

SUSTAINABILITY REPORT

2016

LANNA RESOURCES Public Company Limited

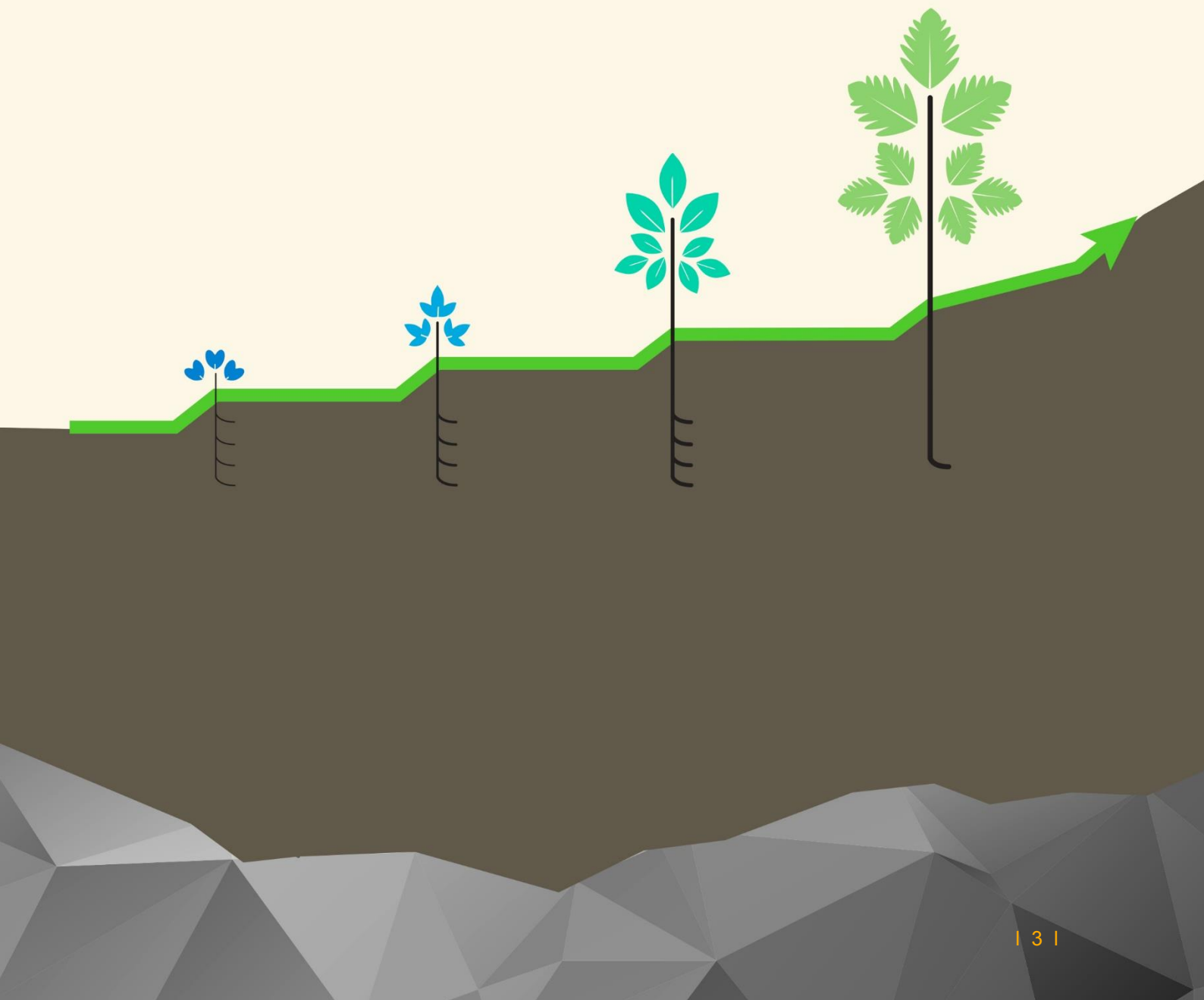


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Quality Energy

The Company is committed to deliver quality energy, which consists of quality of product, quality of management, quality of production and distribution, quality of environmental control, and quality of product for society.





CSR for Corporate Sustainability

As defined by the United Nations, sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Societies with sustainable development possess the following three key components:

1. Sufficiency of natural resources and resource management : This includes but not limited to: sufficiency of water resource, availability of varied sources of energy, and conservation of biodiversity.

2. Economic stability : Measures are put in place to ensure continuous economic stability that encompasses all aspects of economic development.

3. Good quality of life in the community: This includes but not limited to: good air quality and lack of pollution, good livelihood, suitable use of lands, as well as good quality of education.

With the international treaties which emphasis on the importance of balanced economic, societal, and environmental development, an organization that solely focuses on growth may not meet the expectation on the current business operations. Sustainable business practice is the singular key to the business operation of the Company. Additionally, corporate social responsibility is a supporting element to sustainable business practice in every aspect: economy, society, and environment. In other words, without corporate social responsibility, the Company many not maintain its sustainable business operations.

With an aim towards sustainable development, corporate social responsibility of the Company is represented by ethical business practice and good management, with emphasis on both local and global societal and environmental issues, including fostering trustworthiness in the society, ensuring effective business operation, risk management to improve competitiveness and value chain development.



Therefore, the Company puts great emphasis on social responsibility in business practice, with an aim towards sustainable development. Apart from environmental conservation and economic development that stimulates wealth distribution in the local community, other objectives include quality of life improvement and maintenance of good relationship with the community and stakeholders.

The Company also incorporates corporate social responsibility with business administration, in which the information is readily available for public scrutiny. This includes the following eight topics:



All of the above eight topics are in line with policies, strategy, corporate governance, and business plan of the Company, which allows the Company to connect with the stakeholders for sustainable growth of both stakeholders and the Company.

Sustainable Development Principle

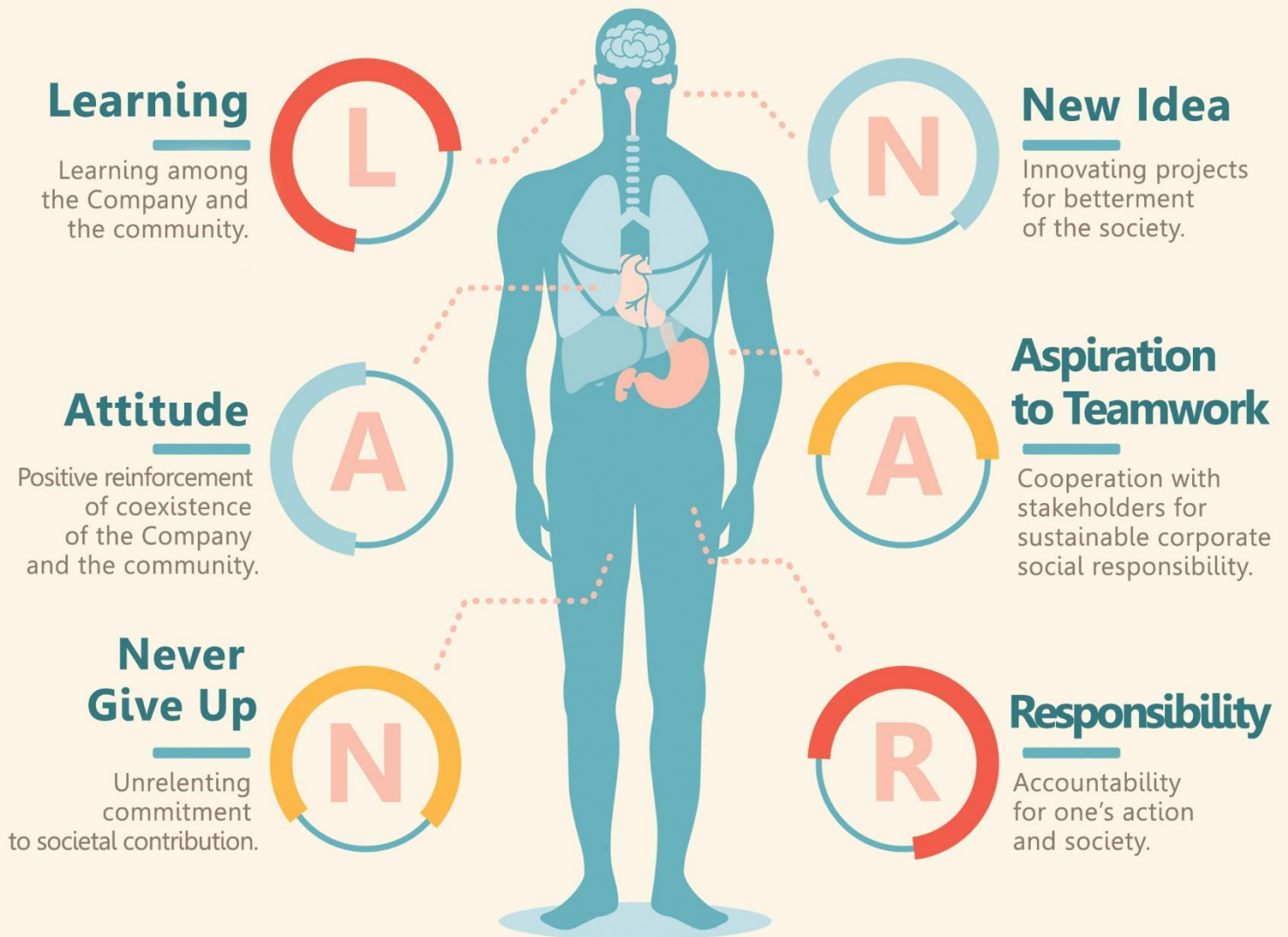


- Business permits
- Economic risks
- Delivery of products

- Minimizing impact to the environment
- Policy on sourcing of clean and sustainable energy sources
- Climate change

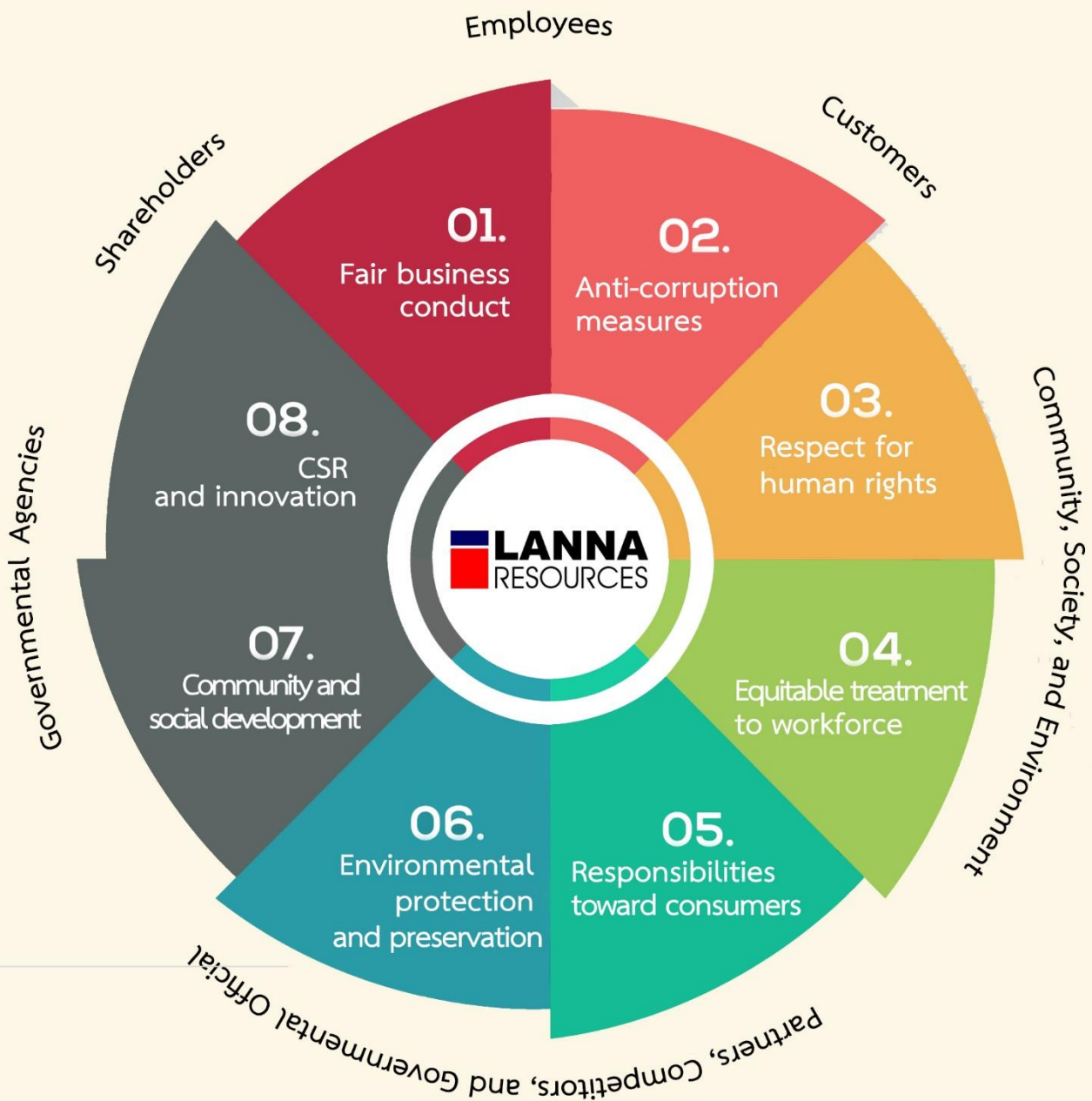
- Community engagement
- Accountability for products and services
- Treatment toward employees
- Mitigation of risks related to operation
- Marketing and pricing
- Products and services that promote quality of life

LANNAR SPIRIT



LANNAR Spirit is the corporate culture which defines how the Company engages in corporate social responsibility.

Diagram Describing Stakeholder and Value Chain Analysis



Stakeholder Analysis

Customers

Stakeholders

- Small and medium sized business customers
- Large sized business customers

Actions

- Customer satisfaction surveys
- Compliant operations
- Customer services

Expectations

- Equitable treatment
- Safeguard of customers' information
- Quality products and services

Responses

- Measures are put in place to safeguard customers' information



Shareholders

Stakeholders

- Major shareholders
- Minor shareholders

Actions

- Annual Meetings of Shareholders
- Annual Reports
- Progress reports for shareholders
- Quarterly reports on operating results
- Investor hot line

Expectations

- Fair business operations for good operating results
- Equitable treatment to shareholders
- Appropriate audit and internal control
- Effective risk management

Responses

- Suitable dividend payments
- Transparent information disclosure



Employees

Stakeholders

- Permanent employees

Actions

- Performance evaluations
- Work satisfaction survey
- Employee engagement survey
- Personnel development

Expectations

- Suitable compensation
- Strong career advancement

Responses

- Upholding human rights principle and equitable treatment
- Employee development plan
- Employee engagement activities



Stakeholder Analysis

Governmental agencies

Stakeholders

- Governmental agencies

Actions

- Compliance with regulations
- Payments of fees as per regulations
- Community development in cooperation with governmental agencies

Expectations

- Compliance with the laws
- Community development in cooperation with governmental agencies

Responses

- Strict compliance with the laws
- Engaging in community development in cooperation with governmental agencies



Community, society, and environment

Stakeholders

- Community in the vicinity of the Ayutthaya Coal Center

Actions

- Youth development and learning promotion
- Community service volunteer by employees
- Prudent use of resources, such as, papers, to reduce carbon emission

Expectations

- Conducting business operation with social responsibility and public interest in mind
- Promoting and participating in community activity
- Adherence to human right and anticorruption principles
- Committing to environmental conservation

Responses

- Having community service activities for employees to engage
- Educating employees on anticorruption



Partners, competitors, and creditors

Stakeholders

- Other companies
- Financial institutions
- Contractors
- Distributors

Actions

- Related party transactions

Expectations

- Strictly adhering to agreements and terms engaged with creditors
- Promoting sustainable growth together with partners with fairness and accountability
- Engaging with competitors on a level playing field
- Protecting trade secrets in compliance with related laws and regulations

Responses

- Putting in place the code of conduct for employees
- Having a fair and transparent business ethic principle
- Repaying debt and other payments on time





FAIR BUSINESS CONDUCT



Fair Business Conduct

In order to ensure fair business conduct, guidelines dealing with stakeholders are established in the Code of Conduct by focusing on responsibility toward stakeholders, including shareholders, employees, customers, business partners, community, society, and environment. Not only as stipulated by the law, the stakeholders' rights shall not be violated whatsoever.

Policy on Fair Business Conduct

- (1) Will not engage in business activities and any actions that could damage the reputation of the country, natural resources and environmental condition and the overall society.
- (2) Support activities that are beneficial to the community and society overall. Be conscious in the conservation of the environment and local culture.
- (3) Encourage moral principles or conscience and responsibilities to the overall communities among the employees at every level seriously and on a regular basis. Enhance the quality and security of the overall community, society, and environment by its own initiative or participating with the government.
- (4) Strictly comply with or supervise on compliance with all relevant laws.
- (5) Will not cooperate or support any person involving in illegal business or dangerous to the society and security of the country. Oppose to any form of corruption.

Policy and Responsibility toward Shareholders

- (1) Determined to develop the Company based on actual potential and capability to ensure sustainable return for shareholders from effective operation and good profitability.
- (2) Respect the equitable right of shareholders for access of necessary information, and disclose factual operating results, financial status, and related information as required by the Securities and Exchange Commission and the Stock Exchange of Thailand.
- (3) Treat every shareholders with equality without restraining the right of shareholders to company's information and attendance of shareholders' meeting. For example, never abruptly disseminate additional documents with important information on the day of the meeting, never add additional meeting agenda or change important information without notice to shareholders, never prohibit attendance of late shareholders, allow minority shareholders to propose a topic to be added in the meeting agenda in advance, allow proposition of qualified persons for director position of the Company, and allow the shareholders to submit related questions prior the meeting, etc.



Policy on Conflict of Interest

(1) Employees shall avoid having conflict of interest of oneself with the interest of the Company while dealing with business partners and other related persons.

(2) During employment and post-employment, employees shall not disclose confidential information of the Company to anyone, whether the electronic information, financial information, business information, business plan, or other important matters.

(3) Employees who become directors or consultants of other companies, organization, or business association shall not have any conflict of interest and have a prior approval from the Board of Directors and/or supervisors.

(4) In case of the employees or their family members participate or hold shares in any business which may have a conflict of interest, the Chief Executive Officer or Managing Director must be immediately notified in writing.

(5) Employees shall not insure and/or borrow money from business partners of the Company except from financial institution due to the fact that it may directly or indirectly influence the operation of the Company's agents.

(6) Employees shall never offer gratuity or assets of the Company to others without permission or approval from authorized supervisors.

Employees shall fully devote their time and effort for the business of the Company. In case that necessitates additional part time job for additional income or other purposes, the nature of the job must not violate any law or upset the peace and morality of the populace, not be a conflict of interest of the Company, not adversely affect the reputation and operation of the Company, not abuse the confidential information of the Company, and not affect the responsible tasks, etc



ANTI - CORRUPTION MEASURES



Anti-Corruption Measures

The Company is committed to anti-corruption in every form. The Board of Directors has established a regulation concerning anti-corruption for raising of the awareness of directors, executives, and employees at every level about the danger of corruption, instilling proper values, and inspiring confidence of all stakeholders for sustainable development of the corporation in long-term. Accordingly, the Board of Directors' Meeting No. 7/2013 dated December 16, 2013 has resolved to enroll the Company in certification process as member of "Thailand's Private Sector Collective Action Coalition against Corruption (CAC). Accordingly on January 24, 2014, the Company has signed the declaration of intention to fight against corruption. On July 10, 2015, the Company has been certified as a member of the CAC.

Anti-Corruption Policy

All directors, executives and employees of the Company at every level are prohibited from engaging in or tolerating any form of corruption, directly or indirectly, for both local and overseas businesses and all relevant work units. Regular inspections and reviews of the work are arranged to ensure compliance with the anti-corruption policy. Also, guidelines and regulations are regularly reviewed for conformity with changes in business condition, relevant rules, regulation and legal provision. The policy is as follows:

(1) All directors, executives and employees at every level must adhere to the anti-corruption policy and code of conduct by not involving in any corruption activities, directly or indirectly.

(2) All employees of the Company at every level must not neglect or ignore when seeing any corruption activities related to the Company and must immediately notify the supervisors or related persons for acknowledgment and cooperate in the investigation. If in doubt, the employee should consult with the supervisors or the person assigned by the Company to be responsible on matters related to the code of conduct through established channels.

(3) The Company shall protect the employee who has notified and reported on the corruption activities as specified under Company's policy on the whistleblowing or complaints by stakeholders.

(4) The person involved in the corruption activity is considered in violation of the code of conduct and must be put through disciplinary actions as stipulated in the Company's regulation. In addition, such person may be punishable by law if illegal action has been committed.

(5) The Company recognizes the importance in educating third-parties who do business with the Company about the compliance with the anti-corruption policy.



Guidelines concerning Anti-Corruption

(1) This anti-Corruption policy covers personnel management including, recruitment, promotion, training, performance evaluation, and remuneration. Supervisors at every hierarchical level need to communicate with employees to ensure effective compliance.

(2) Any measures according to the anti-corruption policy shall follow the guidelines established in the Corporate Governance Handbook and other related guidelines established by the Company in the future.

(3) For the matters with high risk of corruption, every director, executive and employee at every level must operate with caution especially on the following items.

(3.1) Receiving or giving of gifts, assets or other benefits must conform to stipulations of the Company.

(3.2) Receiving or giving of donation or supporting fund must be carried out in transparent and legal manners by ensuring that the donated or supporting money shall not be used as bribery.

(3.3) Receiving or giving of bribe in any business operations are forbidden. Company's operations and contacts with the government sector must be done strictly with transparency, integrity, and in compliance with the laws.

Duty and Responsibility on Anti-Corruption Policy

(1) The Board of Directors has duty and responsibility to establish policies and oversee that there is a system in place to promote anti-corruption effectively in order to build confidence for the management to recognize and give precedence to anti-corruption and foster it to become part of the corporate culture.

(2) The Audit Committee has duty and responsibility to review the accounting and finance system, internal control system, internal audit system, and risk management system to ensure that every system has been carried out according to global standards with prudence, sufficiency, and effectiveness against corruption.

(3) The Chief Executive Officers and executives at every level have duty and responsibility to establish a system to promote anti-corruption policy and convey this policy to the employees and relevant work units, as well as to review the appropriateness of the system and measures to conform to changing business situation and relevant rules and regulations and laws.



(4) The Internal Audit Office has duty and responsibility in the audit and review of operations to be in compliance with policies, guidelines, rules, and regulation. It also has approval authority as well as relevant legal provision to ensure that the control system is appropriate and sufficient for the potential risk involving corruption. The Internal Audit Office directly reports to the Audit Committee.

(5) The Risk Management Committee has duty and responsibility to regularly assess the risk concerning corruption which may occur in any process as well as propose appropriate guidelines to mitigate the risk to be presented to the Board of Directors for review and establish measures for conformity to mitigate such risk that may occur.

Policy on Whistleblowing or Complaints

According to good corporate governance, the Board of Directors has established the policy concerning policy concerning whistleblowing or complaints by stakeholders to ensure effective measures for stakeholder engagement as follows:

(1) Provide opportunity for the stakeholder for whistleblowing or making complaints Any stakeholders who wish to contact the Board of Directors directly without going through the executives of the Company in order to offer any opinions concerning with the business operation including whistleblowing or complaints such as inappropriate action, fault, wrongdoing or mistake, illegal action or unethical behavior etc., it can be directly forwarded to the Audit Committee of the Company as follows:

- By mail, to the following address:

Chairman of the Audit Committee
41/9 Rim Klong Bangsakae Road
Bangkor, Chomthong, Bangkok 10150
• By e-mail address: wanna@lannar.com

(2) Protection for the Whistleblower

The stakeholder who makes whistleblowing or complaints according to (1) above does not need to disclose his/her name.



(3) Procedure after Whistleblowing or Complaints

The Audit Committee is assigned to investigate the information or facts informed by the whistleblower according (1) above and directly presents the matter to the Board of Directors for acknowledgment and consideration.

(4) Correction Measures and Compensation

In case the stakeholder has been damaged from the violation of right according to the laws, the Company is willing to listen to opinion or complaint and will urgently correct the fault and impact without delay including finding measures to prevent recurrence of the event and will consider making appropriate compensation to the damaged person based on cause and effect on a case-by-case basis.

Policy on Whistleblowing or Complaints

(1) Every Director, executive and employee at every level are strictly prohibited from demanding or receiving gifts, assets and/or any benefits from the customer, trading partner and/or person with related business with the Company regardless whether it is personal or for other persons which may cause unfair decision, bias or unease which might create conflict of interest.

(2) Receiving or giving of gifts on occasions of good traditions must be of little value, with price that is not inappropriate price or extravagant, such as souvenirs, marketing promotional gifts or general gifts, etc. Every employee can use their own judgment whether or not the gift is appropriate. If in doubt, the employee should consult with direct superior for advice, by considering the intention of the giver and receiver whether or not it is appropriate.

(3) Receiving or giving of gifts in form of cash, cheque, cash coupon, gold, jewelry or any other valuables is deemed inappropriate and uncalled-for. Without any exception, it should first be assumed that this action indicates wrongful doing or hidden intention to exploit one's authority.

(4) If it is found that any employee conducts wrongful action and/or has intention for exploitation whether for themselves or other persons, the Company shall deem that the employee is grossly breaking discipline and will be strictly subjected to disciplinary action according to the Company's regulation without any exception.



RESPECT FOR HUMAN RIGHTS



Respect for Human Rights

Respect for human rights is fundamental for human resource development and directly relates to the business as added value. Also, human resource is a key factor for the business. Therefore, the Company always improves the surrounding and working conditions for better quality of life and in order to draw full potential of the employees. The employees are also provided with opportunities to train and develop their skills. The policy and regulation in accordance with the principles of fundamental human rights have been established as follows:

(1) The Company strictly abides by human rights principle by providing knowledge and understanding in human rights to employees as part of the operation in the Company, as well as discouraging any businesses that violate human rights.

(2) Employees at every level must thoroughly understand the law concerning with their duties and responsibilities and strictly comply with the governmental laws and regulations. Employees should consult with their supervisors and/or related law consultant on any law related concerns. Do not imply and proceed alone.

(3) Employees traveling to work overseas should study laws, traditions, and culture of the country of destination prior to the trip in order to ensure that overseas business undertaking shall not be illegal or contrary to the traditions and culture of the country of destination.

(4) The Company shall uphold fairness and sincerity upon engaging in management related to salary, wages, benefits, and employment terms without favoritism. Forced labors and child labors are not tolerated. The Company shall support all employees with equal opportunity and provide appropriate and pleasant working environment. Additionally, the Company shall comply with the Labor Protection Act and Thai Labor Standards, including other related laws and regulations.



**EQUITABLE
TREATMENT
TO
WORKPLACE**



Equitable Treatment to Workforce

(1) The Company always operates with equitable treatment to its workforce. In the past, the Company never had any disputes with its workforce and always strictly follows the labor law.

(2) The Company provides wages and salaries at no less than the rate required by law. Compensations to managers and employees are considered based on skills, experiences, and expertise of each individual. Suitable adjustment is also regularly made according to the economy.

(3) The Company also never ceases to improve the working environment. Events are regularly held to promote good relationship among employees, such as, New Year activities, founding day, etc.

(4) The Benefit Committee is established to ensure proper benefits as required by law and to inspire morale. Safety in workplace is focused, with related trainings regularly held. The surrounding environment is ensured with regular water and air quality monitoring every six month. In 2015, no accident has been occurred for three consecutive years.

(5) Other policy and guidelines concerning equitable treatment to workforce, including other activities are disclosed in this Annual Report, page 145 - 152, "Employee Information."



RESPONSIBILITIES TOWARD CONSUMERS



Responsibilities toward Consumers

A customer relation sector has been established to engage with customers and receive any feedback in order to ensure customer's satisfaction in the products and services. Also, the production process is always being improved according to the customer's needs along with reduction of unnecessary cost. Moreover, business is conducted fairly. The policy and regulation regarding this matter are as follows:

(1) The Company shall produce products or services that are safe and reliable without any harm to the consumers' health.

(2) The Company shall safeguard customer information and shall not forward any information without customer's consent.

(3) The Company shall disclose correct and adequate information concerning its products by considering the health and good living of the consumers such as hype or exaggeration, complete and correct information on product label, easy to read and understand, product safety instruction as well as instruction on sanitary disposal of the product

(4) The Company shall encourage the consumers and manufacturers to use products and services that are concerned and care about environment and society.

(5) The Company shall develop its products and services for the benefit of the organization together with bringing the community of consumers to become a society full of good people with culture and moral which shall develop further toward sustainability.

(6) The Company shall operate on free competition and play by the rules. It shall never slanderously attack competitors without reasonable evidence.

(7) The Company shall cooperate with competitors for the benefit of the consumers. Such cooperation shall not involve being a monopoly, sharing of revenue and market, deterioration of product quality, and readjustment of price and service that would adversely affect overall consumers. The personnel of the Company shall engage with competitors or their personnel with care without disclosing or revealing any Company's secret to competitors.

(8) The Company shall select its business partners by considering the competency and experience of the business partners, their financial status, reputation, history on their whistleblowing and legal cases, business partners' company policy, and risk factors of the business partners, etc.



ENVIRONMENTAL PROTECTION AND PRESERVATION



Environmental Protection and Preservation

The Company operates with awareness of environmental responsibility trying to protect and preserve the environment in all action undertaken in the business operation in order to make sure that no consequential impact will occur from the Company's business operation.

Environmental Responsibility Policies and Guidelines

(1) All executives and employees shall operate with quality management system of occupational health and safety, and environment as it optimizes efficiency and effectiveness for the best interest of the Company.

(2) Executives and employees must adhere to and work in compliance with laws, policies and regulations concerning quality standard of occupational health and safety, and environment.

(3) The Company shall undertake any measures to control and prevent loss from fire accident, physical accident, loss or damage of property, security breach, wrong procedure and operation error as well as maintain working environment to ensure employees' safety. It is executives' and employees' duty to report accidents by strictly following established protocol.

(4) The Company shall establish an emergency control and prevention plan for all work areas as well as an organization's emergency and crisis management plan to prepare countermeasures for situations that may occur. Moreover, the Company shall also undertake preparation for other crisis that may cause the business suspension, damage to the reputation and image of the organization.

(5) The Company shall publicize and communicate in order to convey knowledge and understanding to the employees and stakeholders about the policies, regulations, procedures and cautions concerning quality, safety and occupational health in order to bring into practice with accuracy without any harm to health, properties and environment.

(6) The Company shall promote and create awareness of quality, safety and occupational health and safety to be applied to employees' everyday work.

(7) The Company shall provide training for employees and assign supervisors with additional responsibility of managing and overseeing the operation with good safety system and constant practice always.

(8) The Company shall improve standards of safety and environment to an international standard for better quality of working life and environment.



(9) The Company is fully and continually committed to corporate social responsibility in terms of quality, safety and occupational health and safety, and environment. The Company recognizes the importance of environment, safety of stakeholders and social responsibility activities and plans to optimize the natural resources in order for a sustainable development of living standards in the community in accordance with the principles of sustainable development.

Activities for Environment Protection in the Past Year

Every coal mining project must operate according to the mine plan and environmental impact analysis report which was approved by relevant governmental agency and carried out the mine site rehabilitation in order to improve environmental surroundings and ecosystem and return to its useful state such as agriculture, water reservoirs, residence, etc. In the past year 2016, subsidiary companies which are PT. Lanna Harita Indonesia and PT. Singlurus Pratama, operating coal mining business in Indonesia, have received the awards and recognitions for its good environmental management according to the regulations as follows:

- **PT SINGLURUS PRATAMA** has received the “Green Rating for Excellent Environmental Management” award from the Governor of East Kalimantan, Indonesia for four consecutive years (2013-2016) for its good environmental management according to regulations.



- **PT LANNA HARITA INDONESIA**, has received the “Blue Rating for Excellent Environmental Management” award from the Ministry of Environment of Indonesia in 2016 for its good environmental management according to regulations.





● **The Ayutthaya Coal Distribution Center**, a domestic operator, has carried out measures concerning the environment as well. Trees have been planted as wind barriers In order to prevent dust pollution, and high-pressure water spray system has been set up to constantly spray water around coal stockpiles and hauling roads. The sediment from waste water is contained and not released to the public river. Coal trucks are ensured to have complete coverage, and their wheels are washed before entering public road. Air and water quality are measured every six months in order to ensure that the dust was effectively in control. Additionally, a close system of large silos has been constructed for coal storage in order to reduce the dust. In 2016, The Company has been granted the Green Industry Accreditation Level 3 (Green System) from the Ministry of Industry on July 29, 2016, also awarded with a testimonial of “Best Dock and Warehouse for Pollution Reduction” from Ayutthaya Province on August 30, 2016.



The Ayutthaya Coal Distribution Center has environmental related activities as follows:

(1) The close-system coal silos and production facility for selling to small industrial group, have been operating with quality, compliantly, effectively and significantly reduce generated dust. The 4,000-square-meter concrete parking lots has been improving and is sufficient for client’s trucks with good traffic management.



(2) The Company arranges yearly for quality measurement of air, noise and surface water, by hired Mine Engineering Consultant Co., Ltd., for inspection as follows:

(2.1) The results of air measurement in 2016 are in compliance with the Announcement of the National Environment Committee, Issue 24 (2004).

(2.2) The results of 24-hour-average noise measurement (L_{eq} 24 hr) and maximum noise (L_{max}) in 2016, are in compliance with the Announcement of the National Environment Committee, Issue 15 (1997), in which the L_{eq} 24 hr and L_{max} are not more than 70 and 115 decibel respectively.

(2.3) The results of the analysis of surface water quality in 2016 are in compliance with the Announcement of the National Committee, Issue 8 (1994) issued under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992) concerning the quality of surface water type 4.

Table 1 Air and Noise Quality Analysis at Ayutthaya Coal Distribution Center

Date of Measure	Air Measurement Result (mg/ m^3)		Noise Measurement Result (Decibel)			
	TSP	PM-10	Leq24hrs		Lmax	
			Jetty Area	Office Area	Jetty Area	Office Area
May 2016	0.263	0.093	62.5	62.1	95.1	89.1
Standard Value	0.330	0.120	70.0		11.50	





Table 2 Water Quality Analysis of Pasak river before and after passing through the jetty of Ayutthaya Coal Distribution Center

Parameter	Unit	Method	Water Analysis Result (before)	Water Analysis Result (after)	Standard Value
pH	-	Electrometric	7.68	7.66	5.0-9.0
Turbidity	NTU	Nephelometric	16.52	15.10	-
Total Suspended Solids	mg/l	Dried at 103-105 °C	20.4	18.2	-
Total Dissolved Solids	mg/l	Dried at 103-105 °C	240	242	-
Total Hardness	mg/l as CaCO ₃	EDTA Titrimetric	128.0	140.0	-
DO	mg/l	Membrane Electrode Method	5.85	5.83	Not less than 2.0
BOD ₅	mg/l	5-Day BOD Test	11.4	11.06	Not exceeding 4.0
Sulfate	mg/l	Turbidimetric	57.41	57.22	-
Oil & Grease	mg/l	Liquid, Partition-Gravimetric Method	<2	<2	-
Arsenic	mg/l	AA-Hydride	<0.001	<0.001	Not exceeding 0.01
Lead	mg/l	Inductively Coupled Plasma (ICP)	0.008	0.007	Not exceeding 0.05
Cadmium	mg/l	Inductively Coupled Plasma (ICP)	<0.001	<0.001	Not exceeding 0.05
Mercury	mg/l	AA-Cold Vapour	<0.0005	<0.0005	Not exceeding 0.002
Manganese	mg/l	Inductively Coupled Plasma (ICP)	0.027	0.020	Not exceeding 1.0
Magnesium	mg/l as CaCO ₃	Calculation	18.7	35.0	-
Total Iron	mg/l	Phenanthroline	0.100	0.093	-



(3) The Company realizes the importance of tree planting and caring in the Ayutthaya Coal Distribution Center as it is wind barrier and suppresses dust from spreading into public places.

(4) The Company has constructed sediment treatment system in the Ayutthaya Coal Distribution Center in order to prevent sediment from being discharged to public waterways. The sediment traps are scattered across the area in order to collect and keep surface water, which includes rain and water used for sprinkle on stockpile for dust suppression. The collected water is then stored in sedimentary ponds. Once the process is over, the water is brought back to use with the purpose of minimize waste and save the water resources.

(5) The Company has constructed two wheel wash facilities at Ayutthaya Coal Distribution Center which departing coal trucks are required to pass through before entering public roads to prevent debris and other problems that may obstruct public transportation.





**COMMUNITY
AND
SOCIAL DEVELOPMENT**

COMMUNITY AND SOCIETY DEVELOPMENT

The Company places importance on the sustainable development of community and society, by which past performance can be summarized through the Global Reporting Initiative framework of GRI as follows:

Economic

GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
*G4-EC1	Sales and service revenues	Million Baht	2,018	1,627	395
	Profit for year	Million Baht	411	337	70
	Dividend payments to shareholders Lanna Resources Public Co., Ltd.	Baht/Share	0.75	0.64	-
	Employee wages and benefits	Million Baht	91	72	13
	Interest and financing cost to borrower	Million Baht	0	0	0
	Tax payments to government and local government agency, for example, corporate income tax, local development tax, house and building tax or others (please specify)	Million Baht	16	9	2.25
	Cost of Community and Social Development Project	Million Baht	284,840	442,239	3,500
*G4-EC3	Provident Fund contribution rate for employees (percentage of basic salary)				
	- Years of service less than 5 years	Percent	5	5	5
	- Years of service 5-7 years	Percent	7.5	7.5	7.5
	- Years of service more than 10 years	Percent	10	10	10

GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
G4-EC9	Percentage of local provider (Supplier /Service/Outsource) (5 km radius or within the province)	Percent			
G4-EC6	Percentage of executives of management level and above, which are from local people (5 km radius or within the province)	Percent			

Social

GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
G4-LA10	Total employees	Person	92	77	77
	- Permanent employees	Person	74	72	75
	- Outsourced workers	Person	8	5	2
	Employees by Gender	Person			
	- Male	Person	49	44	47
	- Female	Person	33	32	29
	Employees by level	Person			
	- Operator	Person	23	40	40
	- Supervisor and technical staff	Person	13	8	8
- Management	Person	46	29	29	
G4-LA1	Percentage of employees to retire (from year 2017)				
	- In 5 years (aged 55-60 years)	Percent	6	4	4
	- In 10 years (aged 50-60 years)	Percent	13	16	16
	Turnover Rate	Percent	8	5	0
G4-LA3	Number of employees returning to work after parental leave	Percent	0	0	0
G4-LA5	Number of employees being welfare committee member	Person	8	8	8

GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
	Number of employees being safety committee member				
	- Employer representatives and safety officer (person)	Person	4	4	4
	- Employee representatives	Person	3	3	3
G4-LA6	Injury Rate (IR)	Person/man-hour	0	0	0
	Occupational illness Rate (ORD)	Person/man-hour	0	0	0
	Lost Day Rate (LDR)	Person/man-hour	0	0	0
	Absentee Rate (AR)	Person/man-hour	0	0	0
	Fatality Rate	Person	0	0	0
G4-LA9	Average Hours of Training per person per year	Hour/person/year	21	8	1
G4-LA11	Percentage of employees who received performance evaluation and career growth planning	Percent	99	98	0
G4-LA13	Compensation ratio of female and male employees				
	- Operator				
	- Supervisor and technical staff				
	- Management				
G4-HR1 G4-HR10	Percentage of providers, contractors and significant business partners which passed human rights screening	Percent			
G4-HR9	Percentage of business operation which has human rights impact assessment	Percent	100	100	100

GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
G4-SO4	Percentage of employees who passed the anti-corruption policy and practices in organization training	Percent	100	100	100
G4-SO11	Number of written complaints about social impact and formal resolution progress	Case	0	0	0
G4-PR5	Customer Satisfaction Survey	Percent			

Environmental

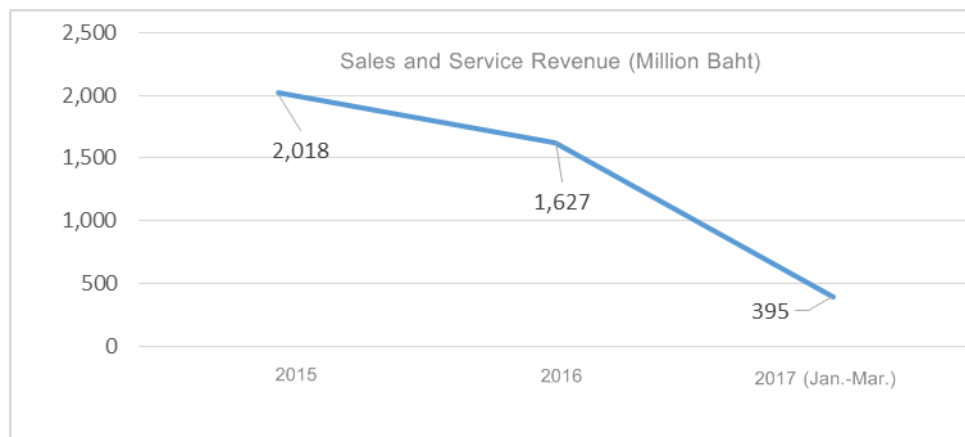
GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
G4-EN1	Main Material				
	1. Coal	Ton	893,345	947,652	276,579
	2. Motor	Piece			
	3. Read Head	Piece			
G4-EN3	Fossil energy consumption				
	1. Diesel (Stationary Combustion)	Lite			
	2. Diesel (Mobile Combustion)	Lite	124,438	119,999	34,485
	3. LPG (Stationary Combustion)	kg			
	4. LPG (Mobile Combustion)	kg			
	5. Natural Gas	scf			
	6. Biomass	kg			
	7. Fuel Oils	Lite			
G4-EN3	Electricity consumption	kWh			
	1. External electricity consumption	kWh	586,860	658,420	169,320
	2. Solar Cell electricity consumption	kWh			
G4-EN8	Water withdrawal - by Source	m ³			
	1. Surface water	m ³	5,994	6,337	
	2. Ground water	m ³			
	3. Reusing of treated wastewater	m ³			

GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
G4-EN10	Percentage of Recycled Water	Percent			
G4-EN15	Direct Greenhouse Gas Emissions : Scope 1 (ton CO ₂ e)*	ton CO ₂ e			
	1. Diesel (Stationary Combustion)x 2.708/1,000	ton CO ₂ e			
	2. Diesel (Mobile Combustion) x 2.7446/ 1,000	ton CO ₂ e	341.53	329.35	94.65
	3. LPG (Stationary Combustion) x 3.11 /1,000	ton CO ₂ e			
	4. LPG (Mobile Combustion) x 3.1899 / 1,000	ton CO ₂ e			
	5. Natural Gas x 0.0573 / 1,000	ton CO ₂ e			
	6. Biomass x 0.6930 / 1,000	ton CO ₂ e			
	7. Fuel Oils x 2.4777 /1,000	ton CO ₂ e			
G4-EN16	Indirect Greenhouse Gas Emissions by electricity used : Scope 2* <u>calculate</u> <u>from</u> <u>External electricity consumption x 0,6093</u> <u>/ 1,000</u>	ton CO ₂ e	357.57	401.18	103.17
G4-EN17	Other Indirect Greenhouse Gas Emissions (ton CO ₂ e) : Scope 3 for example, use of raw material, purchase of water , transportation of employees, etc.	ton CO ₂ e			
G4-EN18	Emissions of ozone-depleting substances (ton CFC-11e)				
	1. Use of HCFC22	ton			
	2. Amount of ozone depletion	ton CFC-11e			
G4-EN21	1. NO _x Emissions	ton			
	2. SO _x Emissions	ton			
G4-EN22	Waste water discharge volume	m ³	0	0	0
G4-EN23	Amount of waste	ton			
	1. Hazardous Waste	ton	2	3	.25
	2. Non-Hazardous Waste	ton	10	10	10

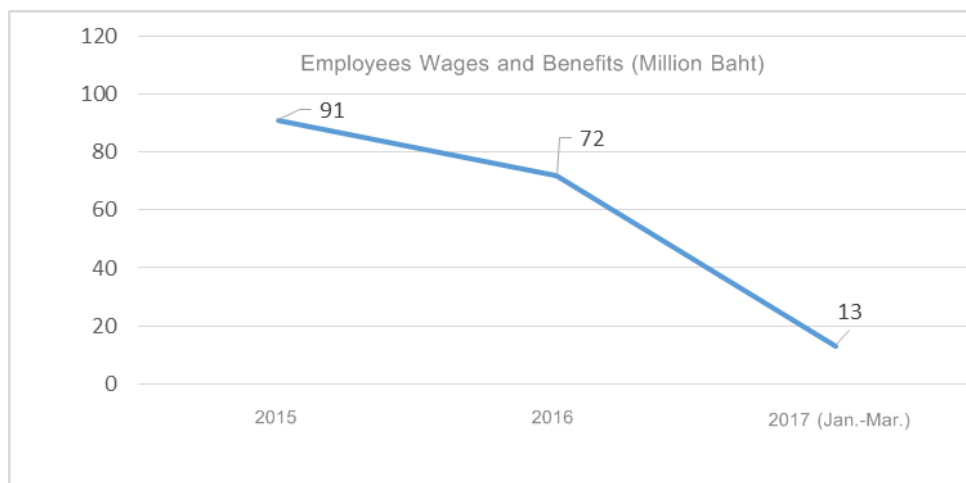
GRI	Performance Data	Unit	Year		
			2015	2016	2017 (1 st Quarter)
G4-EN24	Number of ignificant spills of chemical/oil/waste water/waste	Case			
G4-EN31	Cost and investment for Environmental Protection	Million Baht			
	1. Waste disposal and treatment cost	Million Baht			
	2. Environment Management System cost (including research and development cost)	Million Baht			

Economic Performance

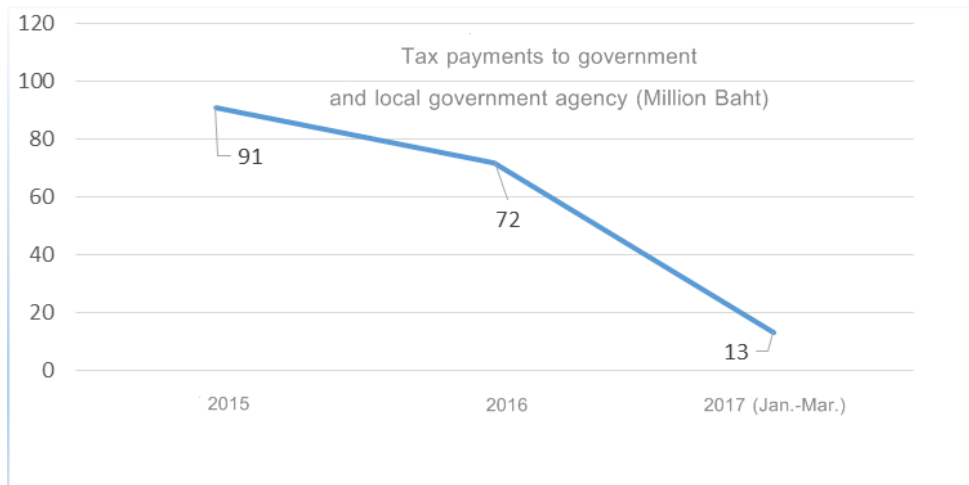
Net Income



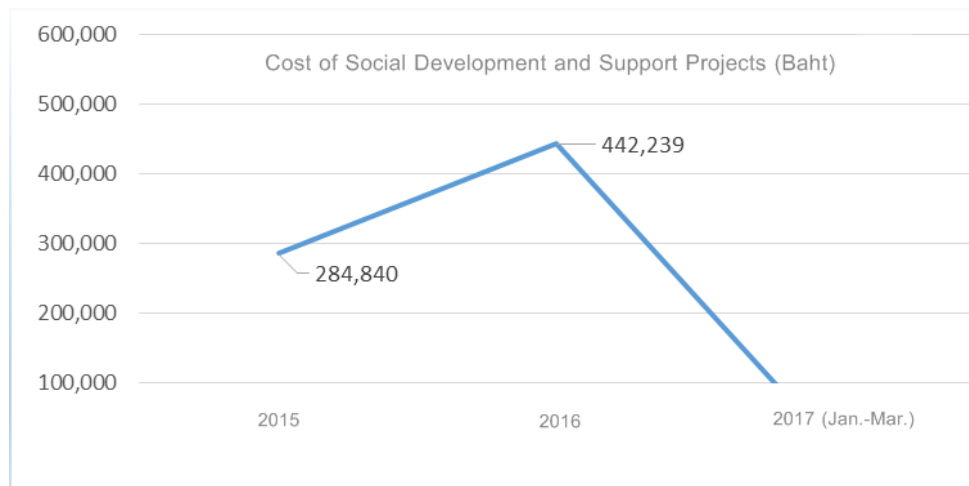
Wages and Benefits



Tax payments to government and local government agency

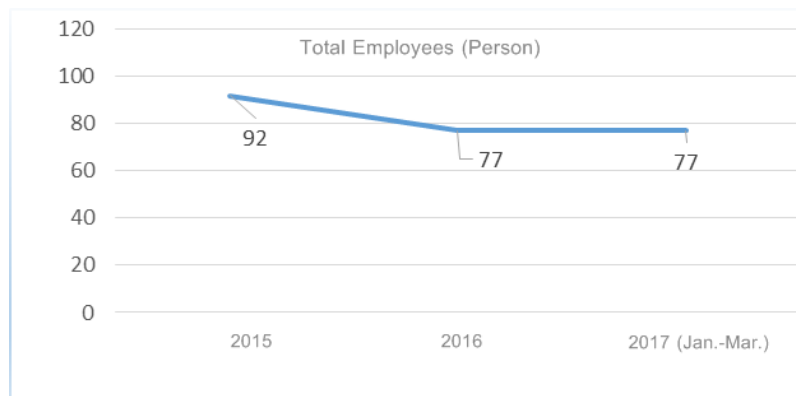


Cost of Social and Community Development Project

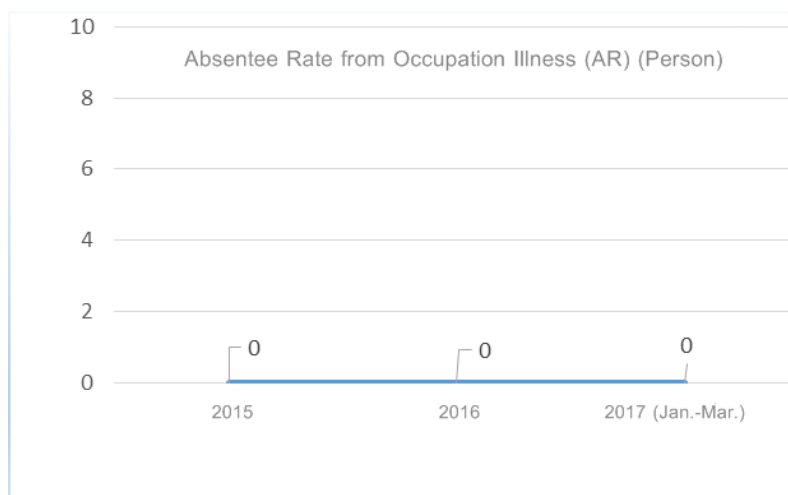


Social Performance

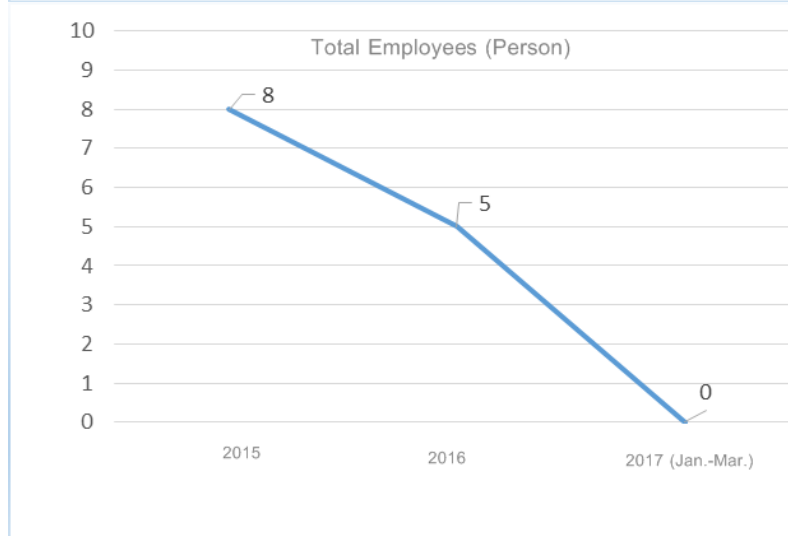
Total employees



Proportion of absence



Turnover Rate



Sustainable Development Projects Implemented during Year 2016

Economic

No.	Project	Budget (Baht)	Budget Year
1	Support Career Development Project on solving the drought problem, Sub-district headman Club, Pak Chan Sub-district	3,000	2016
2	Sponsored student performance costumes at Wat Sadej School for the shows	20,000	2016
3	Sponsored fans purchase and power system improvement of SML Room, Moo 1, Klong Sakae Sub-district	22,000	2016

Social

No.	Project	Budget (Baht)	Budget Year
1	Sponsored Children's Day Activity at Wat Thong Songtham School and Wat Sadej School, Klong Sakae Sub-district	7,200	2016
2	Sponsored shuttle bus fare for elderly to participate in monthly activity, Klong Sakae Sub-district	4,800	2016
3	Sponsored library renovation budget at Nakornluang Udomrat School	12,000	2016
4	Sponsored travel expenses for meeting attendance at Thammasat University, Rangsit Campus	20,000	2016
5	Sponsored Buddhist Lent Candle-molding Ceremony of Nakornluang District	10,000	2016
6	Sponsored Life Support Equipment of Putthaisawan Foundation, Nakornluang District	15,200	2016
7	Give 2-tier shelf to Moo 1, Klong Sakae Sub-district	4,053	2016
8	Sponsored electricity bills of Nakornluang District Office	10,000	2016
9	Sponsored multi-purpose roof building at Wat Baandarb School, Bor Phong Sub-district	10,000	2016
10	Participated in Royal Kathin Robe Offering Ceremony at temples in 3 Southern Provinces	5,000	2016
11	Kathin robe offering at Wat Thong Songtham and Wat Sadej and free food (Padthai) (55,000 Baht each)	110,000	2016
12	Sponsored shuttle bus fare for elderly to participate in monthly activity, Klong Sakae Sub-district	4,800	2016
13	Sponsored library renovation budget at Nakornluang Udomrat School	12,000	2016
14	Sponsored travel expenses for meeting attendance at Thammasat University, Rangsit Campus	20,000	2016
15	Sponsored Buddhist Lent Candle-molding Ceremony of Nakornluang District	10,000	2016
16	Sponsored Life Support Equipment of Putthaisawan Foundation, Nakornluang District	15,200	2016
17	Give 2-tier shelf to Moo 1, Klong Sakae Sub-district	4,053	2016
18	Sponsored electricity bills of Nakornluang District Office	10,000	2016

No.	Project	Budget (Baht)	Budget Year
19	Sponsored multi-purpose roof building at Wat Baandarb School, Bor Phong Sub-district	10,000	2016
20	Participated in Royal Kathin Robe Offering Ceremony at temples in 3 Southern Provinces	5,000	2016
21	Kathin robe offering at Wat Thong Songtham and Wat Sadej and free food (Padthai) (55,000 Baht each)	110,000	2016
22	Sponsored contract teacher wages budget and scholarship at Wat Sadej School	150,000	2016
23	Sponsored contract teacher wages budget and scholarship at Wat Thong Songtham School, Klong Sakae Sub-district	90,000	2016
24	Give towel as a new year gift to community Moo 1, Klong Sakae Sub-district, every household	37,775	2016

Environmental

No.	Project	Budget (Baht)	Budget Year
1	Support Natural Resources and Environmental Protection Volunteer Network, Ayutthaya Province	20,000	2016
2	Sponsored food at Fish and Lobster Release Event, OrBorTor. Pak Chan	3,500	2017





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