



A Better Tomorrow





2023 | Sustainable Development Report



Delta Electronics (Thailand) Public Company Limited

Symbol:	DELTA
Listed:	The Stock Exchange of Thailand
Industry:	Technology
Sector:	Electronic Components
Type of operation:	Manufacturing for export and technology solution provider.
Registered capital:	THB 1,259,000,000 shared at par value of Baht 1
Paid up capital:	THB 1,247,381,614 shares at par value of Baht 1 (As of 13 February 2023)
Proportion of free float	22.36%(as of March 1, 2023)
Thai CAC status:	Certified member
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Adherence level:	In accordance - Core
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Website:	http://www.deltathailand.com
Audited Financial statement:	https://deltathailand.com/en/financial.2022.1

To Provide innovative, clean
and energy-efficient solutions
for a better tomorrow.

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Reporting standard

This report has been prepared in accordance with the GRI Standards: Core Option in both English and Thai. All the information in General Disclosure The material issues of this report has been selected as per the Company's stakeholders' feedback via our on-line questionnaire published on <https://goo.gl/HKsqeV>, stakeholder engagement log collected by our domain experts, face-to-face random interviews, emerging risk and issues consideration, social media log and media stakeholders' analysis. The Company bases on Global Reporting Initiative's GRI Standards, Dow Jones Sustainability Index, SET Sustainability Awards frameworks, stakeholder interests and emerging issues to identify the questionnaire's aspects per sustainability context, data collection as well as the report implementation.

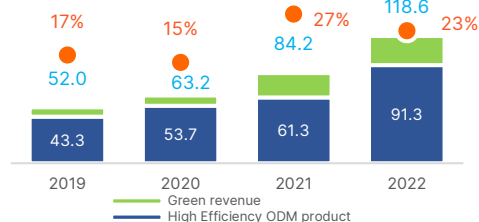
The report qualitative and quantitative contents can be obviously indicated with the GRI Content Index which is shown on the final page after table of Company's performance. In addition, to boost up both internal and stakeholder participation, Delta adds the linkage of this report to related sustainable business practices into its GRI content table. Delta has engaged Lloyd's Register, an independent third party, to provide external assurance for selected environmental and social indicators and ensure the accuracy and reliability of the data reported herein.



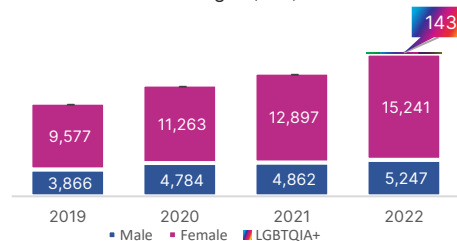
2022

At Glance

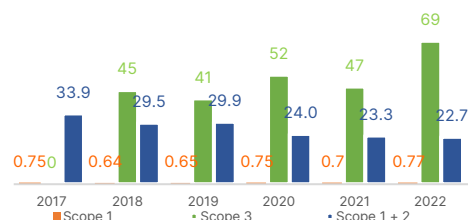
Proportion of Green Revenue to total revenue
(Billion Baht)



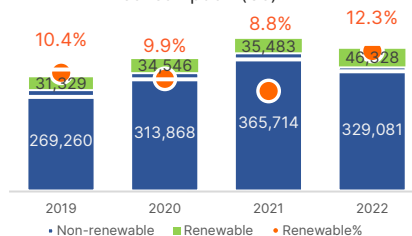
Our Colleagues (FTE)



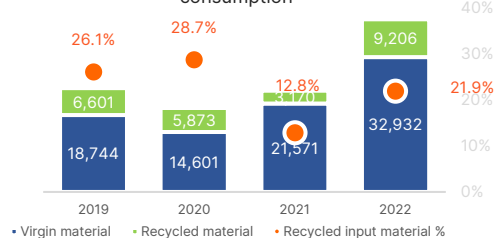
GHG intensity 2017 - 2022
Thailand/India/Slovakia (tons CO2e/M USD)



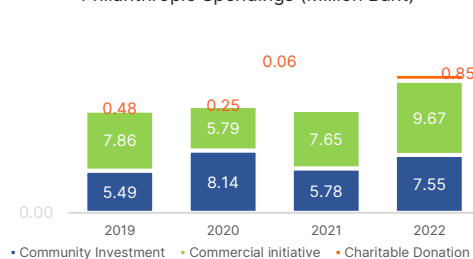
Non-Renewable and renewable energy
consumption (GJ)



Proportion of recycled input material
consumption



Philanthropic Spendings (Million Baht)



Executive Summary

- Delta Thailand sees significant growth across all key financial metrics especially in revenue, gross profit and net profit in 2022 compared with 2021, with headline revenue of USD 3.3 billion and net profit of USD 434 million, a sharp YoY growth of 28% and 111% respectively.
- Despite major headwinds throughout the year, Delta Electronics Thailand delivered on guidance to achieve all of its planned operational and financial targets, alongside successful management of critical global material shortages to meet business growth in 2022.
- Continuing market penetration of Delta solution businesses in the region especially with EV charging station business in Indonesia and Industrial Automation businesses in SEA and Australia.
- Stay committed to sustainable development with business transparency, focus on employee well-being, continuing support for grooming local startups and engineering talents, expand local supplier base to reduce carbon footprint and improve delivery time; accelerate adoption of renewable energy to meet RE100 by 2030 and many other key projects.

For more information on the 2022 executive summary is publicly available at our [Press Release](#).



Corporate Culture

Core values are the foundation of corporate culture, influencing the behavior and decisions of employees and shaping the image and style of the corporate culture. They play a crucial role in determining a company's success. In the past, Delta's corporate culture and values have led to our vision and strategy and laid the critical foundation for our success.

As Delta's development strategy shifts from ODM to OBM to emphasize the Solution Business, and as cross-BG and cross-Region cooperation increases, we need to understand the real needs of our customers and provide suitable solutions that surpass their expectations. Only when we can collaborate with an altruistic mindset and keep learning and innovating, can we integrate technology and products to provide greater added value. To maintain our competitiveness, we are integrating the above vital elements to redefine our core values as: Integrity, Innovation, Collaboration, Inclusion, and Empowerment. The definitions and summary of these values are as follows:

Brand promise

Smarter. Greener. Together

Integrity

Honestly dedicated to achieving quality with our work, upholding the highest level of professional standards and matching our words with action.

Innovation

Looking forward to discovering future possibilities, embracing continuous learning to innovate on creative solutions and breaking through the status quo.

Collaboration

Creating synergetic partnerships that achieve shared goals with agility and precision, putting partners, clients and users at the center of our collaborative efforts.

Inclusion

Open to diverse perspectives, respecting of differing opinions and inclusive of various backgrounds that offer unique contributions.

Empowerment

Achieving our own success by empowering others to realize their own goals, encouraging active and enthusiastic growth to fulfill everyone's potential.

Announced on 27 April 2023



Photos by Finalists of 2022 SD Week Photo Contest under the theme "Diverse and Included, not Divided."





Foreword

The easing of the COVID-19 situation allowed Delta Thailand to resume full operations. Nevertheless, 2022 proved to be yet another busy year for us and our partners as we worked to overcome challenges from lingering post-pandemic impact together. Meanwhile, the conflict in Europe has exacerbated global stagflation with higher energy prices, supply chain shocks and even food production shortages that impacted the cost of living globally.

However, global renewed commitments to sustainability and carbon neutrality have opened new business opportunities albeit with higher ESG standards to comply with and expectations to accelerate net zero and RE100 target achievement from our stakeholders.

Short-term, we are building new eco-friendly facilities in Thailand to cope with the ramp up in orders transferred from other production locations. These new facilities will comply with leading international standards to help us reduce carbon emissions both at the product and organization levels. In 2022, Delta's new company factory in the Wellgrow Industrial Estate and our rented office in Bangkok complied with LEED green building standards.

Delta Thailand is accelerating Renewable Energy Certificate (REC) sourcing to reach a target of 35% renewable energy mix by 2025 in addition to our self-generated renewable energy. In 2022, we purchased 3,800 MWh of RECs and self-generated solar energy accounted for 8.7% of the total electricity consumption of Delta Thailand and our subsidiaries in India and Slovakia.

We are now training product carbon footprint analysts to help our customers prepare for the EU Carbon Border Adjustment Mechanism (CBAM) scheme. In 2022, we trained 10 experts from various business groups or units with ISO 14040 or ISO 14067

certification for target products. In the near future, our experts will disseminate knowledge and experience to representatives from each product line to process Product Carbon Footprint (PCF) certificates for customers.

At the same time, Delta Thailand is proactively engaging with young talents to support our fast growth. In 2022, we added 4,226 full-time hires to our workforce and 80% of new hires are female. The average employee age decreased from 39 years old in 2019 to 31 years old in 2022. Due to rapid investment in training resources and online channels, average employee training hours went up from 25.4 hours in 2021 to 41.7 hours in 2022.

Our medium-term strategic goals are to continue with Diversity Equity and Inclusion (DEI) promotion to ensure employee well-being and readiness for the era of energy and technology transformation. We will also continue to diversify our supply chain and accelerate supplier localization while promoting circular economy principles in our supply chain to ensure a sufficient supply for our ongoing business growth.

In 2022, we successfully reintroduced recycled steel, aluminum, copper, plastic and corrugated paper materials back into our supply production process. Overall, 21.85% of the total weight of our input material in 2022 was made up of recycled contents taken from open recycling markets.

Over the long term, Delta Thailand will continue to have close collaboration with our stakeholders, the government and the public to reach our Net Zero commitments by 2050 and our RE100 target of 100% renewable electricity

throughout our operations by 2030. We have implemented an Internal Carbon Pricing (ICP) scheme to urge awareness among the entire Delta Group and accelerate our Net Zero implementation. In 2022, the Delta ICP project had seven major projects in Thailand worth 1,381,591 USD.

Delta Thailand's long-term sustainable development strategy and rigorous internal programs have positioned us well to meet ever-increasing ESG requirements from global customers in the RE100 era. We would like to thank the following organizations for their recognitions:

1. S&P Dow Jones Indices, for inclusion into the Dow Jones Sustainability Indices 2022.
2. Morgan Stanley Capital International for inclusion into the MSCI Global Standard Indexes List 2022 and upgrade to AA ESG Rating for leadership in employee management practices.
3. The Financial Times and Nikkei Asia for inclusion into the inaugural Climate Leaders Asia-Pacific 2022 List.
4. UL Environment for Zero Waste to Landfill Validation for sustainable waste processing operations.
5. ASEAN CG Scorecard Project for inclusion into the ASEAN Asset Class for excellence in corporate governance.
6. The Ministry of Industry for the Prime Minister's Industry Award 2022 in the Potential Industrial category.

7. The Stock Exchange of Thailand for inclusion into the Thailand Sustainability Investment 2022 in recognition of ESG excellence.

8. The Thaipat Institute for inclusion into the 2022 ESG100 Universe and 2022 Sustainability Disclosure Award.

9. The Employer Branding Institute for the Best Employer Brand Awards 2022 for excellence in training and development.

Finally, I would like to thank everyone at Delta for your determination that led to our shared success. Our excellent results come from a firm commitment to our mission "To provide innovative, clean and energy-efficient solutions for a better tomorrow." I look forward to working with you for a safer and more inclusive workplace. I believe that together we can reach many more sustainability milestones in Thailand.

Yours sincerely,



Jackie Chang
President
Chairman of Sustainable Development Committee
Chairman of Risk Management Committee
Delta Electronics (Thailand) PCL.

This is Delta

An overview on Delta's milestone, products, operation site, market presence, success stories, value chain, sustainability management, CSR commitment, long-term sustainable goals, risk and opportunity.

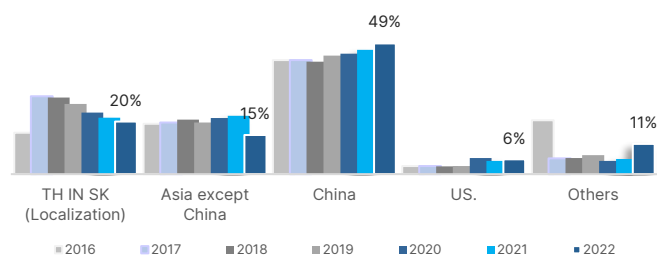
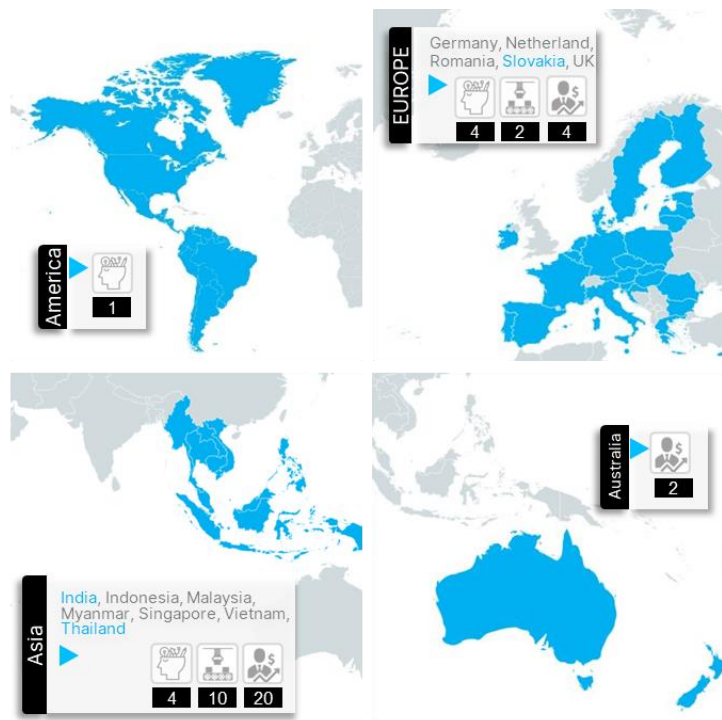


Overview

Delta Electronics (Thailand) Public Company Limited ("Delta" or "Delta Thailand" in the following content) is a manufacturer and exporter of power supply, electronics equipment and parts. The company was inaugurated on June 16, 1988, with THB 40 million in initial capital and converted to a public limited company on September 23, 1994, and listed on the Stock Exchange of Thailand on July 24, 1995, under the symbol of "DELTA". As of December 31, 2022, the company has THB 1,259,000 in registered capital with THB 1,247,381,614 in paid-up capital at THB 1 par value per share.

Delta is one of the world's leading producers of power supplies and electronic components that include cooling fans, EMI filters and solenoids. Our businesses are now mainly involved in power management solutions. Our current power management product line covers various types of power supplies including power systems for information technology, telecommunications, industrial applications, office automation and medical industries; and power supplies for servers, networking and DC-DC converters and adapters. Delta slightly transforms its role to power management and automation solutions provider.





Distribution of our sources of Raw materials

At present, the company has 2 main sites in Thailand, our headquarters in Bangpoo Industrial Estate, Samutprakarn and another plant in Wellgrow Industrial Estate, Chachoengsao. Our overseas plants are in India (Rudrapur, Gurgaon and Hosur), Slovakia (Dubnica nad Váhom and Liptovsky Hradok).

In 2019 Delta Electronics (Thailand) PCL. received Conditional Voluntary tender offer (CVTO) from Delta Electronics Int'l (Singapore) Pte. Ltd. at the offer price of THB 71 per share. The CTVO implementation has not made any major change to the Delta Thailand's organization size, capital structure, ownership, operation and supply chain in the reporting period. However, in 2020, the COVID-19 pandemic and raw material shortage due to climate change slightly disrupted Delta's target to increase material localization.

On 22 April 2021, Delta Electronics (Australia) Pty. Ltd., which is now in the process of dissolution, changed its name to "Delta Electronics (Holdings) Australia Pty. Ltd." and Australia Pty Ltd. changed its name to "Delta Electronics (Australia) Pty. Ltd.". The merger had no impact on the consolidated financial statements nor ESG performance because it was a merger of subsidiaries within a group of companies under common control.

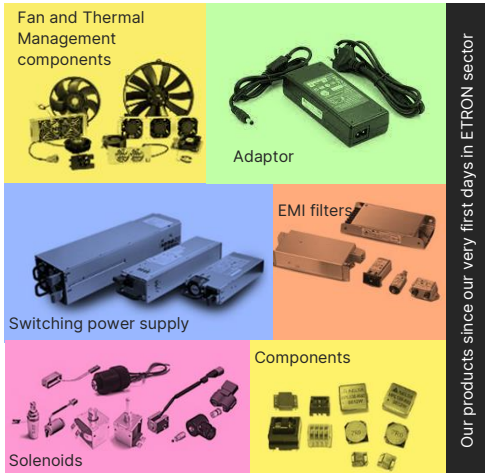
On 25 April 2022, a meeting of the executive committee's Board of Directors passed a resolution to increase the Company's investment in Delta Electronics India Manufacturing Private Limited by USD 5 million, or approximately Baht 169 million, in order to purchase machines and line set up for production. The Company has already made an additional investment in the second quarter of the current year. This additional investment had no impact on the investment structure of the Group.

Our worldwide network of sales and technical support teams are located in Asia, the USA and Europe. These teams are backed by centrally located design-engineering centers that diagnose problems during the design and production stages. This can be demonstrated by Delta Thailand's latest investment structure disclosed in our [Annual Report](#) page 52-54 To keep our stakeholders informed, Delta Thailand's major shareholders has publicly disclosed at <https://deltathailand.com/en/shareholder>.

As a strategic partner to the world's technology leaders, Delta has made a firm commitment to provide leading-edge product/system solutions at a reasonable cost, less environmental footprint and with the highest quality.

Powering Green Innovations

From its expertise in designing and creating high-efficiency power supply, Delta leverages our market leading power supply technology to create greener product and solutions that enhance quality, reliability, customer satisfaction and necessary ESG actions for our stakeholders. Since 2010, the company realized its potential to relief global climate change with smarter and greener solutions. Consequently, Delta gradually phased in to solution business since 2015 with healthy growth in EV, green and energy-efficient solutions which are potential opportunity implied from the company's awareness of Climate Change impact to broad society.



What is power Supply?

The purpose of a power supply is to supply electric power for a device that we use. There are many varieties of devices and power supply types. Some types are the Linear Power Supply, i.e. Transformer, Non-Linear Power Supply and Switching Power Supply. In short, power supply is a device that supplies electricity to various electrical devices and converts AC voltage to DC voltage to meet the needs of various electrical equipment for DC voltage (voltage goes to the device's capacitors or internal components)



Why Delta?

At Delta, we commit ourselves to the advancement of power and electronics technology to provide "smarter" products and solutions with high efficiency. It helps us make a "greener" and more environment friendly way of life possible. We collaborate with our partners by listening to their needs and accomplishing our mission "together". Visit <https://deltathailand.com/en/products-and-solutions> to learn more about our products and solutions. or drop your queries to our sales managers at products_info@deltathailand.com to get more information on our products & solutions.

Application



Why Switching Power Supply?

The main advantages of Switching Power Supply or Switching Mode Power Supply (SMPS) are high efficiency of 80-100%, which means the input is almost as much as the output. It is light, compact, which can be installed in a variety of devices.

Innovations for Better Tomorrow



DET Industrial Automation Solutions

- Factory automation solutions
- Machine Automation solutions
- Process Automation Solutions



DET Data Center Solutions

- Micro data center
- POD
- Containerized data center
- Power container



DET Telecom Energy Solutions

- Outdoor ECO cooling enclosure
- Renewable energy power system
- Outdoor telecom power solutions
- Site monitoring and control system



DET EV Charging Solutions

- Residential charging
- Commercial charging
- Public charging



DET Display and Monitoring Solutions

- Display system solutions
- Display system integration



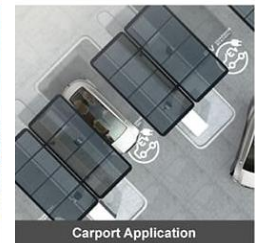
DET Building Automation Solutions

- Building automation
- Lighting design
- Smart streetlight
- Connected lighting
- Smart surveillance & Delta Smart Pass
- UNO Indoor Air quality monitoring



DET Smart Energy Solutions

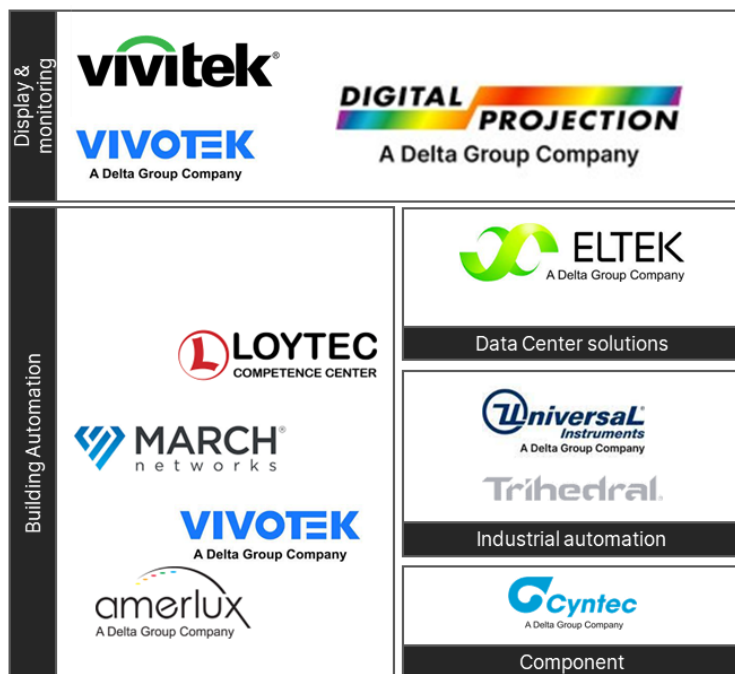
- PV solutions
- Energy storage solutions
- EV charging solutions
- Energy IoT solutions



Portfolio:

Smarter.Greener.Together.

Delta Thailand's corporate brand value has recognized by Chulalongkorn University's Thailand Top Corporate Brand Award, Hall of Fame for its brand valued over THB 50 billion for 5 years in row.



Delta's brand emphasizes innovation and energy conservation and combines robust business development with comprehensive corporate social responsibility. The company seizes on the latest global trends of today's fast changing industrial landscape and climate change issues by creating ultra-efficient and reliable energy-saving solutions for environmental protection, energy conservation and value-add.

According to Delta's Investment Policy, most of the companies in the group operate business related to electronic products or businesses that are related to or support the operations of the Company. From which these companies have different strengths that can help each other support each other. The Company has closely supervised the operations, especially its subsidiaries, by sending directors or executives to supervise policies and business directions as well as to report the operating results and follow up the operating results closely and continuously. This makes the subsidiaries in the group understand the working direction and aims to work together to provide the best service to customers as well as to strengthen the group's business. Our merger and acquisition activities not only help Delta to strengthen its brand image and market presence; but also, another way to strengthen our value chain of innovation among Delta group. Up to the reporting period, there was non-compliance with regulations and/or voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship.

"To provide innovative, clean and energy-efficient solutions for a better tomorrow." Is both our corporate mission and our commitment to environmental protection. Delta commits to its brand promise of "Smarter. Greener. Together." in our core value and product development inspiration. Our brand not only embodies what we demand of ourselves, but also is a commitment to our investors, customers, and employees alike.

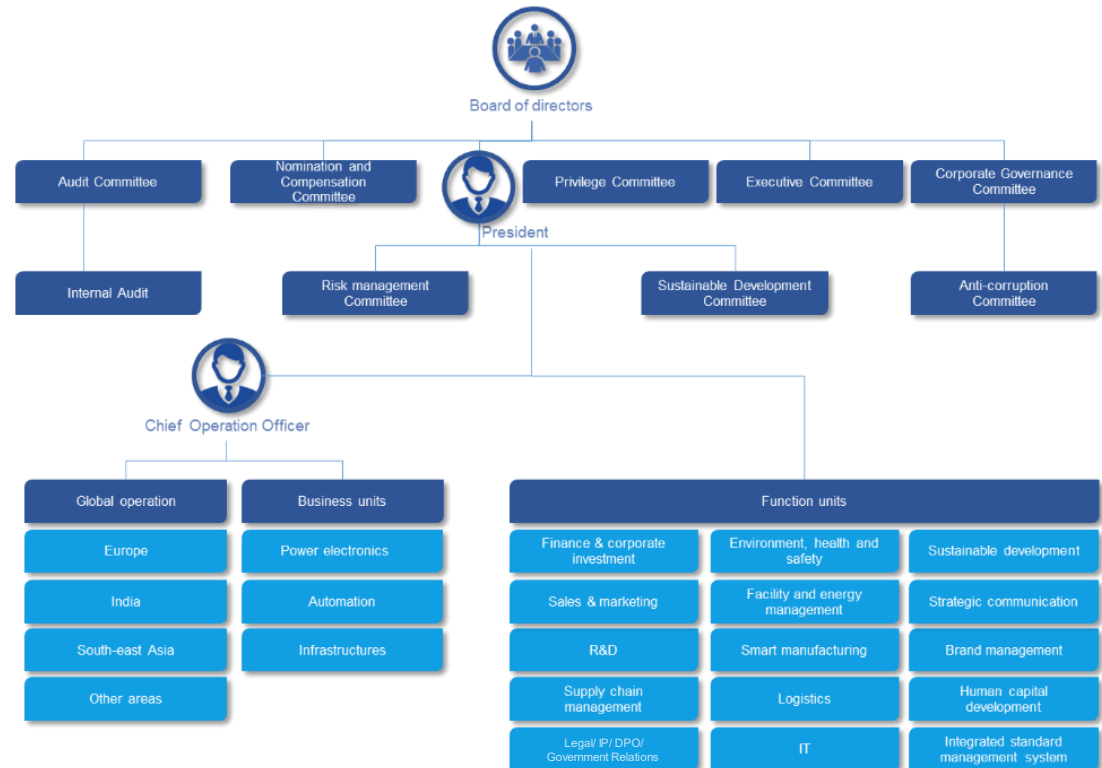
Our strong belief in Delta's brand drives the synergy of leading technology and business partner cooperation in our ongoing creation of ultra-efficient and reliable products and services including power and component products, industrial automation, energy management systems and consumer electronics products that support a smart and environment-friendly future.

Our Structure

In spite of its global presence and wide range of products, solutions and businesses, Delta set up simple organization for delegating authority for economic, environmental, and social topics. Through flat reporting lines policy, strategic target and directions from the highest governance body has communicated to senior executives and other employees with various approach.

Though all Delta's executive-level position has responsible for economic, environmental, and social topics up to their functions, Sustainable Development (SD) Office had founded to connect smarter and greener values chain among related functions and its subsidiaries across the globe. This significant development demonstrates the company's strong passion to boost its performance in sustainable development matters.

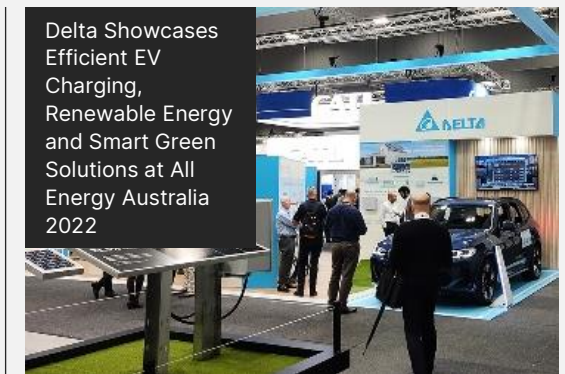
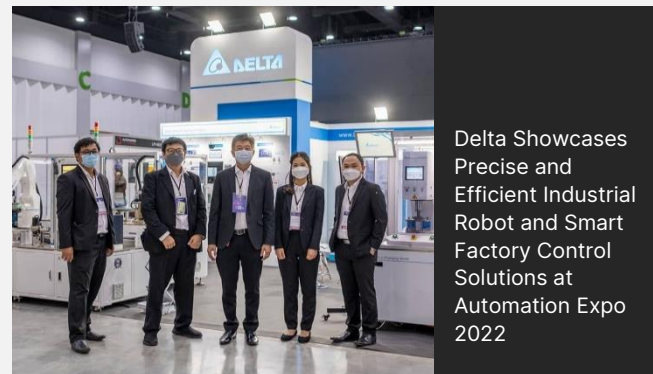
Due to the changing regulations in the energy transformation era, in 2022, Delta established Government Relations functions to oversight the changing scenario of ESG law and regulations. The Government Relation function is responsible for collaborate with other functions to monitor law and regulation which is one of the key forces that influence our strategy, conduct and monito impact assessments, monitoring the organization's compliance with relevant regulations including monitor data privacy risks arising in our organization's activities.



Success Stories

In the ever-emerging complexity of the Industry 4.0 era, customers around the world are seeking Delta products and solutions to maximize energy efficiency, drive growth and boost competitiveness. Our growing project portfolio is a testament to our successes in a wide range of areas including industrial automation, datacenters, green buildings, smart factories, telecom power, monitoring and displays, EV charging and renewable energy.

Delta teams leverage global R&D and manufacturing synergies in our relentless push to deliver the most added value to our customers. Our core competencies in energy management and power electronics power Delta innovation, providing the impetus for our ongoing journey “to provide innovative, clean and energy-efficient solutions for a better tomorrow.”



Sustainable Development

Stakeholder's expectation is crucial for our long-term growth. We also realize actual and potential risk and develop sustainable development strategy and generate mutual benefit to our stakeholders that finally create a better future for the next generation.



Our progress to sustainability

Up to 31 December 2022



The Matters



Through daily business process, feedback from related public disclosure, various communication channels, trade events and partnership with leading institute; our stakeholders' voices help us realized the material issues in extended view.

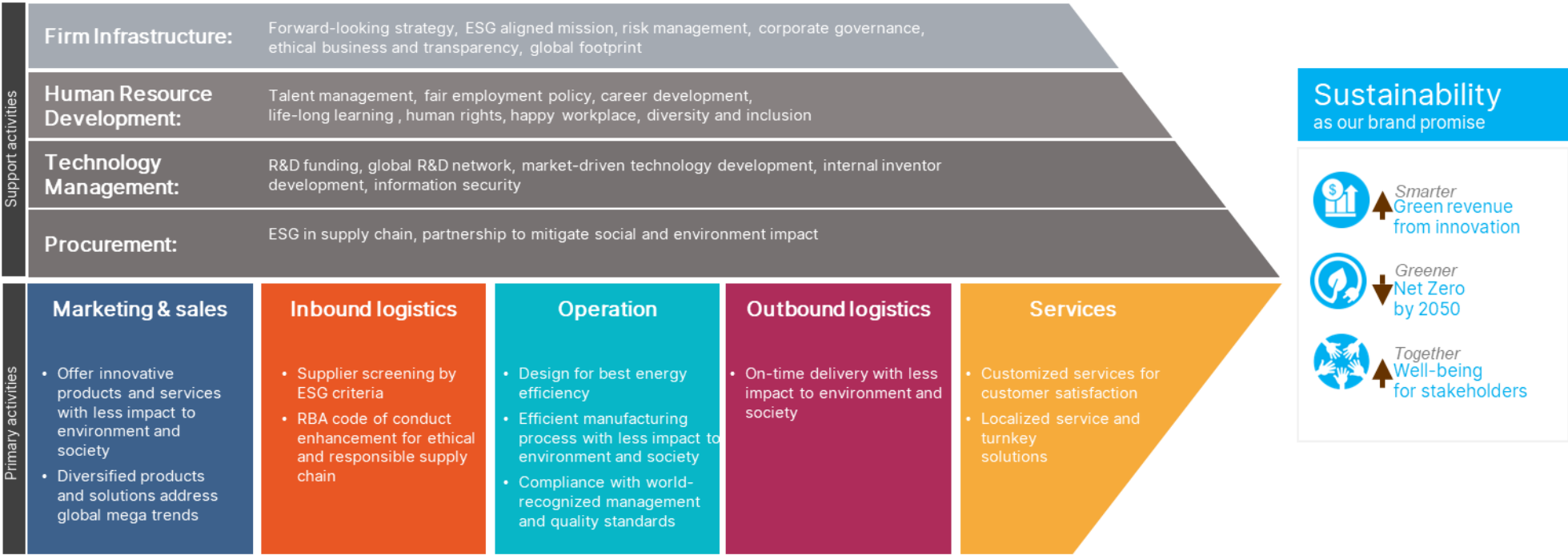
Delta Thailand has adopted AA1000SES 2018 principle to communicate with both direct stakeholders who have a visible role in the organization, regulation, e.g. operational personnels, communities and entities that influenced or be impacted by it the services; and indirect stakeholders who are interested and echo their needs in Delta's performance through various approaches.

The stakeholders' expectations are identified with systematic materiality analysis, so that we can take the necessary responsive action and enrich the content of our information disclosures. Furthermore, any stakeholder's highlights raised in "Other important area" portion of the on-line questionnaire had reported to the management and Sustainability Development Committee to seek for any further action as well.

Step 1: Design the material analysis.

The company's report boundaries to cover the Company's operations in Thailand which include its factories in Bangpoo Industrial Estate, Samutprakarn and factory in Wellgrow Industrial Estate, Chachoengsao and our manufacturing factories in India and Slovakia. Our sites in these countries cover 100% of our manufacturing process and contribute to 98% of the Company's consolidated financial performance.

Mission: To provide innovative, clean and energy-efficient solution for a better tomorrow



Step 2: Value chain analysis

To ensure our capability to response to provide innovative, clean and energy-efficient solutions for better tomorrow, we analyze our business activities to see our potential and gap to deliver the promise value to our stakeholders while balance the company's competitive advantage.

Step 3: Identification of initial list

List sustainable development issues related to Delta Thailand's sustainable development in ESG aspects according to GRI Standard, [the World Economic Forum's Risk Report](#), Dow Jones Sustainability Index Assessment for ITC Sector, SET Sustainability Awards, Responsible Business Alliance (formerly EICC) Code of Conduct and the Securities and the Exchange Commission of Thailand's

Corporate Governance. We implemented Media stakeholder analysis (MSA) to benchmark our list of material issues with peers, our customers and competitors in the same industry. In this reporting period, Delta took the 13 events reported in the latest [WEF Risk Report](#); for example, climate action failure, natural disasters and extreme weather, sever commodity supply crises and cost of living crises, as our initial list .



Step 4: Stakeholder engagement and material topics prioritization

Delta Thailand has adopted ISO 26000 and AA1000SES 2018 principle to communicate with both direct stakeholders who have a visible role in the organization, regulation, operation people, communities and entities that use the service or are impacted by it; and indirect stakeholders interested in Delta's performance.

Since 2019, Delta established [Stakeholder engagement Guideline](#) to systemize its consultation process with its stakeholders on economic, environmental and social topics. In 2022, we engaged our stakeholder through various approaches through related departments/functions e.g., HRA, Volunteer working team, Employee relation team and corporate governance Committee to get their stakeholder feedback and reported to Sustainable Development committee meeting at least once a year. Interpersonal communication log, random interview, questionnaire and stakeholder feedback against marketing and CSR activities; for instance, also included as part of our material topics.

Finally, Delta prioritize stakeholder expectations/ concern by considering the frequency of each topic raised times by the influence or impact level of stakeholder.

Step 5: Material topic validation

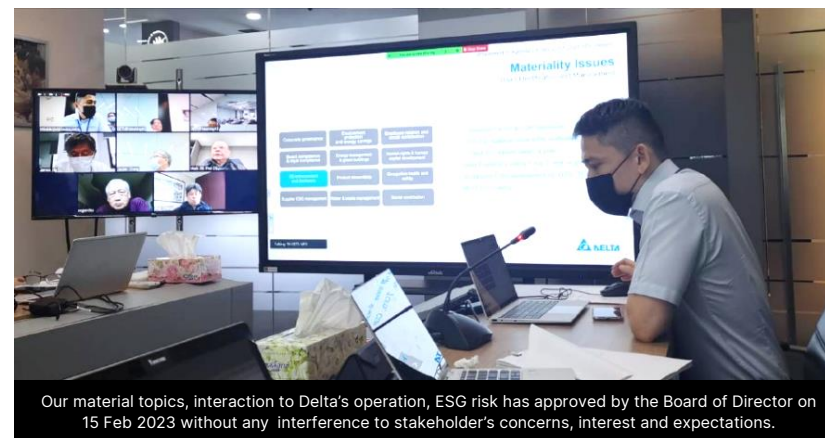
The result of materiality prioritization indicates that 7 of 13 issues have been concerned and interested more frequent by the Company's stakeholders and with high impact to both our stakeholders and our Business and Net Zero goals. However, the issue had clustered to 3 major issues as following:

5.1 Material topics prioritization by stakeholders influence and interest.

Material topics/ Megatrend	Communication Approaches	Stakeholder concern/		Impacted / Interest stakeholders							Type of Impact						Impact description	Delta's Response to stakeholder expectation/ concern
		Frequency	Impact level	Customers	Employees	Suppliers	Community & society	Regulator	Investor	NGO	Others	Actual/ Potential	Negative/ Positive/ Neutral	Short term/ Long term	Intend / Unintended	Reversible / Irreversible		
1. Climate Action Failure Man-made environmental damage Natural disaster and extreme weather events	<ul style="list-style-type: none"> Questionnaire Customer Audit Site visit ESG performance assessment 	H	H	•			•	•	•	•		A	A/P	L	I/ U	R/I	<ul style="list-style-type: none"> Delta's compliance that impacts customer's client's ESG requirement. Competence to fulfil customer's order/ requirement in long term. Community's concern of their health and wellbeing. New international trade association/ countries' environmental law compliance. Competence to maintain profitability. 	<ul style="list-style-type: none"> Commitment to Net-zero target. Commit to RE100, set energy transformation policy, target and procedure. Eco-friendly operation procedure & target deployment. Partnership with leading organizations to mitigate climate change. Disclosure of product carbon footprint inventory
2. Cost of living crises	<ul style="list-style-type: none"> Welfare Committee Meeting Union Meeting Job application platform 	H	M		•		•	•	•	•		A	N	S		R	<ul style="list-style-type: none"> Delta's compliance that impacts customer's client's ESG requirement. First-jobber, employee, and employee's family well-being Competence to maintain profitability. 	<ul style="list-style-type: none"> Competitive remuneration Education, food, medical and other well-being support scheme introduction DEI promotion Internal recruitment to offer higher career path/ compensation.
3. Severe commodity price and supply crises	<ul style="list-style-type: none"> Meeting with suppliers and customers Customer Audit 	M	H	•		•			•			A	N	L	I/U	R	<ul style="list-style-type: none"> Sufficiency of raw material for order fulfillment in long-term Price pressure to supplier Higher cost and environmental impact from transportation process 	<ul style="list-style-type: none"> Robust ethical code in supply chain Promote recycled input material used in supply chain. Increase ratio of local suppliers

5.2 Material topics interaction to Delta performance and long-term target

Material topics/ Megatrend	Stakeholder's Interest Interaction with Delta's value chain (Pearson co-efficiency • test)						
	Economic performance	Business ethics	Innovation management	Responsible supply chain	Eco-efficient operation	Occupational health & safety	Human rights & DEI Promotion
1. Climate Action Failure Man-made environmental damage Natural disaster and extreme weather events	H	H	H	H	H	H	H
2. Cost of living crises	H	H	H	M	M	L	H
3. Severe commodity price and supply crises	M	H	H	H	H	L	L



Step 6: Material Issues Approval

On annual basis, stakeholders’ interest in material topics, including potential and actual impact to stakeholders and Delta has reviewed and acknowledged by the Sustainable Development Committee to ensure that our material topic meet AA1000 requirement as well as GRI’s principle of Stakeholder Inclusiveness, Sustainability Context, Materiality and Completeness. By this process, our material topics have been executed carefully by representatives of these operation sites with variety of business context, cultures, countries’ policies, expertise and emergency issues they were facing daily. On February 2023, the 3 material issues, key ESG performance, stakeholder concern and interests, including ESG risk and impact had reported and approved by the Board of Directors.

Step 7: Public Disclosure

With priority on stakeholders’ interest and severity of the potential impact to them. The 3 approved material topics, including potential and actual impact is disclosed in this Sustainable Development Report as following locations:

Material issue	SD Report chapter	Page
1. Climate Action Failure, Man-made environmental damage, Natural disaster and extreme weather events	Economic performance	34
	Eco-efficient operation	46-51
	Business Ethics	40
	Innovation management	52-55
	Responsible supply chain	56-60
2. Severe commodity price and supply crises	Responsible supply chain	56-60
3. Cost of living crises	Occupational health and safety	111-121
	DEI Promotions	105-110

Step 8: Material Utilization

The material issue including verified KPIs that related to our ESG performance will be utilized for re-assess risk management strategy as well as ESG policies, long-term strategy and departmental KPI development, value chain development, new business process development.

Step 9: Assess key KPI development.

At least twice a year, the Sustainable Development committee reviews Delta’s ESG performance. The committee advises related function to participate both local and international assessment such as DJSI, SET Sustainability Awards, CDP, MSCI, FTSE, Ecovadis and FTSE. The purpose of such participation is to benchmark our performance with peer and industry leaders.

Our Commitment



Delta Electronics (Thailand) Public Company Limited is committed to conducting business according to the company's Corporate Social Responsibility Commitment. The commitment shall provide guidelines for the directors, management, and employees to operate our business ethically with transparency, accountability, and [respect for human rights](#) and fair treatment to all stakeholders including our employees, shareholders, customers, suppliers and the communities.

As a global corporate citizen, we support [international standards](#) such as the [Responsible Business Alliance \(RBA\)](#), the Universal Declaration of Human Rights, [SBTi, RE100](#) and the International Labor Office Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy and Global Reporting Initiative (GRI). We are committed to the following:

- Provide employees with a safe and healthy work environment where they can live up to their full potential in return for reasonable remuneration and benefits.
- Create company value and enhance shareholder value.
- Promote CSR ideals and practices throughout our supply chain and work together for better performance.
- Develop environmentally friendly, energy saving products and implement management standards and sound practices to reduce our impact on the environment to fulfill customer satisfaction.
- Invest in innovation and research, develop intellectual property rights, and devote ourselves to the progress of human culture and technology, the development of society and the economy, as well as the sustainable development of the Earth and its environment.
- All executives shall extend their collaboration and promote their staff members to fulfill these policies successfully.

If you have comments or suggestions to make about Delta's CSR & [Ethics](#), please do not hesitate to contact us through det.sd@deltathailand.com



Remark: revised GHG intensity and Energy consumption intensity target accordingly to Delta's committed Science-based target and RE100 activity

Delta Thailand has continued improving its products, processes and business models to increase productivity and generate profits while reducing costs. The company commits to providing the best return to its stakeholders and we receive local, national and international honors for outstanding performance. Sustainable growth in the ever-changing business environment to meet global needs is necessary for the company in the long term. Delta is integrating sustainable development strategies with our business strategies. We focus on product development and continuous CSR in our business processes to address emerging risks. To achieve our strategic goal while promoting value in the value chain, Delta is responding to three key core company ideals: Smarter. Greener. Together. And our Mission Statement.

Since 2004, every employee has based their daily operations on our core company concepts which form the DNA of Delta culture and drive our social progress and effective responses to change. In 2015, Delta set targets to increase green revenue from its products and solutions portfolio up to 30 percent of total revenue by 2023 while reducing environment footprint from our business process. These products and solutions areas include Solar Energy, Datacenter and Industrial Automation systems that respond to the needs of businesses and the wider community. With the growth of valuable business opportunities in the past 20 years, Delta's energy efficiency products and solutions rose 6.37% from 2015 when this amount of revenue have acknowledged. Finally, Delta's green revenue account for 23% of the company's total revenue in 2022.

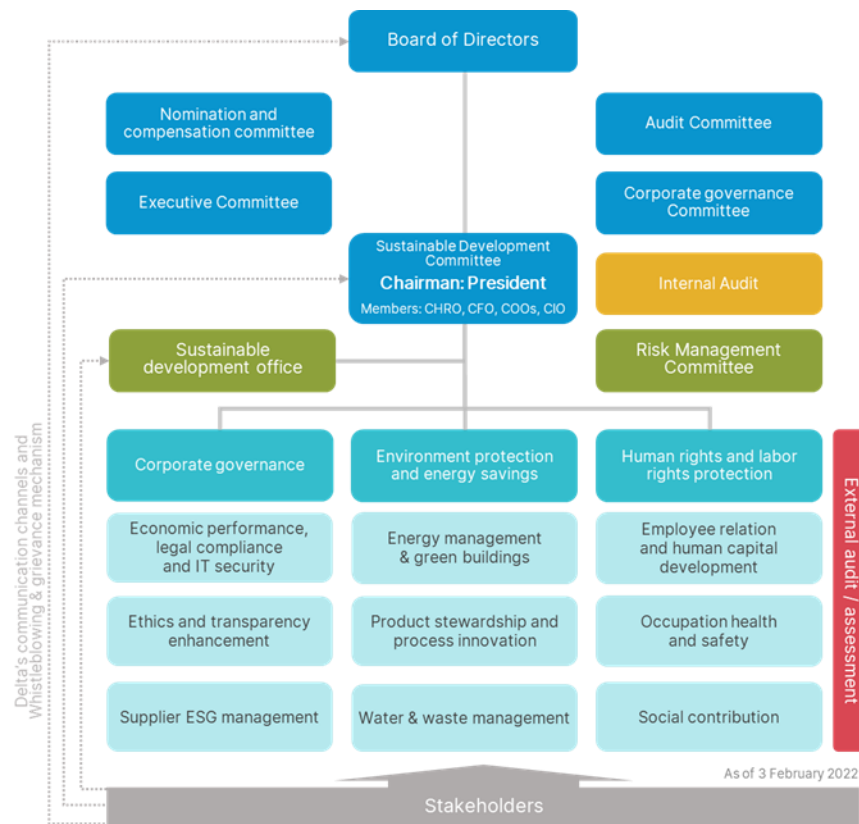
Sustainable Development Organization

According to ISO 26000 guideline, Delta has established a sustainable development organization for the full implementation of our Global sustainability development Strategy. The main body in the organization is the SD Committee which includes the company President, Chief Human Resource Officer (CHRO), Chief Financial Officer (CFO), Chief Operations Officer (COO) and Chief Information Technology (CIO: join the committee in 2018). The SD Committee [reviews and monitors](#) each CSR project, at periodic meetings, according to project-specific standards.

The SD Committee secretary proposes benchmarking procedures for the company's CSR projects and from time to time communicates the global sustainable development practices to the committee for their reference. The committee secretary is responsible for arranging quarterly CSR meetings to inform the SD Committee and operational leaders on the progress of each company CSR project. In addition, the committee secretary will follow up on and compile ESG risk, critical concern and the results of each project in an [annual report](#) to the Board of Directors.

The CSR target fields form three categories: Corporate Governance; Environmental Protection and Energy Saving; and Employee Relation and Social Contribution. Each category has relevant directors and managers who define key performance indicators (KPI), set up specific achievement goals and take responsibility for the project's progress and on-time execution as per the company's policy and relevant standard requirements. Finally, Delta publicly discloses its sustainable development performance on annual basis at

<https://www.deltathailand.com/en/download-sd-report>.



1. Since IT security and on-line communication does matter to corporate strategy, Delta has include Chief Information Technology officer (CIO) into its SD Committee structure.
2. Sustainable Development organization body officially established in 2018 to drive internal ESG performance development and ESG disclosure among Delta Thailand Group.
3. Due to Thailand Cyber Securities Acts, personal Data Protection Acts. OECD BEPS Action 13 and other updated regulations, Delta has include its legal manager (acting DPO) into its SD Committee structure.
4. The COVID-19 pandemic, higher requirement of OHS standards and trend off emerging disease highlights the importance of stakeholders health and safety, Delta separate OHS working team from HRD works to fasten OHS decision making for any possible emergencies.
5. According to the committee meeting in Oct 2021, SD committee has assigned by the President to be responsible for enterprise risk management in social and environmental aspect, SD committee and Risk management Committee has merged. The focused ESG risks will be reported to the President, Audit Committee and the BOD at least twice a year.

The Risk

Effective risk and crisis management is vital for long-term financial planning and organizational flexibility. To reduce various risks to a tolerable and controllable range through identification, assessment, control, monitoring and communication of potential risks from the perspective of Delta Group; we adopt ISO31000, COSO ERM and Integrated GRC as guideline to implement our [Enterprise Risk Management Policy](#). By qualitative or quantitative management methods, as well as to provide a reference for developing operational strategies, and effective risk management process will allow Delta Group to achieve long-term strategic goals and deliver mutual benefit to our stakeholders. The policy has been formulated to achieve the Group's strategic goals in a reasonable manner.

Up to the reporting period, [9 of our nine directors](#) have possessed experience and expertise in risk management. Six of them were non-executive and independent directors. Delta ensures regular risk management education for executive directors, non-executive directors, our managements, internal audit, key function to strengthen our risk culture. In past 3 year, Mrs. Tippawan Chayutimand, Independent director and audit committee member, has completed the [Thai IOD DCP program](#) which Risk Issues for Boards was a key module of the program.

To ensure the effectiveness of ESG risk management target, Delta's [Risk Management Committee\(RMC\)](#) is structurally independent of the business lines. Structural independence allows for objective monitoring and control of various risks, in the best interest of the entire organization and without the pressure of a potential conflict of interest coming from other business priorities. The committee comprises of a variety of experts from various functions to ensure systematic monitoring of all aspects of ESG risks. Executives and managements of our subsidiaries in Slovakia and India are members of this committee. These experts are responsible for addressing both adhered and emerging risk that related to their functions, raising related issues that require help from other functions, setting risk appetite for the raised issues and set short to long-term target to mitigate residual risks including close monitor and report the progress to the Risk Management and Sustainable Development Committee (SDC) at least twice a year. In 2022, Delta engaged experts from the National Institute of Development Administration (NIDA) to educate our directors, senior executives and function leaders. Fifty executives and managements have learned ISO31000, COSO ERM and Integrated GRC framework for developing our practical policy and related activities that should help mitigating ESG risks in our daily business process.



ESG risks have been incorporated into our internal audit process and the results are reported to the Internal Audit Committee. RMC and SDC review and report to the Board of Directors twice a year as well. On an annual basis, the RMC is accountable for evaluating the whole committee and self-evaluating to perceive their created values. Self-evaluation result is part of criteria to consider the member's remuneration. As part of the internal audit process, the Risk and Sustainable Development Committee will monitor the effectiveness of each risk management at least twice a year (in October for 3Q result and another review in February for year-end result). The organizational KPIs that are related to our strategic goals will be audited and verified by an independent auditor, defined residual risk and gap to close and shared with related committee and the BOD.

In addition to risks adhere to our normal process and climate change that increasingly impact us as disclosed in our [TCFD disclosure](#), we've recently seen the potential societal risk of **large-scale involuntary migration**. [UNHCR's Global Trends Report 2022](#) described that, Large-scale involuntary migration and displacement across or within borders, stemming from: persistent discrimination and persecution, lack of economic advancement opportunities, natural or human-made. Geopolitical fragmentation and interstate conflict will drive geoeconomic warfare and heighten this risk in several areas. The risk is forecasted to contribute to its impact globally in both short-term (2 years) and long-term (10 years).

To Delta, large-scale involuntary migration may impact skilled and STEM workers availability at some major production sites. In the hilly districts of Uttarakhand, erratic rainfall patterns and a receding water table has forced people to abandon their homes and farms to migrate to the plains. In Saharsa district of northern Bihar, a relocated community continues to be overwhelmed by incessant floods. Environmentalists point out that coastal erosion and rising sea levels are gradually eating away at the land in the Sundarbans. Many people from the villages are being forced to migrate to cities, like Kolkata, because their fertile land is turning saline with an increasing number of storms and floods([Deutsche Welle](#)). Meanwhile, the states of [Uttar Pradesh](#), Bihar, [Tamil Nadu](#), and Kerala are the major sources of Indian emigration. Migration from the northern and highly populated Uttar Pradesh and Bihar is largely made up of semi-skilled and unskilled laborers, whereas migrants from southern Kerala and Tamil Nadu tend to have higher levels of education.



Refugees from Ukraine on the border with Slovakia. Women and children are fleeing the war in Ukraine. Volunteers on the Slovakia-Ukraine border are helping refugees.



1. Climate Action Failure, extreme weather and man-made disaster
2. Cost of living crisis
3. Interstate conflict
4. Digital inequality
5. Infectious disease
6. Debt crisis
7. Geo-politization of strategic resources
8. Rapid and/or sustain inflation
9. Severe commodity price shock
10. Severe commodity supply crises

Consequences of impact

- Red circle: Over 10 years
- Yellow circle: 1-5 years
- Orange circle: 6-10 years
- Grey circle: No consequence rated

More frequent involuntary migration events near [Thai-Myanmar border](#), Ukraine-[Slovakia](#) and other regions influenced by major countries' conflict raised our concern about compliance and reputation risk that may be caused by usage of illegal cheap labor in next-tiers supply chain. To meet our leading ESG standards, Delta adopts and complies with the Responsible Business Alliance (RBA) Code of conduct. As part of the code, using forced and illegal labor in our supply chain is prohibited. However, according to [the International Organization of Migration's recent disclosure](#), in the European context where the exploitation of migrant workers is widespread, but also presents examples from other manufacturing industries, such as electronics and construction. These workers are at risk of facing human rights issues such as improper work conditions, unfair remuneration and benefits including various forms of discrimination. And the risk should be varied by the numbers of migrants around our suppliers' sites.

With such precautions, Delta adopts key mitigate plan to minimize potential negative impact by

1. Standardizing and communicating our Human rights, Employment policy to our employees, business partners and the public.
2. Worker's legal documents are strictly required as attachment to employment agreement.
3. Promoting Diversity, Equity and Inclusivity among Delta Group.
4. Establishing various communication channels for two-way communication channels for our stakeholders to raise their concerns.
5. Review worker composition, remuneration gap, and worker's concern at certain frequencies.
6. Promoting Anti-corruption to pursue supplier's avoidance of offering illegal benefit to get illegal workers.
7. Screening our new suppliers by using social criteria and embedding social criteria as well as the RBA code into business agreements. Through supplier self-declaration questionnaire and on-site audit, suppliers whose human trafficking, forced labor, illegal labor found at their business process will be terminated.

技術研究與設計開發
Technical Research, Design & Development

 第一名 1 st Place	 第二名 2 nd Place	 第三名 3 rd Place
		
PSBG 構裝工程 (PSBG 構裝工程部 / Structure System Engineering)	Solution Pack 洞洞么 (IABG 解決方案一課 / Solution Team I)	CISBU IE 工業工程 (ICTBG CISBU IE課/ Industrial Engineering)

製造、測試與品管
Manufacturing, Testing & Quality Control

 第一名 1 st Place	 第二名 2 nd Place	 第三名 3 rd Place
		
華南SQM (東莞地區 本部供應商品質管理)	CNE Digital Twin (CNE Digital Twin)	DIN- QE/CE Department (DIN QE/CE)

To create an effective risk culture, Delta implemented various communication channels and an activity to boost up our stakeholder's participation. Yearly, our employees and function heads also experience these specific risk audits to meet ISO45001 and ISO 50001 requirements. We also utilize diverse technology and platform such as DMS platform (internal online web board), DET Kiosk (interactive online touch screen), Delta Line Official to spread the use of risk management best practices, innovation hubs related to risk management and culture. We provided 77,583 training hours of risk management (10% of total training hours in the reporting period) had provided to our employee for free in 2022. Monetary and non-monetary rewards have provided to our employee for their feedback regarding specific key residual risks such as energy conservation and ECRS project versus RE100, health and safety versus zero accident target including corruption risk whistleblowing. Through DMS platform, employees with frequent access and knowledgeable document uploaded were entitled for Jewel awards. At the end of the year, the collective number jewels were used to execute the winner of "Delta Knowledge Management Contest Award" that the winning teams will get both appreciation certificate and monetary awards.

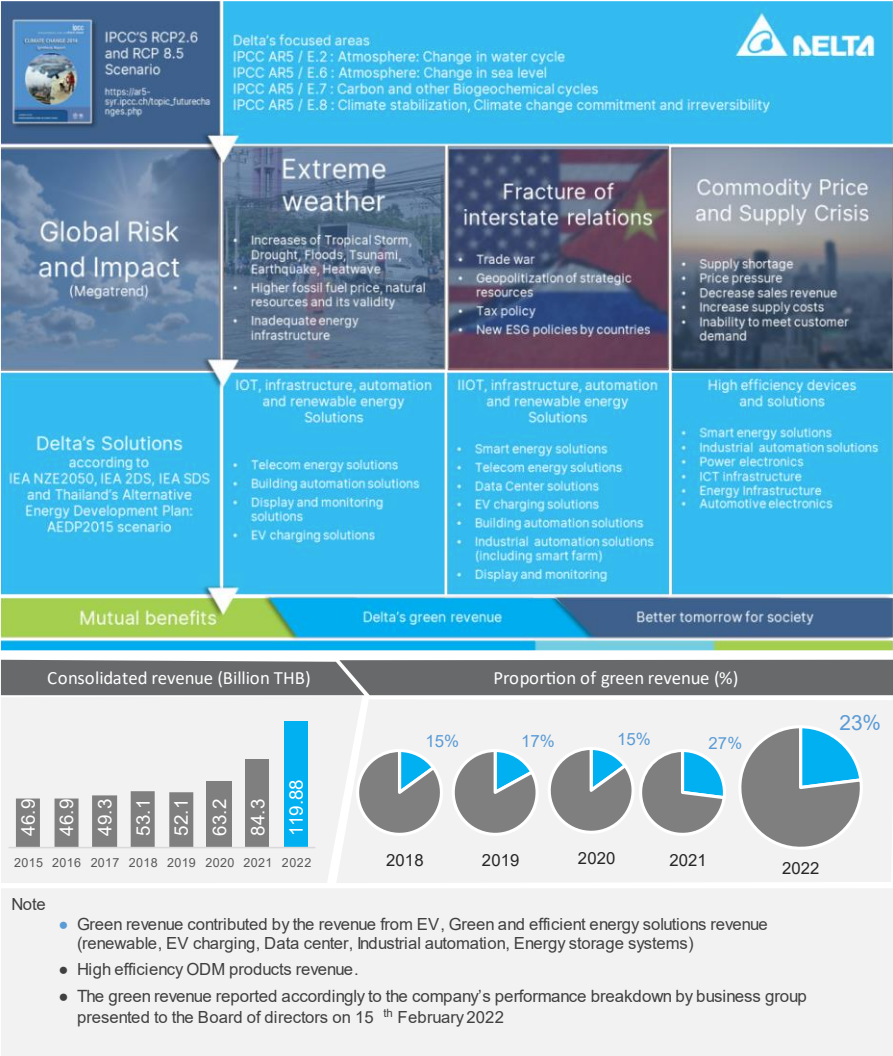
From responsibility to sustainable growth

According to IPCC’s RCP 2.6 and RCP 8.5 scenarios, Delta embraces risk management, supply chain management, innovation and stakeholder’s expectation together with responsibility for ESG aspects as sustainable innovation. Delta synergizes its technology to response to social needs in environment conservation while mitigate climate change impact. Delta has invested 100 million Baht on average since 2015 to make its operation greener.

For fast transition to a lower-carbon economy, Delta maintains its research and development cost at approximately 4 percent of its consolidated revenue to develop, continues merger and acquisition and invest in global operation to re leading efficiency and greener products and solutions that use less natural resources, lower emission, response to market and customers’ climate adaption for good health and well-being amidst climate change and technology breakthrough. Through the mentioned adoption, Delta gained more opportunities in new markets that can be illustrated by Delta’s Thailand new high [revenue of 3,468 Million US Dollar in 2022](#) and Delta Group’s physical assts and intangible assets gained from the [acquisition of a critical material company in 2022 that value over 1,500 Million US dollars](#). This M&A also help lower GHG from material transportation and increase the percentage of [material localization](#) for Delta Thailand.

Delta continues investment to increase the consumption of renewable energy both through both our in-house infrastructure and sourcing of alternative and unbundled energy sources to respond to climate change. While we engaged our supply chain to provide quantitative information of energy and natural resource consumption in 2022, we also continue our startup development program to expand our eco-efficient supply network in the transition period.

In parallel with various programs to increase Delta Smart Manufacturing (DSM) production line, Delta Group set an internal carbon pricing (ICP) at 300 US dollars per ton to power investments in negative carbon technology and innovation in R&D. In the reporting year, we had 7 projects included in our ICP scheme valued 1.3 Million US dollars. We intend to neutralize residual emissions and further mitigate emissions beyond our value chain with offsetting and investing in permanent carbon removal.





Not only Delta, but floods and changes in sources of water resulting from climate change are forecasted to impact countries across the globe. According to [2022. EM-DAT: The Emergency Events Database](#) published by the Université catholique de Louvain (UCL) – CRED, Monsoon Floods has created around 42 billion USD economic losses from 2001-2022. From the same report, 3,774 mortalities resulting from flood in 2 countries; India and Pakistan. In addition, from [IPCC's Synthesis Climate change Report \(AR5\)](#), the fractions of the global population that will experience water scarcity and be affected by major river floods are projected to increase with the level of warming in the 21st century. [In urban areas climate change is projected to increase risks for people, assets, economies and ecosystems, including risks from heat stress, storms and extreme precipitation, inland and coastal flooding, landslides, air pollution, drought, water scarcity, sea level rise and storm surges \(very high confidence\).](#)

Climate change will amplify existing risks and create new risks for natural and human systems. Risks are unevenly distributed

and are greater for disadvantaged people and communities in countries at all levels of development. Increasing magnitudes of warming increase the likelihood of severe, pervasive and irreversible impacts for people, species and ecosystems. Continued high emissions would lead to mostly negative impacts for biodiversity, ecosystem services and economic development and amplify risks for livelihoods and for food and human security.



Delta Implements the First VT Scada Facility Management Control System in Southeast Asia

Delta implemented the first Facility Management Control System (FMCS) powered by VT Scada in Southeast Asia at the Delta Plant 7 in Wellgrow Industrial Estate. [VT Scada](#) software is an industry-leading SCADA software developed by Trihedral, a Canadian company in the Delta Group.

The VT Scada-powered system aims to greatly improve facility management and reduce energy consumption in all operations. Managers can leverage the powerful system for detailed and flexible monitoring and reporting of energy consumption data and get optimal automated control of the plant's HVAC system. In addition, real-time data and paperless operation greatly reduces on-site work and allows managers to make better-informed decisions onsite.

We can use this system to help in the waterworks, energy, chemicals, manufacturing and food and beverage industries can leverage this software platform for better integration and reliability in monitoring and control of mission-critical applications.

Delta Develops Solar Water Pump Solution to Support Thailand's Rural Development








Delta Electronics (Thailand) PCL. developed an original [solar power electric water pump solution](#) for a customer providing well water to remote communities in support of the Thailand government's rural development policy.

Delta developed this solar power water pump as a solution for lifting liquid from low to high levels in applications such as village wells. The solution utilizes solar energy, which is converted into electrical energy through photovoltaic panels. Delta's MS300 standard compact vector control drive and inverter manage the alternating current or direct current used in this system and adjusts the output power as well as the speed of the water pump. The solution also includes the Delta KPC-CC01 digital keypad for easy control.

A major advantage of Delta's solar water pump solution is that it uses clean renewable energy at no cost. With no recurring cost for solar power electricity, the MS300 can reduce total energy consumption by over 40%. The Delta MS300 also has an integrated controller that reduces costs compared with competitor models that require a separate controller. It also features a Maximum Power Point Tracker (MPPT) function for over 20% more efficiency.

Towards Sustainable Development Goals

From a broader business perspective, this dedication to CSR ideals makes Delta a true global citizen. Since Mr. Dick Hsieh, President, delivered Delta Thailand's Sustainable Development Goals to business partners and the company's personnel in Delta Annual Partner Meeting dated 28 December 2016, awareness and various forms of collaboration in Delta's value chain increasingly matter. In 2017, Delta realized its potential to response to 6 major goals which aim to reduce disparities in society. The goals we voluntarily commit to include SDG4, SDG7, SDG9, SDG12, SDG13 to respond to Climate Change and SDG 17 to forge Partnerships to Achieve Sustainable Goals. In 2021, Delta Thailand Updates Target UN Sustainable Development Goals to support good health and well-being of our stakeholders.

	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	7 AFFORDABLE AND CLEAN ENERGY	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	17 PARTNERSHIPS FOR THE GOALS
							
Committed SDGs	3.b.1 Proportion of the target population covered by all vaccines included in their national programme	4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	7.1.2 Proportion of population with primary reliance on clean fuels and technology	9.2.2 Manufacturing employment as a proportion of total employment	12.2.2 Domestic material consumption	13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals
SDG KPIs we support	3.8.1 Coverage of essential health services 3.9.3 Mortality rate attributed to unintentional poisoning	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	7.2.1 Renewable energy share in the total final energy consumption	9.4.1 CO ₂ emission per unit of value added	12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment 12.5.1 National recycling rate, tons of material recycled	—	—
Our Activities	Delta strives to improve wellbeing at the workplace with ISO45001 compliance and the signing of the RBA agreement by our business partner During the COVID-19 pandemic, employee and stakeholder health is a top priority for Delta Thailand. In 2021, Delta offered free voluntary COVID-19 testing and vaccination for over 90% of employees and subcontractors	Inclusive and equitable quality education, relevant skills, including technical and vocational skills, updated knowledge leading to decent jobs which reduce inequality in the society. Higher opportunity from quality education help ones to access the developing infrastructure in the changing global technology and world environment. Delta promotes education and life-long learning for its employees, employee's families and undergraduate students by promoting: 1.) basic and STEM education 2.) environment education 3.) talent cultivation mechanism 4.) experience-based learning Finally, life long learning will be a noble pursuit that will keep ones healthy life even after retirement	Constructing a reliable and sustainable clean energy system is one of the global focus. Delta dedicates developing solar power and renewable energy solutions, and discovering new business opportunity from these green solutions. Delta also provides affordable renewable energy and industrial automation solutions for leading research institutions to extend affordability opportunity to access clean and modern energy in rural areas and developing countries.	Accelerating industrial innovation and assisting in the construction of resilient infrastructure are the best solutions for companies facing the dual pressure of climate change and sustainable development. Strengthen innovation ecosystem by enhancing future innovator pool to advance green technology industry while mitigate environmental impact Delta has implemented and internal incentive system to continuously accumulate innovative energy saving solutions for global customers. It applications include smart manufacturing and modal shift transportation to reduce carbon in logistics process	Sustainable consumption and production are the basis for sustainable business operations. Delta upholds its mission "To provide innovative, clean and energy-efficient solutions for a better tomorrow". To mitigate global environmental challenges including air pollution, water and natural resources scarcity, the company has implemented sustainable consumption and production into daily operations through promoting eco-efficient operation measures, procurement localization, circular economy enhancement in supply chain, green building promotion and green life-style throughout the organization.	Properly responding to climate change and its impact, and taking countermeasures are a major challenges for the company's sustainable business strategy Delta response to climate risk by adaptation and mitigation, and continue to identify climate change opportunities. In addition, Delta uses "CDP21", "Carbon Footprint for Organization (CFO)", "Voluntary carbon reduction scheme (V-CSS)" and "Carbon Disclosure Project (CDP)" and participation in climate change-related policy as strategies to carry in side out strong action.	Delta participated in global partnerships to help activate sustainable development. In business process, Delta enhance smarter and greener value chain through various approaches of communication to our stakeholders. Delta participates in national and international sessions on climate change and sustainable development. We collaborate with leading organizations to develop essential infrastructures for greener and inclusive future. The company also share our knowledge and practices with business and social sectors to create broader graner impact for next generation's well being.

Corporate Governance

Learn our Brand's competence, Subcommittee and how we drive ethic and transparency through our value chain.



Corporate Governance

Corporate governance systems ensure that a company is effectively and transparently managed in the interests of shareholders (including minority shareholders). On the one hand this includes checks and balances that enable the Board of Directors to have appropriate control and oversight of corporate-wide responsibilities. The Board of Directors is the highest governance body that is responsible for decision making on and overseeing the management of the organization's impacts on the economy, environment, and people. Key committees are reporting the organization's ESG performance directly to the Board on a quarterly basis. Finally, the Board discloses those performance to our stakeholders and public [on the same frequency](#).

Board Competence

The Board of Directors (BOD) is the key driver in developing the company's corporate governance to enable added values for Delta business. To enhance BOD's competence, Delta has the policy to encourage directors, executives and the company secretaries to participate in training involving good corporate governance at least once a year.

The company organizes internal and encourage the BOD members to participate external training by relevant institutions such as the SET, the SEC and the Thai Institute of Directors Association (IOD). At present, there are 7 directors from 9 directors attending the training courses related to the duty of directors' roles and responsibilities, emerging risk and Delta's long-term strategic goals. Please find "Training" portion of the [Board of Directors' Qualification and Competency Matrix](#).

Selection of Directors

The Board of Directors assigned the Nomination and Compensation Committee to search, select and nominate qualified candidates to be a director or member of any committee. The committee selections are considered on the basis of whether that person is knowledgeable and experienced in areas such as accounting, finance, management, strategy and possess individual skill and expertise in line with the company's business and strategies without restrictions on gender, race, or nationality. In addition, the NCC also consider any committee's association of social group to ensure none of them is membership of under-represented social groups, cross-shareholding with suppliers The company has prepared a skill matrix to define the requirements for members of its Board of Directors to aid in the Board nomination process. To ensure that selection of Board of Directors is fair, Delta commits to basic human rights principles including gender equality.



In April 2018, one female director with experience in finance, accounting and tax has on boarded. This is to ensure the achievement on company's objectives [BOD diversity](#) and a solid company structure with good corporate governance standards. Each of the nine directors possesses knowledge and expertise in various professional disciplines that are in-line with the company's corporate governance policies and cover all aspects of sustainable growth. In 2022 at the Annual General Meeting, the company consult our shareholders to consider and approve the appointment of directors to replace the directors who will be retired by rotation. Resolution in this agenda shall be approved by the majority votes of the shareholders attending the meeting and casting their votes. Finally, appointment of three directors has been approved with 99.6% score in average.

Structure of BOD

Delta's one-tier-system Board of Directors comprises nine directors; three are executive directors. The remaining six are non-executive directors, including four independent directors who comprise over one-third of the Board. Currently, the Chairman of the Board and the President positions are held by two individuals with clearly separated responsibilities. The roles and responsibilities of the Board and management are also clearly defined so as to ensure transparency and independent management. With one female director who is onboard since April 2018. The target number of independent directors, according to the company's practices of the Board of Directors, is no less than one-third of the total number of board members. The Board must have at least three independent directors according to the regulations of the Stock Exchange Commission and the Stock Exchange of Thailand. Explicit definition of the "independence" publishes on [Corporate Governance Policy](#) page 17-18. To ensure the independence and competence of the BOD members, Delta has rechecked its BOD member's qualification by consolidating a [Board of Directors' Qualification and Competency Matrix](#). Finally, it is concluded that the independence of the BOD meets SET and SEC's requirements.

Roles and Responsibilities

Delta Board of Directors is responsible for deciding, giving directions and supervising effective decision-making processes to facilitate the company's success in economic, social and environmental areas. Delta's directors and executives have equal voting rights to other shareholders said, "one share one vote". The company has the policy to separate the roles and responsibilities of the Chairman the Board and the President. Different individuals must hold these two positions to enhance management accountability and transparency. The Board plays its role to setting purpose, values, and strategy and assigns the President to manage the day-to-day operations according to defined duties and responsibilities guidelines. Find the [Board of Director Charter](#) for roles and responsibilities in setting purpose, values and strategy.

BOD's Authorization

The Board of Directors can authorize matters under their scope of authority stipulated by law, the Company's Articles of Association and the shareholders' meeting resolutions. Such matters include defining and reviewing corporate vision, operating strategies, operating plans, risk management policy, annual budget and business plans, and medium-term business plans. The Board will also define the company's target operating results and follow up by appraising operating results to ensure they are in line with plans. The Board oversees capital expenditure, mergers and acquisitions, corporate spin-offs, and joint venture deals.

Board of Directors Performance Assessment

The Board arranges a yearly self-assessment for the Board of Directors as follows.

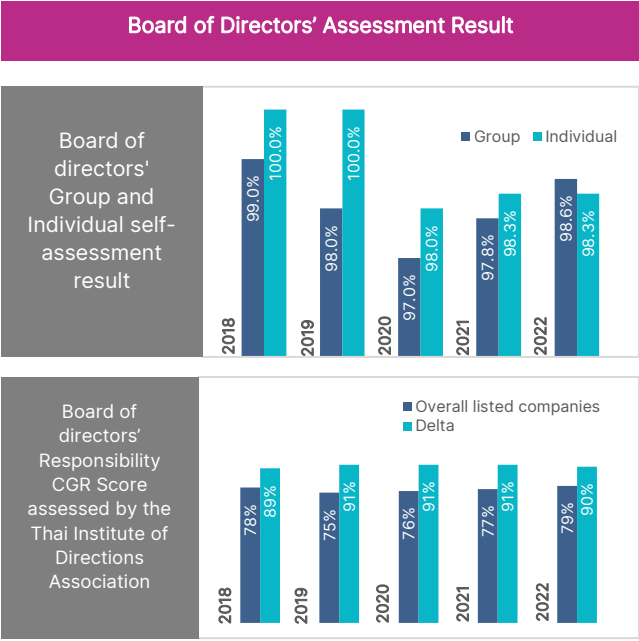
- 1. Group self-assessment for the entire Board of Directors
- 2. Individual self-assessment of the Board of Directors members

Areas of assessment include Board duties, Board structural composition and individual member’s qualifications, job performance, professional development, and teamwork. Other areas of member’s assessment are meeting attendance, general knowledge and expertise as well as proactive action in areas of responsibility. Each Board member shall be able to provide their input to assessment independently. After the assessments, the evaluation forms will be submitted to the Company Secretary for tabulation and the results will be presented to the NCC with action plans to address the gaps, if any, for deliberation and onward submission to the Board. In 2022, the Board had outstanding 98.6% of group assessment and 98.3% of individual member performance result. The Board of Directors acknowledged the results of both group and individual level assessments and discussed possible areas for improvement. These two types of assessments have been adopted to Risk Management Committee and Sustainable Development Committee as well.

Yearly, Delta Board of Directors’ responsibility is assessed by the Thai Institute of Directors Association. In 2022, Delta achieved 90% score while overall listed companies’ score of BOD’s responsibility was 79%.

BOD Meeting

The independent directors’ service term is limited to a maximum of nine years or three consecutive terms. Appointed directors cannot hold a director position in over three companies listed on the Stock Exchange of Thailand. Board meetings are conducted at least once every quarter to review the company’s business and ESG-related performance and discuss important strategic issues including their risk and opportunity. According to the Corporate Governance Policy and the BOD’s agreement, the minimum attendance rate for every Board of Director member is 90% for good governance. In 2022, five meetings had held with an average attendance rate of 97%.



Sub-Committee

In addition to their roles and responsibility as the nature of Delta business, the Board of Directors appoints subcommittees to help study, deliberate and give opinions on ESG matters. Presently, there are four sub-committees under the Board of Directors with the Executive Committee, Audit Committee, Nomination and Compensation Committee and Corporate Governance Committee. There are two committee under the President with Sustainable Development Committee and Risk Management Committee.

Executive Committee

The Executive Committee of the company consists of five members to operate and manage the business of the company in compliance with company’s objectives, Memorandum of Association, policies, regulations, notifications, order as well as the resolution of the Board of Directors. The Committee also establishes policies, business plan, directions, strategies, budget and the main organization structure and authority of each department within the company including the organization chart in order to propose to the Board of Directors for its consideration and approval. Besides, the Committee monitors and follows up the result of the operation of the company to be in accordance with the policies. To ensure that a company is managed in the interests of its shareholders, directors, CEO and executive committee members have requested to report their ownership of the company’s share according to SEC’s best corporate governance practice. Find [Executive committee charter](#) on our website.

Audit Committee

The Audit Committee of the company consists of three members and all the members are independent directors. The Committee reviews the company’s financial reporting and consider the capability and independence of an external auditor, review that the company complies to the law on securities and exchange, the regulations of the SET and other laws related to the company business and do any other matters assigned by the Board of Directors. The service term of an independent director is no longer than 9 years or no more 3 consecutive terms and qualifications and responsibilities of the Committee as prescribed by the Stock Exchange of Thailand. More information on the Audit committee is publicly available at our recent [Annual Report](#) page 110-111.

Sub Committee Performance





Privilege Committee

To optimize shareholders mutual benefit while complying with law and regulation, Delta set up privilege Committee to consider, review, promote and supervise the measures for requesting a tax or non-tax privilege from Thai Government, state enterprise or other connected entity. The full roles and responsibilities can be found from <https://deltathailand.com/en/committee-charter>.

Risk Management Committee

Risk Management Committee is reporting to consists of 12 members to delegate the risk management to their respective managers, develop and review strategic risk management plans, monitor and continuously improve risk management and quarterly and/or any time that is necessary to present a detailed report to the Board or to the Audit Committee. In 2022, 12 major operation risks by business with 2 critical concerns had communicated to the highest governance. In addition to consideration of impact and likelihood of the ESG-related risk in daily business process, emerging risk of air pollution in Bangkok and surrounding areas which will impact DET's operation, employees' health yet exposes another business opportunity had reported to the BOD as well. More information on the Risk Management committee is publicly available at our recent [Annual Report](#) page 113.

Nomination and Compensation Committee

This Committee consists of three members, two independent directors and one executive director, to review the remuneration policy and determine both fixed and variable remuneration of the directors of the company and members of the sub-committee. Up to 2022, there is no claw back provision for deferred share policy, sign-on bonuses or recruitment incentive payment and termination payment. The Committee also defines the qualifications, structure, size and composition of the Board members and attracts qualified candidates for Board of Directors' consideration. The Term of office shall follow the Annual Director Election.

The Board of Directors assigns the NCC to evaluate the President's Key Performance Indicators (KPI). The NCC works together with the President to set the President's KPI with consideration to his/her role as the Chairman of the Sustainable Development Committee. The President's KPI covers economic, environmental and social aspect which are varied by the company's sustainable development targets such as revenue, profit, return on equity, regional business, training and development, social benefit optimization and environmental impact reduction performance. With variable performance considered, President and other executives' deferred bonus is paid out in April after which the income was earned for their January – December performance period. Based on these predefined targets, longest performance Period for Variable CEO Compensation is 5 years. Find more detail from remuneration policy page 7. More information on the Corporate Governance committee is publicly available at our recent [Annual Report](#) page 112.

In 2022, remuneration of Chairman of the Board, non-Executive Director, executive director, independent director and Audit committee chairman had 100% [approved by the company's shareholders](#) in its Annual general meeting. The Ratio of the annual total compensation for Delta President, Executive and management to the median annual total compensation for all employee was 14.27. The ratio of increment in annual to total compensation for our highest paid individual to the median percentage slight increase in annual total employee at 0.66. Majorly, the increment of annual total compensation for both management and employee were resulting from the collective achievement in Green revenue performance.

Sustainable Development Committee

In addition to periodical meeting, ESG issues are frequently discussed among Delta group through various on-line platform Sustainable Development Committee consists of four members to delegate sustainable development to respective managers, develop and review strategic sustainable development plans, monitor and continuously improve CSR-in-process and ESG-related initiatives and quarterly and/or any time that is necessary to present a detailed report to the Board of Director. ESG target has embedded into the committee members for their remuneration execution.

Since information technology and information security play significant roles in facilitating sustainable development and transparency, Chief Information Technology Officer joined Delta Sustainable Development Committee. With the CIO's support, on-line platforms for both internal and external stakeholder engagement had developed with the right technologies and securities. All the sub-committees agree to follow the Board of directors' good practice where the sub-committees' members must have a minimum required meeting attendance rate of at least 90% for effective good governance.

Corporate Governance Committee

To systematically drive transparency among Delta Group, Corporate Governance Committee has been set up in early 2019. The committee consists of three members, one non-executive director and two executive directors. The Committee reviewed whether the company's Corporate Governance Policy, Code of Conduct and Anti-Corruption Policy are appropriate, adequate and regular update. This includes overseeing of how to promote them to employees for clear understating and actual implementation. More information on the Corporate Governance committee is publicly available at our recent [Annual Report](#) page 112.

In 2022, Delta utilizes online conference technology to facilitate our sub-committee's discussion. The sub-committees' attendance rate has been reported as follows. Find more information of Delta 's sub-committees at <https://deltathailand.com/en/board-management> .



Ensure Norm of Transparency

The COVID-19 pandemic has revealed the fragility of global supply chains arising from raw material scarcity, production and transportation disruption, and social distancing. Firms need to carefully anticipate the difficulties during recovery and formulate appropriate strategies to ensure the survival of their businesses and supply chains. Debt crisis in large economy, stagflation, and extreme weather and geo-politization of resources intensify existing interdependencies, radically alter market structures, and potentially increase the returns to corruption.

Delta has observed [Corruption Perception Index](#) to have precaution and track corruption and bribery situation in the countries we invested. In 2022, its subsidiaries in India and Slovakia (another 50% manufacturing sites) to mitigate potential risk of corruption and all the form of bribes. The company evaluates the potential 5 risky areas, strengthens up our control and performs necessary activities to implement our ZERO TOLERANCE target while maintaining its tangible and intangible assets for sustainable growth.

According to our public shareholding disclosure, there are no individual governmental institutions nor individual founding family members owning more than 5% of voting rights. In 2017-2022 the company does not make any contributions to or expenditures to political campaigns or organizations, lobbying, trade associations, tax-exempt entities, or other groups whose role is to influence political campaigns, anticompetitive behavior, violation of anti-trust and monopoly or public policy and legislation. Delta Thailand and its subsidiaries' list of [membership of association](#) has report to the Sustainable development committee and publicly disclosed on annual basis.

Delta Thailand's Board of Directors has approved the Anti-Corruption Policy which aim to clarify the company's goal to combat all forms of corruption had communicated to all the Board of Director and Executives based in Thailand headquarter since 2016 Delta has set a zero-corruption goal to further develop our sustainability. The company commits to conducting its business with transparency and integrity.

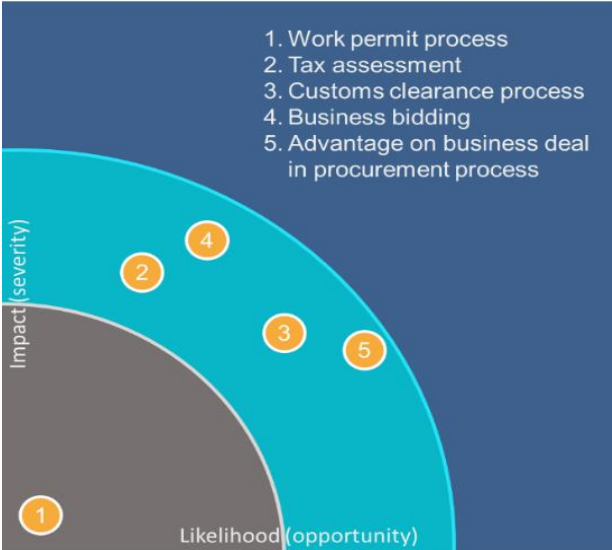
The infographic features the Delta logo at the top left. The main title 'No Offer Receive Zero tolerance to corruption' is prominently displayed in red and black text. To the right, an illustration shows a woman and a man with their arms crossed, with a speech bubble saying 'NO!'. Below this, there is a section in Thai titled 'แจ้งเบาะแสมาที่' (Report to) and 'ร่วมสร้างสังคมเดลต้าที่ดี' (Join in creating a good Delta society). It includes a QR code and the email 'Whistleblow@deltathailand.com'. A list of Thai text provides details about the reporting process, including confidentiality and protection. Below this, a section titled 'Help us to make Delta a better workplace. WE NEED YOUR HELP! YOU WILL BE SAFE AND PROTECTED.' encourages reporting. The bottom section contains six statistics in a grid format, each with a large percentage or number and a brief description.

100 %	7 cases	0
Of our 8 manufacturing sites in 3 countries investigated to implement ZERO tolerance in 2022	Confirmed incidents in which employee dismissal, disciplinary violation for corruption.	Confirmed incidents of business partner's contract termination or not renew due to corruption issue.
100 %	100 %	58,796
CG Committee members have received training on Anti-Corruption.	Of our employee has communicated Anti-Corruption policy and business code of conducts.	2022 Learning hours Our Business Ethics and Anti-Corruption Policy

To enhance our stakeholders' confidence, Delta Thailand's policy prohibits directors, directors of sub-committees, management, personnel and related business partners of the company to act or consent to any form of corruption and all the form of bribery. Our corporate codes of conduct cover discrimination, confidentiality of information, conflicts of interest, antitrust/anti-competitive practices, money laundering and/or insider trading/dealing, environment, health and safety and whistleblowing.

Delta Thailand's Board of Directors has approved the Anti-Corruption Policy which aim to clarify the company's goal to combat all forms of corruption had communicated to all the Board of Director and Executives based in Thailand headquarter since 2016 Delta has set a zero-corruption goal to further develop our sustainability. The company commits to conducting its business with transparency and integrity. To enhance our stakeholders' confidence, Delta Thailand's policy prohibits directors, directors of sub-committees, management, personnel and related business partners of the company to act or consent to any form of corruption and all the form of bribery. Our corporate codes of conduct cover discrimination, confidentiality of information, conflicts of interest, antitrust/anti-competitive practices, money laundering and/or insider trading/dealing, environment, health and safety and whistleblowing.

At risk likelihood 4/5 (2021: 2/5) and impact level 4/5 (2021: 3/5), the company applied the COSO Enterprise Risk Management to all business processes in its daily operations to mitigate corruption risk and ensure transparency and



traceability in high-risk areas such as purchasing, resources use and reimbursement related to our fast operation expansion. In addition, Delta operates its business with political neutrality, not participating and siding to certain political party or influential political leader and not using the Company's capital, resource to support political parties, politicians directly or indirectly. Periodic 100% risk assessment and internal monitoring has been placed as part of four countermeasures. However, the company Delta design various approaches to ensure our employees and related stakeholders have communicated and are aware of our high standard of ethical practice in the business process. In addition to regular ethic commitment as a part of employment agreement and code of conduct training as part of new staff orientation, in 2019, our Corporate Governance Committee appointed an Anti-corruption working team. The team launched the Anti-Corruption.

Existing employees <ul style="list-style-type: none"> • Sign Anti-corruption commitment • Specific training course on code of business conduct (online and off-line) • Promotion on digital media • SD week activities • Bulletin board • Direct email • Employee Relation Line Group • Intranet • Whistleblowing channels 	New employees <ul style="list-style-type: none"> • Code of Conduct and Anti-corruption as part of employment contract • Code of conduct and Anti-corruption as part of new staff orientation • Sign Anti-corruption commitment • Specific training course on code of business conduct (online and off-line) • Whistleblowing channels
Subsidiaries <ul style="list-style-type: none"> • Anti-corruption policy enforcement • Specific training course on code of business conduct (online) • Sustainable Development committee meeting • Risk and Anti-corruption assessment on annual basis • Direct email • Whistleblowing channels 	Delta's Anti Corruption, ethics and code of conduct communication approaches 
Public & society <ul style="list-style-type: none"> • Listed as Thai Collective Action Against Corruption's certified member • Whistleblowing channels 	
Business partners <ul style="list-style-type: none"> • Code of Conduct and Anti-corruption as part of new supplier registration form • Code of conduct and Anti-corruption as part of procurement agreement • No Gift Policy communication • Whistleblowing channels 	

Commitment Program to ensure that employees are aware of their duties and responsibilities and perform their jobs with honesty and integrity. The commitment was implemented through both a reliable on-line platform and physical training with black and white signatory commitment.

Since 2017, accumulated 100% of Delta Thailand's total employees has educated and sign the Anti-Corruption Commitment on-line. This training helps our employees to understand the context and contents of corruption, bribery, fraud, money laundry and related activities that conflict with our ZERO tolerance goal. Consequently, the knowledge from this training help to reduce the numbers of unrelated whistleblowing case that also help the working team to focus on related issue accurately.

The company initiated an agreement between the purchasing department and suppliers named The Procurement and Supplier Covenants in 2001 and later changed to Integrity Undertaking to build a healthy procurement system and avoid the negative influence of human factors on normal business. The agreement is an acknowledgment by both parties to 100% of our 1,856 active suppliers who had educated and signed this agreement for common understanding to do business with integrity and without bribery or any unwarranted returns.

In 2018, Delta has signed on declaration of intent in establishing Thailand's Private Sector Collective Action against Corruption (CAC) on 16 July 2018 and submitted Self-Evaluation Tool for Countering Bribery to the CAC Board on 12 December 2019 for certification. Since 7 February 2020, the company has listed as a certified member of Thailand's Private Sector Collective Action Coalition against Corruption. The company has established the following communication channels to allow all employees and stakeholders to provide feedback or file complaints concerning this issue.

- **Communication channel for Delta employees**
 1. Head of the unit where the employee belongs to
 2. Email: HR.GRIEVANCE.SEA@deltaww.com
 3. Suggestion box
- **Communication channel for other stakeholders**
 1. Opinion Box (PO Box 50, Bangpoo, Samutprakarn 10280)
 2. Email: whistleblow@deltathailand.com

Depending on the relevance of the complaints, the Board's Secretary will gather and submit the complaints to the Anti-Corruption Committee, the Corporate Governance Committee, or the Board. The details of the complaint will be kept confidential to avoid an infringement of privacy. More details on Whistleblowing policy and practice guidelines can be found on the company website www.deltathailand.com/en/about_anti-corruption.

In 2020, there was a public interest in the company's significant increase of the company's securities trading volume and trading price in 2020. Delta had [officially clarified](#) the Stock Exchange of Thailand on 28 December 2020 that we have no significant development which would affect the securities trading volume and trading price.

In 2022, we did not receive any complaints, non-compliance with law and regulation in the social and economic area nor public legal case which brought against the company for conflict of interest, money laundering, insider-trading, anti-corruption and information and confidentiality fraud and abuse during the reporting period.

At the Board of Directors Meeting No. 4/2022, the Secretary of the Board of Directors informed the attendees to consider and acknowledge that in the past year of 2022, the Company received complaints that led to investigation. The company found 7 cases of the Code of Conduct violation. There were 16 employees who receive punishment in relation to these cases. Most of cases were ethical violations of integrity issues and accepting bribes or corruption.

The company has issued a letter to its suppliers and partners requesting their cooperation in complying with the Company's anti-corruption guidelines. in the following aspects 1. Avoid conflicts of interest by submitting a self-report to the Company if relatives are involved in a business transaction with Delta. 2. Whistleblowing through complaint channels 3. No gift policy - The company seeks cooperation from suppliers not to send any gift/gratuity to company management, employees or their family member during New Year and other festival occasions.

In 2022, Delta organized a "Supplier Day" to communicate the Company's commitment and conduct business with integrity, ethics, without corruption to suppliers and business partners by online meeting. There were more than 350 participants and has persuaded partners to come together as a coalition against corruption. - We regularly organize training and campaigns for employees to realize the importance of our efforts. And we also organized an online training on "Anti-Corruption". that requires all director, management and employees to attend the training and passing score at least 85 points.



Eco-friendly Operation

Find our proactive response to climate change, environmental PDCA, CSR in supply chain and our innovative products and process.



Eco-friendly operation

Climate action failure, more frequent severe weather and geoeconomic confrontation urged our stakeholder interest in our measures and performance of natural resources management. Among global supply crises, higher energy cost and trade tariff, effective management of environment, energy transition and natural resources enable new opportunities in business process and resulting in continuous growth among industry's constraints.

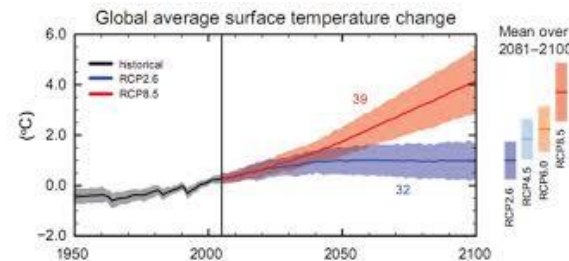
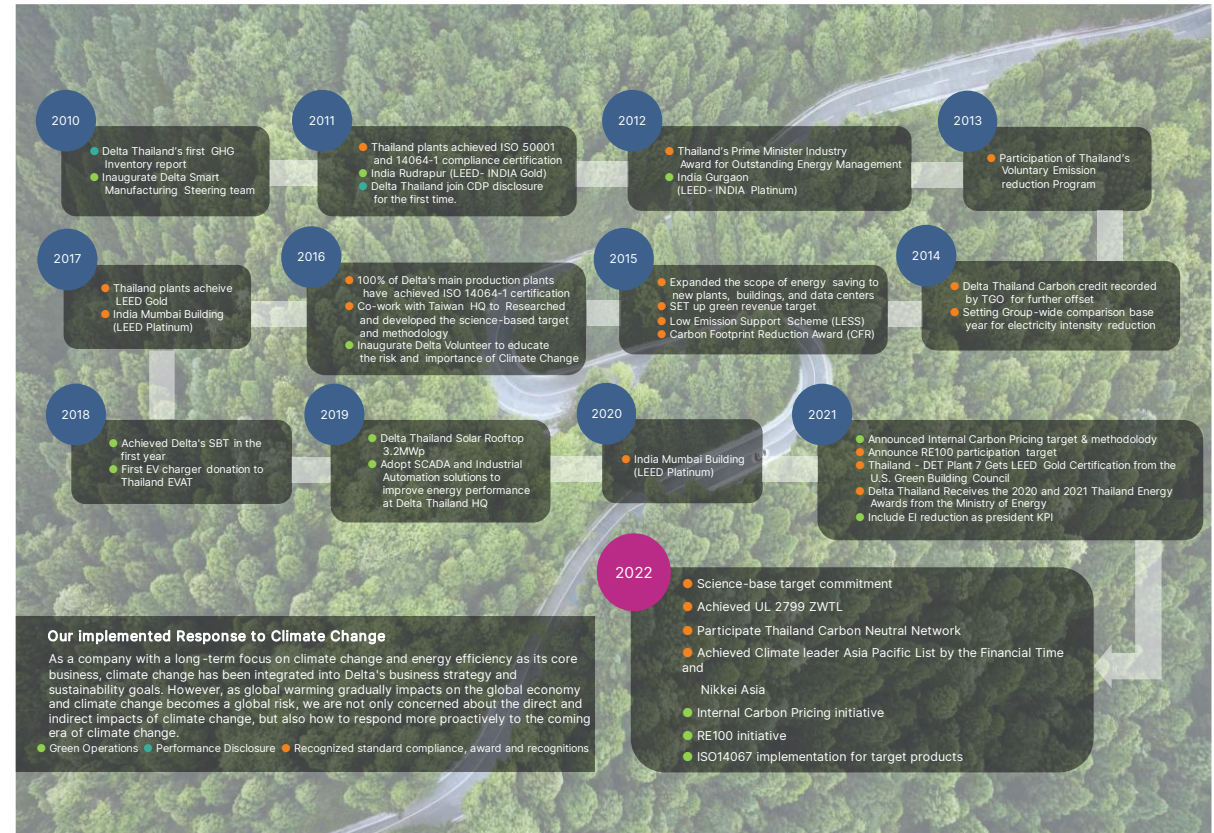
Prioritizing eco-friendly operations in our daily operation process is crucial for sustainable development, environmental protection, and the long-term success of businesses in the sector.

The decision is to ensure the fulfillment of our [commitments](#) to fight climate change when our manufacturing and business processes are normally performed in the reporting period.

According to World Meteorological Organization's press release of [Climate change indicators and impacts worsened in 2020](#), the COVID-19 pandemic since 2020 added a new and unwelcome dimension to weather, climate and water-related hazards, with wide-ranging combined impacts on human health and well-being. Mobility restrictions, economic downturns and disruptions to the agricultural sector exacerbated the effects of extreme weather and climate events along the entire food supply chain, elevating levels of food insecurity and slowing the delivery of humanitarian assistance. The pandemic also disrupted weather observations and complicated disaster risk reduction efforts.

Productive Response to Climate Change

To ensure our eco-efficient operation reduces negative impact on climate change, Delta learns from our stakeholder requirement, global best practices and utilizes possible technologies to illustrate its brand promise; Smarter. Greener. Together, in our daily operation to mitigate climate change impact. According to Delta Thailand's Risk management report, climate change had been in our focus since 2012 to conserve people's wellness and natural resources for the next generation. Delta aligned with ISO 26000, ISO 14001, ISO 14064, ISO14067 and ISO 50001 for high standard of environment footprint and CO₂e management. Responsible Business Alliance code of conduct and Carbon Disclosure Project, UNCG principle 7 and 8 guidelines to reduce overall environmental footprint of companies. The company proactively plans and periodically measures its environment-related performances to seek improvement in every process. With smarter and greener business processes, mutual benefits for Delta, its stakeholders and the world's environment will be inclusively enabled in long term.



RE100
CLIMATE GROUP



Environment policy and Management System

According to RCP 2.6 and RCP 8.5 scenario study, Delta complies with world-recognized standards to minimize environmental footprint and mitigate climate change impact from our business process. These standards help us to deliver our commitment to provide innovative, clean and energy efficient solutions for a better tomorrow from every business process. An eco-efficient operation requires continuous effort in reducing a business' environmental impact. Our [Environmental, Health and Safety Policy](#) is showing our sincere attempt and partnership with global citizens to make a smarter and greener future. With this practical management system, drive business operations on basis of the PDCA principle (Plan/ Do/ Check/ Action).

The system allows us to cope with various contexts of quality, economic, social and environmental requirements and stakeholders' expectations, which employees at all the levels can continue applying as part of their daily activities. In 2022, there is no non-complied issues according to our certified recognized standards.

Business, codes, initiatives, guideline					
		Delta's Mission & Business Code of Conduct; Environment, Health and Safety Policy			
		The Responsible Business Alliance Code of Conduct			
			ISO26001		
		Management Standard for Environment-related Substances (Doc No. 10000-0162)			
		WEEE and ROHS			
Full & proven Compliance					
Coverage					
	Design	Supplier, service providers & contractor	Production & Business facilities (including on site waste management)	Distribution & logistics	EOL management

Remark:

1. WEE and RoHs standard communicated to our stakeholders through eco-label that our end-of-life product can be easily dissembled and 80% of the dissembled part is recyclable.
2. We base on the validation of standard certificate to declare Full & proven compliance.

Eco-friendly design

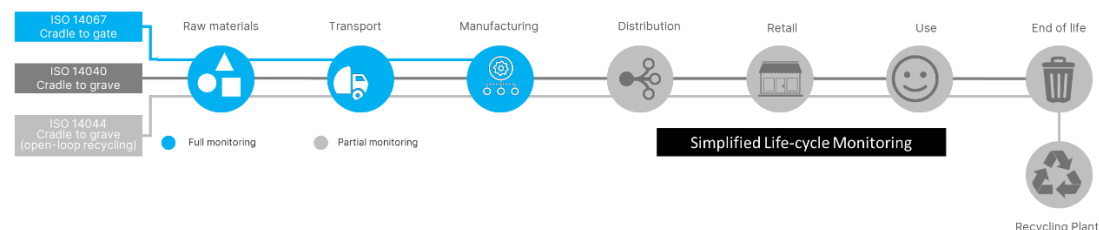
Delta Thailand has been consistently investing around 5% (higher than industry's average) in R&D budget and will remain so in the coming years as can be seen in our [Annual Report](#). The annual investment encompasses state of the art equipment, global talent sourcing and development, global R&D facilities enhancement and research activities.

Delta shall continue to collaborate with well-established universities to keep abreast of the latest technologies and in return provide our R&D expertise (from more than four countries) and training for the respective institutions in countries like Germany and Thailand. In addition, with a healthy balance sheet, Delta is constantly looking out for suitable M&A targets. The objective in M&A is not only about growing revenue but more importantly to seek out new perspectives in business and product innovations from a healthy and compatible company.

To ensure innovation is in place, Delta targets to

1. Launch market leading new technology every 2 years.
2. Annual increase in power efficiency for the products
3. Continuously reduce carbon footprint in product development process
4. Maintain high R&D budget above industry average.

The success of new product development (item1, 2) will increase the revenue of the Company. Growth of green revenue and technology optimization to mitigate social and environmental impact are part of CEO's KPI to link with the executive compensation. All Delta products comply with international safety standards or international environmental requirements. Products or product packaging are also labeled with conformity information in accordance with the environmental regulations of the target market, such as the EU RoHS and WEEE directives, and the China Measures for the Control of Pollution from Electronic Information Products. We also display environmental certification information such as US Energy Star and 80 PLUS on our products that are required by our customers.



The 10 principles of eco-friendly design:

1.Resource Efficiency: Eco-friendly designs prioritize the efficient use of resources, such as energy, water, materials, and land. This involves optimizing production processes, using renewable resources, and minimizing waste generation.

2.Renewable Energy Use: Incorporating renewable energy sources, such as solar, wind, or geothermal, into the design helps reduce reliance on fossil fuels and decreases greenhouse gas emissions.

3.Material Selection: Choosing sustainable and environmentally friendly materials is vital in eco-friendly design. This involves considering factors such as recycled content, biodegradability, low toxicity, and responsibly sourced materials.

4.Energy Efficiency: Designing for energy efficiency aims to minimize energy consumption during the product's use or the building's operation. In addition to the efficiency of the product, this can include energy-efficient appliances, lighting, heating, ventilation, and air conditioning (HVAC) systems.

5.Waste Reduction and Recycling: Eco-friendly design promotes waste reduction and encourages the recycling or upcycling of materials at the end of a product's life or a building's use.

6.Life Cycle Assessment (LCA): Conducting a life cycle assessment helps evaluate the environmental impacts of a product or project from raw material extraction to end-of-life disposal. It enables designers to identify areas for improvement and make informed decisions.

7.Adaptability and Longevity: Creating products and structures with a focus on durability and adaptability can extend their lifespan and reduce the need for replacement or upgrades, thus conserving resources.

8.Social and Community Considerations: Eco-friendly design takes into account the social and community impacts of a project, including factors such as accessibility, inclusivity, and promoting local economic development.

9. Natural resources Conservation: Implementing water-efficient technologies and practices in buildings and products can help reduce energy and water consumption while minimize potential negative impact to other natural resource.

10. Recognized Standards compliance: Adhering to recognized green building or eco-labeling standards can ensure that eco-friendly design practices are met and verified by third-party organizations.

The Life Cycle Assessment (LCA) is a green design approach that systemically analyzes the environmental impact of a product from material extraction, manufacturing, shipping, product use, and disposal. According to guidance of ISO 14040 international standard divided LCA into several key processes including the definition of the goal and scope, inventory analysis, and impact assessment and interpretation. Due to the complex nature of supply chain relationships in the electronics industry, Delta knows that a complete LCA will consume enormous amounts of time and resources. Delta has drawn on research by the Society of Environmental Toxicology and Chemistry (SETAC) on LCA methodology and adopted the Screening, Simplified and Streamlined LCA (SLCA) to focus on the issues with the most significant environmental impact, such as GHG emissions, and reduced the amount of data that needs to be gathered. Additionally, by using the Simplified Life Cycle assessment (SLCA) methodology, we can accurately identify design or process areas for improvement.

Hazardous and Environment related substances reduction

Delta incorporate [environmental risk criteria in our product development and approval process](#). Delta has implemented the Green Product Management (GPM) IT system based on the QC 080000 Hazardous Substance Process Management System. Apart from inspecting materials testing reports from suppliers, Delta manages parts/components based on their environment related substance risk level to ensure the proper control of [environment-related substances](#). Delta sites have also introduced lead-free processes and low-halogen materials to help customers develop greener and



more eco-friendly products.

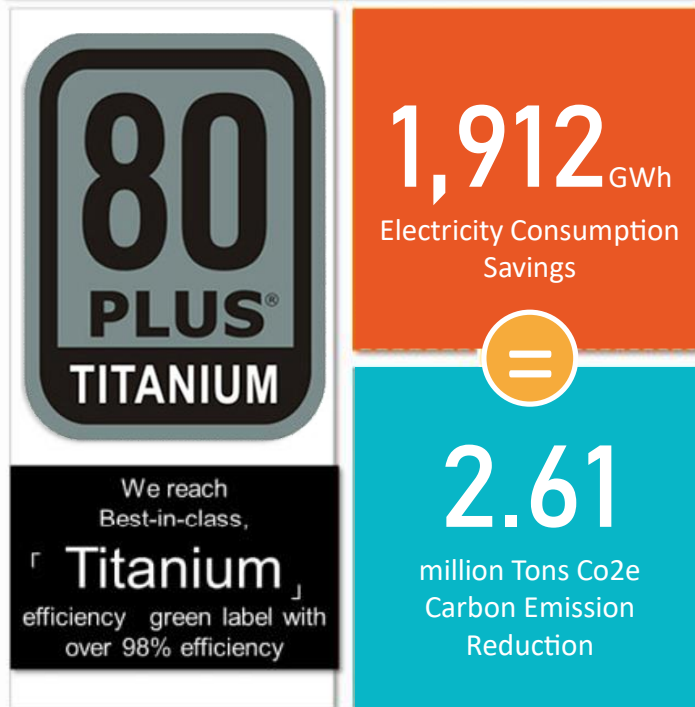
With regard to hazardous substances and chemical safety and control, Delta abides strictly to comprehensive sets of ERS (Environmental Related Substances) procedures and standards according to our [corporate-wide procedures- Management Standards for Environmental Related Substances \(Document No. 10000-0162\)](#) and ERS Management Procedure (Document No. 06-028). Up to 2022, 80 hazardous substances endanger our employees, users and environment had been taken out from Delta's book of material.

The Management Standards for ERS (Document No. 10000-0162) is an exhaustive list of internationally banned and controlled substances according to recognized standards. The standards include but not limited to the Regulation (EC) No. 1907/2006 - REACH concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) issued by the EU; the Directive 2011/65/EU (updated to Directive 2014/1/EU) for the restriction of use for certain hazardous substances (RoHS); the Regulation (EC) No. 842/2006 on certain fluorinated greenhouse gases. The ERS Management Procedure (Document No. 06-028) is an operational procedure to complement the Management Standards for ERS document so as to ensure that the substances and chemical listed inside the latter are closely managed and controlled according to internationally established procedures and methods.

The ERS Management Procedure elaborates the many measures that must be taken to control the related substances starting from product design phase including subsequent design change and then vendor sourcing, vendor audits, incoming parts inspection, in-process check and complete manufacturing control until delivery. In order to ensure adherence to the procedure by all related parties including R&D, procurement, quality assurance, production and many more, the ERS Management Procedure also identified the ERS Organization that is set up specifically to drive effective implementation and execution of the ERS monitoring and control efforts.

Energy Savings for Customers

During 2016-2022, Delta Thailand's high-efficiency Products shipped world-wide has enabled



Product Carbon Footprint

To mitigate related risk as [RCP 2.6 scenario](#) to limit the climate change lower than 2°C, removing CO2 from every business process especially the core product is vital. Due to the Climate Action failure, as well as corporate carbon inventory, implementation of product carbon footprint information was frequently asked question raised by our customer, investor and regulator last year.

Product carbon footprint is the best example of the SLCA in action. Delta has now completed the carbon footprint inventory and verification of several Business-to-Business (B2B) products based on the PAS 2050 Product Carbon Footprint Standards issued by the British Standards Institution (BSI), including notebook adaptors, PV inverters and DC fans. Delta is committed to developing new products that reduce product carbon footprint by improving power efficiency and utilizing renewable energy sources.

In 2022, Delta Thailand sampling checked carbon footprint Delta is strongly committed to our mission "To provide innovative, clean and energy-efficient solutions for a better tomorrow" In 2022, the company sampling our custom designed power supply to compare its product carbon footprint with the same product certified ISO14067 last three years. In pass 3 years helped reduce 21.3% of CO2e generated through this product life cycle. Majorly, this significant improvement is the consequence of the consumption of more recycled energy used in our manufacturing process. In the same year, we trained up 10 PCF experts at our global sites and planned to implement more PCF certificates to allow our stakeholder to learn how they should be able to provide collaborative support to reduce carbon emission.

By implementing ISO 14067 (PCF cradle to gate) verification, Delta targets to reduce 10% of product carbon footprint of the sampled products every 3 years. By using IPCC 2021 GWP 100a v1.03 analysis method and SimaPro 9.3.0.3/ Ecoinvent 3.8 software, it was found that our effort to improve in raw material phase, manufacturing phase and market phase, the study illustrate that the increasing proportion of renewable / non fossil fuel energy used as production factor help us to reduce 21% of CO2e per product unit. Another major source of CO2e contributor is raw material we use (over 80% of CO2e per product units. With result of the study and [climate change risk scenario information](#), we synergize our teams and customer collaboration to rethink the component design, reduce the material use and seek for lower-carbon substitute parts to implement another 10% reduction for the specimen product.

Product Efficiency Enhancement

According to IEA's Sustainable Development Scenario (SDS Scenario) assumptions of Industry sector policies, minimum energy performance standards and implementation of system-wide efficiency measures will be all industry new norm by 2025. This norm will be global collective action to implement "well below 1.5 °C" pathway targeted by the Paris Agreement. For ICT devices and solutions, Energy efficiency is the frequently asked query raised by our customers. It is not only the electricity and excess heat management cost resulting from ICT solutions' 7/24 operating hours, but also the transmission stability when the source of electricity power switched to renewable sources resulting from their environmental awareness. High efficiency power supplies that help to stabilize power distribution and generating power from renewable sources have become priorities for customers in ICT industry.

For example, our power supply units used in data centers have the highest efficiencies in the world to significantly reduce power loss. Furthermore, the energy storage system of Delta's bi-directional PV inverters has overcome the storage limitations of photovoltaic energy. In addition, Delta's wind power products are gradually entering the market with the goal of increasing the percentage of renewable energy sources used in global power generation.

The company will continue to improve our product's energy efficiency. Most of Delta's power management products have surpassed 92% energy efficiency, such as our PV inverters with a conversion efficiency of over 98.7%, DC-DC converters for automotive with 96% efficiency, and telecom power supplies up to 98% efficiency. Find Delta Group's leading-efficiency products at plugloadsolutions.com and energystar.gov

In 2022, Delta Thailand had sampling checked its top ten revenue custom design products which cover 10% of Thailand's revenue. The sampling check is to ensure implementation of environmental declaration on its products. Up to 2022 more than 200 Delta power supply products had obtained 80 plus certification, and some of them achieved the Titanium level launched in volume production. Nevertheless, Delta Key businesses majorly falls at ODM/OEM business section, any label on product is under customers' specification requirement. During the reporting period, there were no incidents of non-compliance concerning product and service information labeling, marketing communication, the health and safety impacts of products and services.



Delta Unveils New DC EV Fast Chargers, V2X Innovation and Energy Solutions at ASEAN Sustainable Energy Week 2022

At the ASEW 2022 event, Delta unveiled its latest DC EV chargers including the new Ultra-Fast Charger 200kW, DC City Charger 200kW and the DC Wallbox Charger 50kW and Delta's V2X Bi-Directional EV charger that enables both EV charging and discharging of EV batteries to the grid. This DC fast chargers and the innovative vehicle-to-everything (V2X) bi-directional EV charger that can combine with Delta's solar inverter and energy storage systems to save electricity bills, secure building power and protect the environment.

- DC City Charger with 200kW dual interface simultaneous fast-charging and 96% power efficiency.
- Ultra-Fast Charger with 200kW/400A CCS2 cable without the need for liquid cooling.
- M100A_280 3 Phase Inverter with 100kW and 98.7% power efficiency, smart cooling system ensures high yield and performance.

ASEAN Sustainable Energy Week is a top regional event for renewable energy, energy efficiency, environmental and EV technology. As a provider of energy-efficient green solutions, Delta offers local customers world-class products, solutions and services to support the green transformation of Southeast Asia.

We help our global customers to make informed purchasing choices.

Find our leading efficiency Power supplies on pluifloadolutions.com

Australia America Europe Asia

UL LISTED C-UL US C-UL US C-UL US C-UL US

EnergyE EAC RoHS CE

10 8 Pb

POWER SUPPLY
开关电源 交流式电源转换器

P/N 料號 : R0501-A0030-11
DATE 日期 : 25082015

INPUT 輸入 輸入
AC100-240V 7.5A MAX. 47-63Hz
OUTPUT 輸出 輸出
+5VSB --- 1.0A MAX.
+5V --- 40.0A MAX.
+12V --- 33.0A MAX.

THE TOTAL COMBINED OUTPUT POWER OF THE
+5V, +12V AND +5VSB SHOULD NOT EXCEED 600W.
+5V 和 +12V 和 +5VSB 的組合輸出不能超過 600W
+5V 和 +12V 和 +5VSB 的組合輸出不能超過 600W

DELTA ELECTRONICS
MODEL 型號 : TDP5-600FB A REV 8A : 08F
S/N 序號 : ABTT15352248
MADE IN THAILAND 生產地 : 泰國 / 生產廠 : 泰國

1. Specification and clear product information is basically in English and Chinese which are used by over 48% of global citizen. (Ref: <https://bit.ly/2VFPQJg>)
2. Product origins.
3. Information of health, safety and environmental handling according to requirement of customers in various regions.
4. Level of product efficiency helping our customers to create positive impact from less energy consumption.
5. Disposal instruction of the product.
6. Barcode display for data traceability of part/component source.
7. Safe use of the product.
8. Laboratory standard assurance.

Environmental Labels and Declarations

Since Delta Thailand's nature is B2B manufacturer and exporter, eco label type I or ISO 14064 application generally implemented by our end customers

95% Eco label Type III
of our total products implement simplified LCA with self-declared eco-label according to ISO 14021 guideline

5% Eco label Type II
EnergyE EnergyE EnergyE

0.002%
ISO 14067 verified

Certificate
Standard: ISO 14067:2018
Certificate Number: 40 000000000001
Report No: 380160000001

Certificate Holder: Delta Electronics (Thailand) Public Co., Ltd.
Site: Delta Electronics (Thailand) Public Co., Ltd. Plant 2
Scope: Verification and Validation Body: TÜV Rheinland Taiwan Ltd.
This certificate is valid from 2023/07/01 to 2025/07/01

Eco-labels and Eco-declarations

Consequently, from Delta Group participation in COP21 and various occurrences resulting from climate change; Product Safety, health and environmental handling instruction on electronics products is in global regulators and customers focus. According to the company procedure of Product Regulatory Mark Application and Control Procedure (document no. 06-025), 100% Delta products declare related compliances with health, safety and environmental regulations to encourage our worldwide customers to make informed purchasing choice. Content, that particularly might produce an environmental or social impact, safe use of the product and proper disposal; for example, had significantly posted onto our products.

Since 2010, Delta launched the “EnergyE” program for rectifiers which offers a energy savings calculator on the product webpage to help customers understand the cost and energy conservation benefits they can achieve by using Delta rectifiers under different scenarios based on the type of power source, number of sites, average load per site and energy cost information. In addition, we added “EnergyE” labels to our Rectifier product catalogs and products with energy efficiency of over 95%, 96%, and 97% to allow easy identification by customers. Delta supports informed purchasing choice by applying Ecolabel onto its product.

We target to have PCF data or certificates for all products exported to EU customers by 2030. To be ready for carbon tax schemes in the country/ region we generate our revenue, we are now training product carbon footprint analysts to help our customers prepare for the EU Carbon Border Adjustment Mechanism (CBAM) scheme. In 2022, we trained 10 experts from various business groups or units with ISO 14040 or ISO 14067 certification for target products. Up to the reporting period we successfully achieved 3 PCF certificates for target products manufactured at Delta Thailand and 9 certificates for target product produced as our associated factories which we imported for our trading activities. A certificate renewal (first data collection in 2018) of a power supply for data storage system is the golden prove that using renewable energy for production process help remove over 20% of product carbon footprint (IPCC2013 GWP 100a v.1.03/ Simapro 9.0.0 Ecoinvent 3 Materiality 5%).

Up to the reporting period, there were no incidents of non-compliance concerning product and service information and labeling, customer privacy and confidentiality nor incidents of non-compliance concerning marketing communications.

Thailand 4.0 target of the 20year economic reform (2017-2036)		
<ul style="list-style-type: none"> • An average growth rate of GDP in the industrial sector will be not less than 4.5 percent per year. • An average investment not less than 10 percent per year. • An average increase in the export value not less than 8 percent per year. • An average growth rate of total-factor productivity (TFP) not less than 2 percent per year. • The number of New Warriors 4.0 (Advance tech startups) of 150,000. 		
Target Industries		Delta's Innovative Products & Solutions
First S-Curve	Smart Devices	<ul style="list-style-type: none"> • Health care devices • Embed power • Component
	Future Automotive	<ul style="list-style-type: none"> • Automotive electronics • EV Charging solutions
	Health Tourism	<ul style="list-style-type: none"> • Building automation solutions • In-door air quality solutions
	Agriculture and Bio- Technology	<ul style="list-style-type: none"> • Process autonomous solutions
	Food Processing	<ul style="list-style-type: none"> • Industrial automation
New S-Curve	Robotics and Automation	<ul style="list-style-type: none"> • Industrial automation • Data center solutions
	Aviation and Logistics	<ul style="list-style-type: none"> • Industrial automation for logistics • Display and monitoring solutions
	Bio-fuels and Bio-Chemicals	<ul style="list-style-type: none"> • Smart energy solutions • Industrial automation
	Integrated Medical Services	<ul style="list-style-type: none"> • Medical power • Industrial automation
	Digital	<ul style="list-style-type: none"> • Data Center Solutions • Telecom Energy solutions • Smart Energy solutions

Keep introduce innovative solutions.

Amid the global emergency to heavily invest in health and safety and business recovery in 2022, Delta still our R&D investments at 3.2% of consolidated revenue with specific focus on our green revenue growth. Revenue from environment-friendly not only helps strengthen our business but our global networks to relieve Climate change.

Based on the [International Energy Agency \(IEA\)'s climate-related scenarios for transition risks](#) including Sustainable Development Scenario, [Net Zero](#) Emissions by 2050 Scenario and the 2 Degree Scenario, we see the opportunity to develop the products and solutions that help Delta and the society to bridge the open gap of transition risk. According to the mention scenario, our **8 philosophies of eco-friendly innovation** help us to research and develop our products and solution to

- User's health and safety
- Optimize the natural resources used in the production process.
- Optimize the product's efficiency to help our customers to operate under unstable efficiency of renewable / off-grid energy sources.
- Help customers and end users to reduce emission from usage stage to meet RCP 2.6 target of climate change under 2°C in 2050.
- Help customer and end user have quality living if emission continue rising at current rate (RCP 8.5 scenario)
- Help generate innovative energy to bridge the gap of energy transition to renewable energy.
- Comply with high safety and environmental standards to ensure user's safety.
- Easy to manage end-of-life products to circulate recyclable parts into the production process while non-recyclable parts will not harm the environment.

Major extensions of the product lines and integrated solutions were achieved as well as continued improvement of our product's key features, efficiency, power density and digital intelligence. Additionally, Delta R&D has increased the application range and customer base respectively of its power technology products like industrial wireless charging, combined charge units for electro-mobility and artificial intelligence.

The healthy view of the markets, their customers and their demands combined together with the R&D personnel know-how and strengths is the door to Delta's competitiveness and leadership in green environment and efficient energy saving power devices and solutions.

To keep introducing our innovation to the market during the COVID-19 outbreak, Delta started transforming our marketing communication to virtual events, online training and webinar and [virtual showroom](#) platforms. These interactive channels helped boost up our global customers and public to have more information on our products and solutions while still safe and healthy at their places.



In 2022, Delta successfully implemented [the first Facility Management Control System \(FMCS\) powered by VT Scada](#) in Southeast Asia at the Delta Plant 7 in Wellgrow Industrial Estate. VT Scada software is an industry-leading SCADA software developed by Trihedral, a Canadian company in the Delta Group.

[VT Scada](#) is an intuitive platform for creating highly customized industrial monitoring and mission-critical applications of every size. It is widely used in large power, water treatment and oil and gas industries in North America, providing key application solutions with excellent quality and support that has won it numerous industry awards.

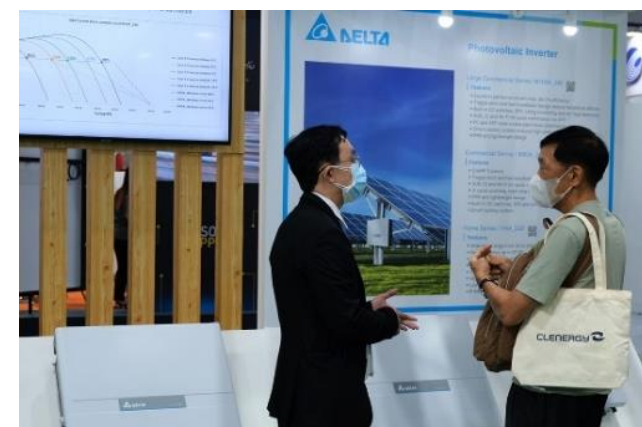
In Thailand, operations managers in the waterworks, energy, chemicals, manufacturing and food and beverage industries can leverage this software platform for better integration and reliability in monitoring and control of mission-critical applications. VT Scada's excellent functions, service and ease-of-use offer users savings on both costs and time.



Delta's Energy Infrastructure Solutions. In 2022, [Delta unveils New DC EV Fast Chargers, V2X Innovation and Energy Solutions at ASEAN Sustainable Energy Week 2022](#). In the showcased solution also integrates innovative new products including Delta's V2X Bi-Directional EV charger that enables both EV charging and discharging of EV batteries to the grid.

In addition, Delta unveiled its latest DC EV chargers including the new Ultra-Fast Charger 200kW, DC City Charger 200kW and the DC Wallbox Charger 50kW.

Delta's latest DC fast chargers and the innovative vehicle-to-everything (V2X) bi-directional EV charger that can combine with Delta's solar inverter and energy storage systems to save electricity bills, secure building power and protect the environment. As an EV charging and renewable energy solutions provider, Delta supports the green transformation of Thailand and Southeast Asia to fulfill its brand promise: Smarter. Greener. Together.





Retain Innovation Pipeline

Covid-19 fastened frequent technology break through and changing aspect of customer requirement changeover, innovation pipeline is vital for our long -term growth with over 1,400 patents and countless knowhow, Delta frequently disseminate its cutting edged technologies to develop ICT and related industries infrastructure.

To recognize and appreciate the accomplishment on patents of DET inventors, in 2022 company has set up “DET Patents Recognition Ceremony”. It is a special occasion to thank our employees for the all the effort that they have put into our company. At the same time, the inventors also take the chances to present and share their achievement to the team.

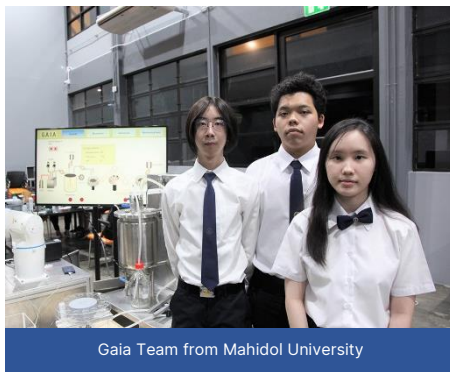
Retain Innovation Pipeline

The Covid-19 pandemic highlighted the importance of technological development too response to unexpected events resulting from climate change and disease pandemic. The world—wide outbreak also reminds us about the possibility of technology vulnerability that impacts youth and the next generation’s well—being. From our genuine willing to enable children and youth’s technology literacy, we were interested by broader society in how we use technology to maintain business growth, health, safety and well-being against the global outbreak. This can be illustrated by the increasing numbers of various engagements requested by non-tech institutes visited and engaged us last year.

Since 2016, Delta Thailand sponsored prize-winning teams from Thailand’s Chulalongkorn University, Kasetsart University, King Mongkut’s Institute of Technology Ladkrabang (KMITL) and King Mongkut’s University of Technology campuses in North Bangkok (KMUTNB) and in Thonburi (KMUTT). In 2022- Delta Electronics (Thailand) PCL. sponsored student teams from top universities in Thailand to join the 8th Delta International Smart & Green Manufacturing Contest, also known as Delta Cup. This year, three teams from Thailand passed the semifinal contest and two teams won prizes at the virtual finals.

This year’s Delta Cup theme was “Seeking Low-carbon Manufacturing Talents” with 102 teams from 328 schools qualified to compete in the semi-finals. Of these teams, only 15 teams advanced to the final round. The Delta Group organizes the annual competition to help students develop innovative automation, smart manufacturing solutions and green technology applications.

The Delta Cup’s goal is to inspire passion among young talents for automation technology by strengthening their design, programming, and debugging skills while integrating theory with practice. In this way, the contest fulfills Delta’s mission “To provide innovative, clean and energy-efficient solutions for a better tomorrow” and echoes Delta’s brand promise of “Smarter. Greener. Together.”



Due to ongoing COVID-19 travel restrictions in China, the [2022 Delta Cup](#) was held virtually for the second time. The three Thai teams competed against elite student teams from around the world to win the following awards for their innovative automation projects:

1. Grand Prize: Gaia Team from Mahidol University for Carbon Polymerizing System Project. The team developed an automated microbial system that can transform carbon dioxide into biodegradable plastics called Polyhydroxy butyrate (PHB). This system allows us to reduce excess carbon in the atmosphere and create environmentally friendly plastics which can biodegrade 90% within 10 days and leave no waste at the end of their life cycle.
2. Second Prize: Olo Plus Team from Kasetsart University for Re-electric Warehouse Project. The team's system converts the vibration energy of industrial machinery, through a piezoelectric plate, to electric power. The electric power is then transferred to a PLC system and a conveyor to transport goods to warehouses.
3. Second Prize: F-Embedded Team from Burapha University for Smart Green Living Project. The team's project is a system that helps control an HVAC system by collecting data on occupants' usage and the overall building's electrical usage. This data is sent to the Delta DIACloud to process and analyze using AI for accuracy and speed. AI enables adaptation and optimal usage of HVAC according to the number of people in the building for best energy saving.

During 2016-2022, we sponsored 105 participated team, the teams from the three countries vied for top prizes with elite engineering student teams from Taiwan and China. Delta Thailand's business associate, Delta Electronics Inc. organized the 5th Delta Cup under the event theme- Seeking Smart Manufacturing Talents. Delta's offers training and sponsorship in the Delta Automation Academy, Delta Automation Labs and Delta Cup as part of its commitment to develop society and support Thailand's competitiveness in the Industry 4.0 Era. These academic projects also aim to provide work experience to the students who are the industry's future innovators after their graduation. After on-field experience on application, equipment and knowledge adoption, these new generation engineers will be quality blue pillars to advance innovation infrastructure of ICT industry in long-term. With their creative use of Delta automation products for industrial applications, Thai teams participating at the Delta Cup received the following awards from the judging committee comprised of industry, government and academic experts.

Delta offers training and sponsorship to Thai teams in the Delta Automation Academy, Delta Automation Labs and Delta Cup as part of its commitment to develop society and support Thailand's competitiveness in the Industry 4.0 Era.

Responsible Supply chain

To enrich responsible supply chain for competitive quality, technology, delivery, cost, human rights, environment impact mitigation and ethical society, Delta Electronics (Thailand) Public Company Limited and its subsidiaries encourages our suppliers to follow Delta's Supplier Corporate Social Responsibility Policy as following:

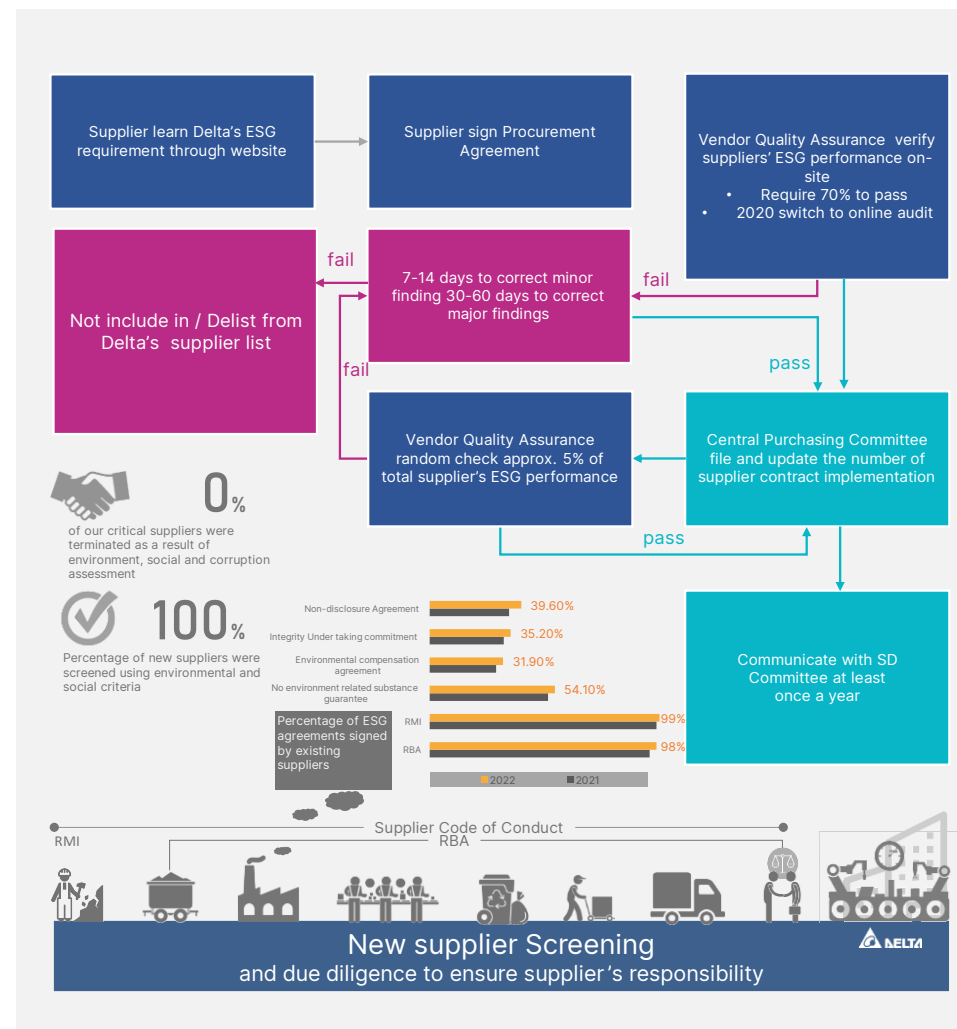
- Uphold Delta's founded mission "To provide innovative, clean, and energy-efficient solutions for a better tomorrow" to implement corporate social responsibility, and actively become Delta's partner in promoting sustainable development.
- Establish a responsible supply chain that protects the environment, strictly abides by ethical standards, respects labor human rights, provides a safe and healthy work environment, and strives towards sustainable development.
- Comply with laws and regulations.
- Collaborate with suppliers to invest in research and development of green innovation and develop environmentally friendly products to mitigate the impact on the environment.
- Follow the principle of sustainable procurement and prioritize procurement of products or services from suppliers who: promote innovation; respect human rights; protect the natural environment; combat climate change; conserve energy; and improve employment, public health, and social conditions.
- Evaluate and manage suppliers' superior quality, competitive cost, on-time delivery, service teams, and sustainable development capabilities to meet Delta's requirements and enhance the competitiveness of the overall supply chain.
- Commit to social well-being activities and encourage employees to participate to promote the development of the industry.

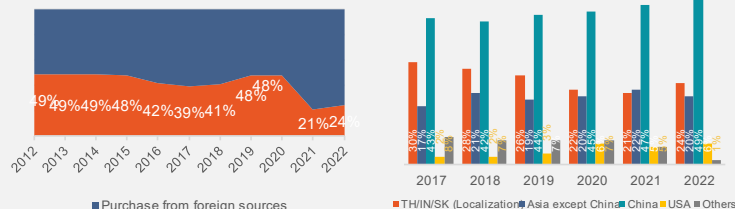
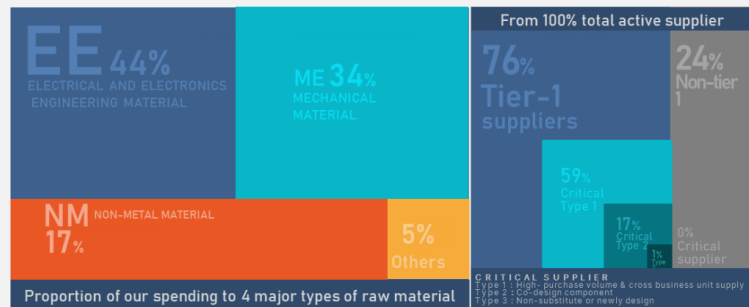


Well-managed supply chain does not only help Delta but also our customers in term of competitive quality, technology, delivery, cost, human rights and social responsibility. Climate and demographic change lead to raw material scarcity and high competition among global supply chain. Delta views suppliers as long-term partners as described in our Delta [Supplier Social Responsibility Management Measure](#) which is based on the RBA code of conduct guidelines. We believe a prolonged partnership is only viable between enterprises with similar cultures and make integrity, code of business conduct and honesty our top priorities when selecting a supplier. Thousands of suppliers all over the world are Delta business partners and support our promotion of a sustainable business.

Since 2001, Delta formed an [agreement](#) between its purchasing department and approximate 1,900 active suppliers to ensure integrity in its supply chain. The Procurement and Supplier Covenants promote a healthy procurement system that avoids the negative influence of human factors such as bribery or unwarranted returns on normal business. During the Delta Annual Partner Meeting 2019, the supplier's quality and ESG performance, circular economy, Delta's responsible business directions, emerging risks, technology and global trend updated and collaborative opportunities among supply chain had communicated to our global automotive suppliers.

Up to 2022, 100% of our new suppliers that were screened using social and environmental criteria. According to higher frequency of global supplier's interest in being Delta's suppliers, we establish an online [Supplier Registration Platform](#). This platform helps those who are interested in joining Delta's supply chain to have precaution about our high requirement of ESG responsibility. Meanwhile, it creates a pool of potential suppliers to shorten our sourcing process against global raw material shortage and shocked supply chain due to the COVID-19 outbreak. For the existing suppliers, we target to have them 100% RBA compliance agreement and 100% of metal supplier to signatory agree with Conflict Mineral agreement. Delta engages them to sign related ESG agreements with evidence attached. These suppliers had informed us that there may be a random on-site audit at their sites after the agreements have been signed.





To understand supply chain risks and dependencies from a general, economic point of view, Delta undertakes its annual procurement spending analysis of its 100% suppliers to secure its productivity performance, cost management and sustainability management accordingly RBA code of conduct. Over 2,100 million dollars was the cost of raw material we spend for raw material from 2,010 active suppliers in 2022. 44% of our material used for production process in 2022 were electrical engineering material (EE) follow my electromechanical parts, non-metal and metal part respectively. Moreover, this spending analysis helps Delta to ensure its independence from any supplier (not over 5% of total spending) to secure our material validation for order ramp up due to society's need of ITC service during the lockdown period.

For effective communication, ESG-related issues control, Delta major raw material and component had supplied by direct manufacturers rather than agents and outsourced suppliers. For direct control of our supplier's ESG responsibility, Delta aims to have 100% tier-1 supplier in 2023. In 2022, Raw material and component direct suppliers and manufacturer counted as our tier-1 suppliers was 95%.

To enhance ESG performance of critical supplier **type 1** (high purchase volume & cross-business unit supply) while closely monitoring critical supplier **type 2** (Critical component, co-design component, single source suppliers, mold suppliers or similar) and **type 3** (non-substitutable suppliers and newly introduce suppliers) competence, Delta continues to adopt purchasing localization is highly required. 61% of our raw material expense in 2022 had spent to these critical suppliers. Localization is Delta practical way to establish close linkage to local partners, improve social and economic development in the community and reduce the environmental footprint of our operation. To mitigate supply chain hiccup, Delta target to have one-third (35%) of total suppliers localized by 2030. In 2022, 24% of direct materials had purchased locally for our major production sites in Thailand India and Slovakia. Regarding these 3 major procurement practices, either risk as nature of business process or emerging risk in supply chain can be effectively mitigated. With smooth and collaborative supply chain, agile action to fulfill Delta requirement and customer satisfaction has stably retained.

Responsible Supply Chain Enhancement



“How to have long-term business with reasonable margin and smooth supply chain among natural resources constraint, changed-over technology and high competition market?” was the question recurrently asked by our suppliers during supplier engagement meetings with accounted buyers. RBA code of conduct became our world-class customers’ expectation. According to Delta stakeholder engagement questionnaires and frequent customer engagement questionnaires, human right issue especially forced labor in ICT industry were still in broader society’s interest.

To this concern, Delta encourages our suppliers to provide their collaboration to enhance Green supply chain. This not only lowers operational costs for us and our suppliers but also increases the competitiveness of the entire supply chain. Finally, the company realized our suppliers’ collaborative actions as follows.

Since 2014 Delta promotes RBA (EICC) Verification Consultation to lower ESG risks in our supply chain and improve competitiveness. Delta Thailand set up a verification and consultation team, “RBA (formerly) EICC committee”, composed of five major departments: Human Resource Administration, Occupational Health and Safety, Facilities, Central Purchasing Control, Purchasing Material Control and Supplier Quality Management. The RBA committee will examine related law and regulation compliance, human rights, labor rights, health and safety, environmental issues and Ethics and Management Systems accordingly to our [standard checklist](#). We found room for improvement for most of our suppliers in Health and Safety aspects of the RBA management system. Delta plan to implement 100% critical supplier RBA audit in 2023.

Delta request all new suppliers to have certifications in Quality, Environment, and Occupational Health & Safety and sign the company’s “Integrity Statement” and “[Responsible Business Alliance Commitment Statement](#)”. Delta also encourages existing suppliers to have the above-mentioned certificates. In 2019, Delta group has established “[Supplier Registration Platform](#)” to allow global suppliers to have precaution about Delta’s supply chain responsibility. In this platform, a supplier can pre-assess his/her organization performance to Delta’s requirements. Business overview, qualification process, sample of agreements, CSR direction and related business terms are available on the platform. According to our [Supplier Management Procedure \(doc no 06-009\)](#), RBA audit score will be used for supplier classification. The classification will affect each supplier’s volume of order share, reporting process as well as Delta’s decision qualification process.

At 70%-point score threshold, our 2022 on-line audit (include paper-based audit) included 100% suppliers. We also sampling check 13 suppliers that submitted their online responses and achieved the top 10 scores. Delta RBA audit team has closed 18 risky areas at our supplier sites. Majorly, these findings are the supplier's risk to environmental, occupational health and safety and labor law violation. However, these suppliers can perform corrective action accordingly to Delta requirement (immediate action after audit for minor findings and up to 60 days for major findings.). 8 minor findings regarding out-date policies and other documentation have feedback to 6 suppliers and their corrective action had implemented timely. Finally, accumulated 371 suppliers (19% of total active suppliers) audited who all passed with an average score of 90 points, which means 82 points and highest score 97.61 points. None of our suppliers has suspended, disqualified, or terminated due to violations of our environmental, social, quality and services agreement and corruption.

Since 2019, Delta has conducted 100% supplier CSR Self- Assessment to urge boost up suppliers' performance of CSR in-process. From this assessment our definition of critical supplier has extended to cover environmental, social and governance ethics. At the first stage, suppliers' CSR assessment was implemented in Tier-1 supplier pool by using criterions aligning to the Responsible Business Alliance code of conduct, 6 UN SDGs that we focus, emerging risk and the emerging events in the reporting period. In addition, we regard these criterion as our risk in supply chain to be monitored and control closely Yearly, Supply Chain RBA Committee plans on-site visit for 1% of these suppliers to ensure that their performances are in accordance with our requirement and their feedback through self-assessment.

In 2022, due to major countries' conflict and neighbor country's interstate conflict in the reporting, Delta added additional questions regarding these issues to urge our suppliers' awareness of human rights and forced labor among non-voluntary immigrants. Finally, there was no forced nor immigrant labors worked at our suppliers' site.

As part of our effort to reduce GHG scope 3 in upstream activities, the company also adds questions regarding energy and water consumption including ratio of renewable energy mix for our suppliers to voluntarily provide their quantitative information. However, the coverage of the feedback received did not meet our expectation at 30% coverage in the first engagement. Hence, we schedule technical training for suppliers to allow them to have conceptual background of our Net Zero commitment and RE100 and ease their quantitative feedback process. Such action should ease and accurate Delta's GHG scope 1 data collection as well.



Number of Suppliers potentially expose to ESG Risk



Note:

- Currently, Delta Thailand has over 2,000 active suppliers
- * KPI available in SD report has verified by independent auditor
- 100% of these identified suppliers passed our self-assessment 70% threshold in 2022. However, we adopted various supplier competence development plan to enable their best competence in ESG.

Risk in Supply chain

Delta uses tools such as [OECD Due Diligence Guidance for Mineral and related risk mapping](#) that considers economic, environmental, and social factors to verify potential risks in the supply chain and strengthen risk management. During the past years, the number of key suppliers for our power supply products that receive relevant industry standard certificates has increased every year. In 2022, we learned that 335 suppliers expose to ESG risks. We informed the result of our on-desk analyses to these suppliers and we have 100% feedback to account buyer. 73% of them send back their updated policy or activities, 19% replied that those social and environmental issues are risk by their nature of business while another 8% need more time to value the ROI of additional investment to meet international standards/ codes.

Modern Slavery labor and human trafficking

According to the U.K. Modern Slavery Act of 2015 and Thailand's Emergency Decree Amending the Anti-human Trafficking Act, B.E. 2551, B.E. 2562, (the "Act"), Delta Electronics Thailand and its subsidiaries ("Delta") has performed essential due diligence to prevent modern slavery and human trafficking in our business and supply chain. Though all suppliers are requested to sign an RBA commitment statement, we keep tracking our supply chain as preventive action. In 2022, we online surveyed 100% of Tier 1 and Tier 2 suppliers through an ESG questionnaire to identify those with a high risk for human rights issues in the supply chain. We identified a total of 29 Tier 1 and 10 critical non-Tier1 high risk suppliers, for a high-risk rate of 10.9% and 17.9% respectively. To help our supplier to mitigate risk and prevent re-occurrence, our RBA team introduced the Modern Slavery Act and share how Delta measure to enrich labor right accordingly to

international standards. Since most of the findings are "minor", Delta provides a period for corrective action from 1-3 weeks for these suppliers to implement. Finally, all the CAR given have closed. Excessive work hours are a common management problem in the industry. Our RBA verification and consultation team provided experience in introducing and promoting Delta Thailand's Management System to address these findings to our suppliers. The team also conducted status followed-up to ensure continued improvement. The company sets a target to gain 100% signatory agreement implementation of all commodities including Electromechanical, Non-metal and Metal in 2023.

To implement our target of Zero tolerance to all the form of Human rights violation through our value chain, Delta encourages our stakeholder and business partners across industries, Delta disclose our declaration of Modern Slavery labor and human trafficking on our [website](#) on annual basis.

Conflict Mineral Sourcing

Since 2010, Delta implements a [Conflict Mineral Policy](#) that bans the use of Tungsten, Tantalum, Tin, Gold (3TG) and cobalt mined from human right harassment countries accordingly to "Dodd-Frank Wall Street Reform and Consumer Protection Act". The company's suppliers had requested our power supply products suppliers to declare the origin of out a "Metal Origin Survey Form" and to sign a "Responsible Minerals Initiatives (RMI) Agreement". These are very important steps to help mitigate human rights risk, we also help trace the original ores of metals in our supply materials.

By 2021, 99 % (2021: 95.2% 2020: 98.2%) of our major material suppliers have signed the ["Responsible Minerals Initiatives](#)

[\(RMI\) Agreement"](#), the percentage was slightly decline from 2020 due to the entry of new substitute material and new technology suppliers. It was ensured that conflict metal in our supply chain yet and continue to communicate the need for our major materials suppliers to leverage their influence for corporate social responsibility and increase efforts for origin verification of ore products by the RBA or a third party.

Though EV battery and [energy storage system](#) is significant to our green growth, Delta Thailand and its subsidiaries in India and Slovakia has no production of any type of the mentioned batteries which cobalt is required. All the battery has source from our [associated company' in Taiwan with Japanese technologies](#) where major minerals like cobalt and copper has sourced from standard suppliers China. These suppliers have committed to our associated company's Conflict mineral policy as part of ESG screening of new supplier agreement. While Delta and its business partner keep investment in research and development substitutional mineral, the parties has [develop](#) the battery's efficiency, containers and product variations for longer lifetime to optimize the consumption of natural resources.

Environment related risk

The company has introduced the IECQ/QC080000 Quality System and promotes a Green Product Management (GPM) system. We implemented the IECQ based on the risk classification of materials and the Green Supply Chain based on the following principles:

- A supplier must have total compliance with local statutory regulations and define its own risk control mechanism.

- A supplier must set up environmental protection, staff health and safety. The supplier must be hazardous substance free (H-F).

A supplier must follow relevant Delta Thailand's standards on managing environment-related substances (such as [10000-0162 Management Standards for Environment Related Substances](#)) and 10000-0222 Standards for Regulated Environment Substance and packaging design standards. The company also leverages the GPM system as a shared platform of environmental information in the supply chain. Delta relays the most recent international environmental requirements, such as the latest controlled substances of EU's RoHS 2.0 and REACH SVHC, to all supplier partners on the platform.

Economic risk

The COVID-19 pandemic caught many Small and Middle-Income Enterprises (SMEs) unaware and unplanned. The pandemic led to restriction of several economic activities in Thailand. The ripple effect of logistic industry, raw material supplies, higher health and safety cost caught up with SMEs, taunted to be a growing economic pillar across the globe.

To smoothen our supply chain whereas our small suppliers can survive, Delta relief our supplier burden by re-consider the credit term and earlier provide our demand to allow them to plan their production factor, logistic mode and so on with reasonable cost, acceptable margin and well-prepared production factor.

From our effort to help our partner, Delta issued an official letter to invite our small and medium size suppliers to participate in the credit and payment term reconsideration.

The characteristics of small and medium enterprises eligible to participate this program are as following:

1. Product manufacturers with the number of workers does not exceed 200 and revenue does not exceed 500 Million THB/year.
2. Sales (whole-seller or retailer) and service provider with number of workers do not exceed 100 and revenue do not exceed 300 Million THB/year.
3. In the case of doing many types of business such as Product manufacturer and sales (whole-seller or retailer) and/or service provider, Delta consideration will base on the main type of business that majorly contribute to the firm's revenue.

Up to Q2/2022, 425 suppliers including raw material supplier, MRO supplier, contracted service provider participated in this program for shorter clearance term or even change term of payment to COD.

Corruption risk

Global tight supply chain, blockage of logistic route, economic stagflation and natural disaster (flood from unseasonal rain) again brought back ethic and corruption risk into our focus.

Fraud, bribery and corruption tend to thrive in chaos.³ The COVID-19 pandemic has made the business world a breeding ground for a plethora of risks, with vulnerabilities seeping across several industries. As companies grapple with operational pressure, disruption around cash management, working capital, supply chain and workforce issues; resorting to unethical shortcuts, fraudulent practices, compliance violations and management overrides may be construed

acceptable in these extraordinary times. Difficult times call for innovative solutions and it the pressure to stay afloat may supersede the need to conduct business in the ethical way significantly.

According to the Association of Certified Fraud Examiners (ACFE), a study conducted after the 2008 recession highlighted that the majority of respondents saw an observable increase in the number of frauds. Almost 80% believed that fraud levels increase in times of economic distress. With a sharp fall in markets worldwide, plunging stocks and job losses, many factors then may be relevant right now, which might impact the global economy.

In addition to our anti-corruption policy, President online engagement with suppliers and [supplier management measure](#), Delta Supplier management team and CG committee is studying [UNODC's Corruption Risks in Public health Procurement in the Context of COVID-19 in Pacific Island Countries](#) to strengthen the company's due diligence in procurement process.



"Recycling and up cycling concept is exactly good for environment. However, in business sector the present processes need higher resources to implement ; especially in sorting and cleaning process after we took recyclable waste from waste management company, that resulting higher-cost to our customers. The awareness of important of waste sorting should be disseminate to everyone everywhere to reduce unsystematic waste littering that depreciate the qualification of recyclable waste."

Our stakeholder said

A metal part supplier



Material availability against the outbreak and climate change

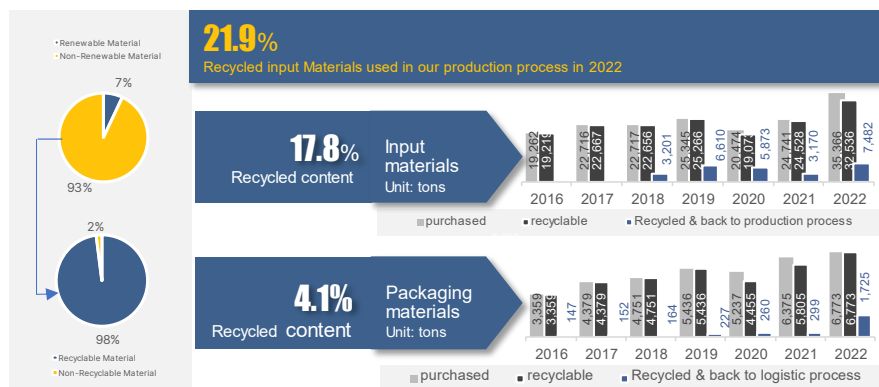
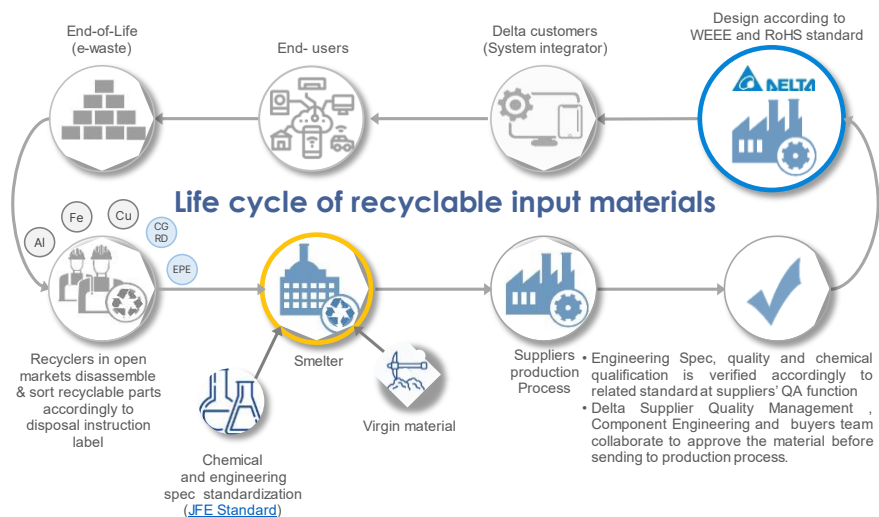
Climate change, and rapid rising demand of technological products that affect the limited availability of these elements and oil tighten the rare earth element supply (REEs). Featured with unique magnetic, catalytic and optical properties, rare earths are widely used in many high-tech and low-carbon technologies, from hard disk drives, electric vehicles and fiber optic cables to missile guidance system, medical devices, and clean energy technologies. Five rare earth minerals, tantalum, silver, lithium, gallium and indium, are widely used in modern technologies. For example, tantalum is commonly used in electronic capacitors in computers and mobile phones for its energy-storing capacity. Owing to its low failure rate, it has also been used in automotive and aerospace electronics, atomic energy and wind turbines.

Since the 4th quarter of 2022, outstanding potential shortages of semiconductors, multilayer ceramic capacitors, power MOSFETs, and other related components occurred and got worse with COVID-19 pandemic. MLCC's function in electronic devices is to temporarily charge and discharges electricity. It regulates the current's flow in a circuit and prevents electromagnetic interference between components. Raw materials consumed in the production of mass-produced surface mount passive components are usually made from transition metals, post-transition metals and some rare earth element.

The pandemic also brought an immediate change on global labor, health and safety, and cross-border policies. These changes severely disrupted global logistics, container utilization cycle and again, led to material shortage. This event highlighted the significance of our effort to localize suppliers, manage the consignment procurement and logistics modal shift management. Among the global lockdown and port recession.

The company also conducts in-depth analysis of key suppliers' financial status after the global financial crisis as well as reviewing the supply chain diversification/ geographical distribution of suppliers' production lines in order to reduce the risk of material shortage caused by extreme climate conditions or possible major natural disasters in the future.

In addition to plan for longer lead-time, close monitoring, seek for alternative source and more frequent supplier engagement, our Component Engineering team has assigned to downsize MLCC and capacitor component to optimize the natural resources consumption. Simultaneously, we utilize our global operation network to engage their local cross-border and courier suppliers. Optional routes and courier path connection had carefully planned to mitigate the delay of material and finished goods delivery.



- Total weight of recycle input material calculated from the percentage of recycled content used to produce the semi manufactured parts, associated process material including all forms of material and components other than raw material that are part of the final products
- Total weight of recycle packaging material calculated from the percentage of recycled tissue/ fiber used to produce the packaging.

According to IEA's Sustainable Development Scenario (SDS Scenario) assumptions of Industry sector policies, global collaboration to support circular economies through increased recycling of aluminum, steel, paper and plastics, and material efficiency is on of key strategies to implement "Limit global warming to 1.5 °C" pathway targeted by the Paris Agreement.

In spite of a takeback program for close-loop recycling, Delta reduces impact to natural resources through close loop recycling. Since Delta is a 100% export company, take back program will double the total variable cost (e.g., people cost, shipment cost, customs process cost) and GHG scope 3 for both Delta itself and our customers. To ensure 80% recyclable part & component as WEEE requirement will be utilized, since 2019, Delta has encouraged our supplier to use and disclose the percentage of recycled input material in their process. In the same session, we communicated the cost effectiveness and the new business sector resulting from circular economy practice and disclosure. We target to have 30% of recycled input material to total weight of purchased material in 2030.

From the supplier self-declare process, Delta realized that 9,206 tons of recyclable material had used by our suppliers in their production process. These 9,206 tons account for 21.9% of our total 42,138 tons of purchased materials in 2022 without any impact on material cost, quality and technology investment cost. This volume of recycled input material was used as direct and packaging material for conversion to our product.

Working toward deforestation-free supply chains is a key component of our net zero commitment. From our supplier self-declaration in 2022, we found that none of supplier's site locate in the plant/animal conservation area or source of biodiversity preservation area that announced by local government. We encouraged our packaging material to use more recycled content. We've learned that recycled EPE and recycled corrugate paper pulps has used to produce our packaging material. Regarding packaging material, 100% of our wooden pallet made of 4% of our packaging material was produced from recycled compositions. These packages of 100% of our products shipped worldwide last year. From this outstanding result, it is discussed among Sustainable development, Component engineering and purchasing function to seek for further possibility to add allowed percentage of recycled material into supplier's certificate of conformance (COC). 100% of reclaimed products have been disassembled, sorted and eliminated according to the Ministry of Industrial Works' instruction. 100% of packaging of reclaimed products has been reused as packaging materials.

Boost up SMEs' Innovation

Delta Thailand, the Ministry of Industry's Department of Industrial Promotion (DIP) and our partners announced the winner of the Delta Angel Fund for Startup 2022. The 6 prize-winning Thai startup teams received a combined total of four million Baht in corporate sponsorship funds from Delta and partners.

Speaking on the occasion, Jackie Chang, Delta Thailand President said, "Every year, Delta and the Ministry of Industry promote the Angel Fund and select startup teams for their relevance to Delta's energy efficiency and automation solutions and commercial potential in the market. In recent years, the competition has become more accessible and exciting with a Hackathon format. Winning teams can receive cash prizes from Delta and get national exposure that opens doors to new opportunities."

Throughout the COVID-19 crisis, Delta continues to support Thai enterprises and nurture local talent. The Delta Angel Fund for Startup is a key part of Delta's many collaboration projects with the Thai government and top educational institutions which demonstrates its contribution to Thailand's new normal recovery, Delta's supplier localization effort and aligns with the company's brand promise: Smarter. Greener. Together.

Delta, the DIP and partners then presented certificates and sponsorship funds to 9 top prize- winning teams and 13 participation prize-winning teams. The First Prize team received 1,000,000 baht and other top prize teams received from 800,000 Baht to 400,000 Baht in sponsorship funds.

Since 2016, Delta has worked with the DIP at the Ministry of Industry to foster entrepreneurs and startup talent in Thailand. During the COVID-19 pandemic, Delta continues to leverage digitalization including virtual and hackathon events to increase the impact of our CSR efforts.



How our startup's projects help us tackle with Climate change and its consequences	No. of submitted projects		
	2020	2021	2022
Renewable energy/ energy conservation	6	2	6
Waste reduction and circular economy	6	6	7
Natural resource optimization, water conservation and Smart farming	4	4	5
Food securities/ food industry	3	3	4
Health and well-being promotion	8	6	15
Others	3	1	7
Total	30	22	44
Winning projects that finally part of Delta's ecosystem (%)	33%	45%	34%

Next Step to Carbon Reduction

From our latest study of the product's carbon footprint, the biggest portion of CO₂e in our product was from raw material supplied to our production process. In 2019, We communicated our intention to reduce greenhouse gas by optimize electricity consumption and renewable energy solutions to our suppliers. In addition, we highlight the correlation of energy saving to operation cost saving as an additional business opportunity in green business to our suppliers.

To help our supplier to reduce greenhouse gas scope 1 and scope 2, our HQ's implemented its policy to track supplier's development in energy consumption. Delta Thailand is under process to prepare online communication platform and training sessions. We target to get voluntary suppliers to join this Energy Data Disclosure Program by 2023.

For GHG scope3, major global distribution centers cooperate with logistics providers to implement transportation cost optimization, consolidated delivery, full-truck load, packaging design, container packaging and selection of optimal delivery routes. Since Delta attained [ISO/IEC 27000 Information Security Management System \(ISMS\)](#), we encourage our suppliers to utilized e-invoice and e-document as much as possible to save natural resource and mitigate greenhouse gas from distance transportation.

Business matching event for new normal recovery

Delta Electronics (Thailand) PCL. and the Thailand Board of Investment (BOI), collaborated to support Thai suppliers by holding a business matching event at Delta's Bangpoo headquarters. The event aimed to match Delta Thailand with qualified Thai vendors and suppliers and seek opportunities for collaboration to support Thai businesses. This initiative is part of the Industry Linkage Development Division's new E-Linkage campaign under the BOI to support Thailand's economic recovery and Thai manufacturers facing new normal era challenges.



Mr. Jackie Chang, Delta Thailand President, thanked BUILD for their support and welcomed ThaiSubcon with the 50 qualified Thai vendors and suppliers who joined the event after vetting by BUILD. The participating vendors and suppliers could freely discuss ways to leverage collaboration and explore new possibilities with Delta.

Delta manufacturing managers then took the delegation on a tour of the highly automated Delta Smart Manufacturing (DSM) production lines. At the showroom, Mr. Kasemson Kreuatorn, Delta's Senior Regional Manager for Industrial Automation, presented Delta's unique Industrial Internet of Things (IIoT) solutions which use DIACloud communications, control and field devices for factory processes and building management.

After explaining Delta's products and manufacturing development plans, Delta invited the Thai vendors and suppliers to explore four booths in the company lobby. Each booth showcased specification details and requirements for industry-specific areas in Delta's local manufactured products and parts open for local partner support.

Delta Thailand's procurement and manufacturing management then invited 12 participating companies to continue discussions. The business matching meetings took place between each of the four Thai industry sector groups and respective Delta management.

As a major Thailand-based manufacturer and solutions provider, Delta works with the BOI and Thai research and industry partners to develop local solutions which protect medical personnel during the COVID-19 crisis. Delta welcomes local partnership as it leverages its industrial automation and ICT infrastructure solutions to support Thailand's economic recovery in the new normal.

A greener process

The failure of climate action, global supply shock and commodities price cireses reminded the business sector to reduce negative environmental impact and place global climate change risks as a top focus. Delta's founding mission is "to provide innovative, clean and energy efficient solutions for a better tomorrow". Without significant change in our operating locations and supply chain, our company carried out our eco-efficient operation and continuous efforts in reducing our business' environmental impact. Our group-wide environmental policy published on our website shows our sincere effort and partnership as a global citizen to make a smarter and greener future.

2022 Major contributors to Delta's consolidated revenue



98% of Delta consolidated revenue has contributed by our major sites in 3 countries

Source of Energy



Type of grid operator



Green building certification



Slovakia



Dubnica nad Vahom
Production area : 10,800 sq.m
No. of workers : 316
Production line : 22 lines
Actual production : 81% of full capacity
Location : 48.94824, 18.14440



India



Rudrapur Plant
Sector - 5, SIDCUL Industrial Area
Production area : 11,635 sq.m
No. of operators : 236
Production line : 12 line
Actual production : 67% of full capacity
Location : 29.00912, 79.41605

Gurgaon Plant
Sector - 35, HSIIDC Industrial Area
Production area : 1,488 sq.m
No. of operators : 55
Production line : 3 lines
Actual production : 84% of full capacity
Location : 28.41745, 77.00304



Others

Subsidiaries of Delta Thailand where their business nature are sales & service offices and research and development centers located in Australia, Austria, Brazil, Czech, Finland, France, Germany, Italy, Myanmar, Netherlands, Poland, Romania, Russia, Singapore, Slovakia, Spain, Sweden, Switzerland and USA,

Thailand



No. of workers : 17,970

Plant 1

Bangpoo Industrial Estate

Production area : 16,884 sq.m
Production line : 17 lines
Actual production : 100% of full capacity
Location : 13.55277, 100.66937

Plant 3

Bangpoo Industrial Estate

Production area : 15,752 sq.m
Production line : 106 lines
Actual production : 80% of full capacity
Location : 13.55555, 100.67026

Plant 5 (HQ)

Bangpoo Industrial Estate

Production area : 34,054 sq.m
Production line : 51 lines
Actual production : 85% of full capacity
Location : 13.54915, 100.67210

Plant 6:

Wellgrow Industrial Estate

Production area : 22,456 sq.m
Production line : 86 lines
Actual production : 80% of full capacity
Location : 13.58864, 100.94492



- Delta major operation sites are in well - management Industrial parks
- These major sites had certified ISO 50001, ISO 14001, ISO 14064-1 and ISO45001

22.69

2022 GHG Intensity (scope 1+2) tons CO2e : MUSD production amount.



2,114

GHG Scope 1: tons CO2e



60,452

GHG Scope 2: tons CO2e



189,341

GHG Scope 3: tons CO2e

Electricity intensity Reduction from year 2022

23%

12,869

Renewable energy use: MWh



9,936

Reduced energy consumption from energy saving projects: Gigajoule



88,156

Total electricity purchase: MWh

The company extended GHG inventory scope to the full coverage of manufacturing sites (Thailand/India/Slovakia) since 2017. The cases show here is covered 100% of manufacturing sites

Plan with Awareness

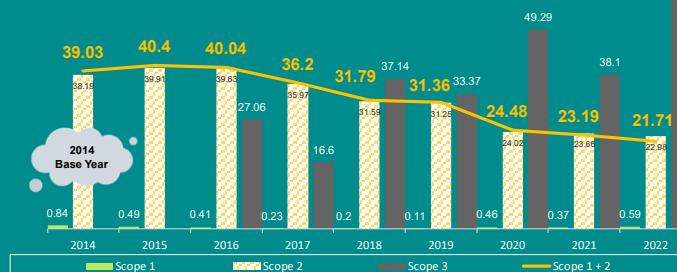
Delta included climate change as one of the critical risks of corporate sustainable management, we applied IEA NZE 2050, IEA 2DS, IEA SDS scenarios listed in [climate-related scenarios](#) about GHG emissions and ensured our eco-efficient operation to mitigate negative impact of climate change. Delta aligns with the Carbon Disclosure Project (CDP) guideline to provide concrete measures to continuously implement energy management to improve our energy usage efficiency while reducing carbon emissions. Delta started greenhouse gas (GHG) emissions data collection in 2009 and the report of Greenhouse Gas Emissions and Removals (ISO14064-1) since 2010, which has been transformed to the latest version ISO14064-1:2018, with the coverage of plants in [Thailand](#), [India](#), and [Slovakia](#). Our [Greenhouse Gas Inventory Report](#), which declares standards, methodologies, assumptions, and/or calculation tools used, source of the conversion factors used, and third party assurance, has been disclosed on Delta Thailand's website to show our GHG performance for Thailand's sites. Our relentless pursuit of a sustainable business model drove us to submit our [disclosure on climate change](#) related questionnaire to CDP for the first time in 2016.

Based on GWP rate from the IPCC assessment report (100-year timeframe), Delta Thailand set has set the target to reduce GHG intensity that is GHG emissions per 1 million USD production amount Scope 1 and 2, which covers both direct from the part of our operation and indirect emissions from generation of purchased electricity, as 56.6% by 2025 from a base year 2014. At our Thailand's sites, the direct emissions (Scope 1) of 2022 were 1486.35 tons CO₂e with its intensity equals 0.59 tons CO₂e/MUSD, indirect emissions (Scope 2 Location Based) were 59,865.53-ton CO₂e with its intensity equal to 23.73 tons CO₂e/MUSD and indirect emissions (Scope 2 Market Based) were 57,965.91 tons CO₂e with its intensity equals 22.98 tons CO₂e/MUSD. The GHG intensity (Scope 1 & 2) for Thailand's sites resulted in 2022 for the location based was 22.41 tons CO₂e/MUSD and market based was 21.71 tons CO₂e/MUSD, a decrease of 44% and 46% from our base year 2014. In year 2022, Delta Thailand starts purchasing I-REC to reduce the GHG emission, this make the ISO14064-1:2018 certificate to separate the method for Scope 2 into 2 methods. The first method is a location-based method that reflects the average emissions of grid on which energy consumption occurs.

GHG Intensity 2014 - 2022 Thailand (tons CO₂e/M USD)

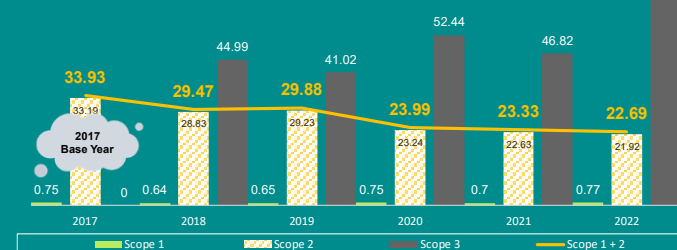
▼ **46%**
GI reduced from
base year 2014

Our target is to reduce GHG intensity 56.6% by 2025 from the base year 2014.



GHG Intensity 2017 - 2022 Thailand/India/Slovakia (tons CO₂e/M USD)

▼ **33%**
GI reduced from
base year 2017



To mitigate climate change risk, Delta proactively start collecting greenhouse gas inventory statistics accordingly to ISO 14064-1 standard since 2010. After Delta group's participation in COP21 2015, the company extend its responsibility coverage to GHG scope 3 and expand to the full coverage of manufacturing sites (Thailand/India/Slovakia) since 2016 and 2017, respectively.

- Greenhouse Gas Emissions Rate follows Global Warming Potential from IPCC 2021AR6 GWP
- Calculation included CO₂, CH₄, N₂O, HFC, PFC, SF₆
- GHG scope 1 majorly from stationary combustion, mobile combustion, industrial process emissions, direct fugitive emissions.
- GHG scope 2 is from purchased electricity and Electricity from renewable energy sources purchased from other organization (Unbundled Energy Attribute Certificates (REC), Green Electricity Products, Directly Procured from RE Generators (PPA)).
- Gases included in GHG scope 1 calculation for Thailand, India and Slovakia has disclosed at 2023 Sustainability in Numbers: <https://tinyurl.com/njwx3p4u>.
- Suggestion or query det.sd@deltathailand.com

The second method is market-based method that reflects emission from electricity that Delta has purposefully chosen, it derives emission factors from contractual instruments, which in the organization of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims such as I-REC. Delta included our GHG scope 3, which occurred as a consequence of the category 3 and 4, the indirect emission from transportation, products and services used by organization. From our report in 2016 to expand responsibility throughout our supply chain and fully covered subsidiaries India and Slovakia in 2017-2021 which the GHG inventory reports for each location are issued retrospectively.

For the full coverage of manufacturing sites (Thailand/India/Slovakia), direct emissions (Scope 1) of 2022 were 2,113.75 tons of CO₂e with its intensity equals to 0.77 tons CO₂e/MUSD, and indirect emissions (Scope 2) were separate into 2 methods the first method is Scope 2 Location based that emits 62,351.76 tons CO₂e with its intensity equals to 22.61 tons CO₂e/MUSD. The second method is Scope 2 Market based that emits 60,452.14 tons CO₂e with its intensity equals to 21.92 tons CO₂e/MUSD. The GHG intensity (Scope 1 & 2) for the full coverage of manufacturing sites resulted in 2022 was 22.69 tons CO₂e/ MUSD for Market based and 23.38-ton CO₂e/ MUSD for Location based, a decrease by 33.14% and 31.11 respectively from our base year 2017. Other indirect emissions (Scope 3) of Thailand's site were 167,322.25 tons CO₂e and of the full coverage of manufacturing sites (Thailand/India/Slovakia) were 189,340.85 tons CO₂e with its intensity equals to 68.66 tons CO₂e/MUSD. Delta's emissions disclosure had validated by an independent assurer to ensure data accuracy and transparency reported in [2023 Sustainability in numbers](#), GHG emissions were disclosed on page 8 (GRI 305-1, 305-2, 305-3, 305-4).

In 2022, we disclose our new base year 2021 that related to our updated science base target for full coverage of manufacturing sites (Thailand/India/Slovakia). By using inventory method, direct emissions (scope 1) of 2022 were 2,113 tons CO₂e that increase from our base year 2021 28.79%, indirect emissions (scope 2 Location based) were 62,351.76 tons CO₂e that increase from base year 2021 17.37%, indirect emissions (scope 2 market based) were 60,452.14 tons CO₂e that increase from base year 2021 13.79%, and other indirect emissions (Scope 3) were 189,340.85 tons CO₂e that increase 26.35%. The data coverage for the Thailand site has been expanded for this reporting cycle to include a new facility in the year 2022. The majority of emissions at this new factory originate from facilities and construction activities because it is not yet fully operational. Additionally, the role and impact of indirect emissions (GHG scope 3) on climate change are becoming well understood. As more data becomes available and data accuracy for calculating scope 3 emissions improves, Delta can obtain a more precise picture of the indirect emissions. As a result, reported emissions may be higher than in prior years. Delta starts to engage with all levels of suppliers with knowledge sharing and process sustainability of reducing GHG in their operation method that related with our brand promise smarter, greener, together.

Carbon Neutral Initiatives by 2030

The Thailand Voluntary Emission Reduction Program (T-VER) was launched in 2013 by the Thailand Greenhouse Gas Management Organization (TGO) as a project-based voluntary scheme to encourage GHG reduction and promote the carbon market in Thailand. The scheme is harmonized with international standards, ISO 14064-2:2019 and ISO 14064-3:2019. Carbon credit can be traded in the domestic carbon market. Delta has been participating and registering in T-VER since 2014. There is a total of 9 projects that had been registered in T-VER and it is proximately accredited 11,161 tons CO₂e carbon credits that had been reduced from those projects. (Please refer to: <https://tinyurl.com/m75pvxh3>)

Recently in 2021, Delta group (Delta Electronics, Inc., its subsidiaries including Delta Electronics (Thailand) PCL.) have joined the RE100, a global initiative bringing together the world's most influential businesses committed to 100% renewable electricity. Which DET has set the target 35% of increasing renewable energy intensity by 2025 compared with base year 2020. Moreover, to continue with the Carbon neutrality targets DET set the RE100 goal by 2030. (Please see more detail: <https://www.deltaww.com/en-us/news/14986>)

Do more with less.

Since climate change threatens all industries with far-reaching impacts on power system design, markets and operations, Delta realizes our potential to mitigate climate change impact by reducing our greenhouse gas and related environment footprint in our daily operation. As [TCFD supporter](#), we disclosed information on climate governance, strategies, risk management, and key indicators aligning with the 4 elements of [TCFD in Taskforce on Climate-Related Financial Disclosures Report 2022](#). We embrace climate change related-risk management in accordance with IPCC's RCP 2.6 and RCP 8.5 scenarios by applying COSO Enterprise Risk Management, as well as, considering the [climate-related scenario](#) IEA NZE 2050, IEA 2DS, IEA SDS, and others. In addition, Delta responded to the Paris Agreement's long-term temperature goal and the Science Based Targets initiative ([SBTi](#): <https://sciencebasedtargets.org/companies-taking-action>) that aimed to keep the global average temperature increase to "limit global warming to 1.5°C", together with, [Thailand's recent pledge in the last COP27 is to reduce Greenhouse gas emission by 30-40% by 2030](#) and the national that aimed at integrating with an energy strategy plan according to the Thailand Ministry of Energy Integrated Energy Blueprint (**TIEB**) using 5 integration master plans; [PDP](#) (Thailand Power Development Plan), [EEDP](#) (Energy Efficiency Development Plan), [AEDP](#) (Alternative Energy Development Plan), [GAS](#) (Natural Gas Supply Plan), [Oil](#) (Petroleum Management Plan). We conduct feasibility studies and apply green technologies to improve our own process efficiency and energy saving together with increasing our alternative clean energy sources usage.

Our strategic plans in reducing our greenhouse gas and related environment footprint in our daily operation and continuing to enhance green revenue from our products and solutions reflect our long-term potentials for adaptation and mitigation the impact of climate change.



Overall Net-Zero Target Delta Electronics commits to reach net-zero greenhouse gas emissions across the value chain by 2050 from a 2021 base year. Near-Term Targets Delta Electronics commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2030 from a 2021 base year. Delta Electronics also commits to increase annual sourcing of renewable electricity from 55% in 2021 to 100% by 2030. Delta Electronics further commits to reducing absolute scope 3 GHG emissions 25% within the same timeframe. Long-Term Targets Delta Electronics commits to maintain at least 90% absolute scope 1 and 2 GHG emission reductions from 2030 through 2050 from a 2021 base year. Delta Electronics also commits to reduce absolute scope 3 GHG emissions 90% by 2050 from a 2021 base year. With our smarter, greener, together operation, we enable mutual benefits for Delta, stakeholders, and the world's environment.

Delta's participation in the 27th Conference of the Parties (COP27) of the United Nations Framework Convention on Climate Change held in Sharm El Sheikh, Egypt



Delta today announced its participation at the 27th Conference of the Parties (COP27) of the United Nations Framework Convention on Climate Change (UNFCCC) held in Sharm el Sheik, Egypt. This year, Delta will host an official side event, participate in the Action Hub section of the Conference, and have a booth in the COP27 Blue Zone to share with delegations from around the world its solutions and initiatives, which help ensure power grid resilience and coral restoration for islands. Through video demonstration of these events, it will not only show a success case in which Delta's energy storage system stabilized the power grid of Orchid Island, but also the achievements of a coral restoration project launched on Delta's 50th anniversary. In the press conference today in Taipei, Delta's representatives also shared first-hand observations from COP27. (Please see more details : [Delta Attends COP27 UN Climate Change Conference and Hosts Official Side Event to Share its Solutions for Islands' Power Grid Resilience and its Coral Restoration Initiatives](#) and [Delta Discussed its Coral Restoration Initiative, High Temperature-tolerant Coral Genes and Blue Carbon Topics with World-class Experts in the Action Hub of the COP27 Blue Zone](#))

Different from the traditional conferences, Action Hub is held in a semi-open space in the Blue Zone to allow participants to participate freely. The Delta Electronics Foundation also shared the Restoration Scheme NFT that it recently launched by joining hands with Asia University and Formosa Art Bank DAO (FAB DAO) at the event, with the aim of increasing public attention through diverse issues. Meanwhile, the Delta Electronics Foundation set up a booth in the Blue Zone during COP27 to display coral restoration equipment, which also facilitated the exchange of ideas with several international climate advocates.

The Delta Electronics Foundation decided on the topics of this side event and invited the Spanish island governments to exchange ideas about the issue of island energy transition with each other. At the event, Pep Mala Grava, DG Energy and Climate Change Government of the Balearic Islands, emphasized their renewable energy goal of 35% by 2030 and 100% by 2050 for the whole islands. This means an acceleration of renewables within 200MW per year until 2030, reaching 1600MW. Thanks to innovative solutions, such as the use of green hydrogen for energy storage, we are also looking for new ways to produce green electricity, such as offshore wind and wave energy. (Please refer to: [Delta discussed energy storage with Spanish local governments at COP27 side event](#))

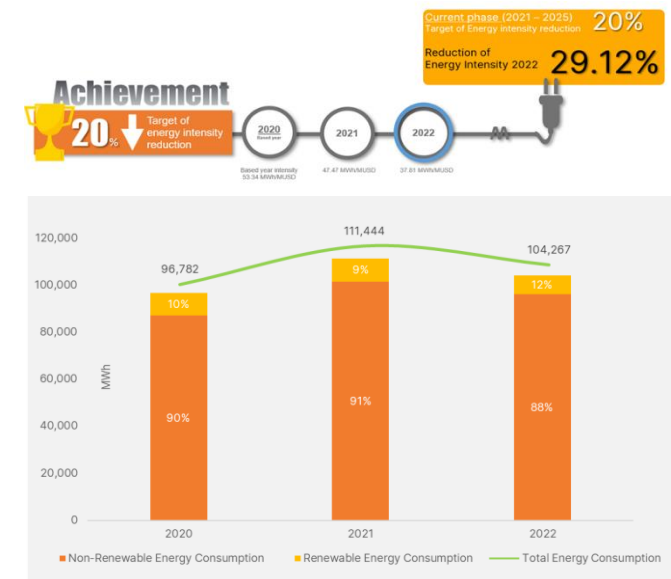
Delta has long participated in the UN COP starting from 2007 and regularly brings back the latest information on international negotiations and carbon reduction knowledge to assist Taiwan in mitigating the environmental impact caused by climate change. As an official observer of the UNFCCC, the Delta Electronics Foundation has hosted or participated in 18 exchange side events at the UN COP. In the future, Delta will continue to act in alignment with Delta's business mission of "to provide innovative, clean and energy-efficient solutions for a better tomorrow" with technologies that improve energy efficiency and through restoration endeavors that protect the natural environment.

Technological innovation for improving the efficiency of energy & tracing clean energy in 2022.

As Delta Electronics (Thailand) Public Company Limited and its subsidiaries (India and Slovakia) use electricity as the main power and fuel to operate our business. In the reporting period, electricity cost was 0.6% of our cost of goods sold. We keep in mind that our goal is to reduce energy consumption and greenhouse gas emissions accompanied by our core mission “To provide innovative, clean and energy-efficient solutions for a better tomorrow”. Delta has gradually invested in innovation and technology to increase the proportion of renewable energy use and reduce non-renewable energy consumption, which leads to GHG emissions in scope 1 and 2, to ensure our sustainable and intelligent use of energy. To response to the mission concretely, Delta set an energy intensity reduction target of 20% within 2025 compared with the base year of 2020. This energy intensity target has deployed to CEO, COO, plant managers, facility managers’ KPI whose their quarterly incentives , year-end compensation and long-term compensation and promotion will be directly impacted respectively. From our challenge target and increase the renewable energy ratio to 35% within 2025. In 2022, Delta consumed non-renewable energy 91,411.45 MWh or 329,081.22 gigajoules and 12,855.92 MWh of renewable energy or 46,281.31 gigajoules. Our non-renewable energy intensity, calculated by the consumption of non-renewable energy per 1 million USD of production amount, was 33.15 MWh/MUSD and renewable energy intensity was 4.66 MWh/MUSD. Our total energy consumption intensity was 37.81 MWh/MUSD compared to based year 2020 that showed 53.34 MWh/MUSD, the performance of year 2022 showed the reduction of energy intensity by 29.12%. Delta had no electricity sold in 2022. Energy consumption outside of the organization by site has stated at [2023 Sustainability in numbers, page 5.](#)

We also implement and certify our company's energy management system in our operations according to the ISO14001 and ISO50001 standards to ensure continuous improvement through appropriate measures. In 2022, our energy saving projects with the assessment of Energy Management, were reported to the Department of Alternative Energy Development and Efficiency Ministry of Energy of Thailand and showed our total of reduced energy consumption was 9,936,150 mega joules which mean our GHG emission reduction was 1,380,022 kgCO₂e per year.

Delta annually participates in the assessment of energy management which reports directly to the Department of Alternative Energy Development and Efficiency Ministry of Energy of Thailand. Since 2015 - 2022, Delta has steadily implemented energy conservation projects which resulted in less electricity consumption compared by production amount (energy intensity) in the mid of the project timeline with the increasing utilization of clean energy via our solar rooftop. Delta Electronics (Thailand) PCL. received the 2022 Thailand Energy Award (TEA) in category: Energy Management Team for Designated Factory. (Please see more details in [Winners | Thailand Energy Awards 2023 \(TEA2023\)](#)). The awards demonstrated Delta as a role model for factories, buildings and individuals that are responsible for energy resources for sustainable development.



- We keep tracking our performance of energy consumption by type of energy(GRI 302-1) and reduction of energy consumption(GRI 302-4) yearly, please to refer: [2023 Sustainability in numbers](#) page 5-6.
- Source of the conversion factor used, please refer: [Energy Converter](#)

Total saving

9,936,155 MJ of Energy Consumption
334,551 USD of cost
1,380,022 of GHG Emissions

Remark:

1. Exclude reductions resulting from reduced production capacity or outsourcing
2. Total investment of saving projects in the reporting year valued approx. 1.34 MUSD.

VFD control AHU 7.5 kW 2 set

- Reduced energy consumption 118,800 MJ/year
- Monetary saving 4,000 USD/year
- GHG reduction 16,500 kgCO₂e/year
- Calculation by using: $(N2/N1)^3 \times kW1 \times \text{hr} \times d$;
N= speed, RPM



Air compressor effective operation

- Reduced energy consumption 216,000 MJ/year
- Monetary saving 7,273 USD/year
- GHG reduction 30,000 kgCO₂e/year
- Calculation by using: $(kW1/Flow1) - (kW2/Flow2)$

High Efficiency Motor (IE4) 30 kW 2 set

- Reduced energy consumption 90,720 MJ/year
- Monetary saving 3,055 USD/year
- GHG reduction 12,600 kgCO₂e/year
- Calculation by using: $((kW1/eff1) - (kW2/eff2)) \times \text{hr} \times d$; kW, eff nameplate

High Efficiency Motor (IE4) 22 kW 3 set

- Reduced energy consumption 117,936 MJ/year
- Monetary saving 3,971 USD/year
- GHG reduction 16,380 kgCO₂e/year
- Calculation by using: $((kW1/eff1) - (kW2/eff2)) \times \text{hr} \times d$; kW, eff nameplate

High Efficiency Motor (IE4) 11 kW 3 set

- Reduced energy consumption 81,648 MJ/year
- Monetary saving 2,749 USD/year
- GHG reduction 11,340 kgCO₂e/year
- Calculation by using: $((kW1/eff1) - (kW2/eff2)) \times \text{hr} \times d$; kW, eff nameplate



Change cooling tower 1000TR

- Reduced energy consumption 648,000 MJ/year
- Monetary saving 21,818 USD/year
- GHG reduction 90,000 kgCO₂e/year
- Calculation by using: kWh1-kWh2

Automatic temp control AHU

- Reduced energy consumption 108,000 MJ/year
- Monetary saving 3,636 USD/year
- GHG reduction 15,000 kgCO₂e/year
- Calculation by using: kWh1-kWh2

SCADA Phase 2 (HVAC)

- Reduced energy consumption 1,800,000 MJ/year
- Monetary saving 60,606 USD/year
- GHG reduction 250,000 kgCO₂e/year
- Calculation by using: kWh1-kWh2

New Chiller Trane 600 Ton

- Reduced energy consumption 2,250,000 MJ/year
- Monetary saving 75,758 USD/year
- GHG reduction 312,500 kgCO₂e/year
- Calculation by using: $((eff1 \times RT) - (eff2 \times RT)) \times \text{hr} \times d$;
eff= kW/RT

New Air Compressor GA75VSD

- Reduced energy consumption 450,000 MJ/year
- Monetary saving 15,152 USD/year
- GHG reduction 62,500 kgCO₂e/year
- Calculation by using: $(kW1/Flow1) - (kW2/Flow2)$

High Efficiency Motor (IE4)

- Reduced energy consumption 180,000 MJ/year
- Monetary saving 6,061 USD/year
- GHG reduction 25,000 kgCO₂e/year
- Calculation by using: $((kW1/eff1) - (kW2/eff2)) \times \text{hr} \times d$; kW, eff nameplate

New Installation VFD Exhaust Fan

- Reduced energy consumption 90,000 MJ/year
- Monetary saving 3,030 USD/year
- GHG reduction 12,500 kgCO₂e/year
- Calculation by using: $(N2/N1)^3 \times kW1 \times \text{hr} \times d$;
N= speed, RPM

Install Air Dryer

- Reduced energy consumption 83,358 MJ/year
- Monetary saving 2,807 USD/year
- GHG reduction 11,578 kgCO₂e/year
- Calculation by using: kWh1-kWh2

Install Solar Carpark gate3 356 kWp

- Reduced energy consumption 1,918,440 MJ/year
- Monetary saving 64,594 USD/year
- GHG reduction 266,450 kgCO₂e/year
- Calculation by using: Simulation by Pvsyst

High Efficiency motor AHU 11kW&15kW IE4

- Reduced energy consumption 108,000 MJ/year
- Monetary saving 3,636 USD/year
- GHG reduction 15,000 kgCO₂e/year
- Calculation by using: $((kW1/eff1) - (kW2/eff2)) \times \text{hr} \times d$;
kW, eff nameplate

Solar Green carpark 146 kWp

- Reduced energy consumption 767,376 MJ/year
- Monetary saving 25,838 USD/year
- GHG reduction 106,580 kgCO₂e/year
- Calculation by using: Simulation by Pvsyst

Install central optimized control automatic start – stop air comp

- Reduced energy consumption 345,600 MJ/year
- Monetary saving 11,636 USD/year
- GHG reduction 48,000 kgCO₂e/year
- Calculation by using: $(OF1 - OF2) \times kW \times \text{hr} \times d$;
OF= Operation factor

Install new AHU Humidity Room

- Reduced energy consumption 396,000 MJ/year
- Monetary saving 13,333 USD/year
- GHG reduction 55,000 kgCO₂e/year
- Calculation by using: $((kW1/eff1) - (kW2/eff2)) \times \text{hr} \times d$; kW, eff nameplate

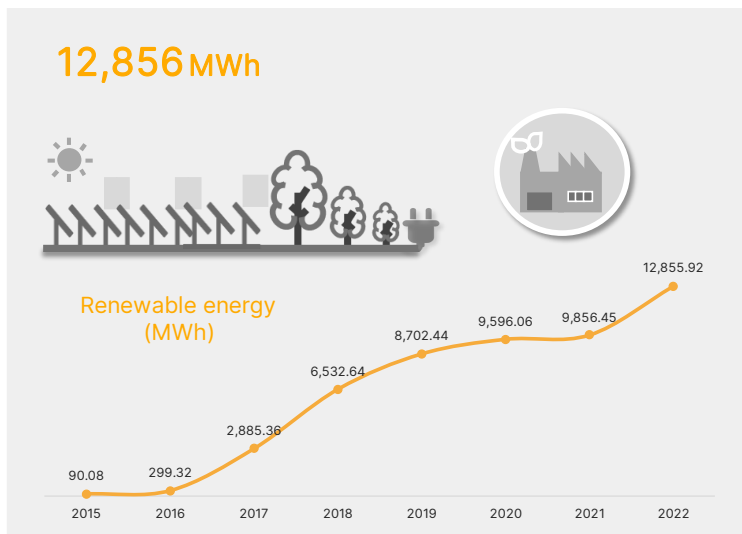
Change Steel cooling tower fan to energy saving fan

- Reduced energy consumption 166,277 MJ/year
- Monetary saving 5,599 USD/year
- GHG reduction 23,094 kgCO₂e/year
- Calculation by using: kWh1-kWh2



Apart from our energy saving projects that we have done for many years, our company's sustainable energy activities also focus on promoting the global transition to clean energy and move towards a zero-carbon grid in response to [transition risks scenario](#) reported by IEA. As the scenario IEA SDS in Power sector policies stated that the deployment of renewables would be increased, as well as the scenario IEA NZE 50 stated that most new clean technologies in heavy industry demonstrated at scale, Delta's RE100 target is 100% renewable electricity throughout our entire global operations by 2030. Our targets for regional operations are Delta Thailand RE35 and Delta India RE30 by 2025, and all regions RE100 by 2030. Through self-generation of solar energy, energy-saving projects, and Thailand Voluntary Emission Reduction Program (T-VER), the renewable energy contribution in our operations reached 12% in 2022. Through its core competence in energy-efficient power electronics, Delta continues to foster energy-saving solutions and actively contributes to containing global warming below 1.5 °C.

In addition, Delta also encourages our energy efficient concepts to society through CSR activities as "[Angel Fund program](#)", the first fund in Thailand created by a private sector in collaboration with the Department of industrial Promotion (DIP). Throughout the year, Delta supported Angel Fund for Startup teams with technical and business training to develop their business proposals into commercially viable offerings. For this year, winning teams can join pitching at the business reality show Shark Tank Thailand for additional funding. The fund supports new entrepreneurs, SMEs and startup companies to develop local talent and incubate the innovative industry sector. (Please see in the details in <https://deltathailand.com/en/csr-detail/18/260/Delta-and-DIP-Angel-Fund-2022> and [Ministry of Industry and Delta Host 2022 Angel Fund for Startups Awards with Prizes and Funds to Boo \(deltathailand.com\)](#)). Delta Angel Fund for Startup aims to encourage young Thai entrepreneurs to establish business models that leverage advanced technology and develop useful products for commercial use. These align well with the Thailand 4.0 goals and Energy's Thailand Integrated Energy Blueprint (TIEB).



Process Innovation

Delta continuously develops its manufacturing process for less material use, decreased energy intensity, lower production waste and provide greener products to customers.

From 2015 – 2022, the Company had accomplished more than 2,321 automation and ECRS projects in 6 major potential processes. At the same time, the Company has made a strategic decision to upgrade all Delta factories to "Delta Smart Manufacturing". It is a five-year plan to integrate all manufacturing processes digitally with optimum automation rather than just upgrading with single station automation. Such integration aims to enable all data regarding the manufacturing process to be available at anytime and anywhere with an IoT platform. Since 2014 when we gradually introduced higher innovative automation processes and robotic arms. The big data collected will be used for predictive analysis to optimize production plans, improve logistic efficiency, and enhance machine maintenance process, quality control and many more.

Delta Thailand's overall manufacturing productivity for the factories in 2022 had achieved 27% productivity improvement and 34% conversion cost from the previous year. Our focused investment and effort in process automation and continuous process improvement projects were the main contributors. 64 majors process with the latest automation technologies had implemented to concrete Delta smart Manufacturing line. The rapid deployment of such new processes can be done due to the thoughts and research put into the concept and implementation phase to ensure disruption on daily production schedule and output will be minimized. Beyond Delta's benefit of stable cost of goods sold, accurately automated process helps to reduce environment negative impact, optimize manufacturing resources and electricity power while our employees' safety had secured from complex and hazardous process.

In addition to process digitalization, Delta has been focusing on Kaizen and ECRS to improve its process efficiency. Annually, Delta group organizes Delta Innovation Awards to drive innovation in its intellectual properties, new product development, manufacturing process improvement and new business model development. In 2022, 47 projects from Delta's global sites had submitted while 8 teams and 10 individuals granted "The 15th Delta Innovation Award". The 10 teams and 9 individuals of winners had grants monetary and nonmonetary awards. Their projects had adapted to Delta's production process.





Thailand Plant

LEED GOLD



India Gurgaon Plant

LEED INDIA GOLD



India Rudrapur Plant

LEED INDIA GOLD



Thailand Plant 7

LEED GOLD



Delta Green Thailand

LEED GOLD

Green Building Certified

Delta commit zero deforestation for its operational site expansion. Delta had opted to set up its operations in well-managed industrial parks is to enhance the company's Net Positive Impact. Global warming and rapid urbanization are driving us to seek sustainable solutions while reducing the negative impact of our offices and factories on the environment Delta's innovatively use of our own solutions to create the first factory in Thailand with the LEED (Leadership in Energy and Environmental Design) certification in the EBOM (Existing Buildings: Operations and Maintenance) category. At Delta Thailand's green headquarters, we save energy and reduce our carbon footprint every day by leveraging solutions in renewable energy, automation, DC motor ventilation, and smart HVAC and environment management.

The U.S. Green Building Council (USGBC), one of the most recognized green building certification programs in the world, awarded Delta Thailand headquarters with the LEED- EBOM Gold certification after our year-long renovation project that included evaluation, data collection, construction, equipment installation and initiatives to improve energy-management and environment conditions to meet LEED Green Building criteria.

In 2017, Delta Thailand Plant 5 (Headquarter) in Bangpoo Industrial Estate plans had been certified Leadership in Energy & Environmental Design (LEED) Certified by the U.S. Green Building Council (USGBC) in our existing building: Operations and Maintenance (EBOM) - Gold Level category by renovating the building energy-efficiently. For example, smart air-conditioning, lighting, energy-efficient elevators, avoiding invasion plants in the company's landscape and energy management information systems and solutions which are developed by the company are used. Presently, Delta Thailand is the first manufacturing factory in Thailand which has certified LEED-BOM. Delta is willing to share its experience in energy-efficient building, low-carbon green buildings and green factory-office buildings through the Open House Activity to green building programs. This includes working with local environmental protection groups to promote environmental education programs and the energy-saving ideas of green buildings with the government, school, media, communities and the public.

To ensure sustainable share of renewable energy in the global energy mix, Delta utilizes its expertise in renewable (solar) energy for the energy conservation projects. In Delta's pursuit of replacing conventional energy sources with renewable energy, solar roofs are installed in all the three Thailand factories. All new factories within the group will be built as certified Green buildings while existing ones will have to work towards the same standard. For example, Delta's Plant 5 in Thailand has attained LEED Gold certification for existing building while India's factories are certified Gold and Platinum.

In 2021, the Delta Electronics (Thailand) PCL. New Plant 7 in Wellgrow Industrial Estate, Chachoengsao has received the LEED (Leadership in Energy and Environmental Design) Gold certification in the New Construction category.

In 2022, the 66 Tower, where Delta's Green Industrial (Thailand) Co., Ltd. new office is located, is a LEED Gold-certified green building that has implemented Delta's EV Charging Solutions including the 22kW AC Max charger for regular charging and the 100kW DC City Charger for fast charging.

Discover Delta group's 32 green buildings and 2 green data centers at https://esg.deltaww.com/en/csr_GreenBuilding.

Smart Logistics Modal Plan

Since 2020 Delta face a negative impact resulting from the global disease crisis. As reported by the World Bank's [International Finance Corporation](#), COVID-19 pandemic and global lockdown directly disrupted global supply chains. [Cargo was backlogged at China's major container ports](#), travel restrictions led to a [shortage of truck drivers](#) to pick up containers, and ocean carriers [canceled \(or blanked\) sailings](#). The resulting shortage of components from China impacted manufacturing operations overseas. Major industries around the world, including automotive, electronics, pharmaceuticals, medical equipment and supplies, as well as consumer goods, were affected.

Delta Thailand Logistics function is mainly responsible for transporting domestic and international materials to the production line, delivering finished products to our customers and managing all the relevant parties in the logistic chain in line with the "Green Logistics" approach. Delta is constantly working towards optimizing operations processes and minimizing the harmful impacts to the environment.

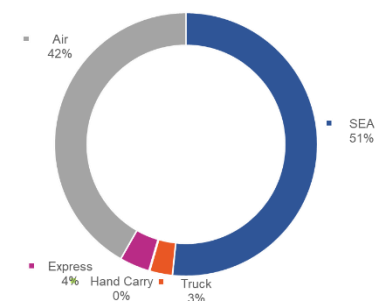
With our attempt to be greener and confident in IT security management, Delta has addressed the value of paperless work by sampling check of e-invoice process for outgoing shipment and realize impacts or our practical logistic management as following:

1. Ensure that inbound and outbound shipments are for full truck load (FTL) by loading trucks with as much cargo as possible. By doing this, the number of trips between the production bases to port per day is reduced, warehouse cost is saved. Just-in-time production is achieved and minimizes empty backhauling.
2. Request freight forwarders at the point of origin to fill containers with freight to full container load (FCL) so that a large amount of shipments can be delivered in one trip without having to waste free space in the container and involve intermodal transport. Delta also encourages suppliers to use durable eco packaging to prevent damage to goods and materials during transport. If products are damaged, Delta is responsible for delivering replacements to the customer, which results in an increased transportation cost.
3. Use major carriers and freight forwarders to ensure high quality service standard and green logistics operations. Not only does our choice of freight counterparts guarantee efficiency in transportation, but it also protects the environment and biodiversity by reducing CO2 emissions.
4. Promote modal shift by using sea freight over air freight as sea freight is more energy efficient and more environmentally friendly.
5. Consider high-standard suppliers committed to recognized environmental standards/ initiative.

In 2022, the COVID-19 outbreak led to the failure of modal shift attempt. Global measures to response to the pandemic crises caused port recession and container shortage. To maintain our customer satisfaction, Delta faced double freight cost to fulfill our customer order. The recession not only led to modal shift failure to have 80% shipment by sea but also compromised our effort to reduced transportation environmental footprint. To minimize this impact, Delta diversifies its transportation mode into land, express, hand carry and so on.

According to our participation to RE100 initiative and Thailand's Alternative Energy Development Plan: AEDP2015 scenario, after the recession, global logistics industry forecasted to encounter higher energy price. Delta is under the process to consolidate the information of renewable energy used for land transportation by our freight. The information should help us to secure our logistics process while mitigate climate change in the long-term. Result of this activity will be disclosed in the next issue of Delta Thailand Sustainable Development Report.

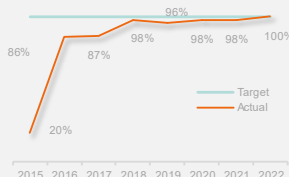
Transportation mode we used in 2022





100%

2022 percentage of Delta Thailand's workers received information security.



Total number of

- information security breaches or other cybersecurity incidents
- information security breaches involving customers' personally identifiable information
- customers affected by company's data breach
- fines/penalties paid in relation to information security breaches or other cybersecurity incident.

0

1.33 PUE

(Power Usage Effectiveness) of "DeltaInfrasuit" used 7 days 24 hours to securely facilitate our business in Thailand its subsidiaries in 5 countries.

Reliable Information technology helps to reduce greenhouse gas scope 2 and scope 3 in Delta's daily operation.

Power usage effectiveness (PUE) is a ratio that describes how efficiently a computer data center uses energy; specifically, how much energy is used by the computing equipment (in contrast to cooling and other overhead). PUE is the ratio of total amount of energy used by a computer data center facility to the energy delivered to computing equipment.

An ideal PUE is 1.0. Anything that isn't considered a computing device in a data center (i.e. lighting, cooling, etc.) falls into the category of facility energy consumption.

Reliable on-line business process On-line communication among Delta group and its business partners is Delta's effective tool to reduce GHG scope 3 from unnecessary transportation and business trip ; for instance, on-site stock checkup, material flow follows up, order fulfillment status, and design and business-related discussion. Delta strengthens its online operation with Zero data breaches target by acquiring ISO/IEC27001 for its information security management system. In addition to Delta own product and solution utilization, this enables a secure flow of important information to support our customers and suppliers to ensure a sustainable cooperation.

[ISO/IEC 27001](#) is formally specified as an information security management system (ISMS) and includes a range of activities concerning the management of information security risks. It is an overarching management framework taking care of:

1. Assessing the risks inherent to transmitting confidential information.
2. Implementing information security measures through development, documentation and dissemination of methods.
3. Building a management system to share roles and responsibilities, establishing an internal audit.
4. Managing the risk evaluation process, developing countermeasures and understanding exceptions and ongoing improvements protecting our information is critical for a successful and smooth operation.

Four of Delta' BOD members have Information Security knowledge background. The Board of directors has assigned the Chief Information Technology (CIO) to be responsible for overseeing cybersecurity within the company. The CIO will collaborate with Information Security Management Committee, Data Protection Officer, Internal Auditors and report to the President to oversee cyber security strategy at least once a year. As Sustainable Development committee member, the CIO and DPO have requested to share information security performance to the SD committee at least once a year as well.

Though we have no e-commerce activity on our online channel, ensure valuable information security and ethical communication. Delta communicates the [Information security policy](#) on our intranet and online training platform. In addition, to raise employees' awareness on this issue, the company target is to conduct 100% IT security training to its employees annually. At our website, data privacy policy, use of the collected information, user's choice of privacy and other privacy related information is available. According to our recent study in the reporting period, 99% of user and customer directly access our website and access through well-known search engine was protected by Delta's ISO2700. We found 1% of our website users who access our site from a referral source with unclear privacy policy may be at risk. However, up to the report period, there was no confirmed case of information security breach or breaches of [customer privacy](#) identified leaks, thefts, losses of customer data or misuse of intelligence properties from outside parties or regulatory body to Delta's whistleblowing channels, ISMS and DPO.

On top of transportation reduction, intelligence properties protection, trade confidentiality protection and personal data protection, [Delta InfraSuite](#) help the company to optimize energy consumption. According to [a leading research institute survey](#) of 1,600 data center owners and operators found that 2022's average [PUE](#) rate is 1.33. This competitive performance finally helps the company to reduce GHG scope 2 from IT 7/24 operation where represent approximately 1% of total energy consumption at Delta.

Ensure natural resources conservation

While our stakeholders focus on how we manage our worker health and economic performance, outstanding emergence of pollution and global infectious disease crisis outstandingly raised our awareness of climate change. Global health crisis and strict quarantine measures was not only leading to economies to slow down but also impacted the environment in an intriguing way. During the lockdown across the globes, [air quality in certain regions has improved in recent weeks](#). It can be said that the COVID-19 pandemic offered lessons and opportunities leading to environmental actions.

Delta Sustainable Committee studied the [relationship of climate change to the occurrence of infectious diseases](#). It was found [that the changing climate affect the occurrence and existence of various infectious diseases in humans](#). This study, again, urge us to back to our track to smarter and greener environment management to mitigate negative impact from our operation.

As a public-listed company in Thailand and a global corporate citizen, Delta's commitment to energy-saving and natural resources conservation guide everyone at Delta to a greener lifestyle and practice. We adhered to international environment standards such as ISO14001, ISO 14064, ISO 14067, and ISO 50001 to develop our product, process, and work environment to be more eco-friendly.



August 2022, [Delta voluntary join Reforestation Activity at Bangpoo Industrial Estate to conserve and restore local mangrove forests and canals](#). The project aims to conserve the natural resources of the coastal areas in Samutprakarn Province. As part of the environmental protection, volunteers work on the restoration of mangrove forests and canals where water flows into the sea. Restoring these natural areas to their original condition helps to prevent coastal erosion and flooding that impacts the livelihood of local communities. The activity help raise awareness on conservation and environment issues among the youth and the local community as well as business operators within the Bangpoo Industrial Estate. Delta regularly participates in the conservation and preservation of natural resources and the local environment to give back to the community and create a better future for the next generation.





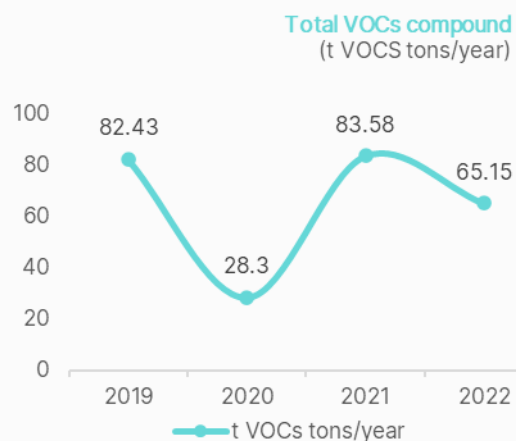
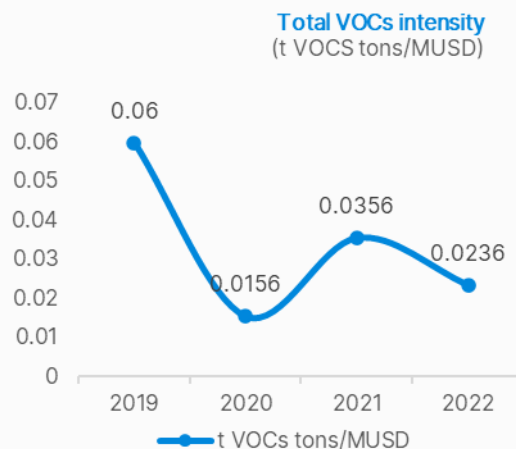
Waste in focus

To pursue the sustainable use of resources and avoid the depletion of the earth's resources, we will continue to improve the diversion rate of waste through reduction, reuse, and recycling to reduce our environmental impact. Delta pledges 100% waste diversion rate by 2025 (90% for the year 2022). Delta's mission to ensure the use of stakeholder resources also includes monitoring trends in waste emissions from business operations. All of Delta's main plants divide waste into three categories: production waste, non - production waste and hazardous waste. Production waste includes metal waste, plastic waste, waste pallets, paper, and paper boxes. According to the Department of Hazardous waste includes electronic waste, waste glass tubes and glass, and solvents. The waste is also sorted, collected, and handed over to local qualified third-party waste treatment businesses.

As the [scenario IEA SDS](#) in industry sector stated policies to support circular economies through increased recycling of aluminum, steel, paper and plastics, and material efficiency strategies, Delta considered and classified 3 metal materials in product components, which are made of a certain percentage of recycled raw material as steel, copper and aluminum which used by our next tier suppliers in 2022 was weighted as 3,170 tons and these input material equals to 12.81% of 24,741 tons of total input material, besides the packaging material, 100% of wooden pallet, paper, and paper boxes are also recyclable in the year 2021.

In 2021, Delta reported waste performance according to GRI 306: waste version 2020 covering 100% of manufacturing sites including Thailand, India, and Slovakia. The waste data (GRI: 306-3, 306-4 and 306-5 version 2020) was disclosed in [2023 Sustainability in numbers](#) page 11-12. With 2016 based year, 30% of non-hazardous waste (Total disposed waste) in 2023. We also set 2019 based year as our targets to reduce 15% of total waste generated intensity by 2023. In 2022, Delta generated a total of 5,669.07 tons in waste. Of this, 5,599.22 tons of generated waste were categorized as non-hazardous waste and 69.86 tons was hazardous waste. Non-hazardous waste was disaggregated to be waste prevented by animal feeding 1,107.15 tons, waste recycled 5,438.48 tons, and waste disposed by secure landfill 160.74 tons. Hazardous waste was disaggregated to be waste recycled 52 tons, waste to heat recovery 2.73 tons, waste disposed by secure landfill 11.80 tons, and other disposal operations 3.33 tons (For hazardous waste in Thailand, the method of disposal is determined by The department of Factory Works). At the result, the diversion rate of total waste was 96.85% in 2022. (Diversion rate: waste diverted divided by the total amount of waste).

According to the above stated results, non-hazardous waste intensity was reduced 17.17% compared with the base year 2016. At the same time, the accumulated non-hazardous waste reduction intensity from 2016-2022 was 67.75%. Delta set a target for hazardous waste reduction by 5% in 2023 from the base year 2019. The total hazardous waste intensity in 2022 was decreased 13.79% compared with base year 2019. In addition, Delta is tracking this issue by using waste intensity (waste generation: tons/million USD of production amount) as an indicator, our waste intensity in 2022 was 2.06 tons per Million USD production amount (tons/MUSD) which decrease 16.60 % from 2.47 tons/MUSD in 2016. As a result, our accumulated waste reduction intensity from 2016-2022 was 22.20%. (Please refer to: [2023 Sustainability in numbers](#) page 11).



Refrigerant replacement

In accordance with GRI: 305-6 Delta keeps tracking its [ozone depletion substances \(ODS\)](#) at our manufacturing sites based on the IPCC2007 and ISO14067 methodology and ISO14064 standard. According to the UNEP initiative, Delta uses HCFCs to replace CFC to decrease Ozone Depletion Potential. Therefore, during the HCFCs lifecycle, only about 1-10% of CFC-12 is emitted to Ozone. According to the company's 2015-2022 GHG Inventory report, OSDs include Chlorofluorocarbons (CFCs), Halon (CBrF₃), Carbon tetrachloride (CCl₄), Methyl chloroform (CH₃CCl₃), Hydrobromofluorocarbons (HBFCs), trichlorofluoromethane (CFC-11) equivalent), Hydrochlorofluorocarbons (HCFCs), Methyl bromide (CH₃Br), and Bromochloromethane (CH₂BrCl) as defined in the 'Montreal Protocol' was not produced, imported or exported by Delta.

Air Emissions monitoring

Delta's business operation is guided by Occupational Safety Health, Hygiene and Environmental Policy, which applied all the visitors and stakeholders within the company's premises for the well-being of everyone as well as environmental impact, and in accordance with the related laws, international standards, [the scenario IEA SDS](#) in power sector policies about stringent pollution emissions limits for industrial facilities. There was no major combustion included as part of our process. Majorly, our VOCs are from cleaning agent used in production. Periodic monitoring of air emissions quality including with Volatile Organic Compounds (VOCs), Total Suspend Particles (TSP), Carbon Monoxides (CO), Nitrogen Oxides (NO_x), Sulfur Oxides (SO_x), Toluene (C₆H₅-CH₃), Xylene (C₈H₁₀), Tin (Sn), Lead (Pb) and other Hazardous Air Pollutions (HAPs) discharged at various stations from manufacturing process, is one of our significant tasks listed in our policy.

Delta fully reported Air Emission performance to cover 100% of manufacturing sites (Thailand/ India/ Slovakia) since 2019. Delta Thailand's Air emission results has been measuring and monitoring since 2014, Delta India's Air emission results were fully covered since 2017 and Delta Slovakia's Air emission results were covered in 2019. Their emission data reported from the factories' stacks inspection where [VOCs, TSP, CO, NO_x, SO_x and HAPs](#) had annually/biannually monitored, measured and reported accordingly to their local department of pollution control and [NIOSH standard](#) for each country that Delta operates. To ensure transparency, accuracy and compliance with the local standard and regulations, Delta's air quality inspection is performed and assured by third party specialized company by using direct measurement method. Proper methodologies such as US. EPA 5, 6C, 7E, 10, 18, 19 and 29, Charcoal Tube and GC/NIOSH 1501 have been applied to each stationary source.

In the year 2015 to 2018, Delta indicated VOCs emission as the aggregation of Xylene, Toluene and Isopropyl Alcohol using US. EPA Method 18 as the method was designed to measure gaseous organics emitted from an industrial source. No significant chemical spill reported from any location.

Thailand's sites started actual measurement for total VOCs released from its operations since 2019 and still examined the volume of Xylene and Toluene to further monitoring the progress of VOCs reduction until the present reporting year. Concurrently, VOCs emission from Slovakia's sites was calculated by VOCs [emission factors for burning natural gas](#) and India's sites was calculated by [VOCs emission factors for diesel generators](#).

From 2019 – 2021, The VOCs reduction target was achieved in 2021 performance. According to our achievement on the set long-term target, Sustainable Development will propose the new target to reduce 20% of TVOCs intensity by the year 2027 in Q3/2023. Progress of new target approval will be disclosed in the next issue of SD Report which will be publicly available in June 2024. In 2022, the total VOCs was 65.15 tons VOC per year or equal to 0.0236 tons VOC/ MUSD per year, Xylene, and Toluene were detected as 2.93, and 3.19 tons/year respectively. Consequently, the intensity of total VOCs intensity decreased 60.66% from year 2019 that equals 0.060 tons VOC/ MUSD per year.

Nitrogen oxides, sulfur oxides, and carbon monoxides were detected as 21.477, 0.015 and 9.548 tons/year in 2022 respectively. Nitrogen oxides, sulfur oxides, and carbon monoxides mostly came from testing /using the generators and boilers to generate heat and hot water for domestic purposes. Delta cautiously chose the innovative condensing gas boiler to use at its sites. The boiler is designed to run with natural gas which has less emission and low NOx, SOx and CO level (see also: <https://tinyurl.com/y6f34kt3>). Total Suspend particles was reported as 104.73 tons in 2022. Delta Thailand implemented the preventive measurement of PM/TSP in workplace, every 62 square meters (m2) were applied with air purifiers for clean air condition in the workplaces. In 2022, Thailand encounters PM 2.5 problems throughout the country. This causing the situation of PM/TSP to be more valuable than last year (refer to : [Thailand Air Quality Index \(AQI\) and Air Pollution information | IQAir](#) and [CAPM warning on 22-24 December 2022, PM2.5 tends to increase and may exceed the standard values in Bangkok and its vicinity – Pollution Control Department \(pcd.go.th\)](#)). (Please refer to [2023 Sustainability in numbers](#) page 11)

Non-VOC cleaning solvent test onsite with vendor



Our effort to reduce VOC

Although, the result of total VOCs intensity achieved its target in 2021, Delta Thailand, where was the source of 99% of total VOCs emissions, aware of employees' health as well as surrounding community wellness due to the increasing amount of total VOCs. We analyzed in depth the exact VOCs components and found the dominant VOC from company's air emission was Acetone that counted as 95% of total VOCs. It mainly came from the cleaning agent to remove flux residue for Printed Circuit Boards (PCB) during the heating process and using volatile organic solvents such as or silicone sealants, welding processes and others. Environment (ENVI) and Sustainable Development (SD) teams are cooperating with production teams to examine the areas and the materials causing Acetone. After defining that IPA Solvent cleaner (Isopropyl Alcohol) was the main usage causing Acetone, the teams engaged a vendor for the replacement of a cleaning solvent to non-VOC type. The non-VOC solvent was provided by the vendor in June 2022 and trials of the new cleaning solvent are still ongoing in Plant DET1, DET3, DET5, and DET6 to ensure product quality as well as environmental impact and employee wellness.

Remark:

(1) Delta Thailand's Air Emission data from stacks had collected and measured accordingly to the Department of Industrial Works' announcement subjects "Standard of air emission discharged from manufacturing factory B.E. 2549" and Thailand Industrial Estate Authority's announcement on "Emission Standard for factory located in Industrial Estate" reference number 46/2541. To calculate the estimation of air pollutants, load per year following "Measurement mass balance emission factors engineering calculation" by Pollution Control Department, Bangkok, Thailand. (<http://prtr.pcd.go.th/wp-content/uploads/2020/02/1.-RET-Manual-and-correction-Green-1-1.pdf>)

(2) Delta Electronics India Pvt Ltd. 's Air Emission data from stacks had collected accordingly to Central Pollution Control Board, Ministry of Environment & Forests, Govt. of India, G.S.R.771(E), 11th Dec 2013– Emission Limits for New Diesel Engine up to 800 kW) for Generator Set (Genset) Application and measured methods following IS 11255-1 (1985): Indian Standard Methods for measurement of emissions from stationary sources prescribed by Bureau of Indian Standards. (See also: [IS 11255-1 \(1985\): Methods for measurement of emissions from stationary sources, Part 1: Particulate matter \(resource.org\)](#))

(3) Delta Electronics (Slovakia), s.r.o. Air Emission data from stacks (NOx, SOx and CO) had collected accordingly to Decree of the Ministry of Environment of the Slovak Republic no. 411/2012 Coll., on monitoring of emissions from stationary sources of air pollution and air quality in their vicinity as amended by Decree of the Ministry of the Environment of the Slovak Republic No. 316/2017 Coll. Others emissions results were calculated emission factors from heat input (Natural gas boilers) using Preferred and Alternative Methods for Estimating Air Emission from Boilers (See also: <https://www.epa.gov/sites/production/files/2015-08/documents/ii02.pdf>) and [EPA AP-42 Chapter 1.4](#)


We maintain water security.

Delta's water management is a matter of interest to our stakeholders. This interest is not only out of concern regarding global change in baseline water and drought severity, but also concerns about chemical contamination to natural water sources from the technology industry. Although water is not our production factor or used in our manufacturing process, our company has taken many measures to conserve clean and accessible water for our local community. Based on Delta's water consumption breakdown, 95% of the water used by Delta's own operation sites for domestic and sanitary purposes. According to our water billing records, municipal water supplied by governmental offices is the main water source for Thailand, India, and Slovakia plants.

Delta 2022 Water Conservation Awareness



Delta consumes **0.000082 Million m3** of water to **create 1 Million USD revenue**

Delta consumes 0.000082 Million m3 of water to create 1 Million USD revenue		Thailand	India	Slovakia	Total
Why we care ?					
Nearby river basin		Chao phraya River	Ganges River	Elbe River	 Are you in risky area? Check out Aqueeduct Water Risk Atlas https://tinyurl.com/4wtuaas
WRI baseline water stress level	<div>WRI Risk min 0 - max 5</div> <div><div></div><div></div><div></div><div></div><div></div></div>	2-3	4-5	0-1	
Seasonal variability		<div></div>	<div></div>	<div></div>	
Flood occurrence		<div></div>	<div></div>	<div></div>	
Drought severity		<div></div>	<div></div>	<div></div>	
Access to water		<div></div>	<div></div>	<div></div>	
Projected change in water stress (Change from baseline to 2030 *business as usual) <small>*The "business as usual" scenario (SSP2 RCP8.5) represents a world with stable economic development and steadily rising global carbon emissions, with CO2 concentrations reaching ~370 ppm by 2100 and global mean temperatures increasing by 2.6-4.8°C relative to 1986-2005 levels.</small>		Near normal	Near normal	Near normal	

Our Consumption		(Source: figures from municipal water bills and rain water harvestin pond's)			
Municipal water (supplied by government)	(m ³)	407,818	1,260	9,452	418,530
-Third-party water (Freshwater ≤ 1000 mg/L Total Dissolved Solids)	(m ³)	397,072	1,260	9,452	407,784
-Third-party water (Other water > 1000 mg/L Total Dissolved Solids)	(m ³)	10,746	-	-	10,746
Ground water (supplied by local government)	(m ³)	-	13,900.60	5,155	19,056
-Third-party water (Freshwater ≤ 1000 mg/L Total Dissolved Solids)	(m ³)	-	13,900.60	5,155	19,056
-Third-party water (Other water > 1000 mg/L Total Dissolved Solids)	(m ³)	-	-	-	-
Rainwater collected directly and stored by the organization (Source: meter)	(m ³)	1,300	-	-	1,300
Surface water including water collected from wetlands, rivers, lakes, and oceans	(m ³)	-	-	-	-
Wasted water from another organization	(m ³)	-	-	-	-
Total water withdrawal (including rain water)	(m³)	409,118	15,161	14,607	438,886
Water withdrawal for production process	(m ³)	-	-	-	-
Water withdrawal for domestic hygiene purpose	(m ³)	409,118	15,161	14,607	438,886

Think twice before discharge					
Total volume of water recycled in toilet flush, gardening and resemble purposes. (Source: meter)	(m ³)	141,163.68	7,407	-	148,571
Total volume of water reused in Cooling system and backwash process. (Source: meter)	(m ³)	14,954.28	12,134	-	27,088
Total volume of water recycled & reused water	(m³)	156,117.96	19,541	-	175,659
% of recycled & reused water to total water withdrawal	%	38.2%	128.9%	-	0

Ensure quality discharge (80% of water withdrawal planned to be treated before discharge to Industrial park's sewer that lead to its treatment plants)					
Discharged from production process	(m ³)	0.00	0.00	0.00	0.00
		Volume of wastewater is assumed to be 80% of Municipal water and transferred to Third-party who provide wastewater treatment services (IEAT: Industrial Estate Authority of Thailand)	wastewater is transferred to their own Sewage water Treatment Plant (STP). The treated water is used in domestic process	Transfer to Third-party who provide wastewater treatment services	
Discharged from domestic consumption to Third-party water	(m ³)	208,682.27	Zero Discharge	4,521	213,203
Total water discharged	(m ³)	208,682.27	0.00	4,521	213,203
Net water consumption (including rain water) (sum of water is not released back to surface water, groundwater, seawater, or a third party)	(m ³)	200,435.73	0.00	10,086	225,682
pH	-	7.27	7.51	8.68	7.82
BOD	mg/L	125.81	20.00	240.00	128.60
COD	mg/L	250.82	72.80	589.00	304.21
TDS	mg/L	678.85	580.00	170.00	476.28
TSS	mg/L	32.18	34.00	500.00	188.73
Oil and Grease	mg/L	2.99	4.00	0.00	2.33
Wastewater Quality Standard categorized by countries		Thailand*	India**	Slovakia***	
pH	-	5.5-9.0	5.5-9.0	6.0 - 9.0	
BOD	mg/L	500	30	-	
COD	mg/L	750	250	800	CODCr if the BOD5 (ATM) / COD ratio is <0.4
TDS	mg/L	3,000	-	2,500	Dissolved substances (RL 105)
TSS	mg/L	200	100	500	Insoluble matter (NL)
Oil and Grease	mg/L	10	10	-	

Source: *Announcement of the Industrial Estate Authority of Thailand No. 76/2560 (2017) dated July 13, 2017

** General Standards for Discharge of Environmental Pollutions Part- A : Effluents Limits as per CPCB (EPR- 1986Schedule- VI Part- A/ EPA

*** The Ministry of the Environment of the Slovak Republic according to Annex no. 3 of Act no. 55/2004 Coll. Maximum Permissible Rate of Pollution of Industrial Wastewater and Special waters discharged into public sewerage.
(refer to : <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2004/55/20040215> and <http://www.povs.sk/zakaznicka-zona/verejne-kanalizacie-a-kanalizacna-pripojka/>)

Remark

1. Full disclosure of 303-3, 303-34 and 303-5 is available at [2023 Sustainability in numbers](#).
2. The volume of wastewater is assumed to be 80% of Municipal water and transferred to Third-party who provide wastewater treatment services (IEAT: Industrial Estate Authority of Thailand). The numerical data of water discharge (GRI303-4) and subtopics were re-calculated according to GRI 303: water and effluents version 2018 since 2014-2021 to indicate the exact the total volume of discharged water to third-party.
3. Delta plant in Rudrapur, Uttara Pradesh is in wetland listed in the Ramsar Convention <http://archive.ramsar.org/pdf/sitelist.pdf>
4. Endemic species found in Chao Phraya River [2022 TCFD Report](#)
5. Slovakia's sewage water is transferred to the public sewerage system to be treated by third-party who provide wastewater treatment services for the local district. <http://www.povs.sk/zakaznicka-zona/verejne-kanalizacie-a-kanalizacna-pripojka/>. Thus the water quality indicators, Slovakia's site reports the highest permissible rate of wastewater discharged into public sewerage according to Slovakia's local water quality standard.
6. There is no usage of surface water/sea water /produce water for Delta's domestic purposes.

In 2018, our company consolidated information about [the rivers near Delta's major operation sites](#). This information is presented without any right of ownership. All the information in this booklet is from Wikipedia, the world's largest free online encyclopedia, to be used as reference for the Delta Group's sustainable development study and performance improvement on natural resource management tracking. In this booklet, readers can learn the size of nearby water sources, national or international protection status, biodiversity values (such as species diversity and endemism, and public highlighted number of protected species), and value of the water source to local communities and indigenous people. Finally, this resource of consolidated data should help to raise awareness of water and natural resources conservation specific to each area.

In 2019-2022, Delta Thailand and subsidiaries (India and Slovakia) applied the India Water Tool developed by the World Business Council for Sustainable Development (WBCSD) to assess the Water Stress of Delta India's sites and WWF Water Risk Filter and WRI Aqueduct, as per recommendation by WBCSD to do [2019 DET's Water risk assessment result](#), [2020 DET's Water risk assessment result](#), and [2021 DET's Water risk assessment result](#). The most recent version [2022 DET's TCFD disclosure](#) was published on our company's website in 2022. Although Delta's water consumption is used for domestic and sanitary purposes only and has less impact, Delta uses these water tools to analyze its activities both in our operational risks and basin risk assessment. We used the location of the factories and the volume of water used from each source by factories to understand the potential related links between local basin risks and operation risks and other factors for planning water management and ensuring our activities do not adversely impact stakeholders or communities.

In 2022, [Thailand had an average annual rainfall of 1,848 mm, which was 349 millimeters or 23% higher than normal](#). It was also the highest annual rainfall when compared with the historical data in the past 40 years. Although it was higher than the annual rainfall of 2011 when Thailand experienced the greatest floods, this year there were no severe and prolonged floods like in 2011 due to the difference in the areas of heavy rainfall. In 2011, heavy rain was concentrated over large areas of the North, while this year heavy rain was concentrated in small patches of all regions, and most of the heavy rain occurred in areas where the water could drain quickly. This situation makes the result of TDS (Total Dissolved Solids) in water supplies less than the year 2021.

As Delta's factories in Thailand are located in the central region which in the hotspot areas, where the drought impact caused high level of chloride concentration in Chao Phraya River, that is used as a raw water source for the Metropolitan Waterworks Authority and the Provincial Waterworks, we have been monitoring quality of water both input and output water through our domestic water usage.

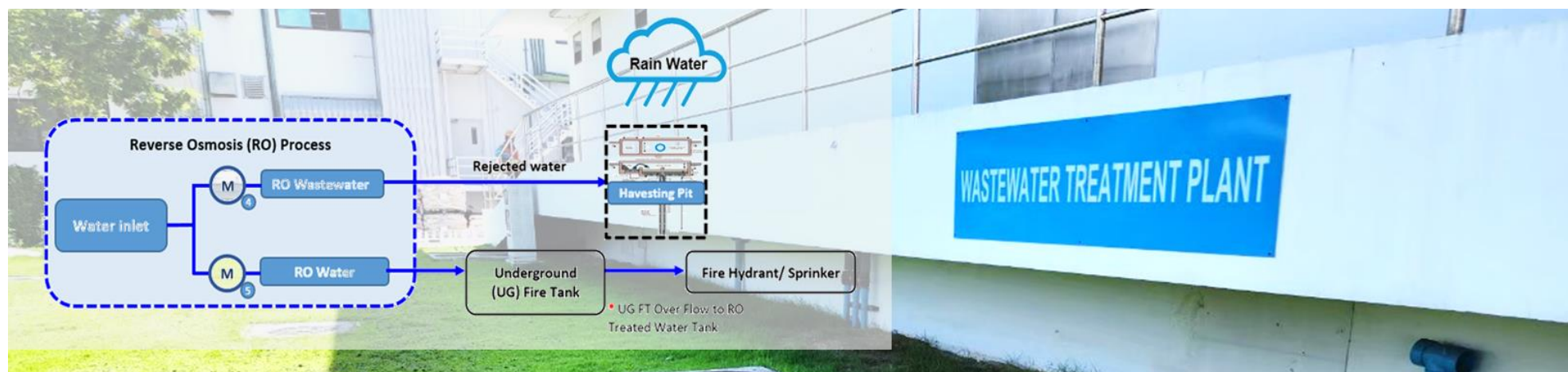
This is despite the fact that water is not our production factor or used in our manufacturing process. For further actions, we tracked back and reported the total dissolved solids concentration (TSD) from 2017- 2022 (please refer to: [2023 Sustainability in numbers](#) page 7). Due to the drought occurred in Thailand, bio monitoring and online raw water monitoring of Chao Phraya River can be followed up via rwc.mwa.co.th/page/graph/. The tracking showed the low concentration of TSD starting from January of 2022 and to December 2022 that is better than 2021.

According to Third-party who provides wastewater treatment services in Thailand (IEAT: Industrial Estate Authority of Thailand), the volume of wastewater is assumed to be 80% of municipal water since 2014-2019, however, to improve reporting accuracy, the volume of wastewater was re-calculated from the actual water discharge (water balance) according to GRI 303: water and effluents version 2020 since 2020-2022 to indicate the exact total volume of discharged water to the third-party. Our discharged water has been handled and professionally treated by local organization/third-party companies in each country, especially for Thailand and India sites. Apart from water quality checked according to Industrial Estate Authority of Thailand (IEAT) standard, our discharged water is also examined for heavy metals concentration annually by a third-party specialist (Environmental Resource Development Co., Ltd.) to ensure and re-check the safety and quality of water before transfer to IEAT for treatment. (The average results of water

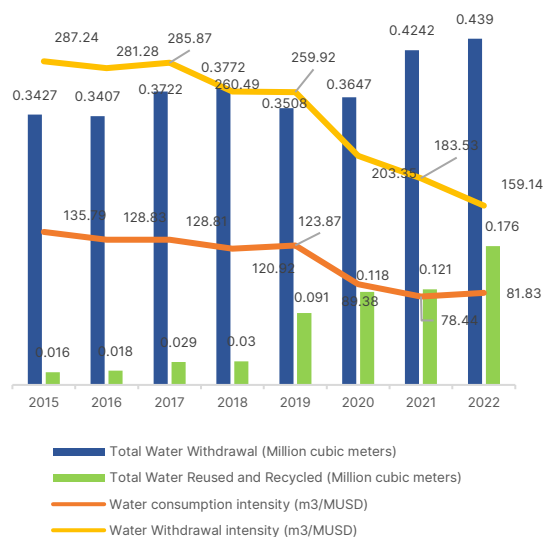
parameter for heavy metals from 2017- 2022 was demonstrated in Delta Thailand's [2023 Sustainability in numbers](#) page 6-8)

For our subsidiaries including India and Slovakia, we have been closely tracking the quality of water discharge for every month of each year. According to each local regulation, India's sites have their own Sewage Treatment Plants (STP). All discharged water goes straight forward to STP through the water treatment process. The treated water is sampled, and the water quality is tested by a third-party according to Central Pollution Control Board of India, CPCB (EPR-1986Schedule-VI Part-A/ EPA) and reused as garden irrigation and toilet flushing. Besides, the rejected water from RO (Reverse osmosis) process and rainwater (storm water) are collected. This provides more water to re-charging pits (sub-surface recharge) for groundwater. Slovakia's site wastewater management is assigned to a local third-party which is proficient in

wastewater treatment according to the recommended values in accordance with Decree of Slovak: Annex no. 3 of Act no. 55/2004 Coll. Maximum Permissible Rate of Pollution of Industrial Wastewater and Special waters discharged into public sewerage. Since 2015, no wastewater from our production process was discharged to surrounding communities and environment. Delta keeps tracking the quality of our discharged water twice a month to ensure that our biodiversity will be preserved when water is discharged to surrounding canals. According to 2015-2022 (retrospective data 2015-2022 in: [2023 Sustainability in numbers](#) page 8), with our professional management and standard in accordance with the regulation. There is no value of water quality indicators over the limit of average standard as mentioned in the table of total water discharge above. Hence, there was no incident of non-compliance with discharge limit nor significant fine on this matter in the reporting period.



Delta's Water Reuse and Recycling Program



According to Delta group's participation in Paris climate agreement (COP21), Delta takes 2015 as a base year to measure our implementation of various water-saving at main sites, such as recycling the condensed water for cooling tower, Rejected RO water for gardening or irrigation. We adopted water-saving taps and water-saving sanitary wear, reducing water output from taps and the water level of cisterns, managing the excess water of cooling towers as well as reusing the wastewater from RO-system water purifiers.

Through our value chain, Delta is aware that water is a production factor for metal part production. We are on the process to study water risk, impact and opportunity of metal part production process in [China](#). Simultaneously, in 2022, we [engage](#) 10% of our suppliers to voluntarily provide quantitative information of their water consumption. Since this was our first quantitative engagement, the volume of water consumption as well as risk and impact at our supplier sites has not officially consolidated in this report. We target to disclose the water impact on the supply chain by the next reporting period.



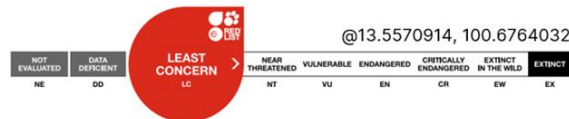
The deeper we check

Delta’s eco-efficient operation is not only help to lessen environmental impact, but also mitigate occupational disease rate Delta realizes that 49% of our total Delta employees involved in routine work/ activities which exposure to risk to occupational diseases announced by the Ministry of Labor of Thailand dated August 15, 2007.

Though the company has established a Personal Protective Equipment Manual and provide work instruction training on occupational health and work environment to our new employees. Delta constantly monitors the exposure to hazardous substances and the list of materials used. The results are used for aligning work practices or making engineering improvements to reduce the risk of occupational illnesses.

The company targets 0 fatalities from work-related ill health. Due to product transfer from other associate sites in Asia to response to the higher demand of networking and telecom power, numbers of our workers who exposed to hazardous factors has significantly increased from 19% of total Full-time equivalent in Thailand in 2021 to 51% (9,076 FTE employee and subcontract workers) in 2022. The risks these employees exposed in their daily work included noise, particulate matter, mineral oil, acetone, x-ray, ionic ray, lead, tin, light, thinner and heat that determined by independent professional physician with Occupational health safety management representative committee. This group of risky employees had been encouraged to participate in an annual high-risk group checkup performed by independent physicians. 0% of hazardous substances contamination in blood and urine found from recent specific checkup ensures both immediate and chronic effects or diseases from manufacturing, stamping, soldering, labor-intensive work, grinding and chemical-related processes; for instance, had properly managed. This annual action aims to prevent our employees and subcontract from disease caused by chemical agents and specific process such as deafness from sound-intensive work, chronic physical hazard, occupational respiratory diseases, occupational dermatitis diseases, occupational musculoskeletal disorders, occupational cancer and impact on reproductive system. Finally, without any medical treatment required for these specific employees, ZERO occupational disease rate and occupational disease-related fatality was reported for the fifth consecutive year.





According to our [Environment Health and Safety policy](#), all of Delta's own major sites are located in industrial parks; including [Bangpoo IEAT](#), [Wellgrow IEAT](#), [Sidcul Industrial Park](#), [HSI IDC Industrial Area](#), and [Industrial Park Dubnica nad Váhom, Slovensko](#), this minimizes the environmental impact on the local ecosystem, biodiversity and habitats during operations. For transparency in environment management, Delta implemented the “[2023 Sustainability in numbers](#)”, a collective result of our environment since 2014 at our public domain. Delta realizes that protecting biological diversity is important for ensuring natural ecosystems which provide clean water and air and contributes to food security and human health. Biodiversity also contributes directly to local livelihoods, making it an essential factor to reducing poverty, and thus achieving sustainable development.

Wetlands are the habitat of the “monitor lizard” (*Varanus salvator*), the semi-amphibious creature living in Thailand wetland habitats as a protected reptile species ranked 91 (page 56) of [the appendix list of Ministerial Regulations B.E 2546 of Thailand's Ministry of Natural Resources and Environment](#) according to [WILD ANIMAL CONSERVATION AND PROTECTION ACT, B.E.2562\(2019\)](#) (TH / EN). Delta conducted a simple investigation into this species in our headquarter (approximately 70,000 s.q.m) environment management indicator (Please refer to: [Wildlife Preservation and Protection Act Thailand](#)). Generation by generation, local monitor lizards help to maintain the environmental balance by eating fish or animal carcasses and biological refuse in nearby wetlands. Since most of the Bangpoo Industrial Estate's surrounding areas are fish farms and swamps, huge numbers of fish were killed when the temperature changed. The biological role of the monitor lizard has protected Delta and our neighboring communities from plague resulting from bacteria.

Climate change poses a threat to the ecosystems where people and animals live. In Thailand 2021, the high temperature and decreasing rainfall led to droughts and increased freshwater scarcity due to the rising of sea level from 2 coastal areas. This exacerbates coastal erosion rates, flooding, and saltwater intrusion. The droughts might also cause a severe cracking and compaction, acidification, loss of organic matter, and enhanced greenhouse gas (for example methane) emissions and lead to irreversible soil changes, with major impacts on water quality (Reference: <https://tinyurl.com/u9mc6bdw>). Furthermore, drought will cause drying out of wetlands and loss of biodiversity. In 2022, the huge rainfall The Monitor Lizard (*Varanus salvator*) and its natural habitat might be threatened by climate change but there are still unconfirmed factors and insufficient data and need further explore. Fortunately, in 2022, due to the heavy rainfall, the salinity of the water sources gradually disappears. This situation causes *Varanus salvator* to return to their normal life that is full of biodiversity. However, *Varanus Salvator* is listed as a [Least Concern species \(LC\)](#) on the [IUCN Red List](#) and we will keep observe their behaviors during these crisis climate change.

Strong action with partnership

In addition to the IEAT's certificate process to affirm its close monitoring of Delta Thailand's environmental performance, the communication channels “Whistleblow@deltathailand.com” and “OHSC@deltathailand.com” are always available to the public to report any cases in violation of environment-related regulations or human rights. Delta's Safety Health and Environment Committee was established to drive, monitor, and review and improve the company's environment-related issues. The committee also provides appropriate countermeasures for any confirmed cases. Up to 2022, there was no any case of non-compliance with environmental laws and regulations, significant fines for non-compliance with environmental laws and regulations, non-monetary sections for non-compliance with environmental laws and regulations nor cases brought through dispute resolution mechanism.

Better Together

Learn our shared value for stakeholders through key activities and performances disclosed on the basis of social science methodology.



A mutual betterment

For both Delta and societal, diversity, equity, and inclusion (DEI) are crucial aspects that play a significant role in the context of climate transition. Ensuring DEI in our [climate policies](#), [Human rights policy](#), [EHS Policies](#), [Employment Policies](#) and other key practices helps address these disparities and ensures that no one is left behind in the transition to a sustainable future. [According to OECD](#), the COVID-19 pandemic has triggered one of the worst jobs crises since the Great Depression. There is a real danger that the crisis will increase poverty and widen inequalities, with the impact felt for years to come. In addition to slow economic recovery, extreme weather events and major countries confrontation impaired global citizen's cost of living that finally degrade their [basic human rights](#). [Numbers of global workforces have been impacted by technology and energy transition](#) to tackle with climate change, vulnerable group like [women, children, ethnic minorities and indigenous people are disproportionately affected by income loss and loss of economic opportunities](#). These crises highlighted the importance of DEI in society and the workplace



Diversity
≠
Difference

Delta employees join 2022 Sustainable Development Week Photo Contest by submitting their photos with short caption under the theme "Diversity ≠ Difference". These employees received non-monetary and monetary awards based on the vote of their colleagues in South-east Asia region.

Representation and Voices: DEI ensures that diverse perspectives, experiences, and knowledge are considered in decision-making processes related to climate change and sustainability. People from different backgrounds and communities bring unique insights and innovative solutions to address environmental challenges.

Access to Resources: DEI ensures equitable access to resources, technologies, and opportunities related to renewable energy, sustainable transportation, and climate mitigation and adaptation efforts. It helps bridge the gap between developed and developing regions in terms of resource distribution.

Innovation and Adaptation: Diverse teams and inclusive environments often lead to more creative and innovative solutions. In the context of climate transition, this can be particularly beneficial in developing adaptive strategies and technologies to combat climate change effectively.

Social Cohesion: Climate initiatives are more likely to gain widespread public support when they address the concerns and needs of diverse communities. By promoting DEI, we foster social cohesion and build more resilient communities that can collaborate effectively to address climate challenges. Inclusive policies are more likely to be perceived as fair, just, and beneficial for society as a whole.

Long-Term Perspective: DEI fosters a long-term perspective by considering the interests and needs of future generations. Climate change is a problem that will affect generations to come, and DEI ensures that their voices are heard and accounted for in decision-making.

In summary, DEI is critical in creating effective and sustainable climate transition solutions that are fair, equitable, and inclusive. Recognizing and addressing the diverse dimensions of climate change and involving all stakeholders in the process is essential for a successful transition to a more sustainable and just future.

Our colleagues

According to customers and regulator engagement in 2019, Electronics industry characterized by organized labor, maintaining good relations with employees is particularly essential for the success of a business's operations and innovation. Delta's employees represent one of a company's most important assets. In addition to employees' capabilities development, Delta, as a multinational enterprise, endeavors its employees' wellness by providing a safe and healthy working environment, fair treatment and non-discrimination, fair remuneration and supporting freedom of association. The company always complies with local and international standards on labor and human rights. In addition, these standards have applied equally across all operations within the organization. The key focus of the criterion is on companies' policies to manage labor relations, related KPIs, equal employment and development opportunities, human rights and freedom of organization. As a world-class enterprise and responsible corporate citizen, Delta Electronics (Thailand) PCL. commits to providing our employees with an environment to develop to their full potential.

Diversity in the workplace is all about creating an inclusive environment, accepting every individual's differences, enabling all employees to achieve their full potential and as a result, allowing Delta business to reach its fullest potential. By the end 2022, Delta Thailand and its subsidiaries had a total workforce of around 22,706 FTEs. The distribution of diversity in employee composition can be illustrated as follow:

Our people	Unit	2022					2021			2020		
		Male	Female	Others	Not disclose	Total/AVG	Male	Female	Total/AVG	Male	Female	Total/AVG
Salary-based workers	FTE	3686	2009	85	0	5780	3266	1750	5016	3187	1445	4632
Daily wage workers	FTE	442	6109	0	0	6551	424	6360	6784	790	5909	6699
Sub-contracted workers	FTE	1917	8400	58	0	10375	1172	4787	5959	807	3909	4716
Total workers (Sub- contract included)	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● Permanent employees	FTE	4128	8118	85	0	12331	3690	8110	11800	3977	7354	11331
● Temporary employees	FTE	1917	8400	58	0	10375	1172	4787	5959	807	3909	4716
● Non-guaranteed hours employees	FTE	0	0	0	0	0	0	0	0	0	0	0
● Full-time employees	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● Part-time employees	FTE	0	0	0	0	0	0	0	0	0	0	0
Other workers ¹	FTE	51	64	0	0	115	46	65	111	41	53	94
Employees by age	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● Under 18 years old	FTE	0	0	0	0	0	0	0	0	0	0	0
● 18-29 years old	FTE	2188	7237	86	0	9511	1324	4344	5668	1807	6192	7999
● 30-50 years old	FTE	3725	9205	57	0	12987	3285	7937	11222	2885	4996	7881
● Over 51 years old	FTE	132	76	0	0	208	253	616	869	92	75	167

Our people	Unit	2022					2021			2020		
		Male	Female	Others	Not disclose	Total/ AVG	Male	Female	Total/ AVG	Male	Female	Total/ AVG
Employees by area of major operation sites	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● Thailand	FTE	3219	14608	143	0	17970	2431	12174	14605	2667	9627	12294
● India	FTE	2102	1380	0	0	3482	1770	221	1991	1162	908	2070
● Slovakia	FTE	724	530	0	0	1254	661	502	1163	955	728	1683
Employees by level	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● Executives (TH level 10-12)	FTE	51	9	0	0	60	38	15	53	28	6	34
● Middle Management (TH level 7-9)	FTE	703	352	0	0	1055	418	521	939	398	462	860
● Senior and Operative (TH level 3-6)	FTE	1984	1288	14	0	3286	1789	1290	3079	2761	977	3738
● Daily employees (TH level 1-2)	FTE	3307	14869	129	0	18305	2617	11071	13688	1597	9818	11415
Employees by job function	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● Administration	FTE	581	1573	10	0	2164	98	50	148	254	205	459
● Production	FTE	2215	13009	131	0	15355	2529	11096	13625	1660	9688	11348
● Sales and service	FTE	613	166	0	0	779	549	235	784	525	125	650
● Supply chain management	FTE	769	672	2	0	1443	458	571	1029	386	551	937
● Technical	FTE	1867	1098	0	0	2965	1228	945	2173	1959	694	2653
Employees by nationality / citizenship (New)	FTE	6045	16518	143	0	22706	4862	12897	17759	4784	11263	16047
● American	FTE	1	0	0	0	1	1	0	1	1	0	1
● Burmese	FTE	1	0	0	0	1	1	0	1	0	0	0
● Cambodian	FTE	2	0	0	0	2	1	-	1	2	0	2
● Chinese	FTE	17	2	0	0	19	30	4	34	12	4	16
● Czech	FTE	1	1	0	0	2	1	1	2	0	0	0
● Filipino	FTE	18	3	0	0	21	19	4	23	18	4	22
● French	FTE	1	0	0	0	1	1	0	1	1	0	1
● German	FTE	2	0	0	0	2	0	0	0	0	0	0
● Indian	FTE	2116	1380	0	0	3496	1768	223	1991	1669	121	1790
● Japanese	FTE	1	0	0	0	1	1	0	1	1	0	1
● Malaysian	FTE	6	1	0	0	7	7	1	8	8	1	9
● New Zealander	FTE	0	0	0	0	0	1	0	1	0	0	0
● Nicaragua	FTE	1	0	0	0	1	1	-	1	-	-	0
● Polish	FTE	2	1	0	0	3	1	0	1	1	0	1
● Russian	FTE	0	0	0	0	0	0	0	0	0	0	0

Our people	Unit	2022					2021			2020		
		Male	Female	Others	Not disclose	Total/AVG	Male	Female	Total/AVG	Male	Female	Total/AVG
● Singaporean	FTE	4	0	0	0	4	5	0	5	6	0	6
● Slovak	FTE	705	524	0	0	1229	654	499	1153	949	729	1678
● Taiwanese	FTE	69	15	0	0	84	54	17	71	63	18	81
● Thai	FTE	3095	14589	143	0	17827	2316	12148	14464	2052	10386	12438
● Ukrainian	FTE	1	2	0	0	3	0	0	0	0	0	0
● Uyghur	FTE	0	0	0	0	0	0	0	0	0	0	0
● Lybanonese	FTE	1	0	0	0	1	0	0	0	0	0	0
● Saudi Arabia	FTE	1	0	0	0	1	0	0	0	0	0	0
Employees by Religions (New)	FTE	3132	14564	85	4925	22706						
● Buddhism	FTE	3091	14541	85	0	17717						
● Christianity	FTE	24	9	0	0	33						
● Hinduism	FTE	11	1	0	0	12						
● Islamism	FTE	6	13	0	0	19						
● Reserved their rights on confidentiality and non-Disclosure	FTE	0	0	0	4925	4925						
Number of disabled workers												
● Number of disabled workers	FTE	28	13	0	0	41	35	51	86	31	40	71
New hire rate	%	21.7	24.7	0	0	23.7	20.7	35.6	31.5	14.2	41.2	33.1
New Employees by age	FTE	1309	4076	0	0	5385	1006	4595	5601	678	4635	5313
● Under 18 years old	FTE	0	0	0	0	0	0	0	0	0	0	0
● 18-29 years old	FTE	851	3106	0	0	3957	867	4534	5401	451	3507	3958
● 30-55 years old	FTE	451	968	0	0	1419	129	57	186	222	1128	1350
● Over 55 years old	FTE	7	2	0	0	9	10	4	14	5	0	5
New employee by function	FTE	1309	4076	0	0	5385	1006	4595	5601	678	4635	5313
● Administration	FTE	135	457	0	0	592	28	417	445	41	511	552
● Production	FTE	691	3392	0	0	4083	417	3234	3651	449	3445	3894
● Sales and service	FTE	58	24	0	0	82	294	749	1043	31	416	447
● Supply chain management	FTE	147	93	0	0	240	138	54	192	20	185	205
● Technical	FTE	278	110	0	0	388	129	141	270	137	78	215

Our people	Unit	2022					2021			2020		
		Male	Female	Others	Not disclose	Total/AVG	Male	Female	Total/AVG	Male	Female	Total/AVG
New Employees by area	FTE	1309	4076	0	0	5385	1006	4595	5601	678	4635	5313
● Thailand	FTE	787	3439	0	0	4226	862	4501	5363	256	4577	4833
● India	FTE	409	576	0	0	985	12	6	18	376	35	411
● Slovakia	FTE	113	61	0	0	174	132	88	220	46	23	69
Employee turnover	FTE	951	1483	0	0	2434	397	429	826	305	385	690
Employee turnover rate (All type of employee)	%	2.28%	2.63%	0.0%	0.0%	2.57%	10.8%	5.3%	7.0%	7.7%	5.2%	6.1%
Voluntary turnover rate (include resignation, retirement, early retirement, end of contract)	%	99.4%	99.8%	0.0%	0.0%	99.6%	99.5%	97.2%	98.4%	100.0%	100.0%	100.00%
Turnover rate from disciplinary action	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Employee turnover by age	FTE	951	1483	0	0	2434	397	429	826	305	385	690
● Under 18 years old	FTE	0	0	0	0	0	0	0	0	0	0	0
● 18-29 years old	FTE	496	1016	0	0	1512	240	317	557	100	94	194
● 30-55 years old	FTE	439	457	0	0	896	146	102	248	180	260	440
● Over 55 years old	FTE	16	10	0	0	26	11	10	21	25	31	56
Employees' turnover by area	FTE	951	1483	0	0	2434	397	429	826	305	385	690
● Thailand	FTE	242	1274	0	0	1516	149	340	489	144	305	449
● India	FTE	639	148	0	0	787	161	34	195	90	10	100
● Slovakia	FTE	70	61	0	0	131	87	55	142	71	70	141
Employees turnover by function	FTE	951	1483	0	0	2434	397	429	826	305	385	690
● Administration	FTE	62	122	0	0	184	29	51	80	42	47	89
● Production	FTE	239	1156	0	0	1395	217	334	551	169	327	496
● Sales and service	FTE	406	114	0	0	520	61	17	78	21	2	23
● Supply chain management	FTE	105	34	0	0	139	58	4	62	14	5	19
● Technical	FTE	139	57	0	0	196	32	23	55	59	4	63
Employees turnover rate by religions (New)	%											
● Buddhism	%	2.51										
● Christianity	%	5.58										
● Hinduism	%	1.33										
● Islamism	%	0.55										
● Use the right to remain silent	%	8.71										

Our people	Unit	2022					2021			2020		
		Male	Female	Others	Not disclose	Total/ AVG	Male	Female	Total/ AVG	Male	Female	Total/ AVG
Number of employees entitled to maternity / parental leave	FTE	724	659	0	0	1383	324	487	811	211	374	585
● Number of employees taken maternity / parental leave	FTE	11	369	0	0	380	57	294	351	66	277	343
● Number of employees return to work after maternity / parental leave	FTE	6	313	0	0	319	55	271	326	63	245	308
● Number of employees return to work and work with Delta for 12 months	FTE	2	284	0	0	286	51	214	265	60	233	293
● Retention Rate	%	94%					93%			90%		

Remark:

- Information of employee number, gender, employee type, religions and so on have consolidated directly from our payroll system while information of other workers have collected from work permit database.
- There was no change in manufacturing sites in 2022. The company strictly adheres to [the Ministry of Labor's regulation to manage labor rights](#). In case Delta, the employer, relocates its operation sites to another location which significantly impacts on the normal life of the employee or his family, the company will give advance notice to the employee at least thirty days before moving. If the employee does not wish to go to work. Our employee has the right to terminate the employment contract by receiving special severance pay not less than the rate of severance payable to the employee under section 118.
- There was no forced worker nor worker recruited from non-voluntary immigrant affected from major countries confrontation in the reporting period.
- The terminologies of employee categories are as follows.
 - Permanent employees refer to employee with a contract for an indeterminate period (i.e., indefinite contract) for full-time or part-time work.
 - Temporary employees refer to employee with a contract for a limited period (i.e., fixed term contract) that ends when the specific time period expires, or when the specific task or event that has an attached time estimate is completed (e.g., the end of a project or return of replaced employees)
 - Non-guaranteed hours employees refer to employee who is not guaranteed a minimum or fixed number of working hours per day, week, or month, but who may need to make themselves available for work as required.
 - Full-time employees refer to employees whose working hours per week, month, or year are defined according to national law or practice regarding working time.
 - Part-time employees refer to employees whose working hours per week, month, or year are less than the number of working hours for full-time employees.
 - Other workers include canteen workers and nurses in the medical room which increase due to warehouse expansion to another warehouse building in Thailand.
- Training course organized at Delta Thailand's Office
- Training +-leave days recorded in payroll system x 8.45 working hours per day. In addition to leave days, Delta supports training course fee, travel and accommodation, meal and daily allowance for these Employees.
- In 2022, increasing number of our FTE were from India production site's expansion.
- Delta Thailand is developing communication process to collect subsidiaries' training information.
- Major employee-related information has been collected from the SAP system based on ISO 9001 standard.
- Indicator 401-3, according to Slovakia labor law, maternity leave is available for male workers.
- Number of disabled worker declaration based on the submission of disables' ID card issue by the Department of Empowerment of Persons with Disabilities and other organizations in India and Slovakia that established with the same objective.
- By 2030, Delta target to maintain at least 80%share of women in total workforce, 40% in all level of management positions of all function, 30% of top management and 50% in in STEM-related positions.
- Over 99% of new employees by areas in Thailand, India and Slovakia are local citizen and 0.8% of them are in management level.

Delta's Labor & Human Right Risk Assessment including risk matrix and mitigation process has been reviewed by Human right working team and SD committee on annual basis. To accomplish this objective, the Company has implemented the group-wide [Delta Employment Policy](#) (which in-line with ISO26000 and RBA code) and disclose on our website to facilitate the company's personnel to acknowledge their rights and obligation. Furthermore, the policy can be used by related business partners as the guideline for reviewing the company's operation. The 9 pillars of Delta's employment policy to retain our innovative and skillful employees are as following:

The 9 pillars of Delta's employment policy to retain our innovative and skillful employees are as following:

1. Law & regulation compliance

To comply with applicable labor or employment laws and international standards wherever it operates. To fulfill this commitment, the Company constantly strives to comply with local regulations and to meet international labor and human rights standards, including the [Responsible Business Alliance Code of Conduct \(RBA\)](#), Universal Declaration of Human Rights, International Labor Office Tripartite Declaration of Principles, [OECD Guidelines for Multinational Enterprises](#), and more.

Due to the global rapid change of law and regulations, Delta has Government Relation and Legal department to ensure our compliance. These 2 functions' primary roles are to engage with government officials, policymakers, and regulatory bodies to influence policy, advocate for the organization's interests, and ensure compliance with relevant laws and regulations. It requires a deep understanding of both the organization's objectives and the political and regulatory landscape in which it operates.

Minimum 1 month notice for relocation case; for instance, typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them accordingly to [Thailand's Labor Act B.E 2541clause 120](#). Periodic due diligence has been implemented to ensure labor rights, human rights and the rights of related stakeholders who might impacted by our operations. Since 2016 to 2022, no grievance in the workplace such as, but not limited to, a breach of the terms and conditions of an employment contract, raises and promotions, or lack thereof, as well as harassment, human right violation, violations involving rights of indigenous peoples and employment discrimination had raised by employees towards grievance and whistleblowing channels.

2. Freely chosen employment

To prohibit hiring forced labor or child labor, all jobs at Delta are voluntary and employees can voluntarily leave the company within a reasonable period after giving notice. The company prohibits hiring forced or child labor to ensure that all jobs are taken voluntarily, and employees can voluntarily leave the company within a reasonable period after resigning officially.



3. Human Treatment

Delta refers to Universal Declaration of Human Rights (UDHR) and Responsible Business Alliance (RBA)'s guideline to prohibit any form of harassment or inhumane treatment, including sexual harassment, abuse, slavery, corporal punishment, threatening, exploitative, mental or physical coercion or verbal abuse of employees. We adhere to the target of zero harassment in our business process. As such, Delta have incorporated human rights principles, namely RBA's Code of Ethics and ILO's labor standards, into the Company's operations and developed our human rights policy based on the UN's Guiding Principles on Business and Human Rights – UNGP. The company commits to protecting, respecting, and supporting our employees, business partners and vulnerable individuals or groups in all our business processes as outlined in the Company's [Human Rights policy](#). We will ensure that human rights are respected and that human rights violations in all forms are prevented throughout the Company and our value chain. In this policy, roles and responsibility of related functions, coverage of prevention, communication channels, Protection of whistleblowers and confidentiality, investigation and penalties and remedy guideline, had clearly communicated. Since we consolidate ESG performance in 2016 up to 2022, no form of human right violation harassment, discrimination, inhumane treatment, violation of labor right, in had been noted raised through whistleblow@deltathailand.com

Since 2019, Delta Electronics Group conducts [100% on-line training](#) subject Human Rights Policy and Responsible Business Alliance Code of Conduct. The online training material has prepared in English, Thai and Chinese to ensure its global employees full understanding of their rights and their responsibilities to related stakeholder. To reduce the digital divide, training rooms and schedule have been arranged for non-computer-user employees. The course requires 60% score on posttests to pass. Finally, 100% of the participated employees have passed the course.

According to our recent survey implemented with our major operation sites in Thailand, India and Slovakia and our supply chain; none of these sites used the permanent and contract workers with age of under 18 years old in 2022. However, according to Delta Thailand's MOU with local technical colleges and universities to provide youth's work experience before their graduate, 34 trainees attached to our operation teams have protected accordingly to the requirement of [Thailand's Labor Act B.E 2541 Chapter 4](#). After these students' training period completed their credited training program, there was no complaint regarding the violation of the students' rights from the students themselves nor the complaint from their caregivers.





"At Delta, there are many levels among employees, right? And there are many genders at Delta like female, male and transgender. We believe that everyone has equal rights and equality. We listen to each other's opinions and the suggestions of each person. Each of them is not deprived of their freedom of thought."

Our employee
Janphen Makkhawichit

Our stakeholder said

4. Non-Discrimination

The company hires its employees based on their capabilities and not to discriminate based on race, religion, nationality, age, gender, sexual orientation, disability, or any other reason which is protected by law for recruitment, training, awards, promotion, termination, retirement, or other employment conditions.

Delta aims for ZERO discrimination in our business process. We recruit, appoint, and develop our employees based on their capacities, and treat all in the same way, regardless of race, faith, color, nationality, age, gender, sexual orientation, marriage status, political affiliation or disability. Due to business expansion in 2022, official (monthly) employees account for 54% of the total while another 46% were in production, operation, and other function positions. Workers are 27% males and 73% females. Direct employees account for 54%. 18% of our permanent employees are under the age of 30 while the age of another 7% is over 50. Without any new workers under the age of 18, 73% of our 5835 new workers are under 30 years old. This makes significant change to the average age of our workers from 41 (2020) to 34 (2021) and 32 (2022) years old on average. For management, 71% are native to the country where they are employed and 43% are female. 41 disabilities were working with us in 2022. According to our recent survey, no employees declared themselves as Indigenous people.

5. Working Hours

To establish a management mechanism for working hours in line with labor laws and regulations. Despite operating under special conditions required, employees are allowed at least one day off for every seven working days. Delta refer to [Responsible Business Alliance \(RBA\) code of conduct](#) which refer to [Thailand's Labor Protection Act B.E. 2541](#) to monitor its employee's working day, working hours, work from home, for overtime and holiday. Annually, Delta's working hours and holidays had informed its employees not less than 30 days before the next fiscal year. The working calendar had announced and be available on the company's [intranet site](#) for employee to plan their schedule.

In the reporting period, the company studied its worker's working hours by using sampling check method. Delta employees had not required to work overtime on a working day and/or holidays unless the employee's prior consent is obtained on each occasion, exceed overtime had found.



In spite of validity of employees' voluntary OT applications, their overtime records are not over 36 hours a week accordingly to Thailand's local regulation, Delta aim to align with [RBA code of conduct](#) regarding working hours by using following measures:

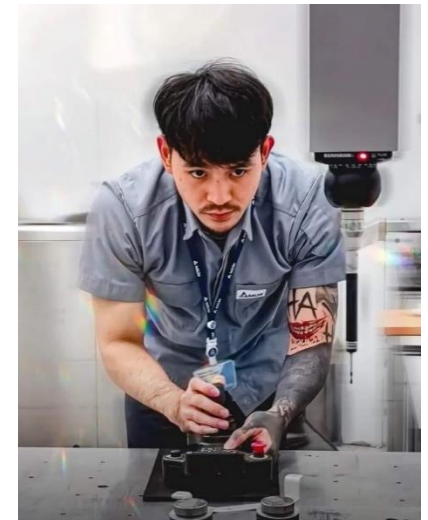
1. Before the working period, employees will raise their overtime requisition and/or RBA working hours waive request form through OA system. The forms must get approval by related supervisors, without the mentioned approval, the company will not be responsible for their overtime pay and related supporting facilities.
2. Plant manager and operation vice president will have weekly OT summary from payroll system for workforce planning.
3. The company utilizes Delta Smart Manufacturing system and on-line application to shorten certain processes while facilitating 24-hours operation run. Cloud-based real-time material stock balance check, auto component insertion, cloud-based production process simulation; for instance, can help to release labor-intensive tasks and shorten the reporting line for smooth operation.
4. The company keeps training its operation to have overall skills through their related process. With clusters of multi-skill operators, skilled workforces can replace each other.
5. In certain/ urgent condition that exact employees are required for overtime work, the supervisors/managers will consider skilled labor overtime record. If that operators' OT exceeds the OT limitation, other operator will be replaced to have the job done.

6. Compensation and Benefits

According to the company's Remuneration and Welfare Policy which is in-line with [Thailand's Labor Act B.E 2541 Chapter 4](#). Thailand's National Wage Committee Notification on Minimum Wage Rate (No.9) Delta Electronics (Thailand) Public Company Limited places great importance on the remuneration package of its employees to ensure reasonable remuneration based on individual performance and in line with the Company's operation performance.

Since the agreement signing day, all new employee will be informed about their role, working day, code of conduct, communication channel and their compensation and benefit by access [Welcome onboard!](#), a guidebook for new employees and will be repeated on the Orientation day. In addition, the Company also places importance on remuneration by market benchmarking so that remuneration is fair within the organization and competitive with other companies . The Company has set the following guidelines:

1. Employment and hiring shall be conducted with consideration for the necessity and appropriateness of a job. The hired employee must have an academic background, experience and ability to fit the position. He/she must also possess qualifications in accordance with the Company's rules and regulations.
2. Command line and job division: The Company shall organize a command line and job division so that a job's scope of responsibility and position are clear and suitable to the nature of the Company's business operation. The Company shall regularly review this part of its policy.



3. The Company manages remuneration, salary and wages fairly by taking into account factors such as qualifications, experience, job grade, position, responsibility and individual performance; when benchmarking with the salary rate of other companies with a similar business nature; the domestic wage rate, market conditions and demand and the Company's operation performance. In addition, the Company reviews the remuneration package in collaboration with labor unions every year. 100% of Delta employee receiving regular performance and career development reviews
4. The company is considering setting up compensation schemes for management and other employees to provide long-term incentives when appropriate, such as an employee stock ownership plan (ESOP). In 2010, Delta raised the proposal of employee's stock option plan as agenda item 2 into its 1/2010 [Extraordinary General Meeting of Shareholders](#). The proposed stock option is to create unity among directors and employees in many locations of the company and its subsidiaries as one team, one company. With the company's significant growth at that time, there will be many new businesses and new teams to add to create more value. As in the past 2 ESOP scheme in year 2000 (DELTA-W1) and year 2005 (DELTAW2), providing directors and employees with additional incentives through the grant of warrants has been a proven effective tool in maintaining and promoting loyalty as well as improvement of personal competency for continued success and growth of the Company. This agenda item must be approved with not less than three-fourths of the votes of the shareholders attending the meeting and having the right to vote. On the other hand, shareholders holding an aggregate number of shares exceeding 10 percent of the votes of shareholders attending the meeting must not oppose the offering of warrants to the directors and employees of the Company and its subsidiaries under ESOP 2010. Finally, the objection of this Agenda item was made by the amount of 117,875,122 votes, representing 10.74% of the total votes of the shareholders attending the meeting, this Agenda item was disapproved. However, due to the company's healthy growth, the company keeps studying ESOP.
5. Welfare: The Company has a policy to take care of its employees' health and working environment to ensure their performance and efficiency. The Company also has a policy to lighten costs by providing welfare for the employees that is comparable with similar companies in the same industry or as prescribed by the laws. In addition, the welfare committee conducts monthly reviews of employee welfare.



Since 2020, Delta conducted a study of ratio of basic salary and remuneration of women to men and gender pay gap to prove our policy of equal remuneration. According to our data in payroll system, our ratio of entry level wage compared to local minimum wage for both male and female worker at Thailand sites in 2022 was 1:1. We studied of how much our women in each job level get when a male worker gets 1 THB. The result of this study shows that when male worker get 1 THB basic salary, woman get THB1.02 in average. Thus, the average gender pay gap in 2022 was less than 0%. In addition, when male worker get 1 THB compensation and bonus, female worker get 0.99 THB in average. Thus, gap ratio of women compensation to men was lower than 0.1. In addition to [public information of compensation & benefit](#) , Delta employee benefit has described in above below. The company provides employee compensation and benefits that meet applicable laws, including industry-comparable wages, holidays with pay and legally stipulated welfare.

In addition to standard life insurance and healthcare (including disability and hospital admission), operative and executive staff are eligible for short-term and long-term incentives based on their years of service and ESG performance. According to the 2016-2022 financial statement, the company's provision for long-term employee benefits is set at an average of 3% of consolidated revenue (7% of basic salary). To optimize benefit and maintain transparency, the jointly-establish fund is managed by TMB Bank Public Company Limited. (Find 2022 [Annual Report](#) page 184. As at December 2022, the weighted average duration of the liability for long-term employee benefit of the company and its subsidiaries is 8-22 years (Delta Thailand's: 0.8- 14 years) [Delta's guidebook for new employee](#) , page 26-27.

In 2022, on the occasion of the 2022 Long Service Awards and Most Remarkable Employee Awards, the company awarded 1,834 long-services employees for their loyalty and outstanding performance. In addition to their years of service, Delta also considers their discipline and ethical records. The gold pedants in difference weights had present to employee with service years of 10, 20, 25 and 30 years. As well as their contribution growing bigger and deeper as time goes by, the value of the prizes we were awarded also vast by time.

7. Freedom of Association

To respect the rights of employees to associate on a voluntary basis, Delta allows its global employees to organize labor unions and to establish employee communication channels according to local regulations.

According to Delta's [Human Right Policy](#) clause no. 1.6 the Company allows its employees the freedom to associate or have affiliation with groups whose activities are not in conflict with the company's Code of Ethics and will not have negative consequences on the Company's image or economic results. In the reporting period, Delta supported various employee groups and activities ran by its employees.

The lower percentage of Delta workers under collective bargaining agreement was resulting from:

- 1. LESS queries on company's employee-related policies since Delta established an employee relation department to fully engage its employee with 1.) Full-time Specialists in employee engagement 2.) Various channels to communicate with corporate 3.) Direct and timely communication from corporate to employees via Line Delta Official
- 2. Over 400 operators (2% of Delta Thailand total FTE in 2022) with the age over 45 and years of service over 15 years voluntarily participate the early retirement program in 2022, 98% of these workers were the union members.
- 3. Higher rate of newcomers since 2022. These groups of workers require a certain time for making the decision to join the labor unions.

Sub-contractor workers are also included in Delta Freedom of Association Policy since all the subcontract agencies are required to comply with RBA code of conduct where Freedom of Association is part of the code. According to the Bureau of Labor Relation's database, it is found that subcontract workers exercise their right of association by registering 3 new labor unions in 2022. However, according to the nature of subcontractor workers who frequently come and go among different agencies, members of these subcontractor unions is lower than 2% per total workers of each agency (headcount as of December 2022).





Paint for Good Deed by Oom Plaeng group: Oom plang group founded by Delta's engineers and technicians since 2012. The name Oom Plaeng means "support the better change". The group had continuously helped to paint other temples. 60 members from manufacturing-orient functions pay their holidays in turn to paint over 10 temples a year. All the resources used by this activity are donated and voluntary supplies by the group's participant.

To keep the group's outstanding result and strong action, Delta partially supports the paint expense and arranges free transportation to the group. In addition, Delta donated write-off office and computer supplies to the group or donated to communities in rural areas. In 2022, the group collaborate with Delta labor union to implement renovation activities for rural communities' better quality of life.



Celebrating the Amazing Culture and People of Thailand at Songkran and May Day: After the long period of COVID-19 pandemic since 2020, Delta resumes 100% on-site work in October 2021. It was noticed that the working atmosphere was full of anxiety. In 2022, we hold a Songkran festival at Delta. Songkran is a highlight of the year for us at Delta Thailand. Everyone is invited to come to work in colorful festive costumes year and take part in traditional water pouring blessings for elders, management in our case:), and even have fun water fights. It's a time of laughter, getting drenched and enjoying the vibrancy of this amazing Kingdom.

Delta noticed that [A diverse and inclusive culture in the work environment](#) will help to promote collaboration. Having an empowering environment at the workplace proves to each of our women that they can contribute to their own professional capability and assist the company in creating success. The company took part in this initiative by promoting this initiative as part of Delta DEI (Diversity, Equity & Inclusion) program.



Delta Electronics India organized a special Diwali Pooja and decorated the office to celebrate the auspicious festival of lights: The festival of lights and one of the major festivals celebrated by Hindus, Jains, Sikhs and some Buddhists, notably Newar Buddhists. At Delta India, our employees with different ethic, belief and religions celebrate Diwali together. The idea of this 1st official Diwali at our site is to share prosperity and encourage their stakeholders and employees to get through the health crisis together.

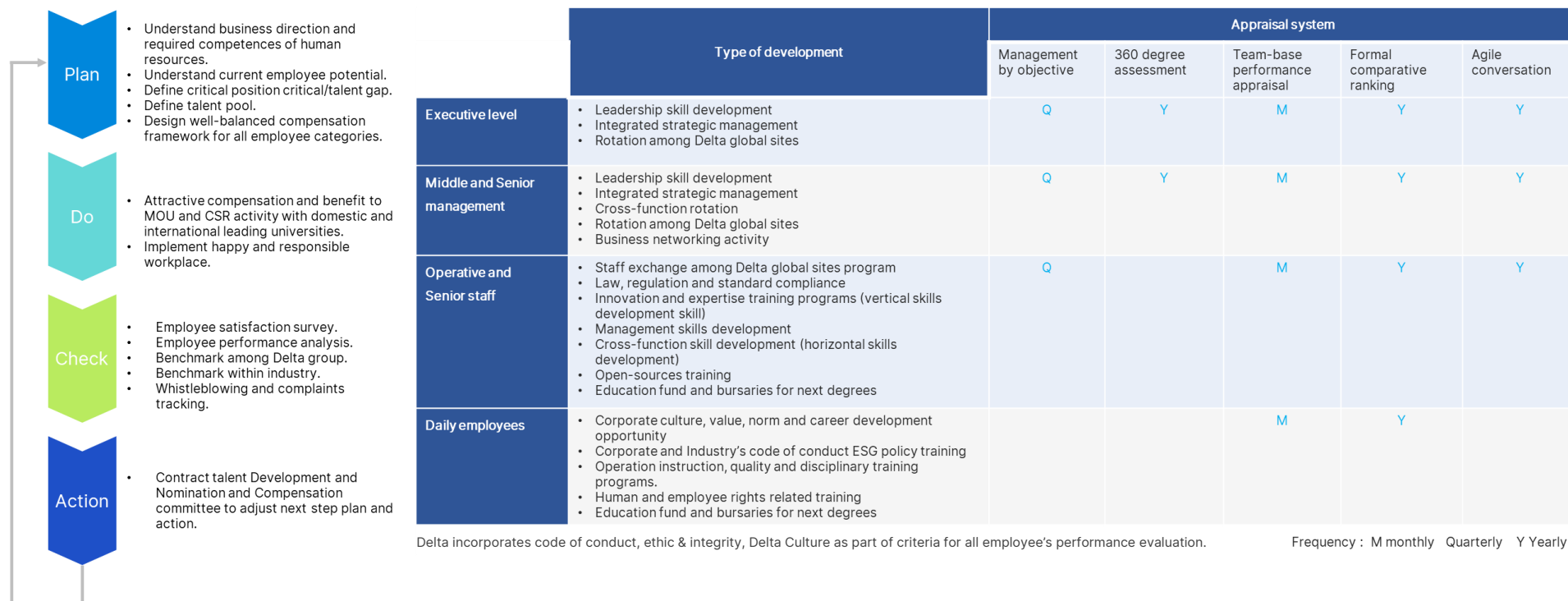
8. Training Opportunity

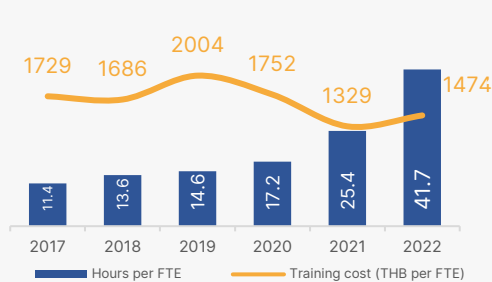
To ensure equal opportunity for employee development and provide job-related training to enhance employee capabilities and skills. The company aligns its employees' capabilities with the company's innovation and eco-efficient operation, Delta keeps developing our employees' both hard skills and soft skills. The company doesn't not only keep focusing on deepening employees' capability, but also inspiring employees' motivation and potential to fulfill continuous growth.

To realize the organization's long-term development and conquer future challenges, we provide a comprehensive and solid training platform to our employees. These training resources are distinguished into several different approaches according to different strategies and goals. On one hand is to diminish the gap between individual contribution and organization's need, on the other hand is to incubate core advantages for business's future transformation and environment challenges. According to the level-based human development scheme 100% of our employees receive regular performance and career development reviews annually.

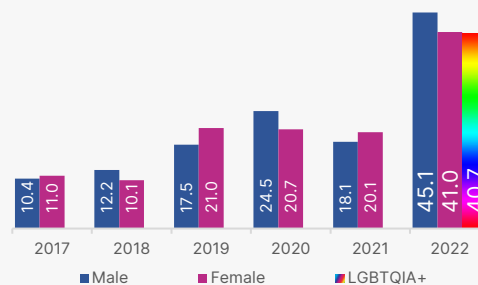
Since 2019, Delta benchmarks its average training our to global technologies companies. To reach the industry's average standard of average training hours, Sustainable Development Committee has proposed related parties to target to 40 average training hours per employee by 2025.

Human Capital Development Measures

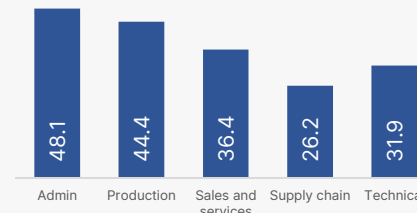




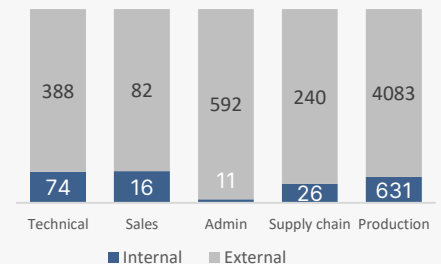
2022 Average training hours per FTE



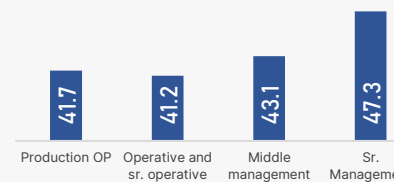
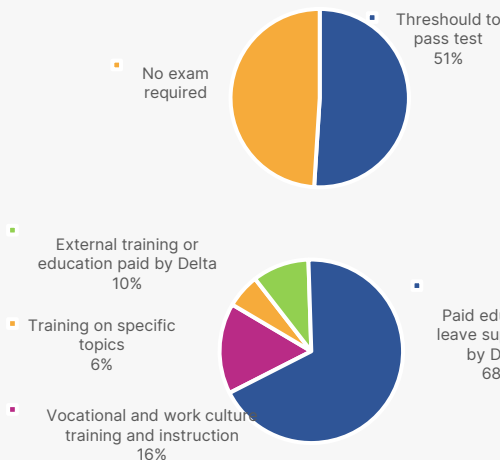
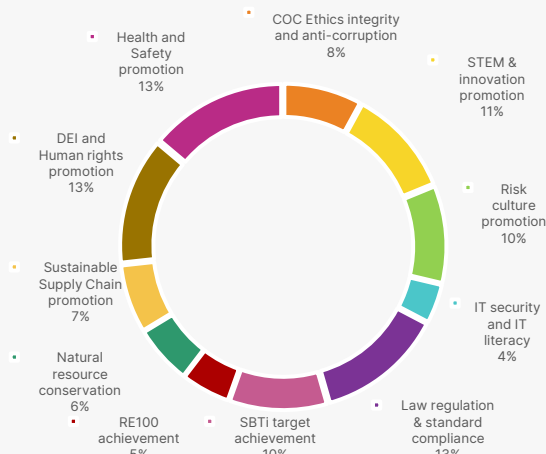
Average training hours by Gender



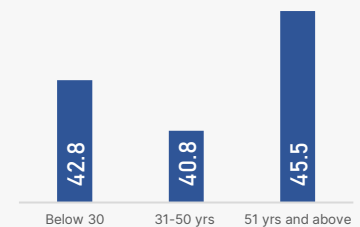
Average training hours by job functions



758 (14.1%) of 6,143 opened positions filled by internal candidates in 2022



Average training hours by job level



Average training hours by age



Remark:

- Cost of training included travel fee for training, training material, training application or examination fee, training special program for specific expertise/ability, and employee's wage calculated based on their paid education leave records.
- The reported cost of training excluded cost of specific training course that managed by our associated companies or paid by using Delta's Internal Carbon Pricing fund such as Product Carbon Footprint Training and verification, South-east Asia sales and supporting function development programs.
- Education paid leave cost = median of entitled staff's hourly wage x an individual education leaves hour.
- Thailand, India and Slovakia (100% of our production sites)'s 2022 total training hours was 946,351 hours.
- In spite of the 7% increment in average training hours per FTE compared with the previous year, our average spending on training and development of 1,474 THB per FTE.
- Average training hour performance cover data of Thailand, India, and Slovakia. By nationality, our employees had 38-42 training hours per FTE in average.

Average hours of training per year per employee

The COVID-19 has been forcing Delta to speed up the timeline of our digital transformations. When heading to digital transformation, and indeed change management in general, there are multiple players, and they all need to be lined up successfully in order to meet the organization goals. One of the most overlooked elements in digital transformation is the role of training new employees and providing ongoing professional support to existing ones. This is not only for Delta growth, but also for the employee decent work in better career path with us. In spite of the substantial increment of our workforce, Delta achieved its target of 40 hours per person per year by increasing the variety of training courses and approaches regardless of our employee's gender, age, job function or nationality.

1. Vocational training, work culture, job-base and on-demand training

Orientation

Deep understanding of the company's value, goal, mission and code of conduct encompass our employee to provide better products and service to customers, uphold the company assets, interests and image and contribute to the sustainable operation and development of the company. In addition, sustainable development direction, environment and safety regulations, employees' rights, human rights, welfare and benefits, Information security measures, were included into the orientation program for 100% of new-hired employees. In 2022, 331,426 training hours of orientation had provided to Delta new employees.

Statutory and ethic training:

Delta provides a series of timely training according to statutory requirement and RBA regulation. Every employee shall attend at least 1-hour annual training regarding to RBA regulation (including to uphold Human Right). In 2022, 13% of our 749,721 total learning hours were statutory training hours recorded. Key courses related to this category of training included training of Labor Relation Act, Workmen's Compensation Act, Labor protection Act, Social Insurance Act and Responsible Business alliance Code of Conduct.

Professional competency-based

Training Delta prepares employees for equipping qualified capability by different segment, including Manufacturing related, Sales and Marketing related, supporting related and managerial related training programs. A training roadmap and a clear career roadmap are also delivered to employees during the performance management cycle. In 2022, advance skill and training courses such as statistical process control, why-why analysis and ISO45001 internal auditor courses had arranged to strengthen our expert in various functions. 100% of security personnel are trained in human rights policies or procedures.

Leadership competency-based training Design for front-end Research and Development leaders, entry-level supervisor, middle and high-level manager. Focus on corporate's strategic goals, core value and competency delivery aligned with Corporate Multi-language training programs is also delivered. Since the company aims to growth with green solutions assembled from our South-east Asia and global manufacturing site, we add periodic courses and activities to boost inter-site collaboration.

Self-learning and experience-based Learning

To boost up expert and professional pools in various functions, Delta encourages our employees to attend advanced or continuing studies, provide a sponsorship and flexible working hour program for employees. Delta leverages Corporate and outside learning platforms to provide employees an open learning resources so that employees can learn along with individual needs without time or location limitation. Travel fare, accommodation expenses and meal allowance for supporting employee's domestic and oversea learning for each level of employees had clearly announced and available on Delta's intranet. With IT security practice, the internet access authority had granted Delta's talent and specialists when specific on-line learning channels required.

In addition to the variety of training course, Delta utilize its IT platform as the key tools to reach the set target. We synergize global sites' best practices, knowhow and lesson learned and share on e-learning platform called "Delta Academy". 3,331 training Medias had prepared in English, Chinese, German, Slovak, Thai and Japanese to ensure Delta's global employees understanding on the practices shared.



Delta also constructed an internal Delta Management System (DMS) for storing data in the traditional sense and integrating functions for smart search, document management, and expert communities. It greatly increases internal knowledge management, promotes inter-department information exchanges, and optimizes internal communication channels. The DMS accumulated 230,085 records of knowledgeable documents and research in 2022. The number of users steadily grew and the number of users in December 2022 increased by 23% from the same period last year. To encourage employees to use the DMS platform, we organized the “Gems Hunt” event for connecting employees through “use”, “question”, “sharing”, and “approval” gems that reward employees for their use of the DMS platform. We then used the gems to analyze user behavior and promote platform optimization. To ensure employee’s career development, Delta assess the various tools to 100% of our employees that companies use to measure individuals’ performance and to what extent these tools are applied throughout the organization.

Delta Thailand organized Creative e-learning Media Contest to increase the variety of our on-line training course that can access from anywhere. From 60 media submitted, 5 winners who get higher vote from both employees and judging panel had awarded monetary and non-monetary prize. In addition to the variety of creative media and training topics, our employee’s interest in learning from anywhere was significantly increased.



Programs for upgrading employee skills and transition assistance programs.

Delta joined hands with the International Labor Organization (ILO) to implement MOU of “Women in STEM workforce readiness and development program”. ILO addressed that the automotive and ICT, IT-BPO, and electrical and electronics sectors are identified as high-growth in Indonesia, the Philippines and Thailand respectively, presenting significant projected skills gaps and opportunities for growth for women over the next decade. These sectors are rapidly evolving and becoming more innovative, requiring critical soft and technical STEM-related skills. As a result, low skilled jobs are declining, and traditional blue-collar jobs are shifting to more skilled occupations. Therefore, the program aims to improve enterprises’ productivity along with career prospects of women in STEM sectors. In turn, productivity is a key source of improved living standards for women and also a major contributor to economic growth. The second phase of MOU aims to upgrade woman employee’s soft and technical STEM-related skills. This stage of training will enable opportunity for those who are already in employment but in low-skilled jobs

with limited mobility to expand their career. The course comprised of High-end technical skills, or leadership and managerial training for those who are already in supervisory or mid-skilled positions.

As the Covid-19 fasten the technology transformation as well as our timeline to implement Delta Smart Manufacturing (DSM), STEM knowledge is vital for our worker’s decent work. Data science, basic statistics, Basic caramel for Automatics Test System and PLC (Programmable logic controller) programming training was added into our training schedule last year.

2. Paid education leave provided by an organization for its employee

According to our growth and role of Delta Thailand as headquarter of the South-east Asia Region, diversity of knowledge of our workforce is highly required. Delta provides paid education leave with a specific leave code. In 2022, 10% of our total learning hours were from paid education and seminar leave.



3. Training or education pursued externally support

In addition to educational bursary granted for our employees annually, to create experts in specific field that investment in on-site training is not worth, the on-site training resources do not meet the minimum requirement of the training scope, The expertise of trainers in the training company is not sufficient or exact certificate or examination or license required by law and regulations. When training with external parties is required, Delta pays for travel fees, expense of training material, the course enrollment and the examination application.

In 2022, we engage specialists from ShengJing Refrigeration and Air Conditioning Technician Office to provide product carbon footprint (PCF) training and consultation accordingly to ISO14040 and ISO14067 protocol. Accurate and verifiable PCF should help us to meet customer and new regulations requirement, concrete our competitive advantage, strengthen our strategic plan to carbon neutral and enrich effectiveness in supply chain management. 249 engineers, buyers, compliance officers and managements and executives participated 2 full-days PCF training and on-site workshops. 10 PCF leaders has developed at Delta Global sties to lead and fasten PCF data collection and ISO 14040 and ISO 14067 verification. Delta target to have 10% carbon reduction for every verified target product in next 3 years.



As part of Product Carbon Footprint training, the team members explored HVAC system, type of refrigeration used for manufacturing process of the target product in 1 year and emission treatment process.



Over 700 sales representatives at our South-east Asia offices participated a series of cross-functional and external pursued training to enhance "Value-based Selling training". The training series aimed to shift Delta's competitive focus from cost to value enabled Delta to build sustainable competitive advantages, foster customer loyalty, and achieve long-term success in an ever-changing market. The success of this training can be illustrated by our steady growth of Green revenue.

4. Training on specific topic

Up to our focused risk, business context, updated law and regulations and stakeholder expectation; training on specific topic has planned. Code of Conducts, Anti-corruption, Human right policy, RBA and IT security courses were implemented by 100% of our employees.

In 2022, to fasten the growth of Green revenue, Delta allocate higher investment in Sales representatives' Value-based Selling training. Series of training and workshops with variety frequency, ESG aspects and skills had designed and deployed to our SEA sales teams to enrich their deep understanding in Delta product and services ESG value and how to provide informed decision making to the customers. Delta's ESG strategy, our committed SDG, megatrend and global challenges, WEF risk disclosure, products and service available at other sites; for instance, are part of Monthly SLCT Meeting, bi-annually SEA sales meeting and Annual Seminar.

9. Health and Safety

To provide a safe and healthy working environment that is in accordance with the required safety and health regulations. Furthermore, we strive to establish and maintain an occupational health and safety management system that defines operational procedures and monitors the implementation of continuous improvements in safety and health performance. The company organizes internal occupational safety health and environment inspections carried out at each plant in accordance with the [Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment B.E. 2549 \(A.D.2006\)](#) and [OHS Act B.E. 2554](#) which in-line with [ILO's Code of Practice on Recording and Notification of Occupational Accidents and Diseases \(Code of Practice\)](#).

Delta's corporate mission is "To provide innovative, clean and energy-efficient solutions for a better tomorrow" by continuously implementing world-class corporate social responsibility and sustainable development. The Company complies with the [Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment B.E. 2549 \(A.D.2006\)](#), Environment Management standard (ISO14001), occupational health and safety standards ([ISO45001](#)) and standards of the industrial sector ([Responsible Business Alliance-RBA](#)). Delta also considers occupational health and safety risk based on our employee's risk exposure in each production and business process to ensure the safety and health standards of food, water and overall employee well-being at the workplace. According to our [Environment, Health and Safety public policy](#), 100% of our employees and subcontractor at our major manufacturing sites in [Thailand](#), [India](#) and [Slovakia](#) complies with ISO45001 standards.

100% of Delta global manufacturing workforce (including sub-contract workers) is controlled by the organization that are represented by formal joint management worker and Environment Health and Safety Management Representatives (EHSMR) Committee. All the member has completed the training program of Occupational Safety, Health and Environment Committee Training conducted by a qualified trainer/ training company in accordance with the Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety Health and Environment B.E 2549. To ensure the quality and effectiveness of EHSMR work, the committee members are requiring participating the monthly meeting. Minutes of these monthly meetings with the committee member attendance will be reviewed by the Chief Operation Officer.



In 2022, our EHSMR committee agreed to decentralize the ESH control power to each factory for agile response to the rising health crisis. This inclusive committee consists of 27 employer representatives and 30 employee and labor union representatives, 3 committee members and 4 secretaries to the committee. These committee members have qualified according to legal requirements. In addition, essential training such as corporate governance policy, legal and standard requirement, human rights, industry code of conduct and other ESG targets has communicated and trained. The committee is responsible for established policy, activities and measures implemented for the prevention, investigation, audit and management of emergencies, work-related accidents, illnesses or injuries. Previously, all the proposal from the committee must be approved by the Chief Operation Officer, the only chairman of the committee. With this EHSMR organization decentralize, implementation of safety procedures for risk-exposure processes, machinery and labor-intensive tasks, management of changes and any activities in resemble mean will be accurately and quickly executed accordingly to their local context, nature of their operation and emergency. The EHSMR committee reports to the Chief Operation Officer monthly. Annually, they report on key activities and performance to the Sustainable Development Committee.

The EHSMR committee provide various [communication channel](#) for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals. In addition, these communication channels can be utilized by workers who which to remove themselves from work situations that they believe could cause injury or ill health.

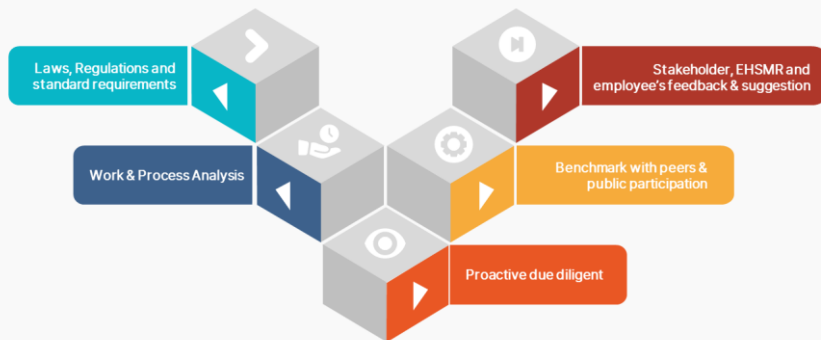
	 Safety	 Health	 Environment	Reporting line / communication channels
Daily	<ul style="list-style-type: none"> Morning talk (in production line) Stationary 6S audit ESD discharge before operation process Machine and working area safety inspection Forklift and its route inspection Personal protection equipment inspection Sub-contractor's work permit review Security personnel meeting COVID-19 risk screening 	<ul style="list-style-type: none"> Drinking water quality inspection Canteen, food and cooking areas hygiene inspection Clinic and ambulance readiness inspection Breastfeeding corner inspection 	<ul style="list-style-type: none"> Incoming hazardous substance inspection Chemical storage inspection AHU system inspection Air pollution and related factor inspection* Scrap room inspection Waste and effluence record 	<ul style="list-style-type: none"> Supervisor Related-department manager
Weekly	<ul style="list-style-type: none"> Facility team (+6S team) meeting* Operation weekly meeting 	<ul style="list-style-type: none"> OHSAS team meeting Operation weekly meeting 	<ul style="list-style-type: none"> Environment team meeting Operation weekly meeting 	<ul style="list-style-type: none"> Department managers
Monthly	<ul style="list-style-type: none"> New staff orientation First aid kits, medicine and stretcher inspection Eye-wash basin at chemical storage inspection Risky workstation and injury rate review ESHMR Meeting 	<ul style="list-style-type: none"> New staff orientation Emergency route and related facilities inspection Quality pregnancy knowledge training Pest control inspection Injury and disease rate review ESHMR Meeting 	<ul style="list-style-type: none"> New staff orientation Stationary 6S audit Chemical spill inspection Energy, water and waste management performance review ESHMR Meeting 	<ul style="list-style-type: none"> Plant manager EHSMR committee Operation vice president
Yearly	<ul style="list-style-type: none"> Stakeholder engagement (labor union meeting, safety week, safety home trip activity, community interview, regulator activity participation, occupational and executive safety personnels training, supplier safety audit, sub-contractor training) ISO45001 standard compliance review Building and alarm system inspection Fire drill and evacuation rehearsal Emerging risk, risky workstation and injury rate review Radiation inspection Work environment inspection Transportation condition inspection 	<ul style="list-style-type: none"> Stakeholder engagement (safety week, injury case interview, regulator activity participation, supplier health and welfare audit) ISO45001 standard compliance review Influenza and cervical cancer voluntary checkup Injury and disease rate review General, emerging risk and risky group health checkup Social security rights training 	<ul style="list-style-type: none"> Transportation condition inspection Energy, water, waste, effluence and GHG management performance review Supplier natural resource and environment management audit Chemical spill case summary ISO14064 and 14001 compliance review 	<ul style="list-style-type: none"> Labor union Related department managers EHSMR committee Sustainable development committee Regulator and public
Irregularly	<ul style="list-style-type: none"> New employee health check Civil construction approval process Sub-contract work permit sampling check Emergency case meeting 	<ul style="list-style-type: none"> Non communicating and emerging diseases training 	<ul style="list-style-type: none"> Stakeholder engagement (education week, community interview, regulator activity participation) 	<ul style="list-style-type: none"> Sustainable development committee Regulator and public

Our communication channels to for worker and related stakeholder to contact EHSMR committee are as following:

- email: OHSC@deltaww.com
- Telephone: +662 709 2800 ext. 6401
- Delta Employee relation official Line Group
- Suggestion box
- EHSMR worker representative at employee's site

Delta established various periodic activities and audits to ensure inclusive safety and well-being through our operation

Health & Safety Risks



Delta also organize [cross-site audits](#) conducted jointly by the OSH committee members and audit personnel accordingly to formal agreement. Complete audit plans, the task force audits Environment, Safety and Health (ESH) documents, the results of risk assessments, Safety Health and Environment control and operations, monitoring and measurements, as well as the work environment, wasted water quality, air quality, noise level, lighting sufficiency, the equipment and onsite operations, has implemented as due diligence to ensure ISO45001 management system fulfilled and related [OHS risk identified](#).

In addition to laws and regulations, standards, guidelines and industry code of conduct we adhere to, work and process analysis and internal due diligence to ensure our worker's wellness; delta also engage our stakeholders to learn of their expectation. Feedback from suppliers, customers, visitors and investors, for instance, helps us to achieve a high standard of SHE management.

Benchmarking with peers both in the same industry and company with the same size in other industries allow us to fast track develop our employee's health and safety. For example, our quick response to prepare a safer workplace for mitigate the COVID-19 spread have been learned from our peers in other countries' that the outbreak has taken place prior.

At Delta occupational health, safety and environment is included in our normal risk assessment process. Find additional information in our [Annual Report](#) page 57-65.

Sample of preventive action we implement in 2022 to mitigate COVID-19 outbreak risk at workplace.

สิทธิทำฟันประกันสังคม
ชุดหินปูน ฟรี | ไม่ต้องสำรองจ่าย
900 บาท

*สำหรับผู้ประกันตนที่ยังไม่เคยใช้สิทธิในปี 2565

ในวันที่ 14,20-21 ตุลาคม 2565
เวลา 05.00-15.00 น.
ณ ลานหน้าโรงงาน เดลต้า 1
Free Dental Service at DET1
on Oct 14,20-21, 2022

**วิธีปกป้องตัวเองจาก
การเบียดเสียดของฝูงชน**

**HOW TO PROTECT YOURSELF
DURING A STAMPEDE?**

1. Don't go against the flow
2. Keep your arms in front of your chest to protect your heart and lungs from being compressed
3. Keep calm
4. Try move to the edge
5. Avoid any choke point
6. If you fall down, try to get up. If you cannot then lie on your side and protect your head, heart and lungs

หากไม่อาจ หลบหนีได้
หากไม่สามารถลุกขึ้นได้
ให้นอนตะแคง หักข้อ
และกดตัว ยามเบียดเพื่อ
ปกป้องหัวใจและปอด

บริษัท เดลต้า อีเลคโทรนิคส์ (ประเทศไทย) จำกัด (มหาชน)

**ขอเชิญพนักงานทุกท่านเข้ารับการตรวจสุขภาพ
ประจำปี และตรวจปัจจัยเสี่ยง ปี 2565**

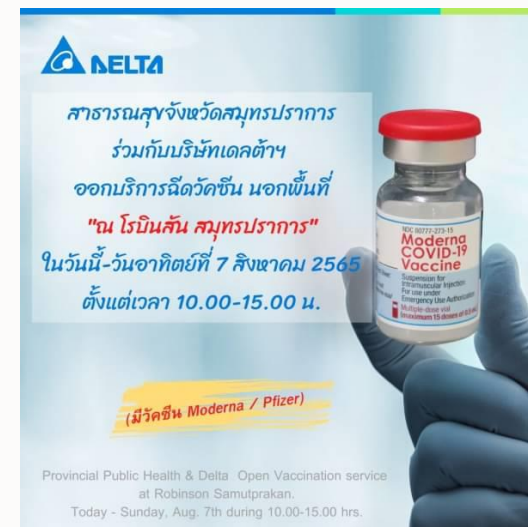
ในวันที่ 27-28,31 ตุลาคม
1-3 พฤศจิกายน 2565
เวลา 05.00-15.00 น.
ณ โรงอาหาร เดลต้า 6

"Annual Health Checkup Year 2022"
On Oct 27-28,31 and Nov 1-3 2022

Relief of COVID-19 Outbreak

During the reporting period, COVID-19 pandemic was still ongoing, and its broad and long-term impacts. Delta targets 0 fatality from COVID-19 at our workplace until 2025 when nationwide vaccinations should be complete. Delta announced the addition of the United Nations Sustainable Development Goal (SDG) number 3 “Good Health and Wellbeing” as a target SDG in 2021. As the COVID-19 pandemic, employee and stakeholder health is a top priority for Delta Thailand. Delta offered free voluntary COVID-19 testing and vaccination for over 90% of employees, subcontractors and other workers such as food vendors, security guards and construction contractors. On January 30th, 2020, Delta Electronics, Inc. established an internal global command center responsible for the planning, implementation, execution and enhancement of countermeasures to limit the operational and employee health risk of the current Novel Coronavirus crisis. The command center has developed “Delta’s Novel Coronavirus Prevention Plan” for the Company’s global sites. The aforementioned plan includes a crisis alert grading and response system, roles & responsibilities (R&R) for prevention task forces, occupational environment and sanitization management, employee healthcare monitoring and management, business trip and attendance management as well as an internal/external communication management system regarding the crisis. These measurement to response to the pandemic will be utilized as our master plan to response to other potential communication diseases resulting from climate change in the future.

Delta has communicating constantly with global customers, institutional investors, and other stakeholders in regard to the current Novel Coronavirus crisis and the related impacts thereof. A dedicated section containing the most updated information regarding this matter has also been implemented on Delta’s global website.





As of the first quarter of 2022, over 99% of Delta employee and subcontract worker have at least 1 dose of vaccine, 92% have 2 doses while another 75% have more than 2 doses. This is the co-effort between Delta and the Ministry of Labor to boost up herd immunity in Samutprakarn and Chachoengsao provinces. At the end of December 2021, 75% of our workers in average at our major manufacturing sites get at least 1 dose of the vaccine.

Up to 31 December 2022, there no recordable fatality case of Covid-19 accordingly to [OSHA's Emergency Temporary Standard](#) (ETS) at Delta's major operation sites in Thailand, India and Slovakia. However, Delta inaugurated Emergency Plan for Communicable Disease Plan Procedure (Document number 06-046) to prevent the risk of any emerging communicable [diseases spread hasten by climate change](#) in the coming future.

Employees well-being vs Global living cost crisis

In addition to [facilities upgrade at workplace](#), we boost up the Happy 8 activities to relief worker employees after we resume 100% onsite operation in October 2021. The Happy workplace initiative is not only for better mental health, but for preventing non-communicable disease and financial problem that should be the consequences of the outbreak.

Long economic stagflation, livestock diseases, and war between Russian and Ukrain indirectly impact Thailand and South-east Asia living cost such as increasing price of oil, electricity and food leading to the higher living cost for all workers. In November 2022, Delta Thailand management has decided to adjust the price of food in the canteen. The price of main dishes will increase by 5 baht. However, to support employees the company offers to pay 5 baht for "First time per day" only. Employees must scan their employee card at the food shop while purchasing food to receive the discount 5 baht each day.

The changing narcotic list in Thailand

On August 27, 2022, the Kratom Plant Act B.E. 2565 (2022) came into effect. This act has been designed to encourage economic activity related to Kratom, by regulating the trade, sale, consumption, study, and advertising of Kratom leaves (alone or as an ingredient in food) in Thailand. In June 2022, Thailand's Food and Drug Administration officially took cannabis off the narcotics list, making possession, cultivation, distribution and consumption of cannabis all legal under specific conditions. Though the mentioned herbs are useful for medical purpose, they may impact worker response to any risky conditions especially machinery incident. In spite of the changing law, Delta adhered to Thailand's White Factory practice. To prevent any occupational safety incident, ganja, hemp and kratom have strictly prohibited at our workplace.



Emergency Preparedness and Recovery Plan

Due to the changing context of the world and business, precaution of all the possible emergency case is to ensure well-being of our employees and those who work at our site including business continuity. Delta is spotting, allocating resource and plan preventive action for hazards from potential emergencies which include fire, accident, chemical spill & chemical waste, explosion, flood, labor strike, earthquake, tsunami, sabotage and terrorism, hurricane, depression, thunderclap, radiation spill and plague. As part of worker's [Health and Safety Manual](#), we publicly disclose our emergency preparedness plan to encourage new comer, business partner and related parties that all the worse scenario has been in our focus, necessary response measures and resources has planned to smoothen our business process.

To evaluate, remove and control these risks before any possible harm, Preparedness Procedure has established as regulation and legislation for preventing to localize any emergencies that may arise and if possible, eliminate them; (b) to minimize the harmful effects of an emergency on people, property and the environment. According to the company's public Human Right policy, Delta factories in Thailand has fully incorporated human rights principles, namely RBA's Code of Ethics and ILO's labor standards, into the Company's operations and developed our human rights policy based on the UN's Guiding Principles on Business and Human Rights – UNGP.

In parallel with emergency preparedness and response plan, Delta implements business recovery plan for business continuity. Since 2018 when the pollution issue passed without any impact to our employee's health nor Delta's operation, the company prepares 5-year roadmap to prepare the organization to be ready for such. This roadmap includes business process digitalization with IT security, occupational health and safety standard upgrade, focusing on science-based study, disseminating eco-efficient practice to the company's stakeholders, and additional performance indicators to be report in Sustainable Development Committee.

From the unseasonal rain, sever weather and flood issues, Delta found a new business opportunity in "Smart Water Level Monitoring System" In spite of which response to local emergency needs. Deta Smart Water Level Monitoring System which leverages Delta's industrial cloud router and DIACloud service to offer precise monitoring and control for pump stations. This helped provide the Bangpoo Industrial Estate's more precise data on water levels in the canal network to prevent flooding. Meanwhile, with close collaboration with Bangpoo Industrial Estate, Delta and neighbor factories should have sufficient time to plan necessary arrangement to prevent any loss including health and safety issue resulting from flood. In 2022, there was no loss nor financial impact from unseasonal rain and flood events.

For additional information, suggestion and complaints on environment, health and safety issue; our Environment, health and safety team is ready to help at White boxes in canteen, office and production line; email OHS@deltathailand.com and HR.grivience@deltaww.com.

Promotion of worker's health

Delta provides health and safety services to ensure workers' long-term healthiness and well-being. The service includes free personal protection equipment (PPE), medical fee, dental fee, and insurance, full-time safety officers, medical room, free annual health check, first-aid kit, on-site Automated External Defibrillator, AED, parking lot and rest room for disables, on-site ambulance and work injury leave without impact to employee's incentive and bonus.

In addition to the mention basic health and safety service, Delta also offers voluntary health promotion services and programs to workers. Since 70% of our employees are women, major programs to promote worker's health related to quality pregnancy and motherhood.

By 2030, Delta implements various activities to ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs.

Woman Health and Birth Plan Training

The health and well-being of a mother and child at birth largely determines the future health and wellness of the entire family. The outcome of childbirth, however, is not the only factor of importance in a mother's well-being.

In preparing to give birth, women, knowingly or unknowingly, develop a birth plan. Birth plans training generally include information such as resources required for reproduce, where a woman wishes to give birth, who will attend a birth, and what forms of medical intervention and pain relief will be used. The birth plan is a tool that outlines a woman's expectations for

her birth and can open communication between a woman and her care providers, providing the woman with knowledge prior to giving birth.

Delta also collaborates with Thailand's Department of Health to hand out Prenatal Vitamins to its female employees who plan to have kid. Delta female workers at the age 20-34 year who plan to have kid will be trained and followed up to have proper nutrition.



Quality Pregnancy Program: Due to demographic change and technology market demand ramp up, female worker in the industry exposure to risk of inequality pregnancy. It is broadly forecasted that Thailand's population grew only 0.4% in 2015, down from 2.7% in 1970. If this trend continues, the annual population growth will be down to 0% in 10 years. This situation should be worsened with inequality pregnancy. For instance, a quality pregnancy is vital for industry to support the countries to have sufficient population to grow the country.

Weekly, these applicants will get Fero-Folic vitamin tablets. The Fero-Folic supplements help with prevention and treatment of iron deficiency anemia and to supply a maintenance dosage of folic acid. The company also provides training for new-faced mothers to handle their pregnancy and grow their children with quality of life.



Welcome Delta's Child Program: Delta provides monetary and non-monetary giving to mother who has a newborn baby to maintain their quality of life after the delivery period and impact both their health, mental health and financial status. In return, this program helps us to maintain an outstanding rate of employee return to work after give birth.



Free Cervical Cancer Screening

by Prep and PAP methodology. Cervical cancer is the fourth most common cancer in women. According to the World Health Organization's [study in 2018](#), an estimated 570,000 women were diagnosed with cervical cancer worldwide and about 311,000 women died from the disease. When diagnosed, cervical cancer is one of the most successfully treatable forms of cancer, as long as it is detected early and

managed effectively. 2022 was the 7th year we arrange a voluntary on-site free cervical cancer screening for our women.



Breastfeeding Corner: Delta female workers at the age 20-34 year who plan to have kid will be trained and followed up to have proper nutrition. Delta has established breastfeeding corners since 2008 in support of the Ministry of Public Health's Quality of Life for Working Woman Promotion Project. Delta encourages and facilitates its employees to provide their infants breast milk for at least 6 months after birth.

The breastfeeding corners are rooms where mothers can extract and store breast milk during working hours. This saves employees THB 4,600 per month in expenses for infant formula and contributes to the environment by saving water that would be used to make infant formula and preventing the release of greenhouse gas from infant formula containers.

As part of breastfeeding program, ex-breast-feeding corner users also help to consult the new-face mother to fully utilize the breast-feeding corners and other related facilities. These tangible results have earned Delta recognition as an industry

role model and as a coach for organizations in Thailand on breastfeeding management and promotion at the workplace.

Delta Thailand is under process to consider parental leave for male workers to strengthen our initiative to provide good health and well-being.

โครงการดูแลองค์กรแห่งความสุขอย่างยั่งยืน HW8



Happy workplace: Our Employee is our innovation creator and the key factor to leverage the company's sustainable achievement. Delta Thailand always pays its attention to human resource development with clear target and strategy accordingly to our Group-wide strategy. This will be another way to facilitate the organization to continuous and sustainable growth. The company establishes a [Happy Workplace policy](#) to continuing its human resource retention activities based on "Happy 8" guidance. The "Happy 8", the guide to human life's balance, aims to encompass our employees to be happy in their 3 aspects of life. The overlapping aspects: personnel aspect, family aspect and social aspect respectively, should be managed to be in balance. Healthiness, well-being, understanding, morale and

professionalism in one's career will result in employee's engagement and retention which will drive the organization to sustainable growth.



Discount from local health-promotion businesses : As extensive program from happy workplace and "My Club" activity, Delta collaborated with local businesses e.g. football fields, in-door gyms and swimming pools to provide special discount for Delta employees. All level of our employees, sub-contract workers and our colleagues from other countries who came to Thailand can easily receive 10-15% discounts from these businesses by showing Delta employee badge at the reception points of participated businesses.

2022 Incident investigation



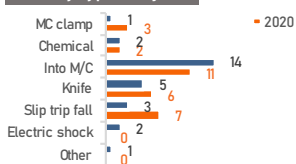
24,241,821
Working hours in 2022

Delta Thailand Employees

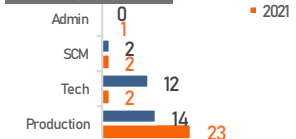
Sub contract workers

21,363,719
Working hours in 2022

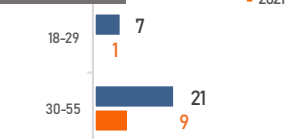
Case by type of injuries



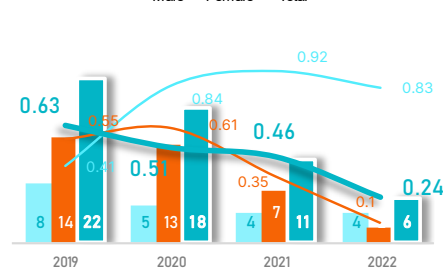
Case by function



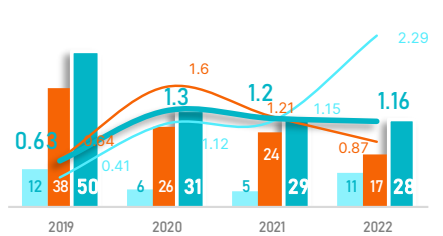
Case by Age



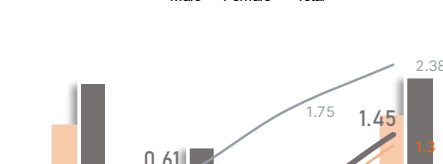
Injury Frequency Rate



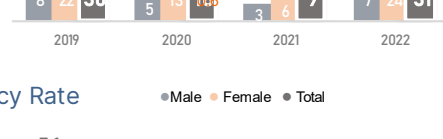
Injury rate breakdown by gender



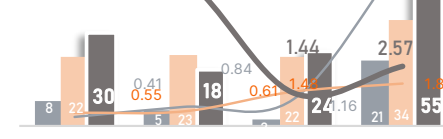
Case by type of injuries



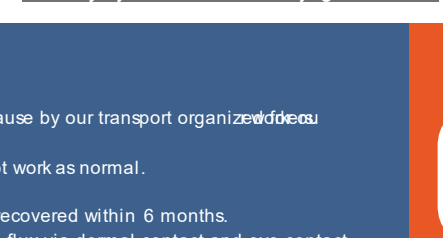
Case by function



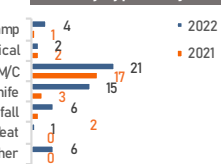
Case by Age



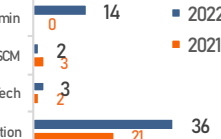
Injury rate breakdown by gender



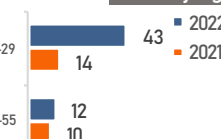
Case by type of injuries



Case by function



Case by Age



Hierarchy of Controls
for
Management of Change

1. Data collected by Safety officer in accordance with OSHA data collection methodology
2. 2017-2018 Close call data is not available
3. Delta's scope of injuries investigation include commuting incidents which may caused cause by our transport organization
4. Delta employee injury rate calculated based on 1,000,000 working hours.
5. We count the recordable case since the day our worker including sub contract worker can not work as normal.
6. The reported Injury statistic included all type of sub contract worker and other workers
7. No High consequence work related injury is executed when the injury that worker cannot recovered within 6 months.
8. The chemical caused reported chemical hazard were IPA used as composite of soldering flux via dermal contact and eye contact. Lost days from these chemical hazard were executed to allow the operator to recover from their irritation only.
9. Zero work related illness includes both infectious and non-infectious diseases.
10. Majorly, other accident had been resolved at first stage, they were not counted as recordable injury.
11. The reported injury cases exclude cases resulting from the pandemic.

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- Fatalities
- work related illness
- high consequence work related injury

for both Delta employees and subcontract worker since 2015 when we start collecting ESG data for public disclosure.

Incident Investigation

With ZERO accident target, Delta has safety officer in professional level who had trained in human rights policy and procedure to track work-related injury and plan for the management of change. According to our ESH standard update to ISO45001, we follow up our worker and subcontractor injury base on [OSHA methodology](#). This is not to prove the effectiveness of our strategy, policy, procedure and continuous improvement as our MOC; but also to ensure our smooth operation through worker's health and wellness. Our OSHA statistic did not include those other workers who work at our sites without our control such as canteen worker, nurse, independent auditor who process their on-site audit and agents from import-export firms. Though statistics of these workers have not been counted, the company commits to humane treatment and apply the same health and safety procedure to safeguard these stakeholders from any injury and illness as well. According to the type of injury analysis and the EHSMR consensus, below are ample of what we implement to mitigate the reoccurrence of such cases.

Major causes of injury	Injury mechanism	Our actions
Knife injury	<ul style="list-style-type: none"> Human failure Improper tools/ equipment 	<ul style="list-style-type: none"> Delete all old models of cutter knife in stationery and tools list and replace with safety cutter. Collect back all the existing cutter knives and replace them with a safety cutter. Workers who cut knives are required as part of routine process, must wear cut-resistant gloves and sleeves to protect your hands and arms. Remind the worker that using utility knives to pry loose objects is prohibited. Add instruction of how to use the safety cutter to Safety training material for New Staff Orientation and production worker's work instruction.
Walk into machine	<ul style="list-style-type: none"> Human failure Improper workplace / process management 	<ul style="list-style-type: none"> Workers at the critical station were requested to out from machine at the break (3 breaks a day) Conduct a facility safety audit. Provide safety training to all the workers working at the defined critical station. Establish a safety rout path with signs and paints
Chemical injury	<ul style="list-style-type: none"> Human failure 	<ul style="list-style-type: none"> Workers at the critical station were requested to out from machine at the break (3 breaks a day) Line leaders and supervisors were requested to check their worker's PPE application before working hours. Re-train the PPE training to injured workers.
Being pinched by machine	<ul style="list-style-type: none"> Human failure Improper tools/ equipment 	<ul style="list-style-type: none"> Workers at the critical station were requested to out from machine at the break (3 breaks a day) Conduct a facility safety audit. Replace typical pincher machine with hydraulic machine.

For our worker's work-related injury, Delta fully takes responsibility for our worker's medical expense, remedy action hand facilitates them for compensation from the Social Security Office accordingly.

OHS Training

Health and safety training during the climate transition period are crucial to protect the well-being of workers, communities, and the environment. By prioritizing safety and incorporating climate-specific considerations, we should be able to successfully navigate the challenges of the transition while safeguarding the people involved.

After our especial focus on communicable and emerging disease training in 2020-2021, Delta's backed to our focus to cope with health and safety risk, climate-specific hazards, disaster preparedness, hazard from new technology used in business processes and emergency response and evacuation procedures. Delta provide inclusive and equitable basic health and safety training such as basic fire-fighting, health and safety law, annual fire drill for every workers. In the reporting year, we engage various specialists to provide specific training like Severe weather and flood response plan rehearsal plan, chemical leakage preparedness training. 103,581 training hours (14% of 2022 total training hours) has provided to 100% of our workers without any charge.



Chemical leakage preparedness training



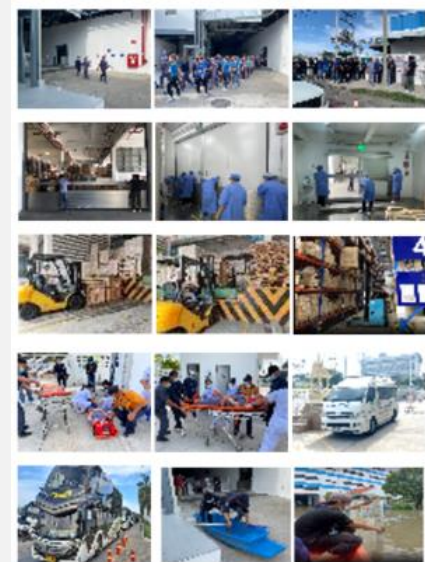
Nitrogen leakage preparedness training



Radiation leakage preparedness training



First-aid, AED and CPR training



Severe weather and flood response plan rehearsal

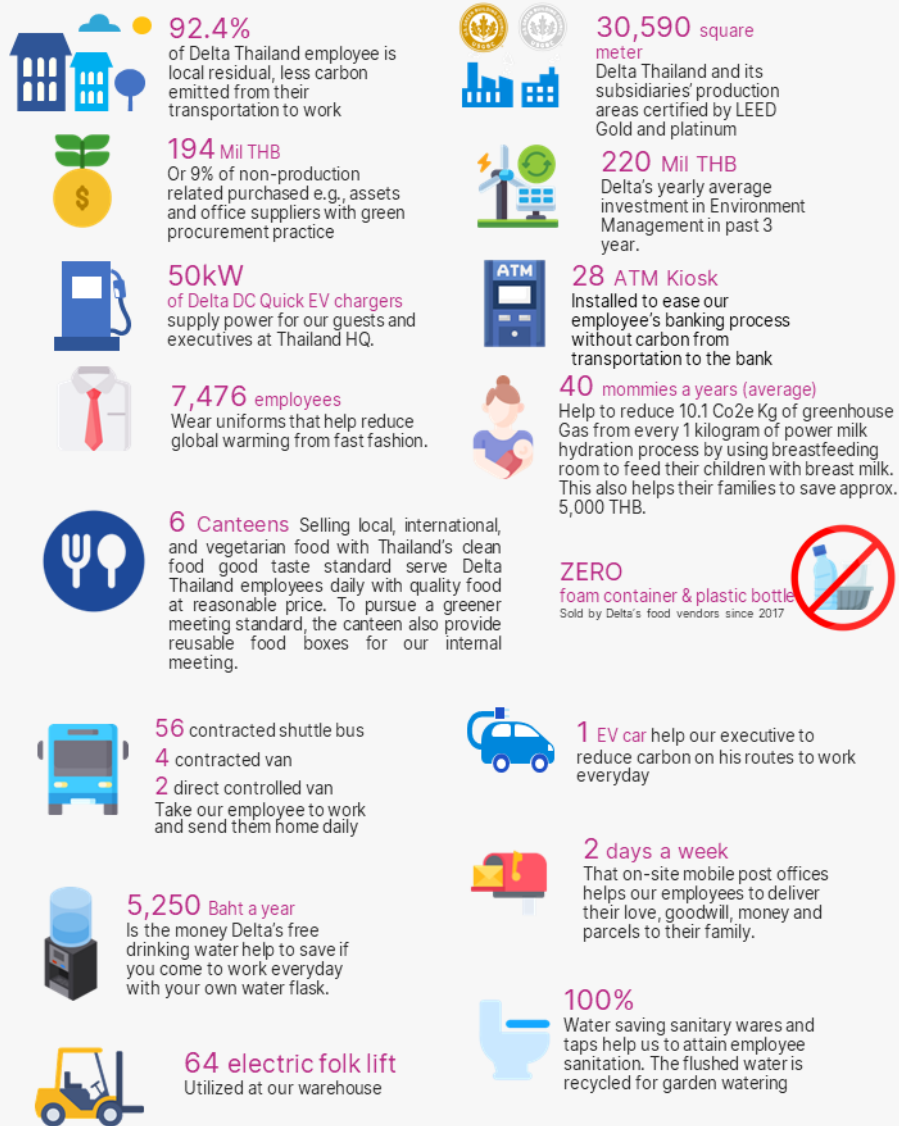


Lockout-Tagout training



Confined space emergency preparedness training

From Eco-Efficient operation to Eco-Friendly lifestyle



Eco-friendly habit cultivation

Delta corporate social responsibility commitment does not mean only natural resources saving in our operation process, but also the devotion to the progress of human culture and technology, the development of society and the economy, as well as the sustainable development of the Earth and its environment. From manufacturing-based practices, the result of our sustainable practice had embedded into every single action at Delta in both organization and individual.

1. Eco-friendly work environment

Delta's work environment and facilities are not only managed for employee's safety, health and well-being, we also manage our work environment to minimize waste and pollution which may occur from our daily personal life too. Green purchasing products and services that cause minimal adverse environmental impacts. It incorporates human health and environmental concerns into the search for high quality products and services at competitive prices. In 2019, 68% of 194 million baht of our spending solar power and burn in recycling system, 20% was spent for energy star computing devices and testing equipment, 11% spent for high efficiency chiller while another 9% had spent for paper from responsible sources and process, green printing ink, eco-friendly cleaning agent and LED lighting.

Delta HQ (LEED Green Building) invested over 10M Baht to renovate the lobby with the objective to create an environment to remind our employees about energy and environmental conservations and encourage communications and collaborations. The highly connected lobby provides USB charging points, vertical gardens, ample comfortable discussion areas and demonstrations of Delta energy management. In addition to a greener environment, Delta applied its high-efficiency renewable energy, surveillance, networking, display and automation products and solutions to this co-working space to showcase our visitor. To trim down the digital divide, free Wi-Fi is accessible for all employees and visitors by simply applying OTP for security protection.

2. Extension of stuff useful life

Next to transparency, an eco-efficient lifestyle turns out to be everyone's norm at Delta. We realized the decline trend of cash donation request to SD Committee while the trend of circular economy initiative to optimize stuff usage was higher. Various activities were initiated and run by our employees while the SD committee and the company played supporting roles for sundry facilitations backup. Following are samples of key activities to extend usage of stuff in collaborative manner.

To reach our goals, Delta manages food waste processing at our company canteen with a "Food Cycle" model. This brings food waste from our canteens to local farmers to use as animal feed. Our food recycling process benefits local farmers and enables us to reduce food waste typically disposed of as general waste to landfills.

Samutprakarn Province, where Delta's plants are located, is next to the coastline making it suitable for inland fisheries and coastal fisheries. According to Provincial research in 2018, the most common inland fisheries are for the Nile Tilapia fish species which take up an area of around 19,058.76 acres.

Every year Delta sorts around 620 tons of food waste to give to local farmers to use as animal feed. In this way Delta Thailand is able to reduce our waste to landfill and help our community farmers reduce their animal feed costs by 31%. This is a significant economic contribution to our local farm sector of approximately 1,720,000 Baht per year in animal feed savings.



3. Regeneration of natural systems

In addition to well-managed integrative process, location and transportation, water efficiency, energy and atmosphere, material and resources, indoor environment quality, innovation and regional priority, Sustainable site is another significant factor that drive Delta to the first manufacturing factory with LEED EBOM certified From LEED standard, Delta had learned importance of native plants that provide shelter and food. On the other hand, native plants are the determining factor for what local birds, insects, and animals can live within the community. During 2017-2022, Delta replaced its ornamental plants with local plants. The Turf area had limited to 25% of the total vegetated onsite area. Though the company does not use water as its manufacturing factor, our awareness of water conservation has been raised frequently by our investors. Since 2018, the company had consolidated information about water risk at our major operation areas. The study is not only a power tool for us to plan water conservation resources and activities, but also urges us to think about potential indirect impact that we might create to the society and environment.



SEA PODCAST

EP1

2022 DIGITAL TRENDS & METAVERSE

PODCASTER: KRISDY (IT) & JIMMY CM.CHEN (IT)

WATCH NOW!

EP 2. Work Life Balance

Podcaster: David Nakayama

WATCH NOW

EP 3. Embrace Change

WATCH NOW

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[CLICK HERE](#) for installation instructions.

Delta Career Thailand Delta Career Thailand LinkedIn

Since Delta's headquarter is based in Samutprakarn, one of the coastal provinces located along the Gulf of Thailand. We are well aware that mangrove forests are highly diverse coastal ecosystems that play a crucial role as a nursery for marine life, thus ensuring bountiful fishing in the future. Without wastewater from our production process discharged to public water basin and well-control of emission, the company collaborated with Bangpoo Industrial Estate to reforest Bangpoo coastal mangrove forest yearly. In 2022, Delta Electronics (Thailand) PCL. volunteers joined a reforestation activity to support a Bangpoo Industrial Estate Office project to conserve and restore local mangrove forests and canals. Bangpoo Industrial Estate organizes this activity annually to sustain coastal ecosystem and biodiversity with collaboration from business and local communities. However, due to the flood issue, this activity has been postponed by the IEAT in 2022.

4. Sharing best practices

Internal communication is vital for Delta as it enables the exchange of information within our organization. Information sharing can also foster a healthy relationship between two or various parties and improve our business performance across the board. Delta Thailand's labor union has established in 1998 to represent its employees and to encourage effective information exchange between Delta's Employees and Management through various communication channels. This approach does not only promote the participation of multiple parties in collaboratively solving issues, but it also strengthens our unity and contributes to our growth. Delta uses Intranet to communicate with the Employees via our internal portal where information about Delta including its subsidiaries and Delta Group in both local language and English can be accessed, and speedy top-down information transfer is possible.

In addition to the Company's information, Employees can find out about latest announcements, policies, updates, and good practices, code of ethics, guidelines and specific technical information for self-learning on the Intranet. For the convenience of our Employees, Delta's Office Automation (OA system) is accessible through our Intranet to provide an easy-to-access platform for various types of employee benefits offered, such as leave requisition, medical expense reimbursement and travel claim. In addition, since 2016 the company has established its official Facebook page and official YouTube channel to be alternative communication channels for the company's personnel and our business-related parties which can be easily accessed. ESG stories, business moves, events and CSR activities can be accessed easily by our internal and external stakeholders. Up to 31 December 2022, our Facebook posts reached 35,591,688 organic reaches by our employer and stakeholders.

In 2022, we provide SEA PODCAST channel for sharing the experience by our employee. This channel has a variety of speaker's nationality, subjects and languages.

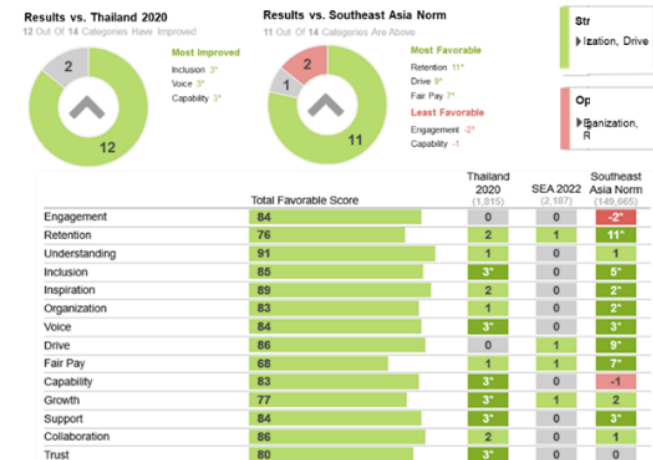
Employee Retention

According to Delta's fair employment policy, happy workplace policy and various programs to ensure our skilled personnel with eco-efficient awareness will be with us in long term, Delta organize the first Global Employee Engagement Survey in 2018. With 100% coverage, the standard method survey was conducted by renowned external consultancy to provide independent and fair analysis. From basic survey regarding Delta Thailand's employees' satisfaction on their work environment infrastructure which cover 28% of global employee in 2014 and 70% since 2016 , We target to expand the survey coverage to its subsidiary in Slovakia, India and Southeast Asia business units to meet 100% in 2020. However, this 100% target has been met since 2018.

The objective of the survey had adjusted to realize its employees' understanding in the company and employee's value, ideals and teamwork which reflect their willingness to stay with us in long-term. For timely response to employee's expectation, Delta plan to conduct this survey every 2 years to retain our healthy retention rate. From our latest study the employee retention rate is significantly relative to the company's strong return of human capital rate at 6.5 in average in past 3 years.

In 2022, Delta utilizes a [third party engagement methodology and software](#) to [engage 2,029 employees](#) (10% of total FTE) from Delta Thailand and 2,187 colleagues from our subsidiaries in India, Slovakia and South East Asia or 41% of Delta Thailand's global staff or 100% had actively engaged. Ratio of male to female of participant were 57:43 accordingly to staff's gender diversity proportion. According to our invitation list, approximately 95% of the participants are Asian while another 5% are European and Australian. These staffs' year of service, function and nature of their business unit's business had considered as selection criterion as well. 9.25% was the proportion of middle management, 6.55 for supervisor and junior management who participate in this survey, 90% were operative and senior operative staff while 0.55% of this pool were working in senior management level.

From 5-point scale, where 4-5 are considered "actively engaged", result of the total 14 categories of 48 questions, scores of all categories were higher than 2018. When compared with other companies in South-east Asia, our favorable score in 11 categories were higher than the norm. 3 categories of favorable score is lower than norm in SEA in no significant level. These scores and in-depth analysis were reported to the CEO, Sustainable Development Committee. Thereafter, the result was discussed and followed up closely by Delta's executives.



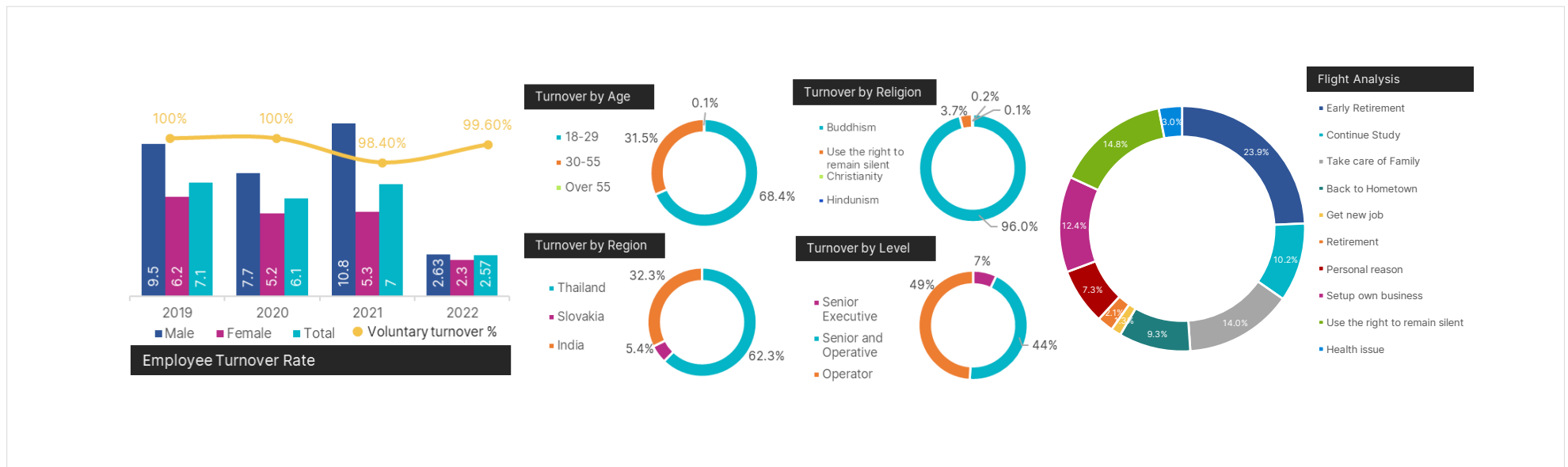


In 2022, Delta Human Resource Development, Employee Relation and Sustainable Development committee co-work to design proper approach to extend the employee engagement survey to cover our operators and subcontract worker to learn their expectation simultaneously with new cycle of staff engagement survey in 2023 . The result of these engagements will be utilized for improving HR strategy, compensation and benefit, work environment, training and mentor program to retain our valued human resources with their satisfaction. In spite of a competitive turnover rate compared to industry peers at 6.1 in 2022, Delta keeps monitoring the reason why our employees made their decision to go.

In 2022, 99.6% of leavers are voluntary turnover. As every single reason for leaving does matter for effective management of human resources, 2022 exit interview information had collected accordingly. When over 50 years-old retired leavers and headcount of dismissal for disciplinary reasons is not considered.

From exit interview questionnaire and turnover record, in 2022, It is found that 23.9% of our employees enjoy the company's fair early retirement program. This group of leavers led to a lower average age of our total worker in 2022. Another 13.7% found their

potential from gained knowledge and experiences, they challenge themselves with new career and their own business. 23.3% of leavers made decision to back to hometown and take care of their family, 10.2% continue their study for higher degree, 3% of this group of leavers need time for taking care of their health issues while another 14.8% reserved their right to refuse to answer the exit questionnaire.



Inclusive well-being

Philanthropic activity plays a crucial role in supporting and accelerating the climate transition with less vulnerability. As the world faces the challenges of climate change, philanthropists and charitable organizations have a unique opportunity to drive positive change and address the environmental, social, and economic impacts of the transition to a low-carbon and climate-resilient future.

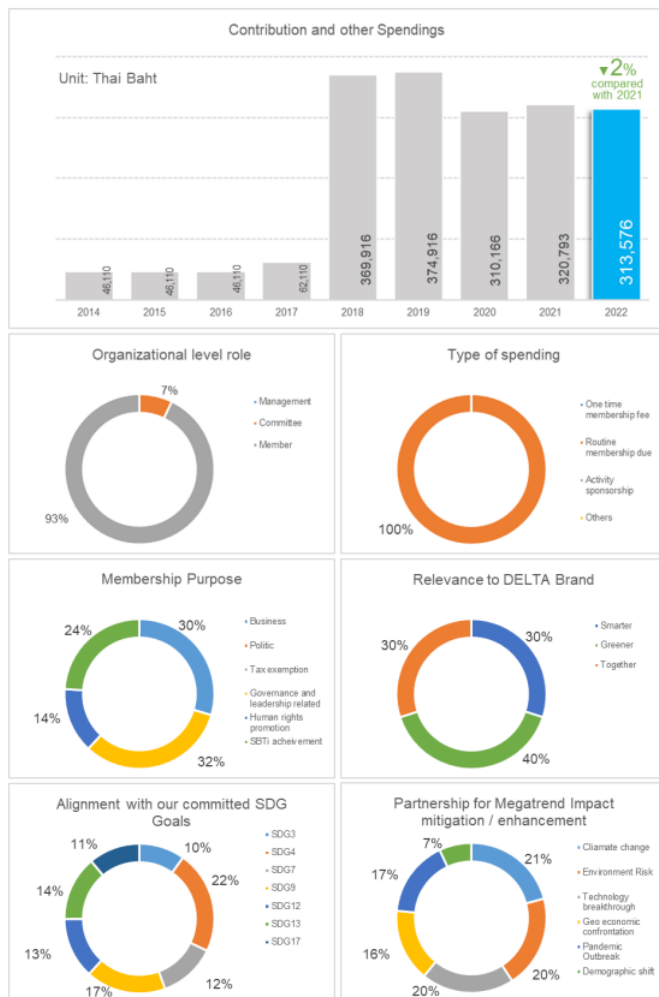
Delta Thailand, as an active corporate citizen, carries specialism of making smarter and greener life on its social responsibilities through various CSR activities, projects, and programs which our catering to the needs of its stakeholders. In addition to continuous effort to take care of its customers, employees, suppliers, creditors, societies and environment simultaneously with fair competition to our competitors accordingly to the Company's Fair Treatment Policy; Delta Thailand broadens our effort to enrich its corporate citizenship in equivalent view and extended view accordingly to the UN Sustainable Development Goals guidance.

To mitigated vulnerability resulting form transition risk, Delta has derived a more focused strategy that will align our corporate mission and brand promise (Smarter. Greener. Together. with all of the company's SD endeavors. This will ensure a clear and consistent message and action reaching and influencing every level of employees in the company. To amplify our effort to mitigate global agenda of climate change, Delta disseminates its innovation to and eco-efficient operation expertise to navigate greener communities by make it ; Smarter- Creating innovations that will benefit the society and environment; Greener- energy and environmental conservation and Together- actively work with our stakeholders for a better tomorrow.

Quality education, affordable and clean energy, industry innovation and infrastructure, responsible consumption and production and partnership to sustainability had taken as our prioritized goals based on our core competence. In 2022, the post-covid recovery period, Delta Thailand contributed 18.1 million Baht which increase 38% from 13.1 million Baht in 2021 as measured by the [London Benchmarking Group's LBG](#) Model and [B4SI-CCI](#) guidelines.

66.4% of the reported amount had contributed to the local and national communities to enhance industry innovation, eco-efficient living and climate action initiatives. This is made up of 4.7% cash donations (charitable and other donations), and 61.7% of investment in STEM education for society, (which include employee time, in kind donations, and certain management costs). Up to the reporting period, there was no non-compliance concerning sponsorship of these programs. Full list of our [philanthropic programs](#) with their input output and impact evaluation is available at our website.





Participation and Membership

Delta Electronics (Thailand) PCL. emphasizes its mission with a precise brand promise “Smarter. Greener. Together.” to encompass our spirit of responsibility in every aspect of our business practice. For active response to sustainable development in business process and substantive achievement in our long-term goal, Delta maintains its regular membership status with leading organizations in organization level.

To create a positive impact of business transparency, we disclose our direct and indirect spending, contribution and payment to our business network annually. Delta strives to operate its business with political neutrality, not participating and siding to certain political party or influential political leader and not using the Company’s capital, resource to support political parties, politicians directly or indirectly.

In 2022, Delta Thailand’s total contributions and spending for association memberships was 313,576 Thai Baht decreasing 2% compared with 2021. Major purpose of these spending is to exchange and advocate emerging trend, climate change and innovation issues and sustainable development matter. The contributions are in line with our stated brand promise Smarter. Greener. Together. at 30%, 40% and 30% respectively. The subscribed business networks should help us to strengthen our capability to achieve our publicly committed Sustainable Development goals; SDG3, SDG4, SDG7, SDG9, SDG12, SDG13 and SDG17. 30% of the spending goes to business related associations while 32% goes to governance and leadership enhancement and sustainable development related associations. None of these spending had paid for politic and tax exemption purpose.

100% of our spending in 2022 had paid for regular annual membership renew and first-time regular membership subscription. The company had not sponsored any membership-related activity in 2022. By organization-level role, 100% of these spending was for maintaining Delta’s member level while company’s role as the committee of the Thai IOT Association had maintain by one-time membership fee spent in 2019. In addition, we also [disclose](#) our membership without application fee such as our membership in Thailand Carbon Neutral Network , ESG Network by Thai Listed Company and Sustainability Disclosure Community to our stakeholders for transparency. Delta’s major role and responsibility as the committee of these network is to provide its point of view and engage industry partners to boost knowledge sharing among the industry.

Overview of Delta Electronics (Thailand) Public Company Limited's Membership Status 2022

Item	Organization / Network	Organizational level role			Type of spending				Membership purpose						Relevance to DELTA Brand			Alignment with our committed SDG goals							Partnership for Megatrend Impact mitigation / enhancement					
		Management	Committee	Member	One time membership fee	Routine membership fee	Activity sponsorship	Others	Business	Politic	Tax exemption	Governance and leadership related	Human rights promotion	SBT achievement	Smarter	Greener	Together	SDG3	SDG4	SDG7	SDG9	SDG12	SDG13	SDG17	Climate change	Environment Risk	Technology breakthrough	Geo Economic confrontation	Pandemic Outbreak	Demographic shift
1	Association of Electronics Industry in SK	-	-	●	-	●	-	-	●	-	-	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2	Bangpoo Industrial Society	-	-	●	-	●	-	-	●	-	-	●	●	●	●	●	●	●	-	●	-	-	●	●	●	●	-	●	-	-
3	Electrical and Electronics Institute (EEI)	-	-	●	-	●	-	-	●	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	●	-
4	Electronics and Computer Software Export Promotion Council	-	-	●	-	●	-	-	●	-	-	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	●	-
5	Export Promotion Council of EOU and SEZ	-	-	●	-	●	-	-	●	-	-	●	-	-	●	●	●	●	-	●	-	-	●	●	●	-	●	●	-	-
6	Electricity Vehicle Association of Thailand	-	-	●	-	●	-	-	●	-	-	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-
7	Happy Workplace Network	-	-	●	-	-	-	-	-	-	-	●	●	-	●	-	●	●	-	-	-	-	●	-	-	-	●	-	●	●
8	Safety and Health at Work Promotion Association (Thailand)	-	-	●	-	●	-	-	●	-	-	●	●	-	●	●	●	●	-	-	-	●	●	●	●	●	-	-	●	-
9	SDG-Friendly Business	-	-	●	-	-	-	-	●	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10	Slovak Chamber of Commerce	-	-	●	-	●	-	-	●	-	-	●	-	-	●	-	●	●	-	●	-	-	●	●	●	●	●	-	-	-
11	Sustainability Disclosure Community	-	-	●	-	-	-	-	●	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
12	Thai Auto-part Manufacturers Association	-	-	●	-	●	-	-	●	-	-	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-
13	Thai Automotive Institute	-	-	●	-	-	-	-	●	-	-	●	-	●	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	-
14	Thai Breastfeeding Center Foundation	-	-	●	-	-	-	-	-	-	-	●	●	-	●	-	●	●	-	-	-	-	●	-	-	-	-	●	●	-
15	Thai Chamber of Commerce	-	-	●	-	●	-	-	●	-	-	●	-	-	●	-	●	●	●	●	-	-	●	●	●	●	●	●	-	-
16	Thai Institute of Directors	-	-	●	-	●	-	-	●	-	-	●	-	-	●	-	●	●	-	-	-	-	●	●	●	●	●	●	●	●
17	Thai IoT Association	-	●	●	-	●	-	-	●	-	-	●	-	●	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	-
18	Thai Listed Company Association	-	-	●	-	●	-	-	●	-	-	●	-	-	●	-	●	●	-	-	-	-	●	●	●	●	●	●	-	-
19	Thai Photovoltaic Association	-	-	●	-	●	-	-	●	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-
20	ESG Network by Thai Listed Company	-	●	-	-	-	-	-	●	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
21	Thailand's productivity Institute	-	-	●	-	-	-	-	●	-	-	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-
22	Thai Private Sector Collective Action against Corruption	-	-	●	-	●	-	-	●	-	-	●	●	●	●	-	●	●	-	-	-	-	●	●	●	●	●	●	●	-
23	Thailand Printed circuit Association (THPCA)	-	-	●	-	●	-	-	●	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-
24	The Federal of Thai Industries, Chachoengsao Chapter	-	-	●	-	●	-	-	●	-	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-
25	The Global language of Business (GS1 Thailand)	-	-	●	-	●	-	-	●	-	-	-	-	-	●	-	●	●	-	●	-	-	●	-	-	-	●	-	-	-
26	Thailand Carbon Neutral Network	-	-	●	-	-	-	-	●	-	-	●	●	●	●	●	●	●	-	●	●	●	●	●	●	●	●	●	-	●
27	The Federal of Thai Industries	-	-	●	-	●	-	-	●	-	-	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-

Remarks:

1. The expenses reported above are annual membership fees compiled from Delta Thailand and its subsidiaries recorded in the SAP ECC6 system as:
 - a. Due and member fee expense
 - b. CSR support / donations
 - c. Other related activities expenses such as remark in expense reimbursement form with official invoice and receipt attached such as entertainment expenses, printing and copy expenses, travel expenses and legal fees.
2. According to Delta's code of conduct clause 5.1, before establishing business relationships with others, the Company has evaluated the legitimacy, integrity, and operational policy of these organizations whether there are any records of dishonesty, to ensure such entities' business operation is with integrity, transparent, and will not demand, offer or receive bribes. Finally, the implementation of media and stakeholder analysis (MSA) method, none of the mentioned records found.
3. Delta monitors and feedbacks these expenses to each cost center owner on a monthly basis. Each year, Delta Thailand Group's total membership fee, sponsorship expenses including monetary and non-monetary donation are compound and reported to the Chairman of Sustainable Development and Corporate Governance Committee on annual basis.
4. Delta's payment and reimbursement system has designed in accordance with Thai Financial Reporting Standard (revise 2017) which aims at alignment with the corresponding International Financial Reporting Standard.
5. None of these amounts had paid for lobbying, tax exemption, interest representation or similar purposes.
6. Delta does not have any payment to local, regional or national political campaigns / organizations / candidates.
7. All the stated organizations are located in Thailand, India and Slovakia where Delta approximately generates over 95% of its total revenue (2022 financial statement).
8. Since we realize India and Slovakia's membership fee recorded as other expenses in 2022, we restate 4 years of membership fee spent by our subsidiaries in India and Slovakia.
9. The 6% increment of membership fee in 2022 caused by first-time membership fee spent to The Global language of Business (GS1 Thailand)

We Learn and Share

According to our commitment to invest innovation and research, develop intellectual property rights, and devote ourselves to the progress of human culture and technology, the development of society and the economy, as well as the sustainable development of the Earth and its environment, Delta has performed various activities to disseminate what we've learned from our long journey in ITC Industry. On the contrary, Delta realized that communities sustain innovation because as they share ideas they can mutate and grow, especially as they adapt to new conditions. From both business and non-business simple visits, projects and discussion, we have learned what we can do more to balance our passion for betterment with the communities' requirement.

Delta Electronics (Thailand) Public Company Limited, develop Delta Energy Education Program (DEEP) to build awareness of energy and environment conservation. The program targets elementary students nearby Delta's Bang Poo factory, some of whom are Delta employees' children.

Due to the COVID-19 pandemic, we miss our target to hit 12,000 learning hours to safeguard the children in the covid-19 from the risk of disease infection. Delta put its effort to transform this activity into an online platform. We take the opportunity of Delta Annual Scholarship Program 2022 to engage the caregivers and the children themselves about the opportunity to run this program as our plan. However, from 400 population (200 caregiver and 200 primary school student the result of the survey shows that

- Over 74% of the parents and caregivers thought their children faced too much tension from their on-line classes during the outbreak.
- 95% of the children prefer spending their leisure time on off-line activities. 98% of these children will love to participate Delta Energy Education Program when the activity is organized at their school.

Delta regards children's right to participate in public decision-making. Finally, we follow the children's voice to postpone DEEP activities until we are able to properly organize on-site sessions.



We learn and Share

January 22, 2022 - Delta Electronics (Thailand) Public Company Limited donated 100,000 THB for COVID-19 prevention at Bangpakong District in Chachoengsao Province. Delta also launched a COVID-19 vaccination drive to offer third dose booster shots to up to 4,500 employees at its factory in Wellgrow Industrial Estate, Chachoengsao Province.

Mr. Jackie Chang, Delta Thailand President, represented the company to present the donation to the Chachoengsao Provincial Social Security Office for COVID-19 prevention. This follows a previous donation of 100,000 THB and the opening of Delta Plant 7 as a COVID-19 vaccination site on July 15, 2021.



February 21, 2022 - Delta Electronics (Thailand) PCL. joined hands with the Department of Industrial Promotion (DIP) under the Ministry of Industry and key private sector partners to launch the Angel Fund for Startups 2022. This year, Siam Cement Public Company Limited (SCG) and HUBBA Thailand are joining as corporate partners to offer expert business advice and assess the performance of contestants. The Angel Fund program links Thai entrepreneurs with government and private sector partners and offers funds and an intensive program for business skill-up and innovation incubation.

Entering its seventh year, the Angel Fund by Delta and the DIP has grown to be an inclusive and robust platform to foster local entrepreneurs and startup talent in Thailand. Delta adopts new technologies and digitalization, including online hackathon events, and welcomes partnerships from top brands in Thailand to extend the fund's reach and boost its positive impact on Thai entrepreneurs and society.

March 2, 2022 - Delta Electronics (Thailand) PCL. and the Asian Institute of Technology (AIT) signed a five-year MOU for joint promotion and development of academic programs and activities supporting research and development (R&D), training of AIT students in innovation related to Delta regional business and sustainable development in Thailand and Southeast Asia.

Under the agreement, Delta will support the development of a curriculum in response to Thailand's latest human resources development policy in the fields of R&D and engineering. Both parties will cooperate in joint R&D and organize activities to enhance AIT students' competencies in fields including data science, automation, robotics, industrial engineering, sustainability and business. Joint activities may include internships, joint seminars and robotics contests.



We learn and Share



April 20, 2022 - Delta Electronics (Thailand) PCL. donated an original Smart Water Level Monitoring System to help flood prevention at Bangpoo Industrial Estate. Mr. Anusorn Muttaraid, Delta Executive Director, welcomed Mr. Tada Soontonphan, Deputy Governor of Industrial Estate Authority of Thailand (IEAT) Bangpoo Office to Delta's Samutprakarn headquarters for an official handover ceremony.

Mr. Kasemson Kreuatorn, Delta's Senior Regional Manager for industrial automation, gave a detailed presentation of the Smart Water Level Monitoring System which leverages Delta's industrial cloud router and DIACloud service to offer precise monitoring and control for pump stations. This will help provide the Bangpoo Industrial Estate's more precise data on water levels in the canal network to prevent flooding.



Apr 30, 2022- Delta Electronics (Thailand) PCL. hosted 10 automation engineering student Thai teams from top universities in Thailand to join a kickoff event for the 8th Delta International Smart & Green Manufacturing Contest, also known as the Delta Cup.

At the kickoff ceremony at Delta Thailand's head office, Mr. Alan Chou, Delta Industrial Automation SEA Senior Director, welcomed the Thai participants to this year's contest and presented certificates to three Thai teams who won the Delta Cup competition last year. The 2021 winning teams presented their projects and shared their experiences with this year's participants.



May 30 – Jun 2, 2022 - Delta Thailand Signs MOUs with Three Taiwan Universities to Collaborate in Internship and Training for Thai Students. Delta Thailand continues to strengthen ties with top universities in Taiwan to provide training, internship and employment opportunities for Thai and Southeast Asian students. The partnerships also benefit the universities and Delta by facilitating knowledge and talent exchange, joint research and talent development.

This year Delta Thailand renewed an MOU with National Cheng Kung University and signed two new MOUs with two universities in Taiwan and one school in Chiang Mai Thailand.

We learn and Share



July 11, 2022 - Delta Electronics (Thailand) PCL. joined seven universities and group of nine companies to sign a Memorandum of Academic Cooperation by the Ministry of Higher Education, Science, Research and Innovation (MHESI) and EEC-HDC for talent and workforce development in Thailand's Eastern Economic Corridor (EEC) area.

Under the agreement, the MHESI and EEC-HDC will work with the partner companies to jointly develop a Master Class to train students at the partner universities. The MHESI developed the Cooperative and Work Integrated Education (CWIE) program aims to foster quality graduates that meet the needs of Thailand's job market. The CWIE is aligned with the EEC Model Type A program developed by the EEC-HDC which works with higher education institutions and companies in the EEC area to develop a skilled workforce.



September 8, 2022-Delta Electronics (Thailand) PCL. hosted a 40-member delegation from the Thai Red Cross Society to explore Delta's solar energy solutions and energy management system at its green factory headquarters.

The Thai Red Cross Society delegation aimed to use this visit to learn from Delta's green building renovation projects for implementation at existing facilities.

As a green solution pioneer in Thailand, Delta serves as a model for energy-efficient and sustainability to companies and organizations seeking to reduce their carbon footprint and increase efficiency. Delta welcomes partnerships from the private and public sectors to tackle the issue of climate change and support a low-carbon society in Thailand.



September 29, 2022-Delta Electronics (Thailand) PCL. and Mahidol University signed an MOU for collaboration on research and development of automation solutions with Delta products and Ultraviolet-C (UV-C) health care products. The 3-year agreement also brings the Delta Automation Academy to the Mahidol University Faculty of Engineering to develop students' skills in robotics, automation systems, IoT, electronics and embedded systems at the Delta Industrial Automation Lab.

Over 1,000 Thai engineering students have already trained at the Delta Automation Academy so far and top talents have won prizes in the international Delta Advanced Automation Competition or Delta Cup held each year with elite engineering student teams from Southeast Asia, Taiwan, China, India, and Europe.

We learn and Share



September 29, 2022- Delta Electronics (Thailand) PCL donated 100,000 THB to Samutprakan Hospital to purchase new medical equipment and supplies.

Mr. Yongyuth Pakdougjan, Delta Senior Director of Government and Public Affairs Department, represented the company, to deliver the funds to Dr. Patiwat Wongngam, Deputy Director of Samut Prakan Hospital. In 2020 and 2021, Delta donated protective equipment for frontline medical personnel and funds to the Samutprakan Hospital for COVID-19 protective equipment. Delta continues to support its communities and medical workers in Thailand.



September 29, 2022- Delta Electronics (Thailand) PCL. Visited the rural schools in Chaiyaphum and Ubon Ratchathani Provinces in Northeast Thailand to deliver donated computers and equipment to support teachers and students.

Delta by Employee Relation officers represented the company together with Delta volunteers to deliver the computers and equipment to the rural schools as part of Delta's ongoing activities to support local communities. The school directors, teachers, committees, and students warmly welcomed Delta's action to support the development of education in underdeveloped community schools.



December 8, 2022-Delta Electronics (Thailand) PCL. Opened its first-ever Power Electronics Lab located at a Thai university as part of the Thailand Board of Investment's (BOI) merit-based incentives measures. The new Delta Power E Lab is located at the Department of Electrical and Computer Engineering, at the Faculty of Engineering of King Mongkut's University of Technology North Bangkok.

The lab will provide Thai engineering students with world-class testing facilities to develop power electronics and train them in advanced skills. It will also be a Thai industry-academic collaboration and innovation center for local research activities that will facilitate the sharing of know-how and ideas between Delta and KMUTNB.

Your satisfaction, our pride

Customer satisfaction is a critical enabler of energy transition. It drives the adoption of renewable energy, supports policy initiatives, fosters innovation and investment, and creates a positive environment for the shift towards a sustainable energy future. By prioritizing customer satisfaction, Delta and our value chain can accelerate the smooth and effective energy transition while contribute to a greener, more resilient planet.

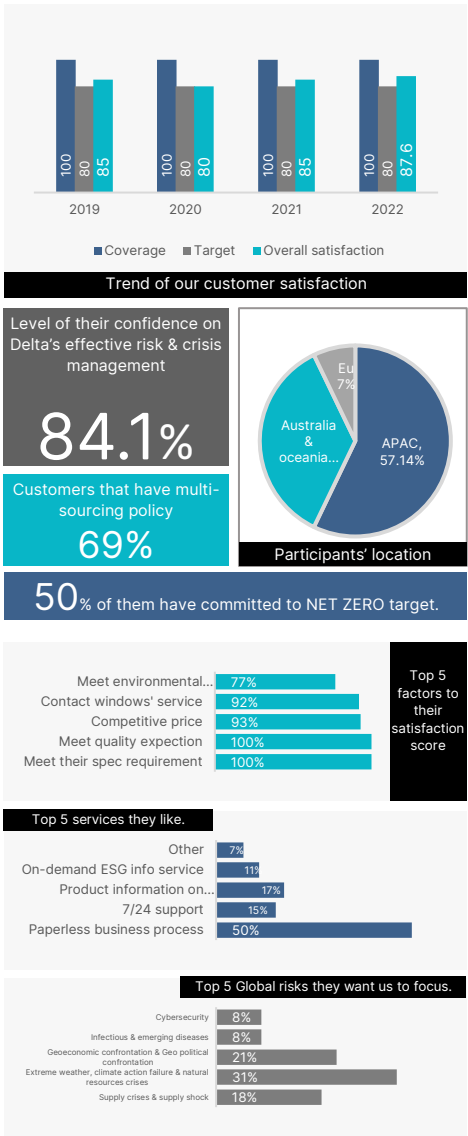
Plenty of non-financial dialogues between Delta and its world-class customers had opened in recent year. In 2022, Delta’s sales representative and Sustainable Development Office receives a numbers of questionnaire from the our customer regarding ESG topics especially our transition to carbon neutral target. Code of conduct, Anti-corruption progress, human rights in supply chain, hazardous substance control and environmental management; for instance, had repeatedly engaged by our customers. We also received more frequent queries about product carbon footprint and science-basd target. Customer satisfaction is positioned as the central driving force for all the factors, including Innovation, Quality, Agility and Teamwork accordingly to our corporate culture all Delta family aim for. As a result, Delta is constantly driven to foster world-class standard level not just in product and technology but also in social and environmental inclusiveness to meet expectation.

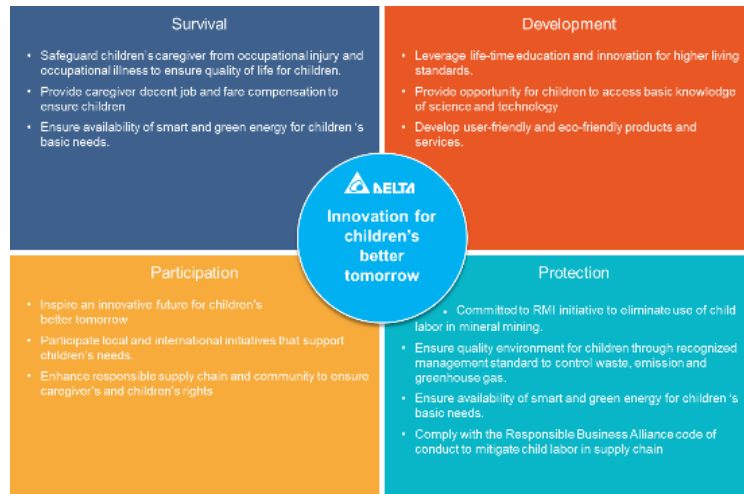
Early 2023, approx. 60% of our customers received our [Customer Satisfaction survey](#) for our 2022 performance and 100% of them feedbakced accordingly. We expand the coverage of the survey from approx. 78% of consolidated sales (Thailand only) to 100%. The candidates were selected accordingly to their contribution percentage of Delta’s 90% sales revenue in the reporting cycle. We targeted at least 3 key customers for each business unit. Our selected key customers in APAC, Australia and New Zealand, Europe and America had answered the questions with 100% response rate.

With 80% satisfaction rate as Delta’s qualitative target, the survey help to reflect the customer satisfaction level on the company’s product, service and business ethics, etc. in different aspect. Meanwhile, there feedbacks from “Other comment” portion, has brought to Sustainable Development Committee, Strategic Marketing, Sales Meeting to seek for further improvement accordingly. Amidst the global outbreak crisis and its high impacted consequence such as port recession, the rising raw material price and immediate policy change in several areas during the first half of 2021 that we conduct the survey, we were able to maintain our satisfaction at 87.6%. In 2022, Sustainable Development committee propose new customer satisfaction target to all business target at 90%.

In addition, it was found that our outstanding customer satisfaction rate correlates with our high customer retention and lifetime value (LTV)*. From the standpoint of customer satisfaction, Delta gains from value-add to its core competencies, including cost-effectiveness, low service requirements, partnerships for sustainability and business that generates referrals for business growth. To help maintain its steady business growth, Delta has tracked the annual customer retention rate of its top 20 clients since 2014. During this reporting period, the company’s annual customer retention rate was an impressive 95%.

Remark:* Due to customer’s privacy and confidentiality agreement, public disclosure of this information is prohibited.





A Better tomorrow for next Generation

Delta continuously foster better tomorrow for children's lives through the way in which they operate facilities, develop and market products, provide services, and exert influence on economic and social development. As part of our Human Rights Policy, children are our defined vulnerable population who requiring specific attention to guarantee respect for their human rights. Delta provides decent work for young workers, parents and caregivers. We also contribute towards the elimination of child labor, including in all business activities and business relationships. We ensure the protection of children in all business activities and facilities. In the digital era, we Use marketing and advertising that respect and support children's rights. Most of Delta social programs have designed for children to cultivate innovation and awareness of environment conservation.





At early 2023, Mr. KK Chong, Strategic Communication and Sustainable Development Director of Delta Electronics (Thailand) PCL., joined the Panelist at RBHR Forum/child rights session, 9 February 2023. This was the consequence of our pioneer effort to integrate Children right as part of our Haman Right policy.



The session focused on how the business responsibility towards children's rights has evolved in the region over the past decade. Invite panelist and participants actively discussed the ways that public and private sector can take action to integrate child rights consideration into their policies and decision-making including through showcasing specific examples and good practices.

Delta's exemplary work on child right and business leads to its genuine initiative to integration of the Children Rights in Business Principle (CRBPs) into Delta's Human Rights Policy, ESG performance disclosure and every business process. Up to the reporting period, none of our operations and suppliers operation was at significant risk for incidents of child labor nor any form of children rights violation.

To respect and support children's rights in relation to the environment and security, Delta realize our impact to children while ensure our direction and efforts satisfy the needs of the present without compromising the capacity of their future, we performed self-assessment accordingly to the Unicef's Children's Rights and Business Principle (CRBP) guidance. The result of our assessment has demonstrated as following:

<div>     </div>				
Stakeholders	Employee	Supplier	Consumer	Community
Involvement	<ul style="list-style-type: none"> Employee Employee's Children Child labor 	<ul style="list-style-type: none"> Child labor 	<ul style="list-style-type: none"> Children as future users and trend setter 	<ul style="list-style-type: none"> Children in local communities and the countries we invest Children as "Social licensor"
Issues	<ul style="list-style-type: none"> Hazardous substance Human rights R&D investment (Innovation dissemination) Labor's rights (COC) Safety Guard leverage Responsible Business Alliance code of conduct 	<ul style="list-style-type: none"> Hazardous substance Human rights R&D investment (Innovation dissemination) Labor's rights (COC) Safety Guard leverage Responsible Business Alliance code of conduct 	<ul style="list-style-type: none"> Customer requirement Safety Guard embedded in products and service R&D investment Information securities standards for product and service Technology product that easy for recycling Technology literacy Children's privacy 	<ul style="list-style-type: none"> Safety Guard leverage Environment, Safety and Health Energy Management System Land use
Response & Mitigation	<ul style="list-style-type: none"> Children's right as part of our Human rights policy Happy workplace program for employee's family life balance DEEP (DELTA energy Education Program) Education fund for employee's family DELTA CUP Informed decision label Compliance to Responsible business Alliance code of conduct Use raw material from the countries where child labor is prohibited 	<ul style="list-style-type: none"> Children's right as part of our Human rights policy Happy workplace program for employee's family life balance DEEP (DELTA energy Education Program) Education fund for employee's family DELTA CUP Informed decision label Compliance to Responsible business Alliance code of conduct Use raw material from the countries where child labor is prohibited 	<ul style="list-style-type: none"> ISO27001 complied WEEE complied DEEP (DELTA energy Education Program) Product safety standard verification Clear product labeling and instruction for proper safety and environment management Delta industrial automation Academy Industrial Automation lab and Industrial Automation kits fair-price for local universities Availability of free application and Prologic control (PLC) codes for student to download Use marketing, advertising and public disclosure that respect children's rights 	<ul style="list-style-type: none"> ISO9000, 14064, 45001, 50001 complied Availability of emergency preparedness plan to avoid impact to children in local community Invest and operate in well-managed industrial park Community public relation activity Open House activity
Measurement	<ul style="list-style-type: none"> Successor retention rate Number of new employees from referral program 	<ul style="list-style-type: none"> Successor retention rate Number of new employees from referral program 	<ul style="list-style-type: none"> Successor retention rate Number of Delta Industrial Automation participants 	<ul style="list-style-type: none"> 0 complaints Satisfaction / whistle blowing assessment

Both a Thailand-listed company and global corporate citizen, Delta offers long-term value-add to stakeholders that delivers on the company brand promise: Smarter. Greener. Together.

The growing list of Sustainability Development recognitions and international standard compliances underscore Delta's continuous improvement and long-term vision for sustainable development.



Award and Recognitions



Delta Electronics Thailand Wins the Best Employer Brand Awards 2022 for Excellence in Training & Development

January 14, 2022-Delta Electronics (Thailand) PCL. won the Thailand Best Employer Brand Awards 2022 in the category of Excellence in Training & Development - Best Training Initiatives. Delta received the award at a virtual event by the Employer Branding Institute. The Best Employer Brand Awards offers recognitions to organizations and individuals in several categories for both Excellence in HR and Excellence in Training & Development.



Delta Electronics Thailand Wins S&P Global Bronze Class Sustainability Award 2022

Bangkok, Thailand, January 3, 2022 - Delta Electronics (Thailand) PCL. won the prestigious S&P Global Bronze Class distinction in its third consecutive year of S&P awards for excellent sustainability performance. Delta Thailand is once again the only Thailand-based company in the "Electronic Equipment, Instruments & Components" sector of the Sustainability Yearbook 2022.

Delta's extensive reporting and data collection help to measure and encourage recycled materials usage and carbon footprint tracking of its products. Its globally recognized role as a Thailand sustainability leader helps Delta drive green innovation for customers and deliver on its brand promise: Smarter. Greener. Together



Delta Electronics Thailand Remains in MSCI Global Standard Indexes List 2022 in Recognition of Performance

Bangkok, Thailand, February 11, 2022 - Delta Electronics (Thailand) PCL. remains in the MSCI Global Standard Indexes following the announcement of the results of the February 2022 Quarterly Index Review for the MSCI Equity Indexes. The MSCI index is an investment research firm that provides stock indexes, portfolio risk and performance analytics, and governance tools for institutional investors and hedge funds.



Delta Thailand Joins Inaugural Climate Leaders Asia-Pacific 2022 List by the Financial Times and Nikkei Asia

Bangkok, May 27, 2022 - Delta Electronics (Thailand) PCL. announced today it is included in the inaugural edition of the Climate Leaders Asia-Pacific 2022 list by the Financial Times and Nikkei Asia in recognition of its superior environment, social & corporate governance (ESG) performance and continued dedication to reducing its carbon footprint.

The joint initiative aims to recognize corporate citizens across the Asia Pacific region that are contributing substantially to mankind's sustainability efforts. Selection for the Climate Leaders Asia-Pacific 2022 list includes months of intensive research, scrutiny of existing emissions data, public calls for participation and direct contact with companies in the region. The most outstanding companies were identified on the basis of successfully reducing their core greenhouse gas emissions relative to their revenue.



Thaipat Institute's ESG100 Universe 2022 in 8th Consecutive Year of Sustainability Recognition

June 4, 2022 - Delta Electronics (Thailand) Public Company Limited joins 100 of Thailand's best-performing public listed companies for Environmental, Social and Governance (ESG) aspects for the 8th consecutive year in the 2022Thaipat Institute ESG100 Universe.

Delta is one of the 100 leading companies chosen for the ESG100:2021 list from among 824 SET and MAI listed companies assessed this year by the Thaipat Institute along with property funds and Real Estate Investment Trusts (REITs).

Since its launch, Delta has been in every one of Thaipat Institute's annual lists for most outstanding ESG performers on the Thai stock market. Delta's consistent recognition results from an effective sustainable development strategy and excellent value-add for investor and stakeholders.



Delta Electronics Thailand Gets UL Environment Zero Waste to Landfill Validation for Sustainable Waste Processing Operations

Bangkok, Thailand, June 6, 2022- Delta Electronics (Thailand) PCL., received the highest designation UL2799A Zero Waste to Landfill (ZWTL) validation from UL Environment. UL is the leader in third party product testing and certifications and validates claims for manufacturers. UL Environment's auditing and analysis validated the environmental claim "Delta Electronics has achieved Zero Waste to Landfill Platinum Operations, 100% diversion"-positioning Delta Thailand as a top-performing sustainable company for global customers.

As a green factory and sustainable industry leader in Thailand, Delta pursues the highest global sustainability standards throughout its operations. This latest UL Environment certification underscores Delta's commitment to sustainability and responsible supply to global customers.



Delta Thailand's New Plant in Chachoengsao Holds LEED Gold Certification Ceremony with the U.S. Green Building Council

Chachoengsao, Thailand, August 16, 2022 - Delta Electronics (Thailand) PCL. held the official LEED (Leadership in Energy and Environmental Design) Gold certification, in the New Construction category, ceremony at its new Plant 7 in Wellgrow Industrial Estate, Chachoengsao.

LEED is one of the most globally recognized green building certification programs developed by the non-profit U.S. Green Building Council (USGBC). The certification provides independent verification of a building or neighborhood's green features, allowing for the design, construction, operations and maintenance of resource-efficient, high-performing, healthy and cost-effective buildings.



Delta Electronics Thailand Upgraded to AA ESG Rating by MSCI Global for Leadership in Employee Management Practices

Bangkok, Thailand, July 25, 2022 - Delta Electronics (Thailand) PCL. had its Environmental, Social, and Governance (ESG) Rating upgraded to 'AA' in 2022 from 'A' in 2021 by MSCI (Morgan Stanley Capital International) Global for industry leadership in employee management practices following a 2022 assessment and rating action. Delta Thailand is in the MSCI Global Standard Indexes List 2022 in recognition of excellent business and corporate ESG performance.



Delta Thailand Wins Prime Minister's Industry Award 2022 in the Potential Industrial Category

Bangkok, Thailand, October 5, 2022-Delta Electronics (Thailand) PCL. received the Prime Minister's Industry Award 2022 in the Potential Industrial award category in recognition of the company's contribution towards Thailand 4.0 policy goals with next-gen automotive product innovation, smart manufacturing solutions and local engineer talent development.

The Potential Industry award category recognizes companies that are a driving force propelling Thailand's industry to its potential as outlined in the government's Thailand 4.0 policy 10 S-curve targets. The key success factors for Delta's 2022 Potential Industrial award recognition are:

- Product Innovation: Delta's high-efficiency DC brushless blowers and wireless fans for automotive applications support the Thai government's economic policy to develop electric vehicle R&D by local engineers.
- Delta Smart Manufacturing (DSM) solutions:
 - A DC fan frame injection molding machine solution
 - A smart auto winding machine

The Prime Minister's Industry Award 2022 is another recognition of Delta's pioneering innovation to support the Thailand 4.0 development plan. As an industrial automation provider, Delta leverages its own original products and solutions and trains Thai engineers to achieve world-class manufacturing standards.



Delta Electronics Thailand Joins Thailand Sustainability Investment 2022 in Recognition for ESG Excellence

Bangkok, Thailand, October 11, 2022-Delta Electronics (Thailand) PCL. joins the Thailand Sustainability Investment (THSI) 2022 List. This is in the seventh year for Delta to join the SET THSI List with the company joining 157 SET-listed companies chosen for outstanding performance on Environment, Social and Governance (ESG) aspects to enter the 2022 THSI List.

The SET THSI list is based on results from sustainable assessment questionnaires in 19 categories covering ESG dimensions. Public listed companies that voluntarily respond to the sustainability assessment form must score over 50% on the assessments in each dimension's qualification criteria to join the THSI List.



Delta Electronics Thailand to Rejoin the Stock Exchange of Thailand's Prestigious SET50 and SET100 Indices

Bangkok, Thailand, December 21, 2022-Delta Electronics (Thailand) PCL. will rejoin the SET50 Index and the SET100 Index from January 1 to June 30, 2023. The Stock Exchange of Thailand (SET) included Delta Thailand in the SET50 and latest SET100 Stock Review and Revision published on December 20, 2022. Delta Thailand is the only Electronic Components sector SET50 constituent in this latest revision.



Delta Thailand Included in ASEAN Asset Class by the ASEAN CG Scorecard Project for Excellence in Corporate Governance

Bangkok, Thailand, December 1, 2022 – Delta Electronics (Thailand) PCL. was included in the ASEAN Asset Class by the ASEAN CG Scorecard Project for excellence in corporate governance. The recognition was announced after a review of evaluation results in the 2021 ASEAN Corporate Governance Scorecard (ACGS), an initiative of the ASEAN Capital Markets Forum (ACMF) toward ASEAN integration.

The appraisal is conducted for ASEAN listed companies with market capitalization at the Top 100. Recognitions include:

- ASEAN Top 20 Publicly Listed Companies: An award given to companies with the highest score among the top 20 in ASEAN.
- ASEAN Asset Class Publicly Listed Companies: An award given to companies that score 97.50 points or more (representing 75% of the total score for both levels are 130 points).
- Country Top 3 Publicly Listed Companies: An award given to listed companies with the highest score in the Top 3 of each country.

Delta's years of excellent corporate governance performance underscore its successful sustainable development strategy and corporate practices. Delta commits to adding value to stakeholders and delivering on its brand promise: Smarter. Greener. Together.

Delta Electronics (Thailand) Joins Dow Jones Sustainability Indices 2022 in 2nd Consecutive Year of ESG Recognition

Bangkok, Thailand, December 12, 2022- Delta Electronics (Thailand) PCL. qualified as a constituent of the world-renowned Dow Jones Sustainability Indices (DJSI) 2022 in the second year of recognition for excellent environmental, social & governance (ESG) performance.

This year, Delta Thailand is again the only Thailand company in the “ITC Electronic Equipment, Instruments & Components” industry segment in the 2022 DJSI index and is in the DJSI World lists. In 2021, Delta Thailand joined the DJSI index for the first time after two consecutive years of S&P Global Silver Class Awards.

As a DJSI index member, Delta Thailand has a globally recognized ESG leadership role in Thailand and the region. The company's sustainability activities include education and collaboration with partners and suppliers for anti-corruption and sustainable business promotion. Delta's extensive reporting and data collection help to measure and encourage recycled materials usage and carbon footprint tracking of its products.



Delta Thailand Receives Thaipat Institute Sustainability Disclosure Award for 5th Consecutive Year in 2022

Bangkok, Thailand, December 22, 2022- Delta Electronics (Thailand) PCL. received the Thaipat Institute Sustainability Disclosure Award 2022 for the fifth consecutive year in recognition of its excellent public disclosure of company performances and coverage of its Environmental, Social and Governance (ESG) aspects in the 2022 Delta Thailand Sustainability Report.

Ms. Aonthip Aorthong, Delta Sustainable Development Manager, represented Delta to receive the award from the Thaipat Institute. Since its launch, Delta has been on every one of Thaipat Institute's annual lists for the most outstanding ESG performers on the Thai stock market. Delta's consistent recognition results from an effective sustainable development strategy and excellent value-add for investors and stakeholders.

Appendix

Our scope boundary, and methodology to get the disclosed KPIs and external assurance including GRI content index and KPI Mapping to related.



About this report

Delta Electronic (Thailand) Public Company Limited or “Delta Thailand” or “Delta”’s disclosures annually disclose its Sustainable Development report to transparently communicate our continuous effort to ensure our stakeholder mutual benefit. Since our first stand-alone Sustainable development report launched with GRI-G4 standard in 2016, the company keep improve the accuracy of the report until our previous release with GRI Standard in June 2018. To enhance stakeholders’ participation, this report has prepared in two language, English and Thai (local language). Our previous issues of Sustainable development report are publicly available at <https://deltathailand.com/en/download-sd-report>

Reporting cycle

Annually, in June, Delta Thailand’s annual performance of economic, social, environmental and related achievements between January 1st and December 31th of 2022. However, due to the upgrade of General Disclosure 2021, Delta publish this issue of Sustainable Development Report in July 2023 to ensure the content accuracy.

Coverage

Delta’s fiscal year is from January to December. The report therefore covers performance over 1 year period, in accordance with the methodology used in [Delta’s 2022 consolidated financial statements](#) that covered a 12-month period. The scope of this report includes Delta and its subsidiaries in **Thailand and its overseas subsidiaries and associates in India and Slovakia** whose nature of business are **manufacturing and assembly factories** that contribute to major revenue (98%) in consolidated financial statement (Thailand 87%, India & Slovakia 11%). Social and Environmental performance has been collected from 7 factories in the mentioned 3 countries.

Reporting standard

This report has been prepared **in accordance with the GRI Standards: Core Option** in both Thai and English. The material issues of this report has been selected as per the Company’s stakeholders’ feedback via our on-line questionnaire published on <https://goo.gl/HKsqeV>, stakeholder engagement log collected by our domain experts, face-to-face random interviews, emerging risk and issues consideration, social media log and media stakeholders analysis. The Company bases on Global Reporting Initiative’s [GRI Standards](#), Dow Jones Sustainability Index, SET Sustainability Awards frameworks, stakeholder interests and emerging issues to identify the questionnaire’s aspects per sustainability context, data collection as well as the report implementation.

The report qualitative and quantitative contents can be obviously indicated with GRI Content Index which shows in the final page after table of Company’s performance. In addition, to boost up both internal and stakeholder participation, Delta add the linkage of this report to related sustainable business practices into its GRI content table. Delta has engaged Lloyd’s Register, an independent third party, to provide external assurance for selected environmental and social indicators and ensure the accuracy and reliability of the data reported herein.

Restatements of information

There was no major changes resulting from business merger and acquisition, change in supply chain, base year change, nature of business nor measurement method during the reporting.

Calculation

Annual total compensation : Base salary + cash compensation + total fair value of all annual long-term incentives

Average training hours per employee : Total number of training hours provided to employees ÷ Total number of employees

Average training hours per employee category : Total number of training hours provided to each category of employees ÷ Total number of FTEs in category

Average training hours per female : Total number of training hours provided to female employees ÷ Total number of female employees

Average training hours per male : Total number of training hours provided to male employees ÷ Total number of male employees

Change in water storage : Total power consumption of sold products of the reporting period - Total power consumption of sold products at the beginning of the reporting period

Change in water storage : Total water storage at the end of the reporting period - Total water storage at the beginning of the reporting period

Community investment : Cash contribution + monetary value of products or stuff donation + man cost + overhead cost.

Diversion rate of waste (%) : (Total of Waste diverted ÷ Total amount of waste generated) x 100

Energy intensity: Total energy consumption within the organization ÷ production amount

Full-time equivalent: $\Sigma(\text{individual actual working hours for the year} / \text{planned working hours for full year})$

GHG emissions (Scope 1 and Scope 2) intensity : Total GHG emissions (Scope 1 and Scope 2) ÷ production amount (USD)

GHG emissions (Scope3) intensity : Total GHG emissions (Scope3) ÷ production amount (USD)

Mean compensation of all employees & CEO compensation : $\Sigma x_i / n$

Percentage of new suppliers screen by using environmental criteria : Total new suppliers screen by using environmental criteria ÷ total new supplier in the reporting period x 100

Percentage of new suppliers screen by using social criteria : Total new suppliers screen by using social criteria ÷ total new supplier in the reporting period x 100

Percentage of reclaimed products and their packaging materials : Products and their packaging materials reclaimed within the reporting period ÷ Products sold within the reporting period x 100

Percentage of recycled input materials used : Total recycled input materials used ÷ Total input materials used x 100

Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security : $\text{Number of employees who have received formal training in the organization's human rights policies or specific procedures and their application to security} \div \text{total number of employee in the reporting period} \times 100$

Percentage of suppliers identified as having significant actual and potential negative environmental impacts : $\text{of suppliers identified as having significant actual and potential negative environmental impacts} \div \text{total numbers of suppliers} \times 100$

Percentage of suppliers with significant water-related impacts from water discharge that have set minimum standards for the quality of their effluent discharge : $\text{Number of suppliers that have set minimum standards for the quality of their effluent discharge} \div \text{Number of suppliers with significant water-related impacts from water discharge} \times 100$

Percentage of the procurement budget spent to local supplier : $\text{Spent amount to local suppliers} \div \text{total spending} \times 100$

Percentage of total employees by category who received a regular performance and career development review during the reporting period : $\text{Number of specific category employee who received a regular performance and career development review during the reporting period} \div \text{Total number employees of that specific category} \times 100$

Percentage of total employees by gender who received a regular performance and career development review during the reporting period : $\text{number of specific gender employee who received a regular performance and career development review during the reporting period} \div \text{Total number employees of that specific gender} \times 100$

Percentage of total employees covered by collective bargaining agreements : $\text{Headcount of labor union member} \div \text{total employees} \times 100$

Percentage of workers who covered by collective bargaining agreement : $\text{Number of employees who have registered for labor union membership during the reporting period} \div \text{total number of employee in the reporting period reported under 2-7-a} \times 100$

Production of Ozone-depleting substnaces: $\text{ODS produced} - \text{ODS destroyed by approved technologies} - \text{ODS entirely used as feedstock in the manufacture of other chemicals}$

Rate of employee turnover during the reporting period : $\text{Number of employee resigned during the reporting period} \div \text{total number of employee} \times 100$

Rate of fatalities as a result of work-related : $\text{Number of fatalities as a result of work-related injury} \div \text{Number of hours worked} \times 1,000,000$

Rate of fatalities as a result of work-related : $\text{Number of disease cases as a result of work-related} \div \text{Number of hours worked} \times 1,000,000$

Rate of health illness : $\text{Number of occupational illness confirmed by physician} \div \text{Number of hours worked} \times 1,000,000$

Rate of high-consequence work-related injuries (excluding fatalities) : $\text{Number of Work related injuries that the injured worker cannot recover within 6 months (excluding fatalities)} \div \text{Number of hours worked} \times 1,000,000$

Rate of new employee hires during the reporting period : $\text{Number of new employee hired during the reporting period} \div \text{total number of employee} \times 100$

Rate of recordable work-related injuries : $\text{Number of recordable work-related injuries} \div \text{Number of hours worked} \times 1,000,000$

Ratio of the basic salary and remuneration of women to men for each employee category : Sum of women employee's salary and remuneration in specific category ÷ Sum of men employee's salary and remuneration in that specific category x 100

Ratio of water recycled and reused as a percentage of the total water withdrawal (%) : (Total of water recycled and reused ÷ Total water withdrawal) x 100

Reduction of energy consumption intensity : (energy reduction from energy saving project -total energy consumption)÷ production amount

Reductions of GHG emissions : present year x 100 ÷ base year

Requirement of energy of sold products : Average power consumption of sold product x average power load rate of sold products

Retention rate : Total number of employees retained 12 months after returning to work following a period of parental leave x ? total number of employees returning from parental leave in the prior reporting period x 100

Return to work rate : Total number of employees that did return to work after parental leave ? total number of due to return to work after taking parental leave x 100

Total energy consumption within the organization : Non-renewable fuel consumed + Renewable fuel consumed + Electricity, heating, cooling, and steam purchased for consumption + Self-generated electricity-Electricity, heating, cooling, and steam sold

Total Volatile Organic Compounds intensity (t VOCs) : Total Volatile Organic Compounds ÷ production amount (USD)

Total water discharged : Discharged surface water + groundwater + seawater +produced water + third-party water

Total water withdrawal : Surface water + groundwater + seawater +produced water +third-party water

Total weight of hazardous waste transported by destination : Weight of hazardous waste transported to the organization by destination from external sources/ suppliers not owned by the organization + Weight of hazardous waste transported from the organization by destination to external sources/ suppliers not owned by the organization + Weight of hazardous waste transported nationally and internationally by destination between locations owned, leased, or managed by the organization.

Waste intensity : Total amount of waste generated ÷ production amount

Water consumption : Total water withdrawal - Total water discharge

Water consumption intensity : Total water consumption intensity ÷ production amount

Water withdrawal intensity : Total water withdrawal intensity ÷ production amount



LRQA Independent Assurance Statement

Relating to Delta Electronics (Thailand) Public Company Limited's Sustainability Report for the calendar 2022

This Assurance Statement has been prepared for Delta Electronics (Thailand) Public Company Limited in accordance with our contract but is intended for the readers of this Report.

Terms of engagement

LRQA (Thailand) Ltd. was commissioned by Delta Electronics (Thailand) Public Company Limited (DELTA) to provide independent assurance on its Sustainability Report 2022 (the Report) against the assurance criteria below to a moderate level of assurance and at the materiality of the professional judgement of the verifier using Accountability's AA1000AS v3 Type 2 approach¹.

Our assurance engagement covered DELTA's operations and activities in India, Slovakia and Thailand (as Head Office) and specifically the following requirements:

- Evaluating the nature and extent of DELTA's adherence to all four AA1000 AccountAbility Principles - Inclusivity, materiality, responsiveness and impact.
- Confirming that the report is in accordance with GRI Standards 2021 including related universal social responsibility standards principles addressed in ISO 26000
- Reviewing the integrity of DELTA's Mechanisms for advice and concerns about ethics (GRI 2-25, 2-26, 2-29)
- Evaluating the reliability of data and information for the selected economic, environmental and social indicators listed below:
- Economics: Human Capital Return on Investment and Community investment (GRI201-1); Operations assessed for risks related to corruption (205-1); Communication and training about anticorruption policies and procedures (GRI205-2) and Confirmed incidents of corruption and actions taken (GRI205-3).
- Environmental: Materials used by weight or volume (301-1); Recycled input materials used (GRI301-2); Energy consumption within the organization (GRI302-1); Energy intensity (302-3); Reduction of energy consumption (GRI 302-4); Water withdrawal (GRI 303-3); Water discharge (GRI 303-4); Water consumptions (GRI303-5); Direct GHG emissions (Scope 1) (GRI305-1); Energy indirect GHG emissions (Scope 2) (GRI305-2); Other indirect GHG emission (GRI305-3) - Transportation of Raw material and Finished Goods (Ocean and Air Freight only) and Transportation of Business trip by Air Freight; Nitrogen oxides (NO_x), Sulfur oxides (SO_x) and other significant air emissions (GRI305-7); Waste generated (GRI306-3); Waste directed to disposal (GRI306-4); Waste diverted from disposal (GRI 306-5); New suppliers that were screened using environmental criteria(GRI 308-1).
- Social: New employee hires and employee turnover (401-1); Benefits provided to full-time employees that are not provided to temporary or parttime employees (401-2); Parental leave (GRI401-3); Work-related injuries and Work-related ill health (GRI403-9 and 10); Average hours of training per year per employee (GRI 404-1); Percentage of employee receiving regular performance review (GRI 404-3); Ratio of basic salary and remuneration of women and men (GRI405-2); Operations in which the right to freedom of association and collective bargaining (GRI 407-1); Operations and suppliers at significant risk for incidents of child (GRI 408-1); Operations with local community engagement, impact assessments, and development programs(413-1); New suppliers that were screened using social criteria (GRI 414-1).

Our assurance engagement excluded DELTA's data and information of the selected indicators (GRI 401-3) outside of Thailand

LRQA's responsibility is only to DELTA. LRQA disclaims any liability or responsibility to others as explained in the end footnote. DELTA's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of DELTA.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that DELTA has not, in all material respects:

- Met the requirements above
- Disclosed reliable performance data and information as no errors or omissions were detected
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a moderate level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a moderate level assurance engagement is less than for a high-level assurance engagement. moderate level assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the



level of assurance obtained in a moderate level assurance engagement is substantially lower than the assurance that would have been obtained had a high-level assurance engagement been performed.

¹ GHG quantification is subject to inherent uncertainty.

LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing DELTA's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. We did this through reviewing associated records.
- Reviewing DELTA's process for identifying and determining material issues to confirm that the right issues were included in their Report. We also tested the filters used in determining material issues to evaluate whether DELTA makes informed business decisions that may create opportunities that contribute towards sustainable development.
- Auditing DELTA's data management systems to confirm that there were no significant errors, omissions or misstatements in the Report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems as well as collaborate opinions for other third parties. We also spoke with those key peoples responsible for compiling the data and writing the Report.
- Sampling facilities and consolidated data and information at DELTA's head office.

Observations

Further observations and findings, made during the assurance engagement, are:

- Stakeholder inclusivity: We are not aware of any key stakeholder groups that have been excluded from DELTA's stakeholder engagement process to address impacts.
- Materiality: We are not aware of any material issues concerning DELTA's sustainability performance that have been excluded from the Report. DELTA reviews regularly their material issues, against their established and extensive criteria for determining material issues, to reconfirm that their material issues are still relevant. The criteria for determining materiality are not biased to DELTA.
- Responsiveness: DELTA has processes for responding to various stakeholder groups, included establish and monitor of of GHGs transition plan as well as progressively improvement in suppliers' management.
- Reliability: DELTA uses spreadsheets and data retrieve from ERP to consolidate data and information associated with the selected economic, environmental and social indicators. DELTA should apply periodically internal verification to enhance the data quality and promote awareness of data and information disclosure throughout the operations.
- Impact: DELTA has process to regularly perform impact evaluation and address where where the impact happened in the supply chain.

LRQA's standards, competence and independence

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

This verification is the only work undertaken by LRQA for DELTA and as such does not compromise our independence or impartiality.

Dated: 7 July 2023

Opart Charuratana
LRQA Lead Verifier
On behalf of LRQA (Thailand) Limited
LRQA reference: BGK00000xxx

LRQA Group Limited, its affiliates and subsidiaries, including LRQA (Thailand) Ltd., and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

The English version of this Assurance Statement is the only valid version. LRQA Group Limited assumes no responsibility for versions translated into other languages.

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GRI Content Index

Structure:

The structure of this report follows the Global Reporting Initiative's (GRI) "GRI Sustainability Reporting Standards 2021"

Mapping tools of related initiatives we claimed in this index:

- ISO26000: [ISO - GRI G4 Guidelines and ISO 26000:2010](#)
- TCFD: [Driving Alignment in Climate-related Reporting \(how GRI Standards can be used to meet the TCFD requirements\)](#)
- CDP: [gri-standards-and-cdp-2017-climate-change-linkage-document.pdf \(globalreporting.org\)](#)
- UNGC: [Making the Connection - Using GRI's Guidelines to Create a COP | UN Global Compact](#)
- SDG: <https://www.globalreporting.org/media/lbvnxb15/mapping-sdgs-gri-update-march.pdf>
- CRBP: [Children are everyone's business 2.0](#)

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 2: General Disclosures 2021	2-1 (2021) Organizational details	<ul style="list-style-type: none"> • SD Report, page 2, • Annual Report page 52-54 • Website 			6.4.1, 6.4.2					
	2-2 (2021) Entities included in the organization's sustainability reporting	<ul style="list-style-type: none"> • SD Report, page 68, 145 • Annual Report page 47-49, 134 			4.4					Principle 1
	2-3 (2021) Reporting period, frequency and contact point	<ul style="list-style-type: none"> • SD Report, page 2, 145, 165 								
	2-4 (2021) Restatements of information	<ul style="list-style-type: none"> • SD Report, page 145 								
	2-5 (2021) External assurance	<ul style="list-style-type: none"> • SD Report, page 149 			4.4		CC8.6, CC8.6a, CC8.6b, CC8.7, CC8.7a, CC8.8, CC14.2, CC14.2a			
	2-6 (2021) Activities, value chain and other business relationships	<ul style="list-style-type: none"> • SD Report, page 2, 9-13 • Annual Report page 47-49, 172 • 2022 Membership of Association 			4.4, 6.4.1, 6.4.2					

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 2: General Disclosures 2021	2-7 (2021) Employees	<ul style="list-style-type: none"> SD Report, page 94-98, 146 Annual Report, page 98 			4.4, 6.4.1, 6.4.2			Principle 6	8.5, 10.3	
	2-8 (2021) Workers who are not employees	<ul style="list-style-type: none"> SD Report, page 94-98 Annual Report, page 98 			4.4, 6.4.1, 6.4.2					
	2-9 (2021) Governance structure and composition	<ul style="list-style-type: none"> SD Report, page 14, 34-39 Corporate Governance Policy BOD Competence Matrix Annual Report, page 91-97, 186-203 			4.4, 6.2	Governance (a)	CC1.1, CC1.1a		5.5, 16.7	Principle 1
	2-10 (2021) Nomination and selection of the highest governance body	<ul style="list-style-type: none"> SD Report, page 38 Annual Report, page 118-120 2022 AGM Minute, page 6-7 BOD Competence Matrix 			4.4, 6.2				16.7, 5.5	
	2-11 (2021) Chair of the highest governance body	<ul style="list-style-type: none"> SD Report, page 34-35 Annual Report, page 186-194 BOD Competence Matrix 			4.4, 6.2				16.6	
	2-12 (2021) Role of the highest governance body in overseeing the management of impacts	<ul style="list-style-type: none"> SD Report, page 14, 18-22, 25 Annual Report, page 52-54, 200 Executive committee charter Board of Director Charter 			4.4, 6.2	Governance (a) (b), Risk Management	CC2.1, CC2.1a,		16.7	
	2-13 (2021) Delegation of responsibility for managing impacts	<ul style="list-style-type: none"> SD Report, page 25 SD committee charter 			4.4, 6.2	Governance (a) (b)	CC1.1a			Principle 1
	2-14 (2021) Role of the highest governance body in sustainability reporting	<ul style="list-style-type: none"> SD Report, page 22 Annual Report, page 217 				Governance (a) (b)				
	2-15 (2021) Conflicts of interest	<ul style="list-style-type: none"> SD Report, page 34 Annual Report, page 89-90, 111-112 BOD Competence Matrix 			4.4, 6.2				16.6	
	2-16 (2021) Communication of critical concerns	<ul style="list-style-type: none"> SD Report, page 18, 38-39 Annual Report, page 52-67 			4.4, 6.2					
	2-17 (2021) Collective knowledge of the highest governance body	<ul style="list-style-type: none"> SD Report, page 34 Annual Report, page 186-198 BOD Competence Matrix 			4.4, 6.2	Governance (a)			4.7	

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 2: General Disclosures 2021	2-18 (2021) Evaluation of the performance of the highest governance body	<ul style="list-style-type: none"> SD Report, page 36 Annual Report, page 103-106 			4.4, 6.2					
	2-19 (2021) Remuneration policies	<ul style="list-style-type: none"> SD Report, page 38 Annual Report, page 97 2022 AGM Minutes, page 7-10 			4.4, 6.2		CC1.2, CC1.2a			
	2-20 (2021) Process to determine remuneration	<ul style="list-style-type: none"> SD Report, page 38 Annual Report, page 97 2022 AGM Minutes, page 8 			4.4, 6.2				16.7	
	2-21 (2021) Annual total compensation ratio	<ul style="list-style-type: none"> SD Report, page 34, 38 Annual Report, page 115 2022 AGM Minutes, page 7-10 			4.4, 6.2					
	2-22 (2021) Statement on sustainable development strategy	<ul style="list-style-type: none"> SD Report, page 6-7 					CC2.2, CC2.2a, CC3.1, CC3.1e, CC3.1f			
	2-23 (2021) Policy commitments	<ul style="list-style-type: none"> SD Report, page 23, 71 Corporate Governance Policy Code of Conduct Anti-corruption Policy Human rights Policy Sustainability International Initiatives 			4.4			Principle 10	16.3	Principle 1
	2-24 (2021) Embedding policy commitments	<ul style="list-style-type: none"> SD Report, page 25, 39 								
	2-25 (2021) Processes to remediate negative impacts	<ul style="list-style-type: none"> SD Report, page 100 Corporate Governance Policy Anti-corruption Policy Human rights Policy 								
	2-26 (2021) Mechanisms for seeking advice and raising concerns	<ul style="list-style-type: none"> SD Report, page 100 Human rights Policy 			4.4			Principle 10	16.3	
	2-27 (2021) Compliance with laws and regulations	<ul style="list-style-type: none"> SD Report, page 88, 91, 127 Local regulator official endorsement 			4.6, 6.7.1, 6.7.2, 6.7.6			Principle 7 Principle 8	16.3	Principle 6 Principle 7
	2-28 (2021) Membership associations	<ul style="list-style-type: none"> SD Report, page 128-130 Membership of Association disclosure Philanthropic contribution disclosure 			4.4, 6.4.1, 6.4.2					

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
	2-29 (2021) Approach to stakeholder engagement	<ul style="list-style-type: none"> SD Report, page 20 Stakeholder Engagement Guideline 			4.4					
	2-30 (2021) Collective bargaining agreements	<ul style="list-style-type: none"> SD Report, page 104 			4.4			Principle 1	8.8	
GRI 201: Economic Performance 2016	201-1 (2016) Direct economic value generated and distributed	<ul style="list-style-type: none"> SD Report, page 30, 40, 127-130 Annual Report, page 4-5, 124-132 Membership of Association disclosure Philanthropic contribution disclosure 								
	201-2 (2016) Financial implications and other risks and opportunities due to climate change	<ul style="list-style-type: none"> SD Report, page 11-12, 30 TCFD Report 2023 			6.5.5	Governance (b), Strategy (a), (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC5.1, CC5.1a, CC5.1b, CC5.1c, CC6.1, CC6.1a, CC6.1b, CC6.1c	Principle 7	13.1	
	201-3 (2016) Defined benefit plan obligations and other retirement plans	<ul style="list-style-type: none"> SD Report, page 125-126 Annual Report, page 141-142 			6.8.7					
	201-4 (2016) Financial assistance received from government	<ul style="list-style-type: none"> Annual Report, page 168-170 								
GRI 202: Market Presence 2016	202-1 (2016) Ratios of standard entry level wage by gender compared to local minimum wage	<ul style="list-style-type: none"> SD Report, page 102-103 			6.3.7, 6.3.110, 6.4.3, 6.4.4, 6.8.1, 6.8.2			Principle 6	1.2, 5.1, 8.2, 8.5	
	202-2 (2016) Proportion of senior management hired from the local community	<ul style="list-style-type: none"> SD Report, page 98 			6.4.3, 6.8.1, 6.8.2, 6.8.5, 6.7			Principle 6	8.5	
GRI 203: Indirect Economic Impacts 2016	203-1 (2016) Infrastructure investments and services supported	<ul style="list-style-type: none"> SD Report, page 52-55 Annual Report, page 141-142 			6.3.9, 6.8.1, 6.8.2, 6.8.5, 6.8.7, 6.8.9				11.2, 2.a, 5.1, 7.a, 7.b, 9.1, 9.4, 9.a	
	203-2 (2016) Significant indirect economic impacts	<ul style="list-style-type: none"> SD Report, page 14, 24, 49, 93, 111 			6.3.9, 6.6.6, 6.6.7, 6.7.6, 6.8.1, 6.8.2, 6.8.7, 6.8.9				1.2, 10.b, 17.3, 2.3, 3.8, 8.2, 8.3, 8.5	Principle 10
GRI 204: Procurement Practices 2016	204-1 (2016) Proportion of spending on local suppliers	<ul style="list-style-type: none"> SD Report, page 50 			6.4.3, 6.6.6, 6.8.1, 6.8.2, 6.8.7				1.4, 5.1, 8.3	
GRI 205: Anti-corruption 2016	205-1 (2016) Operations assessed for risks related to corruption	<ul style="list-style-type: none"> SD Report, page 34, 52 			6.6.1, 6.6.2, 6.6.3			Principle 8 Principle 10	16.5	Principle 10

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
	205-2 (2016) Communication and training about anti-corruption policies and procedures	<ul style="list-style-type: none"> SD Report, page 34-40, 93 Anti-corruption Policy 			6.6.3, 6.6.7			Principle 7 Principle 8 Principle 10	16.5	Principle 10
	205-3 (2016) Confirmed incidents of corruption and actions taken	<ul style="list-style-type: none"> SD Report, page 34-40 			6.6.1, 6.6.2, 6.6.3			Principle 8 Principle 10	16.5	Principle 10
GRI 206: Anti-competitive Behavior 2016	206-1 (2016) Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	<ul style="list-style-type: none"> SD Report, page 34-40 			6.6.1, 6.6.2, 6.6.3			Principle 8	16.3	
GRI 207: Tax 2019	207-1 (2016) Approach to tax	<ul style="list-style-type: none"> SD Report, page 30-32, 34, 114-116 Tax Policy 							17.3	
	207-2 (2016) Tax governance, control, and risk management	<ul style="list-style-type: none"> SD Report, page 30, 34, 114-116 Annual Report, page 145, 152, 166-172 Tax Policy 							17.3	
	207-3 (2016) Stakeholder engagement and management of concerns related to tax.	<ul style="list-style-type: none"> Stakeholder Engagement Guideline 							17.3	
	207-4 (2016) Country-by-country reporting	<ul style="list-style-type: none"> Annual Report, page 167 							17.3	
GRI 301: Materials 2016	301-1 (2016) Materials used by weight or volume	<ul style="list-style-type: none"> SD Report, page 58, 65 			6.5.4			Principle 7 Principle 8	12.2, 8.4	
GRI 3: Material Topics 2021	3-1 (2021) Process to determine material topics	SD Report, page 58, 65								
	3-2 (2021) List of material topics	SD Report, page 58, 65								
	3-3 (2021) Management of material topics	SD Report, page 58, 65								
GRI 301: Materials 2016	301-2 (2016) Recycled input materials used	<ul style="list-style-type: none"> SD Report, page 65 			6.5.4		Material Issue	Principle 8	12.2, 12.5, 8.4	
	301-3 (2016) Reclaimed products and their packaging materials	<ul style="list-style-type: none"> SD Report, page 65 			4.4, 5.2			Principle 8	12.2, 12.5, 8.4	
GRI 302: Energy 2016	302-1 (2016) Energy consumption within the organization	<ul style="list-style-type: none"> SD Report, page 71-72 ISO 50001 certificate (Thailand) ISO 14001 certificate (Thailand) ISO 14001 Certification (India) ISO 14001 Certification (Slovakia) 2023 Sustainability in numbers, page 5 			6.5.4	Metrics and Targets (a), (c)	CC10.1a, CC11.2, CC11.3, CC11.3a, CC11.4, CC11.5	Principle 7 Principle 8	12.2, 13.1, 7.2, 7.3, 8.4	

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 301: Materials 2016	3-1 (2021) Process to determine material topics	SD Report, page 71-72								
	3-2 (2021) List of material topics	SD Report, page 71-72								
	3-3 (2021) Management of material topics	SD Report, page 71-72								
GRI 302: Energy 2016	302-2 (2016) Energy consumption outside of the organization	<ul style="list-style-type: none"> SD Report, page 67, 68 			6.5.4	Metrics and Targets (a), (c)		Principle 8	12.2, 13.1, 7.2, 7.3, 8.4	
	302-3 (2016) Energy intensity	<ul style="list-style-type: none"> SD Report, page 71-72 2023 Sustainability in numbers, page 5 			6.5.4	Metrics and Targets (a), (c)	CC10.1a, CC11.2, CC11.3, CC11.3a, CC11.4, CC11.5	Principle 8	12.2, 13.1, 7.3, 8.4	
	302-4 (2016) Reduction of energy consumption	<ul style="list-style-type: none"> SD Report, page 73-75 2023 Sustainability in numbers, page 5 			6.5.4, 6.5.5	Metrics and Targets (a), (c)		Principle 8 Principle 9	12.2, 13.1, 7.3, 8.4	
	302-5 (2016) Reductions in energy requirements of products and services	<ul style="list-style-type: none"> SD Report, page 49-50 			6.5.4, 6.5.5	Metrics and Targets (a), (c)		Principle 9	12.2, 13.1, 7.3, 8.4	
GRI 303: Water and Effluents 2018	303-1 (2016) Interactions with water as a shared resource	<ul style="list-style-type: none"> SD Report, page 85-86 				Metrics and Targets (a), (c)		Principle 8	6.4	
	303-2 (2016) Management of water discharge-related impacts	<ul style="list-style-type: none"> SD Report, page 85-89 				Metrics and Targets (a), (c)		Principle 8	6.4	
	303-3 (2018) Water withdrawal	<ul style="list-style-type: none"> SD Report, page 85-89 2023 Sustainability in numbers, page 6-7 				Metrics and Targets (a), (c)		Principle 7 Principle 8	6.4	
GRI 301: Materials 2016	3-1 (2021) Process to determine material topics	SD Report, page 85-89								
	3-2 (2021) List of material topics	2023 Sustainability in numbers, page 6-7								
	3-3 (2021) Management of material topics	SD Report, page 85-89								
GRI 303: Water and Effluents 2018	303-4 (2018) Water discharge	<ul style="list-style-type: none"> SD Report, page 85-89 2023 Sustainability in numbers, page 8 				Metrics and Targets (a), (c)		Principle 7 Principle 8	6.3, 6.4	
	303-5 (2018) Water consumption	<ul style="list-style-type: none"> SD Report, page 85-89 2023 Sustainability in numbers, page 8 				Metrics and Targets (a), (c)		Principle 7 Principle 8	6.3, 6.4	

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 304: Biodiversity 2016	304-1 (2016) Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	<ul style="list-style-type: none"> SD Report, page 64, 67, 77-78, 81-89, 91 TCFD Report 2023 EHS Policy 			6.5.6				15.1, 15.4, 15.5, 6.6	
	304-2 (2016) Significant impacts of activities, products and services on biodiversity	<ul style="list-style-type: none"> SD Report, page 77, 91 TCFD Report 2023 			6.5.6			Principle 8	8, 14.2, 15.1, 15.4, 15.5, 6.6	
	304-3 (2016) Habitats protected or restored	<ul style="list-style-type: none"> SD Report, page 68, 77, 87-89, 91 TCFD Report 2023 			6.5.6			Principle 8	14.2, 15.1, 15.4, 15.5, 6.6	
	304-4 (2016) IUCN Red List species and national conservation list species with habitats in areas affected by operations	<ul style="list-style-type: none"> SD Report, page 91 TCFD Report 2023 			6.5.6			Principle 8	14.2, 15.1, 15.4, 15.5, 6.6	
GRI 305: Emissions 2016	305-1 (2016) Direct (Scope 1) GHG emissions	<ul style="list-style-type: none"> SD Report, page 69-70 Delta Thailand GHG Inventory Report Delta Thailand ISO14064-1 certificate Delta India ISO14064-1 certificate Delta Slovakia ISO14064-1 certificate 2023 Sustainability in numbers, page 9 			6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC7.1, CC7.2, CC7.2a, CC7.3, CC7.4, CC8.1, CC8.2, CC8.9, CC8.9a, CC9.1, CC9.1a, CC9.2, CC9.2a, CC9.2b, CC9.2c, CC9.2d CC13.1	Principle 7 Principle 8	12.4, 13.1, 14.3, 15.2, 3.9	
	305-2 (2016) Energy indirect (Scope 2) GHG emissions	<ul style="list-style-type: none"> SD Report, page 69-70 Delta Thailand GHG Inventory Report Delta Thailand ISO14064-1 certificate Delta India ISO14064-1 certificate Delta Slovakia ISO14064-1 certificate 2023 Sustainability in numbers, page 9 			6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC7.1, CC7.2, CC7.2a, CC7.3, CC7.4, CC8.1, CC8.3, CC8.3a, CC10.1, CC10.1a, CC10.2, CC10.2a, CC10.2b, CC10.2c	Principle 7 Principle 8	12.4, 13.1, 14.3, 15.2, 3.9	
	305-3 (2016) Other indirect (Scope 3) GHG emissions	<ul style="list-style-type: none"> SD Report, page 69-70 Delta Thailand GHG Inventory Report Delta Thailand ISO14064-1 certificate Delta India ISO14064-1 certificate Delta Slovakia ISO14064-1 certificate 2023 Sustainability in numbers, page 9-10 			6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC3.1a, CC3.1b, CC3.1c, CC3.1e, CC8.9, CC8.9a, CC14.1	Principle 7 Principle 8	12.4, 13.1, 14.3, 15.2, 3.9	
GRI 3: Material Topics 2021	3-1 (2021) Process to determine material topics	<ul style="list-style-type: none"> SD Report, page 69-70 Delta Thailand GHG Inventory Report 								
	3-2 (2021) List of material topics	Delta Thailand ISO14064-1 certificate								
	3-3 (2021) Management of material topics	Delta India ISO14064-1 certificate								

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 305: Emissions 2016	305-4 (2016) GHG emissions intensity	<ul style="list-style-type: none"> SD Report, page 69-70 Delta Thailand GHG Inventory Report 2023 Sustainability in numbers, page 10 			6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC12.2, CC12.3	Principle 8	13.1, 14.3, 15.2	
	305-5 (2016) Reduction of GHG emissions	<ul style="list-style-type: none"> SD Report, page 69-70 Delta Thailand GHG Inventory Report Delta Thailand ISO14064-1 certificate Delta India ISO14064-1 certificate Delta Slovakia ISO14064-1 certificate 			6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC3.3a, CC3.3b, CC7.2, CC7.2a, CC7.3, CC12.1, CC12.1a, CC12.1b, CC14.3, CC14.3a	Principle 8	13.1, 14.3, 15.2	
	305-6 (2016) Emissions of ozone-depleting substances (ODS)	<ul style="list-style-type: none"> SD Report, page 82 			6.5.3, 6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)		Principle 7 Principle 8	12.4, 3.9	
	305-7 (2016) Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	<ul style="list-style-type: none"> SD Report, page 82-84 2023 Sustainability in numbers, page 11 			6.5.5	Governance (b), Risk Management (a), (b), (c), Metrics and Targets (a), (b), (c)	CC12.2, CC12.3	Principle 7 Principle 8	11.6, 12.4, 14.3, 15.2, 3.9	
GRI 306: Waste 2020	306-1 (2016) Waste generation and significant waste-related impacts	<ul style="list-style-type: none"> SD Report, page 82-84 Local Regulator Official Endorsement 			6.5.3	Metrics and Targets (a), (c)		Principle 8	12.4, 12.5, 3.9	
	306-2 (2016) Management of significant waste-related impacts	<ul style="list-style-type: none"> SD Report, page 81 Local Regulator Official Endorsement 			6.5.3	Metrics and Targets (a), (c)		Principle 7 Principle 8	12.4, 12.5, 3.9, 6.3	
	306-3 (2016) Waste generated	<ul style="list-style-type: none"> SD Report, page 81 Local Regulator Official Endorsement 2023 Sustainability in numbers, page 11 			6.5.3	Metrics and Targets (a), (c)		Principle 8	12.4, 12.5, 14.1, 15.1, 3.9, 6.3, 6.6	
GRI 3: Material Topics 2021	3-1 (2021) Process to determine material topics	SD Report, page 81								
	3-2 (2021) List of material topics	Local Regulator Official Endorsement								
	3-3 (2021) Management of material topics	2023 Sustainability in numbers, page 11								

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 306: Waste 2020	306-4 (2016) Waste diverted from disposal	<ul style="list-style-type: none"> SD Report, page 81 Local Regulator Official Endorsement 2023 Sustainability in numbers, page 11-12 			6.5.3	Metrics and Targets (a), (c)		Principle 8	12.4, 12.5, 3.9	
	306-5 (2016) Waste directed to disposal	<ul style="list-style-type: none"> SD Report, page 81 Local Regulator Official Endorsement 2023 Sustainability in numbers, page 12 TCFD Report 2023. 			6.5.3	Metrics and Targets (a), (c)		Principle 8	12.4, 12.5, 3.9	
GRI 308: Supplier Environmental Assessment 2016	308-1 (2016) New suppliers that were screened using environmental criteria	<ul style="list-style-type: none"> SD Report, page 56-61 Procurement Agreement Supplier Management Measure 			6.3.5, 6.6.6			Principle 8		Principle 7
GRI 3: Material Topics 2021	3-1 (2021) Process to determine material topics	SD Report, page 56-61								
	3-2 (2021) List of material topics	Procurement Agreement								
	3-3 (2021) Management of material topics	Supplier Management Measure								
GRI 308: Supplier Environmental Assessment 2016	308-2 (2016) Negative environmental impacts in the supply chain and actions taken	<ul style="list-style-type: none"> SD Report, page 56-61 			6.3.5, 6.6.6			Principle 8		
GRI 401: Employment 2016	401-1 (2016) New employee hires and employee turnover	<ul style="list-style-type: none"> SD Report, page 94-98 Employment Policy 			6.4.1, 6.4.2, 6.4.3			Principle 6	5.1, 8.5, 8.6	Principle 3
	401-2 (2016) Benefits provided to full-time employees that are not provided to temporary or part-time employees	<ul style="list-style-type: none"> SD Report, page 89, 102 Employment Policy Welcome onboard, manual for new employees 			6.4.1, 6.4.2, 6.4.4, 6.8.7			Principle 8	3.2, 5.4, 8.5	Principle 3
GRI 3: Material Topics 2021	3-1 (2021) Process to determine material topics	SD Report, page 89, 102								
	3-2 (2021) List of material topics	Employment Policy								
	3-3 (2021) Management of material topics	Welcome onboard, manual for new employees								
GRI 401: Employment 2016	401-3 (2016) Parental leave	<ul style="list-style-type: none"> SD Report, page 98, 102 Employment Policy Welcome onboard, manual for new employees 			6.4.1, 6.4.2, 6.4.4			Principle 6	5.1, 5.4, 8.5	Principle 3
GRI 402: Labor/Management Relations 2016	402-1 (2016) Minimum notice periods regarding operational changes	<ul style="list-style-type: none"> SD Report, page 98 Employment Policy Welcome onboard, manual for new employees 			6.4.1, 6.4.2, 6.4.3, 6.4.5			Principle 3	8.8	

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 403: Occupational Health and Safety 2018	403-1 (2018) Occupational health and safety management system	<ul style="list-style-type: none"> SD Report, page 112 ISO45001 certificate: Thailand, India, Slovakia 							8.8	
	403-2 (2016) Hazard identification, risk assessment, and incident investigation	<ul style="list-style-type: none"> SD Report, page 90, 112-113 							3.3, 3.4, 3.9, 8.8	
	403-3 (2016) Occupational health services	<ul style="list-style-type: none"> SD Report, page 90, 117-119 Welcome onboard, manual for new employees 							3.3, 3.4, 3.9, 8.8	
	403-4 (2016) Worker participation, consultation, and communication on occupational health and safety	<ul style="list-style-type: none"> SD Report, page 105, 111-115, 125-126 							8.8	
	403-5 (2018) Worker training on occupational health and safety	<ul style="list-style-type: none"> SD Report, page 105, 111, 120 								
	403-6 (2016) Promotion of worker health	<ul style="list-style-type: none"> SD Report, page 90, 117-119 Happy Workplace Policy Employment Policy Welcome onboard, manual for new employees 								
	403-7 (2016) Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<ul style="list-style-type: none"> SD Report, page 90, 117-119 Environment, Safety and Health Policy Supplier Management Measure Local Regulator Official Endorsement 								
	403-8 (2016) Workers covered by an occupational health and safety management system	<ul style="list-style-type: none"> SD Report, page 111 								
	403-9 (2018) Work-related injuries	<ul style="list-style-type: none"> SD Report, page 119-120 								
	403-10 (2018) Work-related ill health	<ul style="list-style-type: none"> SD Report, page 90, 119-120 								
GRI 404: Training and Education 2016	404-1 (2016) Average hours of training per year per employee	<ul style="list-style-type: none"> SD Report, page 107 			6.4.7			Principle 6	4.3, 4.4, 4.5, 8.2, 8.5	Principle 3
GRI 3: Material Topics 2021	3-1 (2021) Process to determine material topics	<ul style="list-style-type: none"> SD Report, page 107 								
	3-2 (2021) List of material topics	<ul style="list-style-type: none"> SD Report, page 107 								
	3-3 (2021) Management of material topics	<ul style="list-style-type: none"> SD Report, page 107 								

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
GRI 404: Training and Education 2016	404-2 (2016) Programs for upgrading employee skills and transition assistance programs	<ul style="list-style-type: none"> • SD Report, page 108-110 • Employment Policy • Membership of Association disclosure • Philanthropic contribution disclosure 			6.4.7, 6.8.5			Principle 8	8.2, 8.5	Principle 3
	404-3 (2016) Percentage of employees receiving regular performance and career development reviews	<ul style="list-style-type: none"> • SD Report, page 103 			6.4.7			Principle 6	10.3, 5.1, 8.5	
GRI 405: Diversity and Equal Opportunity 2016	405-1 (2016) Diversity of governance bodies and employees	<ul style="list-style-type: none"> • SD Report, page 34, 94-98 • CG Policy • BOD Competence Matrix • Employment Policy 			6.2.3, 6.3.7, 6.3.10, 6.4.3			Principle 6	5.1, 5.5, 8.5	Principle 3
	405-2 (2016) Ratio of basic salary and remuneration of women to men	<ul style="list-style-type: none"> • SD Report, page 102-103 			6.3.7, 6.3.10, 6.4.3, 6.4.4			Principle 6	10.3, 5.1, 8.5	
GRI 406: Non-discrimination 2016	406-1 (2016) Incidents of discrimination and corrective actions taken	<ul style="list-style-type: none"> • SD Report, page 99 			6.3.1, 6.3.2, 6.3.6, 6.3.7, 6.3.10, 6.4.3			Principle 6	16.b, 5.1, 8.8	Principle 1, 3
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 (2016) Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	<ul style="list-style-type: none"> • SD Report, page 58-61 			6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.8, 6.3.10, 6.4.5, 6.6.6			Principle 3	8.8	Principle 3
GRI 408: Child Labor 2016	408-1 (2016) Operations and suppliers at significant risk for incidents of child labor	<ul style="list-style-type: none"> • SD Report, page 137 			6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.5, 6.3.10, 6.6.6, 6.8.4			Principle 5	16.2, 8.7	Principle 1, 2, 3
GRI 409: Forced or Compulsory Labor 2016	409-1 (2016) Operations and suppliers at significant risk for incidents of forced or compulsory labor	<ul style="list-style-type: none"> • SD Report, page 58-61 • Procurement Agreement • RMI Agreement • Supplier Management Measure 			6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.3.5, 6.3.10, 6.6.6			Principle 4	8.7	
GRI 410: Security Practices 2016	410-1 (2016) Security personnel trained in human rights policies or procedures	<ul style="list-style-type: none"> • SD Report, page 107-108 			6.3.1, 6.3.2, 6.3.4, 6.3.5, 6.6.6			Principle 1	16.1	Principle 8
GRI 411: Rights of Indigenous Peoples 2016	411-1 (2016) Incidents of violations involving rights of indigenous peoples	<ul style="list-style-type: none"> • SD Report, page 99 			6.3.1, 6.3.2, 6.3.4, 6.3.6, 6.3.7, 6.3.8, 6.6.7, 6.8.3			Principle 1	2.3	
GRI 413: Local Communities 2016	413-1 (2016) Operations with local community engagement, impact assessments, and development programs	<ul style="list-style-type: none"> • SD Report, page 17, 36, 91, 116-122 			6.3.9, 6.5.1, 6.5.2, 6.5.3, 6.7.9			Principle 1		Principle 7

GRI STANDARD	DESCRIPTION	Page / Link	Reason for omission	External Assurance	Linkage to other initiatives					
					ISO26000	TCFD	CDP	UNGC	SDG	CRBP
	413-2 (2016) Operations with significant actual and potential negative impacts on local communities	<ul style="list-style-type: none"> SD Report, page 17, 36, 91, 116-122 Local Regulator Official Endorsement 			6.3.9, 6.5.3, 6.7.9			Principle 1	2.3	Principle 7
GRI 414: Supplier Social Assessment 2016	414-1 (2016) New suppliers that were screened using social criteria	<ul style="list-style-type: none"> SD Report, page 57 Procurement Agreement 			6.3.5, 6.6.6, 6.8.1, 6.8.2			Principle 7 Principle 8		Principle 2, 3
	414-2 (2016) Negative social impacts in the supply chain and actions taken	<ul style="list-style-type: none"> SD Report, page 57 Supplier Management Measure page 4-13 			6.3.5, 6.6.6, 6.8.1, 6.8.2			Principle 7 Principle 8		Principle 2, 3
GRI 415: Public Policy 2016	415-1 (2016) Political contributions	<ul style="list-style-type: none"> SD Report, page 114-116 Membership of Association disclosure Philanthropic contribution disclosure 					CC2.3, CC2.3a, CC2.3e, CC2.3f, CC2.3g	Principle 8 Principle 10	16.5	
GRI 416: Customer Health and Safety 2016	416-1 (2016) Assessment of the health and safety impacts of product and service categories	<ul style="list-style-type: none"> SD Report, page 114 			6.7.1, 6.7.2, 6.7.4, 6.7.5, 6.8.8			Principle 8		Principle 5
	416-2 (2016) Incidents of non-compliance concerning the health and safety impacts of products and services	<ul style="list-style-type: none"> SD Report, page 114 			4.6, 6.7.1, 6.7.2, 6.7.4, 6.7.5, 6.8.8			Principle 8	16.3	
GRI 417: Marketing and Labeling 2016	417-1 (2016) Requirements for product and service information and labeling	<ul style="list-style-type: none"> SD Report, page 51 			6.7.1, 6.7.2, 6.7.3, 6.7.4, 6.7.5, 6.7.9			Principle 8	12.8	Principle 5, 6
	417-2 (2016) Incidents of non-compliance concerning product and service information and labeling	<ul style="list-style-type: none"> SD Report, page 51 			4.6, 6.7.1, 6.7.2, 6.7.3, 6.7.4, 6.7.5			Principle 7 Principle 8	16.3	
	417-3 (2016) Incidents of non-compliance concerning marketing communications	<ul style="list-style-type: none"> SD Report, page 51 			4.6, 6.7.1, 6.7.2, 6.7.3			Principle 7 Principle 8	16.3	
GRI 418: Customer Privacy 2016	418-1 (2016) Substantiated complaints concerning breaches of customer privacy and losses of customer data	<ul style="list-style-type: none"> SD Report, page 79 ISO/IEC27001:2013 Information Security Management certificate 			6.7.1, 6.7.2, 6.7.6			Principle 8	16.a, 16.3, 16.10	Principle 6



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ใบอนุญาตเลขที่ 4/17 ปณ บางปู
ถ้าหากส่งในระเทศนี้ต้องส่งตราประทับรายการ



คณะกรรมการเพื่อการพัฒนาที่ยั่งยืน

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1. Which group of reader are you in?

☐ Regulator ☐ Business partner ☐ Customer ☐ Creditor ☐ Shareholder/ investor

☐ Delta employee ☐ Student ☐ Research/ educational institute ☐ Media ☐ Community ☐ Sustainable report developer

☐ Others (please specify).....
2. Which rank of age are you in?

☐ under 22 yrs. old ☐ 22 – 35 yrs. old ☐ 36 – 46 yrs. old

☐ 46 – 60 yrs. old ☐ 61 yrs. old and above
3. Your overall satisfaction on this report

3.1) Easiness to understand

☐ High ☐ Moderate ☐ Need improvement

3.2) Attraction of the contents

☐ High ☐ Moderate ☐ Need improvement

3.3) Content grouping and chronicle

☐ High ☐ Moderate ☐ Need improvement

3.4) Completeness of material issues

☐ High ☐ Moderate ☐ Need improvement

3.5) Inclusiveness of stakeholders

☐ High ☐ Moderate ☐ Need improvement

3.6) Balance of the content

☐ High ☐ Moderate ☐ Need improvement

3.7) Key indicator mapping to related initiatives

☐ High ☐ Moderate ☐ Need improvement

3.8) Validity of additional information links

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3.9) Overall satisfaction level

☐ High ☐ Moderate ☐ Need improvement

4. What are your top 3 subjects ae you interested in?

4.1).....

4.2).....

4.3).....

5. How should Delta improve our Sustainable Development Report to suit your requirement?

5.1).....

5.2).....

5.3).....

6. Here’s your e-mail addressand you would like to stay connect with Delta’s move on these matters:

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Your feedback matters!

We value your suggestion in this report as part of our sustainable development activities.

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