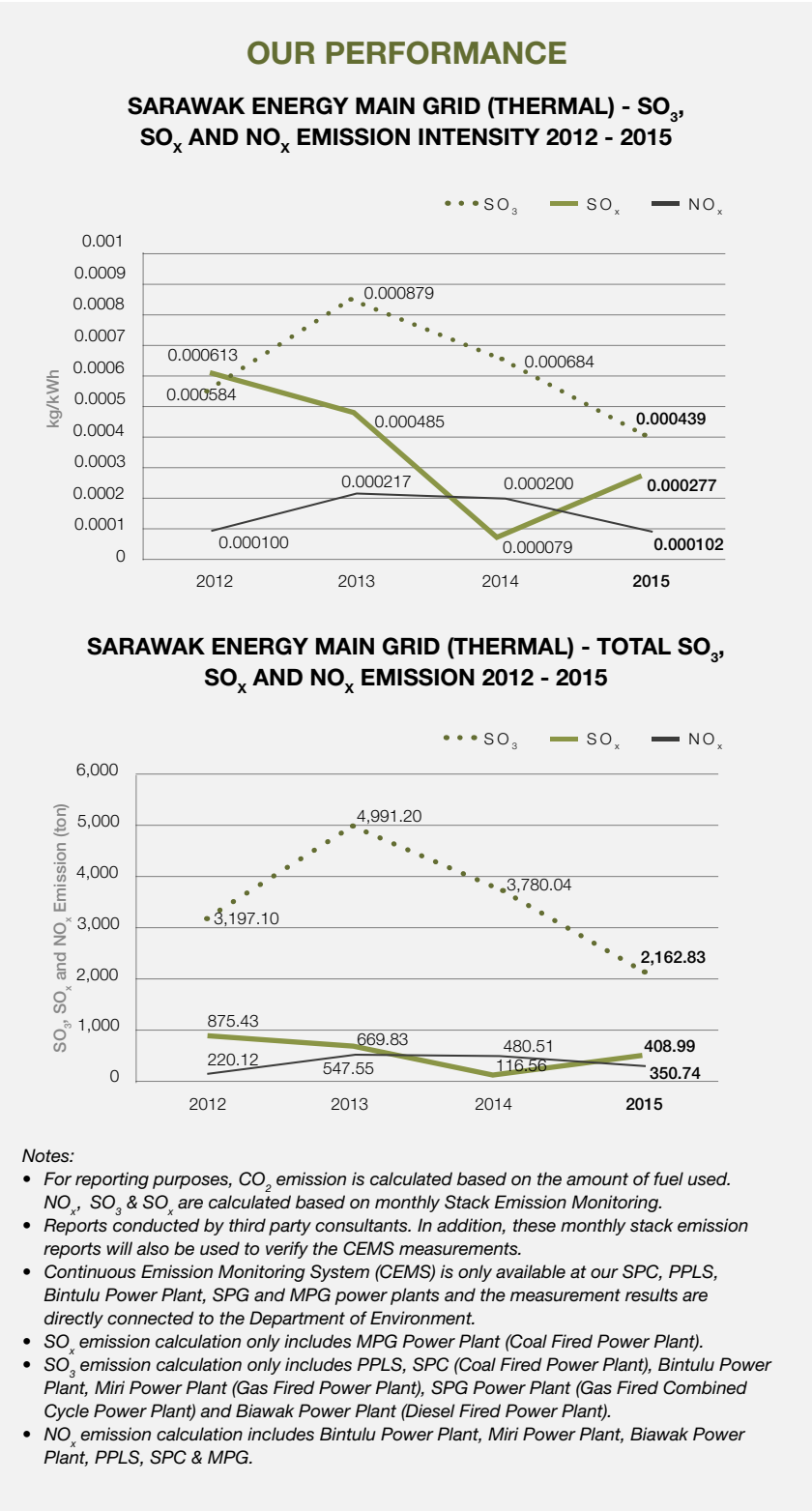


IMPROVING OUR ENVIRONMENTAL FOOTPRINT

MANAGING OUR EMISSIONS

In ensuring we continuously manage and improve our emissions, Sarawak Energy strives to comply with the relevant environmental regulations such as the Environmental Quality Act 1974.

Our efforts to reduce our power plant emissions are also aligned with our long-term energy efficiency strategies to introduce new and efficient technology.



MATERIALS AND WATER MANAGEMENT

At Sarawak Energy, we are continuously conscious of our usage of materials and consumption of water due to the impact they create on our wider environment.

In the year under review, the quantity of materials used to produce our primary products and services is recorded in the table on the next page. We are also pleased to report an increasing share in the use of renewable energy from our hydroelectric plants, resulting in a more sustainable and reliable source of electricity to drive the State's development agenda.

## IMPROVING OUR ENVIRONMENTAL FOOTPRINT

### MANAGING OUR WATER RESOURCES

#### WATER INFLOW TO OUR RESERVOIR

| BATANG AI HEP (2015):  | MURUM HEP (2015):  |
|--|--|
| * Annual inflow 3,100 mil m <sup>3</sup><br>(annual inflow from catchment) | * Annual inflow 7,840 mil m <sup>3</sup><br>(annual inflow from catchment) |
| * Annual energy generated 316GWh   | * Annual energy generated 2,093GWh   |

In terms of our water utilisation management, during the year we recorded the following in total water withdrawal by source:

#### WATER INTAKE FOR COOLING PROCESS

| PLANT TYPE                   | MAJOR PLANT                 | SOURCE                                 | UNIT                          | TOTAL 2015                 |
|------------------------------|-----------------------------|--|-------------------------------|----------------------------|
| Coal                         | Sejingkat Power Corp + PPLS | Municipal                              | meter cubic (m <sup>3</sup> ) | 1,574,620 m <sup>3</sup>   |
|                              |                             | Seawater or other natural water source | meter cubic (m <sup>3</sup> ) | 416,275,200 m <sup>3</sup> |
| Coal                         | Mukah Power Generation      | Municipal                              | meter cubic (m <sup>3</sup> ) | 526,540 m <sup>3</sup>     |
|                              |                             | Seawater or other natural water source | meter cubic (m <sup>3</sup> ) | 454,118,400 m <sup>3</sup> |
| Combined Cycle - Natural Gas | SPG + Bintulu Power Plant   | Municipal                              | meter cubic (m <sup>3</sup> ) | 80,096 m <sup>3</sup>      |
|                              |                             | Seawater or other natural water source | meter cubic (m <sup>3</sup> ) | 180,623,765 m <sup>3</sup> |
| Open Cycle - Natural Gas     | Miri Power Plant            | Municipal                              | meter cubic (m <sup>3</sup> ) | 18,978 m <sup>3</sup>      |
|                              |                             | Seawater or other natural water source | meter cubic (m <sup>3</sup> ) | Not Applicable             |
| Diesel                       | Biawak Power Plant          | Municipal                              | meter cubic (m <sup>3</sup> ) | 9,197 m <sup>3</sup>       |
|                              |                             | Seawater or other natural water source | meter cubic (m <sup>3</sup> ) | 1,590,050 m <sup>3</sup>   |
| Diesel                       | Limbang Power Plant         | Municipal                              | meter cubic (m <sup>3</sup> ) | 34,838 m <sup>3</sup>      |
| Diesel                       | Lawas Power Plant           | Municipal                              | meter cubic (m <sup>3</sup> ) | 247 m <sup>3</sup>         |

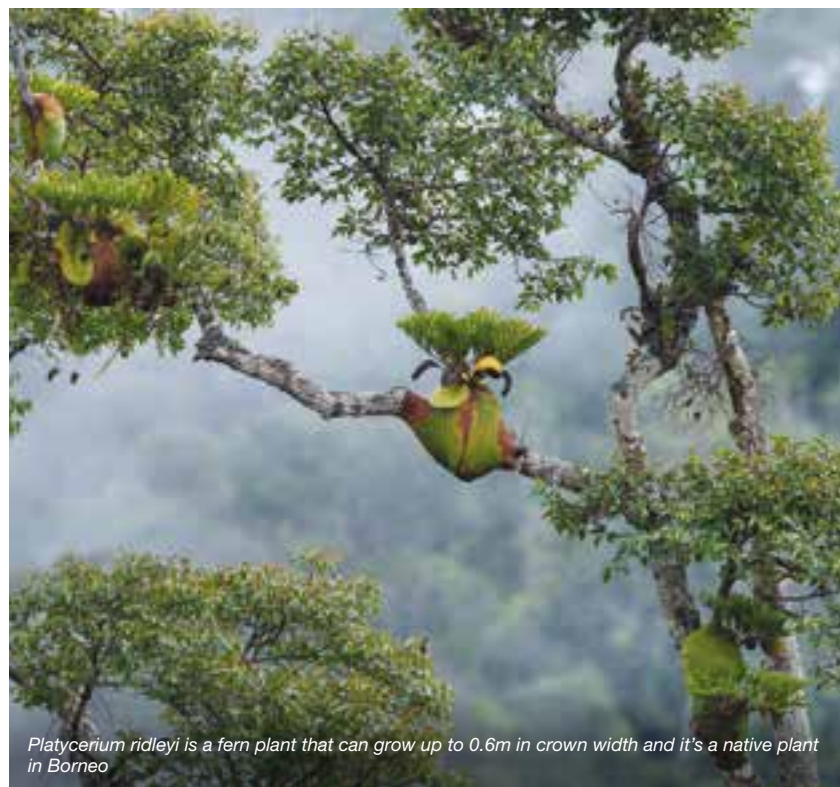
We also recorded the following water withdrawal by source in our Hydro segment:

#### WATER UTILISATION FOR OUR HYDROPOWER GENERATION

| BATANG AI HEP:   | MURUM HEP (2015):   |
|--|---|
| * Annual rainfall 2,676 mm   | * Annual rainfall 4,441 mm  |
| * Annual water consumption 2,755 mil m <sup>3</sup> (Outflow from Power House) | * Annual water consumption 2,933 mil m <sup>3</sup> (Outflow from Power House)              |
|  | * Annual water consumption 5,358 mil m <sup>3</sup> (Spillway discharge)                    |
|  | * Annual water consumption 8,291 mil m <sup>3</sup> (Total outflow: Power House + Spillway) |

### PROTECTING SARAWAK'S RICH BIODIVERSITY

With our 100-year history of serving Sarawak, we recognise how fortunate we are to operate in a region rich with natural resources and biodiversity. In view of this, we have made it our mission to protect the natural environment and its flora and fauna. In recent years, this has seen our company focus on undertaking hydropower projects which not only help to create new ecosystems that contribute to the well-being of the environment, but also act as a catalyst for rural development.



*Platycerium ridleyi* is a fern plant that can grow up to 0.6m in crown width and it's a native plant in Borneo



## IMPROVING OUR ENVIRONMENTAL FOOTPRINT

### SARAWAK ENERGY'S INVOLVEMENT IN HoB INITIATIVE

Hydropower is one of the best options for clean and renewable energy. In Sarawak most of the potential and ideal areas for hydropower development are located downstream of the Heart of Borneo (HoB) areas. These areas are the headwaters of the major rivers in the state which also serve as catchment areas that provide water supply to meet downstream needs including power generation.

Good quality and consistent water supply to our reservoirs will ensure our hydroelectric plants operate at optimum level. This will also result in endless benefits to the State's development via new revenue streams, with a stable and competitive source of energy leading the pack, followed by increased Foreign Direct Investment (FDI) that will result in thousands of job opportunities, rural development and tax revenue. Indirect benefits include access to basic infrastructure for rural areas, flood mitigation and environmental conservation in the form of clean energy in reducing the environmental load.

#### THE HEART OF BORNEO INITIATIVE

The HoB Initiative is a unique Government-led and NGO-supported programme that was initiated by a joint Declaration by the governments of Brunei, Indonesia and Malaysia in 2007.

The aim of the initiative is to conserve the biodiversity of the Heart of Borneo for the benefit of the people who rely upon it through a network of protected areas, sustainable management of forests and other sustainable land uses.

#### Exploring the Gems of Upper Baleh - HoB Scientific Expedition Baleh

The Heart of Borneo Scientific Expedition Baleh 2015, as it was officially known, was part of the State's conservation effort and it contributed to support the protection of water resources in the Baleh catchment.

The expedition site was within the proposed Baleh National Park, which was also a part of the headwater areas for the catchment. Jointly organised by the Forest Department Sarawak, Universiti Malaysia Sarawak (UNIMAS), World Wildlife Fund (WWF) and Sarawak Energy, the 10-day expedition was located upstream and within the catchment area of the proposed Baleh hydroelectric plant.

It was one of the top priorities of the HoB initiative to strengthen commitment to Sustainable Development and conservation in Sarawak.

The objectives of the expedition were:

1. To gather baseline data and document the diversity of the flora and fauna of Upper Baleh to support the gazettement of the Proposed Baleh National Park.
2. To gather baseline biodiversity data to support conservation and development of a catchment management plan.

3. To generate new scientific information on the biodiversity of a poorly-known part of Sarawak state. Activities by UNIMAS will lead to scientific publications, student training and materials (data, specimens and tissue samples) for research.
4. To gather baseline data to develop an understanding of the montane terrestrial and freshwater biodiversity and ecosystems to support and complement identification of other representative priority conservation areas within the wider Baleh watershed.

The results show that the Baleh Basin area is rich with herpetofaunal diversity, including three undescribed species of lizards (of the family *Scincidae*) as well as the Bornean endemic species, genus and family, *Lanthanotus borneensis*, the Bornean Earless Monitor, which is classified as Totally Protected in Sarawak.

The data and findings will provide insights for an integrated management approach of the Baleh catchment, and the gazettement of this area. Having an example created in Baleh, there is potential to replicate the management to broader watersheds within the Heart of Borneo which includes protecting headwater sources for energy and water security for Sarawak.



Sampling activity during Baleh expedition



Ulu Baleh Expedition Team

## IMPROVING OUR ENVIRONMENTAL FOOTPRINT

### SARAWAK ENERGY CONSERVATION EFFORTS

Murum Hydroelectric Plant (MHEP) is the latest hydropower plant to come on line for Sarawak Energy. Its catchment has become a high biodiversity value area and an environmentally-protected area within the State. The MHEP reservoir spans a geographical area of approximately 245 km<sup>2</sup>, with its dam standing at a maximum height of 146 m above the riverbed, providing the capacity to hold 1.6 million m<sup>3</sup> of water.



Orchid garden at Flora Conservation Garden, Murum



Datu Len Talif releasing Empurau, Semah and Tengadak fish into the river. Also present are the Chief Operating Officer of Sarawak Energy Mr. Lu Yew Hung, Chief Executive Officer Wong Ting Chung for Sarawak Forestry Corporation (SFC) and Chairman Murum Penan Development Community (MPDC), Mr. Labang Paneh at the Official Launching of Tagang System, Sg. Lekasi, Tegulang

#### Tagang System Fisheries

Sarawak Energy has also undertaken a number of initiatives in our effort to promote the conservation of the State's biodiversity, including the establishment of a "Tagang System" of fishery for Penan Tegulang communities. The community-based fishery project, saw the release of an estimated 2,500 fish fry of indigenous species in May 2015 at Lekasi river, near the Tegulang Resettlement Scheme. The project was jointly promoted and organised by Sarawak Energy, Sarawak Forestry Corporation (SFC) and Sarawak Inland Fisheries, with participation from the Penan community.

#### Plant/Orchid Garden on a Permanent Island in the Murum Reservoir

In September 2015, as we approached the completion of the rescue operation for plants and wildlife at the Murum Reservoir, we established a plant/orchid garden on one of the selected permanent islands in the area. The garden currently comprises a nursery, orchid garden, commercial trees and non-tree species, including some species considered rare, endangered and endemic to the area.

#### Study on Environmental Efficiency Improvement and Rehabilitation Plan


During the year, we also initiated a study together with Mukah Power Generation (MPG) to address riverbank erosion at the Bedengan river mouth, in Balingian Mukah. The erosion affected the efficiency of the intake of cooling water for the MPG Power Plant usage and had also impacted the local community and a nearby school, SK Sg. Bedengan. We have since appointed an environmental consultant to conduct the study.

#### Environmental Education and Awareness

As part of an efforts to advocate environmental awareness among our communities, we have organised the following programmes during the year:

- Environmental "Gotong-royong" programme at SK Sg Bedengan, Mukah, jointly organised with NREB Mukah and SK Sg Bedengan, Balingian Mukah with active participation from the nearby local communities. The programme, officiated by YB Yossibnosh Ballo, ADUN Balingian on November 2015 and involving 150 participants, aimed to address beach erosion which had affected the school compound.
- Murum WIMOR Talks, held on 8 June 2015 at RH Hotel Sibu for private sector and Government officers in Sibu. Talks were delivered by SFC personnel, who are experts in their field on wildlife rescue and conservation. During the talks, the SFC personnel reported on and shared their wildlife rescue experience in Murum to help stakeholders understand and appreciate efforts in biodiversity conservation and sustainability.
- Environmental Awareness Sessions at Long San in Baram and Mukah to inform the local communities on the potential livelihood and environmental impacts from projects to be developed by Sarawak Energy.



A Penan man is shown in a workshop, focused on his craft. He is wearing a dark apron over a light-colored shirt and is using a large, traditional wooden tool to work on a piece of wood. The workshop has a high, vaulted ceiling made of wooden beams and corrugated metal sheets. The lighting is warm and focused on the man and his work.

A Penan in the process of making handicrafts

# TRANSFORMING SOCIAL OUTCOMES

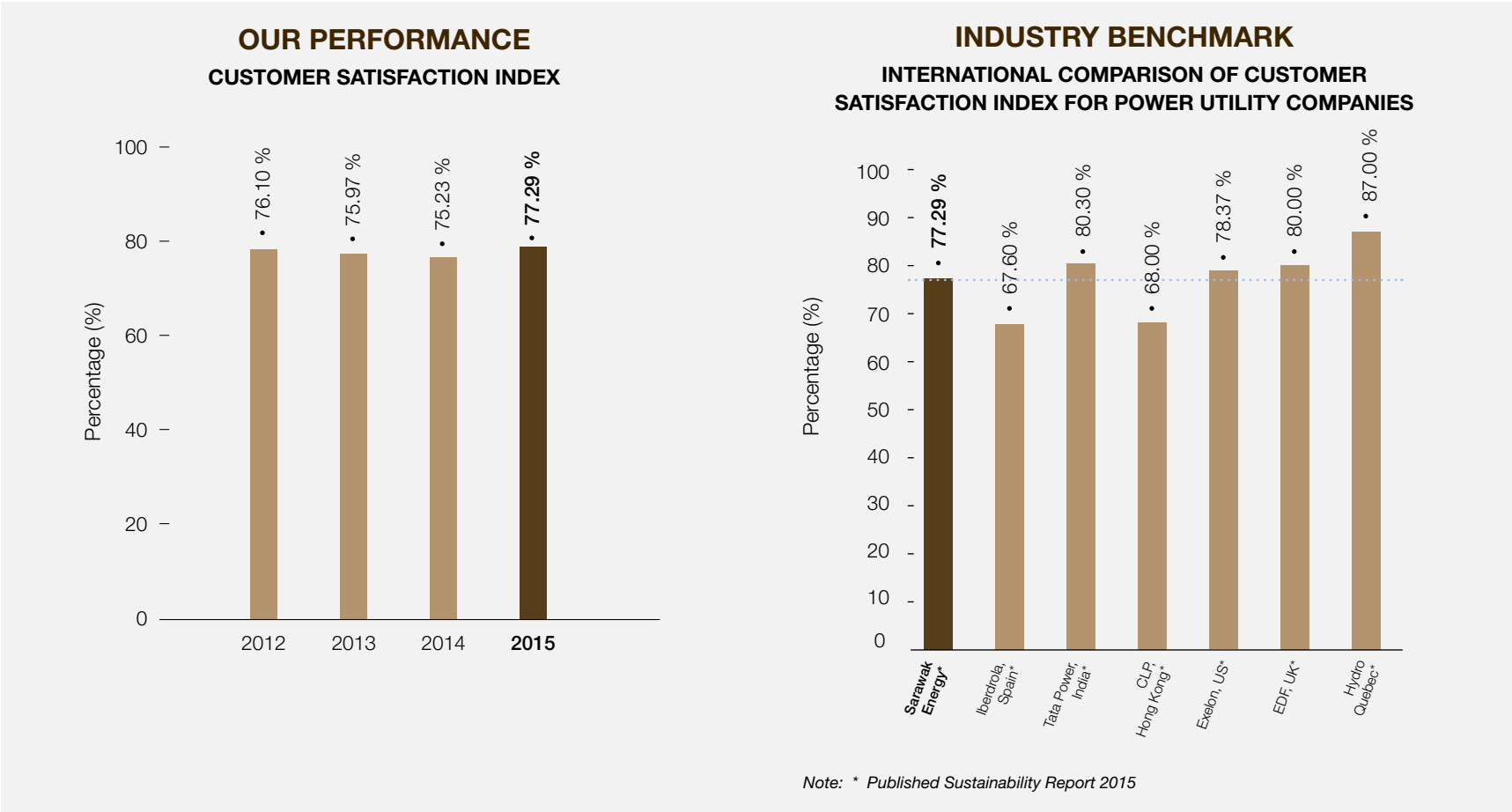
Our business is deeply rooted in the lives of the people of Sarawak, and we hope to be able to give back to our stakeholders by placing society at the heart of our operations. From internal stakeholders such as our valued employees, to the customers who let us into their homes every day and the communities whose lives we touch every day, we strive to improve outcomes for all those around us.



TRANSFORMING SOCIAL OUTCOMES

PUTTING OUR CUSTOMERS FIRST

As a result of our continuous efforts to serve and listen to our customers, we recorded an improvement in our Customer Satisfaction Index to 77.29% in 2015 from 75.23% in 2014. Our progress in putting customers first is illustrated as follows:



CUSTOMER PRIVACY

Sarawak Energy takes the privacy of our valued customers seriously and has taken the appropriate steps to keep their private information secure in accordance with the Personal Data Protection Act 2010 (PDPA), which was enacted in 2013. During the year, we did not receive any substantiated complaints regarding the breach of any of our customers’ privacy of their personal data.

We have also taken steps to educate both our employees and our customers on the PDPA through public awareness talks and programmes with our staff, while customers were kept informed of the law through our website and leaflets, as well as during signings of new contracts.

LIGHTING THE WAY FOR RURAL COMMUNITIES

As Sarawak’s energy utility, one of the most important things we do is ensure access to electricity even in the farthest reaches of Malaysia’s largest state. The Government’s Rural Electrification Scheme (RES) has provided us a platform to do so, while we also undertake standalone projects to help connect rural communities to this basic necessity.

Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential.

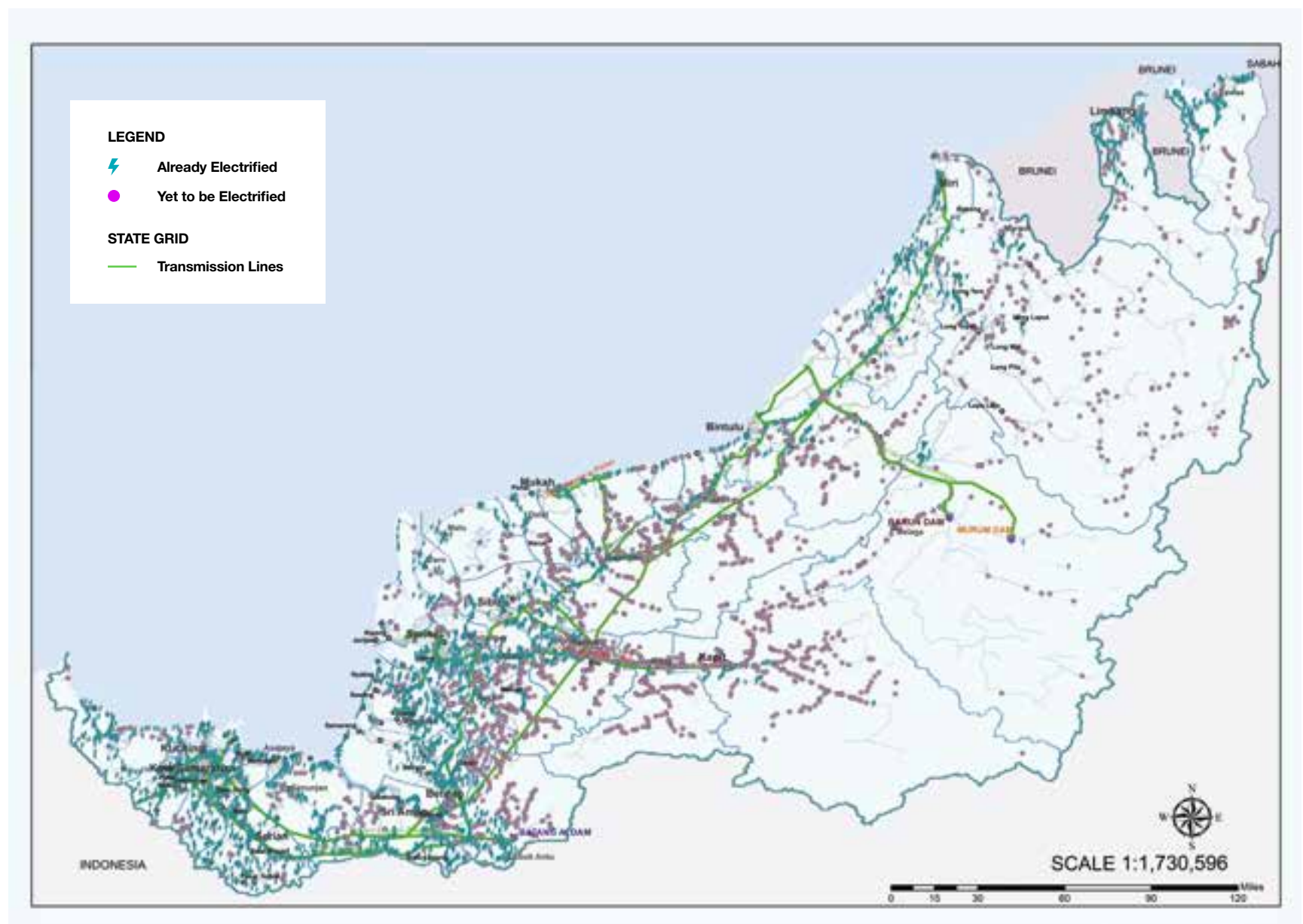
## TRANSFORMING SOCIAL OUTCOMES

### RURAL ELECTRIFICATION SCHEME (RES)

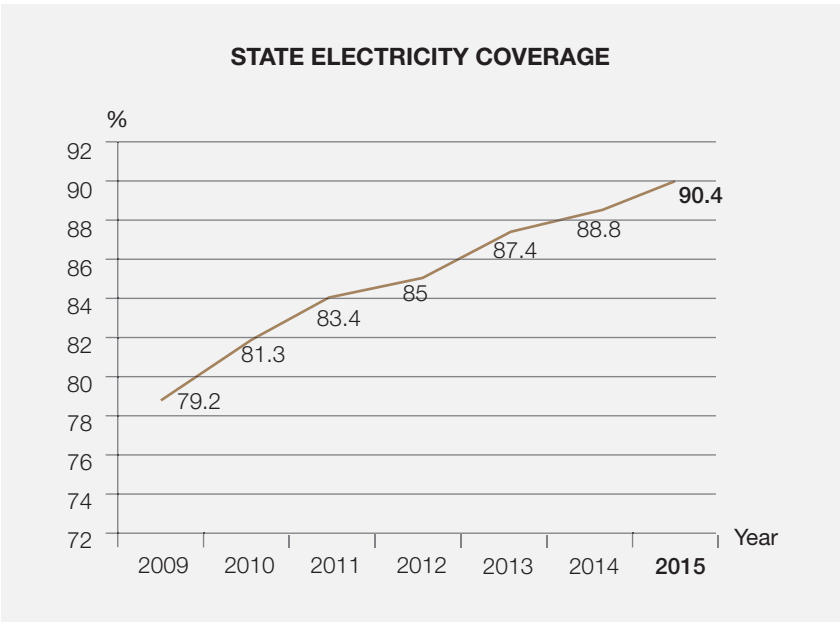
Since the implementation of the Improving Rural Development National Key Result Area (RD NKRA) under the Government Transformation Programme launched in 2009, Sarawak Energy has been proud to partner with the Government in its effort to provide basic infrastructure to rural and remote areas of Sarawak through the RES.

The Government has allocated RM2.5 billion to electrify rural villages in Sarawak since then, of which RM2 billion has been allocated for grid extension and the remaining for alternative supply made up of off-grid power supply such as micro-hydro and solar hybrid projects. This has raised Sarawak's electrification rate to 90.4% as at the end of 2015, from 79.2% in 2009, benefitting no less than 87,000 rural households from 2010 - 2015 through both the normal grid scheme and alternative solar and micro-hydro systems.

Micro-hydro and solar hybrid systems have emerged as a vital alternative to normal grid schemes as the remaining unelectrified villages become more remote, making extending grid lines more challenging. Thus, we expect an uptrend in alternative supply schemes as we continue to provide remote areas with access to electricity.



TRANSFORMING SOCIAL OUTCOMES



Number of households electrified under RES by system type, 2010 - 2015:

| YEAR                       | NEW HOUSEHOLDS CONNECTED |       |        |        |        |        |
|----------------------------|--------------------------|-------|--------|--------|--------|--------|
|                            | 2010                     | 2011  | 2012   | 2013   | 2014   | 2015   |
| Normal Grid                | 17,039                   | 9,136 | 21,130 | 11,858 | 14,763 | 12,419 |
| Alternative - Solar System | -                        | -     | -      | 57     | 187    | 605    |
| Alternative - Micro-Hydro  | -                        | -     | -      | -      | -      | 138    |
| TOTAL                      | 17,039                   | 9,136 | 21,130 | 11,915 | 14,950 | 13,162 |

As at the end of 2015, 850 households in Kapit, Belaga, Lawas, Bario and Betong have been fitted with solar hybrid schemes as part of the RD NKRA. On our own initiative, we continuously seek villages with potential to be supplied with micro-hydro facilities. This has resulted in the construction and commissioning of a micro-hydro station in Long Banga in November 2014, consisting of two units of turbines installed to a combined capacity of 320kW.



To increase the reliability of the station, two units of diesel generators with a 80kW and 160kW capacity were installed to provide contingency to the turbines. The micro-hydro station is currently supplying electricity to 138 households, with further plans to expand the station with two additional units of 160kW turbines to further supply three additional adjacent villages, namely Long Beruang, Long Lamai and Long Balong. An estimated 152 new households will be connected once the extension is completed.

RURAL POWER SUPPLY SCHEME (RPSS)

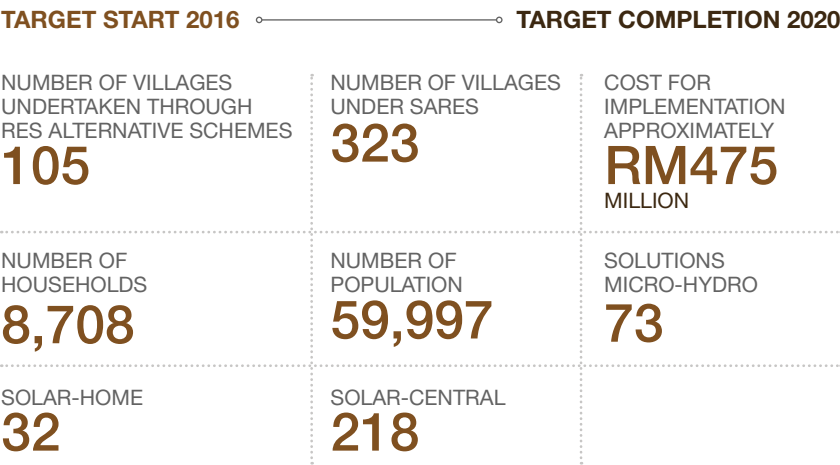
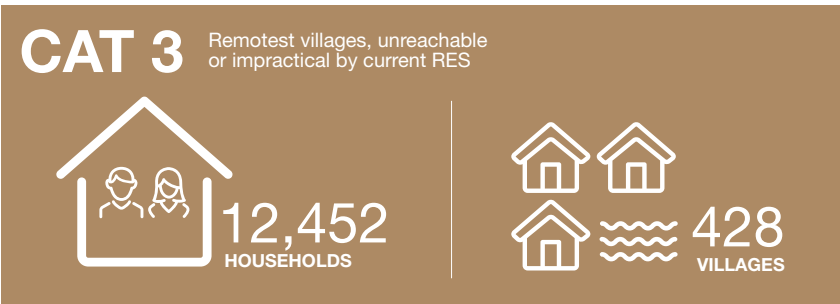
The RPSS was formulated in 2015 to address the electrification of rural villages where existing transmission and distribution lines are reaching their technical limitations. This new initiative will see the construction of new transmission lines/substations and distribution substations to complement the RES grid extension programme by connecting the interiors to the grid as we strive for full electrification of the State.

SARAWAK ALTERNATIVE RURAL ELECTRIFICATION SCHEME (SARES)

SARES was introduced as a new initiative by the State Government to speed up the progress of rural electrification activities in the most remote villages. The scheme was conceived at the end of 2015 and is expected to begin implementation in 2016 by providing “self-help” micro-hydro and solar electricity generating solutions as an alternative to costly and noisy diesel generators. This new initiative is estimated to benefit approximately 8,700 remote households in 323 of the remotest villages which have not been covered by any electrification plan.

SARES QUICK FACTS AND FIGURES

General:  
Current unelectrified villages = 1,919 divided into 3 Categories





TRANSFORMING SOCIAL OUTCOMES

Apart from our efforts undertaken as part of the RES, we have also been proactive in providing power to rural communities by installing solar hybrid systems under our own initiative.

As at the end of 2015, we have completed installing 30 solar power stations throughout the State, equivalent to a solar installation capacity of 7MWp which benefited 2,243 households.

INDIGENOUS RIGHTS

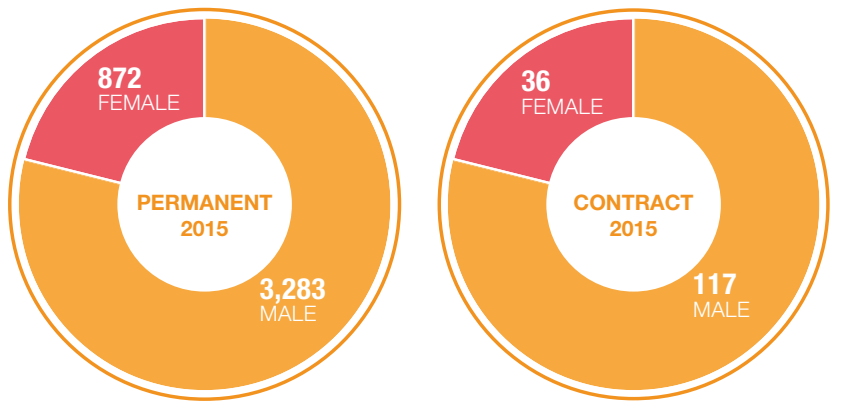
Sarawak Energy is an active proponent of human rights. This has been integrated into our project development process, and is in line with HSAP standards and the International Finance Corporation’s Handbook on the Preparation of a Resettlement Action Plan for stakeholder engagement. These standards prescribe the “Free, Prior and Informed” principle to provide the communities the right to voice their opinions and grievances on proposed projects that may impact them be it directly or indirectly. We also ensure we continuously carry out community engagements, which form an integral part of our overall stakeholder engagement strategy.

During the reporting period, there were no incidences of violations of the rights of indigenous peoples.

EMPOWERING OUR WORKFORCE

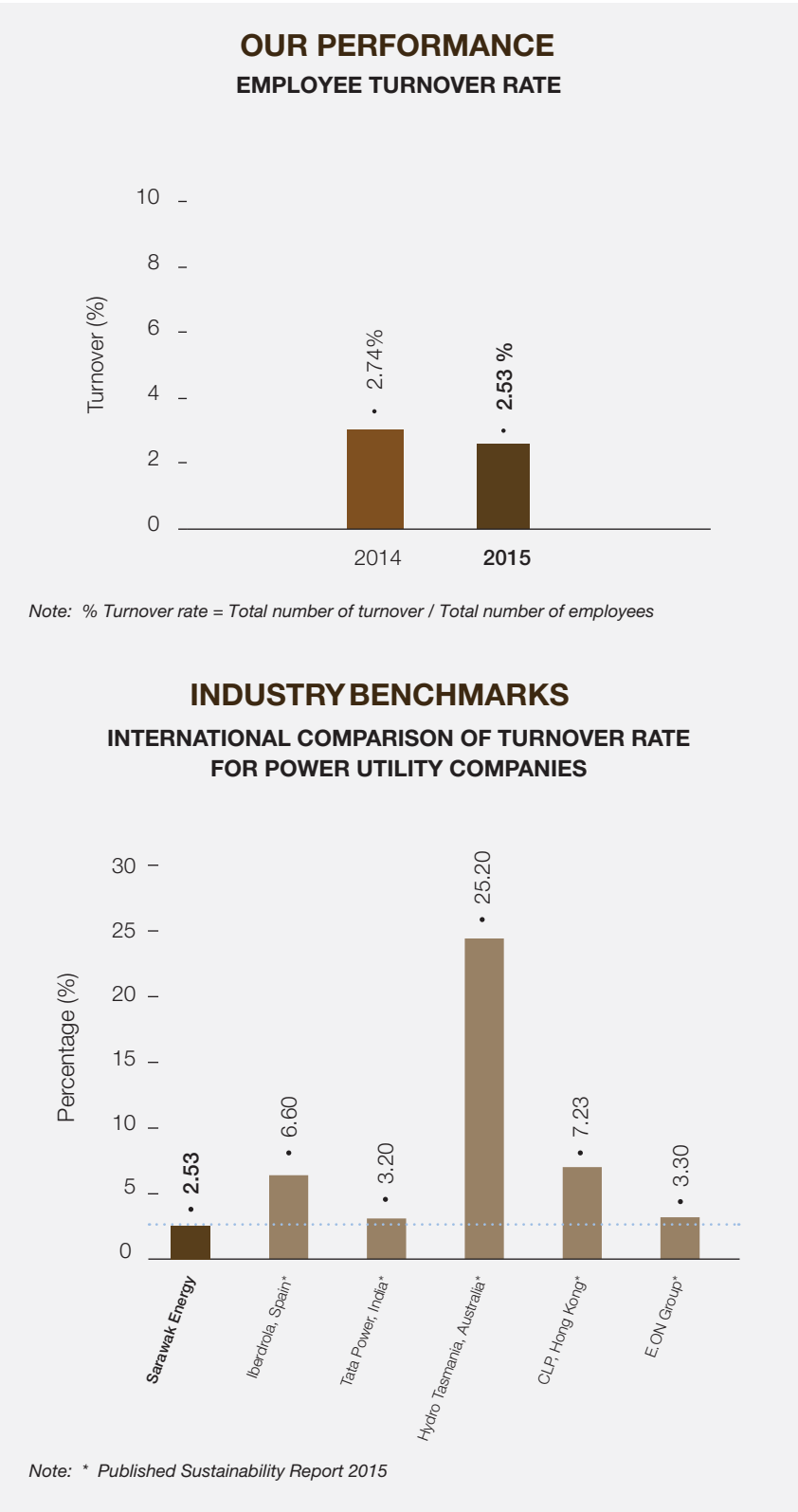


Sarawak Energy is proud to work with some of the brightest talent in the State, employing 4,308 employees at the end of 2015. Of these, 4,155 are employed in permanent positions while the remaining 153 represent contract staff.



EMPLOYEE TURNOVER

We are pleased to report that in 2015, we successfully hired 242 new workers, while our employee attrition rate declined to 2.53% from 4.39% in 2014, as detailed in the charts below:



TRANSFORMING SOCIAL OUTCOMES

EMPLOYEE WELFARE

As one of Sarawak’s largest employers, Sarawak Energy strives to provide our employees with a comprehensive compensation scheme which takes their well-being into account at all times.

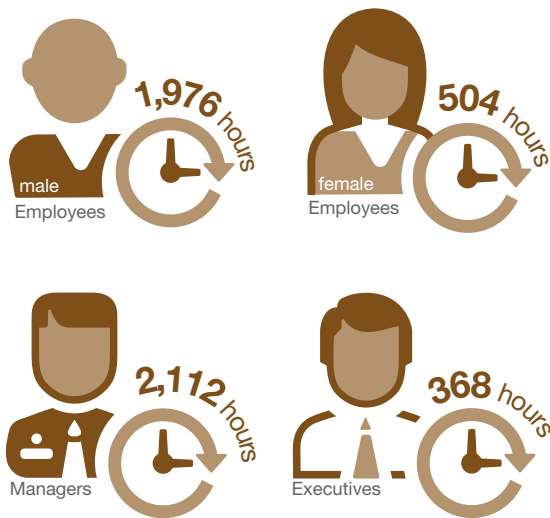
LEADERSHIP DEVELOPMENT

Our Talent Development Department is responsible for identifying and grooming our brightest talents into future leaders of Sarawak Energy. During the year, our employees underwent a total of 2,480<sup>1</sup> hours of training in professional leadership development, of which 2,112 hours were provided for managers and 368 hours were provided for executives. In terms of gender distribution, male employees received 1,976 hours of training while female employees underwent 504 hours of training.

TRAINING AND EDUCATION

At Sarawak Energy, we invest in the continuous development of our employees not only because it adds value to our own organisation, but also because it contributes to the deepening of the State and industry’s talent pool.

**Total number of training hours provided to each category of employees:**



Throughout the year, our employees participated in internal as well as external courses in various areas related to their job functions, as detailed in the following tables.

Summary of Courses Conducted in 2015 by Course Category (Internal)

| NO.   | COURSE CATEGORY        | COURSE CATEGORY<br>(AS PER MONTHLY REPORT) | NO. OF<br>COURSES |
|-------|------------------------|--|-------------------|
| 1.    | Electrical             | Chargeman                                  | 33                |
| 2.    | Electrical             | Wiring Installation                        | 13                |
| 3.    | Electrical             | Switching                                  | 27                |
| 4.    | Electrical             | Other Electrical Courses                   | 26                |
| 5.    | Mechanical             | Mechanical Course                          | 5                 |
| 6.    | Information Technology | Information Technology                     | 7                 |
| 7.    | Safety                 | Safety Awareness                           | 20                |
| 8.    | Safety                 | First Aid                                  | 30                |
| 9.    | Administration         | Administration                             | 9                 |
| TOTAL |                        |  | 170               |

Note:  
<sup>1</sup> This total hours of training data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.

## TRANSFORMING SOCIAL OUTCOMES

### Summary of Courses Conducted in 2015 by Course Category (In-house)

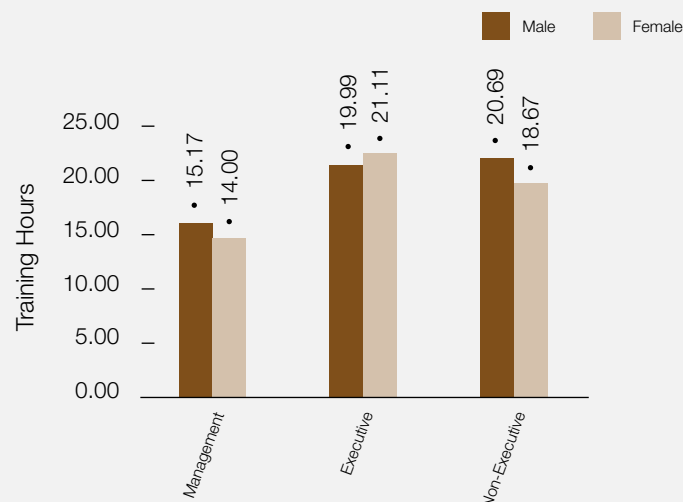
| NO.          | COURSES / CONFERENCES / SEMINARS | NO. OF COURSES |
|--------------|----------------------------------|----------------|
| 1.           | Admin & Management               | 133            |
| 2.           | Clerical & Development           | 12             |
| 3.           | Electrical                       | 21             |
| 4.           | Finance                          | 24             |
| 5.           | HSE                              | 76             |
| 6.           | IT                               | 83             |
| 7.           | Leadership Management            | 11             |
| 8.           | Legal                            | 12             |
| 9.           | Mechanical                       | 23             |
| 10.          | Others                           | 13             |
| 11.          | Quality Management               | 8              |
| <b>TOTAL</b> |                                  | <b>416</b>     |

### Summary of Courses Conducted in 2015 by Course Category (External)

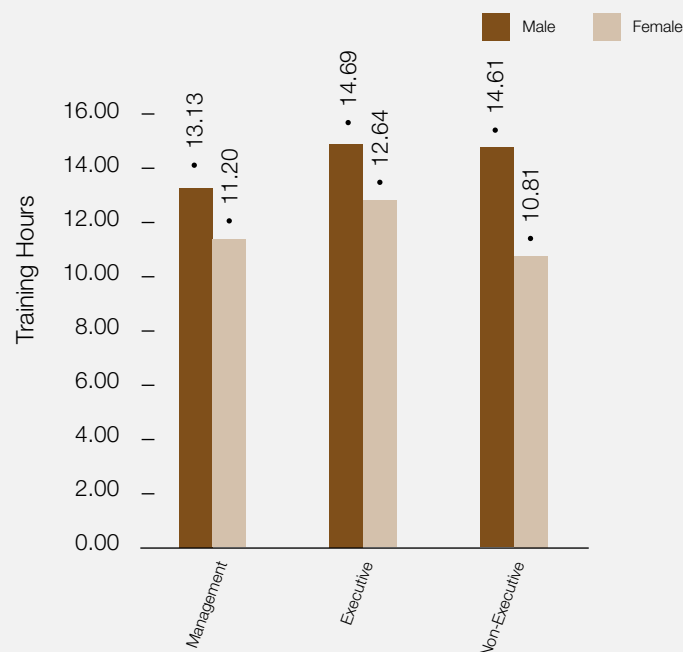
| NO.          | COURSES / CONFERENCES / SEMINARS | NO. OF COURSES |
|--------------|----------------------------------|----------------|
| 1.           | Administration                   | 97             |
| 2.           | Civil                            | 35             |
| 3.           | Electrical                       | 331            |
| 4.           | Finance                          | 96             |
| 5.           | Health, Safety & Environment     | 257            |
| 6.           | Information Technology           | 88             |
| 7.           | Leadership Management            | 383            |
| 8.           | Legal                            | 16             |
| 9.           | Mechanical                       | 10             |
| 10.          | Others                           | 124            |
| <b>TOTAL</b> |                                  | <b>1,437</b>   |

We also ensure that all levels of employees are provided with access to training, with 2,247 of our workforce participating in a total of 45,941<sup>1</sup> hours of internal courses during the year and 1,435 employees attending a total of 36,925<sup>1</sup> hours of external courses. Details of employees' internal and external training in terms of category, hours and gender are as follows:

**AVERAGE HOURS OF TRAINING BY CATEGORY AND GENDER (INTERNAL COURSES)**



**AVERAGE HOURS OF TRAINING BY CATEGORY AND GENDER (IN-HOUSE COURSES)**

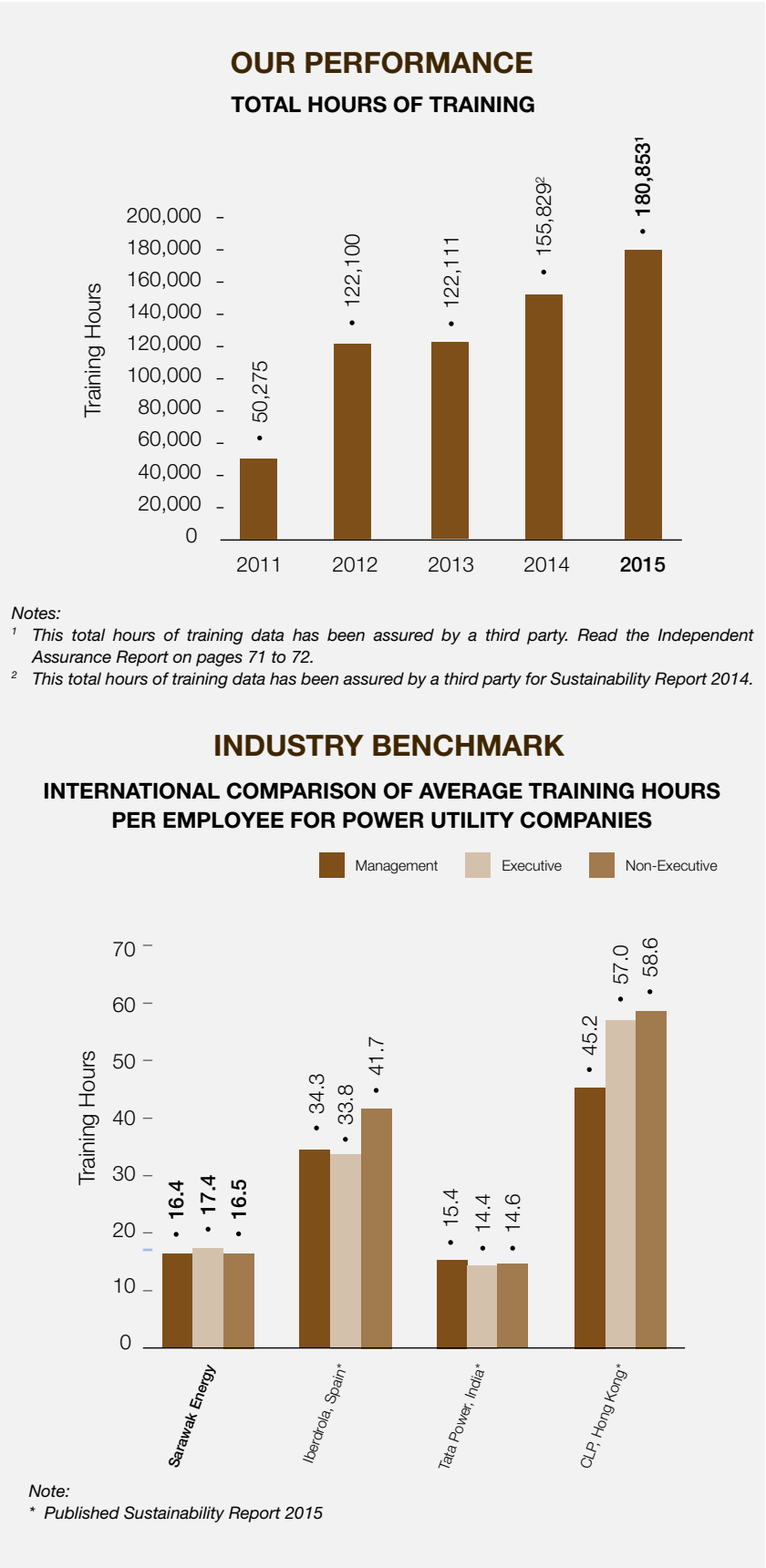
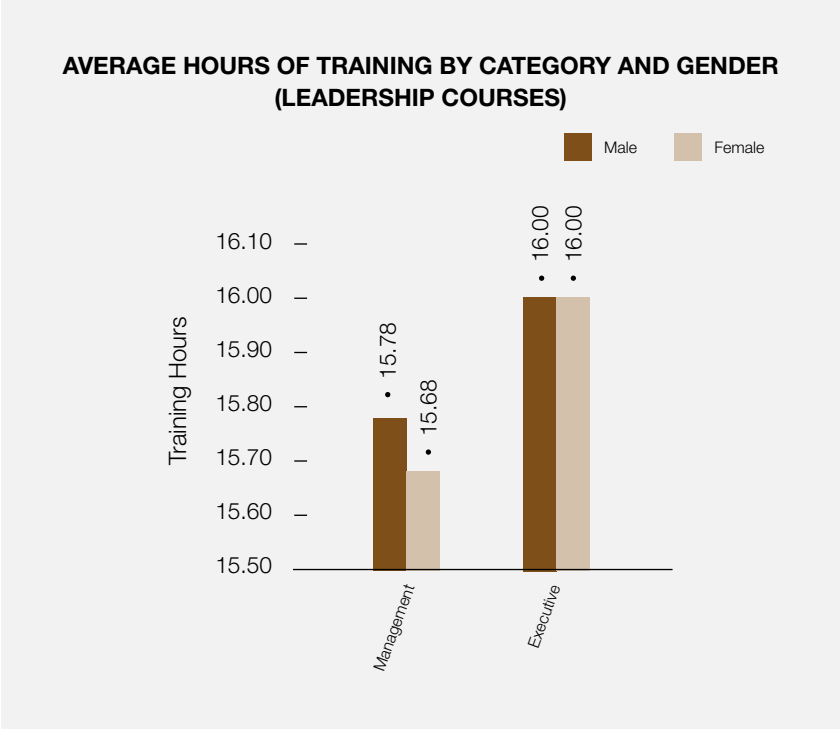
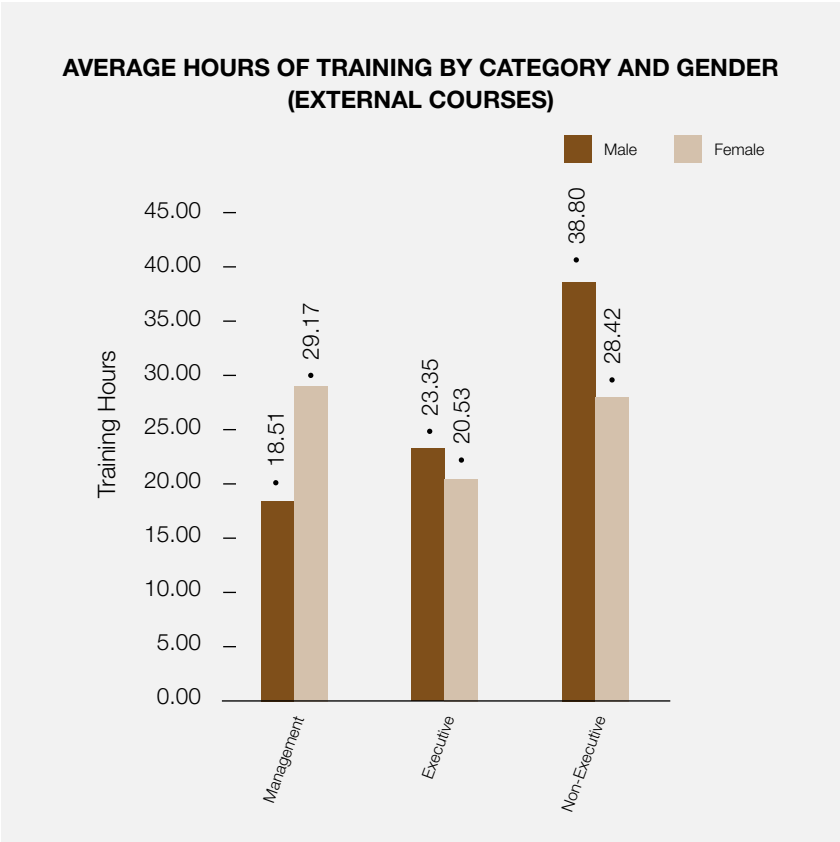


Note:

<sup>1</sup> This total hours of training data has been assured by a third party. Read the Independent Assurance Report on pages 71 to 72.



TRANSFORMING SOCIAL OUTCOMES



## TRANSFORMING SOCIAL OUTCOMES

### ON-JOB COMPETENCY

On-Job Competency (OJC) is a management tool to measure employees' current competencies objectively and can be used as a supporting document for upgrading, promotion and training that may be required. The tool comprises Units of Competence, each of which contains a list of Elements of Competence. Every staff will be assessed based on relevant Elements of Competence which consist of three parts of assessment, namely Knowledge, Process and Product. A staff is considered competent after he/she passes all the questions for Knowledge, Process and Product of every Element of Competence.

The People and Leadership Development Department has identified at least 998 on-job competencies that must be developed among our employees, with plans to complete the development of OJC documents by the end of 2017. The progress to date is disclosed in the following table:

#### Progress of development of OJC documents

| GROUP        | TOTAL OJC TO DEVELOP | PROGRESS IN 2015 | TARGET           |                   |
|--------------|----------------------|------------------|------------------|-------------------|
|              |                      |                  | 2016             | 2017              |
| NE1 - NE6*   | 581                  | 146 (25%)        | 292 (50%)        | 581 (100%)        |
| E1 - E4**    | 417                  | 239 (57%)        | 417 (100%)       | 417 (100%)        |
| <b>Total</b> | <b>998</b>           | <b>385 (39%)</b> | <b>709 (71%)</b> | <b>998 (100%)</b> |

\* Non-executives level 1-6

\*\* Executives level 1-4

#### Performance Appraisal

We regularly monitor and appraise the progress of our employees to ensure they are performing to the best of their abilities. In 2015, 100% of our workforce from all our employee categories of top management, managers, executives and non-executives underwent the annual performance appraisal.

#### Safety at the Workplace

Our safety procedures are conducted in accordance with the Occupational Safety and Health Act 1994. In line with this, we have established Safety and Health Committees at each of our 10 regional offices and eight main power stations to ensure appropriate and effective safety and health measures are put in place at the workplace.

The committees comprise a chairman, secretary and employee as well as employer representatives, in accordance with the Occupational Safety and Health (Safety and Health Committee) Regulations 1996. Each committee is supported by Sarawak Energy's Corporate Risk and Health, Safety and Environment division, which is also represented on the committee as a corporate EOSH/OSH committee member.

Total members of Sarawak Energy's Safety and Health Committees 2015:

| POSITION                | NO. OF WORKFORCE |
|-------------------------|------------------|
| Chairman                | 18               |
| Secretary               | 18               |
| Employer Representative | 128              |
| Employee Representative | 208              |

In line with the Occupational Safety and Health (Safety and Health Committee) Regulations 1996, the functions of the Safety and Health Committees are as follows:

- Assist in the development of safety and health rules and safe systems of work
- Review the effectiveness of safety and health programmes
- Carry out studies on the trends of accident, near-miss accident, dangerous occurrence, occupational poisoning or occupational disease which occur at the place of work, and report to the employer any unsafe or unhealthy condition or practice at the place of work together with recommendations for corrective action, and;
- Review the safety and health policies at the place of work and make recommendations to the employer for any revision of such policies.

The committees are also responsible for inspecting the workplace and investigating any accidents which occur at the workplace.

#### Corporate Safety Council

Sarawak Energy has also established our Corporate Safety Council, which comprises members of top management and meets every quarter to discuss any major issues related to health, safety and environment at the workplace. The Council also deliberates on annual corporate HSE programmes and KPIs for all chairmen and secretaries of the Safety and Health Committees in order to achieve our zero-fatality target and advocate a culture of safety at Sarawak Energy in line with our HSE slogan: "Raising Standards, Saving Lives, Nurturing Culture".



GM Corporate Risk & HSE speaks at HSE Corporate Week 2015 Batang Ai HEP

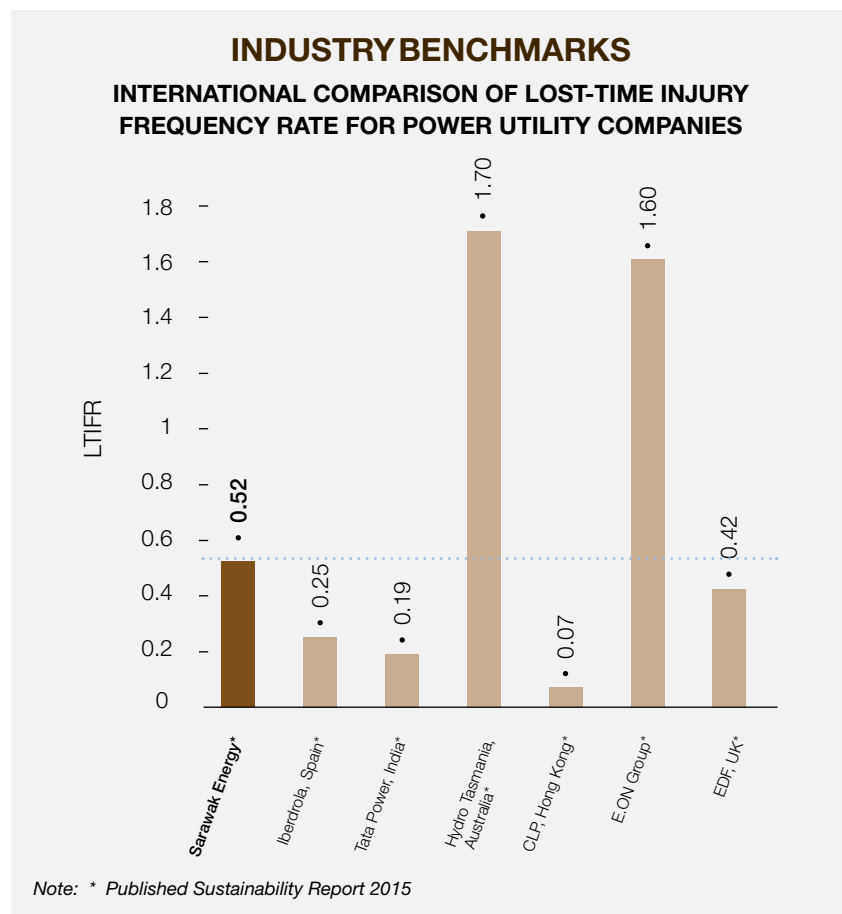
#### Lost Time Injury

As a result of our efforts in occupational health and safety, we have continued to improve on our Lost Time Injury Frequency Rate, with our LTIFR of 0.52 in 2015 out performing our LTIFR target of 1.0 for the year. This is also better than our LTIFR of 1.08 in 2014. Meanwhile, our Lost Time Injury Incident Rate (LTIIR) was recorded at 1.21% incidence per one thousand employees in 2015.

## TRANSFORMING SOCIAL OUTCOMES

### OUR PERFORMANCE

| SARAWAK ENERGY CORPORATE RISK & HSE LTIFR<br>(LOST TIME INJURY FREQUENCY RATE) |                     |                     |                |
|--|---------------------|---------------------|----------------|
| DESCRIPTION  | 2014<br>ACHIEVEMENT | 2015<br>ACHIEVEMENT | 2016<br>TARGET |
| Operations   | 1.08                | 0.52                | 0.50           |
| Project Execution  | -                   | -                   | 2.00           |



As we continue to strive to decrease the total number of accidents and incidents that lead to LTIFR, in 2016 the LTIFR target will be divided into Operations, consisting of retail, distribution, thermal and hydropower, and Project Execution, which will cover ongoing projects. The LTIFR targets for Operations and Project Execution are both 2.0.

We have also collected and monitored safety performance statistics at each of our regional offices and power stations. In an effort to standardise the reporting of these statistics, as well as to establish valid and reliable OSH data, our Corporate Risk and HSE Department has established the Main Safety Performance Statistics Database. Each regional office and power station will upload their safety performance statistics onto the database at the end of the first week of every month, while safety performance statistics for short- and long-term projects must be submitted at the end of the project and on a monthly basis, respectively. We have also put in place a standard form for the statistics to ensure standardisation in reporting of the statistics.

Furthermore, in compliance with the Occupational Safety and Health Act 1994, the Corporate Risk and HSE Department submits our annual safety performance statistics to the Director General of the Department of Occupational Safety and Health (DOSH), which is vital in assisting the DOSH in its analysis and formulation of strategic plans to administer and enforce the law.

### MONITORING THE HEALTH OF OUR WORKERS

As an organisation that emphasises the well-being of its employees, Sarawak Energy takes every effort to monitor the health of our workers, especially those who may be exposed to health hazards at work. New staff are required to undergo a full medical examination before reporting for duty, while annual medical exams are conducted for employees based at our power stations. We are pleased to report that in general, our employees are not exposed to a high incidence or risk of diseases related to their occupation in the course of their work.

In compliance with the Factory and Machinery (Noise Exposure) Regulation 1989, we regularly conduct hearing conservation programmes such as noise monitoring and audiometric testing at all regions and power stations which may be exposed to excessive noise levels.

In inculcating a culture of safety in our organisation as well as within our communities, HSE Week campaigns, safety and health audits and inspections as well as HSE awareness programmes involving our staff, contractors, relevant Government agencies and the public are carried out in all the regions we operate in and at our power plants.

During the year, we also conducted the following programmes to promote awareness of health and safety among our stakeholders:

- ✓ Electrical awareness talks at 76 schools located in all regions
- ✓ Electrical awareness talks at longhouses, oil palm estates and plantations, the Public Works Department, Telekom, Sarawak Agricultural Department and communities involved in the RES
- ✓ Public electrical awareness programme
- ✓ HSE awareness campaign in collaboration with RTM Radio and Cats FM radio station
- ✓ Safety audits at project sites with DOSH

Other occupational health and safety activities conducted during the year included:

- ✓ Development of First Volume Footprint 2015
- ✓ Technical & process safety joint visit with DOSH
- ✓ Embarking on process safety awareness programme
- ✓ Internship programme for university students
- ✓ MSOSH Award



## TRANSFORMING SOCIAL OUTCOMES



### ENVIRONMENTAL AWARENESS PROGRAMME

Our Environment Division also conducted the following environmental programmes:

- MAHB Green Day on 5 February 2015
- Youth Green Exchange Programme at Matang Wild Life Centre, held on 20-22 March 2015 in collaboration with DOE, AZAM, NREB and WWF
- Outreach Programme at SMK Belaga on 14 May 2015. In collaboration with NREB
- Mangrove Planting Programme at Matang Wetland. In collaboration with the Forestry Department
- Malaysia Environment Week – State level held on 31 October 2015. In collaboration with DOE
- Awareness Programme at Kg. Stass, Bau on 16 Dec 2015 with the village's Development and Safety Committee

### DISASTER/EMERGENCY PLANNING AND RESPONSE

Sarawak Energy continuously undertakes safety drills and safety programmes to ensure we are in a constant state of readiness to respond in the event of any disaster or emergency. During the year, we conducted ERP drills at our Batang Ai and Murum plants in January and October, respectively, while we completed our Dam Safety Emergency Plan (DSEP) documentation for Murum in September.

In terms of dam safety management, we have put in place dam safety surveillance at both our Batang Ai HEP and Murum HEP in line with the International Dam Safety Procedures and Guidelines. We are also in the process of installing an automated data retrieval system at Murum.

During the earthquake which occurred in the neighbouring State of Sabah in June 2015, the Batang Ai and Murum seismic stations did not record any seismic readings. We are pleased to report that Sarawak Energy has developed a common understanding on data sharing for seismic activity recorded by the Malaysian Meteorological Department (MMD). We have installed three seismic instruments within the vicinity of the Murum Dam and operate one instrument on a data-sharing basis with the MMD.

In the year under review, we also performed the following drills at our thermal plants:

| Plant                      | Drills/Activities Related to Thermal Power Station Emergency Response & Recovery Plan Done in 2015  |
|----------------------------|---|
| SPC                        | Emergency Spill Control Training conducted on 8 Sept 2015.  |
| PPLS<br>MPG                | Fire drill conducted on 8 Dec 2015 and chemical drill carried out on 10 Dec 2015 involving simulation of staff injury due to hydrochloric acid.   |
| Bintulu Power Plant<br>SPG | Fire and Chemical Spillage drill on 2 Dec 2015 (annual).<br><br>Last review on ERP procedure performed on 10 Mar 2015.  |
| Miri Power Plant           | Emergency Response Plan Exercise covering fire drill & chemical spillage carried out on 24 Nov 2015.<br><br>The exercise was aimed at evaluating the response of ERT personnel during emergency situations and the effectiveness of the ERP procedure itself. These exercises also assisted in identifying any weakness in the ERP implementation, chemical management and waste management programmes for further improvement. |
| Biawak Power Plant         | Major drill on Fire & Oil Spillage conducted on 3 Nov 2015 (annual).<br><br>Monthly Fire Drill on 26 Feb 2015.  |

### CATALYSING SOCIO-ECONOMIC DEVELOPMENT THROUGH CORPORATE SOCIAL RESPONSIBILITY

“Minimising any negative impact of our operations and maximising the positive impact of what we do for our community”, is Sarawak Energy’s ultimate goal in Corporate Social Responsibility (CSR). We work towards this goal based on four strategic CSR pillars:

- creating economic opportunities for Sarawakians;
- supporting partners in Community Investment;
- demonstrating high standards of transparency and community engagement; and
- undertaking our projects in a sustainable way.

Sarawak Energy has identified four focus areas in community investment which we are developing as long term sustainable partnership programmes that meet real community needs. Specifically, the four focus areas are: education and young people; environmental management and conservation; culture and heritage; and community development and entrepreneurship.

### EDUCATION AND YOUNG PEOPLE

Sarawak Energy’s determined CSR effort to empower the Penan community in Murum through its literacy and education programmes has received international recognition. It won the coveted “Excellence in Provision of Literacy and Education Award (Gold)” at the 7th Annual Global CSR Summit and Awards 2015.

## TRANSFORMING SOCIAL OUTCOMES

### SPECIAL EDUCATION FUND FOR THE PENAN COMMUNITY

To ensure that communities affected by our projects benefit in a sustainable manner, Sarawak Energy and Bakun Charitable Trust signed a memorandum of understanding (MoU) allocating a revolving fund of RM200,000 annually to provide educational assistance to the rural communities in Belaga.

The beneficiaries of this special fund are specifically the six resettled Penan communities, and another 19 Penan communities from throughout the Belaga District. The resettled Kenyah Badeng community of Malim Kenyah from Murum Resettlement is also included in the fund.

The fund provides academic incentive awards for primary and secondary students as well as financial aid for students to pursue tertiary education or skills development training. In addition, incentives are given to students with high attendance in school as part of the efforts to address the high dropout rate among the Penan community.



Tan Sri Datuk Amar Dr James Masing, Senior Minister and Chairman of Bakun Charitable Trust and Datuk Torstein Dale Sjøtveit, Sarawak Energy Group Chief Executive Officer exchange documents after the MOU signing as Liwan Lagang, Assistant Minister of Culture and Heritage and Belaga Assemblyman and Jiwari Abdullah, Sarawak Energy head of the CSR Department and others look on

### BARAM PENAN LITERACY PROGRAMME - STAGE 3

Following the success of Sarawak Energy's signature CSR programme, the Murum Penan Literacy programme was replicated for eight Penan communities in Sg Patah, Baram in February 2014. The eight Penan communities are Long Lilim, Long Luteng, Long Sengayan, Long Kawi, Ba' Kabing, Long Daloh Bestari, Long Daloh Asal and Ba' Abang. A total of 38 facilitators were trained under this programme to set up literacy classes at their respective longhouses. This literacy programme provided participants with the fundamentals of reading, writing and arithmetic.

A certificate presentation ceremony was held in December 2015 to recognise the successful completion of the programme by 312 participants and the efforts of the 38 facilitators. With overwhelming response from the community, Sarawak Energy is set to implement Stage 2 of the programme in 2016. The programme was implemented in partnership with a non-governmental organisation, the Society for the Advancement of Women and the Family, Sarawak (SAWF).

#### Baram Literacy Program



**312**  
participating



**38** Facilitators  
are trained



Baram Penan Literacy participants learning simple arithmetic

### MURUM PENAN LITERACY PROGRAMME

Since the programme's inception in February 2012, the Murum Penan Literacy Programme has provided the fundamentals of reading, writing and arithmetic to 341 Penan in the Murum resettlement area. Aside from reading, writing and arithmetic which was conducted for stage 1, the programme continued with stage 2 and stage 3 which address pertinent self-development needs like hygiene, nutrition and health education, essential living skills, home economy and parenting workshops. 348 participants from six longhouses in Murum, namely Long Wat, Long Malim, Long Menapa, Long Luar, Long Tangau and Long Singu participated in the programme, which was completed in July 2015.

#### Murum Literacy Programme - Stage 3



**348**  
participating



**31** Facilitators  
are trained



A Penan Literacy class at Long Luar, Murum



## TRANSFORMING SOCIAL OUTCOMES

### CULTURE AND HERITAGE

#### Handicraft Development

As one of the State's leading corporations, local culture is deeply ingrained within Sarawak Energy's identity. We play our part in preserving the State's rich culture and heritage by supporting local handicraft activities, which also paves the way for economic benefits for our communities.

Handicraft development has been identified as a CSR community investment strategy to provide socio-economic opportunity for the resettled Penan community in Murum. Sarawak Energy recently embarked on a handicraft project that aims to have a positive impact on the Penan indigenous community while preserving their rich culture and heritage. We work in partnership with craft organisations and institutions, namely the Malaysian Handicraft Development Corporation (MHDC) Sarawak branch, the Sarawak Craft Council (SCC) and Universiti Malaysia Sarawak (UNIMAS). This joint partnership is working towards marketability of their crafts through quality improvement as well as diversifying their handicraft products by exposing artisans to new ideas and design concepts.

Three training workshops were implemented in 2015 for the artisans in Long Wat and Long Malim. Parang-makers learned how to apply gloss and polishing techniques to embellish and add value to the traditional parang (machete) while female artisans were taught sewing techniques to refashion their woven rattan products and new skills to craft glass beadwork.

In 2015, the artisans participated in two handicraft exhibitions held in Miri and Bintulu respectively to showcase their products. For many of them, it was their first exposure to the marketing of their crafts to the public. The exhibition served as an ideal platform to provide exposure to the entrepreneurial environment, besides providing networking and learning opportunities with artisans from other communities.

Sarawak Energy has actively supported the handicraft production by purchasing and offering these crafts as exclusive gifts to the company's corporate guests, both international and local.



Penan handicraft



Baram Penan youth attending welding training programme

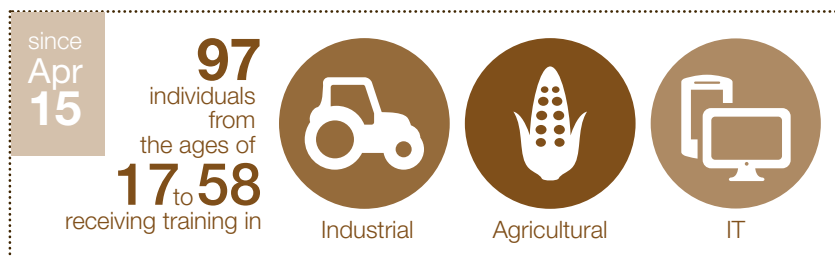


A Penan artisan weaving a rattan mat

### SKILLS AND TECHNICAL TRAINING FOR RURAL YOUTH AND JOB SEEKERS

Sarawak Energy strongly believes that skills and technical training are key to income generation, stable employment and entrepreneurship, especially for rural communities. In support of this, we have organised a series of trainings for the Baram community which aims to equip youth and job seekers with technical skills to meet the new demands of evolving industries and sectors of growth.

Since April 2015, this has seen a total of 97 individuals from the ages of 17 to 58 receiving training in the agricultural, IT, food and industrial sectors. The participants were mostly made up of school and college leavers facing employment difficulties and skilled technical workers without formal qualifications who were looking to upgrade their careers.





## TRANSFORMING SOCIAL OUTCOMES

The training was conducted in partnership with local agencies and training institutions comprising the National Youth Skills Institute, a community college and the Department of Agriculture. Following the training, 48 of the participants are now employed, 39 are self-employed and seven have gone on to further their studies.

### PROGRAMME STRUCTURE: SKILLS AND TECHNICAL TRAINING FOR RURAL YOUTH AND JOB SEEKERS

#### YEAR 2015:

Training 1: Basic Computer – April, 2015

Training 2: Bakery and Pastry – June, 2015

Training 3: Operation and Maintenance of Diesel Engine – August, 2015

Training 4: Agriculture, Livestock, Fisheries and Poultry – September, 2015

Training 5: Metal Fabrication – November, 2015



Agriculture training programme for Baram community



A participant from Long San is guided by an instructor from the National Youth Skills Institute in operating a diesel engine

### MURUM PENAN FESTIVAL

The Murum Penan Festival took place concurrently in the two resettlement areas of Tegulang and Metalun in 2015. It was organised by the Murum Penan Development Committee (MPDC) and supported by Sarawak Energy.

Sarawak Energy played a significant role in this event which provides a platform for communities to come together and celebrate. Besides fostering a closer bond among the villagers, the festival aims to preserve the communities' culture and heritage through traditional games such as the Orang Ulu wrestling test of strength "Payu" and blow-pipe skills competitions.



Penan wrestlers captivating the audience with their "Payu" skills



The gotong-royong spirit is alive and well during the Murum Penan Festival



## TRANSFORMING SOCIAL OUTCOMES

### COMMUNITY ENGAGEMENT

#### THE PROPOSED BALEH HYDROELECTRIC PROJECT

Sarawak Energy has an obligation to ensure that our stakeholders understand our development projects. In 2015, a number of stakeholder engagement and consultation sessions were carried out for the proposed Baleh hydroelectric project (HEP). We believe that it is important to carry out engagement at the earliest phase of a project so that the views and well-being of the local community and other stakeholders can be considered.

The economic and social benefits of the project, and potential business and job opportunities, have been regularly communicated to the local communities to encourage local participation. In this regard, a series of skills and technical training programmes is in the pipeline, to equip local job seekers with the required competencies for employment when work commences. The training programme will commence in 2016 and go on for the next three years.

#### MURUM HYDROPOWER STATION

Sarawak Energy accepts a special responsibility towards the communities that are directly affected by our development projects. After the full commissioning of the Murum hydroelectric plant, we continued to engage with the resettled community to support their well-being.



Community engagement for the proposed Baleh HEP at Rumah Tajai , Nanga Entawau



Dialogue with the community at Rumah Laso, Nanga Entawau



Gotong-royong initiative to clean the weir structure at Metalun



Community leaders from Batang Ai Ulu Engkari visited Menara Sarawak Energy



## TRANSFORMING SOCIAL OUTCOMES

### BATANG AI HYDROPOWER STATION

Since the commissioning of the Batang Ai hydroelectric plant (HEP) 30 years ago, Sarawak Energy has maintained a strong partnership with the community through continuous engagement and CSR initiatives supporting schools and conducting gotong-royong log-clearing exercises around the reservoir to provide safe access to villagers travelling on boats. The National Park, which is within the HEP's catchment area, is now one of the world's leading locations for wild orang utan conservation and research, and we also support the Sarawak Forestry Corporation in this conservation venture.

In recognition of this long-term partnership with the Batang Ai community, Sarawak Energy funded the rewiring works for all the 22 resettled longhouses. The rewiring work was aimed at improving the electrical safety of these longhouses by upgrading the supply and replacing the existing internal house wiring which had been in place since the beginning of the Batang Ai HEP.



Villagers assisting in transporting equipment from Batang Ai Jetty to the longhouses

### LIGHTING UP THE COMMUNITY IN BATANG AI

In our effort to light up the remote communities upstream of Batang Ai, Sarawak Energy has equipped five longhouses with solar home systems (SHS) and solar freezer systems (SFS). The SFS enables each longhouse to have communal refrigeration to freeze some of their fresh food supply for later consumption. The SHS and SFS project is part of a RM3 million commitment to social investment by Sarawak Energy in conjunction with the Batang Ai hydropower station's 30<sup>th</sup> anniversary.

The first phase of the project was implemented in December 2014 at two longhouses, namely Rh Kino and Rh Manggat in Menyang in cooperation with the local villagers. Following its initial success and positive response from villagers, Phase II of the SHS commenced in 2015 and is expected to be completed in 2016. This project, costing a total of RM2 million, involves 63 households and will benefit more than 300 residents in Rh Kino, Rh Manggat, Rh Griffin, Rh Jangong and Rh Ninting.



Solar panels on the roof tops of Rumah Manggat



Lighting up Rumah Griffin with solar home systems (SHS)



## AWARDS & RECOGNITION

During the reporting period, Sarawak Energy received a number of awards and recognitions. These were for:



1. CEO Datuk Torstein Dale Sjøtveit wins the Asian CEO of The Year - at Power & Electricity Awards Asia 2015
2. Utility of the Year - at Power & Electricity Awards Asia 2015
3. Chairman YBhg Datuk Amar Abdul Hamed Sepawi wins the Man of The Year Brand Icon Leadership Award - at the BrandLaureate Awards in November 2015
4. Most Sustainable Brand 2015-2016 (Leadership in Power Generation & Renewable Energy) - at the 10<sup>th</sup> Anniversary BrandLaureate Awards
5. Excellence in Provision of Literacy & Education Award (Gold) at the 7<sup>th</sup> Annual Global CSR Summit & Awards 2015
6. MPC for Mukah Power Generation
7. ISO9001, ISO14001, OHSAS18001, MPC for Sejingkat Power Corporation and PPLS
8. ISO/IEC 27001 for Biawak Power Plant, Sejingkat Power Corporation, Mukah Power Generation, Miri Power Plant, Bintulu Power Plant and Batang Ai Power Plant
9. ISO9001, ISO14001, OHSAS18001 for Biawak Power Plant, Miri Power Plant, Bintulu Power Plant and Batang Ai Power Plant
10. Winner in the Customer Service Category Award – at the State Civil Service Awards Ceremony 2015

# INDEPENDENT THIRD PARTY ASSURANCE STATEMENT



## Independent Assurance Report

### To Management of Sarawak Energy Berhad (2015)

We have been engaged by Sarawak Energy Berhad ("SEB") to perform an independent limited assurance engagement on selected Key Performance Indicators (hereon after referred to in the Subject Matter as "KPIs") as reported by SEB in its Catalyst for Change Sustainability Report 2015 for the year ended 31 December 2015 ("SEB Sustainability Report 2015").

### Management's Responsibility

Management of SEB is responsible for the preparation of SEB Sustainability Report 2015 in accordance with the Global Reporting Initiative's G4 Sustainability Reporting Guidelines ("GRI G4").

This responsibility includes the selection and application of appropriate methods to prepare the KPIs reported in the SEB Sustainability Report 2015 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 evidence-gathering procedures 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 KPIs is subject to inherent limitations given their nature and methods for determining, calculating and estimating such data.

Our assurance report should therefore be read in connection with SEB's 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 KPIs on which we provide limited assurance consists of:

- The management and reporting processes with respect to the preparation of the following four (4) KPIs reported and marked in SEB Sustainability Report 2015 as follows:
  1. Grid Carbon Emission Intensity (Main grid only) for the financial year 2015;
  2. System Average Interruption Duration Index (SAIDI) for distribution level for the financial year 2015;
  3. Total Electricity Sales for the financial year 2015; and
  4. Total Hours of Training for management, executives and non-executives for the financial year 2015.

### Criteria

- SEB's internal sustainability reporting guidelines and procedures by which the KPIs are gathered, collated and aggregated internally.

PricewaterhouseCoopers (AF 1146), Chartered Accountants,  
Level 10, 1 Sentral, Jalan Travers, 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](http://www.pwc.com/my)

## INDEPENDENT THIRD PARTY ASSURANCE STATEMENT

**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 KPIs reported in SEB Sustainability Report 2015 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 and plant level for the KPIs;
- Inspection on a sample basis of internal documents, contracts, reports, data capture forms and invoices to support the KPIs for accuracy including observation of management's controls over the processes;
- Inquiries of personnel on the collation and reporting of the KPIs at the corporate and plant level; and
- Checking the formulas, proxies and default values used in the computation of the Carbon Emissions against SEB's guidelines and procedures.

**Conclusion**

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

**Other matters**

This report is addressed to SEB in connection with the performance of an independent limited assurance on KPIs as reported by Sarawak Energy Berhad for financial year 2015, and should not be used or relied upon for any other purposes. Our report is not to be disseminated to any third party in whole or in part. Accordingly, we will not accept any liability or responsibility to any other party to whom our report is shown or into whose hands it may come.

PRICEWATERHOUSECOOPERS  
(No. AF: 1146)  
Chartered Accountants  
Kuala Lumpur

27 September 2016



# GRI CONTENT INDEX

This report is “In Accordance” with the GRI G4 Guidelines – Core option. This table shows where specific GRI disclosures can be found in this online report.

| GENERAL STANDARD DISCLOSURES |  |                    |  |
|------------------------------|--|--------------------|--|
| General Standard Disclosures | Page   | External Assurance | Description  |
| <b>Strategy and Analysis</b> |  |                    |  |
| G4-1                         | Chairman’s Foreword, p.10-11<br>Group CEO’s Message, p.12-13<br>p.2-3  |                    | Statement from the most senior decision-maker of the organisation  |
| G4-2                         | p.16-24  |                    | Key impacts, risks and opportunities   |
| <b>Organisation Profile</b>  |  |                    |  |
| G4-3                         | Sarawak Energy Berhad (Sarawak Energy, or the Company)   |                    | Name of the organisation   |
| G4-4                         | This information can be found in the Organisation Profile on p.5-6   |                    | Primary brands, products and services  |
| G4-5                         | Menara Sarawak Energy, No. 1, The Isthmus, 93050 Kuching, Sarawak  |                    | Company Headquarters   |
| G4-6                         | Sarawak, Malaysia  |                    | Countries of operation   |
| G4-7                         | The principal activity of the Company is that of an investment holding company. Information on the Company’s organisation structure can be found on p.4  |                    | Nature of ownership and legal form   |
| G4-8                         | The Company provides services to the following customers (p.5) in the State of Sarawak:<br>a. Organic - domestic, commercial, industrial and public lighting;<br>b. Bulk - SCORE customers and interconnection |                    | Markets served   |
| G4-9                         | The Company’s corporate structure is reported in the Organisation Profile on p.4   |                    | Scale of the organisation  |
| G4-10                        | The total number of employees is reported under “Transforming Social Outcomes” on p.58   |                    | Organisation’s workforce   |
| G4-11                        | All of Sarawak Energy’s non-executive staff are covered by collective bargaining agreements  |                    | Percentage of total employees covered by collective bargaining agreements                                |
| G4-12                        | p.6  |                    | Supply Chain   |
| G4-13                        | This information can be found in the Organisation Profile on p.4   |                    | Significant changes during the reporting period regarding size, structure, ownership or its supply chain |
| G4-14                        | p.26, p.40-45  |                    | Explanation of whether and how the precautionary approach or principles is addressed by the organisation |

## GRI CONTENT INDEX

| GENERAL STANDARD DISCLOSURES                      |   |                    |  |
|---|---|--------------------|--|
| General Standard Disclosures                      | Page  | External Assurance | Description  |
| G4-15   | <p>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:</p> <ul style="list-style-type: none"> <li>Hydropower Sustainability Assessment Protocol (HSAP)</li> <li>UNDRIP</li> <li>Global Reporting Initiative (GRI)</li> <li>IFC</li> <li>UN Global Compact (UNGC)</li> <li>World Commission on Dams</li> <li>ISO14001</li> <li>OSHA</li> </ul>      |                    | Externally developed economic, environmental and social charters, principles or other initiatives      |
| G4-16   | <p>The Company 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</p> <p>Sarawak Energy is a GRI Gold Community Member</p> |                    | Memberships of associations and national/international advocacy organisations                          |
| <b>Identified Material Aspects and Boundaries</b> |   |                    |  |
| G4-17   | The list of entities is reflected in the Company’s organisation structure, found in the Organisation Profile, p.4   |                    | Entities included in the organisation’s consolidated financial statements or equivalent documents      |
| G4-18   | Information about this is elaborated under “About this Report” on p.1   |                    | Process for defining report content and the Aspect Boundaries  |
| G4-19   | The list of material aspects can be found under “Materiality Issues” on p.14  |                    | Material Aspects identified in the process for defining report content                                 |
| G4-20   | This information can be found under “About this Report” on p.1 and Group CEO Message on p.12-13.  |                    | Aspect Boundary within the organisation  |
| G4-21   | This information can be found under “About this Report” on p.1  |                    | Aspect Boundary outside the organisation   |
| G4-22   | No restatements have been made, as this is the Company’s second Sustainability Report   |                    | Restatements of information provided in previous reports   |
| G4-23   | None  |                    | Significant changes from previous reporting in the Scope and Aspect Boundaries                         |
| <b>Stakeholder Engagement</b>                     |   |                    |  |
| G4-24   | The list of stakeholder groups engaged by the Company is stated under “Engaging Our Stakeholders” on p.28-29  |                    | List of stakeholder groups engaged by the organisation   |
| G4-25   | Basis for identification and selection of stakeholders with whom the Company engages with is elaborated under “Engaging Our Stakeholders” on p.28-29  |                    | Basis for identification and selection of stakeholders with whom to engage                             |
| G4-26   | Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group is elaborated under “Engaging Our Stakeholders” on p.29  |                    | Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group |

## GRI CONTENT INDEX

| GENERAL STANDARD DISCLOSURES |   |                    |  |
|------------------------------|---|--------------------|--|
| General Standard Disclosures | Page  | External Assurance | Description  |
| G4-27                        | This information can be found under “Engaging Our Stakeholders” on p.28. Key topics and concerns, particularly those that are of primary concern, are addressed throughout this Sustainability Report   |                    | Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting |
| <b>Report Profile</b>        |   |                    |  |
| G4-28                        | From 1 January until 31 December 2015   |                    | Reporting period   |
| G4-29                        | This is the Company’s second Sustainability Report  |                    | The previous report is 2014  |
| G4-30                        | The Company plans to publish this Sustainability Report on an annual basis  |                    | Reporting cycle  |
| G4-31                        | General questions regarding this report can be addressed to the Sustainability Division at:<br>Menara Sarawak Energy, Level 8, No. 1, The Isthmus, 93050 Kuching, Sarawak.<br>Tel: 082-388 388 (ext. 8816/8165)   |                    | Contact point  |
| G4-32                        | This report has been prepared in accordance with the GRI G4 “Core” option and the general standard and specific standard disclosures are available on p.73-95   |                    | GRI content index  |
| G4-33                        | Indicators that are subjected to external assurance and represented in Sarawak Energy’s Sustainability Report 2015 for year ended 31 December 2015 (p.71-72):<br>- Grid CO <sub>2</sub> Emission Intensity (Main grid only)<br>- SAIDI (Distribution level)<br>- Total Electricity Sales<br>- Total Hours of Training | Yes                | External Assurance   |
| <b>Governance</b>            |   |                    |  |
| G4-34                        | This information can be found under “Governance” on p.26  |                    | Organisation’s governance structure  |
| <b>Ethics and Integrity</b>  |   |                    |  |
| G4-56                        | This information is discussed in our Group CEO’s Message on p.12-13   |                    | Organisation’s values, principles, standards and norms of behaviours   |



## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |  |          |                    |   |
|-------------------------------|--|----------|--------------------|---|
| Material Aspects              | DMA and Indicators   | Omission | External Assurance | Description   |
| ECONOMIC                      |  |          |                    |   |
| Economic performance          |  |          |                    |   |
| G4-DMA                        | p.31   |          |                    |   |
| G4-EC1                        | This information can be found under “Catalysing Economic Sustainability” on p.10, p.31   |          |                    | Direct economic value generated and distributed                                 |
| Indirect economic impacts     |  |          |                    |   |
| G4-DMA                        | p.34   |          |                    |   |
| G4-EC7                        | <div>This information can be found under “Catalysing Economic Sustainability” p.34-37</div> <div>Corporate Social Responsibility (CSR) Total Expenses (RM)</div> <div><div>RM</div><div>Total5,576,731</div></div> |          |                    | Development and impact of infrastructure investments and services supported     |
| G4-EC8                        | This information is available under “Transforming Social Outcomes - Catalysing Socio-Economic Development through Corporate Social Responsibility” on p.64-69  |          |                    | Significant indirect economic impacts, including the extent of impacts          |
| Procurement practices         |  |          |                    |   |
| G4-DMA                        | p.45   |          |                    |   |
| G4-EC9                        | Information on this is available under “Catalysing Economic Sustainability” on p.46  |          |                    | Proportion of spending on local suppliers at significant locations of operation |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |   |               |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
|-------------------------------|---|---------------|--------------------|----------------------------------|------|--------------|-----|--------|---------------|-------|-------------|---------------|-------|----------|------|------|------|--------------|--------------|--------|---------------|---------------|-------------|---------------|---------------|--|--|------------------------------------|
| Material Aspects              | DMA and Indicators  | Omission      | External Assurance | Description                      |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| ENVIRONMENTAL                 |   |               |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Materials                     |   |               |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| G4-DMA                        | p.48  |               |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| G4-EN1                        | <div><div>Category: Non-renewable materials used (2015)</div><table><thead><tr><th>Plant Type</th><th>Volume</th><th>Unit</th></tr></thead><tbody><tr><td>Coal</td><td>2,166,911.46</td><td>Ton</td></tr><tr><td>Diesel</td><td>19,194,869.94</td><td>Litre</td></tr><tr><td>Natural Gas</td><td>26,370,960.45</td><td>mmbtu</td></tr></tbody></table><div>CATEGORY: NON-RENEWABLE MATERIALS<table><caption>Non-Renewable Materials Data</caption><thead><tr><th>Material</th><th>2015</th><th>2014</th></tr></thead><tbody><tr><td>Coal</td><td>2,166,911.46</td><td>2,100,509.91</td></tr><tr><td>Diesel</td><td>19,194,869.94</td><td>22,712,617.47</td></tr><tr><td>Natural Gas</td><td>26,370,960.45</td><td>31,779,419.54</td></tr></tbody></table></div><div>Category: Renewable Materials<br/>Batang Ai HEP (2015):<br/>*Annual inflow 3,100 mil m³ (annual inflow from catchment)<br/>*Annual energy generated 316 GWh<br/><br/>Murum HEP (2015)<br/>*Annual inflow 7,840 mil m³ (annual inflow from catchment)<br/>*Annual energy generated 2,093 GWh</div></div> | Plant Type    | Volume             | Unit                             | Coal | 2,166,911.46 | Ton | Diesel | 19,194,869.94 | Litre | Natural Gas | 26,370,960.45 | mmbtu | Material | 2015 | 2014 | Coal | 2,166,911.46 | 2,100,509.91 | Diesel | 19,194,869.94 | 22,712,617.47 | Natural Gas | 26,370,960.45 | 31,779,419.54 |  |  | Materials used by weight or volume |
| Plant Type                    | Volume  | Unit          |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Coal                          | 2,166,911.46  | Ton           |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Diesel                        | 19,194,869.94   | Litre         |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Natural Gas                   | 26,370,960.45   | mmbtu         |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Material                      | 2015  | 2014          |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Coal                          | 2,166,911.46  | 2,100,509.91  |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Diesel                        | 19,194,869.94   | 22,712,617.47 |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Natural Gas                   | 26,370,960.45   | 31,779,419.54 |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| Water                         |   |               |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| G4-DMA                        | p.50  |               |                    |                                  |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |
| G4-EN8                        | <div>This information is available under “Improving Our Environmental Footprint” on p.51</div> <div>For thermal, water is used for cooling purposes. As for hydro, withdrawal of water is used for electricity generation</div>   |               |                    | Total water withdrawal by source |      |              |     |        |               |       |             |               |       |          |      |      |      |              |              |        |               |               |             |               |               |  |  |                                    |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES                        |  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
|--|--|--------------|--------------------|---|--------------|----------|-----------|----------|-----------|---------------------------|------|------|------|-----------------------|------------|------------|------------|----------------------|------------|------------|------------|----------------------|--------------|--------------|--------------|--------------------------|------------|------------|------------|---------------------|------------|------------|------------|------------------|------------|------------|------------|--------------------|----------|-----------|-----------|--|--------------|--------------|--------------|--|--|---|
| Material Aspects                                     | DMA and Indicators   | Omission     | External Assurance | Description   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Biodiversity   |  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| G4-DMA   | p.51   |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| G4-EN11  | This information is disclosed under “Improving Our Environmental Footprint” on p.52-53   |              |                    | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| G4-EN12  | p.52-53  |              |                    | Impacts of activities, products, and services on biodiversity in areas of high biodiversity value outside protected areas                 |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Emissions  |  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| G4-DMA   | p.48-50  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| G4-EN15  | <div>1. Gross direct (Scope 1) GHG emissions in metric tons of CO<sub>2</sub> equivalent</div> <div><div>TOTAL EMISSIONS (tCO<sub>2</sub>eq) (2015)</div><table><tr><td>Grid</td><td></td></tr><tr><td>Main</td><td>4,775,325.44</td></tr><tr><td>Northern</td><td>96,174.21</td></tr><tr><td>Isolated</td><td>12,022.59</td></tr></table><div>Total CO<sub>2</sub> Emission (Main Grid)</div><table><tr><td>POWER STATION (Main Grid)</td><td>2013</td><td>2014</td><td>2015</td></tr><tr><td>PPLS Power Generation</td><td>796,564.42</td><td>699,287.53</td><td>770,033.30</td></tr><tr><td>Sejingkat Power Corp</td><td>734,362.86</td><td>825,823.49</td><td>836,758.64</td></tr><tr><td>Mukah Power Sdn. Bhd</td><td>1,521,674.59</td><td>1,630,849.29</td><td>1,678,345.18</td></tr><tr><td>Sarawak Power Generation</td><td>828,229.82</td><td>789,089.66</td><td>501,310.17</td></tr><tr><td>Bintulu Power Plant</td><td>603,107.14</td><td>475,832.10</td><td>446,329.02</td></tr><tr><td>Miri Power Plant</td><td>428,360.31</td><td>398,087.77</td><td>521,034.44</td></tr><tr><td>Biawak Power Plant</td><td>6,166.68</td><td>33,132.06</td><td>21,514.69</td></tr><tr><td>Total CO<sub>2</sub> Emission (tCO<sub>2</sub>eq)</td><td>4,918,465.82</td><td>4,852,101.90</td><td>4,775,325.45</td></tr></table></div> | Grid         |                    | Main  | 4,775,325.44 | Northern | 96,174.21 | Isolated | 12,022.59 | POWER STATION (Main Grid) | 2013 | 2014 | 2015 | PPLS Power Generation | 796,564.42 | 699,287.53 | 770,033.30 | Sejingkat Power Corp | 734,362.86 | 825,823.49 | 836,758.64 | Mukah Power Sdn. Bhd | 1,521,674.59 | 1,630,849.29 | 1,678,345.18 | Sarawak Power Generation | 828,229.82 | 789,089.66 | 501,310.17 | Bintulu Power Plant | 603,107.14 | 475,832.10 | 446,329.02 | Miri Power Plant | 428,360.31 | 398,087.77 | 521,034.44 | Biawak Power Plant | 6,166.68 | 33,132.06 | 21,514.69 | Total CO <sub>2</sub> Emission (tCO <sub>2</sub> eq) | 4,918,465.82 | 4,852,101.90 | 4,775,325.45 |  |  | Direct greenhouse gas (GHG) emissions (Scope 1) |
| Grid   |  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Main   | 4,775,325.44   |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Northern   | 96,174.21  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Isolated   | 12,022.59  |              |                    |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| POWER STATION (Main Grid)                            | 2013   | 2014         | 2015               |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| PPLS Power Generation                                | 796,564.42   | 699,287.53   | 770,033.30         |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Sejingkat Power Corp                                 | 734,362.86   | 825,823.49   | 836,758.64         |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Mukah Power Sdn. Bhd                                 | 1,521,674.59   | 1,630,849.29 | 1,678,345.18       |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Sarawak Power Generation                             | 828,229.82   | 789,089.66   | 501,310.17         |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Bintulu Power Plant                                  | 603,107.14   | 475,832.10   | 446,329.02         |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Miri Power Plant                                     | 428,360.31   | 398,087.77   | 521,034.44         |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Biawak Power Plant                                   | 6,166.68   | 33,132.06    | 21,514.69          |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |
| Total CO <sub>2</sub> Emission (tCO <sub>2</sub> eq) | 4,918,465.82   | 4,852,101.90 | 4,775,325.45       |   |              |          |           |          |           |                           |      |      |      |                       |            |            |            |                      |            |            |            |                      |              |              |              |                          |            |            |            |                     |            |            |            |                  |            |            |            |                    |          |           |           |  |              |              |              |  |  |   |



## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |  |           |           |          |                    |   |           |
|-------------------------------|--|-----------|-----------|----------|--------------------|---|-----------|
| Material Aspects              | DMA and Indicators   |           |           | Omission | External Assurance | Description                                     |           |
| G4-EN15                       | Total CO <sub>2</sub> Emission (Northern Grid)                             |           |           |          |                    | Direct greenhouse gas (GHG) emissions (Scope 1) |           |
|                               | POWER STATION (Northern Grid)  | 2013      | 2014      |          |                    |   | 2015      |
|                               | Limbang PS   | 56,813.27 | 58,749.86 |          |                    |   | 60,939.51 |
|                               | Lawas PS   | 32,029.91 | 33,347.74 |          |                    |   | 35,234.70 |
|                               | Total CO <sub>2</sub> Emission (tCO <sub>2</sub> eq)                       | 88,843.18 | 92,097.60 |          |                    |   | 96,174.21 |
|                               | Total Overall Stand-alone Grid CO <sub>2</sub> Emission (All over Sarawak) |           |           |          |                    |   |           |
|                               | POWER STATION (Non-Grid)   | 2013      | 2014      |          |                    |   | 2015      |
|                               | Kapit PS   | 23.99     | 121.26    |          |                    |   | 0         |
|                               | Belaga PS  | 3,095.91  | 3,283.10  |          |                    |   | 3,636.68  |
|                               | Song   | 0         | 0         |          |                    |   | 0         |
|                               | Ng Mujong PS   | 143.54    | 151.97    |          |                    |   | 185.23    |
|                               | Ng Ngungun PS  | 960.75    | 854.24    |          |                    |   | 933.79    |
|                               | Ng Jagau PS  | 158.61    | 159.97    |          |                    |   | 178.61    |
|                               | Ng Entawau PS  | 223.57    | 242.41    |          |                    |   | 247.75    |
|                               | Mulu PS  | 1,009.72  | 1,597.18  |          |                    |   | 2,177.35  |
|                               | Long Lama PS   | 2,382.71  | 2,426.75  |          |                    |   | 2,518.51  |
|                               | Pantu PS   | 725.76    | 0         |          |                    |   | 0         |
|                               | Banting PS   | 211.81    | 216.24    |          |                    |   | 238.22    |
|                               | Paloh PS   | 504.4742  | 536.99    |          |                    |   | 544.46    |
|                               | Kpg Bruit PS   | 2,263.87  | 2,409.49  |          |                    |   | 966.12    |
|                               | Kpg Saai PS  | 794.78    | 905.70    |          |                    |   | 268.97    |
|                               | Bakun PS (Non grid)  | 4,905.53  | 4,885.94  |          |                    |   | 126.89    |
|                               | Total CO <sub>2</sub> Emission (tCO <sub>2</sub> eq)                       | 17,405.03 | 17,791.24 |          |                    |   | 12,022.59 |

## GRI CONTENT INDEX

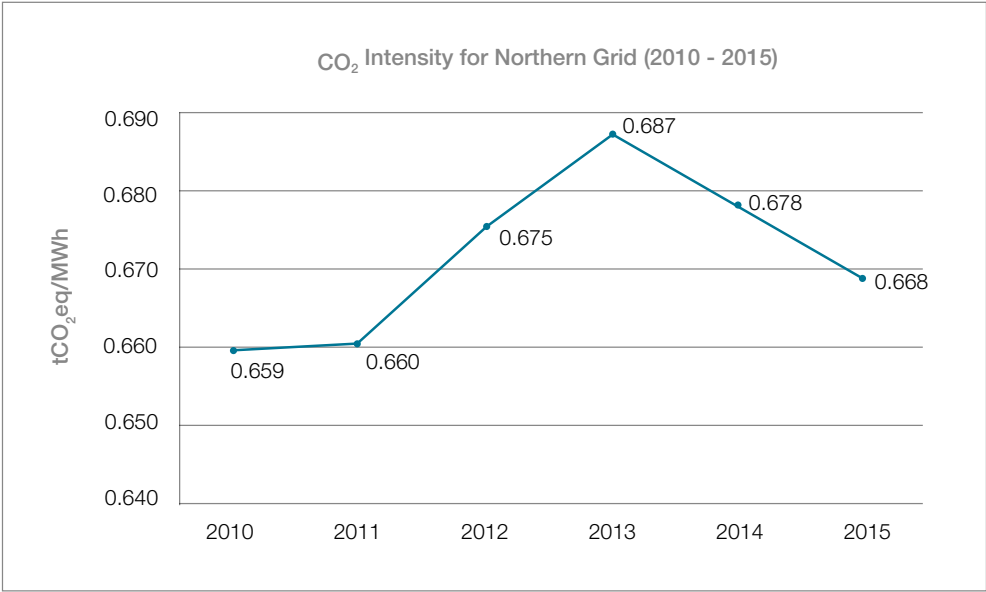
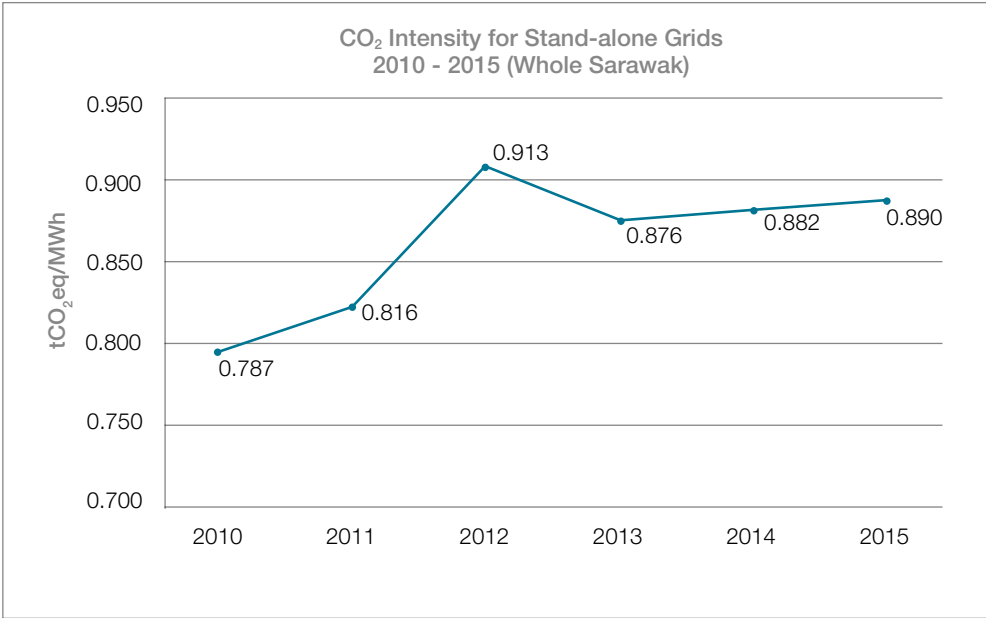
| SPECIFIC STANDARD DISCLOSURES |   |                          |              |              |   |
|-------------------------------|---|--------------------------|--------------|--------------|---|
| Material Aspects              | DMA and Indicators                        |                          |              | Omission     | External Assurance                              |
| G4-EN15                       | Total Net Energy Generated for Main Grids |                          |              |              | Direct greenhouse gas (GHG) emissions (Scope 1) |
|                               | Plant Type                                | Plant                    | 2013         | 2014         |   |
|                               | Coal                                      | PPLS Power Generation    | 665,653.45   | 673,067.79   |   |
|                               | Coal                                      | Sejingkat Power Corp     | 670,717.36   | 677,982.14   |   |
|                               | Coal                                      | Mukah Power Sdn. Bhd     | 1,381,055.96 | 1,481,594.57 |   |
|                               | BTU-Combined Cycle                        | Sarawak Power Generation | 1,770,203.95 | 1,638,149.35 |   |
|                               | BTU-Open Cycle                            | Bintulu Power Plant      | 695,162.97   | 572,782.13   |   |
|                               | Miri-Open Cycle                           | Miri Power Plant         | 491,203.58   | 445,644.89   |   |
|                               | Diesel-Standby                            | Biawak Power Plant       | 5,098.36     | 37,644.93    |   |
|                               | Total MWh                                 |                          | 6,242,758.86 | 5,526,865.80 |   |
|                               | Hydropower                                | Batang Ai HEP            | 349,834.63   | 311,289.09   |   |
|                               | Hydropower                                | Bakun HEP                | 5,415,266.50 | 8,477,979.00 |   |
|                               | Hydropower                                | Murum HEP                | -            | 167,945.87   |   |
|                               | Hydropower                                | Lundu Power Plant        | -            | -            |   |
|                               | Total MWh                                 |                          | 5,23,497.55  | 8,957,213.96 |   |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |   |            |                    |                   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
|-------------------------------|---|------------|--------------------|-------------------|------|------|--------|----------|---|---|---|--------|-----------|----------|----------|-----------------|--------|------|---|---|---|--------|--------------|--------|--------|---------------|--------|---------------|--------|--------|-----------------|--------|-------------|--------|--------|---------------|--------|---------------|--------|--------|---------------|--------|---------|----------|----------|-----------------|--------|--------------|----------|----------|-----------------|--------|----------|--------|---|---|--------|------------|--------|--------|---------------|--------|----------|--------|--------|---------------|--------|--------------|----------|----------|-----------------|--------|-------------|--------|--------|---------------|--------|----------|----------|----------|--------------|-----------|--|-----------|-----------|------------------|------------|-------|------|------|------|--------|------------|-----------|-----------|------------------|--------|----------|-----------|-----------|------------------|-----------|--|-----------|------------|-------------------|------------|-------|------|------|------|------------|----------------------|----------|----------|--|------------|----------------------|----------|----------|--|-----------|--|----------|----------|-----------------|--|--|---|
| Material Aspects              | DMA and Indicators  | Omission   | External Assurance | Description       |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| G4-EN15                       | <p><b>Total Net Energy Generated for Stand-Alone Grids</b></p> <table> <tr> <th>Plant Type</th><th>Plant</th><th>2013</th><th>2014</th><th>2015</th></tr> <tr> <td>Diesel</td><td>Kapit PS</td><td>-</td><td>-</td><td>-</td></tr> <tr> <td>Diesel</td><td>Belaga PS</td><td>3,684.30</td><td>3,752.66</td><td><b>4,054.91</b></td></tr> <tr> <td>Diesel</td><td>Song</td><td>-</td><td>-</td><td>-</td></tr> <tr> <td>Diesel</td><td>Ng Mujong PS</td><td>144.69</td><td>154.34</td><td><b>205.38</b></td></tr> <tr> <td>Diesel</td><td>Ng Ngungun PS</td><td>951.88</td><td>985.24</td><td><b>1,084.81</b></td></tr> <tr> <td>Diesel</td><td>Ng Jagau PS</td><td>134.26</td><td>128.65</td><td><b>123.31</b></td></tr> <tr> <td>Diesel</td><td>Ng Entawau PS</td><td>241.23</td><td>272.23</td><td><b>278.93</b></td></tr> <tr> <td>Diesel</td><td>Mulu PS</td><td>1,067.51</td><td>1,811.50</td><td><b>2,423.58</b></td></tr> <tr> <td>Diesel</td><td>Long Lama PS</td><td>2,945.30</td><td>2,962.34</td><td><b>3,069.97</b></td></tr> <tr> <td>Diesel</td><td>Pantu PS</td><td>864.01</td><td>-</td><td>-</td></tr> <tr> <td>Diesel</td><td>Banting PS</td><td>212.45</td><td>219.76</td><td><b>244.52</b></td></tr> <tr> <td>Diesel</td><td>Paloh PS</td><td>562.11</td><td>601.86</td><td><b>616.39</b></td></tr> <tr> <td>Diesel</td><td>Kpg Bruit PS</td><td>2,507.33</td><td>2,699.45</td><td><b>1,064.10</b></td></tr> <tr> <td>Diesel</td><td>Kpg Saai PS</td><td>885.24</td><td>987.13</td><td><b>289.88</b></td></tr> <tr> <td>Diesel</td><td>Bakun PS</td><td>5,665.81</td><td>5,591.56</td><td><b>56.00</b></td></tr> <tr> <td colspan="2">Total MWh</td><td>19,866.11</td><td>20,166.70</td><td><b>13,511.76</b></td></tr> </table> <p><b>Total Net Energy Generated (Northern Grids)</b></p> <table> <tr> <th>Plant Type</th><th>Plant</th><th>2013</th><th>2014</th><th>2015</th></tr> <tr> <td>Diesel</td><td>Limbang PS</td><td>79,535.69</td><td>81,769.58</td><td><b>85,331.79</b></td></tr> <tr> <td>Diesel</td><td>Lawas PS</td><td>42,470.59</td><td>44,129.66</td><td><b>49,059.72</b></td></tr> <tr> <td colspan="2">Total MWh</td><td>98,951.75</td><td>125,899.24</td><td><b>134,391.51</b></td></tr> </table> <table> <tr> <th>Plant Type</th><th>Plant</th><th>2013</th><th>2014</th><th>2015</th></tr> <tr> <td>Mini Hydro</td><td>Lawas M/H (Kalamuku)</td><td>3,432.32</td><td>3,238.58</td><td></td></tr> <tr> <td>Mini Hydro</td><td>Lawas M/H (Sg. Kota)</td><td>3,811.00</td><td>6,678.60</td><td></td></tr> <tr> <td colspan="2">Total MWh</td><td>7,243.32</td><td>9,917.18</td><td><b>9,494.71</b></td></tr> </table> <p><b>Data assumption:</b></p> <ol style="list-style-type: none"> <li>1. Fuel consumption, fuel Calorific Value &amp; fuel Specific Density (for CO<sub>2</sub> emission calculations) data obtained from OpX</li> <li>2. Net Energy Generated for grid connected power plants (using GSO data) – Request for both grid Thermal &amp; Hydro (Batang Ai, Bakun &amp; Murum)</li> <li>3. Net Energy Generated for non-grid connected power plants (using Non-grid generation Planning &amp; Development) – Request for both non grid Thermal &amp; Mini hydro (Kalamuku &amp; Kota 1)</li> </ol> | Plant Type | Plant              | 2013              | 2014 | 2015 | Diesel | Kapit PS | - | - | - | Diesel | Belaga PS | 3,684.30 | 3,752.66 | <b>4,054.91</b> | Diesel | Song | - | - | - | Diesel | Ng Mujong PS | 144.69 | 154.34 | <b>205.38</b> | Diesel | Ng Ngungun PS | 951.88 | 985.24 | <b>1,084.81</b> | Diesel | Ng Jagau PS | 134.26 | 128.65 | <b>123.31</b> | Diesel | Ng Entawau PS | 241.23 | 272.23 | <b>278.93</b> | Diesel | Mulu PS | 1,067.51 | 1,811.50 | <b>2,423.58</b> | Diesel | Long Lama PS | 2,945.30 | 2,962.34 | <b>3,069.97</b> | Diesel | Pantu PS | 864.01 | - | - | Diesel | Banting PS | 212.45 | 219.76 | <b>244.52</b> | Diesel | Paloh PS | 562.11 | 601.86 | <b>616.39</b> | Diesel | Kpg Bruit PS | 2,507.33 | 2,699.45 | <b>1,064.10</b> | Diesel | Kpg Saai PS | 885.24 | 987.13 | <b>289.88</b> | Diesel | Bakun PS | 5,665.81 | 5,591.56 | <b>56.00</b> | Total MWh |  | 19,866.11 | 20,166.70 | <b>13,511.76</b> | Plant Type | Plant | 2013 | 2014 | 2015 | Diesel | Limbang PS | 79,535.69 | 81,769.58 | <b>85,331.79</b> | Diesel | Lawas PS | 42,470.59 | 44,129.66 | <b>49,059.72</b> | Total MWh |  | 98,951.75 | 125,899.24 | <b>134,391.51</b> | Plant Type | Plant | 2013 | 2014 | 2015 | Mini Hydro | Lawas M/H (Kalamuku) | 3,432.32 | 3,238.58 |  | Mini Hydro | Lawas M/H (Sg. Kota) | 3,811.00 | 6,678.60 |  | Total MWh |  | 7,243.32 | 9,917.18 | <b>9,494.71</b> |  |  | Direct greenhouse gas (GHG) emissions (Scope 1) |
| Plant Type                    | Plant   | 2013       | 2014               | 2015              |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Kapit PS  | -          | -                  | -                 |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Belaga PS   | 3,684.30   | 3,752.66           | <b>4,054.91</b>   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Song  | -          | -                  | -                 |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Ng Mujong PS  | 144.69     | 154.34             | <b>205.38</b>     |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Ng Ngungun PS   | 951.88     | 985.24             | <b>1,084.81</b>   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Ng Jagau PS   | 134.26     | 128.65             | <b>123.31</b>     |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Ng Entawau PS   | 241.23     | 272.23             | <b>278.93</b>     |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Mulu PS   | 1,067.51   | 1,811.50           | <b>2,423.58</b>   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Long Lama PS  | 2,945.30   | 2,962.34           | <b>3,069.97</b>   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Pantu PS  | 864.01     | -                  | -                 |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Banting PS  | 212.45     | 219.76             | <b>244.52</b>     |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Paloh PS  | 562.11     | 601.86             | <b>616.39</b>     |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Kpg Bruit PS  | 2,507.33   | 2,699.45           | <b>1,064.10</b>   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Kpg Saai PS   | 885.24     | 987.13             | <b>289.88</b>     |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Bakun PS  | 5,665.81   | 5,591.56           | <b>56.00</b>      |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Total MWh                     |   | 19,866.11  | 20,166.70          | <b>13,511.76</b>  |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Plant Type                    | Plant   | 2013       | 2014               | 2015              |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Limbang PS  | 79,535.69  | 81,769.58          | <b>85,331.79</b>  |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Diesel                        | Lawas PS  | 42,470.59  | 44,129.66          | <b>49,059.72</b>  |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Total MWh                     |   | 98,951.75  | 125,899.24         | <b>134,391.51</b> |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Plant Type                    | Plant   | 2013       | 2014               | 2015              |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Mini Hydro                    | Lawas M/H (Kalamuku)  | 3,432.32   | 3,238.58           |                   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Mini Hydro                    | Lawas M/H (Sg. Kota)  | 3,811.00   | 6,678.60           |                   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |
| Total MWh                     |   | 7,243.32   | 9,917.18           | <b>9,494.71</b>   |      |      |        |          |   |   |   |        |           |          |          |                 |        |      |   |   |   |        |              |        |        |               |        |               |        |        |                 |        |             |        |        |               |        |               |        |        |               |        |         |          |          |                 |        |              |          |          |                 |        |          |        |   |   |        |            |        |        |               |        |          |        |        |               |        |              |          |          |                 |        |             |        |        |               |        |          |          |          |              |           |  |           |           |                  |            |       |      |      |      |        |            |           |           |                  |        |          |           |           |                  |           |  |           |            |                   |            |       |      |      |      |            |                      |          |          |  |            |                      |          |          |  |           |  |          |          |                 |  |  |   |



GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |  |          |                    |  |
|-------------------------------|--|----------|--------------------|--|
| Material Aspects              | DMA and Indicators   | Omission | External Assurance | Description                              |
| G4-EN18                       | CO <sub>2</sub> Intensity for Sarawak Energy Main Grid can be found on p.48  |          | Yes                | Greenhouse gas (GHG) emissions intensity |
|                               | Northern Grid  |          |                    |  |
|                               | <div><p>CO<sub>2</sub> Intensity for Northern Grid (2010 - 2015)</p></div>                    |          |                    |  |
|                               | Overall stand-alone Grids (All over Sarawak)   |          |                    |  |
|                               | <div><p>CO<sub>2</sub> Intensity for Stand-alone Grids 2010 - 2015 (Whole Sarawak)</p></div> |          |                    |  |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |  |          |                    |             |  |
|-------------------------------|--|----------|--------------------|-------------|--|
| Material Aspects              | DMA and Indicators   | Omission | External Assurance | Description |  |
| G4-EN19                       | This information is detailed under “Improving Our Environmental Footprint” on p.48 |          |                    |             | Reduction of greenhouse gas (GHG) emissions  |
| G4-EN21                       | This information is detailed under “Improving Our Environmental Footprint” on p.50 |          |                    |             | NO <sub>x</sub> , SO <sub>x</sub> and other significant air emissions  |
| Effluent and Waste            |  |          |                    |             |  |
| G4-DMA                        | p.50-51  |          |                    |             |  |
| G4-EN22                       | p.51   |          |                    |             | Total water discharge by quality and destination including thermal discharges as part of the total volume of planned and unplanned water discharges. |
| Compliance                    |  |          |                    |             |  |
| G4-DMA                        | p.50   |          |                    |             | Progress and processes to ensure the availability of skilled workforce   |
| G4-EN29                       | The Company did not incur any monetary sanctions in 2015                           |          |                    |             | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations            |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES    |  |      |       |       |      |          |                    |  |
|----------------------------------|--|------|-------|-------|------|----------|--------------------|--|
| Material Aspects                 | DMA and Indicators                       |      |       |       |      | Omission | External Assurance | Description  |
| SOCIAL                           |  |      |       |       |      |          |                    |  |
| Labour Practices and Decent Work |  |      |       |       |      |          |                    |  |
| Employment                       |  |      |       |       |      |          |                    |  |
| G4-DMA                           | p.58-63                                  |      |       |       |      |          |                    |  |
| G4-LA1                           | New Hires and Turnover by Gender and Age |      |       |       |      |          |                    | Total number and rates of new employee hires and employee turnover by age group, gender and region |
|                                  |  | 2014 |       |       | 2015 |          |                    |  |
|                                  | New Hires (by Gender)                    | Men  | Women | TOTAL | Men  | Women    | TOTAL              |  |
|                                  | Total number                             | 153  | 85    | 238   | 172  | 70       | 242                |  |
|                                  | By age, in numbers                       |      |       |       |      |          |                    |  |
|                                  | Up to 30 years old                       | 134  | 66    | 200   | 145  | 54       | 199                |  |
|                                  | Between 31 and 50 years old              | 15   | 19    | 34    | 27   | 16       | 43                 |  |
|                                  | Over 50 years old                        | 4    | 0     | 4     | 0    | 0        | 0                  |  |
|                                  |  | 2014 |       |       | 2015 |          |                    |  |
|                                  | Staff Turnover (by Gender)               | Men  | Women | TOTAL | Men  | Women    | TOTAL              |  |
|                                  | Total                                    | 92   | 22    | 114   | 84   | 25       | 109                |  |
|                                  | By age, in numbers                       |      |       |       |      |          |                    |  |
|                                  | Up to 30 years old                       | 32   | 14    | 46    | 27   | 11       | 38                 |  |
|                                  | Between 31 and 50 years old              | 30   | 7     | 37    | 29   | 7        | 36                 |  |
|                                  | Over 50 years old                        | 30   | 1     | 31    | 28   | 7        | 35                 |  |



## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |  |     |       |       |          |   |
|-------------------------------|--|-----|-------|-------|----------|---|
| Material Aspects              | DMA and Indicators                         |     |       |       | Omission | External Assurance  |
| G4-LA1                        | New Hires and Turnover by Company          |     |       |       |          |   |
|                               | 2014                                       |     |       | 2015  |          |   |
|                               | New Hires (by Company)                     | Men | Women | TOTAL | Men      | Women   |
|                               | Total number                               | 153 | 85    | 238   | 172      | 70  |
|                               | By company, in numbers                     |     |       |       |          |   |
|                               | Sarawak Energy Berhad                      | 1   | 3     |       | 2        | 0   |
|                               | Sejingkat Power                            | 1   | 1     |       | 1        | 1   |
|                               | Mukah Power                                | 3   | 1     |       | 7        | 1   |
|                               | SESCO Headquarters                         | 70  | 56    |       | 93       | 51  |
|                               | SESCO Kuching                              | 20  | 8     |       | 10       | 5   |
|                               | SESCO Sri Aman                             | 5   | 0     |       | 2        | 0   |
|                               | SESCO Sarikei                              | 5   | 1     |       | 0        | 0   |
|                               | SESCO Sibul                                | 6   | 2     |       | 13       | 5   |
|                               | SESCO Bintulu                              | 20  | 1     |       | 18       | 2   |
|                               | SESCO Miri                                 | 22  | 12    |       | 12       | 1   |
|                               | Balingian Power                            | -   | -     |       | 14       | 4   |
|                               | 2014                                       |     |       | 2015  |          |   |
|                               | Staff Turnover (by Company)                | Men | Women | TOTAL | Men      | Women   |
|                               | Total number                               | 92  | 22    | 114   | 84       | 25  |
|                               | By company, in numbers                     |     |       |       |          |   |
|                               | Sarawak Energy Berhad                      | 8   | 2     |       | 4        | 2   |
|                               | Sejingkat Power                            | 2   | 0     |       | 3        | 1   |
|                               | Mukah Power                                | 6   | 0     |       | 4        | 0   |
|                               | SESCO Headquarters                         | 32  | 10    |       | 24       | 16  |
|                               | SESCO Kuching                              | 13  | 3     |       | 7        | 2   |
|                               | SESCO Sri Aman                             | 2   | 0     |       | 0        | 0   |
|                               | SESCO Sarikei                              | 0   | 0     |       | 1        | 0   |
|                               | SESCO Sibul                                | 11  | 2     |       | 12       | 2   |
|                               | SESCO Bintulu                              | 5   | 2     |       | 13       | 1   |
|                               | SESCO Miri                                 | 13  | 3     |       | 16       | 1   |
|                               | % Turnover rate 2014 = 2.74%               |     |       |       |          |   |
|                               | % Turnover rate 2015 = 2.53%               |     |       |       |          |   |
| G4-LA2                        | No changes from Sustainability Report 2014 |     |       |       |          | Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES         |  |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
|---------------------------------------|--|----------|--------------------|--|---------------------------------------|------|--------|------------|----|---|-----------|-----|-----|---------------|-----|-----|-----------|-----|-----|-------|-------|--|-------------------------------------|------|--------|------------|-----|-----|-----------|--------|-------|---------------|-------|-------|-----------|--------|--------|-------|---------------------|--|---------------------------------------|------|--------|------------|-------|-------|-----------|-------|-------|---------------|-------|-------|--|-----|---|
| Material Aspects                      | DMA and Indicators   | Omission | External Assurance | Description  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Occupational Health and Safety        |  |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-DMA                                | p.62   |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA5                                | This information is disclosed under “Transforming Social Outcomes - Empowering Our Workforce - Safety at the Workplace” on p.62  |          |                    | Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programmes |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA6                                | This information is disclosed under “Transforming Social Outcomes - Empowering Our Workforce - Safety at the Workplace” on p.62-63   |          |                    | Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender                        |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA7                                | This information is disclosed under “Transforming Social Outcomes - Empowering Our Workforce - Monitoring The Health of Our Workers” on p.63   |          |                    | Workers with high incidence or high risk of diseases related to their occupation   |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Training and Education                |  |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-DMA                                | p.59   |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA9                                | <div>This information is available under “Transforming Social Outcomes - Empowering Our Workforce” on p.60-61</div> <div>Total Hours and Average Hours of Training Recorded by Category and Gender (External Courses)</div> <table><thead><tr><th>YEAR</th><th colspan="2">2015</th></tr><tr><th>TOTAL NUMBER OF EMPLOYEES BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr></thead><tbody><tr><td>Management</td><td>45</td><td>6</td></tr><tr><td>Executive</td><td>637</td><td>341</td></tr><tr><td>Non-Executive</td><td>241</td><td>165</td></tr><tr><td>Sub-total</td><td>923</td><td>512</td></tr><tr><td>TOTAL</td><td colspan="2">1,435</td></tr></tbody></table><br><table><thead><tr><th>TOTAL HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr></thead><tbody><tr><td>Management</td><td>833</td><td>175</td></tr><tr><td>Executive</td><td>14,875</td><td>7,000</td></tr><tr><td>Non-Executive</td><td>9,352</td><td>4,690</td></tr><tr><td>Sub-total</td><td>25,060</td><td>11,865</td></tr><tr><td>TOTAL</td><td colspan="2">36,925<sup>1</sup></td></tr></tbody></table><br><table><thead><tr><th>AVERAGE HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr></thead><tbody><tr><td>Management</td><td>18.51</td><td>29.17</td></tr><tr><td>Executive</td><td>23.35</td><td>20.53</td></tr><tr><td>Non-Executive</td><td>38.80</td><td>28.42</td></tr></tbody></table> | YEAR     | 2015               |  | TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE | FEMALE | Management | 45 | 6 | Executive | 637 | 341 | Non-Executive | 241 | 165 | Sub-total | 923 | 512 | TOTAL | 1,435 |  | TOTAL HOURS OF TRAINING BY CATEGORY | MALE | FEMALE | Management | 833 | 175 | Executive | 14,875 | 7,000 | Non-Executive | 9,352 | 4,690 | Sub-total | 25,060 | 11,865 | TOTAL | 36,925 <sup>1</sup> |  | AVERAGE HOURS OF TRAINING BY CATEGORY | MALE | FEMALE | Management | 18.51 | 29.17 | Executive | 23.35 | 20.53 | Non-Executive | 38.80 | 28.42 |  | Yes | Average hours of training per year per employee by gender, and by employee category |
| YEAR                                  | 2015   |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE   | FEMALE   |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Management                            | 45   | 6        |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Executive                             | 637  | 341      |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Non-Executive                         | 241  | 165      |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Sub-total                             | 923  | 512      |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL                                 | 1,435  |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL HOURS OF TRAINING BY CATEGORY   | MALE   | FEMALE   |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Management                            | 833  | 175      |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Executive                             | 14,875   | 7,000    |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Non-Executive                         | 9,352  | 4,690    |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Sub-total                             | 25,060   | 11,865   |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL                                 | 36,925 <sup>1</sup>  |          |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| AVERAGE HOURS OF TRAINING BY CATEGORY | MALE   | FEMALE   |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Management                            | 18.51  | 29.17    |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Executive                             | 23.35  | 20.53    |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Non-Executive                         | 38.80  | 28.42    |                    |  |                                       |      |        |            |    |   |           |     |     |               |     |     |           |     |     |       |       |  |                                     |      |        |            |     |     |           |        |       |               |       |       |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |

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| SPECIFIC STANDARD DISCLOSURES         |  |          |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
|---------------------------------------|--|----------|--------------------|-------------|--|---------------------------------------|------|--------|--|------------|----|---|--|-----------|-----|-----|--|---------------|-------|-----|--|-----------|-------|-----|--|-------|-------|--|--|-------------------------------------|------|--------|--|------------|-------|----|--|-----------|-------|-------|--|---------------|----------|-------|--|-----------|--------|-------|--|-------|---------------------|--|--|---------------------------------------|------|--------|--|------------|-------|-------|--|-----------|-------|-------|--|---------------|-------|-------|--|--|-----|---|
| Material Aspects                      | DMA and Indicators   | Omission | External Assurance | Description |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| G4-LA9                                | <div><div>This information is available under “Transforming Social Outcomes - Empowering Our Workforce" on p.60-61</div><div><div>Total Hours and Average Hours of Training Recorded by Category and Gender (Internal Courses)</div><table><tr><th colspan="2">YEAR</th><th colspan="2">2015</th></tr><tr><th>TOTAL NUMBER OF EMPLOYEES BY CATEGORY</th><th>MALE</th><th colspan="2">FEMALE</th></tr><tr><td>Management</td><td>15</td><td colspan="2">5</td></tr><tr><td>Executive</td><td>264</td><td colspan="2">125</td></tr><tr><td>Non-Executive</td><td>1,688</td><td colspan="2">150</td></tr><tr><td>Sub-Total</td><td>1,967</td><td colspan="2">280</td></tr><tr><td>TOTAL</td><td colspan="3">2,247</td></tr></table><table><tr><th>TOTAL HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th colspan="2">FEMALE</th></tr><tr><td>Management</td><td>227.5</td><td colspan="2">70</td></tr><tr><td>Executive</td><td>5,278</td><td colspan="2">2,639</td></tr><tr><td>Non-Executive</td><td>34,926.5</td><td colspan="2">2,800</td></tr><tr><td>Sub-Total</td><td>40,432</td><td colspan="2">5,509</td></tr><tr><td>TOTAL</td><td colspan="3">45,941<sup>1</sup></td></tr></table><table><tr><th>AVERAGE HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th colspan="2">FEMALE</th></tr><tr><td>Management</td><td>15.17</td><td colspan="2">14.00</td></tr><tr><td>Executive</td><td>19.99</td><td colspan="2">21.11</td></tr><tr><td>Non-Executive</td><td>20.69</td><td colspan="2">18.67</td></tr></table></div></div> <td></td> <td>Yes</td> <td>Average hours of training per year per employee by gender, and by employee category</td> | YEAR     |                    | 2015        |  | TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE | FEMALE |  | Management | 15 | 5 |  | Executive | 264 | 125 |  | Non-Executive | 1,688 | 150 |  | Sub-Total | 1,967 | 280 |  | TOTAL | 2,247 |  |  | TOTAL HOURS OF TRAINING BY CATEGORY | MALE | FEMALE |  | Management | 227.5 | 70 |  | Executive | 5,278 | 2,639 |  | Non-Executive | 34,926.5 | 2,800 |  | Sub-Total | 40,432 | 5,509 |  | TOTAL | 45,941 <sup>1</sup> |  |  | AVERAGE HOURS OF TRAINING BY CATEGORY | MALE | FEMALE |  | Management | 15.17 | 14.00 |  | Executive | 19.99 | 21.11 |  | Non-Executive | 20.69 | 18.67 |  |  | Yes | Average hours of training per year per employee by gender, and by employee category |
| YEAR                                  |  | 2015     |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE   | FEMALE   |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Management                            | 15   | 5        |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Executive                             | 264  | 125      |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Non-Executive                         | 1,688  | 150      |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Sub-Total                             | 1,967  | 280      |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| TOTAL                                 | 2,247  |          |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| TOTAL HOURS OF TRAINING BY CATEGORY   | MALE   | FEMALE   |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Management                            | 227.5  | 70       |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Executive                             | 5,278  | 2,639    |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Non-Executive                         | 34,926.5   | 2,800    |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Sub-Total                             | 40,432   | 5,509    |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| TOTAL                                 | 45,941 <sup>1</sup>  |          |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| AVERAGE HOURS OF TRAINING BY CATEGORY | MALE   | FEMALE   |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Management                            | 15.17  | 14.00    |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Executive                             | 19.99  | 21.11    |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |
| Non-Executive                         | 20.69  | 18.67    |                    |             |  |                                       |      |        |  |            |    |   |  |           |     |     |  |               |       |     |  |           |       |     |  |       |       |  |  |                                     |      |        |  |            |       |    |  |           |       |       |  |               |          |       |  |           |        |       |  |       |                     |  |  |                                       |      |        |  |            |       |       |  |           |       |       |  |               |       |       |  |  |     |   |



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| SPECIFIC STANDARD DISCLOSURES         |   |          |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
|---------------------------------------|---|----------|--------------------|-------------|---------------------------------------|------|--------|------------|-----|----|-----------|----|---|---------------|---|---|-----------|-----|----|--------------|------------|--|-------------------------------------|------|--------|------------|-------|-----|-----------|-----|-----|---------------|---|---|-----------|-------|-----|--------------|--------------------------|--|---------------------------------------|------|--------|------------|-------|-------|-----------|-------|-------|---------------|---|---|--|-----|---|
| Material Aspects                      | DMA and Indicators  | Omission | External Assurance | Description |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| G4-LA9                                | <p>This information is available under “Transforming Social Outcomes - Empowering Our Workforce” on p.60-61</p> <p><b>Total Hours and Average Hours of Training Recorded by Category and Gender (Leadership Courses)</b></p> <table><tr><th>YEAR</th><th colspan="2">2015</th></tr><tr><th>TOTAL NUMBER OF EMPLOYEES BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr><tr><td>Management</td><td>109</td><td>25</td></tr><tr><td>Executive</td><td>16</td><td>7</td></tr><tr><td>Non-Executive</td><td>-</td><td>-</td></tr><tr><td>Sub-Total</td><td>125</td><td>32</td></tr><tr><td><b>TOTAL</b></td><td><b>157</b></td><td></td></tr></table><br><table><tr><th>TOTAL HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr><tr><td>Management</td><td>1,720</td><td>392</td></tr><tr><td>Executive</td><td>256</td><td>112</td></tr><tr><td>Non-Executive</td><td>-</td><td>-</td></tr><tr><td>Sub-Total</td><td>1,976</td><td>504</td></tr><tr><td><b>TOTAL</b></td><td><b>2,480<sup>1</sup></b></td><td></td></tr></table><br><table><tr><th>AVERAGE HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr><tr><td>Management</td><td>15.78</td><td>15.68</td></tr><tr><td>Executive</td><td>16.00</td><td>16.00</td></tr><tr><td>Non-Executive</td><td>-</td><td>-</td></tr></table> | YEAR     | 2015               |             | TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE | FEMALE | Management | 109 | 25 | Executive | 16 | 7 | Non-Executive | - | - | Sub-Total | 125 | 32 | <b>TOTAL</b> | <b>157</b> |  | TOTAL HOURS OF TRAINING BY CATEGORY | MALE | FEMALE | Management | 1,720 | 392 | Executive | 256 | 112 | Non-Executive | - | - | Sub-Total | 1,976 | 504 | <b>TOTAL</b> | <b>2,480<sup>1</sup></b> |  | AVERAGE HOURS OF TRAINING BY CATEGORY | MALE | FEMALE | Management | 15.78 | 15.68 | Executive | 16.00 | 16.00 | Non-Executive | - | - |  | Yes | Average hours of training per year per employee by gender, and by employee category |
| YEAR                                  | 2015  |          |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE  | FEMALE   |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Management                            | 109   | 25       |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Executive                             | 16  | 7        |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Non-Executive                         | -   | -        |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Sub-Total                             | 125   | 32       |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| <b>TOTAL</b>                          | <b>157</b>  |          |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| TOTAL HOURS OF TRAINING BY CATEGORY   | MALE  | FEMALE   |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Management                            | 1,720   | 392      |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Executive                             | 256   | 112      |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Non-Executive                         | -   | -        |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Sub-Total                             | 1,976   | 504      |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| <b>TOTAL</b>                          | <b>2,480<sup>1</sup></b>  |          |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| AVERAGE HOURS OF TRAINING BY CATEGORY | MALE  | FEMALE   |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Management                            | 15.78   | 15.68    |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Executive                             | 16.00   | 16.00    |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |
| Non-Executive                         | -   | -        |                    |             |                                       |      |        |            |     |    |           |    |   |               |   |   |           |     |    |              |            |  |                                     |      |        |            |       |     |           |     |     |               |   |   |           |       |     |              |                          |  |                                       |      |        |            |       |       |           |       |       |               |   |   |  |     |   |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES         |   |          |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
|---------------------------------------|---|----------|--------------------|---|---------------------------------------|------|--------|------------|---|---|-----------|-------|-----|---------------|-------|-------|-----------|-------|-------|-------|-------|--|-------------------------------------|------|--------|------------|-----|----|-----------|--------|-------|---------------|--------|--------|-----------|--------|--------|-------|---------------------|--|---------------------------------------|------|--------|------------|-------|-------|-----------|-------|-------|---------------|-------|-------|--|-----|---|
| Material Aspects                      | DMA and Indicators  | Omission | External Assurance | Description   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA9                                | <p>This information is available under “Transforming Social Outcomes - Empowering Our Workforce” on p.60-61</p> <p><b>Total Hours and Average Hours of Training Recorded by Category and Gender (In-house Courses)</b></p> <table><tr><th>YEAR</th><th colspan="2">2015</th></tr><tr><th>TOTAL NUMBER OF EMPLOYEES BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr><tr><td>Management</td><td>8</td><td>5</td></tr><tr><td>Executive</td><td>1,000</td><td>665</td></tr><tr><td>Non-Executive</td><td>3,961</td><td>1,329</td></tr><tr><td>Sub-Total</td><td>4,969</td><td>1,999</td></tr><tr><td>TOTAL</td><td colspan="2">6,968</td></tr></table><br><table><tr><th>TOTAL HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr><tr><td>Management</td><td>105</td><td>56</td></tr><tr><td>Executive</td><td>14,694</td><td>8,406</td></tr><tr><td>Non-Executive</td><td>57,886</td><td>14,360</td></tr><tr><td>Sub-Total</td><td>72,685</td><td>22,822</td></tr><tr><td>TOTAL</td><td colspan="2">95,507<sup>1</sup></td></tr></table><br><table><tr><th>AVERAGE HOURS OF TRAINING BY CATEGORY</th><th>MALE</th><th>FEMALE</th></tr><tr><td>Management</td><td>13.13</td><td>11.20</td></tr><tr><td>Executive</td><td>14.69</td><td>12.64</td></tr><tr><td>Non-Executive</td><td>14.61</td><td>10.81</td></tr></table> | YEAR     | 2015               |   | TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE | FEMALE | Management | 8 | 5 | Executive | 1,000 | 665 | Non-Executive | 3,961 | 1,329 | Sub-Total | 4,969 | 1,999 | TOTAL | 6,968 |  | TOTAL HOURS OF TRAINING BY CATEGORY | MALE | FEMALE | Management | 105 | 56 | Executive | 14,694 | 8,406 | Non-Executive | 57,886 | 14,360 | Sub-Total | 72,685 | 22,822 | TOTAL | 95,507 <sup>1</sup> |  | AVERAGE HOURS OF TRAINING BY CATEGORY | MALE | FEMALE | Management | 13.13 | 11.20 | Executive | 14.69 | 12.64 | Non-Executive | 14.61 | 10.81 |  | Yes | Average hours of training per year per employee by gender, and by employee category |
| YEAR                                  | 2015  |          |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL NUMBER OF EMPLOYEES BY CATEGORY | MALE  | FEMALE   |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Management                            | 8   | 5        |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Executive                             | 1,000   | 665      |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Non-Executive                         | 3,961   | 1,329    |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Sub-Total                             | 4,969   | 1,999    |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL                                 | 6,968   |          |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL HOURS OF TRAINING BY CATEGORY   | MALE  | FEMALE   |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Management                            | 105   | 56       |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Executive                             | 14,694  | 8,406    |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Non-Executive                         | 57,886  | 14,360   |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Sub-Total                             | 72,685  | 22,822   |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| TOTAL                                 | 95,507 <sup>1</sup>   |          |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| AVERAGE HOURS OF TRAINING BY CATEGORY | MALE  | FEMALE   |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Management                            | 13.13   | 11.20    |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Executive                             | 14.69   | 12.64    |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| Non-Executive                         | 14.61   | 10.81    |                    |   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA10                               | This information is available under “Transforming Social Outcomes - Empowering Our Workforce” on p.59-60 & 62   |          |                    | Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |
| G4-LA11                               | This information is available under “Transforming Social Outcomes - Empowering Our Workforce” on p.62   |          |                    | Percentage of employees receiving regular performance and career development reviews, by gender and employee category                                   |                                       |      |        |            |   |   |           |       |     |               |       |       |           |       |       |       |       |  |                                     |      |        |            |     |    |           |        |       |               |        |        |           |        |        |       |                     |  |                                       |      |        |            |       |       |           |       |       |               |       |       |  |     |   |

## GRI CONTENT INDEX

| SPECIFIC STANDARD DISCLOSURES |   |          |                    |  |
|-------------------------------|---|----------|--------------------|--|
| Material Aspects              | DMA and Indicators  | Omission | External Assurance | Description  |
| <b>Society</b>                |   |          |                    |  |
| <b>Local Communities</b>      |   |          |                    |  |
| G4-DMA                        | p.68  |          |                    |  |
| G4-SO1                        | 100% of Sarawak Energy's operations involves and includes local community engagement, impact assessments and development programmes, particularly projects categorised under "prescribed activities" by the Natural Resources and Environment Board, Sarawak and Department of Environment                    |          |                    | Percentage of operations with implemented local community engagement, impact assessments, and development programmes                       |
| G4-HR8                        | There were no identified incidents of violations involving the rights of indigenous peoples during the reporting period   |          |                    | Total number of incidents of violations involving rights of indigenous people and actions taken  |
| <b>Product Responsibility</b> |   |          |                    |  |
| <b>Customer Privacy</b>       |   |          |                    |  |
| G4-DMA                        | p.55  |          |                    |  |
| G4-PR8                        | This information is available under "Transforming Social Outcomes - Putting Our Customers First" on p.55  |          |                    | Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data                                |
| <b>Compliance</b>             |   |          |                    |  |
| G4-DMA                        | p.55  |          |                    |  |
| G4-PR9                        | In the year under review, Sarawak Energy did not incur any fines for non-compliance with:<br><br>1. Provision and use of products and services (G4-PR9)<br>2. Product & services on information & labelling (G4-PR4)<br>3. Marketing communications, including advertising, promotions & sponsorship (G4-PR7) |          |                    | Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services |



## GRI CONTENT INDEX

| SECTOR SPECIFIC DISCLOSURES  |  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
|------------------------------|--|---------------|--------------------|--|--------|---------------|-----|-----------|-------|-----------|-------|------|-------|-------------------------|-----|-----------------|-----|------------------------------|-------|-----|-------|-----------------------|-----|-------------------------|-----|--------------------|-------|--------|----|------------------------|--------|--|--|--|
| Material Aspects             | DMA and Indicators   | Omission      | External Assurance | Description  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| G4-EU1                       | This information is available in the “Organisation Profile” on p.8   |               |                    | Describe the fuels used and the capacity of multi-fuel plants. |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| G4- EU2                      | <div>See table below:</div> <div>2015</div> <table><thead><tr><th>ENERGY SOURCE</th><th>Net</th></tr></thead><tbody><tr><td>Hydro</td><td>10,162</td></tr><tr><td>Batang Ai HEP</td><td>315</td></tr><tr><td>Bakun HEP</td><td>7,719</td></tr><tr><td>Murum HEP</td><td>2,127</td></tr><tr><td>Coal</td><td>2,880</td></tr><tr><td>Sejingkat Power (SPC 1)</td><td>683</td></tr><tr><td>PPLS-PG (SPC 2)</td><td>723</td></tr><tr><td>Mukah Power Generation (MPG)</td><td>1,475</td></tr><tr><td>Gas</td><td>2,019</td></tr><tr><td>Miri Pujut Open Cycle</td><td>512</td></tr><tr><td>Bintulu 1- 5 Open Cycle</td><td>486</td></tr><tr><td>SPG Combined Cycle</td><td>1,021</td></tr><tr><td>Diesel</td><td>23</td></tr><tr><td>TOTAL ENERGY GENERATED</td><td>15,084</td></tr></tbody></table> | ENERGY SOURCE | Net                | Hydro  | 10,162 | Batang Ai HEP | 315 | Bakun HEP | 7,719 | Murum HEP | 2,127 | Coal | 2,880 | Sejingkat Power (SPC 1) | 683 | PPLS-PG (SPC 2) | 723 | Mukah Power Generation (MPG) | 1,475 | Gas | 2,019 | Miri Pujut Open Cycle | 512 | Bintulu 1- 5 Open Cycle | 486 | SPG Combined Cycle | 1,021 | Diesel | 23 | TOTAL ENERGY GENERATED | 15,084 |  |  | Describe net energy generated by the utility in GWh or GJ (for where heat is a secondary product). This should be broken down by primary energy source and by regulatory regime. |
| ENERGY SOURCE                | Net  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Hydro                        | 10,162   |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Batang Ai HEP                | 315  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Bakun HEP                    | 7,719  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Murum HEP                    | 2,127  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Coal                         | 2,880  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Sejingkat Power (SPC 1)      | 683  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| PPLS-PG (SPC 2)              | 723  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Mukah Power Generation (MPG) | 1,475  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Gas                          | 2,019  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Miri Pujut Open Cycle        | 512  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Bintulu 1- 5 Open Cycle      | 486  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| SPG Combined Cycle           | 1,021  |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| Diesel                       | 23   |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |
| TOTAL ENERGY GENERATED       | 15,084   |               |                    |  |        |               |     |           |       |           |       |      |       |                         |     |                 |     |                              |       |     |       |                       |     |                         |     |                    |       |        |    |                        |        |  |  |  |

## GRI CONTENT INDEX

| SECTOR SPECIFIC DISCLOSURES  |   |  |                         |                           |                           |             |  |
|--|---|--|-------------------------|---------------------------|---------------------------|-------------|--|
| Material Aspects   | DMA and Indicators                          |  |                         | Omission                  | External Assurance        | Description |  |
| Organisation Profile   |   |  |                         |                           |                           |             |  |
| G4-EU3   | Grid / Non Grid No of Customers Ending 2015 |  |                         |                           |                           |             | Report the total number of accounts by type and by point of connection and customers who are also producers. |
|  | Grid  | Tariff                                 | No. of Active Customers | No. of Inactive Customers | Total Number of Customers |             |  |
|  | Grid  | C1                                     | 88,400                  | 13,294                    | 10,1694                   |             |  |
|  | Grid  | C2                                     | 19                      | 1                         | 20                        |             |  |
|  | Grid  | C3                                     | 35                      | 4                         | 39                        |             |  |
|  | Grid  | DOM                                    | 517,299                 | 44,300                    | 56,1599                   |             |  |
|  | Grid  | I1                                     | 870                     | 109                       | 979                       |             |  |
|  | Grid  | I2                                     | 43                      | 4                         | 47                        |             |  |
|  | Grid  | I3                                     | 81                      | 12                        | 93                        |             |  |
|  | Grid  | I4                                     | 12                      | 0                         | 12                        |             |  |
|  | Grid  | PL                                     | 8,963                   | 261                       | 9,224                     |             |  |
|  | Non Grid                                    | C1                                     | 3,613                   | 388                       | 4,001                     |             |  |
|  | Non Grid                                    | DOM                                    | 15,854                  | 1,321                     | 17,175                    |             |  |
|  | Non Grid                                    | I1                                     | 19                      | 1                         | 20                        |             |  |
|  | Non Grid                                    | PL                                     | 2,222                   | 6                         | 2,228                     |             |  |
|  | Grand Total                                 |  | 637,430                 | 59,701                    | 697,131                   |             |  |
|  | No.   | List of SCORE Customers                |                         |                           | PPA/PEA                   |             |  |
|  | 1.  | Press Metal Bintulu Sdn Bhd (RM)       |                         |                           | PPA                       |             |  |
|  | 2.  | Press Metal Bintulu Sdn Bhd (USD)      |                         |                           | PPA                       |             |  |
|  | 3.  | Press Metal Sarawak Sdn Bhd (RM)       |                         |                           | PPA                       |             |  |
|  | 4.  | Press Metal Sarawak Sdn Bhd (USD)      |                         |                           | PPA                       |             |  |
|  | 5.  | Tokuyama Malaysia Sdn Bhd (Phase 1)    |                         |                           | PPA                       |             |  |
|  | 6   | Tokuyama Malaysia Sdn Bhd (Phase 2)    |                         |                           | PPA                       |             |  |
|  | 7   | Press Metal Bintulu Sdn Bhd (Phase 2)  |                         |                           | PPA                       |             |  |
|  | 8.  | Comtec Solar International (M) Sdn Bhd |                         |                           | PPA                       |             |  |
|  | 9.  | Iwatani-SIG Industrial Gases Sdn Bhd   |                         |                           | PPA                       |             |  |
|  | 10.   | Pertama Ferroalloys Sdn Bhd            |                         |                           | PPA                       |             |  |
| 11.  | Sakura Ferroalloys Sdn Bhd                  |  |                         | PPA                       |                           |             |  |
| 12   | OM Materials (Sarawak) Sdn Bhd              |  |                         | PPA                       |                           |             |  |
| Press Metal Bintulu & Press Metal Sarawak have 2 contract accounts respectively (RM & USD) |   |  |                         |                           |                           |             |  |

## GRI CONTENT INDEX

| SECTOR SPECIFIC DISCLOSURES |   |                    |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
|-----------------------------|---|--------------------|--------------------|--|-----------------------|------|--------|------|------|--------|-----|------|--------|-------------|------------|--------------------|-----|--------------------|--------|---------------------|----------------|--------|------------------|-----------------|--------|-------------|------------|--------------------|--------------------|------------------|--------|--|--|
| Material Aspects            | DMA and Indicators  | Omission           | External Assurance | Description  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| G4-EU4                      | This information is disclosed in the “Organisation Profile” on p.9  |                    |                    | Report aggregated circuit lengths in km, by regulatory regime, voltage category, and overhead and/or underground             |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| G4- EU5                     | Not relevant  |                    |                    | Report on the emissions trading schemes or alternative requirements for managing CO <sub>2</sub> emissions                   |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Availability & Reliability  |   |                    |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| G4-DMA                      | Information on this is elaborated under “Catalysing Economic Sustainability” on p.34-38   |                    |                    | Management approach to ensure short and long-term electricity availability and reliability                                   |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| G4-EU10                     | This information is disclosed under “Catalysing Economic Sustainability” on p.34  |                    |                    | Planned Capacity Against Projected Electricity Demand over the long term, broken down by energy source and regulatory regime |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| System Efficiency           |   |                    |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| G4-EU11                     | <div><div><div><div>Gross Efficiency (%) for Coal Plant</div><table><tr><th>Major Plant</th><th>Plant Type</th><th>Average Efficiency</th></tr><tr><td>Sejingskat Power Corp</td><td>Coal</td><td>30.46%</td></tr><tr><td>PPLS</td><td>Coal</td><td>34.30%</td></tr><tr><td>MPG</td><td>Coal</td><td>32.94%</td></tr></table></div><div><div>Gross Efficiency (%) for Natural Gas Plant</div><table><tr><th>Major Plant</th><th>Plant Type</th><th>Average Efficiency</th></tr><tr><td>SPG</td><td>BTU-Combined Cycle</td><td>37.28%</td></tr><tr><td>Bintulu Power Plant</td><td>BTU-Open Cycle</td><td>19.65%</td></tr><tr><td>Miri Power Plant</td><td>Miri-Open Cycle</td><td>20.66%</td></tr></table></div><div><div>Gross Efficiency (%) for Diesel Plant</div><table><tr><th>Major Plant</th><th>Plant Type</th><th>Average Efficiency</th></tr><tr><td>Biawak Power Plant</td><td>Diesel - Standby</td><td>31.30%</td></tr></table></div></div></div> <div>Average generation of efficiency of thermal plants by energy source and by regulatory regime<br/><br/>*GRI G4 definition:<br/>Generation efficiency – the ratio of gross energy going into a plant against the net energy (electricity, and if CHP, heat) supplied</div> | Major Plant        | Plant Type         | Average Efficiency   | Sejingskat Power Corp | Coal | 30.46% | PPLS | Coal | 34.30% | MPG | Coal | 32.94% | Major Plant | Plant Type | Average Efficiency | SPG | BTU-Combined Cycle | 37.28% | Bintulu Power Plant | BTU-Open Cycle | 19.65% | Miri Power Plant | Miri-Open Cycle | 20.66% | Major Plant | Plant Type | Average Efficiency | Biawak Power Plant | Diesel - Standby | 31.30% |  |  |
| Major Plant                 | Plant Type  | Average Efficiency |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Sejingskat Power Corp       | Coal  | 30.46%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| PPLS                        | Coal  | 34.30%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| MPG                         | Coal  | 32.94%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Major Plant                 | Plant Type  | Average Efficiency |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| SPG                         | BTU-Combined Cycle  | 37.28%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Bintulu Power Plant         | BTU-Open Cycle  | 19.65%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Miri Power Plant            | Miri-Open Cycle   | 20.66%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Major Plant                 | Plant Type  | Average Efficiency |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |
| Biawak Power Plant          | Diesel - Standby  | 31.30%             |                    |  |                       |      |        |      |      |        |     |      |        |             |            |                    |     |                    |        |                     |                |        |                  |                 |        |             |            |                    |                    |                  |        |  |  |



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| SECTOR SPECIFIC DISCLOSURES              |  |            |                    |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
|--|--|------------|--------------------|--|------------|---------------|-----------------------------------|--------|--------|-------|----------------------------------|--------|--------|-------|----------------------------------|----------|--------|-------|--------------------------------------|---------|----------|-------|---------------------------------|---------|---------|-------|------------------------------|---------|----------|-------|--------------------------------|----------|--------|-------|--|--|---|
| Material Aspects                         | DMA and Indicators   | Omission   | External Assurance | Description  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| System Efficiency (Sector Specific)      |  |            |                    |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-DMA                                   | Information on this is available under “Transforming Social Outcomes” on p.56-58   |            |                    | Programmes, including those in partnership with government, to improve or maintain access to electricity and customer support services |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-EU12                                  | This information is available under “Catalysing Economic Sustainability” on p.38   |            |                    | Transmission and distribution losses as a percentage of total energy   |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Disaster/Emergency Planning and Response |  |            |                    |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-DMA                                   | p.64   |            |                    |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Access                                   |  |            |                    |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-EU26                                  | This information is available under “Transforming Social Outcomes” on p.56-57  |            |                    | Percentage of population unserved in licensed distribution or service areas  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-EU27                                  | This information is available under “Catalysing Economic Sustainability” on p.38   |            |                    | Number of residential disconnections for non-payments, broken down by duration of disconnection and by regulatory regime               |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-EU28                                  | This information is disclosed under “Catalysing Economic Sustainability” on p.37   |            |                    | Power outage frequency   |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-EU29                                  | This information is disclosed under “Catalysing Economic Sustainability” on p.37   |            | Yes                | Average power outage duration  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| G4-EU30                                  | <table><tr><th>POWER STATION</th><th>PO (Hours)</th><th>FO (Hours)</th><th>EAF (%) - GRI</th></tr><tr><td>PPLS Power Generation (Main grid)</td><td>971.46</td><td>432.87</td><td>90.85</td></tr><tr><td>Sejingkat Power Corp (Main grid)</td><td>825.61</td><td>549.24</td><td>89.31</td></tr><tr><td>Mukah Power Sdn. Bhd (Main grid)</td><td>1,497.08</td><td>380.44</td><td>79.83</td></tr><tr><td>Sarawak Power Generation (Main grid)</td><td>2,414.3</td><td>6,447.13</td><td>58.38</td></tr><tr><td>Bintulu Power Plant (Main grid)</td><td>3,978.5</td><td>1,156.2</td><td>88.04</td></tr><tr><td>Miri Power Plant (Main grid)</td><td>4,208.2</td><td>1,758.59</td><td>89.38</td></tr><tr><td>Biawak Power Plant (Main grid)</td><td>2,710.82</td><td>465.67</td><td>94.00</td></tr></table> |            | POWER STATION      | PO (Hours)   | FO (Hours) | EAF (%) - GRI | PPLS Power Generation (Main grid) | 971.46 | 432.87 | 90.85 | Sejingkat Power Corp (Main grid) | 825.61 | 549.24 | 89.31 | Mukah Power Sdn. Bhd (Main grid) | 1,497.08 | 380.44 | 79.83 | Sarawak Power Generation (Main grid) | 2,414.3 | 6,447.13 | 58.38 | Bintulu Power Plant (Main grid) | 3,978.5 | 1,156.2 | 88.04 | Miri Power Plant (Main grid) | 4,208.2 | 1,758.59 | 89.38 | Biawak Power Plant (Main grid) | 2,710.82 | 465.67 | 94.00 |  |  | Average plant availability factor by energy source and by regulatory regime |
| POWER STATION                            | PO (Hours)   | FO (Hours) | EAF (%) - GRI      |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| PPLS Power Generation (Main grid)        | 971.46   | 432.87     | 90.85              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Sejingkat Power Corp (Main grid)         | 825.61   | 549.24     | 89.31              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Mukah Power Sdn. Bhd (Main grid)         | 1,497.08   | 380.44     | 79.83              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Sarawak Power Generation (Main grid)     | 2,414.3  | 6,447.13   | 58.38              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Bintulu Power Plant (Main grid)          | 3,978.5  | 1,156.2    | 88.04              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Miri Power Plant (Main grid)             | 4,208.2  | 1,758.59   | 89.38              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |
| Biawak Power Plant (Main grid)           | 2,710.82   | 465.67     | 94.00              |  |            |               |                                   |        |        |       |                                  |        |        |       |                                  |          |        |       |                                      |         |          |       |                                 |         |         |       |                              |         |          |       |                                |          |        |       |  |  |   |

## GRI CONTENT INDEX

| SECTOR SPECIFIC DISCLOSURES |  |  |                    |             |   |                 |
|-----------------------------|--|--|--------------------|-------------|---|-----------------|
| Material Aspects            | DMA and Indicators                       | Omission                                     | External Assurance | Description |   |                 |
| Research & Development      |  |  |                    |             |   |                 |
| (Former EU8)                | R&D Projects 2015                        |  |                    |             | Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development |                 |
|                             | No.                                      | Name of Project                              |                    |             |   | Approved Budget |
|                             | 1.                                       | Purchase of Spare Parts for Water Level      |                    |             |   | 114,000.00      |
|                             | 2.                                       | Purchase of Accessories for UAS project      |                    |             |   | 115,000.00      |
|                             | 3.                                       | UAS Projects                                 |                    |             |   | 310,000.00      |
|                             | 4.                                       | GHG Monitoring of HEPs (CP)                  |                    |             |   | 2,040,000.00    |
|                             | 5.                                       | Transformer Oil Laboratory                   |                    |             |   | 5,457,200.00    |
|                             | 6.                                       | GFN RCC Pilot Project (CP)                   |                    |             |   | 1,693,600.00    |
|                             | 7.                                       | Nanga Jagau Solar Hybrid System              |                    |             |   | 2,940,100.00    |
|                             | 8.                                       | SoNick Battery for Kim Hin Sub.              |                    |             |   | 186,200.00      |
|                             | 9.                                       | Purchase of Equipment for Weather Monitoring |                    |             |   | 183,000.00      |
|                             | 10.                                      | Purchase of HOMER Pro Software (Hybrid O)    |                    |             |   | 14,000.00       |
|                             | 11.                                      | Covered Conductor Pilot Project              |                    |             |   | 600,000.00      |
|                             | 12.                                      | Gasification Plant at Paloh Power Station    |                    |             |   | 3,150,000.00    |
|                             | 13.                                      | Purchase of Survey Equipment for Site Survey |                    |             |   | 35,000.00       |
|                             | 14.                                      | Battery Performance Evaluation System        |                    |             |   | 55,000.00       |
| 15.                         | Installation of Solar System Safety Line | 220,000.00                                   |                    |             |   |                 |









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