



CIEE
1st Annual Environmental
Report 2016





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Knows CIEE

About CIEE

CIEE Interconnect is an Electronics Manufacturing Services (EMS) provider of wiring and cable assemblies and integration solutions for a wide range of industries, delivering customers all around the world.

CIEE’s worldwide headquarters is in France and the main manufacturing site is located in Thailand, close to Bangkok.

CIEE Interconnect is a strategic partner to many important global companies that are leaders in their markets.

Focused markets include industrial medical, energy, aerospace, rail, and marine. For ten years, CIEE Interconnect has run a strong, continuous investment program to establish high efficiency manufacturing facilities in Europe and Asia, equipped with automatic machines and high-end control equipment.

The high level of expertise and quality performance allows these facilities to comply with the most demanding certifications in the field of cable assemblies: AS9100 (aerospace), IRIS (rail), ISO13485 (medical), ISO 9100, and UL.

CIEE Interconnect is focused on quality, reliability, responsiveness and cost reduction. We offer innovative solutions in design, supply chain, service, and raw materials to help our customers lead their markets.

Vision & Mission

VISION	MISSION
<p>Become and admired company by quality and spirit of teamwork</p>	<ul style="list-style-type: none"> ❖ Build real teamwork ❖ Improve quality management system ❖ Management by objectives and results ❖ Increase profit of company and wellbeing of employees.



Value & Culture

Taking care of customers by taking care of employees

- ❖ All staff trained within the Group to a common set of standards
- ❖ Stable, long-term career prospects for staff with flexibility to float capacity to demand around the group

Investing in a long-term future

- ❖ Highest technology facilities and equipment as standard
- ❖ CIEE addresses environmental impact as a primary criteria for infra-structure investment

Partnership-style customer relationships

- ❖ Mutually beneficial long term relationships with customers.
- ❖ Working together for optimum quality, cost and delivery performance.
- ❖ Providing specialist professional expertise.



Quality Policy

Customer satisfaction is our priority

- ❖ We reach our commitments
- ❖ We guaranty quality of our products
- ❖ We follow request and deliver on time to customer according to acknowledgement done
- ❖ We comply with applicable laws and regulations
- ❖ We identify and prevent any safety risk in any working area
- ❖ We plan and follow in detail production and supply chain
- ❖ In case of customer issue, we fix the problem with reactivity and professionalism
- ❖ Managers lead and deploy quality and customer satisfaction spirit in the company
- ❖ Customer needs and requirements are taken in account by all CIEE staff
- ❖ Management recognizes performing and professional behavior
- ❖ We create an environment to promote innovation and learning organization
- ❖ We use continuous improvement management to improve our performance and the effectiveness of our management system.

Our key measure is the feedback of our customers



Technical Safety Policy

The Technical Safety Policy of CIEE THAI COMPANY is aimed at maintaining and improvement the technical and economic efficiency of production activities in order to ensure competitiveness of our products.

CIEE THAI COMPANY Technical Safety objectives are:

- ❖ To ensure the production of products within the required deadlines with the highest level of quality.
- ❖ To ensure company's functioning safe for our company and our customers.
- ❖ To ensure the security of our products & staff during all operation processes.
- ❖ To provide the required level of equipment to optimized efficiency & cost level.
- ❖ To prevent negative influences on the environment.

CIEE THAI COMPANY Established Technical Safety Policy based on the following principles:

- ❖ Transparency and justification when making technical decisions.
- ❖ CIEE will not accept any orders, when it is not clear that all technical, safety & quality requirements can be fulfilled by CIEE.
- ❖ Quickly responding to potential problems associated with the production or delivery to a customer.
- ❖ Integration of manufacturing operations and other departments through the implementation of required management techniques.
- ❖ Conformity of production processes and the continuous development of manufacturing equipment and technology
- ❖ Compliance of developed technical solutions with requirements of normative and technical documentation, regulations, client requirements as well as legal provisions

Human right and Business Ethic Policy

CIEE THAI COMPANY Management is firmly committed to conducting business in an ethical and responsible manner, respecting the rights and dignity of all people.

CIEE THAI COMPANY respect and support international principles aimed at protecting and promoting human rights, as described in the United Nations Universal Declaration on Human Rights and the International Labor Organization's (ILO) Declaration on Fundamental Principles and Rights at Work.

CIEE THAI COMPANY is committed:

- ❖ To treat everyone fairly and without discrimination, harassment or retaliation. Our employees, agency staff and suppliers are entitled to work in an environment and under conditions that respect their rights and dignity.
- ❖ To respect freedom of association. Where our employees wish to be represented by trade unions or works councils, our employees are able to collectively choose to represent them within the appropriate national legal frameworks.
- ❖ To not hire people younger than 18 years.
- ❖ To not make business with any companies who does not respect the human or children rights.
- ❖ To ensure anticorruption in our businesses practices.
- ❖ To prevent use of CIEE products and services for money laundering purposes
- ❖ To prevent fraud, misappropriations, and other irregularities
- ❖ To disclose any situations that may involve inappropriate or improper conflicts of interests
- ❖ To ensure the right to our employee to bring complaint to top management directly or through suggestions.
- ❖ To operate in compliance with all applicable laws.

CIEE THAI COMPANY recognizes its responsibility to respect human rights in its operations.

In addition, we recognize that we have an opportunity to promote human rights where we can make a positive contribution. This includes, among other things, opposing human trafficking and the exploitation of children.



Environmental Occupational Health & Safety Policy

CIEE THAI COMPANY Management is firmly committed to a policy enabling all work activities to be carried out safely, and with all possible measures taken to remove (or at least reduce) risks to the health, safety and welfare of workers, contractors, authorized visitors, customers and anyone else who may be affected by our operations.

Strive for continuous improvement in our environmental, health and safety management systems and in the environmental quality of our products and processes.

Guiding principles:

- ❖ Meet or exceed all applicable environmental, health and safety requirements. We will evaluate our EHS performance by monitoring ongoing performance results and through periodic management reviews.
- ❖ Where laws and regulations do not provide adequate controls, we will adopt our own standards to protect human health and the environment.
- ❖ Advocate the adoption of prudent environmental, health and safety principles and practices by our contractors, vendors, and suppliers.
- ❖ Communicate environmental, health, and safety policy to our employees and stakeholders & ensure that all employees are aware of their role and responsibility to fulfill and sustain & environmental, health and safety management systems and policy.
- ❖ Ensure that policy will deploy to yearly objectives and targets. We will conduct periodical management review to ensure effectiveness of implementation and maintain of this policy.

Management responsibility is to provide and maintain as far as possible:

- ❖ A safe working environment.
- ❖ Safe systems of work.
- ❖ Plant and substances in safe condition.
- ❖ Facilities for the welfare of workers.
- ❖ Information, instruction, training and supervision that is reasonably necessary to ensure that each worker is safe from injury and risks to health.

- ❖ A commitment to consult and co-operate with workers in all matters relating to health and safety in the workplace.
- ❖ A commitment to continually improve our performance through effective safety management.

Workers responsibilities & obligation are to:

- ❖ Comply with safe work practices, with the intent of avoiding injury to themselves and others and damage to plant and equipment.
- ❖ Take reasonable care of the health and safety of themselves and others.
- ❖ Wear personal protective equipment and clothing where necessary.
- ❖ Comply with any direction given by management for health and safety.
- ❖ Not misuse or interfere with anything provided for health and safety.
- ❖ Report all accidents and incidents on the job immediately, no matter how trivial.
- ❖ Report all known or observed hazards to their supervisor or manager.

CIEE THAI COMPANY seeks the co-operation of all workers, customers and other persons. We encourage suggestions for realizing our health and safety objectives to create a safe working environment with a zero accident rate.

This policy applies to all business operations and functions, including those situations where workers are required to work off-site.



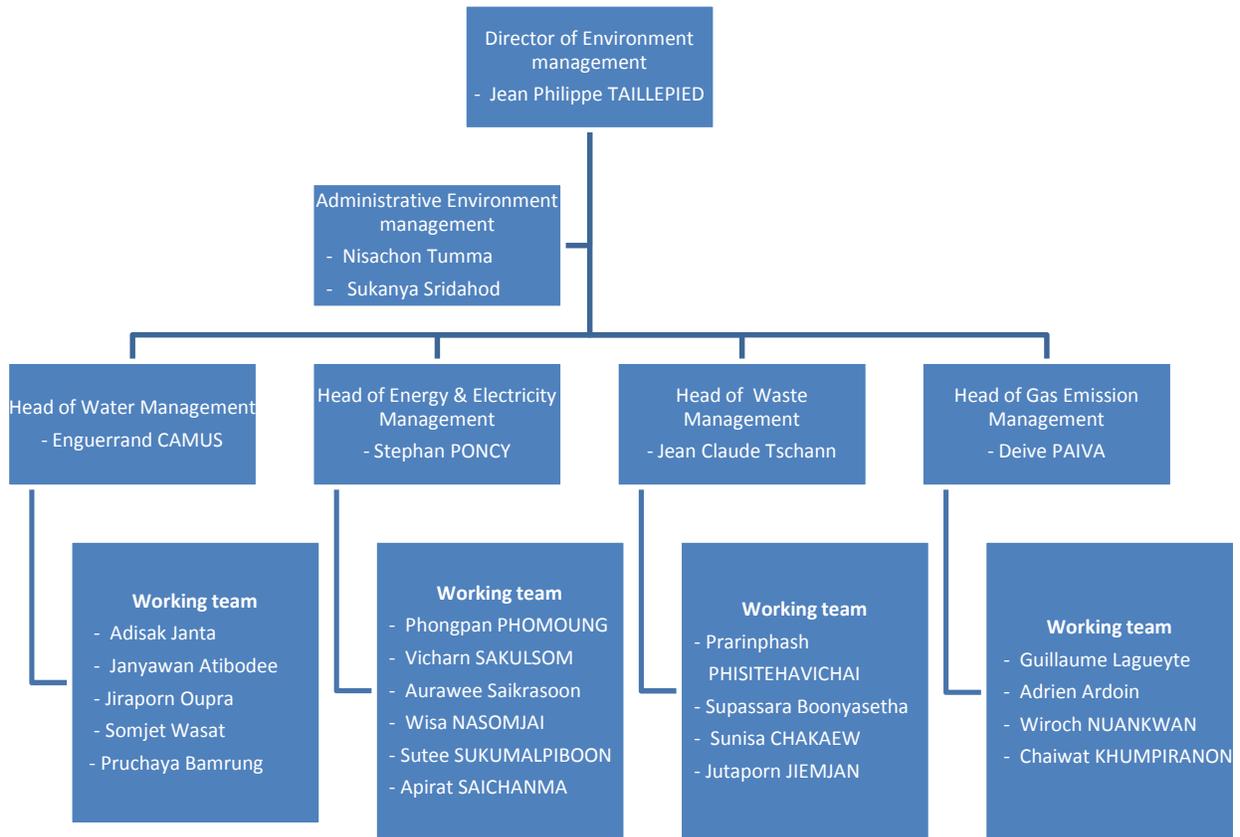
Registration, Evaluation and
Authorisation of Chemicals





Environment Management in 2016

Environmental Working Team





UN Global Compact

CIEE Join the initiative in Global Compact at the end of 2016. We support the ten principles of the Global Compact on human rights, labor, environment and anti-corruption.

With this communication, we express our intent to implement those principles. We are committed to making the Global Compact and its principles part of the strategy, culture and day-to-day operations of our company, and to engaging in collaborative projects which advance the broader development goals of the United Nations, particularly the Sustainable Development Goals.

CIEE will make a clear statement of this commitment to our stakeholders and the general public. We recognize that a key requirement for participation in the Global Compact is the annual submission of a Communication on Progress (COP) that describes our company's efforts to implement the ten principles and support any specialized UN Global Compact issue platform that our company may join at a later date. We support public accountability and transparency, and therefore commit to report Communication on Progress within November 2017 and annually thereafter according to the Global Compact COP policy.

ISO 14001



CIEE has established an Environmental Management System that provides a framework for managing and reducing CIEE's environmental impacts establishes programs to help achieve our environmental objectives and tracks the reporting of environmental incidents as part of our continual improvement process.

We are however in a climate of continual improvement, which is the foundation of ISO14001, so encourage the reporting of all environmental incidents and near-misses to learn and advance.



Water Management

- Control water consumption in 2016
- Maintain result of Analyzing physical, Chemical and microbiological characteristics of Wastewater



- ❖ Water consumption is reducing by 4% in 2016. The total consumption and consumption by m³/1,000 working hours also decreased by 4%.
- ❖ The year-on-year rolling target to maintain or reduce the water consumption per 1,000 working hours was met.

Table 1: Water Consumption

Year	Total Consumption (m ³)	Consumption/working hour (m ³ /1000Whr)	Limited (m ³ /1000Whr)	Charge +/- (%) From 2015 & from limit
2015	7,758	7.0	-	-
2016	8,165	6.7	7.0	-4%

Water Conservation Program:

- ❖ Promote the water conservation program with poster at area of use to increase awareness
- ❖ Monthly preventive maintenance of water equipment such as faucets, pipes, toilet for leaks
- ❖ Weekly checking water meter for hidden water leaks



Environmental Measurement and assessment result

CIEE do not have wastewater from production. We have only wastewater from consumption at Canteen. The wastewater from canteen has been checked and monitors the analyzing physical, chemical, and microbiological characteristics 2 times per years. In order to follow the practices set forth in the series of environmental management systems ISO 14001.



The analyzed result for the analyzing physical, chemical, and microbiological characteristics of wastewater were compared with the regulation standard of The Standard by The Notification of Ministry of Industry plant 2/2539 under the section of Sewerage dumping from the factory guideline.

- ❖ pH value, Biochemical Oxygen Demand (BOD₅), Chemical oxygen Demand (COD), Suspended Solids (SS), Total Dissolved Solids (TDS), Oil & Grease , and Total Kjeldahl Nitrogen (TKN) measure from wastewater. Found that the values are within the criterion standard define.

Table 2: analyzing physical, chemical, and microbiological characteristics of wastewater

Parameter	Results ⁽³⁾		Standard ⁽¹⁾	Unit	Comparison with standard
	Mar 25, 2016	Oct 21, 2016			
pH Value	-	7.9	5.5-9.0	-	Pass
Biochemical Oxygen Demand (BOD₅)	20	18	20	mg/l	Pass
Chemical oxygen Demand (COD)	120	64	120	mg/l	Pass
Suspended Solids (SS)	50	48	50	mg/l	Pass
Total Dissolved Solids (TDS)	5	358	3,000	mg/l	Pass
Oil & Grease	100	2.90	5	mg/l	Pass
Total Kjeldahl Nitrogen (TKN)	20	30.80 ⁽²⁾	100	mg/l	Pass

Remark ⁽¹⁾ The Notification of Ministry of Industry plant 2/2539 under the section of Sewerage dumping from the factory guideline

⁽²⁾ Assure by Special lab Envi & Consultant Co.,Ltd.

⁽³⁾ Approval by Department of the environmental Center, Suan Dusit Rajabhat University





Electricity & Energy Management

➤ Control Electricity consumption in 2016



- ❖ Electricity consumption is growing up from 701,000MWh from 2015 to 785,000MWh in 2016 due to grown of CIEE business. The electricity consumption by MWh/1,000 working hour increase by 2.1% in 2016
- ❖ We control electricity consumption per 1,000 working hour to lower than 700 MWh/1,000Whr in 2016. It is under limit by 7.7%.
- ❖ CIEE has a rolling year-on-year target to maintain or lower than 700 MWh /1,000Whr. The company has met this target.

Table 3: Electricity Consumption

Year	Total Consumption (MWh)	Consumption /Working hour (MWh/1000Whr)	Charge +/- (%) from 2015	Limit (MWh/1000 Whr)	Charge +/- (%) from limit
2015	701,000	632	-	-	
2016	785,000	646	+2.1%	700	-7.7%

Energy & Electricity Conservation Program

- ❖ Use energy efficient devices such as LED light
- ❖ Publish Energy Conservation Awareness program
- ❖ Set up preventive maintenance program for air conditioner
- ❖ Switch of office equipment after use for example, close computer screen and printer during break, switch of main switch of computer after finish work.
- ❖ Daily check office after work by security to ensure that all device / light in office already switch off



Waste Management

➤ Control CIEE total waste



- ❖ Total waste produced is stable in 2016.
- ❖ We control total waste produced per 1,000 working hour to lower than 0.7 container/1,000Whr in 2016. It is under limit by 6.1%.
- ❖ CIEE has a rolling year-on-year target to maintain or lower than 0.7 container/1,000Whr. The company has met this target.

Table 4: Waste Produced

Year	Total waste (container)	waste /working hour (Container/1,000Whr)	Charge +/- (%) from 2015	Limited waste /working hour (Container/1,000 Whr)	Charge +/- (%) from limit
2015	728	0.6569	-	-	-
2016	728	0.6570	+0.02%	0.70	-6.14%

Waste management program

- ❖ All employees practice the 3R (Reduce, Reuse and Recycle) as encouraged by company management to support waste reduction.
- ❖ Training for all employee for the waste separation program



Gas Emission Management

➤ *Maintain result of Emission air quality*



Gas Emission in CIEE production is from tinning process. The air is drawn in from the tinning work station and either expelled outside the building by exhaust fume hood at stack.

Air quality from CIEE stack has been monitored 2 times per year to study trends and to monitor the environmental impact. In order to the practices set forth in the series of environment system ISO14001

Result of Emission air quality monitoring from stack

From analyzed results for the emission air quality monitoring from stack were compared with the regulation standard of the notification of Ministry of Industry B.E. 2549 (2006) under the topic of "The Polluted Air Emission from Factory"

- ❖ Total Suspended Particulate (TSP) monitoring from stack. Found that has a value are within the criterion standard define.
- ❖ Tin (Sn) and Isopropyl alcohol (IPA) monitoring from stack. Found that cannot compared to standard announced by the Ministry of Industry because there is not a standard but the value is very small.

Table 5: Result of Emission air quality monitoring from stack in 2016

Parameter	Results ⁽³⁾		Standard	Unit	Comparison with standard
	Mar 25	Oct 21			
Total Suspended Particulate (TSP)	6.51	10.49	400 ⁽¹⁾	mg/m ³	Pass
Tin (Sn)	<0.001	<0.001	- ⁽²⁾	mg/m ³	Pass
Isopropyl alcohol (IPA)	<0.050	<0.050	- ⁽²⁾	mg/m ³	Pass

Remark ⁽¹⁾ The Notification of Ministry of Industry B.E.2549 (2006) under the topic of "The Polluted Air Emission from Factory"

⁽²⁾ No standard for the Notification of Ministry of Industry B.E.2549 (2006) under the topic of "The Polluted Air Emission from Factory"

⁽³⁾ Approval by Department of the environmental Center, Suan Dusit Rajabhat University

Action Plan in 2017

Environment management program

- ❖ Monthly meeting with working team
- ❖ Review consumption in 2016 and find improvement in 2017
- ❖ 100% attended awareness training program to increase awareness
- ❖ multi communication channels to promote the program
- ❖ recognize for employee if reach the target



1) Water Conservation Program

- ❖ Maintain quality of wastewater Analyzing physical, Chemical and microbiological characteristics of Wastewater
- ❖ Install grease filter

2) Energy & Electricity Awareness Program

- ❖ Study solar cell installation
- ❖ Save paper. Photocopy only what you need. Always use the second side of paper, either by printing on both sides or using the blank side as scrap paper.
- ❖ Study screen working station and automatic record in computer of result crimping machine to reduce paper usage
- ❖ Computers, Monitors, and other Desktop Electronics
 - Set for Monitors are sleep mode after 15 minutes. Users should still turn off their monitors if they will be away from their desk more than one hour since sleep mode still uses power.
 - Activate auto Shutdown Policy

- Plug all desktop electronics into a power strip and turn off the power strip when leaving every night
- ❖ Air conditioner
 - Preventive maintenance air conditioner every 3-6 months.
- ❖ Last-Out Check List: To ensure all lights and shared equipment are turned off every night, each separate office suite will institute a Last-Out Check-List. In the office will post a copy of this check list at a main exit to the suite and have the last employee leaving each evening fill-out the check list. A template for the check list is attached.

3) Waste Management Program

- ❖ More recycling bins across office areas to support zero desk-bin policy

4) Gas Emission Management Program

- ❖ Maintain result of Emission air quality
- ❖ Review designation of exhaust fume hood and develop the fume hood.

