

Corporate Social Responsibility (CSR)

Electric transformers manufacturing industry is an ongoing industry, which related to electricity power because electric transformers are products used in transmission and distribution system. It is the basic fundamental energy crucial for the well-being of the people and drive country's economy as a whole.

Tirathai Company realize the importance and determination to be a part in delivering sustainable electric energy while being a good member of the society. The company operates the business with awareness of responsibility towards the public, caring for the community, society, and environment as well as enhancing participation with stakeholders and the public. The company has the performance of social responsibilities as follows,

1. Good Corporate Governance

The company conducts business in accordance with the relevant laws and regulations with transparency, disclosing important information, and verifiable. The Compliance Policy with Good Corporate Governance, the company is taking into account the benefits to shareholders, employees, communities, society, business partners, customers, competitors, creditors, and all stakeholders.

In 2019, the company received a very good CG Score Assessment of the 2019 Annual General Meeting at 92 score.

2. Conducting Business with fairness

The company prioritize the importance of conducting business operation fairly and adhere to continuous practices by treating supplier partners equally and fairly with honesty, integrity, respecting Intellectual property, promoting political rights and fulfillment on the commitment with stakeholders equally and reasonably

2.1 Fair Competition

Practice and Guidance

1) Stipulates all terms and conditions in the sales contract and strictly adhere to the agreement. In the event that the conditions cannot be complies with, the company will immediately inform customer for further discussions and mutually find the resolutions to solve the problems.

2) Provide necessary information and being a good advisor to clients as well as offering correct suggestions sufficiently and timely to inform clients about the products and services.

3) Understand and respond to customer needs and expectations appropriately and timely manner.

4) Deliver good quality products, according to specifications, and reasonable prices.

2.2 Promoting social responsibility with business partners

The company has not yet officially implementing social responsibility promotion for all stakeholders in the business chain.

2.3 Respects for property rights

Practice and Guidance

1) Promote management and employees to use the resources and assets and resources of the company efficiently in order to increase the competitive edge and provide good service to customers. Promote copyright products and discourage the Intellectual property infringement.

2) The company is committed to protecting the intellectual property that the company is free from infringement or unauthorized use, and respects other intellectual property rights.

2.4 Responsible political Involvement

Practice and Guidance

1) The company operates business with political neutrality without bias and have no interests in any political parties or political authorities. The company do not use the financial or resources to support, direct or indirect, to any political parties or politician.

2) Promoting and encouraging employees to exercise their political rights freely without domination, induce, intimidate, coerce and participate in any way.

3. Anti-Corruption

According to the resolution of the Board of Directors meeting No. 5/2019, held on 8 August 2019, the resolution was



passed to approve the announcement of policies and intention regarding prevention of involvement in corruption, and set up a sub-committee namely Mr. Singha Nikornpun, Mr. Upakrom Thaweepoke, and Mrs. Sunan Santichotinan to proceed as follows,

1. Draft policies concerning prevention of any corruption involvement.
2. Announce policies concerning prevention of involvement in any corruption.
3. Declare intent to participate in the anti-corruption campaign (Collection Action Coalition Against Corruption: CAC)

The company is in the process of continuously achieving the goal in accordance with the criteria including relevant laws. The announcement of the intention to become a Private Action Coalition Against Corruption (Collection Action Coalition Against Corruption: CAC) has achieved the company's goal.

4. Respect for Human Rights

The company stimulates the importance of respecting human rights and dignity and treats all the involvement, employees, communities, and surrounding society with respect to human values and do not offend any fundamental basic rights, which is the foundation in human resources management and development. These cornerstone associate with business in the form of adding values and increase productivity.

Practice and Guidance

- 1) The company promotes the compliance with human rights mandate covering to the operation of its subsidiaries, joint venture, and business partners.
- 2) Protect personal information of employees in possession of the company. Disclosure or transfer of personal information to the public is only with employees' consent.
- 3) The company encourages and opens opportunities to the employees, communities, and society to participate in expression of opinions if there is an act that may violate the human rights.

5. Fair Labour Practices

The company comprehends and places importance on fair labor practices with respect and abide by the laws and principles of ethics without discrimination in employment, no forced labor, nor child labors. Employees are able to have freedom in associations along with consideration of health and safety in workplace. Therefore, the improvement of the working environment, providing good quality of life, and opportunity to express personal potentials, as well as equal opportunity in practicing and skills training, regards as the Values of the company continuously practice for long period of time.

- 1) The company emphasizes on employment without discrimination and bring indifferences in race, religion, gender, age, disability, social status, education, or educational institution in considering and judging for the employment.
- 2) The company treats all employees fairly in providing compensation, migration appointment, and capacity development along with moral development in order to promote talent employees being good citizen of the society such as providing appropriate compensation according to their potential, taking care of pregnant staff with regard to health and safety as priority.
- 3) The company cares for health and hygiene of employees and related employees by promoting and raising awareness on safety, occupational health and working environment. According to the Occupation Health and Safety Policy, the goal is to prevent any incidents of loss and sickness, the plan has put in place for accident prevention, promoting participation, risk elimination, and continuous improvement to create the safety at work culture to all employees and associates.

3.1 The company set up specific department to control and drive for safety operations. Occupational health and working environment Including the Occupational Health and Safety Management Committee (OCSC), holds meetings at least once a month in order to suggestions for improvement, risk analysis and risk assessment including monitoring the progress of the operations and plans.

3.2 The company has implemented the Occupational Health in Health Risk Assessment (HRA) in order to observe the level of health risk of employees to ensure that the employees will be taking care of and manage health risks by receiving the examining of lead in blood level, volatile substances in urine, lungs conditions, and hearing capability. The examination results of the HRA report in 2019 found no abnormal staffs except the unusual hearing capacity of 5 employees. The company has set up the measures to repeat test checks for verification and the results showed the abnormal hearing capacity does not affect the work and daily life. The company proceeds the defensive measures by providing appropriate protective

equipment to employees to wear loud protection devices throughout the work period including the measurement of the environment to meet standards set and having re-inspection every year. In addition, the company has also create "Hearing Conservation Campaign" for those affected employees.

3.3 The company has campaigning "Safety Campaign Program" to follow up and monitor the safety plan and the environment suitable for working standards and relevant rules or regulations. In 2019, the company has performed as follows:

Safety Suggestions from Employees	207 cases
Number of cases approved for adjustment	163 cases
Completed Adjustment	64 cases

In 2019, the company has awarded "Zero Accident" to high risks of accidents functions with 29 functions participating received awards 19 functions. There are 10 function received Zero Gold Award for those without any accidents from working for 3 consecutive years. By the year 2019, the performance has achieved the target set.

4) The company has provided various benefits such as group life insurance, accident insurance and accidental organ loss insurance, health insurance, Provident Fund (PVD), Shuttle Bus, free lunch and dinner for over-time working (OT), and health check according to the risks involved, etc. In 2019, there were 402 employees' health checks base on risk factors for 20,690 baht, a financial support for employees' parent funeral 14 employees, totaling 86,228 baht. There are also "Tirathai Family Care for Each Other Project" by giving 12 employees on laborers birth and sickness, totaling 12,334 baht.

5)) The company promotes and supports the education of employees at all levels by regulating the leave for further studies according to human resources regulations 2551 B.E., for employees to learn and increase potential including having a good quality of life, allowing employees to take leave for further studies or training both short-term and long-term.

6) The company arranges for the Tirathai Savings Cooperative in order to encourage employees to save and plan for money spending following to the philosophy of Sufficiency economy of His Majesty the King Bhumibol Adulyadej. Tirathai Cooperatives established on 29 March 2006. In 2019, there are 246 members with a total share capital of 34,295,335 baht.

7) The company has established a grievance process for employees who were treated unfairly according to working regulations in 2008 in order to strengthen the labor relationship between the company and employees and among employees themselves. The company has determined the procedures for the grievance process, investigations, consideration of complaints, and settlement process as well as protection of complainants and related parties, etc.

The number of employees of the Company and its subsidiaries as of 31 December 2018 and 31 December 2019 are as follows:

Company	Number of People			
	31 December 2018		31 December 2019	
	Male	Female	Male	Male
1. Tirathai Public Co., Ltd.,	358	144	360	143
2. Thai Fin Co., Ltd.,	53	10	49	11
3. Tirathai E&S Co., Ltd.,	27	7	23	7
4. L.D.S Metal Work Co., Ltd.	307	66	268	56
5. L.D.S-N.D.P (JV)	391	45	384	46
Total	1,142	269	1,084	263
Number of employees by employment type				
Full-time employees	717	218	771	220
Contract employees	425	51	313	43

8) The company gives employees the freedom to express opinions without interference, allows employees to be participate in the welfare committee to provide information about the operations and status of the company regularly including supports for discussions and collaboration with the welfare committee to enhance working standard quality of the employees



6. Responsibility to Consumers

The company has policy to meet customer satisfaction. Consumers who directly purchase products and services from the company will obtain quality products and services up to international standards at fair and reasonable price. The company pays close attention to the needs and expectations of consumers' responses appropriately and timely manner. In addition, the necessary information gatherings will be utilizing to improve quality of products and services in order to build trust in company's products and services.

Practices and Guidance

1) Assurances of quality and safety of electric transformers

Every transformer will be testing for electrical properties before distribution since transformers are peripheral devices in a high voltage electrical power transmission system. If there is any defective caused by the transformer, it will cause damage to the property, business opportunity as well as danger to users and people involved. The company is aware of such impact and therefore pay close attention to every process from design process, production process, and testing processes of which TRT is capable of testing all transformers in every single test process from Routine Tests, Type Tests, and Special Tests in accordance with IEC60076, IEEE C57.12.90 and TIS 384-2543 standards. There is only short-circuit withstand test will be sent to the KEMA Testing Laboratory in Netherlands. In addition, the testing laboratory of the company appointed by Office of Industrial Products is a central laboratory for testing and certifying by TIS 384-2543 Industrial Standard including ISO 9001, OHSAS/TIS 18001, ISO 14001 and ISO/IEC 17025 Electrical Testing Laboratory and Calibration Laboratory. In order to guarantee the design quality, production and ability to examine electric transformers in accordance with international standards before distribution to customers.

2) Protection of the Confidentiality and rights of customers

The company has measures to protect customers' confidentiality information including technical information, testing results or any other confidential information. The company has procedures in collecting and sending the information in consideration of customer's confidentiality, and maintain customers' rights such as allowing customers to monitor Witness Test for their own transformers in order to provide confident in the results of the test. In 2019, there are 63 customers attend the Witness test.

3) Provision of accurate and sufficient information to customers

All tested Tirathai transformers that passed the testing will be labelling with every Name Plate (Labels) on the tank of transformer to show the transformer identification. The details show are based on international standards IEC60076-1 and the Thai Industrial Standard TIS 384-2543, with the main details as transformer type, standard number, manufacturer name, manufacturer serial number, production year, number of phases, size, electric rated power, voltage, highest current, insulation level, weight, etc. These labels inform customers all the details of each transformers. Besides, the user instruction manual and the training for how to use, precautions, and maintenance of transformers for customers before use.

4) Dissemination of knowledge in transformer engineering

The company published an academic journal under the name "Tirathai Journal" with the objective of disseminating knowledge about transformer engineering to those who interested. The preparation has no commercial purposes and do not reserve the copyright to distribute the content. The Editors and staffs are all employees of the company. The publication contains knowledge about electrical engineering, valuable thesis in engineering of students from various universities, including technique of operation and maintenance of transformers, as well as the transfer of the philosophy of offshore management, which is another aspect that the university has never taught. In addition, the company aims that this book is environmentally friendly and health-conscious to the readers. The cover and content of the book are therefore printing on paper produced from agricultural waste materials with a non-toxic process and use ink produced from soybean oil etc. In 2019, the journals distributed to employees and customers Electricity Generating Authority of Thailand Metropolitan Electricity Authority Provincial Electricity Authority, Libraries of various universities as well as public. Presently, the publication is Issue 23, total 1,948 copies. There was also being published on the company website, www.tirathai.co.th

5) Hearing Opinions

In order for customer to be confident in the quality of the transformers, the company had opened the customer to visit over the Production Process, Testing Process, as well as to listen the opinions hearing and exchanging knowledge between the company and customer. The various suggestions will be bringing into analysis process for improvement, which will lead to

better customer satisfaction. In 2019, there are government agencies, customers from domestic and overseas paid a courtesy visit Tirathai transformer production process total 164 people, such as Metropolitan Electricity Authority, Provincial Electricity Authority, Federation of Thai Industries, Metropolitan Waterworks Authority etc.

6) Satisfaction Survey

The company conducted the customer satisfaction survey who customers attended the Witness test on the satisfaction of the sales staff, test staff, production and testing processes, products satisfaction as well as the environment. In 2019, the satisfaction survey showed satisfactorily results in accordance with the target 80%.

7) Complaint

The company has a process for receiving complaints about quality of products and services through many channels such as 30 lines of call center, e-mail, and fax. The company has a service team who operate 24 hours call center in response to handle complaints and solving problems quickly.

7. Participation in Community and Society Development

The company commit to be good member to the society and conduct business with awareness of social responsibilities, profit sharing, and return to create community and society to grow together sustainably through the following activities and programs:

Practices and Guidance

1) Learning resources outside the classroom

The Company has a policy to make the organization as a source of learning outside the classroom in the electric transformer manufacturing engineering in the country. The students are experiencing the production process of electric transformers for both Distribution Transformer and Power Transformer. In 2019, there are students from various educational institutions visit the transformer production process including quality management system, environment and safety up to master degrees. There are total of 227 people, such as Faculty of Engineering Ubon Ratchathani University, Rajamangala University of Technology Thanyaburi, King Mongkut's Institute of Technology Thonburi, Don Bosco Technology College, and King Mongkut's Institute of Technology Ladkrabang etc.

In addition, the company has collaboration program on internships and cooperative education from various universities with an aim of providing students with practical work experience. In 2019, there are 47 students enrolled for the internship, the total allowances of 502,881 baht.

2) Public Interest Activities

On 20 April 2019, the company sponsors a study by giving 2 testing transformers of 10 kVA 1Ph 50Hz 220 – 100,000 V, worth 980,000 baht. to King Mongkut's University of Technology Thonburi to use for practical teaching and learning for students. The company allows students of the institute and professors to participate in learning from the design process, production process, including the testing process

In addition, on 4 April 2019, the company also signed a memorandum of understanding (MOU) with Narathiwat Rajanagarindra University in order to develop educational quality and advice on the establishment of a high voltage electrical engineering laboratory. The purpose is to use for teaching and learning, Academic services including the testing of materials in high voltage systems as new learning center related to electrical engineering that will arise in the 3 southern border provinces as well

8. Environmental Management

Environmental management is necessary in parallel with business operations. The Company has conducted policy to administer the environment in consideration of impact from the production process or any activities by abiding the environmental friendly practices, laws, and regulations strictly which leads to true sustainability for the organization, community and society.

Practices and Guidance

1) The company has been certifying according to ISO14001 standard for all the areas in the company by an assessment of independent outside auditors. According to the latest assessment in 2019, there were no incompliance.

2) The company complies with environmental laws and regulations including environmental impact monitoring and



found that the value of various pollutants meets the specified environmental standard as follows,

Air Pollution

The company has installed a Bag House Filter System to vacuum dust caused by the process of producing insulation paper. The quality of air released from the insulating paper production process and other areas of the process are monitoring in order not to affect the environment and neighboring communities. The results of the test are in accordance with laws.

Water Pollution

The company has a wastewater control and treatment system. When the water that is used for consumption or consumed, it will release to wastewater treatment system. The wastewater will be checking for water once a month, such as pH, BOD, COD, Oil & Grease, SS, TDS, and TKN. The measurement results comply with the laws,

Noise Pollution

The company has measures to check noise level. The source of noise comes from the operation of the machines; therefore, in consideration of effects, which will affect employees, and nearby community, the company conducts the noise level measurements at least once a year. The measurement result is according to the laws.

Industrial Waste

The company has a process to disposing of industrial waste from the production process by segregating waste into 3 types;

1. General waste
2. Waste recycling waste
3. Hazardous waste

The company has hired agencies who have license to collect hazardous waste, transport, treatment, and dispose of or unused materials as according to the type waste. In addition, the company is making sure of the waste management process out of the factory; the company sends the professional safety representative to double check the landfills process and segregate the contaminated materials. On 11 February 2019, the company inspected West 2 Energy Company Limited and AK Mechanics and Recycling Company Limited.

3) The company has been certifying for Green Industry Level 4, Green Culture from the Green Industry Promotion and Development Bureau, Ministry of industry. The goal of creating a green culture under the project "Garbage Smile" to encourage all employees to be conscious of waste separation and environmental preservation.

4). In 2019, the company has no complaints about environmental issues or misconduct that do not comply with the laws from any inside and outside the company.

9. Innovation and dissemination of innovation from Corporate Social Responsibility (CSR)

The company brings knowledge, creativity, and experience from business administration combined with the philosophy of Sufficiency Economy that is beneficial to the economic and society to develop, deploy and innovate to create business innovations that can create benefits, increase competitiveness as well as create value added for business and society at the same time

Practices and Guidance

Transformer Testing is the crucial process that determine the quality of Transformers in order to build confidence and acceptance from customers. Tirathai has brought knowledge, creativity, and long-term business experiences integrated with the sufficiency economy philosophy to implement and innovate by developing an up-to-date transformer testing and calibration laboratory according to international standards, such as IEC, IEEE, ANSI, etc. At present, Tirathai Transformer Testing Laboratory is capable of maximum testing up to 900 MVA 3 Ph. 50 Hz 550 kV. the scope of testing certification are:

1. Lightning Impulse Tests
2. Line Terminal AC Withstand Test
3. Switching Impulse Test

According to IEC 60076 standards, added from the original test lists, which is considering that the company's electrical testing laboratory has been accepted as an accredited laboratory for the ability to test the transformer to meet the required standards. In addition, the Electrical Testing and Calibration Testing Laboratory of Tirathai has also been accrediting with the

laboratory standard according to ISO / IEC 17025: 2017 from the Thai Industrial Standards Institute (TIS). This will create opportunities for business competition both domestically and internationally.

The Development of transformer testing capability of Tirathai considered as an investment in human resources development of the company to have the potential of high voltage electricity knowledge. The application to the testing of other devices such as power cables, traps equipment, overvoltage etc., supports research and development work for other industries. In this regard, Thai Industrial Standard Institute (TIS) appointed Tirathai Testing and Calibration Laboratory to be the Third Party testing center for electrical transformer testing.

In addition, the company has also upgraded the production process to be able to produce transformers to cover the country's electricity system and the whole Asian Power Grid systems supporting future renewable energy projects in the country. This is also the preparation of the country's electrical infrastructure to have sufficient potential to compete in the economy under the ASEAN Economic Community framework. On 4 March 2019, the company signed a contract to sell 6 transformers of size 333 MVA 525 kV with Electricity Generating Authority of Thailand for improvement of the structure of the electric power transmission system in Northeast region, Lower Northern, Central region, and Bangkok in order to enhance the stability of the electrical system. This is the first manufacturer of electric transformers in Thailand who can produce power transformers of this level

10. Publication of Corporate Social Responsibility and Environmental Reports (CSR report)

The company emphasizes on the importance to the disclosure of information that fully reflects the implementation of Corporate Social Responsibility (CSR) as stated earlier. By this disclosure of information, not only it will be advantageous to all stakeholders, but also all parties involves help to review the company whether the CSR quality is in line with the set goals or not.

Practices and Guidance

1. The company has published CSR report in the annual report and disseminate via the website www.tirathai.co.th, stating the information as follows,

1.1 Business administrations. The Company operates businesses in accordance with the relevant laws and regulations. Transparent Disclosure of important information is subject to good corporate governance policy taking into account of the benefits to shareholders, employees, communities and society, business partners, customers, competitors, creditors and all stakeholders as well as being a good member of the society and conducting business with awareness of responsibility to the public.

1.2 Environmental and safety operations. The company commits to environmental and safety operations concerning safety at work, good health of staff, and appropriate environment protection. These are considered a part of business administrations, therefore, the company has established an Environmental Management System (ISO 14001), Occupational Health and Safety Management System (OHSAS /TIS 18001), as well as waste management processes from production processes that comply with the laws and others relevant regulations.

1.3 Social operations. The company treats all employees fairly in term of employment without violating basic rights, and provides appropriate compensation and welfare suitable to meet the needs of employees, the development of employee potential in accordance with the organization's values. Furthermore, the company is also a resource of engineering learning for electric transformers in the country. Each year, students from many various education institutes has the opportunity to visit the transformer production process as well as collaborating to support the knowledge and equipment for the establishment of high voltage electricity laboratories. The company also offer project for internships and cooperative education, which shows that Tirathai is more than an electric transformers manufacturer of Thai people, but also participating in promoting the education of Thai people.

2. The company offers numerous channels of information dissemination for easy access to the company information. The company prepares a report on Corporate Social Responsibility (CSR) report in both Thai and English through the following channels via Annual Report, and the disclosure of information via website www.tirathai.co.th and Form 56-1.

