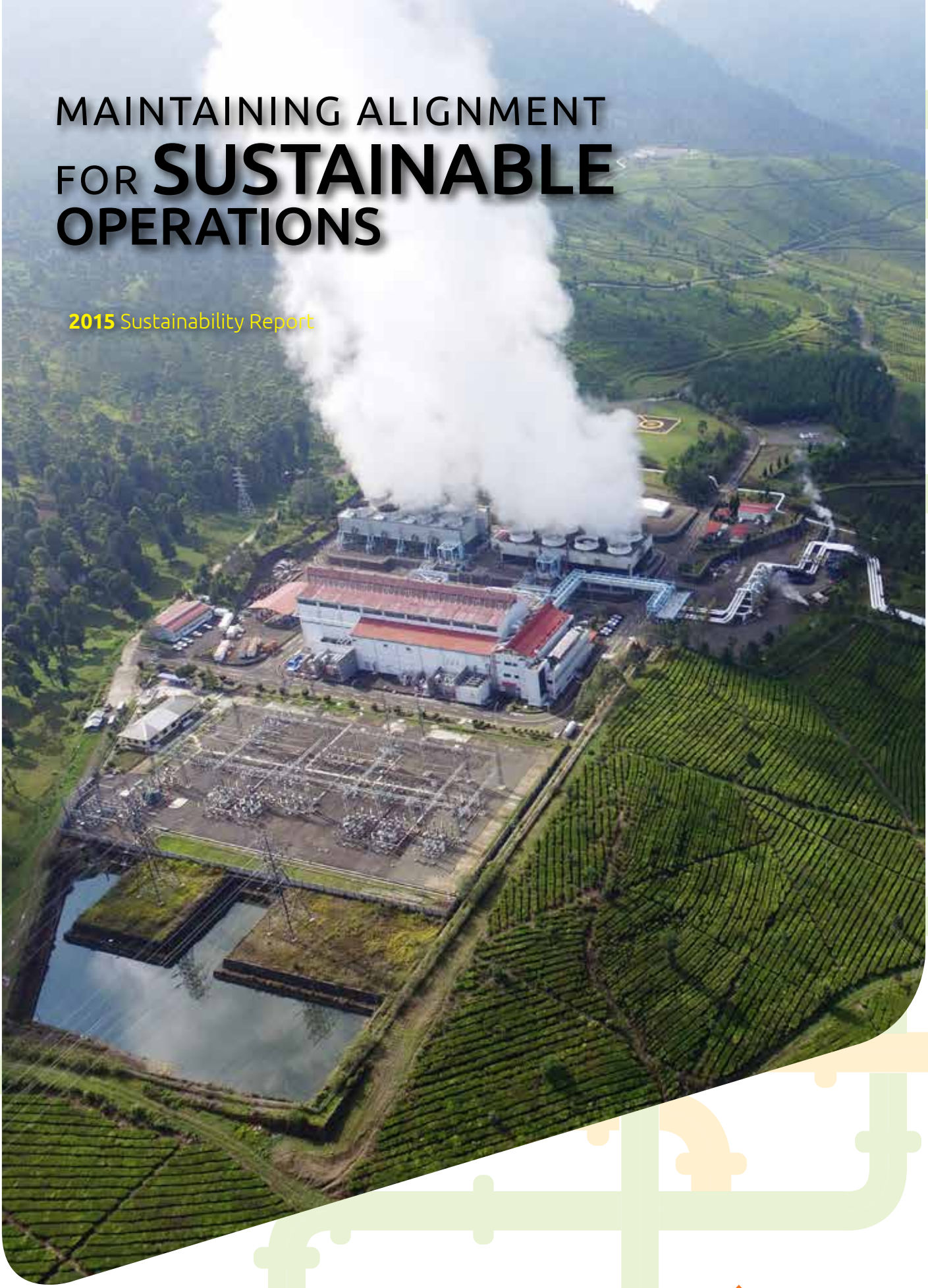
MAINTAINING ALIGNMENT FOR SUSTAINABLE OPERATIONS

2015 Sustainability Report



PERTAMINA
GEOTHERMAL ENERGY

starenergy

Star Energy Geothermal
(Wayang Windu) Limited

MAINTAINING ALIGNMENT FOR SUSTAINABLE OPERATIONS

We have chosen the theme of this report so that readers can immediately capture our determination and commitment to maintain harmony between our field operations and our programs to improve environmental quality, community life and implementation quality of our corporate governance best practices, especially in the implementation of the post-landslide rebuilding program.

We believe that the landslide, which resulted in the suspension of plant operations for several months, was the result of an imbalance between the environmental carrying capacity and satisfying the needs of the surrounding communities.

With the completion of our preservation efforts and the reinstatement and return to operations of the Wayang Windu geothermal power plant after the landslide, we have shown our strong commitment to ensuring the sustainable operation of the Wayang Windu Geothermal Fields, in harmony with the environment and the people in the vicinity.

SUSTAINABILITY PERFORMANCE SUMMARY

Field ENVIRONMENT

- Received the PROPER Gold award for the first time in Indonesia in 2007, with subsequent PROPER Gold awards in 2012 and 2014
- First Geothermal Power Plant in Indonesia to use an Integrated Control System with a zero venting concept so that no steam is released into the environment
- First Geothermal Power Plant in Indonesia to install real-time monitoring of exhaust gas emissions to measure the emission debit released into the atmosphere from the Cooling Tower
- Participated in reducing global carbon emissions by implementing the Clean Development Mechanism (CDM) program
- Implemented design engineering and optimized energy in the interests of energy conservation and efficiency
- Implemented a Well Intervention Program to increase geothermal steam production from existing productive wells
- Implemented the SIMOP program to improve steam use efficiencies and reduce polluting gas emissions
- Implemented a program to utilize rainwater and condensate (from operating air conditioners and the Cooling Tower) in the Geothermal Power Plant to help conserve water
- Implemented a program to reduce non-toxic and non-hazardous waste by composting organic waste
- Implemented a re-vegetation program in recharge areas to conserve resource sustainability and biodiversity
- Implemented an oil analysis program to reduce waste used oil generation

First Geothermal Power Plant in Indonesia **to install real-time monitoring of exhaust gas emissions** to measure the emission debit released into the atmosphere from the **Cooling Tower**


BANTUAN
CSR
BANTUAN
CSR

Field
COMMUNITY DEVELOPMENT

- Strengthened realization of the Synergetic SEGWWL CSR program
- Improved performance of the Usaha Nurkayana Savings Cooperative
- Helped provide education facilities, managed Rumah Pintar and provided student scholarships from elementary school to university level
- Constructed village infrastructure around our operational area
- Developed Alert Village areas
- Helped provide facilities and infrastructure to develop TBM Kertamanah, a place to eradicate illiteracy and provide self-reliance programs

Helped provide education facilities, managed Rumah Pintar and provided **student scholarships from elementary school to university level**

Field
LABOR

- Implemented Training Programs to improve employee abilities and skills
- Completed and signed the Collective Labor Agreement
- Raised the proportion of Local Labor
- Implemented all Human Resource Development Programs

Implemented Training Programs to improve employee abilities and skills

Field
WORKPLACE SAFETY

- Improved the workplace safety culture and increased total working hours without time lost
- Conducted a workplace safety campaign and seminars
- Realized all Health Counseling and Prevention programs for employees, their families and the local community

Improved the workplace safety culture and increased total working hours **without time lost**

Management SYSTEMS

- Disseminated and Implemented the Code of Conduct.
- First company in Indonesia to implement an Integrated Control System in Geothermal Power Plant operations.
- First Geothermal Power Plan to implement an Integrated Management System encompassing ISO 14001:2015, ISO 9001:2008, OHSAS 18001:2007, ISO 50001:2011, ISO 55001:2014, ISO/IEC 17025:2008 and SMK3 (OHS management system) through an Integrated Management System named WIMS (Wayang Windu Integrated Management System).

Implement an Integrated Management System encompassing **ISO 14001:2015, ISO 9001:2008, OHSAS 18001:2007, ISO 50001:2011, ISO 55001:2014, ISO/IEC 17025:2008** and **SMK3**

AWARDS AND CERTIFICATION

The company won various awards for environmental management and community empowerment both at home and overseas, including

a) PROPER Gold award in 2007, 2012 and 2014 from the Environment and Forestry Ministry

b) PROPER Green award from 2008 to 2011, and in 2013 and 2015 from the Environment and Forestry Ministry

c) Environmental Management Certification ISO 14001:2015 in 2016 from Lloyds Register Quality Assurance (LRQA)

d) ADITAMA award for environmental management and OHS in 2011 and 2013 from the Directorate General of New and Renewable Energies and Energy Conservation (EBTKE)-ESDM

e) Natural Resources Category award in the 2014 Sustainability Reporting Awards

f) Platinum GKPM (Gelar Karya Pemberdayaan Masyarakat) Award for Community Empowerment from the Coordinating Ministry for Social Affairs, 2014.

g) CSR Award from ASEAN Learning Network in the Community Micro-Economy Improvement and Empowerment category, 2013

h) West Java CSR Award in the New and Health Education, Economic Development, Infrastructure category from the West Java Governor, 2013

i) Finalist in Global CSR 4th Global Awards, 2012 in the Philippines

j) Application of Integrated Management Systems and Environmental, Quality and OHS Management System Certification ISO 14001:2004, OHSAS 18001:2007 and ISO 9001:2008 in 2006, 2007 and 2014 from Lloyds Register Quality Assurance (LRQA), ISO 50001:2011, ISO 55001:2014 and ISO/IEC 17025:2008

k) Raksa Prasadha Award for Environmentally Friendly Industry from the Environment Agency, 2012

l) Energy Award from the Energy and Mineral Resources Ministry, 2012

m) "Best" award in Environmental Management and Organization from the Bandung Regent, 2012

n) Zero Accidents Award & P2-HIV & AIDS Program in the Workplace Award from the Manpower Ministry, September 2015

PROPER Gold
Environment Ministry

SECOND RUNNER UP
Indonesian Sustainability Reporting Award
Natural Resources category

PLATINUM
GKPM *(Gelar Karya Pemberdayaan Masyarakat)*
Award for community empowerment
Coordinating Ministry for Social Affairs

SUSTAINABILITY MILESTONES

20 JANUARY
Disseminated Star Energy Business Ethics & Whistleblower Program

FEBRUARY
Visit to BKPM (Investment Coordinating Board) head office, Bapeda (Development Planning Board), North Sumatera BKPM and National Geography field visit to the Wayang Windu site

MARCH
Implementation of mandatory training in the integrated management system for ISO 140001, ISO 9001 and OHSAS 18001

APRIL
April 2015, commemorated Earth Day with a series of events, including Smart Environment, Photography Competition, Panel Discussion on the Environment, closing with a SHE (Safety, Health, Environment) Talk and Semut Operation.

5 MAY
Star Energy Geothermal (Wayang Windu) Ltd Suspended Power Plant Operations
Due to a landslide that occurred at approximately 14.30 in Cibitung hamlet (Mount Bedil), Margamukti village, Pangalengan district, Bandung regency, Star Energy Geothermal (Wayang Windu) Ltd suspended operations of two operational power generating units under its management. This disaster caused damage to and severed the Company's production pipeline, causing the Star Energy power plant to suspend operations.

8 MAY
Star Energy Geothermal (Wayang Windu) Ltd Supports Pangalengan Landslide Evacuation and Victim Recovery.
Post-disaster in Cibitung hamlet (Mount Bedil), Margamukti village, Pangalengan district, Bandung regency, Star Energy Geothermal (Wayang Windu) Ltd actively coordinated with the National Disaster Mitigation Agency and a number of relevant agencies to evacuate victims of the landslide.

JUNE-AUGUST

Star Energy Geothermal (Wayang Windu) Ltd started repairs and reconditioning of all facilities affected by the landslide.

22 SEPTEMBER

Energy and Natural Resources Minister Sudirman Said and EBTKE Director General Rida Mulyana surveyed Wayang Windu Geothermal Power Plant.

The two were welcomed by Star Energy and Pertamina Geothermal Energy management, as well as the owner of Barito Pacific Group, Prajogo Pangestu. The Minister's visit was to survey operation of power generation units that had been temporarily suspended due to the landslide in early May 2015.

OCTOBER

The Make Up Well program commenced with drilling between the operational steam field and power plant at existing wells to improve steam capacity for generating units 1 and 2.

3 DECEMBER

Star Energy Geothermal (Wayang Windu) participated once more in the Environmental Performance Rating Program – PROPER – and was award PROPER Green rank.

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MESSAGE FROM THE PRESIDENT & CEO [G4-1]

Rudy Suparman
President & CEO

"We believe that business continuity depends on the quality of mutual relations between the company and all its stakeholders, and on the ability to maintain a balance between economic performance and social and environmental performance. In 2015, we were hit by a natural disaster, a landslide caused our operations to be temporarily suspended; however, with a spirit of togetherness, we soon rose to restore the environmental carrying capacity balance by involving the entire community and returned to normal operations. We believe that aligning the company's economic abilities with improved welfare and community involvement in efforts to maintain the environment will support the achievement of sustainability goals"

Respected Stakeholders,

Greetings to you all.

In opening this message, let us render thanks to Almighty God, for His blessings resulted in the company overcoming serious challenges. As we know, in early May 2015, a natural disaster, a landslide, severed the Company's steam distribution pipeline and forced us to suspend electricity generation operations. The landslide occurred in a hilly region that is outside the Company's management. Refering to Proceeding of Slope, 2015, "Mechanism and Countermeasure in Pengalengan Landslide, West Java" by Toshiaki Hosoda, Aris Handoko and Paulus P. Rahardjo, mentioned that the triggering factors of landslide would be a rainfall in rainy season and groundwater in the area. Thus, when prolonged, high-intensity rain occurred, a hillside collapsed, sending a landslide over several homes and severing our steam pipeline.

Through good cooperation, by the end of 2015, we were able to operate normally again to meet all our stakeholders' expectations, while supporting the fulfillment of supplying clean electricity for Indonesia's economic development.

EMERGENCY RESPONSE, REINSTATEMENT AND PRESERVATION TO RESTORE OPERATIONAL BALANCE AND ENVIRONMENTAL SUPPORT

During the Disaster Emergency Response period, we immediately implemented our Rapid Response to deal with those affected, searching for victims and helping people to get their lives back in order. We then moved into operational recovery, as part of our risk mitigation implementation within the Business Continuity Plan (BCP) framework. We worked closely with competent parties to implement post-disaster trauma elimination programs so that life could return to normal.

We then implemented a Reinstatement and Preservation program to repair all the infrastructure damage at our facilities, while restoring the environment's carrying capacity so that a similar disaster does not happen again. The reinstatement program consisted of several phases, including: moving and repairing the pipeline, pipeline certification, slope stability mitigation construction, and reforestation to restore the land by planting perennials. We are also building a drainage system so that water is better able to flow into local bodies of water. Another important step that we took was preservation, namely dismantling and conducting maintenance on turbine generators to prevent corrosion and ensure turbine performance.

Efforts to repair pipes, turbine installation and power generation trial operations were completed on schedule in four (4) months. At the end of September 2015, operational activities had returned to normal.

Another important factor is educating the surrounding communities, including intensifying community competence development programs to preserve the protected forest, supporting reforestation of degraded land to enhance the environmental carrying capacity and reducing the risk of similar incidents.

WHAT SUSTAINABILITY MEANS TO US

Operating conditions in 2015 reminded everyone at all levels in the Company of the importance of understanding and appreciating the achievement of business development objectives that uphold the principle of sustainability. This principle creates a balance between economic, social and environmental performances.

As we all know, 2015 was the last year for the implementation of the global-scale sustainable development goals known as the Millennium Development Goals (MDGs), which were enacted in 2000. In follow up, all United Nations member countries have agreed on the Sustainable Development Goals (SDGs) development concept, which will be implemented from 2016 to 2030. The sustainable development concept in these SDGs allows for the engagement of the private sector to participate alongside other global citizens to support the achievement of the 17 development objectives for global sustainability. The Indonesian government has decided to fully participate in achieving this goal.

Reflecting on the conditions we have encountered, such as the landslide disaster in the vicinity of our business, we believe that the entire management of Star Energy Geothermal (Wayang Windu) Ltd has started to prepare for full participation in achieving these global sustainable development objectives. We believe also that the entire Company's management is being increasingly active in establishing partnerships with other stakeholders to support efforts to achieve these goals.

This is important, because business continuity is not dependent on the performance of a mere moment. Business sustainability also depends on the quality of relations between the company and all its stakeholders and its commitment to balancing economic performance with social and environmental performance. This is part of the manifestation to achieve the SDG sustainable development goals.

COMMITTED TO IMPROVING THE QUALITY OF THE ENVIRONMENT

Regardless of the operating conditions we faced in 2015, the company continued to show strong commitment to preserving and improving the surrounding environment. Believing in the benefits of optimizing geothermal energy potential as a source of environmentally friendly power, we realized a number of operational innovation programs to enhance the performance of our geothermal power plant (PLTP).

The realization of two major programs demonstrated our strong commitment and determination to maintain and improve the quality of the local environment. We improved the quality of environmentally friendly operations and improved environmental conservation.

We made improvements to the quality of environmentally friendly operations by implementing innovative programs to improve energy efficiency, reduce greenhouse gas (GHG) emissions, implemented the 3R principle (reduce, reuse, recycle) for waste management, and conserved water. We also implemented a number of operational innovation programs during the reporting year, including: Well Intervention Program, improving the implementation quality of the Integrated Control System and SIMOP (Simultaneous Operation) Program, as well as installing Non-Combustible Gas (NCG) Flow Meters and pioneered the implementation of an integrated operational system encompassing ISO 14001: 2004, ISO 9001: 2008 and OHSAS 18001: 2007 through the WIMS (Wayang Windu Integrated Management System) manual.

These innovative operational programs resulted in us successfully increasing energy efficiency, as demonstrated by a decline in energy intensity, lower CO2 emissions and reduced toxic and hazardous (B3) waste and non-B3 waste from operations. We continue striving to optimize potential CO2 emissions reduction, amounting to 794,832 MtCO2e annually, by intensifying the Clean Development Mechanism (CDM) program.

For our programs to improve environmental conservation, we continued to intensify replantation and rehabilitation to increase the biodiversity index in the area under our management. We also continued to monitor the existence of endemic flora and fauna, as well as preparing a breeding facility to ensure improved environmental quality.

As a result of our entire environmental program, the Company received a PROPER GREEN award from the Environment Ministry.

SOCIAL INVESTMENT TO IMPROVE LOCAL COMMUNITY WELFARE

We work constantly to improve the quality of life for communities in our vicinity through the implementation of corporate social responsibility programs, which comprise two main programs: the Community Development Program and Public Relations. Both these programs prioritize respect for human rights and recognition of the rights of local communities as a strategic policy that we implement to maintain harmonious relations with the local community.

We run a variety of activities, including: educational facility development and scholarships, basic infrastructure improvements, construction of village / sub-district government facilities, Rumah Pintar facilities and construction of places of worship and public health improvement. The aim is to improve the Human Development Index (HDI) in the area under our management as a benchmark to evaluate the success of the social responsibility programs that we run, according to IPM BPS Kab. Bandung, the HDI of Kec. Pangalengan was increased from 72.6 up to 76.41 during 2013-2015.

Beyond these routine programs, after the landslide, we implemented an emergency response program for 14 days. During that period of time we raised funds and distributed humanitarian aid such as staple foods, baby food, school uniforms, school supplies and means of worship, in addition to material help to provide temporary homes. We actively provided medical aid to victims, helped with evacuation and provided heavy equipment and other equipment needed to make emergency repairs. We also organized a post-disaster recovery program to restore the psychological condition of the victims. In total, 2,653 people from five hamlets in two affected villages benefited from our support.

COMMITTED TO SUPPORTING NATIONAL ECONOMIC DEVELOPMENT

Believing in the importance of electricity to support the national economy, we immediately made improvements to the entire operational facility in the field so that power generation activities would return to normal. As explained above, the entire power generation facility returned to normal operations in September 2015.

Of course, we still demonstrated a real contribution to improving economic growth during 2015, through tax compliance, paying various fees and charges, the involvement of local partners in the goods procurement program and maintaining consistency in local employment.

Despite suspending operations, we increased the number of permanent employees. We paid strong attention to employees who were approaching retirement age with entrepreneurship training. In addition, since employees are a formal part of the Company, we continued our financial support through pension contribution payments.

> "We demonstrate a strong commitment and determination to maintain and improve the quality of the surrounding environment through the realization of two key programs, namely improving the quality of environmentally friendly operational activities and the implementation of environmental sustainability improvement programs".

In line with efforts to achieve the sustainable development objectives in the Sustainable Development Goals, as ratified by the Indonesian government, we continued our Community Empowerment and Economic Improvement Program. We established and supported co-operatives with training programs to reap benefit from local resources, creating products with economic value. Post-landslide, we intensified economic competency development programs so that people would no longer use the protected forest as land to create basic or additional income.

LOOKING AHEAD

We are determined to improve the utilization of renewable energy sources in the coming years and complete our exploration program for new wells in the Wayang Windu area. In addition, we will continue exploration preparation in the Jailolo region. This is consistent with the renewable energy development plan of PT PLN, manager and distributor of electric power in Indonesia.

As stated in the PT PLN Long-Term Plan, the national long-term target is a substantial increase in the energy mix of the proportion of electricity generated by geothermal power plants, up from 4.7% in 2015.

Facing 2016 with forecasts of continued, conservative national economic growth, we are determined to continue to improve our sustainability performance and strive to meet stakeholder expectations.

CLOSING

Finally, I would like to thank all our stakeholders, who have supported the Company to achieve all its sustainability performance indicators in 2015.

We express our great appreciation to all our employees for their dedication and hard work in supporting efforts to improve all the company's infrastructure and return to normal operating conditions on schedule. Next, let us work together to achieve our sustainable development goals. We invite all of the Company's personnel to work even harder and take advantage of business growth opportunities in 2016 and subsequent years, as well as prioritizing stakeholder expectations as the basis for achieving sustainable business growth.

Jakarta, 20 October 2016

Rudy Suparman
President & CEO

ABOUT THIS REPORT

Welcome to the Star Energy Geothermal Wayang Windu Ltd ("Wayang Windu") 2015 Sustainability Report ("Report"), the seventh consecutive Sustainability Report since the first, was published in 2009.

Welcome to the Star Energy Geothermal Wayang Windu Ltd ("Wayang Windu") 2015 Sustainability Report ("Report"). This is the seventh consecutive Sustainability Report since the first, published in 2009. The purpose of this report is to support stakeholders in their decision making. Through this report, we hope they will be able to assess Wayang Windu's commitment to achieving sustainable development by improving the quality of life and the environment in beneficial ways for the Company, the local community and the public.

Reporting Period and Cycle

Our Sustainability Report is compiled annually and covers the period 1 January 2013 to 31 December 2015; it contains sustainability information and data comprising 3 (three) aspects: economy, environment and social. The social aspect is then divided into 4 sections, namely: employment, human rights, society and product responsibility. The previous year's report was issued in September 2015. [G4-28, G4-29, G4-30]

GRI G4 Core and Assurance [G4-32, G4-33]

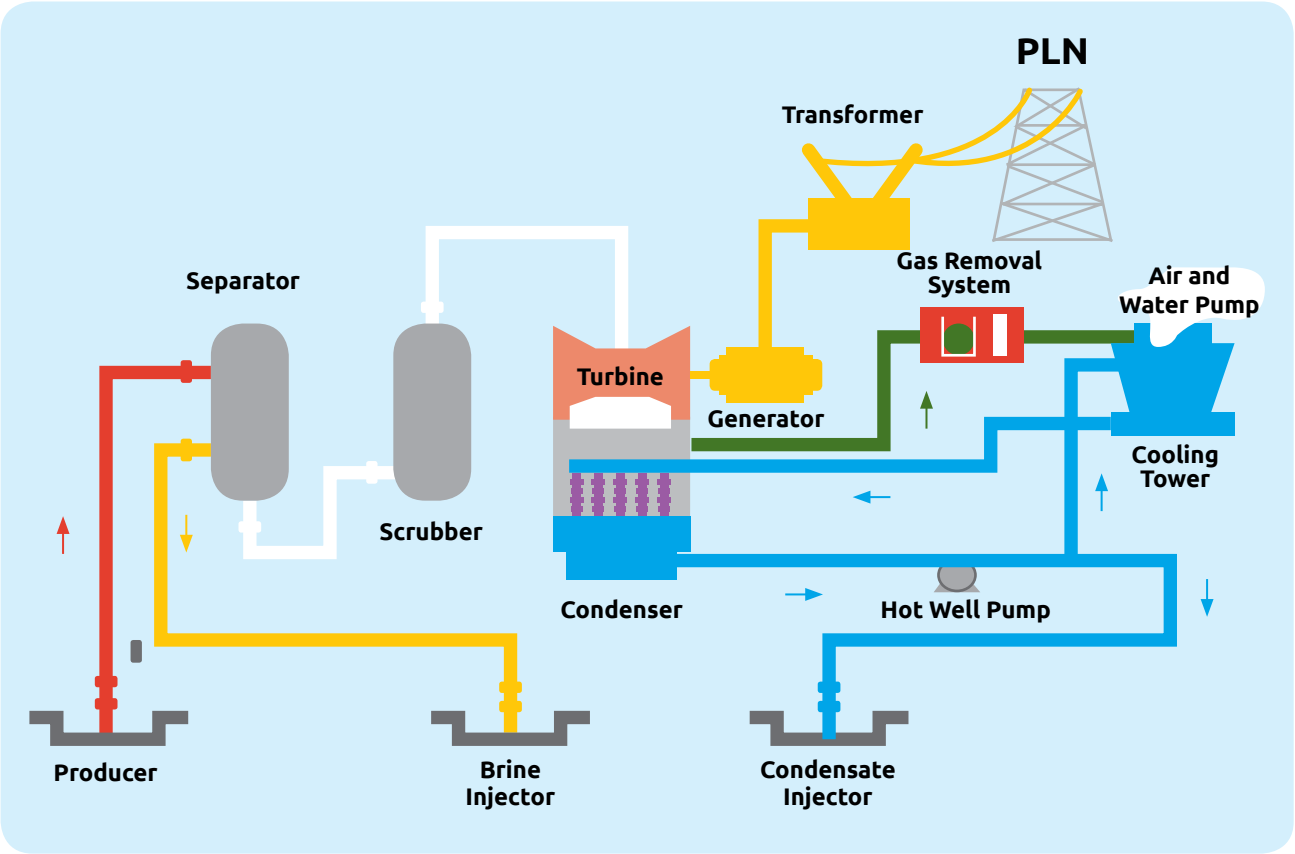
This report has been prepared based on fourth generation Sustainability Reporting Guidelines issued by Global Reporting Initiative (GRI-G4). These guidelines offer two options for reporting criteria, Core and Comprehensive. This report is compliant with GRI G4 Core. To facilitate identification of the G4 Core indicators applied in this report, we have marked indicators in red on each relevant page. The G4 Core index used in this report is presented on page 30.

There is no restatement of data from the previous year and no significant change affecting scope or boundaries in the reporting year. Non-financial data has been validated by an internal team, while financial data is the result of an audit conducted by a public accounting company. [G4-13, G4-22, G4-23]

Due to time limitations, this 2015 report has not undergone an assurance process with an independent assuror to verify data conformity with the GRI-G4 Core index. We plan to implement this assurance process in the coming years. However, we implemented an accordance check to ensure compliance with the GRI-G4 index. The resorts of this accordance check are noted on page 117.

Production Process

In the water and water vapor phase, water vapor is generated from production wells. This steam is channeled to a separator to be separated and obtain pure steam as the turbines can only be moved by dry (saturated) steam. The separated water produced in the Separator is brine, which is returned into the injection wells using gravity and injection pipes, or channeled to temporary storage ponds if there hould be a problem with the injection wells.



After driving the turbine generator, the steam condenses in the direct contact condenser column and the resulting condensation is then pumped to the cooling tower. This condensate generated from the cooling process is returned into the injection wells through injection pipes, by gravity, forming a closed cycle.

Supply Chain and Subsidiaries [G4-12, G4-17]

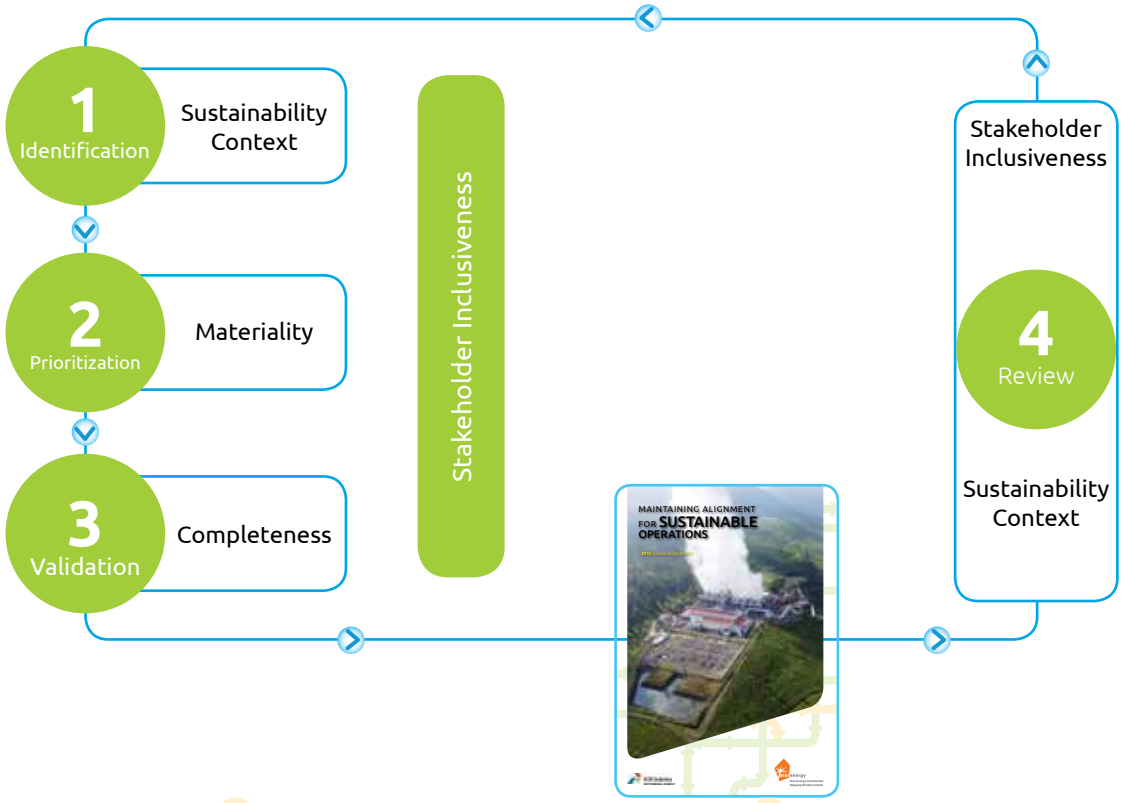
Wayang Windu does not have any subsidiaries. As such, this report only covers Star Energy Geothermal (Wayang Windu) Ltd. Meanwhile, the boundary outside the company encompasses the company's primary suppliers who work for the company and can be controlled by the company.

The Wayang Windu steam fields and geothermal power plant operations have an environmental and social impact, therefore the company implements a fairly rigorous selection process for its suppliers so that those selected uphold the environmental and social policies implemented by the company. In this case, we run an evaluation program on new and existing suppliers to determine whether they are compliant with employment laws and the relevant legislation. Some of our employment criteria that we refer to in the evaluation process include: minimum employment age, working hours and overtime, holiday entitlement, minimum wage, and such like. 100% of new suppliers in the reporting period have undergone this selection process. [G4-LA14]

Report Content Determination Process [G4-18]

We have determined the content of this Report in compliance with GRI G4 standards and implemented 4 (four) stages. First, we identified all material aspects and boundaries (Identification). Second, we prioritized all material aspects or issues that were identified in the previous stage (Priority). Third, we validated all the material aspects (Validation). Fourth, we reviewed the Reports that had been previously published to improve the quality of future reports (Review). We implemented this process in an effort to comply with the 4 (four) principles required in GRI-G4, namely stakeholder inclusiveness, materiality, sustainability context and completeness. See the following Report Content Determination Process Flow Chart.

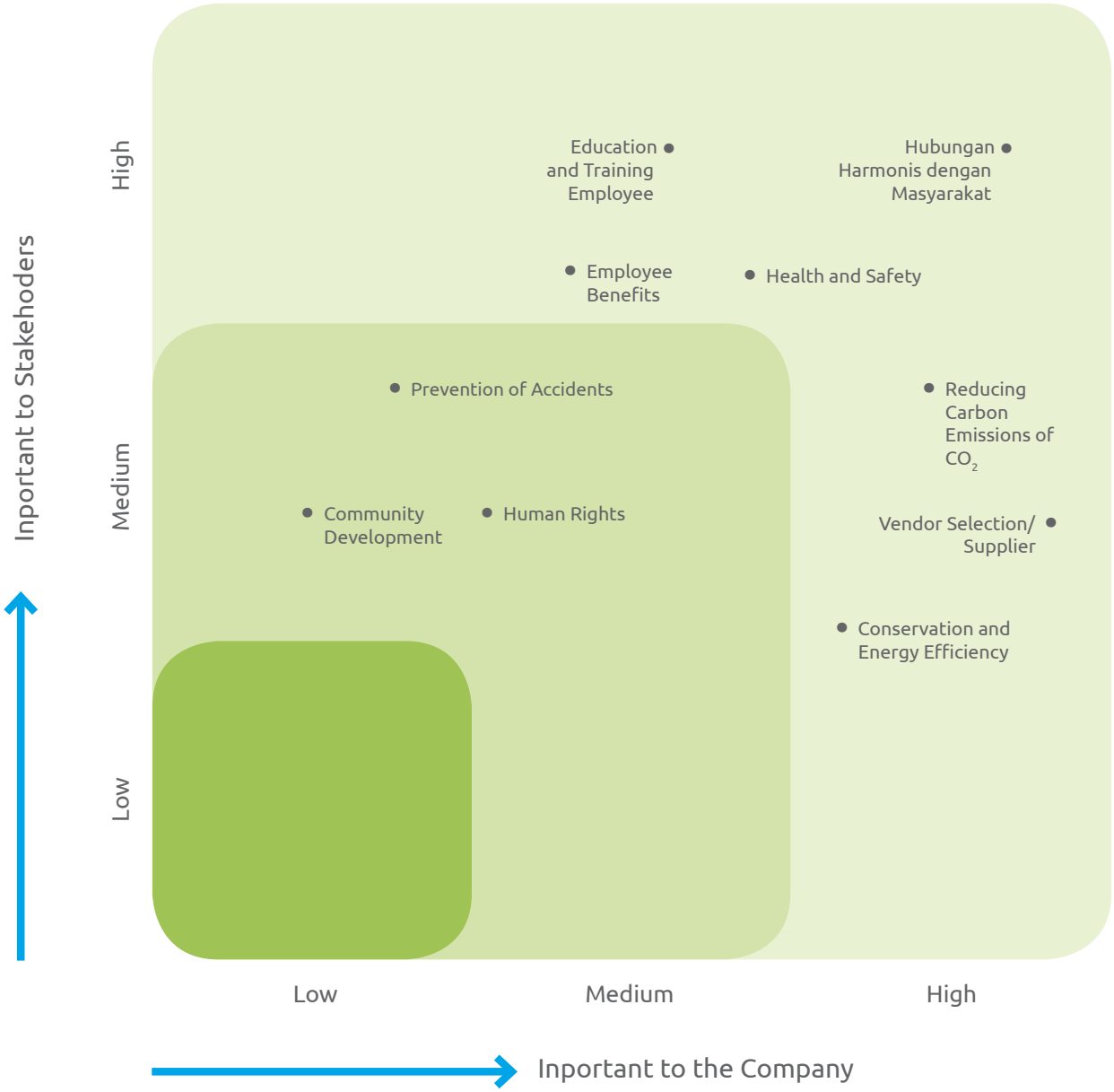
Report Content Determination Process Flow Chart



Determining Materiality

As realization of the principle of stakeholder inclusiveness, we requested input from our stakeholders by sending out a questionnaires to determine the level of material issues to be contained in the report. The stakeholders who participated in filling in and returning these questionnaires encompassed labor unions, shareholders, local communities, NGOs, suppliers, industry associations and the government.

We held focus group discussions, which were attended by various relevant departments, to prepare this report, as well as issuing similar questionnaires to gain a company perspective. Through this forum and from the responses received from our stakeholders, we were able to obtain an illustration of the material level of issues to be reported, as shown in the materiality level graph below.



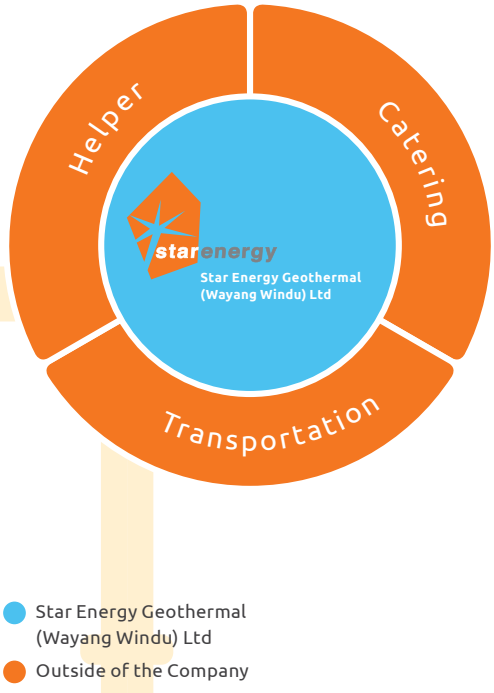
We primarily applied the Principle of Materiality to this report to select the content or material aspects, as put forward in the discussion forums with our stakeholders.

Material Aspects and Boundary [G4-19, G4-20, G4-21]

The material aspects included in this report were identified by considering the impact of the company's operations on the environment and communities, as well as the implementation of the principles of accountability and transparency. These aspects went through the process previously explained. At the identification stage, we held focus group discussions to consider the materiality level in the report. Following is the material aspects and boundary table.

Material Aspects and Boundary Table

Material Aspect	Boundary	
	Within Wayang Windu	Outside Wayang Windu
Category - Economy		
1. Economic performance		
2. Market Presence		
3. Indirect economic impact		
Category - Environment		
1. Energy		
2. Water		
3. Biodiversity		
4. Emissions		
5. Liquid Waste and Disposal		
6. Products and Services		
7. Compliance with Environmental regulations		
8. Overall		
9. Environmental Assessment of Suppliers		
Category - Social		
1. Employment		
2 Occupational Health and Safety		
3 Education and Training		
4 Diversity and Equal Opportunity		
5 Supplier Assessment for Labor		
Human Rights		
1 Freedom of Association and CLA		
2 Assessment of Supplier Human Rights		
Community		
1 Local Community		
2 Anti-Corruption Practices		
3 Compliance		
Product Responsibility		
1 Customer Health and Safety		
2 Product and Services Labeling		



Star Energy Geothermal (Wayang Windu) Ltd

Outside of the Company

Significant Impact Indicators from the Materiality Test

Based on the determination of material aspects, we determined the various GRI indicators as a guideline to compile material for the report, as follows.

Category of Identified Material Aspects	Specific GRI G4 Material Aspect	Indicator According to Material Aspect
Economic Performance	Economic Performance	EC2, EC3
	Market Presence	G4-EC5
	Indirect Economic Impact	G4-EC7, EC8
Environmental Performance	Material	G4-EN1, EN2
	Energy	G4-EN3, EN5, EN6
	Water	G4-EN8, EN10
	Biodiversity	G4-EN13, EN14
	Emissions	G4-EN15, EN16, EN17, EN18, EN19, EN20
	Waste	G4-EN23
	Product & Service Impact on the Environment	G4-EN27
	Compliance/ Environmental Fines	G4-EN29
	Cost of Environmental Management	G4-EN31
	Supplier selection based on environmental criteria	G4-EN32
Social Performance - Employment	Labor	G4-LA1, G4-LA2
	Occupational Health and Safety	G4-LA5, LA6, LA8
	Education and Training	G4-LA11
	Equal opportunities in diversity	G4-LA12
	Supplier selection based on labor practices	G4-LA14
Human Rights	Non-Discrimination	G4-HR3
	Freedom of Association	G4-HR4
	Supplier selection based on human rights criteria	G4-HR10
Community	Local communities	G4-SO1
	Anti corruption	G4-SO3
	Compliance / Fines and sanctions for violating legislation and regulations	G4-SO8
Product Responsibility	Customer health and safety	G4-PR2
	Product and Services Labeling	G4-PR4

Validation and Review

We conducted a validation and review to ensure that the report content was balanced and that in addition to containing information on positive performance it also covered negative performance. In addition, the report content was determined by considering the input, advice and considerations of the stakeholders, who will determine report content in the coming years.

Contact Person [G4-31]

Should you need any further information or have any questions about this report, please contact:

Coordinator Human Resources Business Partner

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OUR PROFILE

Company Name	:	Star Energy Geothermal (Wayang Windu) Ltd [G4-3]
Product & Services	:	Electrical Energy Generated from Geothermal Resources [G4-4]
Market	:	PT PLN (Persero) for the Java-Bali-Madura network [G4-8]
Head Office Address	:	Wisma Barito Pacific, Star Energy Tower, Lantai 3, 8-11 [G4-5] Jalan Let. Jen. S. Parman Kav. 62-63 Jakarta Barat 11410, Indonesia Tel : +62 21 532-5828 Fax : +62 21 532-5307 928 www.starenergy.co.id
Operational Area	:	Margamukti village, Pangalengan, West Java [G4-6]
Share Ownership	:	Star Energy Geothermal Pte Ltd (previously Star Energy Holdings Pte Ltd 100% [G4-7]
Legal Status	:	National Capital Investment, Virgin Islands [G4-7]
Association Membership	:	API (Indonesian Geothermal Association) [G4-16] MKI (Indonesian Electricity Community) METI (Indonesian Renewable Energies Community)

The company's position and status in the above associations is as a member, not as management. The company pays membership dues in accordance with association rules and regulations. The company supports organization programs by providing sponsorship.

VISION, MISSION AND CORPORATE VALUES

Vision

To be a respected energy producer with the fastest growth in Indonesia driven by value creation that fulfils the expectations of our investors, employees, the state and the local community in a balanced manner.

Mission

1. To be an international company with an Asian and Indonesian heart.
2. To achieve a range of successes alongside our stakeholders
3. To uphold high standards of occupational health and safety
4. To harm no one and to care for the environment

CORPORATE VALUES [G4-56]

We have formulated and strive to imbue strong corporate values to be adhered to in carrying out business and in sustainable relationships with our stakeholders. The points of our corporate values are abbreviated into the phrase BRIGHT STAR, as detailed below:

Balance Value for Stakeholders
- Strive for a balanced outcome for all stakeholders when we think, act dan make decisions

Respect People
- Value and respect each other
- Value for differences
- Find value in all ideas

Innovative and Entrepreneurial
- Be creative
- Look for opportunities
- Make the best decision
- Have a sense of business
- Create value
- Challenge the status quo
- Willing to take risk
- Think critically

Go The Extra Mile
- Strive for excellence
- Work smarter
- Beat your deadline
- Be proactive
- Seek out the best process

Honesty and Integrity
- Act professionally & ethically
- Be honest and trustworthy
- Be committed
- Walk the talk
- Adhere to high bussiness ethical standards

Teach Yourself Daily
- Create learning opportunities
- Be an active learner
- Seek feedback
- Be Proactive

Safety Health & Environment
- Comply with or exceed safety, health & environmental policy, laws and regualtions
- Maintain a high level of SHE working competence and awareness.

Team Work
- Value contribution of others
- Value the differences
- Think and act as a team
- Shares information
- Communicate often

Awareness of Costs
- Work effectively and efficiency
- Sense of urgency
- Sense of ownership
- Make continuous improvements

Relationship Are Important
- Work in harmony
- Seek balance between results and relationships
- Build win-win partnership

Disseminating and Achieving the Company's Vision and Mission

To ensure the company's vision and mission are achieved, the company disseminates its vision and mission to all employees periodically using various approaches, such as new employee orientation, which is part of the new employee acceptance process, and employee performance assessment. In addition, the company's vision and mission are communicated during the employee promotion and transfer processes. There is also periodic in-house training that is considered an effective opportunity to communicate our vision, mission and corporate values.

Strategic Plan

We have put in place a number of strategic initiatives outside operational activities with the aim of maintaining a positive image and demonstrating the company's care for matters occurring in the vicinity of its operational area. The realization of these plans is part of our efforts to enact the company's vision and mission. Some of the strategic initiatives that we have implemented include: increasing operational efficiency, participating in efforts to reduce Greenhouse Gases (GHG), developing workforce competencies, environmental management, exploration and development of new generating plants and increasing existing generating plants, as well as community development.

About Star Enrgy Geothermal (Wayang Windu) Ltd

Star Energy Geothermal (Wayang Windu) Ltd, further referred to by the abbreviation SEGWWL, is a Private National Company that was established in 1994. The Company explores for and exploits geothermal energy to power geothermal power plants (PLTP). The Company works under at Joint Operation Contract with PT Pertamina Geothermal Energy in the area under management, around Margamukti village, Pangalengan district, Bandung regency, West Java province.

The Company was established based on the laws of the British Virgin Islands and registered as a permanent business in Indonesia. The Company's product is 227 MW electricity generated by the Wayang Windu geothermal power plant. This electricity is sold to PT PLN (Persero) to supply a percentage of its requirements for the Java-Bali-Madura grid. This total capacity represents approximately 40% of the geothermal-generated electricity market in Indonesia as of the end of 2013, which totaled 568 MW. [G4-6, G4-8]

We started producing electricity in 2000 with the operation of our first 110 MW capacity generating unit. Electricity generation production capacity then rose with the operation of our second generating unit, which has a capacity of 117 MW. This second unit is supported by, as of 2014, 50 steam production wells. We are now working to increase the amount of electricity generated from Wayang Windu's geothermal field, during which process we are striving to obtain steam to develop Unit 3, with a capacity of 60 MW. We are also in the process of developing geothermal potential in Jailolo district, West Halmahera regency, North Maluku, which will be managed by PT Star Energy Geothermal Halmahera, and is expected to have an electricity capacity of 2x5 MW.

SEGWWL HISTORY

1985
Geological and Geophysical Survey

1991
First Well Spud, Pertamina WW-A1 Drilling, identified a commercial geothermal well

1994
Establishment of Star Energy Geothermal (Wayang Windu) Ltd

Dec 1994
JOC and ESC Signing

1996
Proven energy reserves of 220 MW

1997
Proven energy reserves of 440 MW

Jun 1997
EPC contract signed with Sumitomo Corporation

Aug 1999
Unit 1 construction completed

May 2000
Unit 1 commissioned

Jun 2000
Commercial operation of Unit 1

Jan 2001

Operational takeover by Unocal Management

Nov 2004

Star Energy acquires 100 % shares

2006

ESC and JOC amendment completed

2007

EPC contract with Sumitomo Corp signed for development of Unit 2

Feb 2008

Company name change from MNL to Star Energy Geothermal (Wayang Windu) Ltd

Dec 2008

Commissioning of Unit 2

Mar 2009

Commercial operation of Unit 2

Dec 2012

Well Intervention Program completed. Production well drilling for Unit-3 expansion

Mar 2013

Wayang Windu Integrated Management System (WIMS) Roll Out supported by Document Management System (Doms Doc)

2014

Intervention work on nine wells raises steam production by 59 kg/s steam; one injection well adds in excess of 100 l/s injection capacity

2015

Post-landslide Reinstatement Work Completed

Business Group

Wayang Windu does not own any subsidiaries to date. Wayang Windu has one affiliate / associate, a subsidiary of Star Energy Holdings Pte Ltd engaged in geothermal energy, namely Star Energy Geothermal (Jailolo) Ltd.

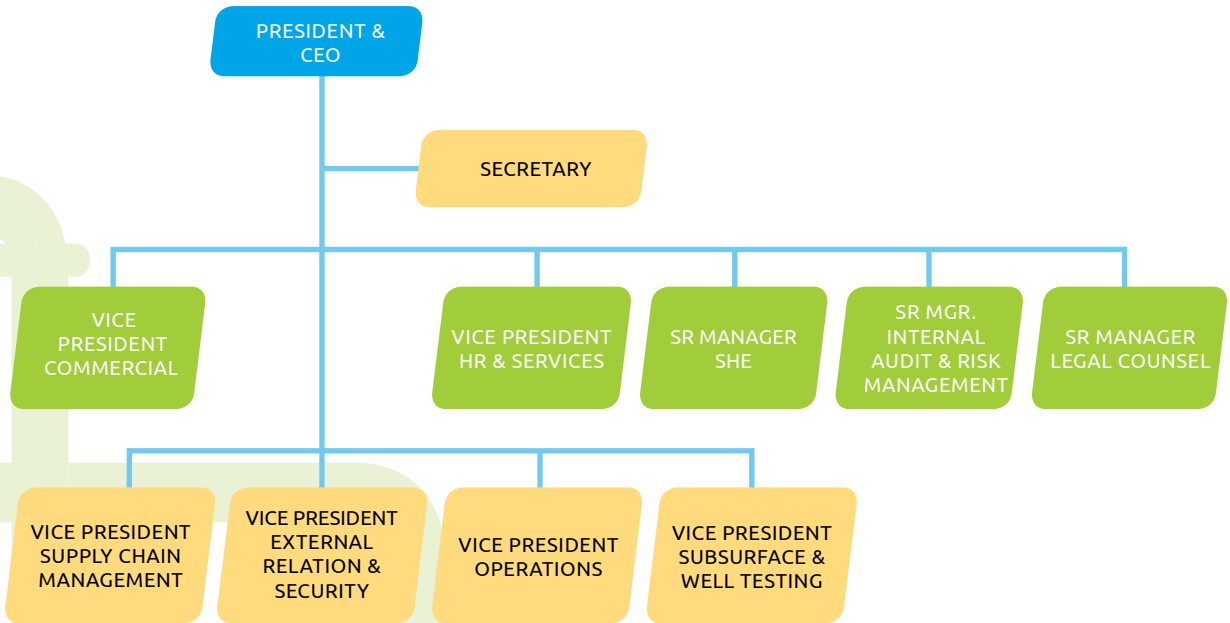
Company Scale [G4-9, G4-10]

Our operational activities support a total of 403 employees who have permanent or contract status. In 2015, we sold electricity amounting to US$68,880. The Wayang Windu Scale Table shows further details, below.

Wayang Windu Scale Table

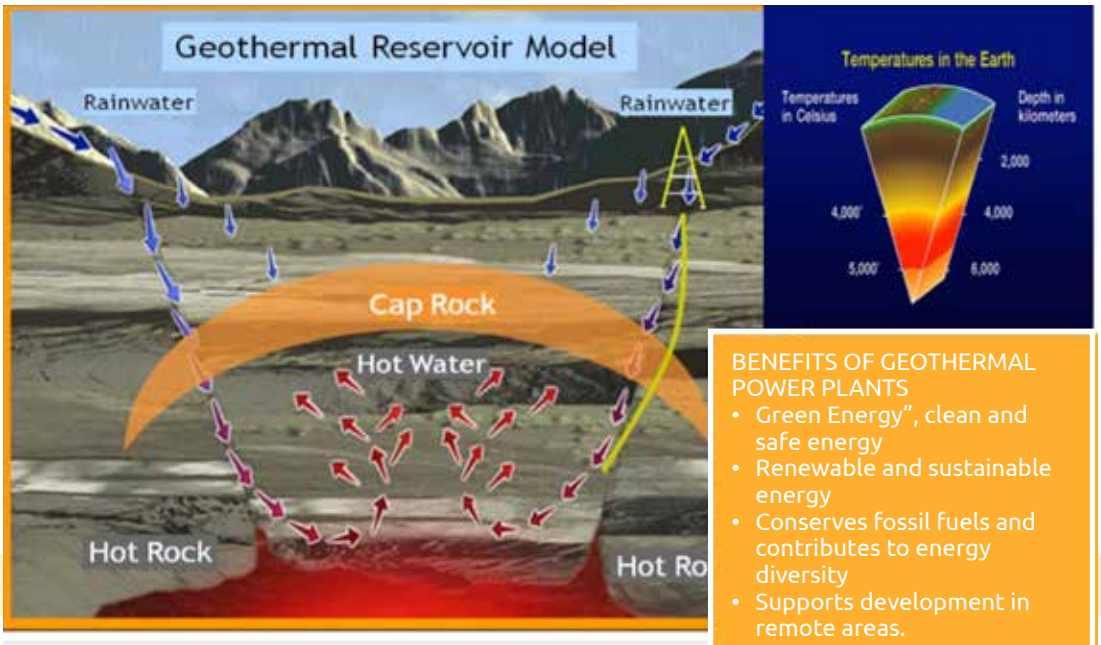
	Period		
	2015	2014	2013
Total employees	403	-	450
Total Net Sales (US$ thousands)	68,88	117,158	121,776
Total capitalization (US$ thousands):			
- Debt	364,169	365,169	366,169
- Equity	44,169	50,834	37,804
Product Sold (GWh)	1,110	1,847	1,880
Total assets (US$ thousands)	554,124	548,826	535,300

Organizational Structure



Operational Map [G4-8]

Our operational activities take place in a mountainous area in the vicinity of Pangalengan, Bandung regency, West Java, in Margamukti village, also known as Wayang Windu geothermal block. The operational area is approximately 40 km south of Bandung. Electricity generation takes place at two geothermal generating units, Unit 1 and Unit 2, with a total capacity of 227 MW, supported by 50 geothermal production wells.



BENEFITS OF GEOTHERMAL POWER PLANTS

- Green Energy", clean and safe energy
- Renewable and sustainable energy
- Conserves fossil fuels and contributes to energy diversity
- Supports development in remote areas.

starenergy
Star Energy Geothermal
(Wayang Windu) Limited

01.
SAFEGUARDING AND **CONSERVING THE ENVIRONMENT AND IMPROVING** ITS QUALITY

"Mitigating the impact of extreme weather on business sustainability through preservation and improvement of the environment's quality with various environmentally friendly operational initiatives, fertilizing awareness, followed by close cooperation with local stakeholders on the importance of environmental sustainability for life now and for future generations"

Recognizing the magnitude of the impact of global-scale climate change on life at present and for future generations, governments in developed and developing countries have been driven to more aggressively jointly reduce the amount of CO2 emissions, one of the main causes of the phenomenon. In addition to emission reductions, primarily from industrial activities and transportation, efforts have been put in place to conserve tropical forests for optimal CO2 absorption by photosynthesis.

The efforts of the global community are embodied in the Kyoto Protocol, which is a binding agreement on 37 major industrial countries and the countries in the EU to work together to reduce CO2 emissions by 18% from conditions in 1990, within an eight-year period, between 2013 and 2020. To support the respective countries achieve the CO2 emission reduction targets set out in the global agreement at an economical cost, the Kyoto Protocol introduced three mechanisms, namely:

- International Emissions Trading
- Clean Development Mechanism (CDM)
- Joint Implementation (JI)

As part of the Kyoto Protocol, the United Nations Framework Convention on Climate Change (UNFCCC) was established to act as a monitoring agency and organizer of the above-mentioned mechanisms. Indonesia, one of the developing countries in a tropical region, committed to reducing Greenhouse Gases (GHG) by 26 percent by 2020 through its own efforts compared to the business as usual baseline, and by 41 percent if it received international support as stated in the Millennium Development Goals (MDG), which ended in 2015.

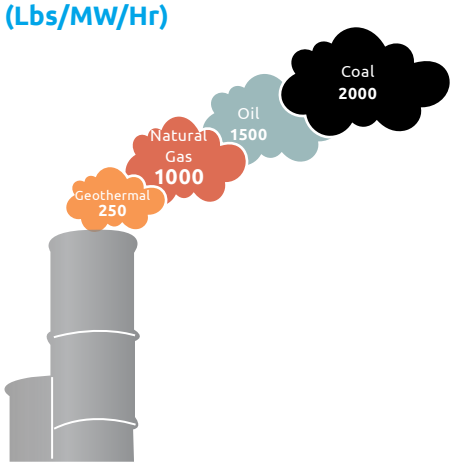
Global-scale sustainable development initiatives have now been continued with the Sustainable Development Goals (SDG), which were launched by the United Nations. The SDGs are 17 global-scale sustainable development goals, the implementation formulation of which was developed at the Conference of Parties (COP), a meeting of all the world's leaders with the basic agenda of reaching a global agreement on ways to achieve environmentally friendly sustainable development through SDGs.

To demonstrate its commitment to participate in supporting SDG development, Indonesia prepared core programs to reduce GHG emissions in five fields: agriculture, forestry and peatlands, energy and transportation, industry and waste management. As part of Indonesia's business community, and certainly as part of the global community, Wayang Windu is determined to participate in these joint efforts by optimizing CO2 emission reduction from its geothermal power plant operations. As is known, our field of business is the provision of electricity generated from geothermal resources, a renewable energy source with great potential to support the reduction of greenhouse gases (GHG), in particular CO2 (carbon dioxide).

GHG emission levels from the geothermal power plant for each lbs/MW-hr are the lowest compared to power generation using other types of fuel, as shown in the following brief table.

Power Plant type	Fuel Source	Emission Units	Total CO2 Equivalent Emissions
PLTP	Geothermal	Lbs/MW-hr	250
PLTGU	Gas	Lbs/MW-hr	1.000
PLTU	Minyak Bumi	Lbs/MW-hr	1.500
PLTU	Batubara	Lbs/MW-hr	2.000

Comparison of CO2 Emissions from Various Power Plant Types (Lbs/MW/Hr)



To maximize potential greenhouse gas reduction from geothermal power plant operations, we have implemented various environmental management and environmentally friendly operational programs. These programs have two main objectives, namely:

- Safeguarding and reinstating environmental conservation for long-term continuity of the geothermal power plant.
- Demonstrating participation in efforts to conserve energy, water, reduce greenhouse gas emissions, reduce and reuse toxic and hazardous waste and non-toxic and non-hazardous waste, and to protect biodiversity.

To demonstrate our strong commitment to protecting the environment and participating in efforts to reduce CO2 emissions, the management has determined policies, targets, compiled programs and implemented monitoring and evaluation programs to achieve environmentally friendly operations.

POLICY

Our commitment to managing operations while maintaining the environment is contained within the "SHE Corporate Policy", the policy guidelines for which are: "Star Energy is committed to the highest performance standards of Workplace Safety, Health and Environment (SHE). Each operational area is managed in an environmentally friendly manner as a workplace that is safe and secure for all personnel and the local community, through the implementation of various activities, such as:

- Proactively preventing injuries, occupational diseases, asset damage and environmental pollution to prevent danger to workers, contractors, the community and the environment to ensure business continuity.
- Implementing a sustainability strategy in daily activities to improve energy efficiency, reduce emissions, conserve water, manage toxic and hazardous waste as well as non-toxic and non-hazardous waste, and protect biodiversity.

We believe that all the points in this environment policy are aligned with global-scale sustainability development concepts contained in the SDGs. We implement various environmentally friendly operational programs alongside our environmental conservation programs, as described in the following discussion, that we believe are in line with various points of the global SDG formula. These formulas of these objectives are:

- Point 6 – Clean Water and Sanitation – Ensure the availability of sustainable clean water and sanitation for all.
- Point 7 – Clean, Affordable Energy – Ensure access to affordable, reliable, sustainable and modern energy for all.
- Point 13 – Climate Change – Take urgent action to combat climate change and its impacts.
- Point 15 – Living on Land – Protect, restore and improve sustainable use of land ecosystems, sustainably manage forests, combat desertification and land conversion, halt and reverse deforestation, halt and restore land degradation, as well as halting biodiversity loss.

WAYANG WINDU'S IMPACT, RESPONSE AND MITIGATION EFFORTS TO IMPROVE THE QUALITY OF THE ENVIRONMENT [G4-EN27, G4-EN29]

As realization of our commitment to improve environmental conditions, we have implemented mitigation programs, as well as repairing and restoring the environment based on an analysis of the impact of operational activities, with the following summary. In addition, to mitigate the risks arising from geothermal power plant operations, such as fatal workplace accidents, which can cause uncontrolled steam outbursts, we have set high operating standards that assert health and safety as a top priority.

We also apply the same standards to our business partners and contractors who supply goods and services, especially relating to employment inspections in the field, namely to steam wells, as well as power generation installations and transmission lines. To ensure compliance with OHS working procedures and to fulfill all environmental provisions in the field, we periodically screen the performance of all prospective new partners and contractors through the application of the Contractor Safety and Health Environmental Management System (CSMS).

Impact Form	Impact Source	Environment Program
Noise	Test wells, generator operation and cooling tower	- Installing rock muffler, monitoring noise levels
		- Revegetation around PS, SS-1 and well pad
Water and Soil Pollution	Drilling, domestic activities, toxic and hazardous waste and non-toxic and hazardous waste, oil and diesel fuel storage and solar	- Domestic liquid waste management through liquid waste management installation (IPLC)
		- Secondary containment at the fuel & oil storage.
		- Utilization of drilling cutting waste through co-processing with cement factories.
		- Use of drilling cutting waste through co-processing
Air Pollution	Test wells, air conditioner operation, vehicle emissions and land clearing.	- Utilization of R-417a as a more environmentally friendly refrigerant for the cooling system
		- Implementation of an online system for the well testing process
		- Capture of H2S emissions using caustic soda during well testing.
Water wastage	Supporting activities, maintenance and drilling	- Filling the air basin cooling tower from the neighboring unit for Unit 2 start up.
		- Removing the need for makeup water in the cooling tower through the direct contact condenser
		- Using condensate to replace surface water requirements for drilling and testing firefighting equipment.
Biodiversity Reduction	Land clearing	- Revegetation of areas around the power plant operations and of critical land outside the operational area (Perhutani land or PTPN land)
		- Perennial and valuable plant cultivation program
		- Deer breeding program in cooperation with PTPN
Traffic Congestion	Mobilization of equipment and materials	- Scheduling equipment and material transportation
		- Implementing traffic control procedures, escorting equipment and material transportation in cooperation with the police
		- Maintenance and repair of the roads in the operational area

THE IMPACT OF CLIMATE CHANGE ON OUR BUSINESS [G4-EC2]

One real impact from the disruption of the environmental balance of the atmosphere due to carbon dioxide and greenhouse gas emissions (GHGs such as CO2, methane, Freon and similar) is global-scale climate change with characteristics such as extreme weather in certain areas. The main characteristic of extreme weather is protracted dry seasons and rainy seasons that have high intensity rainfall and strong winds that result in severe flooding on the flat lands and landslides in hilly areas. Landslides occur for two main causes, namely a lack of vegetation due to land being converted from forest to agricultural use, and excessively high rain intensity.

Global-scale climate change also financially affects our operations.

The disruption of the ecosystem balance in the hilly area near our steam pipeline was caused by the slopes being turned into agricultural land and being unable to withstand the high rainfall intensity. In early May 2015, a landslide occurred in the hills, resulting in the nearest pipeline being severed and forcing us to temporarily suspend electricity generation operations from our turbines. This suspension of operational activities continued for several months.

These conditions impacted on us causing loss of potential revenue from the sale of electricity generated by our generator turbines. While operations were suspended, we conducted an improvements program covering environmental conditions in the vicinity of the pipeline, manufacturing and maintaining the pipeline, as well as other operational support equipment.

We were able to restart operations in stages starting in September 2015, fully operating in December 2015. Full electricity generation capacity was reached by the end of 2015, at which time the entire steam pipe network had been completed reassembled.

Thus, taking into account the amount of time for improvements, we estimate the potential electricity sales revenue lost was USD 40 million. This does not include costs we should have put aside to make improvements that we called the Re-instatement and Preservation Program, as explained in the following description.

POST-LANDSLIDE REINSTATEMENT & PRESERVATION

Overall

On 5 May 2015, a large landslide occurred in the Cibitung area and caused a significant amount of damage and severed our main steam pipeline, which supplied approximately 400 kg/s, or approximately 90%, of our steam to the Wayang Windu power plant.

The SEGWWL facilities impacted by this landslide were:

1. 600 meters of the main 36 inch steam pipe from MBD well.
2. 600 meters of the main 48 inch steam pipe from MBA, MBB and MBD wells.
3. 700 meters of the main 36 inch steam pipe from MBE and WWQ wells.
4. Approximately 600 meters of 12 inch NPWRS water pipe.
5. 3 inch domestic water pipe from the river under the MBD pipe bridge.
6. Other facilities, such as the access road, bridge and electricity and communication cables.

As a result of the landslide, both of the Wayang Windu generating units, Unit 1 (110 MW) and Unit 2 (117 MW) were unable to operate as the supply of steam was insufficient to operate at the lowest permissible capacity. In line with the manufacturer's recommendations, we conducted a special maintenance program. We concurrently started a repair program for the supporting electricity production facilities, such as pipelines and other related facilities.

Fuji Elektrik, the company that designed the Wayang Windu electricity generators, recommended that we immediately open the turbine and rotor casing and

paint it with anti-corrosion paint so that it could be safely stored while it was not operating, and to carry out the same thorough examination as though we were conducting routine repairs.

The recommended maintenance for the generators included removing the rotors, cleaning and storing them in aluminum casing for long storage, periodically monitoring for dampness and carrying out routine maintenance examinations.

PIPE REINSTATEMENT

Due to the emergency conditions and urgent need to quickly restore the pipeline function, this project was started soon after the landslide. Several activities were implemented alongside the evacuation period as part of the project preparation:

- Coordinating and discussing matters with several consultants and selected contractors
- Surveying and mapping the topography
- Early investigation and analysis conducted by geologists and geoengineers
- Preparation of the Implementation Project

Overall, the reinstatement project was divided into four main tasks:

1. Procurement of materials required.
2. Engineering Design Work:
    - Topography and geoengineering survey
    - Civil geo-stabilization and Repair Design
    - Pipeline construction design
3. Construction work:
    - Processing permits for the new pipeline route toward WWQ as the old route was no longer safe
    - Land clearing and construction of the access road.
    - Civil repairs to stabilize land (both temporary and long term)
    - Civil construction and construction of the pipeline supports and mechanical construction to install the pipes
    - Installation of the electricity cables and instrumentation
4. Recertification

To overcome constraints related to the procurement and delivery of new 36 inch and 48 inch diameter pipes, we took or borrowed temporary 36 inch pipe from other routes that were not in use or temporarily not being used. Thus we were able to implement the reinstatement project in two overall stages, as follows:

1. **Initial Stage (30 May - 9 Sept 2015)**
   In this stage, the pipeline was installed by borrowing pipe that was not being used. The electricity generation potential that we could quickly restore was 180 MWe (gross), comprising:
    - Installation of 1 x 36 inch pipe to connect the pipeline from the MBD Wellpad
    - Installation of 1 x 36 inch pipe to temporarily connect MBA and MBB wellpad

2. **Final Stage (10 Sept – 25 December 2015)**
   In this stage, the reinstatement work required the new piping that had been purchased and delivered. With this we could restore electricity generation potential to optimum levels at 227 MWe (gross), comprising
   - Installation of 1 x 48 inch pipe to connect the MBA pipe and MBB wellpad permanently.
   - Installation of 1 x 36 inch pipe used in the initial stage to connect the pipe from the MBE well and WWQ.

SLOPE STABILITY MITIGATION

Efforts to manage the hillside, as part of mitigation efforts to prevent similar risks, saw the construction of terraces. Terracing is a conservation method that reduces the length of the slope, is able to hold water and thus reduces the speed and amount of surface runoff, which increases the opportunity for the soil to absorb the water.

Along the terraces, we built gabions to hold the land in place and prevent the soil from sliding. To maintain the water flow rate on the land, grass was planted along the terraces, while perennials were planted where the landslide had taken place in the 7.2-ha area of Wayang Windu plots 7a and 7b, Pangalengan forest management agency.

Where the landslide had occurred, the land was reforested in collaboration with Perum Perhutani, Bandung Forest Management Agency, South Division West Java and Banten region. Our cooperation was formalized in a 10-year Cooperation Agreement that includes a planting program for 17,715 perennials, consisting of 50% conifers (Merkus pine) and 40% other forest plants, such as the high value Rasamala, Eucalyptus, Kibadak and Gmelina, as well as multi-purpose tree species such as avocados and jackfruit, as well as the shorter Calliandra in the belt zone.

The purpose of this cooperation was to reforest the area in the context of rehabilitating the Cibitung landslide area without changing the basic function and biodiversity of the forest. The purpose was to restore the landslide area to its original function, namely a protected forest, as well as managing and utilizing the former Cibitung landslide area by enriching the types of forest plants.

The whole process of planting, maintaining and replanting was undertaken by local labor in the hope that it would increase the revenue obtained by local residents while the cooperation was ongoing.

To manage the flow of water around the landslide location, we also built a drainage system from the slopes towards local water sources.

Conditions after reconnecting the pipeline, included constructing terracing, gabions, planting grass and trees where the landslide had occurred.

SECURING THE TURBINE GENERATOR - PRESERVATION PROJECT

The program to secure the turbine generator and related equipment started immediately after the final unit had been switched off to prevent the danger of ongoing corrosion. After the turbine generator was dismantled, we stored it in a temporary location until the pipeline installation was complete.

The work to reinstall the turbine generator started when the initial process to reinstall the pipeline was almost complete. Inspections were carried out on the other equipment (transformers, switchgear, UPS / battery, digital relay protection, Hot Well Pump, condenser, cooling tower, separator, scrubber) and parallel maintenance was conducted while the turbine generator was managed.

Every inspection of each piece of equipment was thorough and always witnessed by representatives from various parties competent in their fields. Prior to the generator units being switched back on, we ran a system protection test on the whole system, which had good results and was in line with the expected parameters. The final inspection took place on 2 September 2015.

The program to secure the turbine generator and all its related equipment was divided into three stages:

1. **Dismantling (29 May - 21 June 2015)**
   During this period, our main aim was to quickly dismantle the Turbine and Generator, clean all the equipment, cleaning all the layers to prevent corrosion and preparing for long storage.
2. **Storage / Standby (22 June - 26 July 2015)**
   During this period, the Turbines and Generator were put in a standby condition. In parallel, the other equipment, such as transformers and switchgear, were inspected, the condenser and cooling tower cleaned, the HWP overhauled, etc.
3. **Reassembly (27 July - 18 August 2015)**
   During this period, the Turbines and Generator were reassembled ready to recommence operation once the pipeline had been installed.

Unit 2 started to generate electricity under normal conditions again on 7 September 2015, while Unit 1 started on 9 September 2015.

Unit 2 performance was tested on 12 September 2015, while Unit 1 was tested on 14 September 2015. The result of the clean send capacity performance test for Unit 1 (NDC) was 111.26 MW (5.26% higher than the Fuji guarantee), while the steam rate was 1.97 kg/s (1.19% better than the Fuji guarantee). The clean send capacity of Unit 2 was 113.2 MW (1.3% higher than the Fuji guarantee), while the steam rate was 1.98 kg/s (0.49% better than the Fuji guarantee).

Overall, the work was completed within the desired timeframe and in compliance with national and international standards, with no accidents that caused a loss of working hours and without any further damage to the environment.

The work that was carried out was conducted with efforts to maintain harmony with the surrounding environment, which is an inseparable part of Wayang Windu's steam field operations and power generation.

BIODIVERSITY

The topography of the Company's 12,960 Ha working mine area (WKP) is mountainous, with valleys and hills, located at a height of between 1,700 and 2,000 meters above sea level. The ecosystem around the Wayang Windu operational area is close to protected forest and productive forest and is categorized as tropical lower mountain forest. The local geographical conditions, which are hilly and flanked by two mountains, means that any activity has the potential to change the landscape, such as: land clearing for exploration, exploitation and pipeline network construction in the protected forest can cause changes to plant and wild animal biodiversity.

To mitigate the risk of this impact, we have applied environmentally friendly (green field) schemes to demonstrate the Company's commitment to conserving nature and implemented protective steps, including:

- Inventorying flora and fauna
- Preparing a disposal area for topsoil in preparation for the reclamation stage.
- Restricting interaction with project workers in the protected forest to minimize contact with the habitat and species found within it.
- Creating a plant nursery at the project location.

BIODIVERSITY PROGRAM [G4-EN13]

REVEGETATION AND REHABILITATION PROGRAM REALIZATION

Accumulated Tree Planting on Wayang Windu Lands, 2002-2015

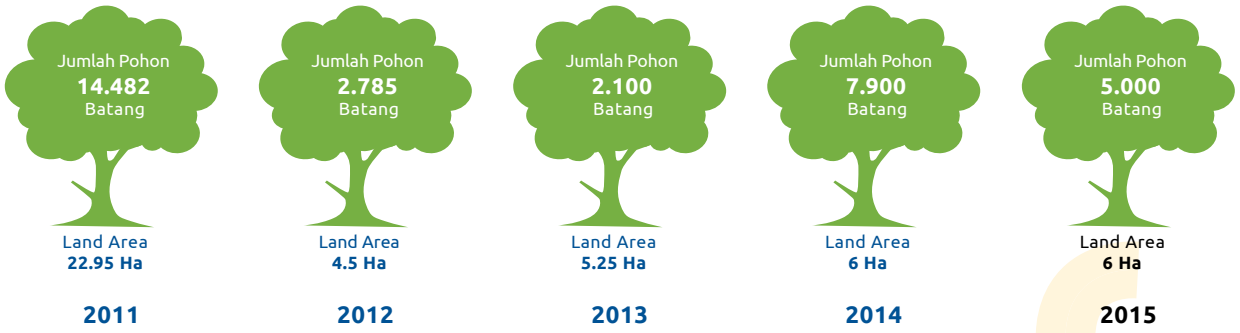
Year	Location	Total and Type of Tree
2002	Unit 1 Soil Disposal	13,000 Pine trees
2003	46 ha forest around Wellpad WWA	45,980 Eucalyptus sp; 7,360 Avocado
2004	Forest around Wellpad WWA	80,000 mulberries
	Power Plant Area and Tea Plantation	7,500 Toona Sureni; 2,700 Eucalyptus sp
2005	Power Plant Area and Tea Plantation	1,000 Silver Oak
2006	Power Plant Area	3,000 Silver Oak
	300 ha Perhutani land	300,000 Arabica coffee seedlings
2007	Power Plant Area	12,100 Toona Sureni, Silver Oak & Cypress
2008	Critical Land around WWS, MBD, MBA, MBD, Wellpad; ±20 ha)	5,803 Altingia Excelsa; 4,096 Toona Sureni; 3,818 Eucalyptus sp; 9,214 Eucalyptus Flatifolia; 4,800 Cypress; 1,022 Acacia Decurrens; 4,802 Avocado. Total Trees: 33,555
	Critical Land around WWQ and MBD bridge (±15 ha)	Eucalyptus sp; total 38,825
2009	20 ha Critical Land around Aul	6,500 Toona Sureni ; 4,400 Dammar Gum; 2,200 Silver Oak; 8,800 Eucalyptus sp. Total :22,000
2011	MBC Wellpad Area	Various trees: 4,894 Eucalyptus; 4,894 Silver Oak; 4,894 Cypress. Total: 14,682
2012	Internal Power Plant Area: PS, SCC Area, Well Pad Area, MBD-Bridge, WW Village, Sukaratu Low Point, Cibolang Low Point, Warehouse-1, Warehouse 2 and SS-1 area	Total 2,785 trees
2013	Open Area along Warehouse-WWA, WWS-MBD pipeline route	1,114 Suren, 426 sengon, 239 Sobsi and others including Huru, Kihujan, Bungur, Eucalyptus; total 2,100
2014	Recharge area close to the production wells MB-A, MB-B, WW-S and WW-A	7,900 trees comprising Puspa, Rasamala, Manglid Baros Chempaka, Eucalyptus, Albizia and a type of mahogany.
2015	Recharge area close to WW-Q	5,000 trees comprising eucalyptus, Mahogany, Rasamala, avocado, Manglid Baros Chempaka, Albizia, pine, Puspa

In addition to the reforestation program where the Cibitung landslide occurred, we also continued our efforts to improve the quality of the habitat around our operational area with revegetation programs, especially on critical land.

During 2015, we replaced plants that had died with 5,000 trees comprising eucalyptus (eucaliptus deglupa), chestnuts (Castanopsis argentea), puspa (Schima wallichii), magnolias (Magnolia macklottii), Albizia, avocados and pines to continue the revegetation and rehabilitation program in the 6-ha recharge area adjacent to the WW-Q production wells. Of the trees planted during 2015, 89.6% (March 2015 data) were growing well. We involved the local communities in this program from planning through to planting, as well as tasking them with plant care. Including this tree planting, between 2002 and the end of 2015, 557,482 trees were planted.

The tree planting is expected to help mitigate the negative impact of GHG by absorbing the equivalent of 9,481.7 tons of CO2e per year (assuming all the trees live) (2014: 9,396.7 tons CO2e). We believe that the revegetation program will contribute greatly to environmental sustainability and the continued availability of steam for our operations. We are determined to continue the program in accordance with the planned revegetation map that has been jointly prepared by all our stakeholders.

Land that Rehabilitated



PROTECTION OF RARE FAUNA [G4-EN13, G4-EN14]

We routinely collect data on the fauna (animals) living in the area under our management. According to analysis results, 14 species of wildlife (mammals and birds) have a relatively significant status, while two of the mammal species, the grizzled leaf monkey (Presbytus comate) and Javan leopard (Panthera pardus), are very important and need special attention. These mammals are important not only because they are endemic to West Java, they are also categorized as Endangered Species by IUCN. These animals are included in Appendix I, meaning they are very valuable and their trade is closely monitored with strict mechanisms and can only occur for certain specific reasons, such as education and scientific research.

List of Fauna Identified in the WW Managed Area, 2015

Taksa	Nama Lokal	Nama Ilmiah	Status	
			PP 7 Tahun 1999	IUCN
Bird	Sikepmadu Asia	Pernis ptilorhynchus	Protected	
	Elang Brontok	Spizaetus cirrhatus	Protected	
	Alapalap Sapi	Falco moluccensis	Protected	
	Rajaudang Meninting	Alcedo meninting	Protected	
	Cekakak Sungai	Halcyon chloris	Protected	
	Takur Tohtor	Megalaima armillaris	Protected	
	Wergan Jawa	Alcippe pyrrhoptera	Protected	
	Kipasan Ekor-merah	Rhipidura phoenicura	Protected	
	Burungmadu Belukar	Anthreptes singalensis	Protected	
	Burungmadu Gunung	Aethopyga eximia	Protected	
	Burungmadu Jawa	Aethopyga mystacalis	Protected	
Mammal	Surili	Presbytis comata		EN
	Macan Tutul Jawa	Presbytis comata		EN
	Bajing	Callosciurus nigrovittatus		NT

Among the bird species found, 11 are protected under Government Regulation No. 7/1999. The majority of these birds are from the families Accipitridae, Alcedinidae and Nectariniidae. Species under these families are protected because of their important role in the ecosystem, such as predators in the food chain, plant pollinators and indicators of water quality.

We provide extra attention to the protected types of flora and fauna to improve the quality of the environmental protection program in the vicinity of the Wayang Windu geothermal steam fields.

Mega palustris

Streptopleia chinensis

Alap-alap sapi *(Falco moluccensis)*

Cekakak Belukar *(Halcyon Smyrnensis)*

Madu gunung *(Aethopyga eximia)*

Serindit jawa *(Loriculus pusillus)*

Surili *(Presbytis comata)*

Monyet Ekor Panjang *(Macaca fascicularis)*

Jalak Suren *(Sturnus contra)*

Penangkaran Rusa Tutul *(Axis axis)*

From mid-2015, we stopped feeding the deer due to a lack of funds. Meanwhile, in early 2016, we submitted a proposal to feed the deer, however, to date there have still been no discussions with PTPN.

Monitoring Water Biota (Plankton and Benthos)

We also monitor the biodiversity of water biota, namely plankton and benthos, around our work environment. The characteristic of the water ecosystem in the vicinity is freshwater. Sampling is conducted to examine the zooplankton, phytoplankton and benthos diversity and to confirm the impact and correlation between activities in the work area and the local aquatic ecosystem. The higher the diversity index, the more stable the conditions, with no pressure on the environment.

The plankton, benthos and nekton diversity data index is not good as it has been impacted by the activities (agriculture) of the local community.

Nursery Plants

The existence of a nursery (for seedlings) and efforts to revegetate are strategic measures to improve the environment, specifically critical land. The nursery is located in the WWS area, by a non-active well. The seedlings and planting of native plants is a move to conserve the germplasm in the working area. As of December 2015, there were 38 plant species in the nursery. The seedlings in the nursery are used to revegetate the company's operational areas or for cooperation activities with Perum Perhutani.

List of Plant Seedlings in the Nursery

No	Plant name	Latin	Total
1	Saninten	Castanopsis argentea	115
2	Puspa	Schima wallichii	670
3	Rasamala	Altingia excelsa	110
4	Suren	Toona sureni	147
5	Trembesi	Samanea saman	147
6	Manglid Baros	Manglietia glauca	265
7	Jeruk	Citrus nobilis	2
8	Sengon	Albizia falcataria	25
9	Lengkeng	Nephelium longana	9
10	Sedap Malam	Polianthes tuberosa	2
11	Bungur	Lagerstroemia speciosa	8
12	Asem Thailand	Tamarindus sp.	7
13	Kaliki (jarak)	Ricinus communis	3
14	Ki Sireum	Syzigium rostrattum	6
15	Huru	Macaranga rhizinoides	38
16	Alpukat	Persea americana	50
	Total		1,604

ENVIRONMENTAL MANAGEMENT AND MONITORING PROGRAM [G4-15]

We apply an integrated Environmental Management System, the Wayang Windu Integrated Management System (WIMS) operation manual, which combines accredited operational standards from ISO 14001: 2004, OHSAS 18001: 2007 and ISO 9001: 2008 to manage and monitor the environment. By implementing the WIMS operation manual, Wayang Windu is the first geothermal power plant in Indonesia to apply an Integrated Management System.

The Wayang Windu environmental management system has been certified by Lloyd's Register Quality Assurance Limited since 2007 and recertified three times for ISO 14001: 2004, with audit findings that state no major findings. The most recent recertification took place on 10 February 2016 and will remain valid until 14 September 2018.

Our environmental management and monitoring program encompasses all operational aspects, from material use efficiency, to energy efficiency, reducing emissions, 3R of toxic and hazardous waste, 3R of solid non-toxic and non-hazardous waste, water efficiency and reducing water pollution, as well as managing biodiversity, as described previously.

MATERIAL USE [G4-EN1, G4-EN2]

In the geothermal electricity generation system, the amount of electricity produced depends on steam production, the primary material to drive the turbine generators. The steam available depends on the amount of steam produced from the steam wells created in the drilling process, as well as well production performance. For this reason, as well as drilling new steam production wells, we also make efforts to maintain and optimize production from existing steam wells and conduct routine maintenance on the turbine generators to sustain optimum steam conversion into electricity.

We are currently operating Unit 1 and Unit 2 for the geothermal power plant, while to maximize steam production from the existing wells and improve steam conversion into electricity, we conduct three key programs, as follows:

1. **Well Intervention Program (WIP)**
   This program aims to revive and improve the capacity of production wells that had not had optimum results or were no longer operational. The use of condensate from the generation process continued for WIP from 2013 to 2015 and was used for well washing. These efforts resulted in an energy efficiency of 28.8 GWh. Compared to the supply of steam from new wells, the well intervention program has been able to improve efficiency by:
   - using land for new wells and preventing the use of green land
   - Reducing fuel use
   - Reducing cutting and drill mud waste
   - Saving surface water use
   - using condensate

2. **SIMOP Program**
   The SIMOP, or Simultaneous Operations, program is part of steam use efficiency and efforts to reduce polluting gas emissions. The SIMOP program transfers steam from normal operations (branch line) after well testing.

   In this way, energy efficiency during 2015 reached 10.0 GWh. Reference was made from the generator steam supply control.

   The benefits from this program include:
   - Using steam that would have been expelled through the atmospheric flash tank for operations.
   - Reducing H2S gas.
   - Reducing noise levels to approximately 95 DBA.

3. **Wayang Windu Make Up Well Program**
   The Wayang Windu make up well program is a drilling program that takes place during operations to maintain steam capacity for the existing generators (Units 1 & 2) at 227 MW, with the following benefits:
   - Drilling of several make up wells, with a steam target of 16 kg/s/well.
   - Conducting work overs on several existing production wells with a steam target of 26 kg/s/well.

To eliminate the possibility of any potential impact on the environment, several preparatory measures were taken prior to the rig mob (19 April 2015), including:
- Repairing the drilling water supply system
- Repairing several access roads

- Hardening several well surfaces to become targeted make up wells, including MB-D, MB-A, WW-Q and WW-A
- Cleaning the drainage systems of several well pads, including: MB-D and MB-A
- Conducting an information dissemination program
- Communicating with several stakeholders, including Muspika and the Manpower Agency.

However, due to the disastrous landslide on 5 May 2015, drilling for the rig move started on 19 April 2015 was postponed until October 2015.

As of the end of the reporting period for the 2015 Wayang Windu Sustainability Report, drilling for make up wells was ongoing and will continue in the following year. It is hoped that this make up well program will ensure the continuity of generating Units 1 & 2 and maintain a total generating capacity of 227 MW for the time being.

Material Use for the Operational Generation Process [G4-EN1, G4EN2]

Description	Unit	Information	Period		
				2014	2015
Unit 1 Steam Generator	Ton	Renewable Raw Material	6,609,734	6,464,802	4,035,364
Unit 2 Steam Generator	Ton	Renewable Raw Material	6,804,868	6,725,747	3,969,529
Caustic Soda	Kg	Ancillary Consumable Material	550,740	319,884	252,530
Biocide, Sulfur 3DT Trasar and Dispersant	Liter	Ancillary Consumable Material	16,796	16,452	13,751

In addition to steam, other materials that are used are caustic soda and biocide. Caustic soda is used to neutralize the pH value, or degree of acidity, of the coolant water, while the biocide functions to control algae growth. These two materials are used to eradicate small amounts of gas (0.6-2.6%), specifically CO2 and H2S, in the geothermal steam that do not condense in the condenser, so that they do not damage the turbine generators.

Total caustic soda requirements in 2015 were 252,530 kg (2014: 319,884 kg), while the amount of biocide required was 13,751 liters (2014: 16,452 liters). Both these materials are consumables and are non-renewable. [G4-EN1]

ENERGY MANAGEMENT AND EFFICIENCY

The greater the efficiency of operations and geothermal power plant operations, the greater the amount of electricity supplied into the transmission and distribution system, at the same time increasing the reduction in GHG. For this reason, we implement various programs to improve generating system operational efficiencies, while running energy use efficiency programs as part of our efforts to participate in efforts to reduce GHG emissions. Over the last few years, we have been striving to improve the operational optimization of our generation system and invest in supporting various operational innovations. Two of these innovations continue to demonstrate increasing support, namely the Well Intervention Program and SIMOP, which have been previously mentioned.

The Well Intervention Program started in 2013, and has been able to increase the volume of steam from the production wells and provide energy efficiencies of 28.8 GWh in 2015. Meanwhile, the SIMOP Program has been running since 2009 and continues to demonstrate increased energy efficiency in 2015 reaching 10.08 GWh.

We continue to implement cooling tower engineering innovations by controlling deposits through the Cooling Tower and Water Pipe Distribution Sulfur Deposition Control program. This program is aimed at controlling sulfur deposits found in the CT fill, piping system, spray nozzles and other places. Controlling sulfur reduces the buildup of sulfur deposits and improved energy efficiency by 2.96 GWh.

We have also implemented several other re-engineering projects that have had an impact by increasing energy efficiency overall. In addition to the energy efficiency program to improve the performance of electricity production facilities, we have also implemented a number of energy saving initiatives for supporting activities through a serious of programs, including:

- Utilizing energy saving light bulbs
- Replacing refrigerant in the cooling system from Freon R22 to R417A to reduce emissions of Ozone Depleting Substances (ODS) and to reduce the use of electricity.
- Managing the use of operational vehicles
- Applying a policy to reduce the use of LPG.
- Briefing subcontractors on restrictions in the use of operational vehicles, heavy equipment and metal processing machinery owned by contractors, as well as suppliers using fuel in their activities.
- Installing GPS in every operational vehicle and applying a route setting procedure.

Overall, throughout 2015, we implemented 19 optimization programs that were either operational or re-engineering, as well as other saving activities that had the overall result of energy savings of 110.27 GWh, as shown in the following table. [G4-EN6]

Energy Efficiency Table

Program	Unit	Year				
		2011	2012	2013	2014	2015
Using optimum steam/steam rate without reducing generation	GWh	17.52	17.52	17.52	17.52	17.52
Reducing electricity use by implementing a gravity strategy for the brine & condensate injection system	GWh	5.25	5.25	5.25	5.25	3.94
Modification of the Unit 1 Condenser Nozzle	GWh	13.14	13.14	13.14	13.14	9.86
Cleaning the Unit 1 Cooling Tower Water Pipes	GWh	17.52	17.52	17.52	17.52	13.14
Changing the duration of the Steam Free test in Unit 2	GWh	0.39	0.39	0.39	0.49	0.30
Redesigning the chimney for the Unit 1 cooling tower to implement the Unit 2 cooling tower design	GWh	12.61	12.6	12.6	12.6	9.50
Using technology to monitor engine lubricant conditions in Unit 1 and Unit 2	GWh	1.22	1.22	1.22	1.22	1.22
Using technology to monitor engine lubricant conditions in Unit 1 and Unit 2 (Condition Base Monitoring)	GWh		1.22	1.22	1.22	0.92
Implementing sulfur control in the cooling water system to sustain the cooling system performance	GWh	3.94	3.94	3.94	3.94	2.96
Replacing R22 Freon with R417A	GWh	0.12	0.12	0.12	0.12	0.09
Redesigning the Unit 1 cooling tower chimney	GWh	12.61	12.61	12.61	12.61	9.46
SIMOP (Simultaneous Operation) Program		13.44	13.44	17.76	26.76	10.08
Saving electricity by replacing fluorescence light bulbs with LED	GWh			0.05000	0.02000	0.02000
Optimizing operational vehicle fuel	GWh	0.50	0.69	0.70	0.29	0.29
Replacing LPG fuel with environmentally friendly electricity to operate the Dryer and Oven	GWh	1.60	1.61	2.03	0.83	0.83
Replacing diesel-fired generators and pumps with environmentally friendly electricity	GWh	0.42	0.34	1.72	0.43	0.43
Blade Cooling Tower Inspection Program	GWh	17.52	17.52	17.52	17.52	6.57
Well Intervention Program	GWh			8.64	127.44	28.8
Saving electricity by installing solar energy panels	GWh	0.0001	0.0009	0.0009	0.0009	0.00070
Total		**117.81**	**117.94**	**132.75**	**248.87**	**110.27**

Electricity Production, Use and Intensity [G4-EN3, G4-EN5]

Various energy efficiency programs and improved performance from our electricity generation equipment has resulted in total gross electricity production in 2015 of 1,152,607 MWh (4,149,386.19 GJ). Meanwhile, total electricity use (house load) for our entire operations has been well managed through various efficiency programs, thus totaling only approximately 42,072 MWh (151,459 GJ).

The demand for electricity for operational activities includes: power supply for generation equipment and (auxiliary) devices, as well as ancillary needs, such as lighting the administration building, employee housing in the field and utility lighting.

As such, total net electricity transmitted to the purchaser, the PLN grid, totaled 1,111,244 MWh (4,000,478 GJ). Meanwhile, energy use intensity compared to total electricity generated reached 3.65 %.

Electricity Produced and Used

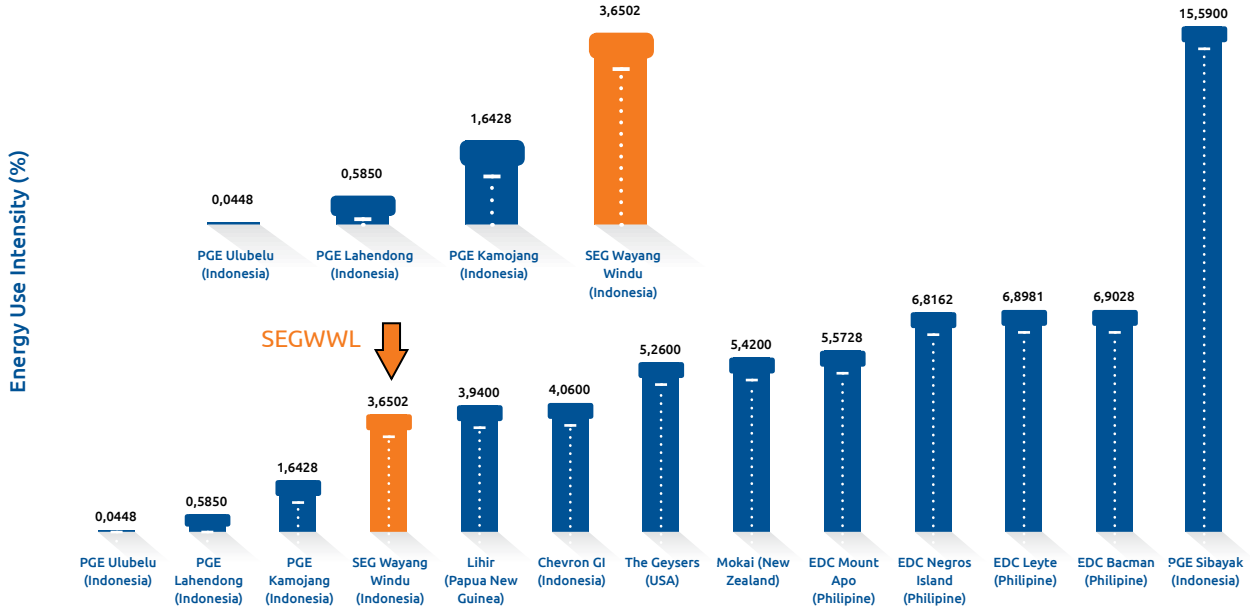
Description	Unit	Year			
		2012	2013	2014	2015
Gross Production	MWh	1,933,845	1,944,312	1,848,434	1,152,607
	GJ	6,961,840	7,000,311	6,703,483	4,149,386
Own Use	MWh	66,546	68,083	67,660	42,072
	GJ	239,569	245,099	245,374	151,459
Net Production	MWh	1,867,299,00	1,879,580	1,780,774	1,111,244
	GJ	6,722,271	6,755,212	6,458,109	4,000,478

These efficiency and energy savings policies have seen the level of electricity used in ancillary buildings become very efficient, as based on Energy Consumption Intensity (ECI) standard calculations for air-conditioned rooms. A summary of the most recent ECI calculations show the admin building has a figure of 54.88 KwH/m2, while employee housing demonstrates 14.44 KwH/m2, which is categorized as very efficient based on the standards used.

Lpg Fuel Consumption Developments and CO2 Emissions [G4-EN6, G4-EN17]

Keterangan	Satuan	Tahun				
		2011	2012	2013	2014	2015
LPG Used	Unit (50 gk)	171	172	142	150	170
Savings	Unit (50 gk)	-22	1	-30	8	20
Target Consumption	Unit (50 gk)	192.00	180.00	168	160	160
CO2 emissions	Tons equivalent	3.8	3.82	3.16	3.33	25.37

Based on the energy intensity benchmark results for 13 geothermal power plants worldwide, carried out by PT. ITS Kemitraan, SEGWWL ranks fourth lowest energy intensity in the world. This is demonstrated in illustration 1, below.



TOTAL EMISSIONS, EMISSION INTENSITY AND EMISSION REDUCTION [G4-EN18, G4-EN19]

In 2015, we increased our consumption of diesel fuel compared to 2014 by 12,790 liters. We also increased the distance we travelled by 82,600 km due to high mobility resulting from the landslide. To ensure optimum vehicle performance, we cooperate with competent parties to apply an operational vehicle age policy and conduct periodic emissions tests on vehicles in use.

Fuel Consumption and CO2 Emission Developments for Operational Vehicles [G4-EN6, G4-EN16]

Description	Units	Year				
		2011	2012	2013	2014	2015
Diesel Used	000 Liters	139.6	120.31	119.84	120.53	133.32
Savings	000 Liters	-28.8	-19.3	-0.5	0.7	12.79
Distance	000 Km	1,048.40	1,055.10	991.9	1.007.8	1,090.40
CO2 Emissions	Tons Equivalent	372.57	321	319.75	322.47	356.69

We have applied a savings policy on the use of LPG for domestic needs since 2009, seeing total LPG consumption continue to fall from 171 canisters in 2011 to 170 in 2015 (2014:150 unit). This has resulted in other benefits, such as reducing cost and CO2 emissions from LPG use from 25.59 tons CO2e in 2011 to 25.37 tons CO2e in 2015.

TOTAL EMISSIONS, EMISSION INTENSITY AND EMISSION REDUCTION [G4-EN18, G4-EN19]

As part of Wayang Windu's efforts to mitigate GHG emissions (especially CO2), we have been striving to reduce emissions totals by implementing various programs. We have monitored and measured the total emissions intensity against total electricity produced to examine results of these programs. We have made efforts to reduce emissions from all sources, including the generating system as the main emitter, as well as emissions from supporting activities including

transportation, cooling facilities and housekeeping services in office buildings. We have also intensified the CDM program, which provides substantial emission reductions as part of our CO2 emission reduction potential optimization from the geothermal power plant.

Generator Emissions [G4-EN15]

As an environmentally friendly way of generating electricity, geothermal power plants only emit NCG (Non Condensable Gases) greenhouse gas (CO2) contained in steam from the generating process. To minimize the formation of NCG, we work to prevent excessive steam occurring in the steam distribution pipes from the production wells. This is achieved by applying Integrated Control with a zero venting concept in normal operations.

In principle, the excess steam occurs from source fluctuations from the well or the plant output, which is regulated using an auto-trimming valve system to ensure there is no excessive steam to cause steam venting.

We minimize steam venting by implementing integrated control on Units 1 and 2, which can reduce greenhouse gas emissions. Wayang Windu is the first geothermal operator in the world to use this system. A reduction in electricity production, as described previously, and increase in steam production resulting from the well intervention program has seen total generator emissions in 2015 amount to 93,347.44 MTCO2 (2014:160.315.30 MTCO2). This reduction in emissions from generating has been caused by the temporary suspension of Units 1 and 2 after the landslide, between May and September 2015.

Clean Development Mechanism Monitoring Scheme

As previously mentioned, to stimulate the involvement of a greater number of parties worldwide, the Kyoto Protocol introduced three mechanisms to benefit businesses able to make a real contribution to efforts to reduce emissions from their operations, one of which is the Clean Development Mechanism (CDM). Believing in the potential to reduce emissions from a geothermal power plant in accordance with the CDM criteria, since we started operating, we prepared to fulfill these criteria by:

- Forming an organizational structure established to account for and implement the CDM mechanism.
- Monitoring high quality data preparation
- Scheduling monitoring reports
- Ensuring accurate measurement instruments calibrated regularly in accordance with required standards
- A well planned file and document archiving system
- Good document control
- Scheduled management reviews and internal audits

After a series of stages, on 2 December 2010, the Executive Board of the United Nations Framework Convention on Climate Change (UNFCCC) approved the Wayang Windu Unit 2 application as a CDM project. Our CDM potential reduction for geothermal power plant operations amount to 794,832 tons CO2/year.

Since that time, we have been monitoring and calculating GHG emission reductions, as well as organizing periodic external audits conducted by third parties accredited by UNFCCC. As a result, as of 31 December 2014, our total Certified Emission Reduction (CER) for Wayang Windu Unit 2 geothermal power plant had reached 3,064,802 CERs, and provided added benefit to the company. The emissions that are calculated in CERs are non-condensable gas (NCG) emissions and emissions generated by burning fossil fuels that are directly related to electricity generation operations. The basis used is generation emissions from the Java, Madura and Bali grid. At this time, we continue to monitor and calculate GHG emission reductions, while striving to gain a CER figure for the 2015 and 2016 operational period.

Wayang Windu is the first geothermal operator in Indonesia to use an integrated control system.

Non-Condensable Gas (NGC) Emission Monitoring)

In addition to the CERs project and the CDM scheme, we also periodically monitor cooling tower emissions from the generator engines in Units 1 and 2 to maintain and improve performance; this is done twice a year and utilizes an accredited and independent third party. The parameters being measured include levels of non-condensable gas emissions such as CO2 H2S, NHs, NO2 and SO2, which all remain under the levels stipulated by the Government.

Reducing Transportation Emissions [G4-EN16]

We implement this program to mitigate CO2 emissions from transportation. Our approach is to measure fuel use efficiency from transportation and calculate the equivalent CO2 emissions it generates based on a generally accepted benchmark, which is based on the chemical reaction that occurs in the combustion process.

We manage two kinds of transportation: first, direct transportation related to operations in the field and general use; secondly, indirect transportation related to operational support activities. For direct transportation, we apply the energy efficiency program already described, which is:

- installing a GPS on every operational vehicle and implementing a route setting procedure, as well as briefing our sub-contractors on limits to the use of operational vehicles, vehicle weight, and so on, which reduces fuel use for direct transportation.
- to reduce indirect transportation, we have intensified the use of information technology, such as video conferencing.

The energy efficiency program for direct operational transportation has resulted in emissions in 2015 equivalent to 356.69 tons CO2 (2014: 322.47 tons CO2) and the equivalent of 25.17 tons CO2 (2014: 52.36 tons CO2) for public transport. Meanwhile, the use of video conferencing to reduce transportation use has reduced emissions in 2015 by equivalent to 15.11 tons CO2 (2014: 15.11 tons CO2).

We also conduct emissions testing and road worthiness tests on all operational vehicles with the involvement of the local Transportation Agency. Vehicle emissions testing makes reference to Environment Minister Regulation No. 5/2006 concerning Permissible Limits for Old Vehicle Emissions, and EURO2 Standards related to vehicle engine performance with environmentally friendly emissions. In addition, we also require all operational vehicles to have emission tests and road worthiness tests carried out by the local Transportation Agency.

Other GHG Emission Sources [G4-EN17]

Efficiencies in electricity use to support operations include replacing LPG with electricity to operate the dryers and ovens and replacing light bulbs, which in 2015 has had quite significant results in reducing emissions, achieving equivalent to 25.37 tons CO2 (2014: 22.38 tons CO2).

Ozone Depleting Substances (ODS) Emission Reductions [G4-EN20]

We have made efforts to reduce ozone depleting substance emissions, including by replacing the use of Freon in the room coolers with R417A (HFC), which is more environmentally friendly. This is in accordance with Presidential Decision No. 23/1992 on Ratification of the Vienna Convention to Protect the Ozone Layer and the Montreal Protocol on reducing the use of substances that have the potential to damage the ozone layer.

This program has been implemented to improve energy efficiency, reaching savings of 20%, or equivalent to electricity savings of 120 MWh per year, as well as, by implication, reducing CO2 emissions by 32.92 MTCO2 per year.

We have also monitored the emission of other gases with the potential to deplete the ozone layer, such as NOX and SOX dispersed from key equipment in geothermal generating systems. The results of periodic emissions tests by an independent party have demonstrated that during the reporting period, total gas emissions have always been under Environmental Quality Standards, in compliance with local government regulations.

Parameter	Benchmark	Unit	Test Result
Co2	na	%	<1
H25	BM:35 mg/Nm3	mg/Nm3	<5 s/d 0,43
NH3	BM:35 mg/Nm3	mg/Nm3	<0,1 s/d 0,3

Emissions and CO2 Gas Emission Reductions [G4-EN15, G4-EN16, G4-EN17, G4-EN18, G4-EN19]

This environmental program aims to improve the quality of the environment while reducing GHG emissions overall has shown positive results. We have successfully reduced CO2 emissions in several scopes of activities, maximized CO2 emission reductions with the CDM program, replaced fossil fuels with electricity to support our operational activities and managed the CO2 emission ratio (GHG emission intensity) to electricity generated in 2015 at a relatively good level, as shown in the following table.

Wayang Windu Total CO2 Emissions [G4-EN15, G4-EN16, G4-EN17, G4-EN18]

Description		Unit	Year				
			2011	2012	2013	2014	2015
A.	Emissions from the Generation Process						
	Generator Emissions	MTCO2	117.316,27	134.717,03	145.563,66	159.933,53	93.947,44
B.	Emissions from Supporting Activities						
	- Transportation	MTCO2e	373,6	321,87	320,62	322,47	356,69
	- Waste Management	MTCO2e	27,76	25,41	20,25	6,94	0,9972
	- Public Transportation	MTCO2e	7,48	7,48	7,48	7,48	25,17
	Subtotal: Supporting Activity Emissions	MTCO2e	408,84	354,76	347,76	381,77	381,85
	Total Emissions from the Business Unit	MTCO2e	117.725.11	135.426.56	146.259.18	160.697.07	94.329.29
	Emission Reduction Ratio to Total Emissions		6,77	5,37	5,26	4,79	4,65

Air Pollution Reduction Program [G4-EN19]

Description	Unit	Year				
		2011	2012	2013	2014	2015
- Wayang Windu CDM Program	TCO2e	770.523,00	725.010	764.667	764.667	435.689,00
- LPG replaced by Electricity for Dryers and Ovens	TCO2e	25.590,22	25,67	21,19	22,38	25,37
- Freon R22 replacement with R417A	TCO2e	32,92	32,92	32,92	32,92	32,9
- Use of environmentally friendly pumps and generators	TCO2e	335,00	337,47	1,718,53	2,539,49	2,539,49
- Optimization of Operational Vehicle Fuel	TCO2e	373,60	321,87	320,62	322,47	356,69
- *Minimizing use of Fuel through Video Conferencing*	TCO2e	11,03	15,11	16,32	15,11	15,11
Total Emission Reductions	TCO2e	796.866,00	725.743,00	766.776,00	767.599,00	438.659,00
Emission Reduction Ratio to Total Emissions (B/A)	TCO2e	7	5	5	5	5
Total Power Generated (MWh)	MWh	1.945.474,56	1.932.151	1.930.282	1.848.434	1.113.597,32
Emission Intensity Ratio to Generated Power	(TCO2e/ MWh)	0,061	0,070	0,076	0,087	0,085

WATER MANAGEMENT AND USE
[G4-EN8, G4-EN10]

Realizing that water is a strategic resource for the company's operational continuity, we manage water use by prioritizing maximum use of produced water and minimizing the use of surface water.

We measure water use performance by calculating water use intensity against total power produced as a water management performance parameter. We use water for three main activities:

- Injecting brine water and condensate into the earth through injection wells to ensure steam quantity as an energy source to drive the geothermal power plant turbines.
- Utilizing condensate or brine water for drilling
- Fulfilling ancillary requirements, such as domestic needs (washing, bathing and sanitary needs).

The water that is injected into the earth is brine and condensate produced from steam field and geothermal power plant operations. The condensate is also used as a dissolving agent for the drill mud and for cementing during drilling. All the condensate produced is reused, thus nullifying the need for surface water in drilling operations. The total volume of condensate that was reused in 2015 amounted to 264,988 tons (2014: 229,740 tons), which is equivalent to saving 264,988 tons of surface water in 2015. [G4-EN8, G4-EN10]

Surface water is only used for domestic requirements, with the volume used reaching 14,413 m3 in 2015, a reduction on the figure for 2014 of 22,444 m3. The water used for domestic requirements is surface and well water.

As such, water use intensity to power generated in 2015 totaled 0.0125 m3/MWh, or 12.50 liters/MWh. We implement very strict supervision over the taking and use of surface water to ensure it is purely for domestic requirements, at the same time ensuring the balance of the sub-watershed area in the vicinity of operational activities. We also conduct various campaigns to increase staff awareness of the need to conserve water, including putting up stickers, repairing broken taps, recommending the use of buckets when washing operational vehicles, and such like.

After processing, some of the water is reused for limited purposes. A small part of the remainder, after fulfilling quality standards, is returned to the Cisangkuy River.

Prior to being returned to the Cisangkuy River, we process all domestic wastewater in our sewage treatment plant / STP in accordance with stipulations in Bandung Regent's Decision No. 666/KEP.008/IPBL/BPMP-2010. The processing is aimed at removing or minimizing any substances or dissolved matter that endangers the environment, while fulfilling the stipulated quality standards. To check the water quality, we work with a competent independent party. [G4-EN22]

Water Conservation

We have been working to conserve water generated through nature's cycles, including by building water catchment facilities to absorb rainwater, or biopores, since 2009. This program is in accordance with the Environment Minister's Decision Per. Men. LH No. 12/2009 on the use of rainwater. As of the end of 2015, we had constructed 100 biopores (2014: 100), which we estimate can absorb 1.3 m3/day of rainwater {2014: 1.3 m3/day).

In addition to the biopore holes, we have created five absorption wells as a medium to absorb rainwater in the employee housing area and around the administrative offices.

In addition, we built a storage pool for rainwater and condensate water from the Admin Building and Operator Room cooling system. This water is used to wash vehicles, then stored to recycle. We expect to use approximately 225 m3/month of water from this storage pond. This program has been implemented to reduce the amount of surface water required for domestic needs.

We target increasing the amount of rainwater we can store through these water conservation programs in the coming years, thus further ensuring continuity of the geothermal power plant operations.

Other efforts to conserve water include the use of condensate from the Power Station air conditioners to wash vehicles.

Vehicles are washed using water from the storage pond, one source for which is the Power Station air conditioners. The amount of condensate collected from the air conditioners totals 171.74 m3/year, or equivalent to washing 858 cars per year. Between 2012 and June 2015, by using air conditioner condensate, we had saved a total of 515.22 m3 of surface water.

WASTE MANAGEMENT AND PROCESSING [G4-EN23]

We use two approaches to manage waste, namely the 3R principle (reduce, reuse and recycle) and safe disposal. We also separate waste into two main groups, toxic and hazardous (B3) waste and non-toxic and non-hazardous waste.

Star Energy Geothermal (Wayang Windu) Limited has its own waste management procedure named Waste Management (EPE.WM) which regulates waste being managed using the 3R principle above, as well as waste handling–monitoring generation, waste sorting, transporting to the temporary tip (TPS) and transporting to the final tip (TPA).

Based on physical condition, we manage two types of waste – solid and liquid. Based on its impact, we separate waste into toxic and hazardous waste and non-toxic and non-hazardous waste.

To manage this, we always prioritize the principle of reducing by improving operational efficiencies. For

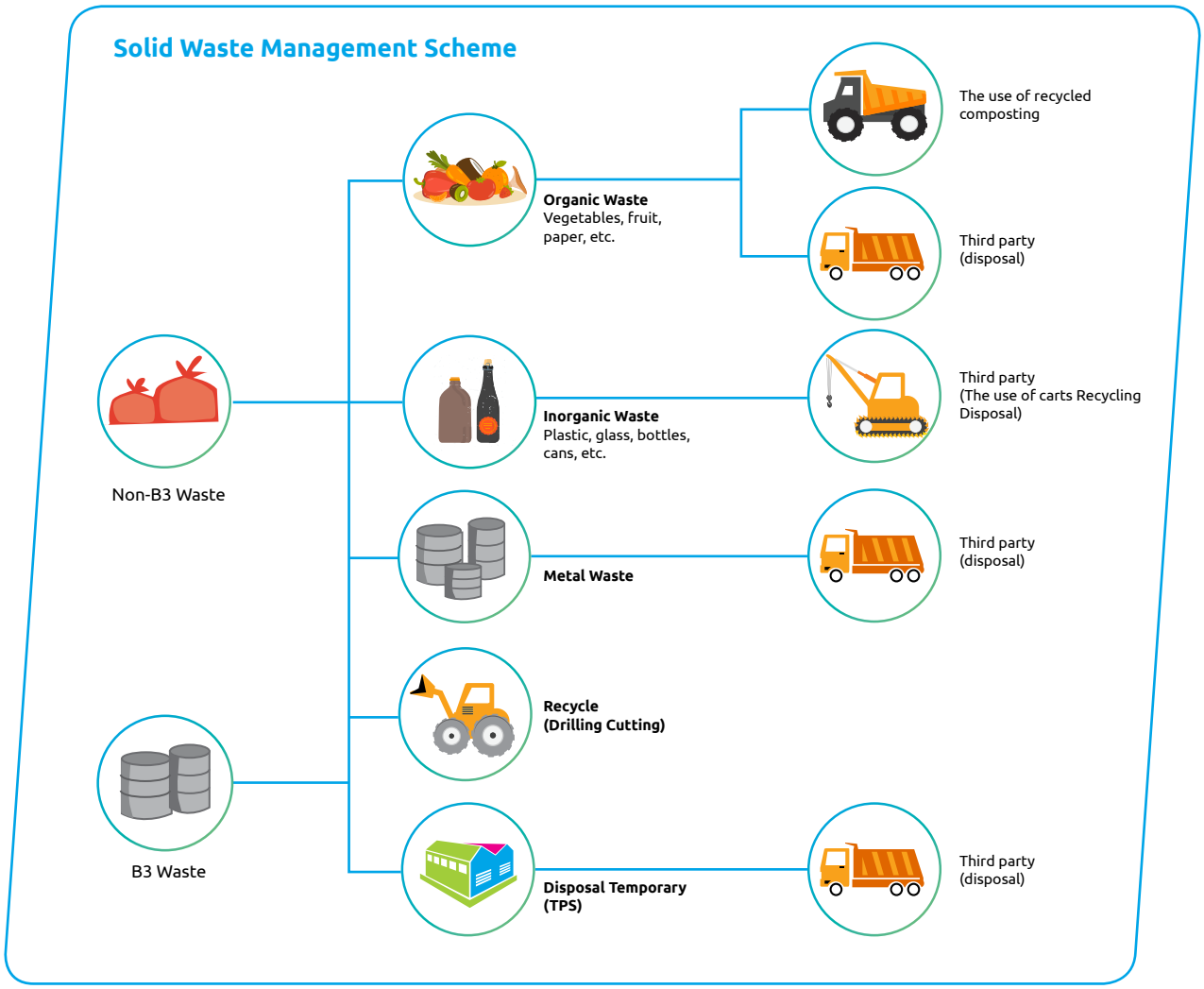
example, we implement an e-document program and use smart card printers to control paper use, while reducing toner waste. During 2015, we managed to reduce toner waste by 19.5 kg.

E-Document Application to Reduce Paper Waste

The company's administration process generally utilizes paper forms that have to be filled in manually. This paper becomes waste when it can no longer be used. To reduce this paper waste, we have taken the initiative to use the E-Doc application for various requirements, including:

- FRACAS, an online reporting system for SHE and Work Permit reports
- BPM application, used by the HR Department to fill in personnel forms such as wage slips, leave requests, travel orders, etc.
- Protap Online application, to process electrical power transactions online.
- Use of a data logger for an operator reporting program.

A total of 279 kg of paper was saved through the use of these applications in 2015.



B3 Waste Management

To manage B3 waste, we use standard operating procedures/SOP in accordance with applicable legislation and regulations, namely:

- Managing a temporary tip (TPS) licensed for toxic and hazardous waste, based on a BPMP Decision on behalf of the Bandung Regent, No. 658.31/22/IV/BPMP.
- Satisfying B3 waste packaging requirements through the use of symbols and labels required by applicable laws.
- Reporting B3 waste management quarterly to the Environment Ministry and sending a copy to the West Java Regional Environment Agency (BPLHD), BPLHD Bandung and the PPLH for Java.

A significant quantity of B3 waste from operations is used lubricant from the turbine generator gearboxes. Since 2009, we have been striving to minimize the volume of used oil by implementing an oil analysis program, in which oil is changed dependent on its operational condition and not on the schedule recommended by equipment specifications. This program has resulted in a substantial reduction in the volume of waste used oil, totaling 5,900 liters since the launch of the oil analysis program in 2009.

Non-B3 Waste Management and Processing

Wayang Windu generates non-toxic and non-hazardous waste from operations, maintenance of the steam fields and the geothermal power plant, office, warehouse and clinic operations, the park around the offices and employee housing, as well as from domestic activities. Consistent implementation of the reduce, reuse and recycle principle has resulted in non-toxic and non-hazardous waste generation through 2015 of 13.23 tons (2014:20.265 tons), or 1,102 kg per month (2014: 1,689 kg per month), with an average recycling rate of 77.29% (2014: 76.8%). Solid non-toxic and non-hazardous waste is predominantly organic waste, totaling 9,600 kg or 800 kg/month; this is then processed into compost. We also process organic waste from the kitchen into liquid compost, which in 2015 totaled 588 kg or 16.2% of all liquid office waste (2014: 3,831 kg kg or 35.94%). The remainder, paper and plastic waste, is processed in cooperation with TBM Kertamanah and the local Sanitation Agency.

Non-B3 Waste Management with Kertamanah Community Reading Park

As part of our environmental education, while improving the skills of the local community, we have pioneered a waste management program in which non-organic waste is utilized in cooperation with Kertamanah Community Reading Park. For this program, reading and writing is taught through managing waste. The participants are taught to read waste bank books and taught to count when weighing waste. Since 2014, Kertamanah Community Reading Park has used 622 kg of waste. This cooperation to manage waste benefits the reading park, which can sell paper to generate funds for the trash bank's operations and to run the park's programs, including helping eradicate illiteracy.

Use of Non-B3 Waste [G4-EN23]

Description	Unit	Year				
		2011	2012	2013	2014	2015
A. Use						
Using organic kitchen waste to make liquid fertilizer		9,243	7,425	5,967	3,831	0,059
Using park waste for compost		9,600	9,600	9,600	9,600	9,600
B. Reduce						
Reducing waste paper using the Fracas online program		-	-	-	0,007	0,180
Reducing waste paper using the BPM online program		-	-	-	0,038	0,061
Reducing paper waste using the logging data program for operators		-	-	-	0,008	0,008
Using food containers for food security		-	-	-	1,918	1,887
PLN news transactions		-	-	1,920	-	0,030
Total 3R Non B3 Waste		18,843	17,025	17,485	15,897	12,552

TOTAL FUND ALLOCATION [G4-EN31]

As we are committed to creating a better quality environment, we allocate funding for activities related to environmental protection and conservation. Environmental costs are funded from the budget for Occupational Safety, Health and Environment (SHE). In the 2015 operational year, total funding for the environment amounted to US$163.800 (2014: US$155.000).

As a result of the programs we have conducted to manage, maintain and improve the condition of the local environment, trust has been established with a number of parties, including local communities and, in particular, regulatory parties as key stakeholders. During 2015, we did not incur any sanctions or fines or become subject to legal action related to violations of environmental regulations and legislation. [G4-EN29]

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02.
DEVELOPING **THE LOCAL COMMUNITY**

"Realizing the Star Energy Geothermal (Wayang Windu) Limited Corporate Social Responsibility Program as manifestation of the Company's determination as a global corporate citizen to support environmentally aware community welfare able to join hands with all other stakeholders to mitigate the risk of disaster"

BACKGROUND AND GOALS

Our business world is experiencing ever more complex developments as a result of globalization. One important change occurring in the business world is the concept of corporate citizenship, whereby a corporation views itself as a "member" of the community, at the same level as other beings and, of course, with the requisite rights and responsibilities. The right of a corporation as a "member" of the community is conducting business activities on a daily basis, while the responsibilities include playing a part in achieving development goals, such as social welfare and improving the quality of life in the local community, or what is known as Corporate Social Responsibility (CSR).

In general, CSR can be defined as a company setting aside part of its economic benefit (profit) for the interests of the community (people) and the environment (planet), sustainably and based on accurate and professional procedures. In Indonesia, the government uses Law No. 40/2007 on Limited Liability Companies to require corporate social responsibility from companies conducting business related to natural resources (Article 74 point 1), complete with sanctions for those that neglect their responsibilities.

For Wayang Windu, this enforcement merely legitimizes the company's consistently implemented activities, which were taking place even before the legislation was issued. From the very beginning, we have not considered CSR to be a burden rather it is an investment in which it is not profit that is the goal, but mutual sustainable benefits for all stakeholders. The Company's goal is to design and implement Corporate Social Responsibility / CSR programs to demonstrate corporate care for local community development, in particular social welfare in line with the Company's progress.

We tend to prioritize implementation of our CSR programs toward community development and empowerment. This focus is in line with the formulas of several of the SGDs, such as: Point 1 No Poverty – End poverty in all its forms everywhere; Point 3 Good Health and Wellbeing – Ensure healthy lives and promote wellbeing for all at all ages; Point 4 Quality Education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Point 10 Reduced Inequalities - Reduce inequality within and among countries.

We implement Community Development and Empowerment activities not only in the interests of community relations but more towards community empowerment. In other words, we implement CSR programs as a means for the company to contribute toward improving social conditions, education, the economy and environment for the local community.

To measure the success of the community potential development programs that we run, we pay careful attention to the development parameters issued annually by the Central Statistics Agency, i.e. the Human Development Index, as well as utilizing internal assessment mechanisms to measure and assess the success of the programs being implemented. We use

the overall assessment results as feedback to design follow up programs. The stages we evaluate in our CSR programs involve:

- Program Implementation Assessment
- Implementation Strategy Development
- Establishing Joint Commitment
- Commitment Implementation
- Program Development Verification and Reporting
- Evaluation and Improvements

Further, to ensure the accuracy and success of our programs, we involve the relevant parties, such as the local community and local community figures, the local government, non-governmental organizations and other independent parties, from planning to implementation and assessment for all the programs that we run.

POLICY

To ensure the effectiveness and success of our CSR program implementation, at each stage of planning and program realization, we are guided by the SEGWWL CSR implementation policy and the Principles of the CSR Program Implementation Guidelines, as follows:

SEGWWL CSR POLICY

SEGWWL commits to playing a responsible and sustainable role in social concerns by making a strong contribution to achieving balanced value for all stakeholders. SEGWWL has taken the initiative to focus on developing social and economic aspects in the community and building harmonious relationships to create a sustainable and positive impact for the community in the vicinity of company operations through Corporate Social Responsibility (CSR) programs that are always based on the Guideline Principles.

SEGWWL applies the ethics of Good Corporate Governance and always strives to ensure that operational activities are carried out based on and in line with high legal, ethical and professional standards, which we have always valued. Everything that SEGWWL does related to operational activities is always conducted with honesty and integrity.

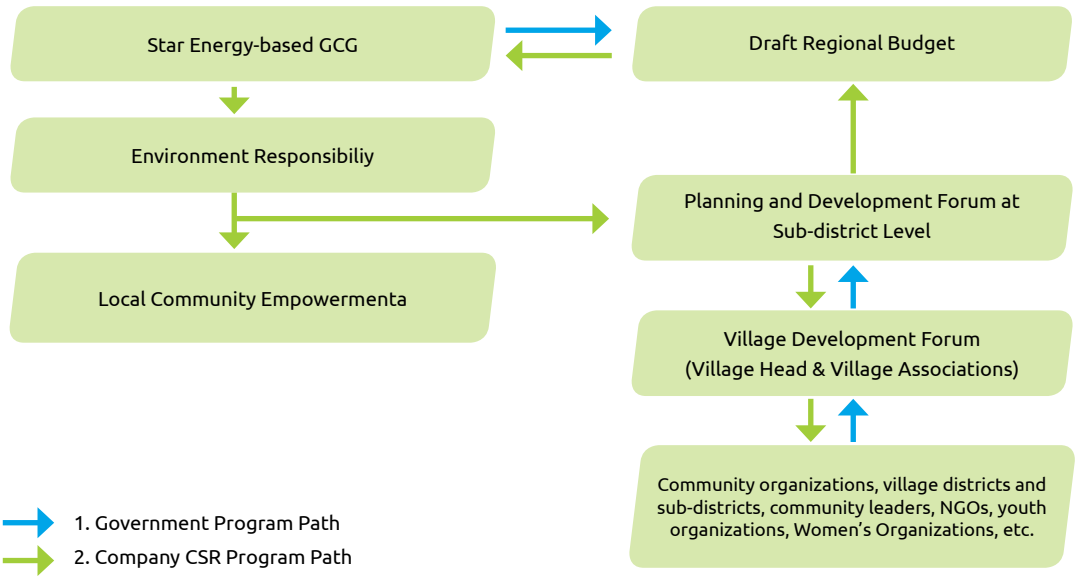
SEGWWL is strongly committed to building and maintaining genuine and fair relationships with government agencies, community leaders, co-workers, community organizations and other relevant parties.

SEGWWL will not tolerate any unethical acts committed by co-workers, government agencies or public figures who violate any rules related to corruption prevailing in Indonesia, with the exception of those actions that have been ratified by written rules or legal regulations.

PROGRAMS [G4-SO1]

To optimize successful implementation, in addition to involving the community as the subject of the program, we also strive to obtain input from independent parties through cooperation with competent non-profit institutions, such as ICSD (Indonesian Center for Sustainable Development) and ITB SBM (Bandung Institute of Technology's Business and Management School). This cooperation is intended to foster the design of community potential development programs that take into account all possible successes and failures and anticipate steps to make improvements. With this approach, the impact of the programs is expected to be maximized and the benefits immediately felt.

STAKEHOLDER INVOLVEMENT



We have designed community development programs that fall into two main groups, namely:

Community Development, with the aims of:

1. Assisting and supporting government programs, especially those improving the Human Development Index (HDI) with a focus on activities in the fields of:
   - Education,
   - Empowering and Improving the Local Economy, and
   - Improving Infrastructure for Social and Public Facilities
2. Building and maintaining communication and good relations with the community, community figures, religious figures, government and relevant agencies.
3. Improving and promoting the quality of economic life and health in local communities.
4. Reducing poverty and unemployment levels in communities local to our sites.
5. Facilitating quality education access, in particular for children and teens.
6. Improving spirituality/religious life by building and repairing religious facilities.
7. Building infrastructure to improve the quality of life for the local community

COMMUNITY RELATIONS

All our programs and activities target building and maintaining good community relations based on a mutual relationship. These take the form of:

- Intensive Communications
- Sponsorship and Donations
- Community Healthcare

Starting in 2014, we initiated an integrated Corporate Social Responsibility (CSR) pilot project, the Wayang Windu Towards a Green Economy CSR Synergy Program, which is scheduled to run for two years (2014-2015). This synergy program will synergize CSR programs in Education, Economic Development and Public Health. The hope is to create a greater and more powerful effect and impact than that of the three programs running separately. A Green Economy is a condition found in a prosperous society, in which the activities of daily economic life take place by creating and maintaining a clean and healthy environment, where the waste produced is well managed and does not damage the forest, which here is in a critical condition.

The aim is to promote increased prosperity and quality of life for the Pangalengan community through economic activities that care about issues like sustaining a healthy environment, which is essential for community life in Pangalengan for future generations. By synergizing these three CSR programs, Nurkayana Cooperative, one of the SME cooperatives we established and oversee, plays a central role. Further, to take internal responsibility for the implementation and success of these CSR programs, we have formed an External Relations and Security Department, which oversees the CSR Division.

Planning and Development Forum (Musrenbang) – Community and Stakeholder Involvement [G4-SO1]

One of the keys to the successful implementation of community development programs is the active participation of the government as the receivers of the programs. The community must feel that they are not only the program target but also the owners. Clearly they are the subject, but not the object, of the programs.

For this reason, when designing and implementing all community development programs to be implemented through Corporate Social Responsibility (CSR), Star Energy Geothermal (Wayang Windu) Ltd strives to involve the community. The forums utilized for this purpose are focus group discussions (FGD), popularly known as Planning and Development Forums (Musrenbang).

The planning and development forum hosts discussions between parties determining the CSR programs directly related to local community needs. This forum involves the community, village administration, district administration, other government agencies, NGOs and company representatives, in this case from Wayang Windu. The agenda for such discussion forums is generally determining CSR programs other than physical construction financed by the Government through Village Aid, or other local government development schemes.

By being familiar with the government development schemes, Wayang Windu can allocate funding / program participation that supports village / district infrastructure development or other community development programs. Proposals from these discussion forums are derived from the community and/or NGOs, community figures and village / district leaders and village / district administrators and are jointly decided. After the proposed program has been approved, a small committee is formed to determine the technical implementation of the program, including its supervision and assessment of the results of its implementation. The assessment results will be discussed at the Planning and Development Forum in the following period.

All the Planning and Development Forum activities make the community feel involved and that they own the programs to be implemented, thus encouraging growing community participation as they benefit directly from the programs. Other stakeholders also feel directly involved in each program being implemented using this approach.

CSR PROGRAM REALIZATION – COMMUNITY DEVELOPMENT

Formal Education Aid Program [G4-EC7]

Based on our monitoring during 2009, the education level achieved in the six villages in the Pangalengan district is still generally that of Elementary School (SD), followed by high school, both Junior High and Senior High (SMP and SMA). The low education level in Pangalengan district is of great concern, bearing in mind that it has a direct correlation with the quality of human resources.

We have great concern for and pay close attention to the "cycle of poverty", where an impoverished community cannot access relatively expensive education to improve the competencies that cause it to have a limited income, which ultimately results in poverty becoming deep-rooted among the impoverished. We believe that creating a smart community would help overcome all life obstacles, be they social, economic, cultural or religious, thus breaking the "cycle of poverty" found in so many developing countries.

To break this cycle, we have designed and realized an education program to create greater opportunities for less-advantaged communities to receive a quality education. Since 2013, we have also started to prepare and realize non-formal educational programs as part of Wayang Windu's concrete moves to increasingly play an active role and contribute to improving the community's quality of life.

The CSR education programs we run include:

- Scholarships for academically gifted students.
- Scholarships for academically gifted students from poor families.
- Assistance to buy study materials and Teaching and Learning Support (KBM).
- Construction of a Rumah Pintar for the Pangalengan community.
- Supportive aid for a Community Reading Park

A summary of Scholarship Recipients at Elementary (SD), Junior High (SMP), Senior High (SMA) and Vocational (SMK) School level in 2015

Level	Academically Gifted Students	Academic Students	Total
SD	680	350	1030
SMP	153	153	306
SMA/SMK	90	90	180
Dll	88*	-	88
Dll			1604

In 2015, through our CSR educational programs, we provided scholarships to 1,604 students at elementary, junior and senior high schools, as well as three-year diplomas at two renowned universities in Bandung, Bandung State Polytechnic (POLBAN) and Padjadjaran University (UNPAD). Following is a table showing the total number of students from elementary school to university as a record for 2015.

Rumah Pintar – Chasing Packet C

As part the follow up to our commitment to provide Rumah Pintar facilities and infrastructure, SEGWWL and the Pangalengan Education Agency cooperate to provide the Packet C educational program (which provides education recognized as being equivalent to high school) to 65 participants aged between 17 and 44 years old from 13 villages in Pangalengan district. The running of the Packet C program is demonstration of one of the Pangalengan Rumah Pintar targets, which is to improve the high school participation rate, with planned focus involving:

Testimony Packet C Rumah Pintar Participant

Fitri Purwanti – Packet C Student

After I spent one year studying at the Pangalengan Rumah Pintar I had an experience I will never forget. I not only gained knowledge, I could also make a lot of new friends who now feel like they are my own family. Everyone's highs and lows make memories for me. This feeling of togetherness always fills my days since I started going to the Rumah Pintar and I will always remember that.

One year has gone so quickly and it is time for us to part. Thank you to all the counselors who guided and supported me and gave me knowledge, and I couldn't forget to thank Star Energy Geothermal (Wayang Windu) Ltd for giving me this opportunity to learn and study at the Rumah Pintar during 2015.

May the Rumah Pintar continue its success and all its students bring grace to the name of our Nation and State. Amen.

Isep S – Rumah Pintar Class A

My studies at the Rumah Pintar have been very useful, I have learned so many new things here. I have also made lots of new friends, as well as gaining lots of useful knowledge that I didn't know before. I feel so lucky to have been to school at this Rumah Pintar as I dropped out of school before. I am so grateful to everyone for establishing this Rumah Pintar.

- Providing even and competent high school and Packet C management in all villages across Pangalengan district
- Providing support to improve the reach of quality high school education services evenly across all villages in Pangalengan district.

Providing financing for the even distribution of the Packet C learning system. The specific characteristics of the Packet C educational program compared to formal education lie in its content, context, methodologies and approaches to achieve standard competency in graduates.

This activity places more emphasis on concepts related to environmental issues, thematic approaches that are contextual and inductive and present life skills training. The target is people who cannot attend formal education, namely those with difficulties that are economic, social, or related to time or opportunity, as well as community groups who can form a learning community that utilizes Flexi Learning.

This program is run with consideration of the community's strong support and the company's commitment to improving the quality of human resources by improving academic and vocational activities and increasing the number of high school graduates in the vicinity of the operational area. This program is expected to continue in 2016, with both packet C and B, as well as other supporting skills training courses.

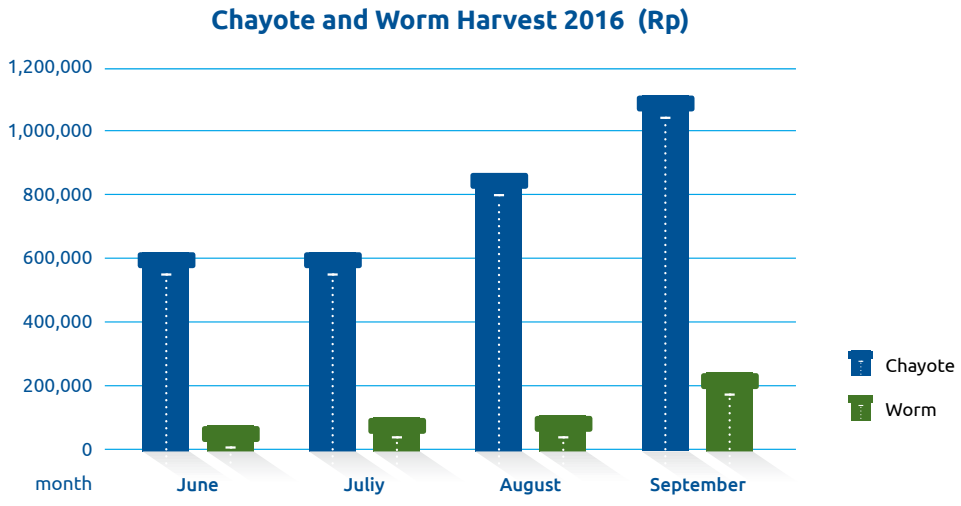
Worm Cultivation [G4-EC8]

Worms, a raw material for cosmetics, are usually cultivated just through worm farming. TBM Kertamanah, however, has diversified its business to cultivate both worms and the vegetable chayote, two items that have a mutually symbiotic impact and which are expected to have a synergetic impact on production. Cultivating worms and chayote is expected to have both a material and environmental benefit as the two are closely connected. Worms play a role in breaking down organic material and improving the aeration and structure of the soil.

As a result, the earth becomes fertile and it is easier for the plants to absorb nutrients. The worms increase the microbe population, which benefits the plants around them, in this case chayote. The chayote, meanwhile, plays an important role in the worms' growth as its leaves protect the worms from direct sunlight. To breed 1kg of worms, 1kg of cow dung, or one small bucket, is mixed with organic waste and 2 liters of water every two days. In two days, the worm cultivation in Rancamanyar village RW 08 requires 50kg of cow dung and organic waste.

Cultivating worms has ecological value in that it reduces the amount of cow manure by 1kg per day per 1kg of worms and 24kg organic waste per day per 1kg of worms being cultivated, at the same time reducing water pollution as the community no longer through their cow dung and organic waste into the river.

In addition, on the economic value side, cultivating worms and the use of compost to fertilize the chayote adds value by raising the income of the people involved in this program. The chayote and worm harvests are shown in the following diagram.



We implemented this program to raise awareness in village communities of environmentally friendly cultivation and its economic value. Considering the potential to impact positively on the environment, as well as the community economy, we are considering increasing and expanding the application of this simple program to other agricultural commodities.

The funding made available for the initial stage of this program amounted to Rp88,000,000. These funds were disbursed to rent a 320m plot of land for three years, build chayote and worm enclosures, buy seeds and support operations for a one-year period.

Testimony - Agus Rohmat – Sewing Training Participant

I live in Sukamenak, at RT 3 RW 2 Margamukti and am one of the sewing students in the course held by Star Energy and Nurkayana Cooperative.

Originally I knew almost nothing about sewing, but with this training, I've been able to learn a lot and gain a lot of knowledge about sewing. Now, I am beginning to slowly understand the right way to sew.

After this course and all I have learned about sewing, I hope in future I will gain more expertise and be able to open my own business. I hope that this training continues as it is very useful for the community.

I am very grateful to Star Energy and Nurkayana Cooperative.

Thank you.

Star Energy Geothermal Humanitarian Aid for the Victims of the Cibitung Landslide in Margamukti hamlet [G4-EC7]

To demonstrate our care and corporate social responsibility, we implemented a program to support the landslide victims. This disaster response program was implemented as humanitarian aid and saw Wayang Windu organize several activities every day for the 14 days of the emergency period.

The value of this direct humanitarian aid reached Rp120,152,000, which was received by the Management of the Emergency Post for the Evacuation of Cibitung Landslide Victims at Margamukti Village Hall from 5-13 May 2015 for 54 families at the Emergency Post. This humanitarian aid comprised staple foods, baby food, school clothes, school stationary and prayer items. We also provided material aid to repair five houses in the temporary relocation area owned by PTPN in Kertamanah village, Cibeureum, Campaka and Munjul.

Prior to the renovation.

After the renovation.

We were also actively involved in provided medical aid to landslide victims, evacuation personnel from the Company's ERT, as well as heavy equipment such as long-arm excavators, standards excavators, backhoes and other equipment, including generators, tents and lights, blowers and personnel support. We also provided humanitarian aid of Rp4 million to nine families who had suffered fatalities.

In addition to the company aid, Star Energy employees also contributed humanitarian aid to show their concern for the community around the project. The humanitarian aid collected from employees in Star Energy Jakarta and Wayang Windu for the landslide victims amounted to Rp31,000,000.

We also implemented a post-disaster recovery program. This program saw collaboration between Star Energy and the Rapid Response Action Team in anticipation of psychological trauma suffered by the victims and people living in villages close to the landslide.

The post-landslide recovery program involved activities including:

- Hypnotherapy for victims and their families
- Distribution of Ramadhan packages
- Mental counseling through religious programs
- Activities to fill in time for women, comprising snack making competitions
- Activities to fill in time for children, comprising storytelling, drawing competitions, and playing with the deer in the local deer compound
- Distribution of Lebaran packages

Aid for Disaster Resilience Communities (MTB) – Bale Endah - Bandung

Expert
Usep Suara - MTB head, Pangalengan district

We feel sufficiently supported by the funding from Star Energy. Alhamdulillah, with these supporting funds we have been able to expand the reach of our disaster readiness response in Pangalengan. We have used these funds for activities that include mitigation, simulation and dissemination for the community, government and schools.

By holding these activities, the community has felt greatly supported with what has been done with regard to disasters, the community feels supported and has benefited from the simulations, dissemination and humanitarian activities we have organized around Pangalengan district. We hope that in the future Star Energy's support for MTB will continue and increase to support all our disaster activities specifically in Pangalengan district and generally in Bandung regency.

Alhamdulillah, this support has enabled MTB to contribute to the victims of disaster in Bandung regency.

Thank you from all of us at the Pangalengan Disaster Resilience Community for the financial support, as well as the advice, ideas and motivation from Star Energy, we greatly appreciate it all. We hope that in future we can develop even closer communication and be of more use to many communities, especially in Pangalengan district.

The program involved five hamlets (Cikakapa, Kertamanah, Rancamanyar, Cibeureum and Cinyiruan) in two villages, Margamukti and Pangalengan, with a total of 2,653 recipients, as follows:

- Hypnotherapy for 80 victims and their families
- Ramadhan packets for 189 people
- Prayer groups and activities for 2,195 women and children
- Lebaran packets for 189 people

Hypnotherapy for victims and their families to reduce and eliminate the trauma and stress caused by the landslide.

Snack-making Competition and a happy photograph of winners in the competition.

Distributing Lebaran packets to families affected by the landslide.

Star Energy Geothermal
(Wayang Windu) Limited

03. DEVELOPING A CULTURE OF **SAFETY AND WORKPLACE HEALTH**

"Making OHS a culture to raise the awareness of OHS risks and the quality of accredited OHS operational standards through systematic training to ensure the achievement of the zero-accident target and the creation of a safe, healthy and comfortable workplace that is free from workplace accidents"

AIMS

As a business that requires quite significant development capital, the operation of steam fields and geothermal power plants must be free of danger that could arise from various identified risks. Significant development capital is required because geothermal power plant development requires very specific advanced technology applications, early investment is large and the risk of failure is high. The advanced technology is specifically needed for analysis, calculations and drilling steam production wells from "reservoirs" far beneath the earth's surface, which can then be channeled through the pipeline to the separator unit, scrubber and then to the turbines to drive the electrical power generators.

Critical points for accidents occur in steam fields and geothermal power plant operations, extending from the production wells to the production facility at the power station. Negligence and a lack of attention to monitoring overall conditions at vital installations and a lack of safety can trigger fatal accidents and disrupt, or even terminate, operations.

For this reason, since the start of development, geothermal power plant facility operations and the generation of power for the PT PLN (Persero) grid, we have been committed to implementing high standards of occupational health and safety in our operational procedures. We aim to achieve the zero-accident target, which means losing no working days due to accidents and a minimum loss of working days due to employee sickness.

POLICY AND OPERATING STANDARDS

[G4-15]

As a form of the Company's commitment to high quality OHS, Wayang Windu upholds the application of its OHS in its "Wayang Windu Green Field Policy" policy statement, which asserts that Star Energy Geothermal (Wayang Windu) Ltd is determined to:

- Always placing SHE (Safety, Health, Environment) as a high priority in Production, Operations and other business aspects.
- Proactively avoid all dangers to workers, contractors, the community and the environment to ensure business sustainability.
- Ensure that SHE priorities are accountable and the lines of accountability are applied from the top of the management structure.
- Ensure the system for identification and control of potential hazards in the work place is in place.
- Continually observe, monitor and improve SHE performance/sustainability and management systems throughout the STAR ENERGY organization.
- Train and develop all employees and contractors to maintain the highest SHE implementation standards.
- Satisfy or exceed all legal requirements in our place of operation. If the SHE policy is unsatisfactory, Star Energy adopts the best practices and applies standards that always protect employees' health and safety at work and prevents negative impacts on the environment.

We believe that these policies and programs to prevent workplace accidents and ensure workplace health implemented by the company are in line with the three of the Sustainable Development Goals (SDGs), namely: Good Health and Wellbeing – Ensure healthy lives and promote well-being for all at all ages.

We have integrated an Occupational Health and Safety Management System with the accredited OHSAS 18001:2007 system by applying environmental management systems in line with ISO 14001:2004 standard certification and ISO 9001:2008 quality management in one. Periodically, we have an independent third party audit the application of these accredited standards.

As a result, we always comply with all criteria determined by the independent assessor and have never had a major find recorded during the audit process. Certification in OHSAS 18001: 2007 health and safety standards was most recently conducted by PT Lloyd's Register Indonesia on 17 January 2014.

Health and Safety Committee

We have formed a SHE (Occupational Safety, Health and Environment) Committee to coordinate activities and programs related to OHS. Provisions on the function and position of the SHE Committee, as well as the duties it is responsible for, are set out in Chapter X of the CLA on Work Protection. The SHE Committee membership consists of Executive Management, Senior Operational Managers and 8 employee representatives (2.8%) of all permanent employees. [G4-LA5, G4-LA8]

The duties of the Health and Safety Committee comprise:

- Discussing all matters related to Occupational Safety, Health and Environment covering protection, prevention and resolution of possible accidents and or sicknesses arising from work;
- Investigating workplace accidents that involve production facility safety, workplace safety and environmental pollution;
- Assessing SHE performance related to standardization, production facility safety, workplace safety and the environment;
- Assessing SHE program implementation; assessing associated duty implementation and periodically reporting on the SHE Committee.

Total Employee Representatives In SHE Committee Leadership [G4-LA5]

Description	Unit	Year				
			2012	2013	2014	2015
Workplace Safety		1	2	2	3	3
Workplace Health		3	3	2	3	3
Environmental Production		2	2	1	2	2
Total		6	7	5	8	8

SHE (WORKPLACE SAFETY, HEALTH AND ENVIRONMENTAL PROTECTION) PROGRAMS IN 2015

Various strategic programs related to SHE were realized in 2015, in accordance with the results of the SHE Committee assessment, encompassing:

- Program review of procedures related to ISO 14001 and OHSA 18001 surveillance
- Quarterly OHS program, with various activities such as workshops for contractors, fire extinguisher training, a caricature competition, drawing, cleanliness competition, Semut Operation and SHE talks
- Revegetation at Mount Bedil with the local Cibitung communities
- EBTKE assessment and field visit related to RKL/RPL implementation in the Wayang Windu area
- Celebration of Earth Day with a series of events such as Environmentally Smart, Photography Competition, Environment Panel Discussion and closing with a SHE Talk and Semut Operation.
- Implementation of the Star Light Campaign
- Revegetation of the land affected by the landslide around WW-S well and the former Cibitung village.

OHS PERFORMANCE STATISTICS IN 2015 [G4-LA6]

Although we have put in place provisions for work procedures that pay great attention to employee safety and the environment, operational activities in the field span a broad range of activities in tiring natural conditions, which can result in a less cautious attitude and result in work accidents.

A number of workplace accidents occurred during the 2015 reporting year, as follows.

Total Workplace Accidents [G4-LA6]

Level	Year				
	2011	2012	2013	2014	2015
Minor	5	10	4	4	9
Moderate	1	2	0	0	0
Severe	1	0	0	0	0
Fatal	0	1	0	0	0
Total	7	13	4	4	9

Reference :
Mining and Energy Minister Decision No. 555/K/26/M.PE/1995 on mining OHS

Note:
Minor: Injury> 1 and less than 3 weeks (FAC, MTC and RWC)
Serious Injury : Injury >3 weeks (LWC)
Fatal: Death within 24 hours of the incident

The increasing intensity of activities in the field during the "Reinstatement & Preservation" program after the landslide caused the frequency of workplace accidents to rise slightly compared to 2014. However, the number of hours lost was maintained at the same level, in line with the company's success in imbuing a culture of workplace accident awareness.

The severity of workplace accidents in 2015 did not alter, even though the frequency increased, with only nine minor workplace accidents, thus the number of working hours lost altered very little. Total working hours in 2014 amounted to 1,481,180, while in 2015 this rose to 1,774,380 working hours.

Incident Rate (IR) and Frekuency Rate

Description	Year				
	2011	2012	2013	2014	2015
IR	0,000002	0,000002	0,000000	0,000000	0,000001
FR	2,76	2,15	0,00	0,00	0,58

Note :
IR = Recordable Cases/1000000
FR = (Recordable Cases x 1000000)/Safe Manhours

Recordable Case = MTC + RWC +LWC

The calculations for the Incident Rate (IR) and Frequency Rate (FR) for these conditions are shown below. To minimize workplace accidents in future, we have implemented the following activities:

- Communicated with and required all employees to comply with all work procedures in accordance with OHS-based SOPs in carrying out their duties.
- Analyzed each workplace accident to prevent similar future occurrences.
- Tightened provisions related to employee rotation.

WORKPLACE HEALTH

As mandated by legislation, we also pay attention to the health of our employees and their families. To maintain employee health, we have various activities to improve awareness of occupational health. This is achieved through education, training, counseling, mitigation and control of the risk of contracting serious illness or contagious disease, such as dengue fever, malaria, and so on. Workplace health activities we implement include:

We divide the management of workplace health into medical occupational health and work environment health. For medical occupational health, we implement the same work patterns as various private and government hospitals with satisfactory facilities close to the operational area in Pangalengan or in Bandung, or our Head Office in Jakarta. These activities cover periodic health checkups for employees in accordance with applicable legislation (Manpower Law) and provisions contained in the CLA, as well as health education for employees and their families, etc. Meanwhile, for the management of occupational health related to the work environment, we coordinate through OHS units with activities including: measuring noise, sanitation care, reducing emission levels, etc.

Activities to Support Workplace Health in 2015

Jenis Kegiatan	Karyawan	Jumlah Peserta	Masyarakat
Promotional /Workshop			
Behavior and risks associated with Bee Stings in the Workplace to WW Security	Employees (Town hall)	21	-
Dissemination and Health Talk from West Java PKVHI and questionnaire on HIV/AIDS for employees to commemorate World AIDS Day 2015	Employees (Town hall)	35	-
Hand injuries	Employees (Town hall)	58	-
Pest Control : Biting Insects and Snake Control	Employees (Town hall)	43	-
Metabolic Syndrome	Employees (Town hall)		-
Acute Coronary Syndrome & Heart Attack	Employees (Town hall)	13	-
Fit for Duty Evaluation for Maintenance Group		20	-
Hygiene and Food Sanitation Seminar	Contractors	15	-
Health Bulletin by e-mail : Child Cancer Healthy Nutrition Guidelines POM Agency Clarification - Listeria Monocytogenes, Biting Insects Congenital Defects, Tuberculosis Congenital Defects on "World Health Day" Post-Traumatic Stress Disorder and World No Tobacco Day – Dangers of Smoking 12 Tips on Staying Fit During Fasting Month & MERSCoV Info 2015 Sanitary Napkins in distribution according to health criteria POM Agency Information Prop 65 Warning Label	by -email to GRP all WW employee		

Description	2015			
	Employees	Total Employees	Community	Monitoring Frequency
Preventative/Mitigating				
Stop Smoking program monitoring	Yes	All employees	-	Incidental
Sporting activity monitoring	Yes	All employees	-	Weekly
Diet monitoring	Yes	25 employees	-	Monthly
Noise monitoring as Industrial Hygiene	Yes		-	Annually
Well & Turn Around noise levels	Yes	Some employees	Local housing	Incidental, based on well testing program & TA
Drinking water monitoring	Yes	All employees	-	Monthly
Hygiene and catering sanitation monitoring	Yes	All employees	-	Monthly

AWARDS

Our achievements throughout 2015 in occupational health and safety resulted in SHE awards from the Manpower Ministry for Zero Accidents and for our P2-HIV & AIDS in the Work Place program.

Star Energy Geothermal
(Wayang Windu) Limited

04.
DEVELOPING
OUR PEOPLE

"Our focus in managing our Human Resources as Human Capital is to increase the capacity of employees on an ongoing basis by recruiting high quality people through a strict, selective process with good screening, improving employee competencies and aligning achievements with remuneration."

HUMAN RESOURCE MANAGEMENT GOALS

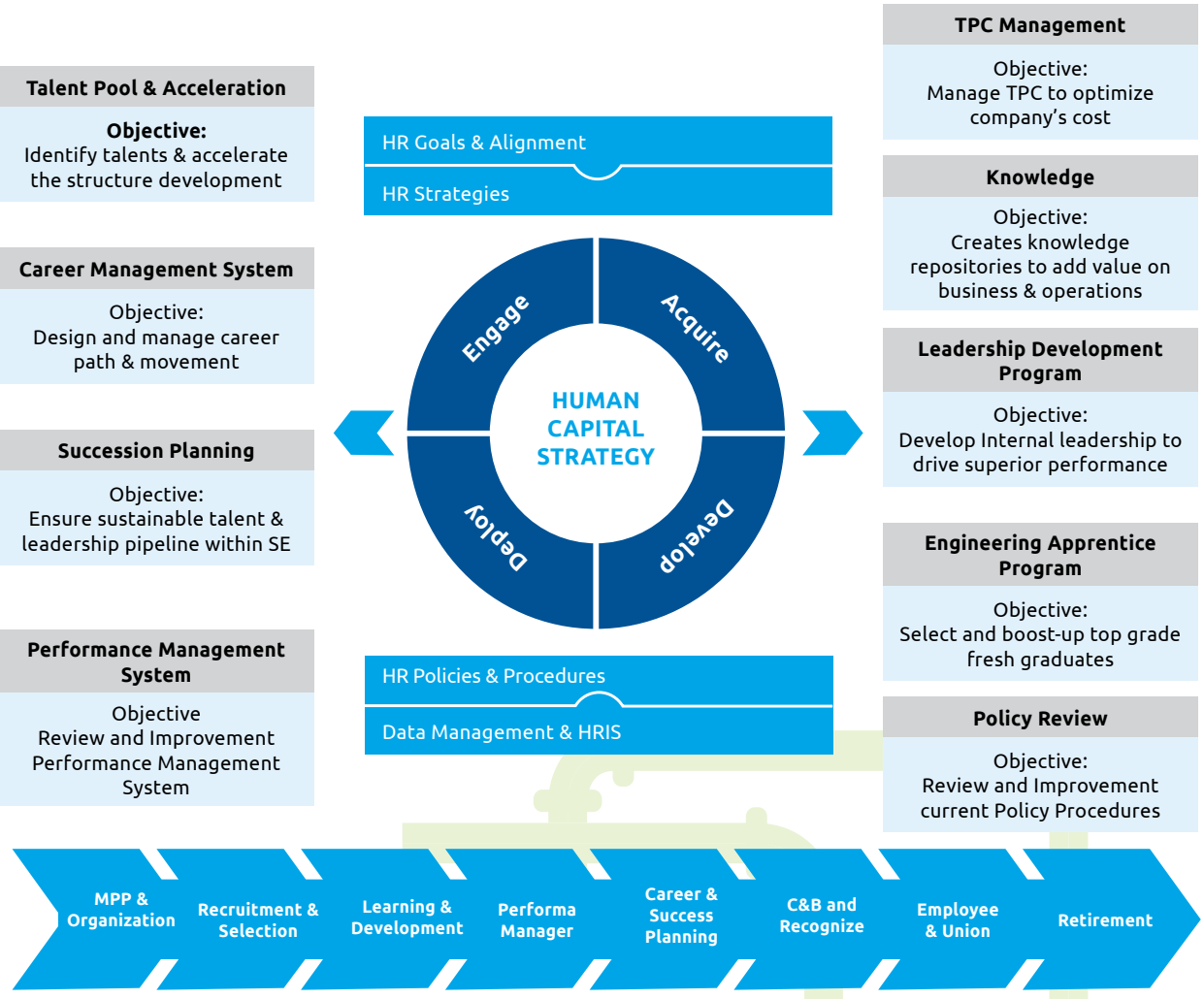
For the Company, our human resources (HR) are one of our most valuable assets, as well as important partners who support our development efforts and run our company's operations. Human resources are capital (human capital), who spearhead the achievement of the three sustainability goals: profit, people and plant. Our employees play a strategic role in generating economic benefit (profit), creating community welfare (people) and safeguarding the environment (planet). We view our human resources as key stakeholders, thus full attention should be paid to the fulfillment of their aspirations, while they must also participate in determining and being responsible for business continuity. As one of our key stakeholders, our human resources play a central role in achieving the Company's vision and mission in the context of sustainability.

As part of the long-term development program, we have designed and applied long-term HR management strategies, in particular determining HR positions in accordance with qualifications and business development requirements.

We apply two primary approaches to satisfy employee needs: (1) ensuring that current personnel are optimized, or ensuring that each person is working effectively and efficiently to a level of productivity equivalent to that practiced in the world's best companies. (2) improving the quality and quantity of personnel in accordance with business development. To ensure this, we have compiled an HR development strategy initiative, summarized below.

Therefore, our focus in the management of human resources as Human Capital is to increase the capacity of employees on an ongoing basis by recruiting high quality people through a strict, selective process with good screening, improving employee competencies and aligning achievements with remuneration. The management of human resources as human capital demonstrates the same direction as the formulation of the global sustainable development goals, or SDGs, Point 8 "Decent Work and Economic Growth - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all".

For this reason, the long-term HR management strategy we have designed and implemented in the company particularly determines personnel positions based on qualifications and business development requirements. To ensure the achievement of this management objective, we have compiled HR development strategy initiatives illustrated in the following chart.



Considering the importance of the role of the company's employees, despite the fact that our operational activities were challenged by the landslide that caused a cessation of power generation activities, we continued our competency development programs and fulfilled employee rights as outlined in the HR development strategy initiatives.

HR MANAGEMENT

We implement Human Resources Goals and the Alignment of HR Strategies (HRG & AHRS) to ensure the optimum HR performance, which encompasses the implementation of TPC management, competency development, career development system, policy review, respecting employee rights and so on, up to pre-retirement preparation.

HRG & AHRS have 9 key pillars:

i) Third party contract Management,
ii) Engineering Apprentice Program,
iii) Knowledge Management,
iv) Leadership Development Program,
v) Talent Pool & Acceleration,
vi) Career Management System,
vii) Succession Planning,
viii) Performance Management System, and
ix) Policy Review.

- **Third Party Contract (TPC) Management**
  Wayang Windu takes into account various parameters when managing contract-based personnel to ensure fulfillment of company requirements and business development, encompassing: employee composition, budget, efficiency factors and employee productivity.

- **Engineering Apprentice Program**
  We recruit and develop fresh graduates based on long-term requirement plans, in addition to consideration of the competency of candidates from the local area to support the recruitment of an increasing number of local employees.

  In cooperation with the local government, we provide scholarships to junior high school, senior high school and university students and provide additional courses to recruit local labor. Through this mechanism, as of the end of 2015, we employed 223 local people (55.3%) out of a total 403 employees.

Total Employees Based on Location [G4-LA1]

Year	Total Employees	Local Employees	Percentage
2011	411	267	65.0%
2012	470	361	76.8%
2013	450	305	67.7%
2014	505	393	77.8%
2015	403	223	55.3%

During 2015, we recruited three new employees, two male and one female. [G4-LA1]

Prior to being accepted as a permanent employee, candidates must undertake an orientation program that covers training to increase basic competencies.

Total New Employees [G4-LA1]

Gender	Year				
	2011	2012	2013	2014	2015
Female	5	0	3	0	1
Male	12	9	5	5	2
Total	17	9	8	5	3

- **Talent Pool & Acceleration and Leadership Development Program**
  During 2015, our employees were focused on the reinstatement program to restore operational conditions to those prior to the landslide. While the competency improvement training was temporarily suspended, we continued to hold mandatory training programs so that the basic skills required by employees were maintained.

- **Performance & Career Management System and Succession Planning** [LA11, LA12]

Total Employees Receiving Work Assessment and Career Development

Description	Year				
	2011	2012	2013	2014	2015
Promotion	29	19	34	50	0
Demotion	0	0	0	0	0
Transfer	0	1	0	2	0

We consistently implement competency-based HR management based on applicable regulations, while executive development is conducted by improving personnel competencies in accordance with applicable requirements for each level.

To measure employee performance, we have developed a performance assessment system based on individual and team Key Performance Indicators (KPI), which is the basis for determining career paths and remuneration. Further, we have also prepared a succession planning program with attention to competency and career path as one of the bases for decision making. During 2015, there were no promotions as the company's operations were temporarily suspended due to the landslide.

> "To measure employee performance, we developed a performance evaluation system based on individual and team Key Performance Indicators (KPI), which serves as the basis for assessment and to determine career paths and remuneration."

EQUALITY IN HUMAN RESOURCE MANAGEMENT [G4-LA12]

We strive to optimize our human resource management, paying attention to the interests of employees, while considering the Company's abilities. As part of the implementation of a high-quality human resource management policy that pays attention to the interests of both parties fairly and with accountability, we apply the following basic policies to our human resource management:

1. Compliance with all employment regulations and legislation.
2. Fostering good relations with employees based on mutual cooperation and on a periodically reviewed Collective Labor Agreement.
3. Implementing a performance-based remuneration system that is fair, transparent and accountable.
4. Respecting the human rights of employees, including fully supporting the formation and activities of the Employees' Union.
5. Organizing various programs to improve employee skills and competency training to improve individual, group and ultimately corporate performance.
6. Applying equality in career paths and remuneration.

We apply equal opportunities for all employees' career development in accordance with competencies and company development. Consistent application of the principle of equality in this reporting year has resulted in no discrimination cases related to ethnicity, race, religion or gender at any level of the Company. This is demonstrated in the employee composition based on position, as shown in "Employee Demographics". [G4-HR3]

BENEFITS

Our remuneration policies regulate the provision of fair compensation in return for fair work, based on salary grade levels (SGL) that illustrate each employee's position, duties and responsibilities. We also provide other benefits to employees in the form of a major religious holiday bonus, health insurance, pension, healthcare and holiday allowance determined based on applicable regulations, which are made in addition to remuneration.

We pay remuneration based on employee status, namely permanent or contracted employee. Several types of remuneration, such as pensions, are not paid to non-permanent employees. [G4-LA2]

Remuneration Types Based On Employee Status [G4-LA2]

Facility	Description	
	Permanent Employee	Contracted Employee
Basic Salary	yes	yes
Health Allowance	yes	yes
Insurance Allowance	yes	yes
Workplace Accident Allowance	yes	yes
Maternity Allowance	yes	yes
Pension	yes	no
Salary-based Loan	yes	no

We also provide a number of other incentives to our employees, including:

- Help with education/training costs.
- Periodic health checks.
- Loans based on salary.
- Assistance to buy prostheses, glasses and hearing aids
- Scholarships for employees' relatives.
- Assistance to take religious pilgrimages.
- Assistance with house ownership.
- Assistance with annual leave costs.
- Help with infertility and IVF treatments.

In addition to material benefits, the Company also specifically applies a maternity policy entitling pregnant women to 90 days' leave. This leave is accompanied by the right to return to work at the end of the maternity leave. During this leave, employee rights, including salary and various other benefits, are still met by the Company. We also provide the right to unpaid leave for employees undertaking education overseas. After completing their education, employees are entitled to return to work with the Company.

"We set up an employee award program as a form of guidance for employees"

Pension Program [G4-EC3]

Wayang Windu provides a pension program in cooperation with a competent pension fund management company. To ensure that pension funds are sufficient for employees entering retirement, we help pay pension contributions. Iuran Pensiun diberikan dari dua sumber yaitu:

1. Employer Contribution of 6% from Employee Salary
2. Employee Contribution 2% of Employee Salary

When an employee retires, he or she receives all the funds in the pension fund they are entitled to in a lump sum from the Pension Fund Management Institution (DPLK).

EMPLOYEE AWARDS PROGRAM

In addition to the above programs, the Company also organizes an employee award program as a form of guidance for employees. Employee awards cover: Achievement Award, Exemplary Award, Service Award and Retirement Award.

DEVELOPING INDUSTRIAL RELATIONS [G4-HR4,G4-11]

We fully support the establishment and activities of a Labor Union to bridge communications between employees and the management for the fulfillment of employee expectations, while at the same time supporting optimum company performance. We believe that this can be achieved by facilitating constructive interaction with the employees collectively through the Labor Union (SP-WWL). This constructive interaction facilitates two-way communication and mutual understanding, allowing for various agreements to be generated that can stimulate optimum employee performance and the fulfillment of employee rights. In continuation of the previous agreement, in 2014, the Labor Union and Company Management completed discussions to determine the points in the Collective Labor Agreement (CLA) for 2014-2016.

The results of this agreement are contained in the Collective Labor Agreement (CLA) signed on 10 September 2015, which will be in effect from 10 September 2015 to 9 September 2017.

The CLA has been registered with the Bandung office of the Manpower and Transmigration Agency with number Kep 230/72/I/HIPK/2006 dated 16 January 2006, as well as being registered with the Manpower and Transmigration Ministry c.q. Directorate General of Industrial Relations and Manpower Social Security with No. 134/Pdf.03/PKB/VIII/2012.

The points contained in the 2014-2016 CLA contain the collective agreements between the employees and the company that have been agreed at the end of negotiations by all SEGWWL employees who are members of SP-WWL (100%), such that the rights of all employees are protected and represented in the Collective Labor Agreement.

The CLA basically regulates various crucial rules and agreements related to rights, responsibilities and employee relations with the company, including the minimum notification time for any substantial changes to working conditions, such as the closure of a work unit and such like. The CLA also provides space for dispute settlement between employees and the company management. As a result of these regulations, during the reporting year there have been no disputes triggering a strike.

Freedom of Association [G4-HR4]

The company guarantees its employees the right to be a union member and to form an employee organization or union in the company environment, as well as the freedom to become union management, as provided in Law No. 21/2000 concerning Labor Unions. A total of 185 active employees are currently members of the SEGWWL Labor Union for the 2014-2016 period out of a total of 223 permanent employees, or 83% of permanent employees.

Employees can submit improvement suggestions, opinions and constructive criticism to improve operational patterns and their welfare to the Top Management through the SEGWWL Labor Union. This input can be presented in the GMS and in other interactive forums between the Top Management and SEGWWL Labor Union. This mechanism demonstrates the importance of employees as key stakeholders who are also responsible for the continuity of the business and the company.

Ensuring a Comfortable Work Environment

We have established a physical and psychological environment in our work area so that the working environment is always healthy, safe, secure and comfortable and has a positive effect on employee performance.

This favorable environment has resulted in relatively low employee turnover rates.
In the reporting year, eight employees stopped working for us, three of whom retired, four of whom resigned, while one died. This is equivalent to 3.6% of the total 223 permanent employees as of the end of the year. [G4-LA1]

Permanent Employee Turnover Rate [G4-LA1]

Jenis Kelamin	Tahun				
	2011	2012	2013	2014	2015
Pensiun	2	1	1	5	3
Meninggal Dunia	0	3	0	0	1
Mengundurkan Diri	2	3	2	4	4
Total	4	7	3	9	8

Working Hours and Changes to Working Hours

The Company implements normal working hours, shifts and special work hours to carry out operational and security work.

We provide compensation in the form of overtime in accordance with applicable employment legislation for employees who have to complete their work outside of previously agreed work hours. If at a later date there are regulation changes related to work hours, changes to operational patterns or cessation of operations, we will provide at least three months' notice before such changes come into effect.

"We guarantee the right of employees to organize and form a union or labor organization in the company environment"

Employee Salaries

Employee salaries take the form of fixed salary, holiday allowance, service award, exemplary employee award, performance incentive, bonus and other benefits. (See "Benefits Package"). The minimum wage received by new employees at the lowest level in the Company is guaranteed to be higher than the regional or provincial minimum wage in the area where the Company is operating. As an example, following is a table comparing the wage of the lowest level new SEGWWL recruit with the closest provincial minimum wage (UMP). [G4-EC5]

Comparison Of Company Salary To Minimum Regional Wage [G4-EC5]

Year	Salary of lowest level employee	Minimum Regional Wage	Percentage
2011	Rp, 2,842,000	Rp, 1,123,000	153%
2012	Rp, 3,155,000	Rp, 1,223,800	257.8%
2013	Rp, 3,284,000	Rp, 1,388,333	236.5%
2014	Rp, 3,539,000	Rp, 1,35,476	203.9%
2015	Rp, 3,539,000	Rp, 2,001,195	176.8%

Respect For Human Rights

At every stage of operational activity, we are fully committed to always upholding and respecting Human Rights.

The policy supporting freedom of association, participation in politics and the right to freely channel political aspirations, including submitting suggestions for the Company's development (through the Labor Union and mechanisms available for this purpose), are some ways we respect human rights.

Human Rights Training and Communication

To ensure Human Rights are upheld in securing the company's assets, we run competency training for the Company's Security Unit. The training curriculum is in line with the curriculum compiled by the Indonesian Police, which includes strengthening and updating knowledge of Human Rights for Security Guards.

Child Labor

We implement a minimum age on prospective employees, who must have at least a high school education and, for permanent employees, be at least 20 years old as proven by a valid, current ID card. This is in accordance with government policy, as reflected in to Law No. 13/2003 on underage workers.

DEMOGRAPHICS AND NUMBER OF EMPLOYEES [G4-10]

There are three types of employee status: permanent employees, non-permanent employees and outsourced labor. In the 2015 reporting year, there were 221 company employees. Of these permanent employees, 191 are assigned in the Wayang Windu field, while 31 others are assigned to Head Office.

Total Employees Based On Employment Status [G4-LA1]

Employment Status	Year				
	2011	2012	2013	2014	2015
Permanent Employee	208	212	218	214	221
Non-Permanent Employee	23	17	6	5	2
Outsourced Labor	180	241	226	286	180
Total	411	470	450	505	403

Total Employees Based On Place Of Work [G4-LA1]

Place Of Work	Year				
	2011	2012	2013	2014	2015
SEGWWL Field	190	185	189	183	191
Head Office	18	27	29	31	32
Total	208	212	218	214	223

There are 2 non-permanent employees and 180 outsourced staff, with duties including maintenance, janitorial services, office boys, drivers and catering. The number of outsourced and contracted staff has fallen from 286 employees and five contracted staff in 2004 due to the landslide that resulted in the company temporarily suspending operations.

Of all the permanent employees in 2015, the majority are high school and university graduates, with 44.84% graduating high school and 32.29% with a Bachelor degree. We have 15.25% of employees with a three-year diploma, and 5.83% with a Master degree, while one has a doctorate.

Permanent Employees Based on Education [G4-LA1]

Employee Education Level	Year				
	2011	2012	2013	2014	2015
Elementary / Junior High School	5	5	3	3	3
High School	128	117	106	100	100
Diploma (1-3)	14	19	34	34	34
Undergraduate Degree	57	62	63	64	72
Postgraduate Degree (Master)	4	9	12	13	13
Postgraduate Degree (Doctorate/Ph.D)	0	0	0	0	1
Total	208	212	218	214	223

The reason the majority of our employees are junior or senior high school graduates is due to the non-operational scope of the Company in security, with primary duties being security and inspecting conditions in the field, which do not require a high degree of skill, but do require prime physical condition. The composition of SEGWWL employees in 2014, according to educational background, was as follows:

Employee Demographics Based On Gender [G4-LA1]

Gender	Year				
	2011	2012	2013	2014	2015
Female	20	13	16	16	19
Male	188	199	202	198	204
Total	208	212	218	214	223

We do not discriminate or have any employee recruitment limits related to gender. However, due to the type of work in the field, there are fewer female than male employees, with 19 female employees, or approximately 8.5% of total employees. The majority of the female employees work in administration and other areas that are not in the field.

In 2014, the day-to-day management of the Company was handled by 10 Managers, 62 Supervisors assisted by 19 staff and 132 non-staff, with details as follows.

Position and Role of Permanent Employees in 2015 [G4-LA12]

Role	Description					
	Total	Gender		Age		
		Male	Female	<30	30-50	>50
Manager	10	10	0		9	1
Supervisor	62	52	10	3	55	4
Staff	19	17	2	4	15	0
Non-Staff	132	127	5	11	111	10
Total	223	206	17	18	190	15

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05. SUPPORTING **ECONOMIC GROWTH**

"Supporting the development potential of the economy by producing and supplying high quality electrical power exploiting the potential of environmentally friendly renewable energy, as well as building relationships with our business partners to empower the local economy in line with business growth."

CONTRIBUTING TO NATIONAL ECONOMY GROWTH

One prerequisite for high economic growth in a country is the availability of basic infrastructure, including electricity. Global and national economy observers argue that Indonesia still has shortcomings in the provision of adequate infrastructure, including the availability of roads, ports and electricity.

The electrification ratio in Indonesia is still around 84.30% (2014), lagging relatively behind ASEAN countries, which are already in the 95% range (the Philippines), even 100% (Singapore, Thailand, Malaysia). Therefore, the Government has set the target of adding a further 35,000 MW of electricity in the next five years to catch up and support economic growth. We are committed to supporting this target by continuing the Company's direct contributions to the growth of the national economy by supplying reliable and trusted electricity from renewable energy sources, namely geothermal energy.

In 2015, we were able to supply electricity for the power grid belonging to PT PLN (Persero), as the buyer, amounting to 1,111,244 MWh, equivalent to 4,000,478 GJ. In the coming years, we are targeting an increase in electrical power supplied from Wayang Windu's geothermal fields, through our program to increase production wells and develop new generators and/or additional existing generating capacity based on the results of the completed exploration drilling. We also directly support national economic growth through the distribution of economic value generated by electricity sales revenue that we have earned. In line with our success in realizing our ongoing efficiency programs, we were able to maintain the level of our economic contribution to the national economy through the payment of taxes, as well as of improving local revenues.

We also managed to improve the local community's economy, as demonstrated by the increasing human development index (HDI) published by the Central Statistics Agency, as a barometer of success for the Economic Empowerment program, part of the Company's Corporate Social Responsibility Program, which we run consistently.

DEVELOPMENT OPPORTUNITIES [G4-2]

According to the results of a study by experts, total useable geothermal potential in Indonesia is equivalent to 28,528 MW, equivalent to about 40% of the world's geothermal potential. This amount is also equivalent to 54% of installed power generation capacity in Indonesia as of the end of 2015, which amounted to 52,889 MW (2014: 51,620 MW).

Total geothermal potential exploited by Indonesia's geothermal power plants in 2015 amounted to 1,348 MW (Source: PLN 2015 Power Plant Installed Capacity), or just 4.7% of total potential available power, including the Company's electrical power capacity of 227 MW in 2015.

The Indonesian government seeks to facilitate increased utilization of renewable energy sources, including through the issuance of Forestry Ministry Regulation No.: P.18 /Menhut-II/2011 concerning guidelines for leasing forest land that allows the construction of geothermal power plants in protected areas. The Government, through the Energy and Mineral Resources Ministry, has also issued a rule change related to calculations to purchase electric power from geothermal power plants, namely Energy and Mineral Resources Ministerial Decision No. 22/2012 on "The assignment of PT PLN (Persero) to purchase electricity from geothermal power plants at benchmark electricity purchase prices from

geothermal power plants", which allows the purchase of electricity from geothermal power plants in Java, Madura and Bali, including the area managed by SEGWWL, to be renegotiated to around US 12.5 cents/kWh.

This shows that there are opportunities to continue the business development that has been ongoing over the years. The risks faced related to the utilization of geothermal energy include: the relatively new use of geothermal energy as a renewable energy source, the high cost of development funding, the risk of failure, and the fact that the potential geothermal energy locations are primarily in protected forest areas in mountainous areas that are hard to access.

MAINTAINING UNIT 1 & 2 GENERATION CAPACITY AND GEOTHERMAL FIELD DEVELOPMENT

To take advantage of opportunities to develop geothermal power plant potential, we run two programs, namely to maintain the performance of existing generating units and increase electricity production capacity by building new generating units. To maintain the performance of the existing generating units, in 2015 we implemented a variety of innovative performance improvement programs throughout the generating network, including: implementation of the Well Intervention Program, implementing the "Integrated Control" Regulatory Systems and the SIMOP (Simultaneous Operation) Program. The general objective of these programs is:

- Improving the operational efficiency of primary equipment and maintaining protection systems to ensure power generation facilities are always ready and capable and in prime condition.
- Ensuring synergy, integration and reliability in power generation.
- Ensuring increased power generation performance under normal operational conditions.

To maintain the electrical production capacity of Units 1 and 2, with a total capacity of 227 MW, and look for potential development opportunities for Unit 3, in this reporting period, we have completed work on drilling several production wells as part of the well make up program. We are also working to develop geothermal potential in Jailolo district, West Halmahera, North Maluku, which will be managed by Star Energy Geothermal Halmahera, with estimated capacity of 2x5 MW.

We are committed to complying with all applicable provisions related to developments and the implementation of power purchasing for the electricity we produce, and seek to effectively and efficiently improve power plant management, so that we never receive a penalty or sanction related to the implementation of unfair competition practices. [G4-SO8]

CONTRIBUTIONS TO THE STATE

We make various direct contributions to the state, encompassing: tax, land/use of potential geothermal energy fees and import duties.

We also always fully comply with all Government regulations on taxation, such that each year we contribute directly through the payment of sales tax, income tax and other relevant taxes. Our compliance with all taxation rules and regulations means that in the reporting year we have not been fined due to violations of these rules and regulations. [G4-SO8]

Fulfilling demand for adequate supplies of electricity has a positive impact on economic growth, such that our success in supplying electricity in line with our production abilities and contractual requirements also support national economic growth.

We also contribute materially to the state through the construction of various facilities and infrastructure (see "Community Development"), including:

- Building village roads.
- Building village and district government infrastructure
- Building religious facilities.
- Building facilities for education for kindergarten/ early years, elementary, junior and senior high schools.
- Others.

SUPPORTING REGIONAL ECONOMIC GROWTH [G4-EC8]

We support regional economic growth through direct and indirect contributions in the form of land and building tax on office buildings and supporting facilities that we own, adding to regional revenue (PAD) through the payment of tax on operational vehicles, building public facilities and infrastructure, as well as absorbing local labor in the area around our operations.

The total number of local residents employed by the Company reached 223 people, or 55.3% of all employees, fewer than the 393 people, or 77.8% of the total workforce, in 2014. Some of these local employees have successfully developed their skills and have been able to achieve career positions as staff, supervisors and even managers. (See "Wayang Windu's People")

We also contribute indirectly to regional economic development through the use of goods and services from local suppliers. We hold firm to our commitment and policy to procure goods and services from local suppliers, provided that the quality and price offered are beneficial to both parties.

RELATIONSHIP WITH SUPPLIERS, CONTRACTORS AND BUSINESS PARTNERS

To improve workforce competency and supply management to attain the level of occupational health and safety, as well as environmental protection (SHE), equivalent to that applied by SEGWWL, we implement the Contractor Safety and Health Environmental Management System (CSMS) to screen and assess the performance of all key contractors. [G4-EN32]

CSMS consists of six phases: risk evaluation, pre-qualification, selection, post-job activity, managing work and final evaluation. We continue to require fulfillment of product quality, credibility, accountability, accurate supply of goods and services from our business partners, as well as competitive prices. We implement the evaluation program periodically on our listed partners during the procurement process, implementation and at the end of the contract period, as a basis to assess the next selection process.

According to the CSMS criteria, during the screening process and contractor performance assessment, we require certain key contractors with contract values of a certain amount to fulfill their employees' rights as part of our commitment to upholding human rights.

We have also introduced a whistleblowing system to ensure that each transaction to procure goods or services is transparent and accountable. In the reporting year, all our key partners (100%) had undergone the screening process. [G4-LA14, G4-HR10]

PRODUCT RESPONSIBILITY AND CONSUMER PROTECTION

Our product is electrical power of 150 KiloVolts (KV) which is sold to a single customer in accordance with legislation, namely PLN. Bearing in mind that we only sell electrical power, no packaging or product code label is necessary. Furthermore, as we only have one sole customer, which is determined by legislation, there is no marketing, marketing communication or similar to market our electrical power. Our electricity is supplied to the Java-Madura-Bali grid managed by PLN. According to the electrical power sales mechanism with PLN, the following provisions are applicable: [G4-PR4]

- The sale of electricity is regulated in a sales agreement valid for a specified period of time.
- The sales price per kWh of electricity is regulated in a decision issued by the Energy and Mineral Resources Minister.
- The amount of power sold in each specified period is in accordance with the ability of the supplier and the power requirement of the grid.
- The supplier, Wayang Windu, must be capable and fully committed to supplying the amount of power at the required voltage noted in the contract. Meanwhile, PLN must be fully committed to absorbing all this electricity.
- In the case the Supplier is unable to supply the amount of power noted in the contract, the Supplier will be fined for undersupply in accordance with mutually agreed provisions.
- Conversely, should PLN be unable to absorb all the power supplied as per the contract, then PLN will be fined based on the amount of power that it cannot accept in accordance with mutually agreed provisions.

To ensure the fulfillment of the provisions related to the amount of power and voltage supplied, we communicate intensively with PLN. All information related to planned periodic maintenance of steam production installations and generators is communicated and discussed with PLN. The implementation of production procedures and

sales administration during this reporting period has not resulted in any reports, complaints or financial sanctions related to violations of the contract to supply electricity or use of the product.

PRODUCT HEALTH AND SAFETY [G4-PR2]

Power lines of 150 KV are categorized as high voltage and can endanger health and lives if they are too close or are touched. To prevent this, we ensure the transmission system and electrical connections from the generators to PLN's transmission network are secured and have reliable insulators so as not to endanger humans or the surrounding environment.

We also implement tight security around the production wells, even though they are in remote locations and far from local community activities. Only on duty authorized personnel are permitted to enter the area and work around the production wells. All employees working in the production well areas are required to wear the stipulated OHS-compatible clothing. Meanwhile, to secure the pipelines feeding geothermal energy from the production wells, we use special lining as a heat insulator to ensure there is no danger to humans or animals that touch the pipes, which also makes them safe for the surrounding environment.

Periodically, we evaluate and inspect the condition of all production facility safety, production wells and connections to the PLN grid transmission system to ensure compliance with all safety regulations and procedures to prevent threats to the health and safety of employees, the public, wildlife and the surrounding environment. Therefore, during this reporting year, we have not received any reports or complaints indicating violations to the health and safety of the surrounding environment in the product supply process.

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(Wayang Windu) Limited

06. IMPLEMENTING HIGH QUALITY **SUSTAINABILITY GOVERNANCE**

"A strong commitment to implementing high quality, best practice corporate governance to support the achievement of various sustainable development goals and to strengthen relationships between the company and its stakeholders to achieve optimum added value"

BEST GOVERNANCE OBJECTIVES AND TARGETS

We are determined to consistently improve and increase the quality of good corporate governance implementation across all operational aspects with objectives encompassing:

- Achieving maximum growth and yield to improve the company's prosperity, while creating long-term value for shareholders and paying attention to the interests of other stakeholders;
- Controlling and directing good relations between shareholders, the Board of Commissioners, Board of Directors and all the company's stakeholders;
- Supporting internal audit activities and company development;
- Managing all resources with greater responsibility for all stakeholders;
- Improving the welfare of all the company's personnel.

The Company provides the optimum benefit for all stakeholders. We are determined to consistently improve the quality of good corporate governance through consistent application of the five basic principles of GCG: Transparency, Accountability, Responsibility, Independence and Fairness.

To support the improved quality of GCG implementation, we have strengthened some of the necessary institutions, including:

- Collective Labor Agreement, containing basic rules that bind employees in the execution of their obligations as employees and requires their compliance with all employment regulations.
- Code of Conduct, containing guidelines for behavior when interacting with internal and external parties, and professional communication within the Company environment.
- Whistleblower Policy Procedure Manual for all parties to contribute to efforts to prevent and handle occurrences of misuse of authority and violations that lead to corruption and fraud.

GOVERNANCE STRUCTURE AND MECHANISM [G4-34]

Wayang Windu's organization structure and governance comprises Shareholders and Directors. The Directors are the day-to-day operational managers of the Company. The decision-making mechanism is held by the Directors. The company body with the highest authority is the General Meeting of Shareholders (GMS). The Shareholders convene an Annual General Meeting of shareholders once a year and an Extraordinary General Meeting of Shareholders when required to determine the business direction and to evaluate the performance of the Directors.

INTERNAL AUDIT

We apply internal audits as part our implementation of the principles of accountability and transparency, basic principles of GCG. Through the Internal Audit department, the management guarantees the effectiveness and efficiency of operations, implementation of all operating standards, compliance with regulations and legislation, as well as accurate and reliable financial reporting.

A description of the duties, responsibilities, authority and reporting mechanism for audit findings as a whole are recorded clearly in the Internal Audit Charter, which serves as a reference for the Internal Audit personnel in carrying out their duties. The Internal Audit Charter has been approved and ratified by the Directors with the knowledge of the Company's Owners.

In addition to referring to the Internal Audit Charter, in carrying out their duties, our internal audit personnel always refer to International Standards for the Professional Practices of Internal Auditing issued by IIA (Institute of Internal Auditing). In addition, to ensure that our operational activities are compliant with applicable regulations and legislation, several regulation references also serve as benchmarks in auditing activities, such as: the Principles of Good Corporate Governance, Code of Conduct, Sarbanes-Oxley, COSO Frameworks, Enterprise Risk Management and others.

To maintain and improve the quality of audit results in line with applicable audit standards, the Internal Audit personnel continue to improve their competencies through various types of education, such as tiered professional internal audit certifications, including operational field training. The auditors in the Internal Audit department have been provided with specialized education on corruption and how to prevent it.

To prevent and minimize such reprehensible actions, periodic audits are conducted on work units that are prone to corruption, such as procurement, maintenance and finance. [G4-SO3]

The Company applies strict sanctions in the form of termination of employment and legal process for every strongly indicated type of corruption. In 2015, all indications of corruption within the company were managed and resolved.

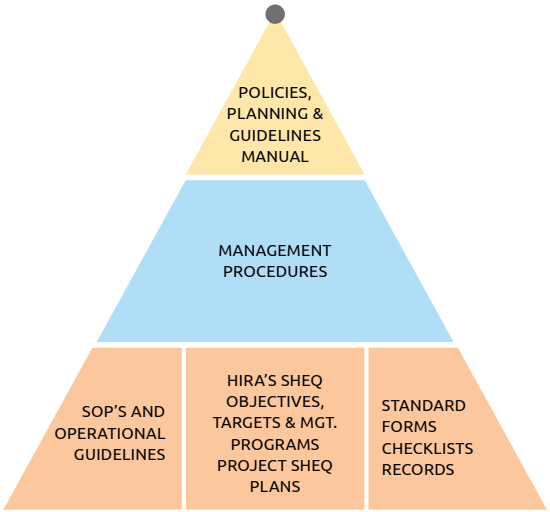
WAYANG WINDU INTEGRATED MANAGEMENT SYSTEM (WWMS)

[G4-14, G4-15]

We implement several accredited operating standards, ISO 14001:2004 for environmental management, OHSAS 18001:2007 for occupational health and safety, and ISO 9001:2004 to quality management, as well as other as yet unaccredited operating standards, such as maintenance operating standards, etc. To facilitate the administrative system for all these operating standards, we have integrated them into one, named the Wayang Windu Management System.

The WWMS integrated system is effective in ensuring improved operational performance, including environmental management. In day-to-day operational activities, sustainability begins with the PLANNING stage and the environmental risk analysis process (Hazard Identification & Risk Assessment/HIRA); followed by IMPLEMENTATION through various standard procedures; CHECK with Internal Audit and External Audit (such as the PROPER Audit, ISO 14001, OHSAS 18001, audits by Bandung Environment Agency, EBTKE Agency, and others); and ACTION as the manifestation of continual improvement through the Performance Improvement Request process. The consistent application of the integrated Wayang Windu Management System is part of our serious efforts to improve the quality of best corporate governance implementation.

Wayang Windu Policy Statement



BUSINESS ETHIC [G4-56]

As part of the Company's commitment to improving the quality of GCG best practice implementation, in 2015, we completed overall implementation of test results and compilation of our Code of Conduct Guidelines, which had been completed in 2013. This required an information dissemination process and the formulation of the "Commitment Statement" for every employee to comply with and apply every point of the provisions contained therein. The Code of Conduct Guidelines contains the commitment of all personnel of every rank to always uphold and implement common business ethics that prevail internationally.

The implementation of the points and provisions in the Code of Conduct demonstrates the Company's commitment to maintaining trust and long-term business relationships. This move also is part of our efforts to meet stakeholder expectations that the Company always applies business ethics that are in accordance with international norms.

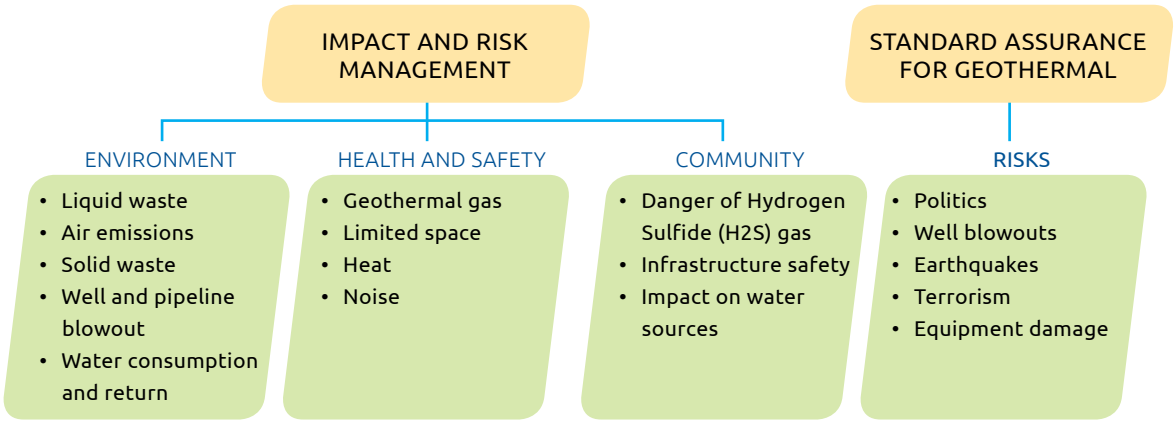
Several examples of business ethics contained within the Code of Conduct include:

- **Whistleblower System**
  As part of our efforts to improve the application of good corporate governance, including the eradication of corruption, bribery and other fraudulent practices, SEGWWL had consistently and continues to implement the completed study and violation reporting system guidelines known as its Whistleblower System. In April 2013, we officially commenced implementation of the Whistleblower system in follow up to business demands for transparency, accountability and fairness. In the guidelines, we have put in place a mechanism that encourages witnesses to make reports, with a procedure that guarantees the complainant's identity and that of the official investigating remain confidential.

- **Prohibition of Giving and Receiving Gifts and Donations**
  We have consistently implemented a prohibition on giving and receiving of gifts and donations by parties inside and outside the company. This prohibition is applied to uphold the independence of decision making, while minimizing the potential for conflict of interest that could damage our business partners' trust in the integrity of the company.

- **Investment, Procurement of Goods and/or Services Policy** [G4-LA14, G4-HR10]
  We apply a procurement policy that is transparent and accountable, satisfying the principles of effectiveness and efficiency, openness, competition and non-discrimination. The procurement process for goods and services is through healthy competition in accordance with applicable regulations and legislation, demonstrating our commitment and business principles to uphold fair and anti-monopolistic business practices.

  In the process of selecting contractors for work of substantial value, such as exploration and exploitation drilling projects, we require a clause to fulfill and respect human rights, as well as considering companies with a good reputation for respecting human rights. All our new suppliers and business partners undergo a screening process related to human rights, including fulfillment of all employment legislation.



- **Equal Opportunity**
  While developing managed areas in remote regions, we uphold fulfilling our human resource requirements based on competence and equal opportunity. Prior to exploration and exploitation, we always conduct a series of overall environmental impact analyses, including on the socio-cultural life of the nearest communities. We also implement the principle of equal opportunity in recruitment, improving competencies and determining career paths based on a dynamic assessment system applied transparently, including for talented human resources in local communities.

  By strongly upholding this commitment, during this reporting year, there have been no cases of discrimination reported.

- **Political Involvement and Public Policy**
  We expressly prohibit the direct and indirect use of Company funds or assets for the interests of political parties or political party candidates. The Company has also never been involved in preparing or forming any public policy, with the exception of suggestions to amend investment regulations in the field of geothermal-based power generation channeled through investor associations/companies engaged in the geothermal industry.

  Other involvement is purely the suggestion to implement a Community Development program that is synergistic and mutually supportive with programs to develop remote villages initiated by and/or implemented by the Government/Local Government.

- **Submitting Opinions to the Directors**
  We provide our employees with the right to give opinions and suggestions to the Directors through formal mechanisms, such as Union Meetings with the Management and company work meetings.

  This mechanism is to ensure the relationship with internal stakeholders, specifically management and employees, remains constructive, and has a positive impact on improving the Company's performance.

COMMITMENT TO EXTERNAL INITIATIVES [G4-16]

We actively adopt several external initiatives in response to climate change, namely the implementation of the Clean Development Mechanism / CDM, part of the Kyoto Protocol implementation agreed upon by the Government of Indonesia through Law No. 17/2004 on the Ratification of the Kyoto Protocol at The United Nations Framework Convention on Climate Change (UNFCCC).

We also play an active role in efforts to create an investment climate to utilize geothermal resources to generate electrical power through the following organizations:

- API (Indonesian Geothermal Association)
- MKI (Indonesian Electricity Community)
- METI (Indonesian Renewable Energies Community)

STAKEHOLDER MANAGEMENT [G4-24, G4-25, G4-26, G4-27]

We believe that long-term business sustainability implies success in fostering harmonious relationships with all stakeholders. For this reason, we strive to create harmonious relationships with our stakeholders through the implementation of high quality stakeholder management.

For this purpose, we have carefully identified the main groups of stakeholders with a dominant influence on the sustainability of the business and strive to satisfy their expectations in accordance with available resources.

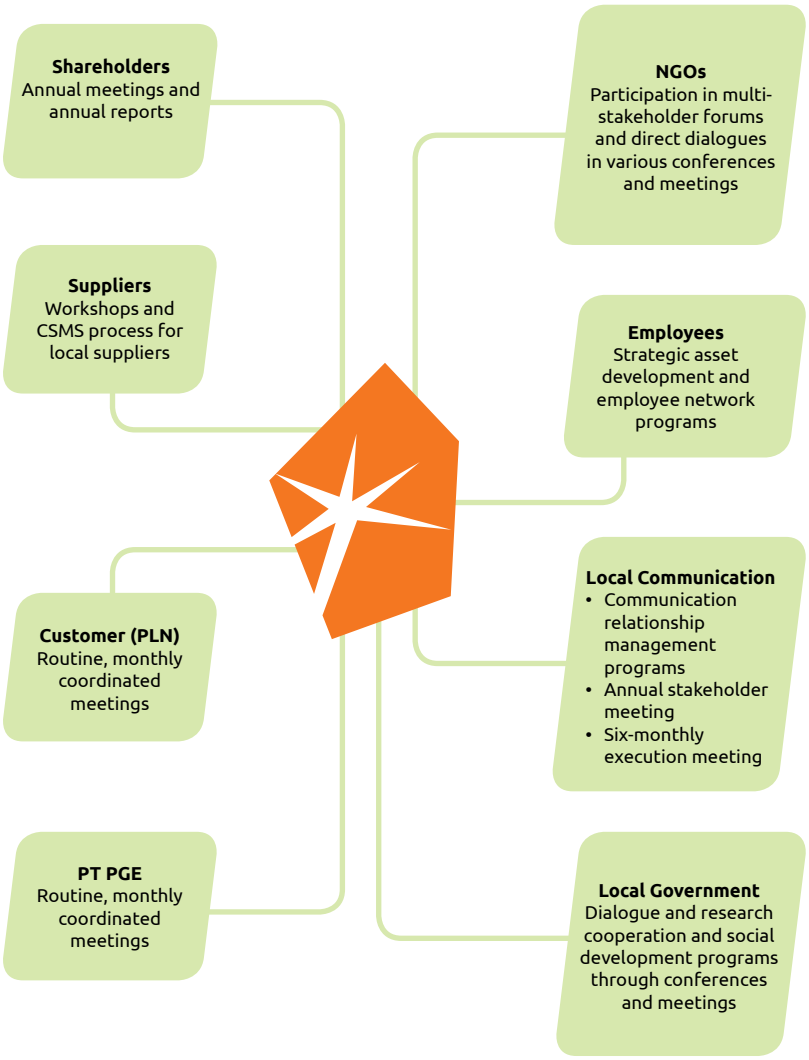
These stakeholders are: customers, employees, government/regulators, business partners/contractors/suppliers (vendors), PGE, NGOs and the surrounding communities.

By managing two-way relationships, we work to clearly understand stakeholder expectations. At the same time, we hope that stakeholders can understand to what extent we have made efforts to meet these expectations, recognize the major obstacles we face and even anticipate to what extent their expectations can be met.

Stakeholder Management Summary [G4-24, G4-25, G4-26, G4-27]

Stakeholder & Basis for Determining Stakeholders [G4-24, G4-25]	Approach & Meeting Frequency [G4-26]	Focus [G4-27]	Follow up [G4-27]
Shareholders	- AGM / once a year	Annual Report for shareholders	Approval of the financial report and GMS approval as required for the directors' actions
- Representatives	- EGM / as needed		
Directors			
- Responsibility	Directors meetings convened as required for the company's operation. Monthly, routine Directors meeting to discuss operational activities.	Company Operations	Approval of the Annual Report and other matters requiring a Directors Meeting Decision.
Customer (PLN) **- Influence** **- Dependency**	Coordinating Meetings on operations and routine monthly maintenance	• Scheduled generator unit maintenance • Generator load	• Send scheduled generator unit maintenance information to PLN • Send planned generator loading monthly and weekly
Employees Representatives	• Town Hall Meetings, • Gatherings, Outbound • Training Workshops and seminars • Mentoring and coaching; • as required	• Asset development program • Employee network strategic	Provide input on company programs to develop employees
PGE **- Representatives Contractors / Business Partners (Vendors/ Suppliers)** **- Dependency**	• Meetings to discuss Budget and Costs Plan, WP & B (quarterly) • Annual gatherings for quarterly or semester SHE Plan Audit	• Realization of work programs explained in presentations • Work Assessment	• Present program realization in presentation format with documentary photographs • Provide input to improve performance
Government / Local Government - Representative	• Meetings with Government officials • Participation in Government programs in line with company programs • Provide necessary comprehensive information transparently through regular cross-institutional meetings and Forum Group Discussions	Mechanism to provide information	• Satisfy government regulations • Cooperated with research and socio-economic program development to demonstrate improved community welfare
Local Community -Proximity	• Six monthly execution meetings • Community relationship management program • Twice yearly stakeholder meeting • Provide necessary comprehensive information transparently through bulletins every 4 months & regular cross-institutional meetings and Forum Group Discussions • Formation of a Counseling Team with membership from community figures as a mediator bridge between the company and the local community	• Contribute to society through community-based development programs (economic, educational, health) • Assist with constructing basic infrastructure	• Conduct activities with the community (health and environment) • Provide and transparently explain a variety of necessary information
NGOs Representative	• Participate in multi-stakeholder forums and initiate direct dialog through a variety of conferences and meetings • Provide the necessary information transparently and comprehensively through bulletins every 4 months and regular cross-institutional meetings and Forum Group Discussions. • FGDs are conducted as needed	Information to comply with government regulations	Provide and transparently explain a variety of necessary information

Chart Identifying Stakeholders and their Demands



WELCOMING A NEW PARADIGM FOR SUSTAINABLE DEVELOPMENT

The Millennium Development Goals (MDG) concept and its formula of eight global goals was implemented between 2000 and the end of 2015, when they officially ended. The eight Global Goals in the MDGs (2000-2015) are as follows:

1. Eradicate Extreme Poverty and Hunger
2. Achieve Universal Primary Education
3. Promote Gender Equality and Empower Women
4. Reduce Child Mortality
5. Improve Maternal Health
6. Combat HIV/AIDS, Malaria and Other Diseases
7. Ensure Environmental Sustainability
8. Develop a Global Partnership for Development

In follow up, all the member countries of the United Nations agreed on a sustainable development concept to replace/continue the MDGs. This development concept is called Sustainable Development Goals ("SDGs").

The SDGs were discussed and agreed by almost all UN member countries, unlike the MDGs, which were initiated by the 34 countries in the OECD (The Organization for Economic Co-operation and Development), namely 34 developed countries in the Americas, Europe and Australia, as well as several Asia countries.

The 17 Global Goals in the SDGs, which are to be implemented from 2016-2030, are:

1. No Poverty
   End poverty in all its forms everywhere.
2. Zero Hunger
   End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. Good Health and Wellbeing
   Ensure healthy lives and promote well-being for all at all ages.
4. Quality Education
   Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Gender Equality
   Achieve gender equality and empower all women and girls
6. Clean Water and Sanitation
   Ensure availability and sustainable management of water and sanitation for all.
7. Clean Affordable Energy
   Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Decent Work and Economic Growth
   Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. Industry, Innovation and Infrastructure
   Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. Reduced Inequalities
    Reduce inequality within and among countries.
11. Sustainable Cities and Communities
    Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Responsible Consumption and Production
    Ensure sustainable consumption and production patterns.
13. Climate Action
    Take urgent action to combat climate change and its impact.
14. Life Below Water
    Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Life on Land
    Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. Peace, Justice and Strong Institutions
    Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Partnership for the Goals
    Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Indonesia has demonstrated its firm commitment to support and implement various programs to achieve these sustainable development goals in accordance with its abilities. Various formulas to achieve the SDGs have provided further opportunities for private corporations and state enterprises to play a role in supporting the achievement of these global development goals, according to their lines of business.

We also view our business activities as supporting the achievement of the sustainable development goals defined in the SDGs, considering that our product is one of the primary needs of all society while meeting environmentally sound development rules. Therefore, we are determined to improve the competencies of all our personnel to improve operational and financial performance, given that these global development goals are in line with our efforts to fulfill the expectations of our stakeholders as a major achievement of the key principle of sustainable business development.

GRI G4 CORE ASSESSMENT REPORT

National Center for Sustainability Reporting

Laporan Pengecekan Sesuai *GRI G4 Core*

The National Center for Sustainability Reporting (NCSR) has conducted a GRI G4 Core in Accordance Check on the Star Energy Geothermal (Wayang Windu) Ltd. Sustainability Report 2015 ("Report"). The check communicates the extent to which the GRI G4 Core criteria has been applied in the Report. The check does not provide an opinion on the sustainability performance of the reporter or the quality of the information provided in the report.

We conclude that this Report has presented disclosures, either fully or partially, in accordance with GRI G4 Core criteria.

Jakarta, 25 October 2016

National Center for Sustainability Reporting

Dewi Fitriasari, Ph.D., CSRA, CMA
Director

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ACCORDANCE WITH SUSTAINABLE DEVELOPMENT GOALS

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1	**No Poverty** - End poverty in all its forms everywhere.	72
2	**Zero Hunger** - End hunger, achieve food security and improved nutrition and promote sustainable agriculture	n.a
3	**Good Health and Wellbeing** - Ensure healthy lives and promote well-being for all at all ages	85
4	**Quality Education** - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	n.a
5	**Gender Equality** - Achieve gender equality and empower all women and girls	n.a
6	**Clean Water and Sanitation** - Ensure availability and sustainable management of water and sanitation for all.	65
7	**Clean Affordable Energy** - Ensure access to affordable, reliable, sustainable and modern energy for all	44
8	**Decent Work and Economic Growth** - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	93
9	**Industry, Innovation and Infrastructure** - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	n.a
10	**Reduced Inequalities** - Reduce inequality within and among countries	72
11	**Sustainable Cities and Communities** - Make cities and human settlements inclusive, safe, resilient and sustainable	n.a
12	**Responsible Consumption and Production** - Ensure sustainable consumption and production patterns	n.a
13	**Climate Action** - Take urgent action to combat climate change and its impact	45
14	**Life Below Water** - Conserve and sustainably use the oceans, seas and marine resources for sustainable development	n.a
15	**Life on Land** - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	45, 53
16	**Peace, Justice and Strong Institutions** - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	n.a
17	**Partnership for the Goals** - Strengthen the means of implementation and revitalize the global partnership for sustainable development	n.a

FEEDBACK FORM

Thank you for reading this 2015 Sustainability Report. To improve future Sustainability Reports in the coming years, we hope that you will complete this Feedback Form and return it to us.

1. This Sustainability Report has provided information on various activities implemented by Wayang Windu to fulfill its corporate social responsibility.
   ☐ Agree ☐ Don't Know ☐ Disagree
2. The material included in this Sustainability Report, including the data and information, is presented in a way that is easy to understand.
   ☐ Agree ☐ Don't Know ☐ Disagree
3. The material included in this Sustainability Report, including the data and information, is complete.
   ☐ Agree ☐ Don't Know ☐ Disagree
4. The material included in this Sustainability Report, including the data and information, is accountable.
   ☐ Agree ☐ Don't Know ☐ Disagree
5. The material included in this Sustainability Report, including the data and information, is accountable.
   ☐ Good ☐ Don't Know ☐ Poor
6. What information do you think was useful in this Sustainability Report?
   .....
   .....
   .....
7. What information do you think was not useful in this Sustainability Report?
   .....
   .....
   .....
8. What information do you think was incomplete and could be improved in future Sustainability Reports?
   .....
   .....
   .....

Your Information

Full Name : .....

Institution/Company : .....

Email : .....

Stakeholder Identification (choose one):

- Government • NGO • Industry
- Academic • Media • Community
- Other, please state
  .....

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