

ECOVE

Every Resource Counts

2024

Sustainability Report

ECOVE Environment
Corporation



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Expanding Resource Cycle Integration Efficiency and Refining Net-Zero Action Momentum



In response to global climate change, implementing a circular economy and improving energy resource efficiency have become essential strategies for achieving net zero emissions. In alignment with the Group's ESG vision of being "Guardians of Earth's Sustainability," ECOVE, the Resource Recycling Business Group, has continuously enhanced resource recycling efficiency over the years through the promotion of four main business pillars: resource management, renewable energy, recycling, and electrical and mechanical maintenance and rectification. The pillars help the continuous enhancement of resource recycling efficiency and is the embodiment of our ideal of "Every Resource Counts."

Deepening Resource Management to Enhance Efficiency through Technology

In the field of resource management, ECOVE is one of the leading companies in the domestic market, capable of providing clients with a comprehensive range of services from upstream waste transportation, recycling, and incineration treatment to downstream final disposal. Our outstanding performance has also extended overseas, currently providing operational maintenance services for a total of 13 resource centers (11 in Taiwan and 2 in Macau). In recent years, there has been a more proactive investment in the development of next-generation energy resource centers, as well as the application of new energy-saving technologies to extend the lifespan of older plants and to incorporate applications such as the Internet of Things and cloud management, effectively enhancing operational performance. In 2024, it is estimated that ECOVE has processed approximately 2.71 million tons of waste, generating 1.53 billion kWh of electricity. The electricity generation per ton of waste has increased by approximately 8% compared to previous years, demonstrating our significant effectiveness.

In business development, ECOVE is actively pursuing climate opportunities. Recently, we secured the BOT bid for the Green Energy Sustainable Recycling Center in Chiayi City and is currently handling the design and procurement bidding. The Changbin Low Carbon Recycling and Disposal Center is undergoing environmental assessment. Internationally, we collaborated with our partners in Malaysia to secure the status of the optimal applicant for the Melaka project, and we will participate in the operational work in the future.

J. J. Liao

Chairman of ECOVE Environment Corp.

Seizing Opportunities in Renewable Energy to Expand Scope of Service

With the recent announcement of Taiwan's new carbon reduction targets, the demand for renewable energy among enterprises is increasing day by day. ECOVE has long invested in constructing and operating solar power plants and currently owns over 100 facilities in Taiwan and abroad. This makes us one of the few Taiwanese companies offering comprehensive services from investment and development to construction, operation, and green electricity trading. ECOVE is expanding its energy storage and green energy transfer services. We are implementing a 5MW energy storage system project in Nantou Industrial Park, supporting Taiwan Power Company's ancillary services. Additionally, we are developing the "Light Charge Storage" smart parking lot, which integrates energy storage, solar photovoltaic systems, electric vehicle charging, and other smart features. Currently, ECOVE has developed a total capacity of 164 MW in the solar photovoltaic sector, with a total maintenance capacity of 485 MW and a green electricity supply of 17 MW. The Company continues to expand its overseas achievements.

Recycling Maximizing Resource Efficiency

Enhancing recycling and reuse technologies to maximize the value of resources has become a significant direction for enterprises to invest in sustainability. In response to the waste solvent treatment generated by the development of the high-tech industry, as well as the recycling and reuse of water resources, ECOVE has been actively promoting these two major initiatives in the field of recycling and reuse in recent years.

In the area of waste solvent recycling and reuse, ECOVE's recovery and reuse of waste isopropyl alcohol (IPA) has obtained multiple patents in Taiwan and the United States. The process can concentrate the IPA to 99.9% purity or even higher, effectively enhancing product value. Currently, after obtaining the general reuse permits from the National Science and Technology Council and the Ministry of Economic Affairs, the production capacity utilization rate has reached full capacity. In the future, we will continue to focus on the research and development of electronic-grade products to facilitate the adoption of high-tech manufacturing processes. Meanwhile, we are collaborating with academic institutions to develop electronic-grade recycling technology for waste edge bead remover (EBR), with the aim of expanding related business operations.

In terms of water resources, leveraging the Group's strengths in turnkey

projects, ECOVE can continue to undertake subsequent operational tasks, thereby providing a comprehensive service. Currently, the scope of services has expanded from industrial wastewater, urban sewage, and wastewater reuse in the high-tech electronics industry to include seawater desalination. Recent achievements include the South Taiwan Science Park Water Reclamation Plant, North District of Taoyuan, Zhongli Sewage System in Taoyuan, and the recently awarded Hsinchu Seawater Desalination Plant. In addition to protecting hydrological and ecological environments, these initiatives can also produce reclaimed water and desalinated seawater for industries, achieving a win-win situation for both the economy and the environment.

ECOVE will continue to pursue the operation and management of new government and corporate wastewater treatment plants and seawater desalination facilities. In response to high-tech industry demands, we will leverage the Group's turnkey project capabilities to create synergies. Through recycling initiatives like reclaimed water and waste solvent recovery facilities, ECOVE aims to help high-tech parks establish zero-waste centers and provide ongoing operation and maintenance services. These business opportunities are promising.

Integration of Intelligence and Green Energy for Upgraded Maintenance and Rectification of Electromechanical Systems

The maintenance and rectification of electromechanical systems contribute to extending the service life of equipment and enhancing its operational efficiency. Recent achievements of ECOVE include: the establishment of an integrated waste solvent energy resource system for international semiconductor manufacturers, along with its operation and product sales; the expansion of a waste solvent recovery system for international memory manufacturers; maintenance projects for public facilities of internationally recognized high-tech equipment suppliers; and performance improvement and replacement projects for multiple energy resource center facilities (such as those in Taohang, Nanke, Gangshan, and Xizhou). In the future, ECOVE will continue to focus on relevant business opportunities by integrating green technology and smart technology. For instance, we will establish waste recycling facilities using advanced recycling and reuse technologies. Additionally, we will assist in upgrading and maintaining energy resource center equipment and extending its lifespan through intelligent management.

ESG for All Employees, Continuing Improvement of Corporate Sustainability

ECOVE has deeply integrated ESG into the daily work routines of our colleagues. According to a 2023 employee engagement survey conducted by an external organization, 89% of employees recognized ESG, ranking it highest among various issues. This strong ESG performance has placed the Company in the top 5% of the Corporate Governance Evaluation by the Taiwan Stock Exchange and Taipei Exchange for 11 consecutive years. Additionally, the Company was selected for the S&P Global Sustainability Yearbook member for the first time in 2025, earning recognition as one of the Industry Movers.

CTCI Group, our parent company, has adopted the Science Based Targets initiative (SBTi) and has set carbon reduction targets in accordance with the 1.5°C pathway standard. Therefore, ECOVE aims to reduce emissions by 30% by 2030, relative to the base year of 2022, and to achieve net zero emissions by 2050. Starting in 2024, the corporate headquarters started to utilize green electricity from solar power projects in central and southern Taiwan, and included "net zero" as one of the key performance indicators (KPIs) to actively promote the achievement of sustainability goals. Regarding the issue of biodiversity, in addition to issuing commitments to biodiversity and a zero deforestation policy, the purple crow butterfly has been included as a species of concern. ECOVE, collaborating with the Taiwan Purplecrow Butterfly Ecological Preservation Association, has integrated purple crow butterfly conservation into the content of environmental education. This is our way of contributing our efforts in biodiversity.

Expanding the Impact of the Circular Economy Achieving Sustainability

To achieve Net Zero by 2050, continuous effort from all sectors is essential. ECOVE aims to be the most trusted leader in sustainable resource recycling by expanding the circular economy through diversified business initiatives and integrated performance, collaborating with customers to support a sustainable global environment.

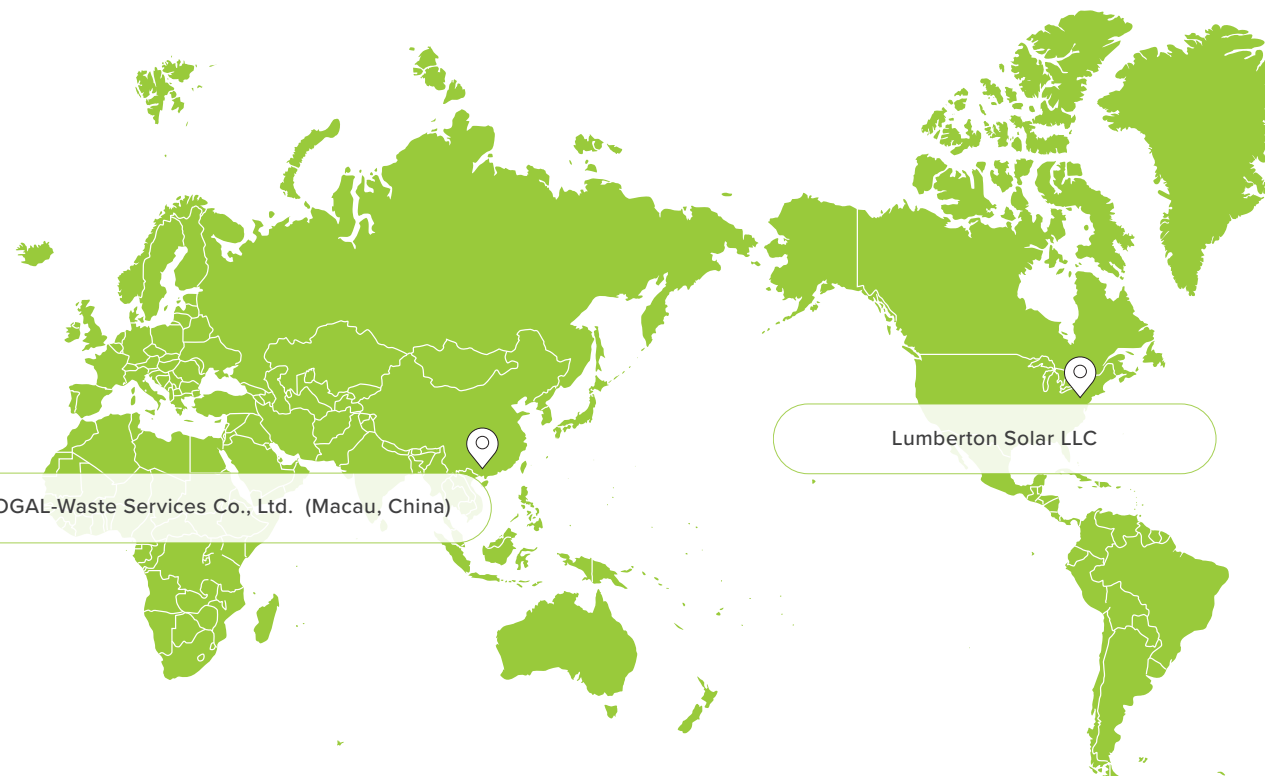
Company Profile GRI 2-1, 2-6

About ECOVE

ECOVE Environment Corp. (hereinafter referred to as "ECOVE" or "the Company") is a subsidiary of CTCL, an international engineering and construction conglomerate. It is also the leader of the Group Resource Cycling Business. ECOVE is committed to enhancing the efficiency of resource reuse and providing professional investment and operation services in the field of resource cycling. Its core focus is on the development and operation of renewable energy, biomass, and recycled water, deeply rooted in the four major areas of resource management, recycling, renewable energy, and electromechanical maintenance and refurbishment.

ECOVE Environment Corporation

Establishment	1999
Stock code	6803
Capital	NT\$723.2 million
Consolidated revenue in 2024	NT\$8.5 billion
Affiliated companies	10 companies (8 domestic, 2 overseas)
Total number of employees by the end of 2024	937 people
Location of headquarters	12th Floor, No. 16 Fushan Road, Beitou District, Taipei City
Company website	http://www.ecove.com
Total market capitalization in 2024 (Calculated based on year-end stock price)	NT\$20,683 million

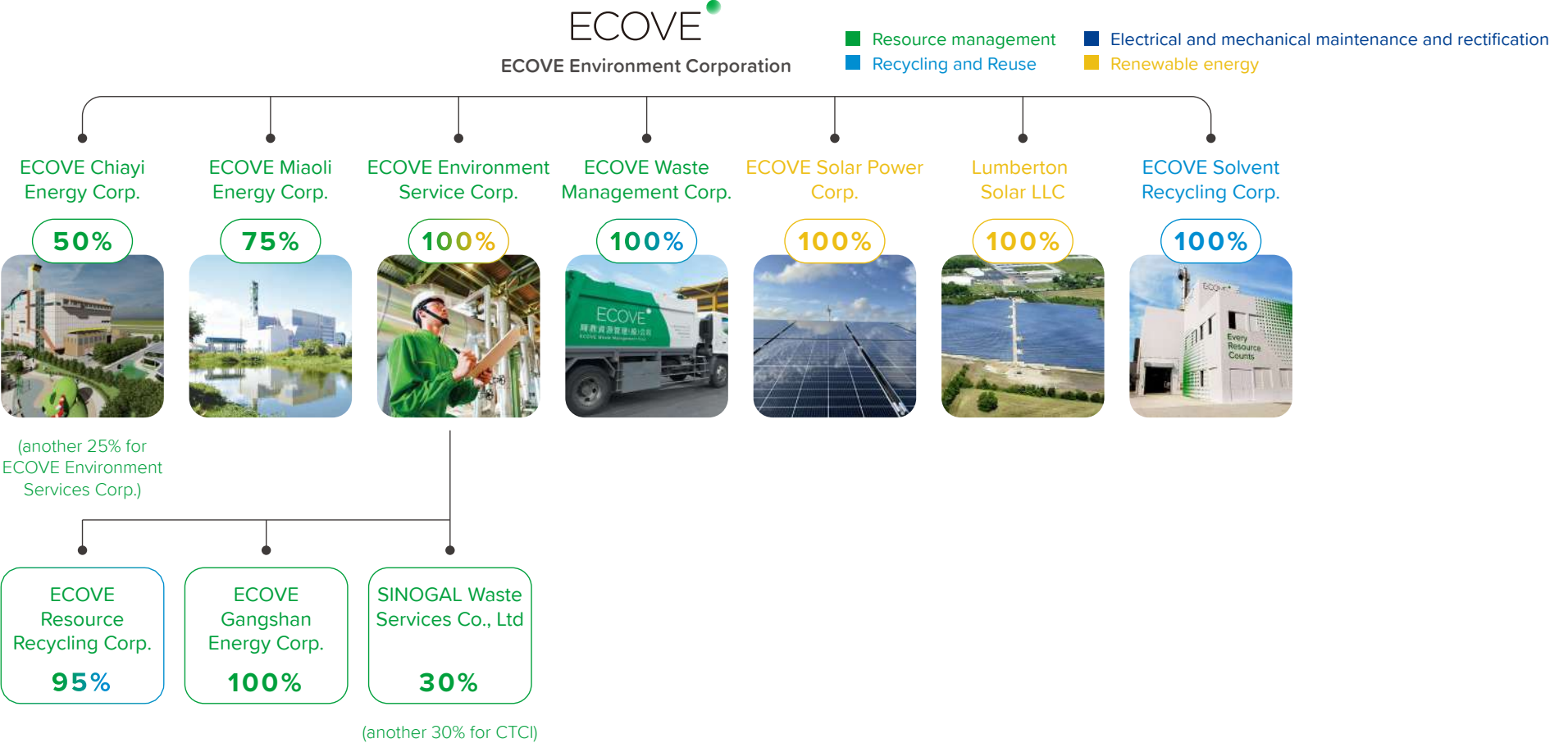


Company Structure and Global Key Locations

ECOVE Environment Corporation

- | | |
|---|--|
| • ECOVE Environment Services Corporation | • Lumberton Solar LLC |
| • ECOVE Waste Management Corporation | • ECOVE Solar Power Corporation |
| • ECOVE Miaoli Energy Corporation | • ECOVE Gangshan Energy Corporation |
| • ECOVE Solvent Recycling Corporation | • ECOVE Resource Recycling Corporation |
| • SINOGAL Waste Services Co., Ltd. (Macau, China) | • ECOVE Chiayi Energy Corporation |

(Companies listed in order of establishment)



Note: The scope of this report does not cover investment companies without substantial operational control, such as Radium ECOVE Corp. and BORETECH Resources Recovery Engineering Co., Ltd.

ECOVE's scope of business includes "investment and management," "operational management," and "technical and consulting services." Its services cover public and private enterprises in the Greater China region, Southeast Asia, and the United States. Through its 14 subsidiary investment companies, they play different roles and support each other in the development of circular economy businesses. They provide comprehensive professional environmental services in Taiwan, Macau, Southeast Asia, and the United States, establishing a professional circular economy team.

Scope of Business and Services

ECOVE ECOVE Environment Corporation

Providing Management Services Centered on Resource Circulation

Resource management

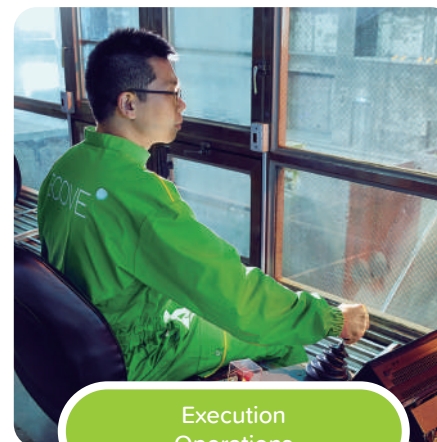
Recycling and reuse

Renewable energy

Electrical and
mechanical maintenance
and rectification



Investment and
management



Execution
Operations



Technical and
Consulting Services

- Energy-from-Waste plant, EfW
- Hazardous industrial waste treatment plants
- Final Disposal Facility

- Solar Photovoltaic Power Plant and Green Energy Supply
- Energy Storage Power Ancillary Services
- Biomass Power Plant

- Resource recycling and reuse plants
- Wastewater treatment and waste water reclamation plant

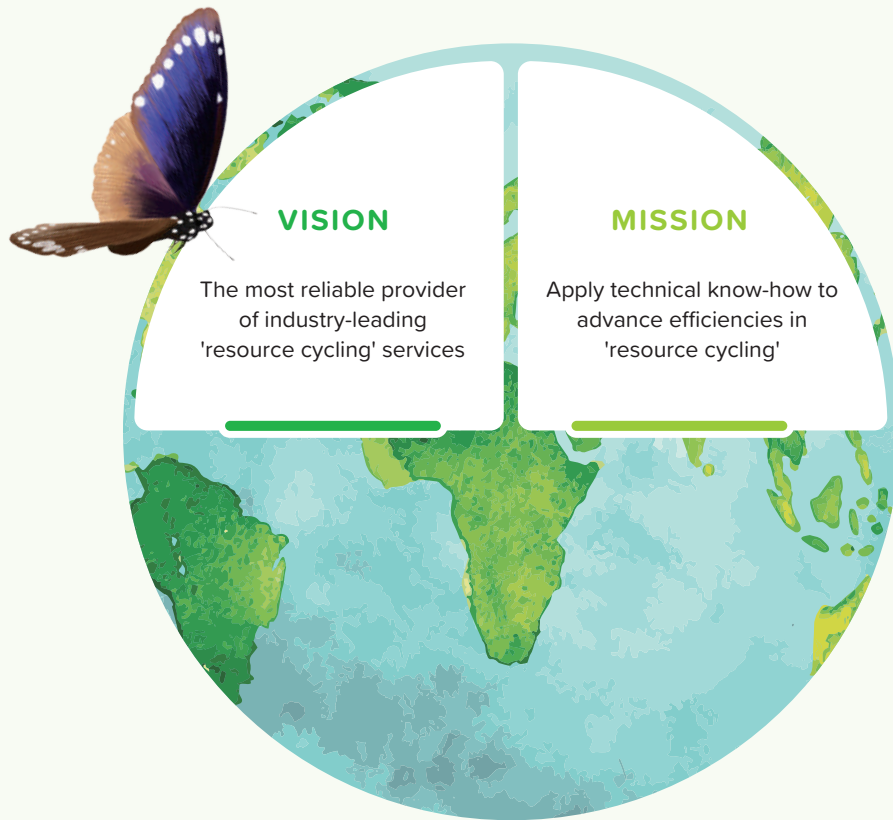
- Waste collection, transportation, and dispatch management

- Electrical and mechanical maintenance and rectification
 - Energy-from-Waste
 - Airport and rail station
 - Solar power project site
 - Nanke plant



Our Vision and Mission

As a practitioner of resource cycling, ECOVE has always strived to expand the impact of global sustainability through a lifelong mission in resource cycling. We continue with our vision of "The most reliable provider of industry-leading 'resource cycling' services", and with "advanced technical integration applications" and "resource cycling" efficiency" as our mission, with the brand ethos of "Every Resource Counts" underpinning our operational model and thinking.



ECOVE's Corporate Culture and Action Plan

Having devoted time and effort to the Taiwanese market for more than twenty years, ECOVE has always held fast to our corporate culture of "Professionalism, Integrity, Teamwork, Innovation" to optimize 'resource cycling' efficiency through advanced technical integration applications. On top of conjugating the Company's operating activities to improve the environment, we have also cared for Taiwan's social development for a long time, hence fulfilling our promise of becoming "the most reliable" brand.





Corporate Governance

We are committed to incorporating SDGs into the Company's development strategy, addressing environmental and social issues through our business activities, and transparently disclosing our performance related to the SDGs to promote sustainable development.

9	Corporate Governance
25	Ethical Management
43	Innovation and Supply Chain
53	Climate Governance
60	Most Reliable

Performance Highlights

Corporate Governance Evaluation System

- Top 5% of Company Governance Evaluation System for 11 consecutive terms

Taipei Exchange

- 30th Anniversary Awards of "Happiness Enterprise Award for Listed Companies" and "Corporate Governance Leadership Award for Listed Companies"

SUSTAINALYTICS

- No. 1 in the facilities maintenance industry

S&P Global

- S&P Global Sustainability Yearbook member and Industry Mover Award

CommonWealth Magazine

- Ranked 2nd in the 2023 Top 650 Service Industry Environmental Hygiene Service Providers

Green Procurement

- Recognized as an outstanding enterprise in government and private sector green procurement in Taichung City and Changhua City

Customer Satisfaction

- 9.4 points (Highest satisfaction score: 10 points)

R&D Patents

- A total of 63 patents have been accumulated

Corporate Sustainability Management

GRI 2-12、2-13、2-16

ECOVE is actively promoting sustainable development, expanding its business scope based on the development of four core fields: "Resource Management," "Renewable Energy," "Recycling and Reuse," and "Mechanical and Electrical Maintenance and Rectification." We not only pay attention to global and domestic trends in sustainable development, but also actively respond to the United Nations Sustainable Development Goals (SDGs). We disclose our sustainability performance with transparency and integrity, ensuring that all relevant actions and strategies are clearly presented.

Under a comprehensive sustainable management framework, ECOVE not only ensures stable operational growth but also strengthens the practices of corporate social responsibility. The Sustainability Report serves as a bridge for ongoing dialogue, collaboratively creating and enhancing sustainable value with all stakeholders, as the Company is committed to long-term ESG benefits.

Sustainability Policy and Promotion Structure

GRI 2-12,13,16,18,20

Sustainable Policy and Vision

Every Resource Counts is the core spirit of ECOVE in promoting sustainable development. We have deeply embedded the operational model of the circular economy into our corporate culture and established the vision of making sustainability the core competitive advantage and essence of the Company. To achieve this goal, ECOVE adopts a strategy of aligning our core business with the SDGs and addressing key issues, and embeds sustainability concepts into all aspects of the Company's operations.

Sustainable Development Strategies



Sustainability Policy Statement



To further practice the spirit of corporate sustainability, ECOVE has developed the "Guidelines for Sustainable Development," which pledge to implement concrete actions in the following three key areas: enhancing corporate governance, developing sustainable environmental practices, and upholding social welfare. Furthermore, ECOVE strengthens the disclosure of information regarding corporate sustainability development, ensuring that the Company's sustainable actions can be reported transparently and clearly to stakeholders, while actively responding to societal and market expectations. We believe that only by balancing economic benefits with social and environmental responsibilities can we achieve long-term sustainable operations, thereby creating a more competitive and valuable future for the Company.

→ ECOVE Guidelines for Sustainable Development



Implement Corporate Governance



Develop Sustainable Environments



Maintain Social Welfare



Enhance Disclosure of Sustainable Development Information



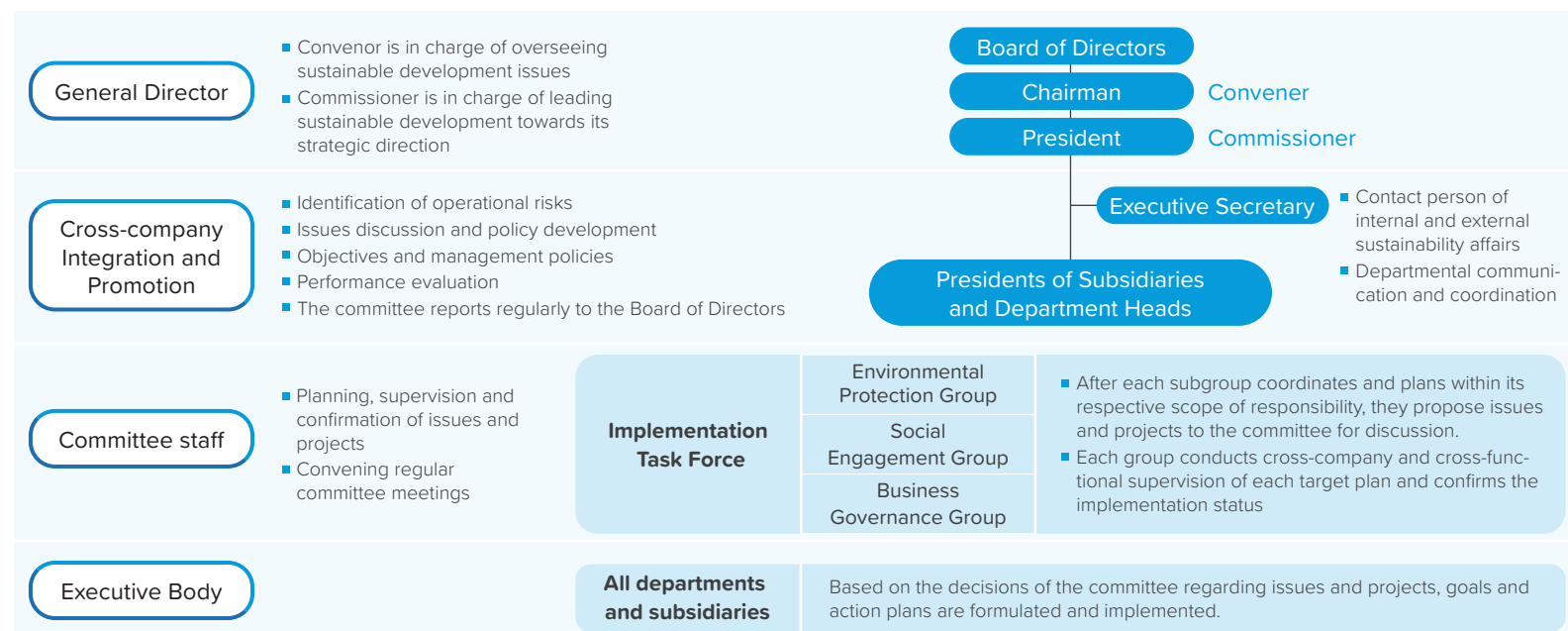
ECOVE
Guidelines for
Sustainable
Development

Corporate Sustainability Promotion Framework

The Board of Directors is the highest decision-making body of ECOVE in promoting sustainable development, and it is responsible for coordinating and guiding the Company's affairs related to corporate social responsibility, environmental protection, and corporate governance through the Sustainable Development Committee. The committee is chaired by the Chairman, with the President serving as the commissioner. It includes the Chairman, President, and department heads of subsidiary companies as members. The committee convenes twice a year. The first meeting focuses on reviewing the progress of sustainable development initiatives for the first half of the year, while the second meeting reviews the outcomes of the current year's implementation and discusses the sustainable development plan for the following year, ensuring the effective implementation and monitoring of each strategy.

To effectively implement sustainable development strategies, the committee has established three dedicated task forces: the Social Engagement Task Force, the Environmental Protection Task Force, and the Business Governance Task Force. These task forces consists of presidents of each subsidiary and department heads, with the primary objective of promoting sustainable development. Each task force plans and executes strategies within specific areas to ensure the comprehensive and in-depth implementation of the Company's sustainability development goals.

→ Organizational Structure of the Sustainable Development Committee



In addition, the Sustainable Development Committee reports annually to the Board of Directors on the execution results of sustainable development (including resolutions of the Sustainability Report) and future plans. The Board of Directors is responsible for overseeing the Company's sustainable development policies, strategies, and objectives, and regularly reviews the effectiveness and implementation of each policy. The most recent report was submitted to the Board of Directors in the fourth quarter of 2024, presenting the sustainable annual plan for 2025. The report covered various topics of emphasis, including talent retention and recruitment, occupational safety and health, social engagement, renewable energy development, greenhouse gas inventory and management, recycling and reuse initiatives, air pollution prevention, water resource management, and corporate governance. ECOVE will continue to implement various sustainable development measures based on these plans, ensuring that the Company can achieve its economic objectives while also making a positive contribution to society and the environment. Starting in 2022, sustainable performance is linked to key performance indicators for directors, presidents, and senior executives in order to promote sustainable development. The remuneration of the Company's directors and managers follows the guidelines and criteria set forth by the Remuneration Committee and the Board of Directors, including the "Guidelines for Director Performance Evaluation and Remuneration System" and the "Guidelines for Manager Performance Evaluation and Remuneration System." The remuneration takes into account industry norms, as well as the Company's performance, individual contributions, and achievements, aiming to provide reasonable compensation.

Remuneration Structure for Directors

The remuneration for the directors of the Company can be divided into compensation, salary, and business execution expenses:

- Director compensation: According to Article 23 of the Company's Articles of Incorporation, "The compensation for directors and the Chairman of the Board shall be determined by the Board of Directors based on their individual contributions to the Company and with reference to industry standards."
- Director salary: According to Article 29 of the Company's Articles of Incorporation, "If the Company has profits for the fiscal year, it shall first retain an amount to offset accumulated losses, and the Board of Directors may allocate up to two percent of the profits as director salary."
- Business execution expenses: The expenses primarily consist of transportation and attendance fees; these are established based on the standards provided by listed companies or industry peers. The remuneration standards for those concurrently serving as directors and supervisors in all companies in the financial report are the same.

Remuneration Structure for Managers

The salary structure for managers (including those who concurrently serve as directors) consists of fixed and variable compensation:

- Fixed compensation includes base salary, allowances, and bonuses, which are determined based on professional qualifications and market remuneration levels.
- Variable compensation includes bonuses and rewards, which are determined based on the Company's overall performance, business unit considerations, and individual relative performance contributions. It aims to align with the Company's core values, demonstrate leadership and management capabilities, and take into account factors such as future risk implications to reasonably determine the compensation.

Managers (including those who concurrently serve as directors) are also subject to annual performance assessment. The assessment encompasses the achievement of various financial goals (approximately 65% weightage), and non-financial performance indicators (approximately 35% weightage). In addition, the annual salary adjustments and performance bonuses are calculated based on their performance evaluation results compared to general employees. The performance results, salary adjustments, and annual bonuses are reported to the Remuneration Committee and the Board of Directors for discussion:

Financial Target 65%	Gross Profit Achievement Rate	50%
	Contract Achievement Rate	20%
	Sales Achievement Rate	20%
	Reduction of Operating Expenses	10%
Non-financial Target 35%	Job Security	20%
	Business Development Execution	15%
	Recruitment and Retention	20%
	Deepening Culture and Brand Recommendation	10%
	ESG-related Programs	25%
	Risk Management Achievement Rate	10%

Starting from 2022, the performance goals for the President and managers have incorporated ESG (Environmental, Social, and Governance) elements. Discussions on goal setting take place at the beginning of the second quarter of each year, and the achievement rate is reviewed in the fourth quarter. ESG goals account for a weightage of 8.75% in the overall performance goals. Specific key performance indicators include domestic and international sustainability evaluation results, carbon reduction benefits, promotion of external environmental education activities, and ESG management of suppliers. Furthermore, within the annual performance assessment, supervisors have ESG self-assessment items to encourage them to actively participate in various internal and external ESG activities or awards within the group. This aims to ensure the implementation of the Group's ESG sustainable goals in daily work.

The rules governing the rest of the employees' compensation and benefits are the same as those of the general management. However, there are exceptions for the allocation of stock options and pensions for senior managers, where the distribution of warrants is reviewed by the Remuneration Committee, while pension is set out based on the coverage rate of the old pension mechanism and is controlled by the Pension Supervision Committee and an actuarial firm to protect the retirement rights and interest of senior managers as employees.

Long-term Incentive Awards for Managers

- Long-term incentive awards are granted in the form of stock-based compensation, which is deferred for five years and calculated based on future stock prices at the time of fulfillment. This ensures that manager compensation is linked to the Company's long-term performance.
- In the event of significant risk events that could impact the Company's reputation or internal mismanagement, or other risk events related to personnel misconduct, the issuance of manager bonuses may be affected, reduced, or withheld, or previously granted bonuses and virtual share rights (including events occurring during the five-year deferral period) may be subject to recovery at the discretion of the Company.

The Remuneration Committee and the Board of Directors shall regularly review the reasonableness of the remuneration, and shall review the remuneration system from time to time according to the actual operating conditions and relevant laws and regulations. They shall not guide the directors, president, and vice president to engage in acts beyond the Company's risk appetite in pursuit of remuneration, so as to avoid improper circumstances such as the Company suffering losses after payment of remuneration. The distribution of remuneration to employees and directors is regularly reported to the shareholders at the annual shareholders' meeting.

International Financial Reporting Standards (IFRS) S1, S2 Disclosure Progress Planning

In accordance with the "Taiwan's Roadmap for Integrating with IFRS Sustainability Disclosure Standards" issued by the Financial Supervisory Commission on August 17, 2023, the Company continues to manage the implementation of the introduction plan in accordance with the reference guidelines and relevant regulations issued by the competent authority.

The timeline for the implementation of the IFRS Sustainable Disclosure Standards is planned as follows, and their progress of implementation is reported to the Board of Directors every quarter:

Work Items		Estimated Completion Time
Analysis and Planning	1-1. Establishment of a cross-departmental project team for the adoption of IFRS Sustainability Disclosure Standards	Q4 of 2026
	1-2. Preliminary identification of material differences and impacts between current sustainability information and IFRS Sustainability Disclosure Standards	Q4 of 2026
	1-3. Preliminary identification of reporting entities	Q4 of 2026
	1-4. Drafting of the implementation plan	Q4 of 2026
Design and execution	2-2. Identifying sustainability-related risks and opportunities, as well as their financial impacts, and assess material financial information related to sustainability	Q2 of 2027
	2-3. Identifying and collecting all necessary data	Q3 of 2027
	2-5. Adjustments to the Company's operating procedures, including financial and non-financial reporting procedures, information systems, supply chain management procedures, internal controls, and the daily operations of all departments	Q4 of 2027
Introduction	3-1. Trial preparation of a dedicated chapter for sustainable information in the Company's annual report	Q3 of 2028
	3-4. Continuously updating the internal control operation manual related to IFRS sustainability information and conduct education training sessions	Q4 of 2028
Adjustment and improvement	4-1. Publication and reporting of the dedicated chapter for sustainable information in the Company's annual report	Q1 of 2029

Materiality Analysis GRI 3-1-3-3

ECOVE is committed to addressing the specific challenges and opportunities of sustainability by incorporating the principles of inclusiveness, materiality, reliability, and the eight reporting principles of the GRI Standards 2021 GRI 3, which incorporates the principles of inclusiveness, materiality, reliability, and the eight reporting principles. Through a meticulous materiality analysis process, we identify the key issues for ECOVE and develop management policies to promote and achieve sustainable development.

■ Identification

We adhere to the five principles of the AA1000 Stakeholder Engagement Standards (SES): Dependence, Responsibility, Tension, Influence, and Diverse Perspective. Through discussions, six major stakeholders were identified: shareholders/investors, customers, employees, suppliers/subcontractors, the community, and the government. In terms of sustainability, we gather both internal and external perspectives to identify issues related to ECOVE's operations. Our sources include internationally recognized sustainability standards and norms such as GRI, SDGs, TCFD, TNFD, IFRS S1/S2 (including SASB), and Guidance for Identifying Sustainable Economic Activities, etc. In addition, we consider our internal operational goals, sustainability requirements of the Group, international industry benchmarks, stakeholder feedback, and external expert recommendations to develop a comprehensive list of 19 issues relevant to ECOVE's operations.

In the 2024 Sustainability Report, ECOVE has restructured and optimized its material topics compared to the 2023 edition as follows:

1. Consolidation and Reclassification of Material Topics	2. Optimization of Topic Titles	3. Addition of New Topics to Reflect Emerging Trends and Management Practices
- Several material topics from 2023 have been consolidated into broader or more strategic categories. For example: Environmental topics such as "Power Generation Efficiency," "Green Transportation and Logistics," and "Circular Economy" have been integrated into "Waste Management Performance" and "Market Strategy." Social engagement topics including "Community Engagement and Public Welfare," "Environmental Education Promotion," and "Participation in Public Infrastructure Projects" have been merged into "Enhancing Social Impact." - The topic "Climate Change Management" has been reclassified from the environmental aspect to the governance aspect and renamed "Climate Strategy and Net-Zero Performance."	- To enhance clarity and align with strategic direction, a total of 10 material topics have undergone title refinements. For instance: "Integrity Management" has been renamed "Corporate Governance and Integrity Management" "Talent Attraction and Retention" has been renamed "Talent Recruitment and Retention" "Occupational Safety and Health" has been renamed "Safe and Healthy Work Environment" "Professional R&D and Technology" has been renamed "Innovative Technology and Services," among others.	Five new material topics have been added in response to evolving challenges such as climate risk, digital transformation, and social inclusion: "Risk and Crisis Management", "Market Strategy", "Customer Service and Relationship Management", "Information Security and Privacy Protection" and "Diversity and Inclusion."

■ Analysis

ECOVE conducted a Critical Issue Analysis focusing on three dimensions: "Stakeholder Level of Concern", "Organizational Operational Impact" and "Sustainable Development Impact". By conducting internal and external surveys and analyzing the results, ECOVE identified material sustainability issues affecting the Company.

Level of Attention

122 Stakeholders

- A total of 122 questionnaires were collected.
- Shareholders/Investors: 17; Customers: 10; Suppliers/Subcontractors: 10; Community: 12; Government: 12; Employees: 61

Operational Impact

14 Internal Managers and Colleagues

- The impact of sustainability issues on ECOVE's operations, including revenue, customer satisfaction, operational risk, brand reputation and employee morale, was assessed by 14 representatives from various departments.

Sustainable Development Impact

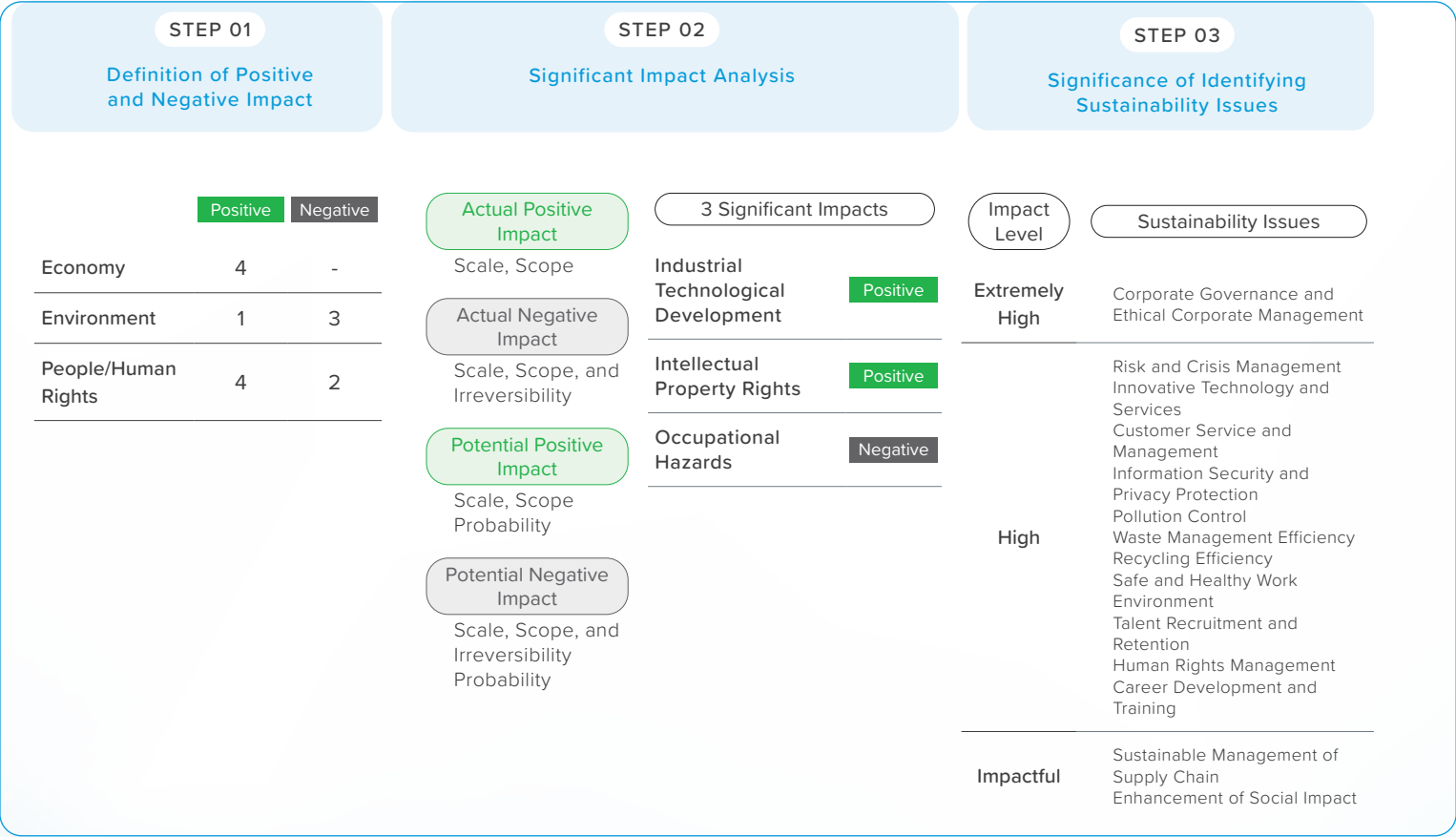
14 Internal Managers and Colleagues

- The materiality of sustainability issues is assessed in terms of economic, environmental and human rights impacts. Significant sustainability issues are identified based on positive/negative, actual/potential, irreparable, and value chain considerations, with input from 14 managers and colleagues.

■ Validation

Based on the above analysis results, after discussions among representatives of the Sustainable Development Committee and reporting to the Chairman, 14 significant sustainability issues were determined. These significant sustainability issues correspond to 14 GRI themes and 2 specific ECOVE topics. There were three significant changes in the material sustainability issues compared to last year: the addition of "Information Security and Privacy Protection," "Customer Service and Management," and "Enhancement of Social Impact." We also analyze the location of each issue within the value chain, including upstream, operations and downstream, to collect and disclose relevant information. We then establish management policies and targets to address sustainability impacts.

→ Impact Assessment Process



Stakeholder Communications and Feedback

ECOVE has implemented a variety of communication mechanisms to actively listen to suggestions, understand stakeholder expectations and concerns, and drive improvements and enhancements. We have assessed the impact of stakeholders on ECOVE's operations using the AA 1000 SES:2015 framework and identified six key stakeholders: shareholders/investors, customers, employees, suppliers/subcontractors, community and government.

Stakeholders	 Shareholders/Investors	 Customers	 Employees
Significance	ECOVE upholds the principles of openness and transparency in the disclosure of information for investors of the Company	Bring about more growth in ECOVE through service and communication	Conscientious employees are ECOVE's greatest assets
Topics of Concern	Corporate Governance Financial Performance	Service Quality	Talent Attraction and Retention Career Development and Training
Response	Disclose financial, business, and operating information to attract investors	- Waste scheduling coordination and communication - Optimize execution based on feedback on existing projects	- Annual adjustments of salaries based on the industry standards and competitors' employee benefits - Execute talent development plans and formulate customize individual development plans (IDP) for employees - The digital platform of CTCI Learning provides employees with learning opportunities that are time-zone independent and borderless.
Mode/Frequency of Engagement*	- Annual general meeting/Annually - Investor conference/Quarterly - Extraordinary Shareholders' Meeting/Ad hoc - Investor Relations/Real-time Information - Market Observation Post System/Real-time Information - Investor conference call/Ad hoc	- Customer Satisfaction Survey/Annually - Trade union or bilateral visit and communication/Quarterly, ad hoc	- Annual adjustments of salaries based on the industry standards and competitors' employee benefits to ensure salaries are competitive/Annually - Execute talent development plans and customize IDPs for employees with potential and who are technically competent/Annually - Assigning employees to their respective departments and creating personalized annual training plans, integrating internal and external resources along with mandatory credits for their positions in order to promote continuous learning and development / Annually
Results of Communication	- One session-General Shareholders' Meeting - Four sessions-Investor conferences	9.3 points-Customer Satisfaction 23 items-In response to customer suggestions and feedback	- Annual adjustments of salaries-Annual periodic review - IDPs for employees with potential-Annual review - Diverse Training Program-49,755.38 hours of training

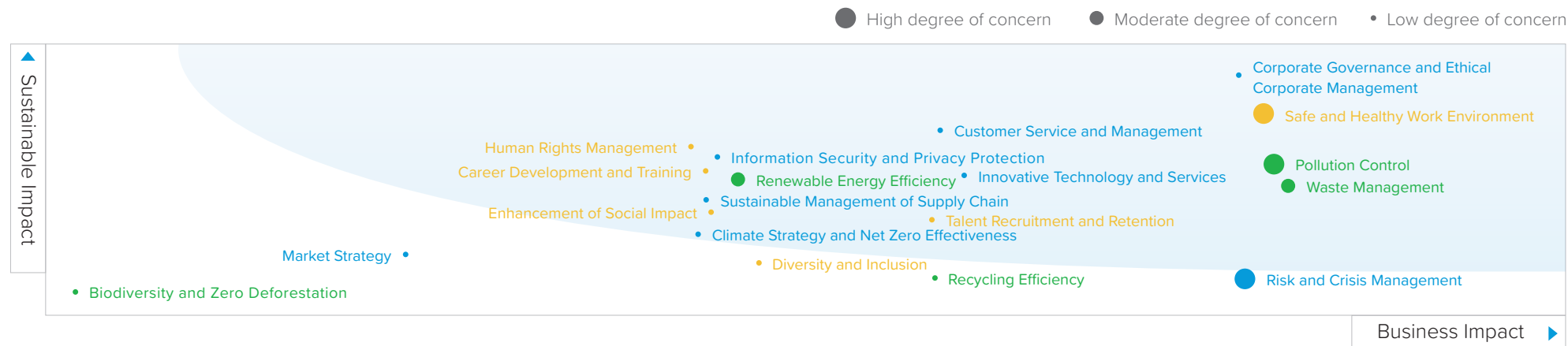
Stakeholders	 Suppliers/Subcontractors	 Communities	 Government
Significance	Mutually assisting partners who supply materials and cooperate in innovation and in value creation	Promote public participation through environmental education and media channels, infusing unique features of neighborhoods around our facilities	Compliance with consultation regulations to facilitate the execution of related operations and maintain smooth functioning.
Topics of Concern	Sustainable Supply Chain Management Occupational Safety and Health (OSH)	Social participation	Communications with competent authority Amendments to policies and laws
Response	- Ensure quality and delivery of materials to maintain stable operations at all sites/projects - Ensuring the Effectiveness of Occupational Safety and Health Implementation by Subcontractors	- Explain and communicate various issues brought up by residents - Communicate pollution prevention monitoring results and public opinion	Revise relevant measures in accordance with policies and laws
Mode/Frequency of Engagement*	- Assessment of suppliers/Annually - Occupational safety and health coordination meeting/As needed - Coordination meeting/Monthly - Phone, email, or fax/Ad hoc - On-site acceptance visit/As needed - Vendor's Commitments to Corporate Sustainable Management and Net Zero/As needed - Vendors conduct self-assessments through questionnaires to gain an initial understanding of their sustainability risks. For high-risk vendors, further on-site audits will be conducted, and recommendations will be provided to assist in improvements /Annually	- Friendly community promotion activity/Ad hoc - Environmental education visit/Ad hoc - Care for the underprivileged/Ad hoc - Environmental protection/Ad hoc	- Participation in public hearing or briefing/Ad hoc - Announcement of policies and regulations of competent authorities/Ad hoc - Correspondence from the competent authorities, response by the Company or on-site inspection/Ad hoc - Communication and discussion with government agencies/Aperiodic - Disclosing information on the Company website, Market Observation Post System, and actively communicating through newsletters regarding ECOVE's actions
Results of Communication	18 sessions -Supplier communication meetings 30 sessions -Supplier acceptance visits 117 copies-Vendor's Commitments to Corporate Sustainable Management and Net Zero 100% response rate-Response rate of the sustainability risk assessment self-evaluation questionnaire 3-High-risk vendors	182 sessions-Environmental Education Activities 17,554 people-Involvement of the outside public 3,952 hours-Employee volunteering hours	Quarterly-Sending newsletter 11 consecutive years-Top 5% in corporate governance evaluation

Topics, Value Chain Stages, and SDGs Corresponding to Sustainability Issues

● indicates causing ○ indicates contributing ▲ indicates being directly related

Major Issue	GRI Material Topics	SASB Topics	Value Chain				SDGs	Sections in the Sustainability Report
			Supply Chain	Operation of the Company	Products/ Services	Local Community		
Corporate Governance and Ethical Corporate Management	Anti-corruption (205)	-	○	●				Business Ethics and Legal Compliance
Innovative Technology and Services	Specific to ECOVE	-		●			   	Innovative Research and Development
Sustainable Management of Supply Chain	- Procurement Practices (204) - Supplier Environmental Assessment (308) - Supplier Social Assessment (414)	-	○					Sustainable Supply Chain Management
Customer Service and Management	Customer Privacy (418)	-		●	○			Service Quality
Climate Strategy and Net Zero Effectiveness	- Emissions (305) - Energy (302) - Economic Performance (201)	-	○	●	○			Climate Governance and Climate Change Management
Information Security and Privacy Protection	Customer Privacy (418)	-		●	○			Service Quality
Pollution Control	Emissions (305)	IF-WM-110a.1~3		●		▲	 	Pollution Control
Waste Management Efficiency	Effluents and Waste (306)/Energy (302)	IF-WM-420a.1~4		●	▲		 	Environmental Performance
Renewable Energy Efficiency	Specific to ECOVE	IF-WM-110a.1~3		●				Waste-to-Energy Performance
Safe and Healthy Work Environment	Occupational Health and Safety (403)	IF-WM-320a.1~2	○	●				Safe and Healthy Workplace
Talent Recruitment and Retention	Market Presence (202) and Diversity and Equal Opportunity (405)	-		●				Talent Attraction and Retention
Human Rights Management	Employment (401) and Supplier Social Assessment (414)	IF-WM-310a.1~2	○	●			 	Human Rights Protection and Welfare
Career Development and Training	Training and Education (404)	-		●			 	Talent Cultivation and Development
Enhancement of Social Impact	Indirect Economic Impacts (203)	-		●		▲	 	Social Participation

Materiality Matrix



■ Dual Materiality of ECOVE Environment Corporation

Major Issue	Value Chain					Impact of Sustainable Development (Materiality of Impact)		
	Revenue	Customer Satisfaction	Operational Risks	Brand Reputation	Employee Loyalty	Industrial Technological Development (Positive)	Protection of Intellectual Property Rights (Positive)	Occupational Hazards (Negative)
Corporate Governance and Ethical Corporate Management	●		●	●		●	●	●
Innovative Technology and Services	●			●		●	●	
Sustainable Management of Supply Chain							●	
Customer Service and Management		●		●		●		●
Climate Strategy and Net Zero Effectiveness								
Information Security and Privacy Protection			●			●	●	
Pollution Control		●	●	●		●	●	
Waste Management Efficiency	●	●		●			●	
Renewable Energy Efficiency	●							
Safe and Healthy Work Environment			●	●	●		●	●
Talent Recruitment and Retention					●		●	●
Human Rights Management					●		●	●
Career Development and Training					●		●	●
Enhancement of Social Impact				●				●

Risks/Opportunities and Management Policies of Sustainability Topics

✓ Standard met

X Standard not met

Major Issue	Impacts Description		Management Policies			Goals for 2024	2024 Achievement Status	Long-term Goals (by 2030)
	Negative	Positive	Strategies	Commitment	Action Initiatives			
Corporate Governance and Ethical Corporate Management	Violation of the Code of Conduct and Ethics may result in company losses.	Enhancing customer trust through the implementation of ethical management and adherence to the code of conduct.	ECOVE has established regulations, provides education and training, and promotes awareness, while also offering channels for reporting and protection, fostering a culture of professional ethics and legal compliance.	We enhance our corporate governance system and strengthen management functions to safeguard the rights and interests of stakeholders.	Signing of Employee Letter of Undertaking of Integrity by all employees and carry out educational training courses on a regular basis.	100% of all employees have signed a commitment to comply with the Government Procurement Act and the Company's anti-bribery policy. - The annual employee morale commitment course achieves a training ratio of 90%.	✓ ✓	100% of all employees have signed a commitment to comply with the Government Procurement Act and the Company's anti-bribery policy.
Innovative Technology and Services	- As the waste management industry increasingly focuses on waste reduction and recycling, the demand for incineration treatment is declining. This trend may eventually lead to saturation of the incinerator market. - Human resource bottleneck caused by declining birth rates	- The development of innovative technologies that achieve high efficiency and energy reuse promotes business growth and enables the capture of market opportunities. - Developing digital transformation and automation to sustain competitive advantage	Overall, the policy directions for promoting sustainable development and enhancing competitiveness through innovation technology development include: Carbon Neutrality and Net Zero Participate in resource recycling and reuse Renewable energy Digital transformation	- Integrating and applying advanced technology - Optimizing resource cycling efficiency	Through innovative in-house development or the introduction of external technology for small-scale applications, core capabilities are established and divided into two categories: Process and operational improvements for existing businesses Developing new business domains	Completed four invention patent applications	✓	Completed four invention patent applications
Climate Strategy and Net Zero Effectiveness	The imposition of carbon fees increases operating costs, and government policies requiring companies to reduce emissions have become more stringent.	The government's main focus for waste management in the future is the circular economy, which offers significant growth potential in the areas of reuse and waste-to-energy business opportunities.	- Strengthening energy management - Adopting low-carbon manufacturing processes - Using renewable energy	In compliance with the government's net-zero pathway, we will introduce new low-carbon technologies, enhance energy-saving measures, and apply renewable energy to reduce carbon emissions.	- Climate risk management - Greenhouse gas inventory and reduction - Internal carbon pricing	Reducing carbon emissions of the headquarters by 20%	✓	- The organization headquarters achieves net zero - Reducing emissions of production sites by 30%
Sustainable Management of Supply Chain	Unexpected internal demand changes, unpredictable natural factors, or insufficient contractor capacity may result in the inability to supply as planned in terms of quantity and quality. Specifications and sources may be restricted, reducing the available options.	Long-term stable operations serve as the foundation for interactive collaboration within the supply chain, ensuring reliability and mutual growth in the supply and contracting relationships.	- Enhancing awareness through meetings and contacts. - Promoting and implementing supplier evaluations. - Implement Local Procurement and Green Procurement	By signing the Corporate Social Responsibility Agreement, the Supplier Code of Conduct, the Commitment to Sustainable Business Operations and Net Zero Emissions, and undergoing supplier assessments, we aim to strengthen and improve the sustainability management performance of our suppliers.	- Strengthening social responsibility, environmental protection, corporate ethics, business management, and promoting zero-emission awareness. - Implementing audit evaluations and corrective measures	- The annual signing of the Corporate Social Responsibility Agreement, Supplier Code of Conduct, and the Commitment to Sustainable Business Operations and Net Zero Emissions has achieved a 100% completion rate. - Conducting key supplier evaluations with a 100% completion rate.	✓ ✓	- Completion of document and file audits for first-tier and non-first-tier concerned suppliers: 100% - On-site audit completion rate for high-risk vendors: 100%. - Improvement rate of on-site audit defects for high-risk vendors: 100%. 80% of large pharmaceutical companies have obtained third-party certification of supplier carbon emissions and 40% have obtained carbon footprint certification.

Major Issue	Impacts Description		Management Policies			Goals for 2024	2024 Achievement Status	Long-term Goals (by 2030)
	Negative	Positive	Strategies	Commitment	Action Initiatives			
Customer Service and Management	The issue of waste management is quite sensitive, and there are significant challenges in communicating with community residents. If customer relationship management is not properly implemented, it will affect customer satisfaction and the Company's reputation.	Enhancing customer satisfaction and trust, and establishing good reputation through professional services, digital management, and strengthened relationships. Emphasizing communication feedback, improving services, and strengthening long-term cooperation.	- Standard operating procedures - Integrating internal and external resources to facilitate effective communication with clients	Adhering to the principle that "Every Resource Counts," our corporate mission is to enhance the integration and application of technology while optimizing resource recycling efficiency. We continuously strive to break through barriers and challenge ourselves to provide our customers with the best and most trustworthy services.	- Guidelines/Procedures for enhancing service quality - Implementing satisfaction survey on executed projects	- The average customer satisfaction score is 9 out of 10 - Response rate of customer satisfaction survey: 100%	✓ ✓	- The average customer satisfaction score is 9 out of 10 - Response rate of customer satisfaction survey: 100%
Information Security and Privacy Protection	Cybersecurity vulnerabilities or employee negligence may lead to data breaches, damaging the Company's reputation and raising concerns among customers. Controversies concerning privacy breaches may lead to lawsuits and fines, increasing costs and risks for the Company.	If cybersecurity is strengthened and certified, customer trust and corporate image can be improved. Implementing privacy policies and establish data processes to safeguard privacy and ensure compliance with regulations, thereby enhancing customer satisfaction.	Implementing the information security management system and continuously strengthening information security defenses and response mechanisms.	Establishing information security management guidelines to ensure that information processing operations can function safely and effectively.	- Regularly conducting email social engineering drills. - The "Information Security Awareness Course" is held annually to promote knowledge related to information security	- Allocating dedicated personnel to information security, enhance education and training, and purchase additional cybersecurity software and hardware - Strengthening the security of core information and telecommunication systems and holding drills of continuity operations - Establishing a cybersecurity monitoring mechanism	✓	Continuously implementing and promoting information security protection measures
Pollution Control	The government may progressively tighten regulations or increase control measures, leading to increased usage of process chemicals or the need for process changes to meet standards.	- By introducing foreign technology and applying it to incinerators, - pollutant emissions are reduced, or cost-saving benefits are achieved.	With a focus on the principles of circular economy and environmental sustainability, we actively work with government environmental policies to provide a range of services for the recycling of resources that are low in pollution, low in carbon emissions and highly energy efficient.	Set emission reduction targets in compliance with regulations and contribute one's own efforts to the sustainability of the planet.	Regular audits of the waste intake inspection ratio and the functionality of air pollution control equipment are conducted to ensure they are in normal operating condition. Relevant monitoring values are managed through internal control.	- Reached 100% approval rate for waste gas emission quality inspection - Nitrogen oxide emissions per ton of waste:<0.84 kg	✓ ✓	- Reached 100% approval rate for waste gas emission quality inspection - Nitrogen oxide emissions per ton of waste:<0.80 kg
Waste Management Efficiency	- Replacing energy-saving and carbon-reducing transportation equipment has led to increased costs - Some equipment at the incineration plant has been in operation for over 20 years, leading to gradual aging and deterioration. This has resulted in an increased frequency of unplanned shutdowns, which in turn affects the operational efficiency and reduces power generation effectiveness	- In line with the international carbon reduction trend, technology giants are gradually demanding green transportation, which can increase business opportunities - Renovation of incineration plant equipment, introduction of new technology, and improvement of power generation efficiency at the incineration plant	- Continuously monitor changes in transportation vehicle technology, energy, and environmental policies, and update equipment procurement plans accordingly - Actively cooperate with the government's resource recycling and zero waste policies, improve the efficiency of waste-to-energy conversion, and invest in a new generation of high-efficiency incinerators.	- In line with the reduction targets set by the government and the Group, we will carefully evaluate existing feasible solutions to ensure that they meet the criteria for overall effectiveness. - Continuously enhance resource cycling efficiency, reduce environmental impact, and take on more social responsibilities.	- By reviewing energy consumption and carbon emissions quarterly, optimization of machine configurations is implemented - By repairing and replacing old equipment to new energy-saving equipment to extend the life of the incinerators, new technologies are being implemented to improve the efficiency of waste-to-energy conversion.	- The unit carbon intensity of the waste collection vehicles has decreased by 9.07% compared to the base year (2022) - Up to 566 kWh/T of electricity is generated per ton of waste	✓ ✓	- The unit carbon intensity of the waste collection vehicles has decreased by 30% compared to the base year (2022) - Up to 630 kWh/T of electricity is generated per ton of waste

Major Issue	Impacts Description			Management Policies		Goals for 2024	2024 Achievement Status	Long-term Goals (by 2030)
	Negative	Positive	Strategies	Commitment	Action Initiatives			
Renewable Energy Efficiency	- The industry is highly dependent on government policy support and is easily influenced by changes in public opinion and media reports, resulting in increased market uncertainty and heightened investment risks. - The adjustment of government policies has attracted a large influx of new entrants into the industry, intensifying market competition and compressing profit margins for businesses, which is detrimental to the long-term stable development of the industry.	- Global enterprises are increasingly emphasizing sustainable development and viewing it as a crucial strategy for enhancing competitiveness. This focus is driving demand in the renewable energy market and facilitating industrial upgrades and supply chain transformations. - In response to the development of AI and the transformation of energy, the demand for electricity continues to rise, which contributes to the expansion of revenue and profitability.	- Actively compete for development rights to large-scale projects and increase capacity in solar power-building in line with green energy development, and promote the green energy supply business to help enterprises achieve carbon neutrality. - Diversify renewable energy sources by building power plants that use food waste, agricultural waste, and other forms of waste.	In accordance with government green energy policies, we actively invest in various types of power plants to expand our investment scale.	- Domestic organic growth and the expansion of our overseas base are creating opportunities for renewable energy. - Apply for a position in the renewable energy sales industry and promote a wide range of green energy sales services. - Investments in biomass power plants and food waste anaerobic digestion facilities.	- The annual electricity generation from solar photovoltaic systems reached 134.42 million kWh. - Green energy wheeling rate >10%	X^{Note 2} ✓	- The annual electricity generation from solar photovoltaic systems reached 200 million kWh. - Green energy wheeling rate >50% 1,000 green energy certificates (self-generated and self-used) per year - Power generation from other sources of renewable energy ≥ 1.9 million kWh
Safe and Healthy Work Environment	- Employee health risks (such as cardiovascular diseases, myocardial infarction, etc.) - An occupational safety incident has caused physical or psychological harm to employees or contractors, as well as the consumption of medical resources	- Enhancing interviews to gather feedback, identifying employees' health risks, timely inquiring about exercise habits, and including the said information in the tracking records of employee health initiatives. - Implementing the PDCA cycle to continuously improve employee safety and reduce workplace incidents.	Prioritizing safety and well-being; promoting employee health and welfare; implementing risk management mechanisms; encouraging the participation and training of all personnel; continuously improving the HSE system.	Providing a safe and secure working environment, promoting various health enhancement activities, reducing occupational accident rates and construction risks, creating a healthy workplace, and enhancing employee cohesion.	- Setting safety and health objectives. - Implementing on-site safety and health management. - Conducting health promotion education and training. - Regular health check-ups and tracking for employees. - Providing on-site medical services.	- SR : 0.6 - FR : 0.14	X^{Note 3} ✓ SR=2.06 FR=0.07	- SR ≤ 0.6 - FR ≤ 0.14
Human Rights Management	Failing to protect employee rights adequately not only impacts the Company's reputation but also erodes employee morale and diminishes the attractiveness in talent recruitment.	Provide a safe and healthy working environment and eliminate unlawful discrimination to ensure equal employment opportunities and establish a friendly workplace.	Ensure compliance with labor laws and the Company's human rights policies by implementing appropriate internal policies and procedures. Regularly review and pay attention to labor issues.	ECOVE is committed to the belief of benefit sharing, providing a good working environment and smooth working channels, and continuously enhancing the harmonious communication between employers and employees	Implement diversified communication channels, online opinion platform, increasing the frequency of communication forums with senior managements, labor-management conferences, employee satisfaction surveys, etc.	No labor disputes or penalties for violating labor laws occurred annually.	✓	No labor disputes or penalties for violating labor laws occurred annually.
Talent Recruitment and Retention	If unable to recruit qualified talents in a timely manner or unable to retain talented individuals, the Company's operations may be affected as a result.	The Company seeks exceptional talent to drive innovation and progress. The quality, competence and performance of our people will have a significant impact on the value and operational performance of the Company.	- Attract and retain talent from diverse backgrounds to enrich the Company's talent pool. - Partner with universities for internship programs and offer students in relevant fields the opportunity to intern with the Company. - Provide a comprehensive and competitive compensation package, a friendly and healthy workplace, and robust learning and development opportunities to achieve the goal of talent retention.	- Enhance personnel's identification and compliance with the Company's corporate culture, so that personnel can adapt their talents and grow - Provide a better, safer and healthier work environment.	Each year, we review our performance evaluation, compensation and rewards policies to ensure that we have a fair performance evaluation and compensation system. Provide a competitive compensation system and comprehensive benefits that meet the needs of employees.	- The turnover rate is between 5% and 8%. - The retention rate of new employees is 85%.	✓ ✓	- The retention rate of new employees is going to be 90% by 2030. - The compensation market positioning standards are reviewed and adjusted annually in order to be implemented into the compensation system. - Long-term incentive compensation tools such as restricted stock plans are established.

Major Issue	Impacts Description			Management Policies		Goals for 2024	2024 Achievement Status	Long-term Goals (by 2030)
	Negative	Positive	Strategies	Commitment	Action Initiatives			
Career Development and Training	If employees are unable to keep up with the changing times, develop themselves, or align their career plans with the Company's core values, it will eventually undermine the Company's competitive edge and growth trajectory.	Assisting employees in career planning is beneficial for enhancing employee satisfaction, reducing turnover rates, and strengthening employees' recognition and sense of belonging to the Company.	Offering comprehensive position and management skills training courses to help employees develop their knowledge that is beneficial to their careers. All employees use digital training guides, enabling learning without time or geographic constraints.	Emphasize employee career development and implement a comprehensive talent development plan to foster diverse skills. Improve employee skills and build a competency-based organization that meets job requirements.	- Encourage employees in continuous education and design career development roadmaps for employees, content of education training, and performance indicators. - Encourage further education for employees to obtain professional certifications.	Total employee training hours is 18,000 hours	✓	The average duration of training hours per employee is 30 hours.
Enhancement of Social Impact	- Increased social awareness may lead to higher external demands for environmental commitments and operational transparency; failure to meet these standards could damage reputation. - Changes in policies and increasing public opinion pressure present challenges to corporate operations. If these challenges are not effectively addressed, they may impact brand image and market competitiveness.	- By promoting renewable energy and environmental protection technologies, we support carbon reduction goals, enhance corporate social responsibility image, and facilitate sustainable industrial development. - Actively participate in community and public welfare activities to enhance public recognition, drive the growth of the green energy industry, and increase social impact.	While optimizing our core operations, we are also expanding our focus to social engagement. We actively respond to international initiatives related to Environmental, Social, and Governance (ESG) and participate in discussions on environmental policies, with the expectation of bringing positive impacts to society. Additionally, we encourage our colleagues to engage in joyful and meaningful volunteer activities, enabling them to achieve a balance between work and life, and eventually realize the value of corporate sustainability.	- Actively respond to ESG-related initiatives and participate in discussions on environmental policies. - Long-term commitment to three main areas of social engagement: "community activities that connect to the Company's operations," "long-term community development," and "corporate volunteerism for mutual benefit."	- In response to international initiatives, our colleagues serve as sustainability ambassadors to promote sustainable concepts online. - Through the environmental education facilities within the plants and community initiatives, we convey knowledge related to environmental education and operations. - Through actions such as fostering neighborly relations, environmental protection, and green space adoption, we will continue to deepen community development. - Collaborating with NGOs to recycle materials and assist disadvantaged groups to demonstrate that we cherish resources.	- Participation in 15 sessions on environmental policies and issues - Step by Step: Factories for Sustainable Environmental Education - 20 sessions - Total hours of volunteer service - 3900 hours	 ✓ ✓ ✓	- Participation in at least 15 sessions on environmental policies and issues per year. - Hold at least 25 sessions of off-site environmental education activity per year. - Average duration of participating in volunteering to be at least 4 hours per year.

Note 1: Resource management: Winning the bid of the Taichung Wuri Energy Resource Center Operation and Maintenance Project, the Tainan Chengxi Energy Resource Center Operation and Maintenance Project, and the Taitung County Energy Resource Center Operation and Maintenance Project.

Renewable energy: The domestic self-owned sites are steadily expanding, and efforts continue to secure maintenance contracts for large external sites, with a total capacity of 485 MW obtained for maintenance projects. The application procedures for Lumberton 2 abroad are still pending the announcement of regulations by the state government before an application can be submitted.

Recycling and reuse: Conducting pilot tests with partners.

Mechanical and electrical maintenance and rectification: Implementation of maintenance work for public facilities by an internationally recognized high-tech manufacturer.

Note 2: The annual electricity generation from solar photovoltaic systems is 118.27 million kWh per year. This is due to the prolonged review period by Taiwan Power Company and government agencies caused by negative press related to solar energy, which has delayed the grid connection for major port area projects and the project of Freeway Bureau, MOTC. Additionally, the impact of typhoon has also contributed to this delay.

Note 3: Please refer to 3.2.5 Occupational Disaster Prevention.

Response to the United Nations' Sustainable Development Goals (SDGs)

Leveraging its core competencies, ECOVE began by conducting a thorough assessment of the organization's goals and practices. As a result, they identified 8 Sustainable Development Goals (SDGs) that are highly relevant to ECOVE's work. We have integrated the Sustainable Development Goals (SDGs) into our operational activities to strengthen the Company's commitment to sustainable development, minimize the impact of our operations, and capitalize on opportunities for sustainable growth.

Protect occupational health and safety for employees

SDG 3

- Continuous monitoring and tracking of employees' blood dioxin levels over 20 years
- Passed ISO 45001 certification
- Provided annual health checkups, including the tracking of health checkup status and assisting high-risk personnel to seek medical attention

Participate in water resource recycling and reuse

SDG 6

- Water resource recycling and reuse passed BS8001 certification
- Recycling and reuse through eco-engineering methods and various levels of pollutant treatment; a total of 26.27 million metric tons of wastewater was treated in 2024.
- In 2024, the production of recycled water in the high-tech industry will reach 19.81 million tons, marking its entry into the recycled water market.

Minimize energy and resource consumption during service delivery

SDG 12

- Recycle and reuse waste isopropyl alcohol (IPA) by converting it into industrial-grade products
- The processing of approximately 14,913 metric tons of waste IPA equates to a reduction of 10,990 metric tons of carbon dioxide emissions.

Protecting biodiversity

SDG 15

- Establishment of the "Biodiversity and Zero Deforestation Policy Commitment"
- Conducting ecological sensitivity area and hotspot analysis
- Collaboration with the community for diverse ecological conservation
- Integrating environmental education and ecology into operations



SDG 4

Promote environmental education to enable a green future

- 2021-2025 "One Factory, One Footprint, Continuous Environmental Education" Promoted to 22 elementary schools in 2024
- The Environmental Education Department has 5 certified incinerators and 14 certified environmental education staff

SDG 7

Promote renewable energy

- Continuous installation of solar panels with a total annual capacity of approximately 121,546 MWh

SDG 8

Sustainable economic growth to promote full employment and suitable jobs for everyone

- EPS reaches a record high of NT\$17.43 in 2024
- New recruits of 128 people, providing many employment opportunities
- Employment of 16 individuals with disabilities

SDG 13

Respond to climate change with early warnings complemented with mitigation and adaptation

- Disclosed climate change risk and impact in accordance with TCFD framework
- Assisted EPA to formulate carbon footprint rules for Waste Management Services and obtained certification
- Regularly conduct a greenhouse gas inventory in line with the government's and the Group's direction to achieve net-zero carbon emissions.

Reduce hazardous impacts on the environment from the cities in terms of waste disposal and subsequent management

- Verified through BS8001 (Enhancement of incineration performance)
- Incineration wastes and final substances were tested and disposed of according to laws and regulations

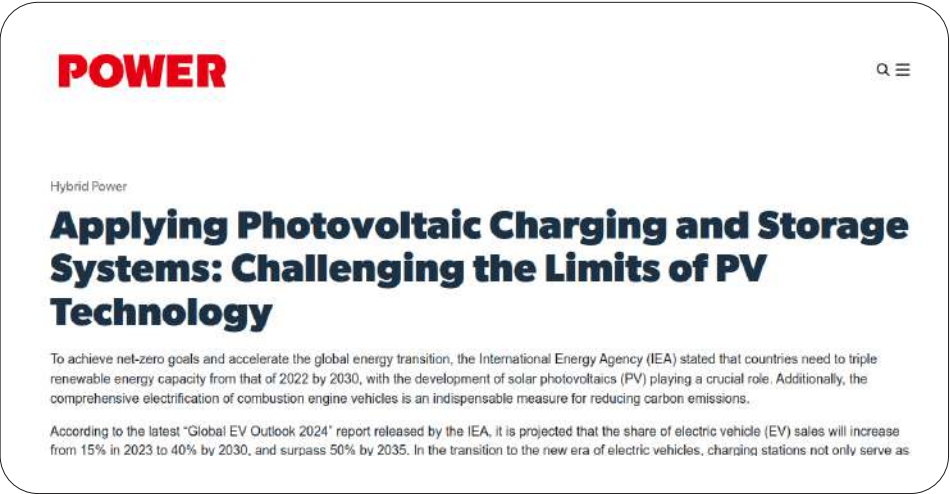
Participation in External Organizations GRI 2-28

Participation in Associations and Organizations

Strengthening connections with the industry and the latest technologies is a crucial strategy for enhancing service competitiveness and expanding industry influence. ECOVE enhances its service level, expands market opportunities, and shapes the future development direction of the industry by participating in various industry development and sustainable management-related public academic association organizations. This is achieved by fostering innovation, promoting knowledge sharing, and advancing technology development. In 2024, the Company participated in a total of 16 external public associations and organizations, demonstrating our commitment to deepening cooperation and co-creating value.

Name of Organization	Participating Identities
Taiwan Institute for Sustainable Energy (TAISE)	Member
Taiwan Electric Power Association (TEPA)	Member
Water Affairs Organization Taiwan	Member
Taiwan Boiler Association	Member
Taiwan Occupational Safety and Health Management System Northern Region Promotion Association (TOSHMS)	Member
Sustainable & Circular Economy Development Association	Member
Taiwan Environmental Engineering Association	Member
Taiwan Water Pipe Engineering Association	Member
Taiwan Electrical Contractors Association	Member
Taiwan Refrigeration & Air-conditioning Engineering Association of R.O.C.	Member
Taiwan Resource Recycling Industries Association	Member
Taichung Waste Management Commercial Association (Grade B)	Member
Taichung Waste Management Commercial Association (Grade A)	Member
Taoyuan Waste Management Commercial Association	Member
Solar PV Generation System Association of R.O.C. (PVGSA)	Member
Kaohsiung City Municipal Waste Management Commercial Association	Member

In addition, ECOVE has accumulated over 20 years of experience in waste incineration operations and has made significant developments in areas such as solar energy and recycling in recent years. In addition to being invited to share Taiwan's experience at domestic and international forums, ECOVE has also been featured in various key media. The application of optical charging and storage system technology by ECOVE has been published in a renowned international journal in 2024.



[Illustration] ECOVE has published an article in Power Magazine, an internationally renowned journal, focusing on the application of optoelectronic charging and storage systems.
Source: August 2024, Power Magazine

Participation in Seminars or Forums

ECOVE actively participates in national and regional environmental policies and issues, and we share more than 20 years of experience in resource cycle industry development and operational strategies with public and private groups from government, industry, and academia, as well as the public in response to invitations from domestic and overseas governmental or non-governmental organizations. This helps to build cornerstones in the resource circular economy and ensure that we stay on top of the trends. In 2024, representatives of ECOVE attended a total of 24 lectures or forums, with the key activities listed as follows:

Activity Name	Event Organizer
Expert Consultation Meeting on Domestic General Waste Management Strategies in Response to Climate Change	Environmental Management Administration, Ministry of Environment
AI Technology Management and Waste Treatment Development Technical Consultation and Exchange Conference	Environmental Management Administration, Ministry of Environment
Instructor for the Low Carbon Personnel Training Course at Industrial Development Administration, Ministry of Economic Affairs	Industrial Development Administration, Ministry of Economic Affairs
Experience Sharing on the Implementation of Sustainable Development Committee	Talent Training Center, Securities and Futures Institute (SFI)
2024 International Workshop on Sustainable Protection and Restoration of Soil and Groundwater and Resource Circulation 1 Tentative Program	National Science and Technology Council
Progress and Outlook of Green Sustainability	National Taipei University of Technology
Series of Lectures Celebrating the 20th Anniversary of Department of Environmental Engineering, Chung Yuan Christian University	Chung Yuan Christian University
Challenges and Transformations of Achieving Net Zero	National Yunlin University of Science and Technology



ECOVE shared practical experiences in carbon reduction, invited by the Industrial Development Administration, Ministry of Economic Affairs



ECOVE shared practices in the circular economy, invited by the National Taipei University of Technology

Industry Initiative

ECOVE actively participates in industry initiatives, leveraging its extensive practical experience to assist in the promotion of sustainable policies and regulatory development. In 2024, we participated in the "Expert Consultation Meeting on Domestic General Waste Management Strategies in Response to Climate Change," organized by the Environmental Management Administration, Ministry of Environment. We provided practical recommendations on the "Guidelines for the Organizational Inventory of Greenhouse Gases from General Waste Treatment Facilities (Draft)." This not only demonstrates the Company's professional insights into the comprehensive waste management policy but also highlights its proactive contributions to climate change adaptation strategies.

In addition, ECOVE assists the Financial Supervisory Commission and National Taipei University in formulating the "Refinement of Taiwan's Guidance for Identifying Sustainable Economic Activities," providing professional recommendations for the waste management and resource recovery industries. This collaboration not only promotes the development of sustainable finance but also strengthens the overall evaluation mechanism for industry sustainability performance.

In addition to policy participation, ECOVE is also committed to the sharing and exchange of industry knowledge. The Company was invited to participate in the "Greenhouse Gas Reduction Technology Forum for General Waste Treatment Facilities" organized by the Environmental Management Administration, Ministry of Environment. Additionally, the Company assisted the Industrial Development Administration, Ministry of Economic Affairs in conducting low-carbon talent training, sharing practical experiences in corporate greenhouse gas inventory and carbon reduction. This proactive knowledge transfer contributes to enhancing the general sustainability capacity and awareness of the industry.

In terms of sharing experiences in sustainable governance, ECOVE actively participated in the "Sustainable Development Committee and Chief Sustainability Officers Forum" organized by the Taiwan Stock Exchange and Taipei Exchange. The Company shared its implementation experiences of Sustainable Development Committee to promote exchanges of ideas in sustainability among industries.

Ethical Management

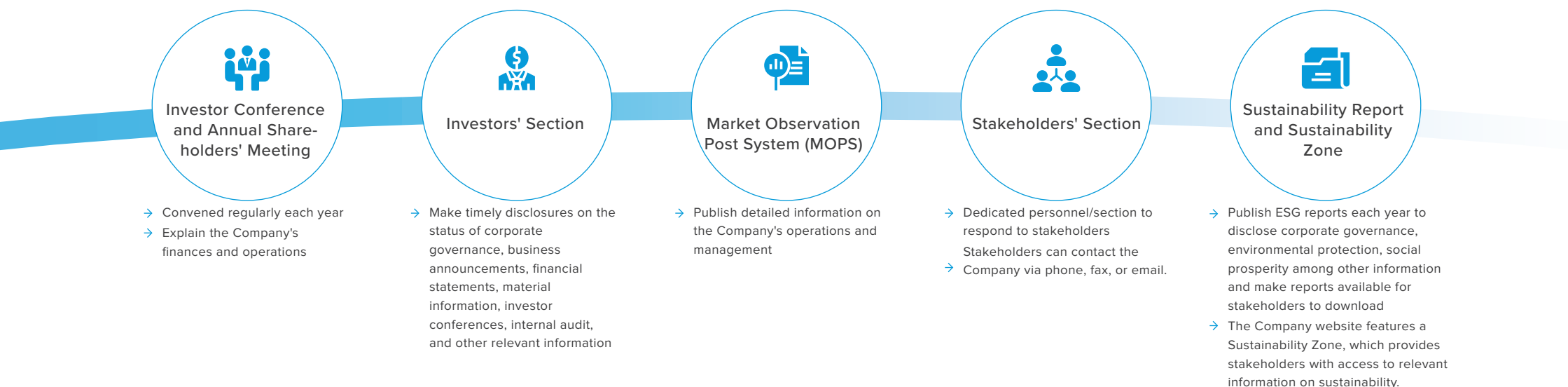
GRI 2-9 ~ 11,2-15,2-17 ~ 18

Effective corporate governance is the cornerstone for sustainable development of enterprises. We see Ethical Corporate Management as the supreme principle, implement sound risk management, comprehensive information security management, and actual compliance with laws and regulations. As a means to achieve the goal of sustainable co-prosperity, we took a proactive approach to understand and respond to the needs of various stakeholders through a variety of information disclosure channels on top of rigorously safeguarding shareholders' rights and interests.

Management Governance

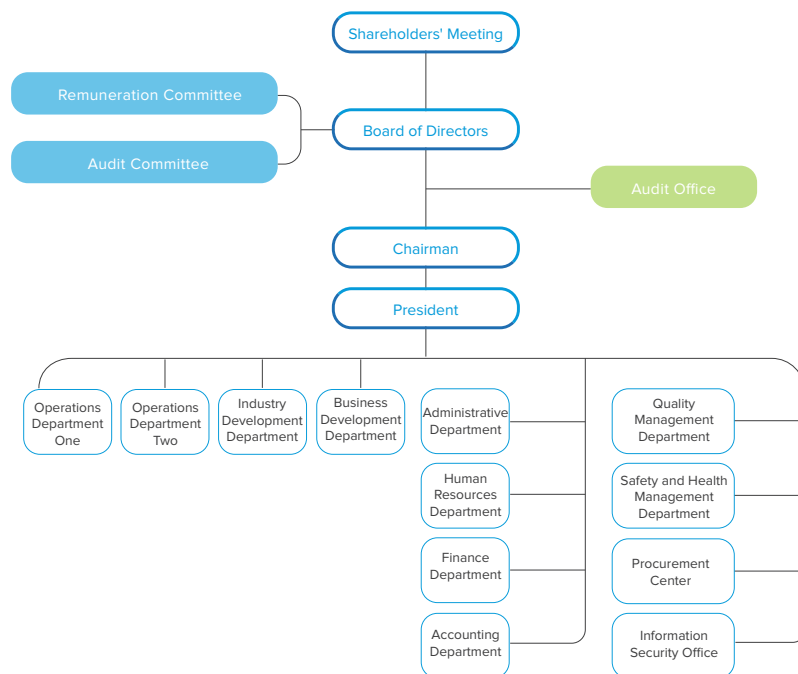
ECOVE sees ethical corporate management as the fundamental spirit of corporate governance and embarks on a quest to satisfy the expectations of investors and various stakeholders while working on the stable growth of the organization. We have established multiple channels to provide relevant information, such as holding regular investor conferences and annual shareholders' meetings, as well as setting up a special zone for investor relations, a special zone for corporate sustainability, and a special zone for stakeholders, etc., in order to continue to strengthen the disclosure of information, to respect the rights and interests of all stakeholders, and to achieve effective communication.

ECOVE not only focuses on resource recycling-related fields in investment planning but also places great importance on implementing sustainable development. Through transparent, professional, and robust corporate governance principles, ECOVE has been consistently ranked in the top 5% of the "Corporate Governance Evaluation" for listed companies for 11 consecutive years. This demonstrates our commitment to being a responsible corporate citizen and serves as a model for information disclosure and ethical business practices.



Governance Structure

The Board of Directors of ECOVE is the Company's highest decision-making body, responsible for overseeing the Company's operations and formulating major strategies. To ensure sound corporate governance, we have established an Audit Committee <https://air.writepath.co/dispatchjob/list/mine> and a Remuneration Committee under the Board of Directors, which are responsible for overseeing the Company's finances and compensation system, respectively. Additionally, an internal audit organization has been set up to manage the planning and execution of audit operations. The unit not only reports on audit activities to the independent directors on a regular basis but also attends meetings of the Audit Committee and the Board of Directors to provide reports.



■ Transparent and Efficient Operations

The operation of our Board of Directors follows the "Rules Governing Procedure for Board of Directors' Meetings" and "Guidelines for Board of Directors Meeting Operations Management." The Board holds meetings at least once per quarter, adheres to conflict of interest regulations, and any director with personal interests involved in a board resolution automatically recuses themselves and does not act as a proxy for other directors in voting. The average attendance rate of all directors on the Board of Directors in 2024 was 100%, which is above and in compliance with the 85% corporate governance rating metric. The Chairman of ECOVE has the primary responsibility of overseeing the executive management to ensure that the Company's operations and business execution align with the corporate philosophy. The President's primary responsibility is to lead the management team and ensure the overall operations are carried out in accordance with the directives of the Board of Directors. The Chairman does not concurrently hold the position of President to avoid conflicts between their respective responsibilities.

	Remuneration Committee	Audit Committee
Main Responsibilities	Evaluate the remuneration policy and system of the directors and managers objectively and make suggestions to the Board of Directors accordingly for policy-making reference.	Established voluntarily since 2014, the Committee is responsible for supervising the fair expression of the Company's financial statements, the selection (dismissal) and independence and performance of CPAs, the effective implementation of internal controls, compliance with relevant laws and regulations, and the control of existing or potential risks.
Composition of Committees	The term of office of the 5th Committee is from May 31, 2023 to May 30, 2026 Convener Shuh-Woei Yu Members James Tsai and Shan Shan Chou	The term of office of the 4th Committee is from May 31, 2023 to May 30, 2026 Convener Shuh-Woei Yu Members James Tsai and Shan Shan Chou
Meetings	Two meetings were convened in 2024. The average attendance rate of the three members was 100%.	Five meetings were convened in 2024. The average attendance rate of the three members was 100%.
Articles of Association (Please ask the graphic team to insert a QR code)		

Board Diversity and Independence

To ensure the independence of the Board of Directors, we have implemented a strict candidate nomination system, whereby the shareholders' meeting elects from the list of director candidates. Directors may be re-elected consecutively. As of the end of 2024, the average tenure of our Board of Directors is 7.1 years. In addition, the Company amended its Articles of Incorporation in May 2025, stipulating that the Company shall have five to nine directors, each serving a term of three years, with the possibility of re-election. Among these, the number of independent directors shall not be less than three and shall not be less than one-fifth of the total number of directors.

In addition, we are committed to promoting a diverse structure for the Board of Directors. The Company's Corporate Governance Principles explicitly state that the composition of the Board of Directors should take into account diversity, including but not limited to basic qualifications such as gender, age, nationality, and culture, as well as professional knowledge and skills. Furthermore, specific management objectives for the Board's diversity policy shall be formulated based on the Company's operations, business model, and development needs. These objectives include that the number of directors who concurrently serve as executives of the Company shall not exceed one-third of the total Board seats, there should be at least one female director, and at least two independent directors whose consecutive terms do not exceed three terms.

The current Board of Directors consists of 9 members, of which 1 member is an employee (approximately 11% of the total board), and also includes 1 female director (approximately 11%) and 3 independent directors (approximately 33%), in accordance with the diversity policy. The Board is responsible for formulating the Company's business policies and important strategies. All members of the Board possess the professional knowledge, experience, and qualifications necessary to perform their duties, including expertise in engineering and environmental protection, industrial safety, water resources, finance, and sustainable environmental practices. They are well-versed in international perspectives, decision-making leadership, and crisis management capabilities to respond to changes in economic, environmental, and social aspects. Information regarding the Board members' positions on other Boards has been disclosed in the Company's 2024 Annual Report.

Directors' Further Training and Performance Evaluation

In order to implement corporate governance and enhance the functions of the Board of Directors, establish performance objectives and strengthen the operational efficiency of the Board of Directors, the Company has established the "Regulations Governing the Board Performance Evaluation,

which stipulates that the Board of Directors of the Company shall conduct an internal performance evaluation annually, and shall be evaluated by an external professional independent organization or a team of external experts and scholars at least once every three years, and that the scope of the evaluation shall include the entire Board of Directors, individual members of the Board of Directors, and functional committees. The evaluation methods include internal self-assessments by the members of the Board of Directors and functional committees (Remuneration Committee and Audit Committee), and performance evaluations conducted by external professional organizations and experts or other appropriate methods. The results of the internal and external performance evaluations of the Board of Directors shall be completed before the end of the first quarter of the following year. In order to enhance the quality of decision-making, ensure that the decisions of the Board of Directors are closely aligned with the goals of sustainable corporate development, strengthen governance effectiveness, and respond to stakeholder expectations, the performance evaluation indicators for the Board of Directors have been updated in December 2023 to include an evaluation item of "participation in sustainable management (ESG)." The individual performance evaluation of directors will serve as a reference for determining their compensation.

The Company appointed Taiwan Corporate Governance Association, an external professional and independent organization, to conduct a performance evaluation of the Board of Directors at the end of 2024. The evaluation results and proposed follow-up measures have been presented at the 13th Board meeting of the 9th term on May 5, 2025. The next performance evaluation will take place at the end of 2027. The results of the Board's performance evaluation, as well as subsequent reviews and improvements, will be reported to the Board and disclosed in the annual report and on the Company's website.

All members of the Board of Directors of the Company have completed relevant training in accordance with the "Guidelines for Continuing Education for Directors and Supervisors of Exchange-listed and OTC-listed companies." The training sessions are coordinated by the Group's Secretariat of the Board of Directors in accordance with the needs of the directors' professional functions or external trends. The training content covers corporate governance, business ethics and compliance, risk management, corporate sustainability, information security, etc., aiming to enhance the Board's understanding of emerging issues and the effectiveness of corporate governance. In 2024, the average training hours for the Company's directors reached 6.3 hours, with all directors meeting the requirement of a minimum of 6 hours of training under the "Guidelines for Continuing Education for Directors and Supervisors of Exchange-listed and OTC-listed companies." Related information is disclosed on the Market Observation Post System.

Remuneration Structure for Directors and Managers

➤ For the remuneration structure of directors and managers, please refer to section 1.1.1.2 Corporate Sustainability Promotion Framework



Information on the current positions, educational and professional backgrounds, current concurrent roles, and areas of expertise of board members.



Implementation of the Board's Diversity Policy



The internal performance evaluation results of the Board of Directors



The external performance evaluation results of the Board of Directors

Business Ethics and Legal Compliance GRI 2-23~24、2-26~27、205-1~3、206-1; SASB IF-WM-120a.3

Business Ethics

ECOVE adheres to the spirit of integrity in its operations and ensures that daily operations comply with corporate ethics and morals. We have established basic standards of conduct that must be followed by the directors, managers, and general employees, including "Corporate Governance Principles," "Ethical Corporate Management Principles," and "Code of Ethical Conduct," among other regulatory standards. Additionally, we have set forth work rules for all ECOVE employees to follow in their daily business activities. The Company's Group Shared Services is responsible for the development and subsequent implementation of the Corporate Integrity Management Plan, and the General Manager, the highest decision-making authority of the Group Shared Services, determines and supervises the implementation of the Corporate Integrity Management Plan. The Company reports the results of the "Policy for Promoting Corporate Integrity" to the Board of Directors once a year.

With the intention of maintaining fair trade and preventing corruption and bribery, and in compliance of the Enforcement Rules of Code of Ethical Conduct and the no-gift policy, ECOVE strictly requires employees and related parties to conduct transactions without preferential treatment, and not to request, obtain, offer, accept favors such as gifts, entertainment, kickbacks, or bribes for themselves or people around them when performing their duties. Through the internal control system, relevant risks can be confirmed and mitigated for all operating sites. Within the "Code of Ethical Conduct," it is specified that employees of the Company must not, in any way, engage in political contribution, support specific political parties or candidates, or participate in other political activities that may influence other employees.

In order to ensure that all ECOVE employees are familiar with the various management standards, since 2020, all employees, regardless of their positions, including newly hired staff, are required to sign the "Employee Ethics Commitment Letter." In 2024, the signing rate reached 100%. During the orientation and training for new employees, the importance of ethics and integrity is emphasized, along with an introduction to ECOVE's "Code of Conduct," "No Gift Policy," "Whistleblowing Website," and other legal compliance regulations and reporting mechanisms. Since 2017, a "Code of Conduct for Procurement Personnel" has been established, requiring all procurement staff to sign it upon employment. The code explicitly prohibits the solicitation of improper benefits and provides guidelines and reporting procedures regarding the giving and receiving of gifts so as to prevent conflicts of interest or the compromise of the impartiality of procurement decisions. As of 2024, the signing rate is 100%. Since 2018, ECOVE also requires all employees of affiliated companies to sign the "Confidentiality, Non-Competition, and Intellectual Property Commitment Letter." In 2024, there were no incidents of corruption or bribery, and our commitment to ethical management in business operations has received recognition and approval from our partners.

To continuously strengthen the commitment to ethical management, the Company has incorporated "ethics" as part of the annual performance evaluation criteria for all employees, accounting for 5% of the performance evaluation metrics. This aims to deepen the connection between ethics and positive employee behaviors. Additionally, each year, the Company organizes both internal and external activities and training sessions related to ethical management for all

employees. In 2024, two online ethical corporate management courses were conducted for all employees, with a total of 1,846 participants in both sessions. The number of employees who completed the courses was 1,840, representing 99.6% of all employees; the 0.4% of employees who did not complete the training was due to their resignations during the training period. In addition, the education and training program for new recruits also includes courses related to ethics and integrity, such as Code of Conduct, Code of Ethical Conduct, and Business Secrets, and the participation rate is 100%. The total number of training hours for the above related courses is 2,767. All Board Directors also underwent courses related to ethical corporate management issues, and advocacy was further conducted on the issues of legal compliance, avoidance of interest, improper political contributions and donations, with a completion rate of 100%, thereby strengthening the concept of ethical management at the governance level.

Training Results for Ethical Management Courses in 2024

Job Type	Number of Employees Who Have Completed the Courses	Percentage
Engineers	423	23.0%
Technicians	1,201	65.3%
Administrative personnel	216	11.7%
Total	1,840	100%

Through practical actions, we strengthen the ethical business management with vendors, during interactions with vendors, such as requesting for quotations, tender meetings, going through ordering procedures, etc. we will express CTCI's and ECOVE's resoluteness in ethics by means of words, written and verbal. Prior to a tender meeting, we will execute Integrity Moment actions, announcing and explaining the contents of the Supplier Code of Conduct to vendors, simultaneously informing the prohibition of private interests, and providing information to the whistleblowing mailbox. Additionally, the implied covenant of good faith and fair dealing is also added to purchase orders to vendors and engineering commission contracts.

2024 Supplier Anti-Corruption Policy and Training Results

Number of suppliers who have received anti-corruption training	809
Percentage of suppliers who have received anti-corruption training (%)	100%
Number of incidents of corrupt and non-compliant behavior that resulted in the termination or non-renewal of contracts with business partners.	0



Corporate Governance Principles



Ethical Corporate Management Principles



Code of Ethical Conduct

Legal Compliance

The Company's business scope covers four major areas: resource management, recycling, renewable energy, and electrical and mechanical maintenance and refurbishment. We regularly review the latest legal changes and updates both domestically and internationally and are committed to establishing a culture of compliance. In 2024, ECOVE did not face any legal actions related to anti-competitive behavior, antitrust and monopoly practices, non-compliance with product and service information and labeling regulations, or violations of marketing and promotion (regulatory or voluntary guidelines). ECOVE and its subsidiaries had no significant regulatory violations in 2024.

The number and total amount of penalties imposed on ECOVE and its subsidiaries in 2023 and 2024 are summarized below:

2023~2024 Workplace Safety Penalty Statistics:

Year	Item	Number of Fines	Fine Amount	Number of Non-monetary Sanctions
2023	General Violation Incident	0	-	0
	Significant Violation Incident	0	-	0
2024	General Violation Incident	2	120,000	0
	Significant Violation Incident	0	-	0

Note 1: A "significant violation incident" is defined as a violation resulting from a "significant occupational disaster" under Article 37 of the Occupational Safety and Health Act.

Note 2: In 2024, there were two penalty cases. The first case was due to the absence of a protective cover, which has since been promptly addressed with the installation of the cover. The second case was related to personnel certificates not meeting requirements, and immediate action was taken to send personnel for training to obtain the necessary certificates.

2023~2024 Environmental Penalty Statistics

Year	Item	Number of Violations	Fine Amount	Number of Non-monetary Sanctions (Stoppage of Work)
2023	General Violation Incident	3	1,066,000	0
	Significant Violation Incident	0	0	0
2024	General Violation Incident	4	475,000	0
	Significant Violation Incident	0	0	0

Note 1: A "significant violation incident" is defined as a single fine in excess of NT\$1,000,000.

Note 2: In 2024, ECOVE and its subsidiaries faced a total of four penalty cases, primarily due to non-compliance with the Waste Disposal Act and the Air Pollution Control Act, among other relevant regulations. Subsequent corrective measures have been completed.

Whistleblower and Consultation Mechanism

In response to reporting-related operations, ECOVE has established the "Whistleblowing Operation Management Measures." These measures are not only available on the Company's internal employee

education platform, but are also published on the official website for both internal and external personnel to download and reference. During the onboarding training for new employees, the reporting channels and the relevant rights of whistleblowers are included in the training materials to ensure that all employees understand the operation of the reporting mechanism and their rights.

The Human Resources Department is responsible for handling whistleblowing cases and providing initial review recommendations. The cases are then forwarded to the Group Shared Services (GSS) for further investigation, ensuring a transparent whistleblowing channel and fair investigation process. Internal and external personnel who discover any violations of laws, regulations of the Company, or other improper conduct that may affect the interests of the Company may freely choose to report such incidents either by providing their names or anonymously. Internal whistleblowers wishing to file a report may do so through the Employee Feedback Platform's employee mailbox (HR@ecove.com) or by utilizing the reporting website established by the third-party impartial organization, KPMG Taiwan, to protect the rights of the whistleblower and ensure that the reported cases are properly investigated and addressed.

Reporting Channel	Target Users
Employee Feedback Email: HR@ecove.com	Internal personnel
Third-party reporting platform: https://secure.conductwatch.com/ctci/	Internal and external personnel

Furthermore, we are committed to maintaining the confidentiality of the whistleblower's information. All participants in the investigation and interviewees required for the case must sign a confidentiality agreement, pledging to uphold the confidentiality of the investigation process and any case-related information they may encounter. Additionally, we will protect the whistleblower from being dismissed, removed from their position, demoted, or subjected to any detrimental treatment that may harm their legal rights, contractual entitlements, or customary benefits as a result of their whistleblowing.

→ Flowchart of Reporting Investigation Procedure



If employees have concerns or inquiries regarding the various codes of conduct or ethical business practices, they can consult with their supervisors or contact the internal complaint mailbox (HR@ecove.com). Two complaints were received in 2024 and only one was substantiated and closed after investigation. ECOVE will continue to follow the brand positioning of "Most Reliable" and continue to implement the Ethical Corporate Code of Integrity, reaffirming and reinforcing employees' beliefs in integrity - honesty, commitment, and sincerity, including: organizing training courses to deepen trust in the corporate culture; organizing online ethical and integrity training courses for all employees and signing of declarations, etc., as well as ensuring a smooth channel for employees to report operations, and increasing the resolve of colleagues to expose malpractices.

Business Ethics Reporting Acceptance Cases Statistics for 2024

Sample of Violation of the Code of Conduct	Number of Cases Received	Inadmissibility	Number of Cases Not Substantiated After Investigation	Number of Substantiated Cases After Investigation
Corruption or Bribery	0	-	-	-
Discrimination or Harassment	0	-	-	-
Customer Personal Information Protection	0	-	-	-
Conflict of Interest	1	-	1	0
Money Laundering or Insider Trading	0	-	-	-
Suspected Unfair Workplace Environment	1	-	0	1
Workplace Bullying	0	-	-	-
Untrue Expense Reimbursement	0	-	-	-
Unreasonable Prices and Non-compliance with Product Specifications	0	-	-	-
Total	2	0	1	1

Note: In 2024, there was one case of a suspected unfair workplace environment. The limitations regarding insufficient improvement space have been addressed, and the facilities and environmental quality of all break rooms have been uniformly enhanced to ensure that all employees can enjoy a comfortable and equitable resting space before closing the case.

Regarding the incident in 2023 at the Gangshan Incineration Plant, where an employee was suspected of taking away contraband cigarettes that were supposed to be destroyed during the operation of a crane and selling them privately, the Company has cooperated with judicial authorities to conduct an investigation and understand the situation, and has implemented relevant disciplinary actions. To strengthen management mechanisms and operational transparency, the Company has reviewed and amended relevant operational processes. The supervision of the destruction of contraband items is now jointly conducted by the unit that applies for the destruction operation, the Environmental Protection Bureau, and the Company, ensuring that contraband items are directly placed into the incinerator for destruction by cranes. Meanwhile, dedicated personnel are assigned to monitor the processing procedures in real-time through video surveillance at the storage pit site and the central control room, in order to enhance operational safety and management efficiency. The Company will continue to enhance internal controls and management measures to ensure that all operations comply with regulations and to respond robustly to external concerns.

Risk Management

In order to strengthen the operational quality and competitiveness of the Company and its subsidiaries, the Company systematically identifies and evaluates the risks it may face in the course of its operations and formulates appropriate risk management strategies to reduce the likelihood of the occurrence of risks and their negative impacts, as well as implements an all-employee risk culture, promotes the Company's core values to its employees, sets behavioral indicators, and strengthens the organization's behavioral and internalized awareness of risks.

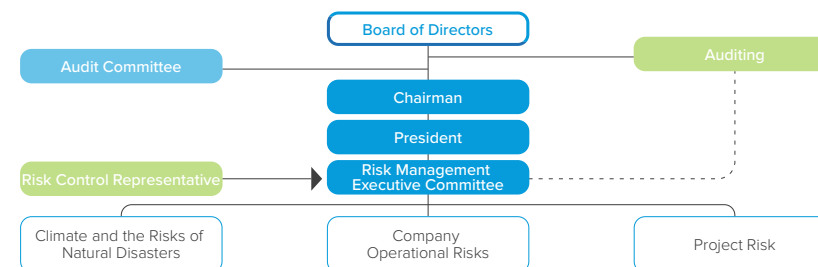
Risk Management Framework

ECOVE focuses on the risks faced in the course of operation to integrate the corporate risk management framework and build a perfect risk management organization and system. In 2017, ECOVE issued the "Risk Management Guidelines" and set up the "Risk Management Executive Committee" to formulate the "Risk Management Policies," which serves as the supreme guiding principle of the Company's risk management, and clearly regulates the policy, purpose, scope, and organizational structure of risk, unit's authority and responsibility, risk management mechanism and execution process, and incorporate the risk management system to implement risk management.

The Board of Directors of ECOVE is the highest governing body responsible for risk management of the Company, delegating the Audit Committee to oversee the effectiveness of the Company's general risk control. The Audit Committee is composed of three independent directors. The Risk Management Executive Committee reports on the implementation of risk management to the Audit Committee and the Board of Directors at least once a year. The most recent report was presented to ECOVE's 10th meeting of the 4th Audit Committee and 11th meeting of the 9th Board of Directors on December 12, 2024, detailing the "Operation of the Risk Management Executive Committee in 2024."

The Company has established the "Risk Management Executive Committee." The Chairman/President serves as the Commissioner, and the heads of each department and the Presidents of subsidiaries serve as committee members. The committee meets quarterly and is responsible for approving risk management policies and guidelines, reviewing management reports, strategies, and improvement plans of each unit, ensuring the effectiveness of risk management measures, etc., and continually reviewing the effectiveness of the control measures through audits to help the Board of Directors and managers to ensure that the risks are effectively controlled. The risk control representative is appointed by the Commissioner of the Risk Management Executive Committee. The representative is responsible for overseeing the convention of the Risk Management Executive Committee meetings, as well as organizing and tracking relevant data and files, ensuring the continuous effectiveness of the risk management mechanisms. The Risk Management Executive Committee for 2024 has convened four meetings to monitor the status of existing risk improvements and the results of the major risk item inventory.

→ Organization Chart of the Risk Management Committee



Risk Management Mechanism

Risk Classification	Main Risk Dimensions
Climate and the Risks of Natural Disasters	Physical: Immediate and long-term Transformation: Regulations, technology, market, goodwill, and responsibility System: Ecosystem stability and financial stability
Company Operational Risks	Political/economic environment, strategy/objectives, ethical management, finance/taxation, legal compliance/intellectual property, corporate goodwill, finance/taxation, human resources, information security, quality, occupational health and safety, procurement, and engineering technology
Project Risk	Project background, financials and contracts, stakeholders, engineering technology, and project execution

ECOVE categorizes risks into three main types: climate and natural risks, operational risks, and project risks. To mitigate the operational impacts caused by internal and external uncertainties, a comprehensive risk management process is implemented. This process includes systematic risk identification, risk analysis, risk assessment, and response measures to address and manage risks that may pose threats (or opportunities) to the Company. The aim is to avoid or reduce the impact on operations. All employees are also responsible for identifying and reporting risks. If any significant risk events that may affect the Company's operations are discovered, they should be reported immediately to their respective supervisors.

Each member of the Risk Management Executive Committee shall bear full responsibility for risk management, which includes risk identification, assessment, reporting, and the execution, supervision, and improvement of daily control measures. The Risk Management Committee's roles and responsibilities include promoting, supervising, identifying and managing significant risks, compiling and compiling risk profiles and improvement plans for each company, collecting and monitoring significant risk events in each company, evaluating the extent of impacts, reporting significant risks and related improvement plans to each company's general manager, communicating risk management guidelines to members, identifying, analyzing, evaluating, handling and reporting the risks of the units under our control, ensuring the effective implementation of the risk management and related control procedures of the units under our control, participating in the meetings related to the risk management of the units under our control, providing the opinions related to the risk management and control, accepting the related risks of the units under our control, proposing the risk mitigation plans/measures of the units under our control and handling and tracking the control according to these plans/measures, informing the colleagues of the units under our control of the items that should be followed and cooperated with by us, and assigning a responsible person for the management and control of the risk management projects as necessary.

After identifying key risk items, the relevant risk responsibility units will discuss and evaluate them to establish "alert standards" and "action standards." These will be submitted to the Risk Management Committee for resolution, and will be implemented upon approval by the President, serving as the basis for risk mitigation and control. If the alert standards are met, each risk management unit shall report to the supervisors of their respective units and monitor the situation according to procedures. If the action standards are met, an emergency risk response team will be established to handle and respond to urgent risk events.

→ Risk Management Process



■ Risk Review

Each risk management unit shall conduct risk identification, risk analysis, risk assessment, and risk control processes at least once every six months. This includes identifying potential risks that the Company may face within its business scope, analyzing the degree of impact and probability, selecting appropriate risk control measures based on each identified risk, and formulating mitigation strategies. The findings shall be submitted to the Risk Management Executive Committee for review to assess the effectiveness of risk control measures and action management, and to continuously monitor the status of risk improvement.

■ Risk Assessment and Analysis

According to the scope covered by the risk management framework, in the assessment results for 2024, ECOVE has identified the following seven major high-risk items:

ECOVE Risk Assessment Results for 2024

Risk Classification	High risk	Rather high risk	Moderate risk	Low risk
Climate and the Risks of Natural Disasters	None	None	Damage to photovoltaic equipment and losses in electricity sales due to strong winds	- Existing equipment and technology being phased out - Changes in customer behaviors
Company Operational Risks	None	- Loss of key personnel - Failure to renew existing contracts - Acquisition of key materials - Environmental incidents - Occupational safety incidents - Construction management or strategies are unable to meet project execution requirements - System interruption	First half of 2024 items (According to risk management guidelines, no need for monitoring and tracking)	First half of 2024 60 items (According to risk management guidelines, no need for monitoring and tracking)
			Second half of 2024 55 items (According to risk management guidelines, no need for monitoring and tracking)	Second half of 2024 58 items (According to risk management guidelines, no need for monitoring and tracking)
Project Risk	None	None	None	None

Based on the aforementioned risk assessment results, appropriate risk control measures will be selected for the primary identified rather high risk items. This will involve the formulation of risk mitigation action plans, including risk control and improvement strategies. Continuous monitoring of the implementation of these mitigation actions will be conducted to ensure that the mitigation plans are effectively executed. The main risk mitigation action measures are described as follows:

Risk Item	Risk Description	Corresponding Materiality Sustainability Topics	Risk Mitigation Actions
Loss of key personnel	The departure, early retirement, or vacancies of personnel at the level of team leader and above cannot be adequately filled, which impacts the effectiveness of business execution and the performance of management operations.	Talent Recruitment and Retention, Career Development and Training	- Enhance communication channels for feedback, appropriately guide employees concerning the release of work-related stress or adjust their job responsibilities, reduce employees' level of dissatisfaction or tendencies to resign, decrease their intentions to resign, strengthen talent training and train reserve personnel for key positions. - Make employees familiarize themselves with their alternative responsibilities through the job duty substitute system, thereby enhancing operational capabilities. - Establish SOPs for management operations and workflow processes, and improve the institutionalization of operational standards. - Continuously inherit and learn from experiences to reduce work concentration that leads to excessive fatigue.
Failure to renew existing contracts	After the termination of the contract, there will be no further renewal services provided, nor will there be any successful bids in the tendering process. The contract amount has not met the target, which impacts the Group's revenue and internal operations.	Market Strategy	- In accordance with the directives of the Group, a team has been established to commence the preparation for bidding ahead of schedule. - To seek suitable new partners. - We will continue to maintain the stable operation.

Risk Item	Risk Description	Corresponding Materiality Sustainability Topics	Risk Mitigation Actions
Acquisition of key materials	The equipment is outdated, and the original manufacturer has ceased production, or there are no compatible spare parts available on the market. The subcontractors are unable to provide technical services from professional technicians in a timely manner.	Pollution Control, Sustainable Management of Supply Chain	1. Expand the list of suppliers. 2. Suppliers are required to establish safety stock. 3. Seeking substitute materials and suppliers. 4. Preemptively plan for equipment upgrades to avoid production stoppages due to material shortages. 5. Build up the information of the same type of products using different factories, and adjust the spare parts and materials flexibly. 6. Assess and establish a list of professional assistance vendors to reduce reliance on a single technology vendor. 7. Evaluate the signing of a long-term technician priority support agreement to ensure the timeline for technician support.
Environmental incidents	The projects violated environmental protection regulations and was fined or ordered to cease operations.	Corporate Governance and Ethical Corporate Management, Pollution Control	1. Strengthen the content of quality audits and implement the three-level quality management system. 2. Amend the Guidelines for Reporting and Handling Project Quality Incidents. 3. Regularly conduct education and training on compliance. 4. A waste gas monitoring system management and pollution control operation has been established and is being strictly implemented. 5. Establish a real-time reporting mechanism to promptly monitor pollution control conditions, facilitate immediate action, and prevent the emergence of environmental disputes. 6. Regularly conduct audits of regulations and permit contents to ensure legality and compliance.
Occupational safety incidents	Significant fire incidents have occurred, resulting in damage to machinery and equipment.	Safe and Healthy Work Environment	1. The rectification plan should be scheduled based on the availability of one crane for emergency use. 2. During the maintenance or rectification period, it is essential to ensure that crane personnel are on duty to avoid missing the opportunity for immediate response. 3. Conduct a fire drill in the storage pit once a month. 4. Implement liquid level management in storage pits and conduct regular turning to prevent the accumulation of biogas.
Construction management or strategies are unable to meet project execution requirements	Delay in contract completion schedule: The project management mechanism was not effectively implemented, resulting in a significant lag in project execution progress.	Corporate Governance and Ethical Corporate Management, Customer Service and Management	1. After the establishment of the project, the project team shall schedule the project timeline and complete the procurement and contracting plan within two months in accordance with the contractual construction period requirements. The construction plan must be completed and submitted for review one month prior to the commencement of on-site construction. 2. The project should hold weekly meetings to review whether the progress aligns with the plan. If any delays in the schedule are identified, the project should promptly develop a catch-up plan, which may include increasing machinery and manpower or extending working hours; daily wrap-up meetings should be held to assess progress until the schedule is back on track. 3. The project should provide a monthly progress report to the President, reviewing the progress of each phase and task, as well as any assistance required.
System interruption	The Company servers have suffered ransomware attacks	Information Security and Privacy Protection	1. All servers must have MDR/EDR software installed to strengthen endpoint management. 2. Engage external cybersecurity firms to investigate whether there has been any infiltration by and lurking of hackers and to ensure that there are no cybersecurity concerns. 3. External (non-company employee) accounts are to be registered and managed. 4. Vendors requiring the use of a VPN connection must submit a formal application and obtain approval from the department supervisor before activation. Additionally, the VPN equipment must restrict the source (IP) and destination (server) of specific connections. User accounts and VPN policies must be configured with valid start and end dates. 5. Conduct a comprehensive check of all VPN access points and maintain a record. Employees must verify whether the device used to log in via VPN is a company-owned computer. 6. Affiliated enterprises must have disaster recovery/remote backup mechanisms in place to ensure uninterrupted business operations. 7. Management of account/password for multi-function printers.

Assessment Results of Emerging Risks

Emerging Risks	Details of Risks	Impact Analysis	Management Strategies
Risks of China's control over rare earth exports	Due to the ongoing escalation of the China-US trade conflict, China may employ measures to regulate rare earth exports as a means of trade warfare, thereby affecting the stability of the global rare earth supply chain.	Rare earth materials are key raw materials for high-efficiency permanent magnet motors and magnetic separation permanent magnets. If it is not possible to obtain rare earth materials smoothly, companies may need to seek alternative materials or supply sources, which could increase costs and potentially reduce the energy efficiency and performance of equipment, impacting operations and sustainability.	1. By signing long-term purchase contracts or joint procurement agreements with suppliers, we ensure a stable supply of raw materials. 2. Develop reliable equipment suppliers for rare earth production.
Environmental, Social, and Governance (ESG) risks associated with supply chain relocation	The United States' imposition of tariffs on China may prompt companies to relocate their supply chains to other countries, such as emerging economies in Southeast Asia, India, or Mexico. These regions may face insufficient environmental protection, labor conditions, and governance standards.	If the new supply chain does not meet international standards, it may lead to environmental pollution and violations of labor rights, which could subsequently affect the Company's reputation.	1. Implement the ESG risk assessment for suppliers. 2. Increase the proportion of local procurement.

■ Strengthening Risk Culture

In order to effectively enhance the outcomes of risk management, the Company not only promotes awareness on risk management guidelines and related regulations through various risk control units, but also establishes a risk management mechanism. This mechanism assists the Company and all employees in systematically identifying and assessing the risks that may be encountered during operational processes. After completing the identification, analysis, and assessment stages, appropriate measures and responses are taken. In addition to adhering to and implementing these measures in daily operations, regular promotional or training activities are conducted for all levels of management and staff to enhance the overall risk awareness of all employees.

Internal Control System

ECOVE's internal control system is based on the "Guidelines for Establishing Internal Control Systems for Publicly Issued Companies" issued by the Financial Supervisory Commission. It incorporates elements such as control environment, risk assessment, control activities, information and communication, and monitoring. Designed by managers, approved by the Board of Directors, and implemented by the Board of Directors, managers, and other employees, the system aims to promote sound business operations, ensure operational effectiveness and efficiency, reliable and timely information reporting, and compliance with relevant laws and regulations. It is regularly reviewed to adapt to changes in the internal and external environment, ensuring the ongoing effectiveness of system design and implementation. In 2024, the Company established an internal control system for sustainable information management, which was approved by the Board of Directors in December 2024.

ECOVE has an internal audit unit under the oversight of the Board of Directors. The unit has established an internal audit system, which is approved by the Board of Directors. It is staffed with a dedicated audit manager and works in conjunction with the Audit Committee to assist the Board of Directors and managers in examining and reviewing deficiencies in the internal control system, measuring operational effectiveness and efficiency, and providing improvement recommendations as necessary. This ensures the continuous and effective implementation of the internal control system and serves as a basis for reviewing and revising the system.

The audit department develops an annual audit plan based on risk assessments and submits it for approval by the Board of Directors. It then carries out various audit procedures according to the plan. Identified deficiencies and abnormal issues related to the internal control system are disclosed in audit reports, which are tracked and followed up on after submission. Follow-up reports are prepared at least quarterly until improvements are implemented to ensure that relevant departments have taken timely and appropriate corrective measures. The audit manager reports the results of the independent director audit plan execution monthly and has individual face-to-face meetings with independent directors every quarter to discuss internal control and audit-related matters. The audit manager also attends Audit Committee and Board of Directors meetings to present audit business reports and demonstrate the effectiveness of the audit function.

Information Security GRI 418-1

ECOVE adheres to the protection of our customers' important intellectual assets. We strengthen the reliability and quality of project execution through a sound information security governance system, regular information security risk assessment, and a diversified information security management mechanism, etc., and comply with the industry's major requirements or legal regulations in order to enhance the trust of our customers. ECOVE also actively identifies and reduces information security risks through standards such as the Regulations Governing Establishment of Internal Control Systems by Public Companies, the Trade Secrets Act, the Personal Data Protection Act, and the Cyber Security Management Act, to enhance the quality of information security on all fronts. To comply with legal requirements and operational demands, and to protect the personal data of the Company's employees and relevant individuals, the "Principles for the Protection of Personal Data Security" have been formulated. These principles apply to all employees hired by the Company (including its subsidiaries) as well as personnel dispatched to work at the Company. The responsible units include the Human Resources Department, Information Services Center, Safety and Health Management Department, all department heads, and the Personnel Committee. In 2024, the completion rate for internal training on the Personal Data Protection Act was 99.57%, totaling 924 training hours. In 2024, one incident of information security took place in ECOVE, which did not caused any damage to the Company's goodwill, nor did it harm customer relationships or affect the Company's revenue; there were no substantiated complaints about infringement of customer privacy.

Information Security Management System

ECOVE complies with the requirements of Article 9-1 of the Regulations Governing Establishment of Internal Control Systems by Public Companies, and has announced the establishment of a dedicated information security unit in 2023. A dedicated head of information security and a dedicated employee of information security have been appointed. The Chief Information Security Officer oversees the promotion, coordination, and supervision of the Company's information security policies, with dedicated information security personnel responsible for planning and executing various information security operations. In addition, an information security management review meeting should be convened at least once a year to review matters related to information security management. The review meeting can be held along with the meetings of Risk Management Executive Committee, and in accordance with the relevant provisions of the Risk Management Guidelines, the Risk Management Executive Committee is the main promotion organization of the Company's risk management. Upon the instruction of the Committee, the Committee is required to submit a "Security Management Report" on the results and effectiveness of the implementation of the social drills, anti-virus system, firewall, email filtering system, and email audit system on a regular basis every year, which will be consolidated into the "Risk Management Executive Committee Report," and report the status and plans of the annual work to the Board of Directors every year.

The dedicated employee of information security has passed the training of the new version of ISO27001:2022 for leading auditors. We have re-examined the "Information Security Management Guidelines" and the accompanying standards in the spirit of ISO/IEC 27001 to regulate the Company's information security management system, in order to ensure the confidentiality, completeness, and usability of information under the Company's jurisdiction, and to further safeguard the rights and interests of the Company and all colleagues. In 2024, ECOVE, its subsidiaries, and domestic and overseas factories, projects, and sites were randomly inspected for a total of 36 safety audits, with a total of 54 items, all of which have been improved.

Information Security Risk Assessment

To proactively identify possible risks to information security, we conducted an annual risk assessment exercise to analyze key items from a combination of potential threats and vulnerabilities, including:

- Scam syndicates using fake e-mail messages to trick employees of the Company into remittances or transactions, or providing personal information.
- Industrial spies or competitors using hacking technologies to continuously infiltrate the internal hosts and steal corporate internal information.
- The criminal syndicates and hackers distributing content with malicious links through e-mails, text messages, social networking software, and communication software, to induce employees to fall victim to scams or to cause victims' computers to be encrypted and held hostage until the demanded ransom is paid.
- Hackers initiating a large number of connection requests through the network to block the normal operation of the Company's network.
- Employees using illegal software or copying sensitive data of the Company to portable storage devices, causing data leaks due to loss, theft, or sale of the devices.
- Natural and man-made disasters causing damage to information software and hardware, resulting in service interruption or data loss.

With regard to information security risks, ECOVE adopted a multi-prong approach to reinforce information security management mechanisms designed for reducing threats and managing risks, by applying information security management guidelines, introducing technological solutions, and stepping up information security education and training. Key measures include:

Key Information Security Management Mechanisms

- Regarding the disposal of hard drives from decommissioned computers, we employ dedicated wiping machines (in accordance with the US Department of Defense DoD 5200.22 standard) to prevent malicious individuals from tracking, recovering, or manually dismantling and destroying the magnetic disk records within the hard drives.
- We conduct quarterly simulations of social engineering attacks and provide cybersecurity education and training to enhance employees' awareness of email protection.
- Client-side installation of monitoring software (Smart IT) is upgraded, and asset management and security control (e.g., blocking the connection of USB storage devices or the right to install software by oneself) are continuously enhanced.
- Antivirus software is installed on all servers and personal computers, and computers are automatically and regularly scanned and continuously updated with antivirus systems and virus codes to protect the security of computers.
- Protect the confidentiality of documents through smart document management system and disk encryption technologies.
- Set up "social engineering attack prevention advocacy" website and "scam mail notification mailbox" to reduce the risk of being attacked.
- Regularly conduct internal/external audits to serve as a basis for improving the operation of the information security system on top of refining the operation of the information security management system.
- The use of remote encrypted connections (SSL VPN) is automated through domain policies. When computers connect to external networks, they first pass through the Company's firewall before establishing internal or external connections, benefiting from the same cybersecurity protection measures as the internal network.
- Coordinate with the owner's supply chain security clinic and security improvement work.
- Annual security clinics (including vulnerability scanning and penetration testing) and improvement confirmation are conducted by security professionals.
- Complete the replacement of mail gateway filter (which has the function of filtering email virus and spam) and add the function of filtering phishing emails to reduce the risk of attackers through the mail channel.
- Complete the updating of backup hardware and software systems (3 storage media + 2 off-site + 1 off-line) to achieve the basic requirements of the "3-2-1 backup principle" and the purpose of operational automation, to prevent the omission of manual periodic replacement of external hard disk or magnetic tape.
- Introduce professional vulnerability scanning software (Nessus Professional, OWASP ZAP).
- Establish deployment principles for Managed Detection and Response (MDR), ensuring its comprehensive installation on servers and expanding the protective scope at the user end, thereby enhancing cybersecurity defense depth and improving response timeliness.
- The email system will transition to cloud services to enhance cybersecurity resilience.
- Establish an offline backup verification center. (Hardware and software equipment and verification system)
- Changes in the operation of multi-function printers. (Access to the account/password for the domain will no longer be available)



Information Security Management Mechanisms

■ Information Security Management Mechanisms

In order to continuously strengthen information security management operations, ECOVE continues to invest resources in information security-related matters every year. In 2024, the investment in information security-related software, hardware, and service rentals reached NT\$8.28 million. Resource allocations include strengthening security defense equipment, relocating the email system to the cloud, upgrading and revising antivirus software, replacing outdated equipment, establishing remote backup validation mechanism, commissioning external professional cybersecurity vendors for security assessments and improvements, and reinforcing security management systems and education training. These efforts span from management to technical aspects to enhance information security capabilities.

Due to the significant damage caused to well-known companies by ransomware attacks in recent years, ECOVE has established a "Social Engineering Attack Prevention" website and a "Fraudulent Email Reporting Inbox" to assist employees in identifying and avoiding risks associated with "fraudulent/phishing emails" and more precise "Business Email Compromise (BEC)" attacks.

Based on information security risk considerations, we have conducted a comprehensive inventory and implemented security protection work, such as the replacement of old equipment and improvement of old systems, the replacement of the work hour management system, and the expansion of the deployment of MDR threat detection and response services. To effectively distribute the potential losses caused by information security risks, the Company purchased "Electronic Equipment Comprehensive Insurance" in 2024, with a total coverage amount exceeding NT\$56.50 million.

Employees in the Information Service Center have set different items and goals for their respective responsibilities within the "2024 KPI Performance Targets and Scoring Method," including incidents of computer infection within the domain, network, servers, application systems, etc., unplanned service interruptions, non-disaster or external force-induced service disruptions, high-risk individuals in social engineering drills, security inspections, information security audits, etc., to ensure the implementation of various information security measures.

In terms of outsourcing management, the Company has established comprehensive outsourcing management guidelines within the Information Security Management Guidelines. All outsourced vendors must sign a Non-Disclosure Agreement, and their project personnel are also required to individually sign a Confidentiality Agreement for Project Personnel of Outsourced Vendors to ensure that responsibilities for information security are clearly delineated. In addition, we require all outsourced vendors to cooperate with the Company in executing the project information security audit to maintain the overall security standards of the information environment.

■ Business Continuity Planning

To ensure the continuous operation of business and to minimize the impact of significant incidents or disasters on critical operations, ECOVE has established a business continuity management procedure for information services. This procedure involves conducting risk assessments and identifications regarding the severity of the impact of various system architectures on critical operational processes. The severity levels (degree) are defined and serve as the basis for determining the frequency of disaster recovery drills. To verify the effectiveness of the Business Continuity Plan and ensure that relevant personnel are familiar with the latest plan content, the Company mandates that a test drill be conducted at least once a year. In 2024, two significant drills have been completed, focusing on the scenarios of SQL database server damage and the damage and reset of various endpoint network devices. This has allowed us to comprehensively review and strengthen our disaster recovery capabilities.

■ Information Security Incident Notification

According to the "Information Security Management Guidelines," if employees detect a computer virus intrusion or other malicious software, they should immediately notify the nearest Information Center or the computer administrator of their department for handling. In practice, when the Information Service Center receives notifications from the antivirus system (indicating that automatic cleaning or isolation has failed), they proactively intervene to prevent individual employees from neglecting the antivirus system's alarm notifications. In 2024, there were 0 warnings or notifications of computer virus infection, 0 automatic cleanups, 0 automatic quarantine, and 25 notifications of information security incidents, which did not result in any data loss or customer damage. However, internal education training has been held to address the potential risk factors associated with the reported incidents. In the future, we will continue to refine and review the relevant processes to comprehensively improve the management of information security and align with the international quality requirements.

On September 21, 2024, the Company's key server was allegedly attacked by hackers utilizing a work account of old multi-function printers, launching a "brute force attack" on the firewall's VPN communication port to infiltrate the system. During the intruders' period of lurking within the system, they familiarized themselves with the information environment structure of the Company before launching a ransomware attack. After the incident occurred, the Company has implemented measures to comprehensively upgrade the cybersecurity risk environment. These measures include changes to operational modes (such as deleting the work accounts of multi-function printers, switching to scanning files directly to the printer's hard drive, and setting up individual directories and account passwords), preventing improper use (such as strengthening VPN connection management and maintaining a registry of external accounts), expanding the scope of detection (by deploying MDR threat detection and response services more widely), and enhancing protection (such as introducing a PAM privileged account management system and a DLP data leakage protection system). In addition, CoreCloud Technology and Microsoft, both external cybersecurity firms, are commissioned to investigate whether there has been any infiltration by and lurking of hackers in the internal network; after thorough checking, there are no cybersecurity concerns. After the inventory assessment, the Human Resources System and the Financial Accounting System are uniformly managed by the Group and are not affected by this incident; the IT operations at each plant site are conducted independently and are also not impacted by this incident. The systems affected by the recent ransomware attack include the Company's document processing file server, email server, and internal website server. No personal data or vital internal documents have been found to have been leaked.

Effectiveness of Information Security Management in the Past Four Years

	2021	2022	2023	2024
Number of major information security incidents	0	0	0	1
Number of violations involving customer privacy	0	0	0	0
Number of customers affected by information disclosure	0	0	0	0
Total amount of fines/penalties paid for information security incidents	0	0	0	0

■Raising Awareness on Information Security Risks

To enhance employees' understanding of the importance of information security, improve their awareness of security issues and emergency response capabilities, and effectively manage risks, we continue to promote social engineering drills and conduct these drills every quarter. According to the results of the drill, the occurrence rate for high-risk incidents in 2024 is 0%, while the occurrence rate for medium-risk incidents is 0.17%.

High Risk Incidence Rate in Social Engineering Exercises in the Last Four Years

	2021	2022	2023	2024
High risk incidence rate (fill in personal information)	0.10%	0.80%	0.30%	0%
Medium risk incidence rate (click on email link)	2.00%	1.60%	1.00%	0.17%
Total amount of fines/penalties paid for information security incidents	0	0	0	0

In addition, various types of educational training are conducted based on different training targets, effectively enhancing cybersecurity awareness and protective capabilities. Furthermore, for those identified as moderate to high risk based on the drill results, educational training on "Understanding Social Engineering Attacks and Key Cybersecurity Awareness" is provided. As of 2024, a total of 840 people have participated in the training sessions, amounting to a total of 480 hours.

2024 Information Security Education and Training Achievement Statistics

Item	Persons to be trained	Courses	Number of persons to be trained	Course hours	Number of hours
1	General colleagues	Introduction to Information Security	266	0.5	133
2	General colleagues	Techniques for Identifying Social Engineering Phishing Emails	556	0.5	278
3	Information security and information technology related colleagues	[ISO27001:2022 Training] Reporting, Handling, and Investigation of Information Security Incidents and Digital Forensics Practices	2	2	4
4	Information security and information technology related colleagues	Training of Nessus Professional, a Vulnerability Scanning Software	3	3	9
5	Information security and information technology related colleagues	iPAS - Intermediate Information Security Engineer - Skills Enhancement Intensive Course	0	16	32
6	Information security and information technology related colleagues	MOXA: Industrial Networks That Strengthens Security Protection	1	8	8
7	Information security and information technology related colleagues	Practical Training on Information Security Protection for Small and Medium Enterprises	6	2	12
8	Information security and information technology related colleagues	The Wave of AI Sweeping through Open Network Services! Establishing Cybersecurity Defense Strategies from ISMS Management	1	1	1
9	Employees at medium/high risk in social engineering drills	Enhancing Identification of Social Engineering Attacks and Key Issues of Information Security	3	1	3

Note: Medium risk refers to individuals who clicked on links within phishing emails, while high risk refers to those who not only clicked on the links but also entered their own account credentials.



Business Results and Industry Outlook

Business Results

Debt to Asset Ratio

Unit: Unit : %



Note : Consolidated

Return on Assets (RoA)

Unit: Unit : %



Note : Consolidated

EPS (Earnings Per Share)

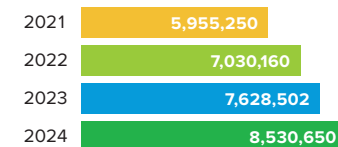
Unit: Unit : NT\$



Note : Consolidated

Consolidated Total Revenue

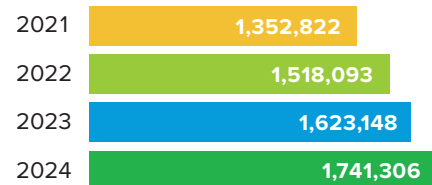
Unit: Thousand NT\$



Note: Resource management accounts for 73.4%, while electrical and mechanical maintenance and rectification, renewable energy, and recycling and reuse together account for 26.6%.

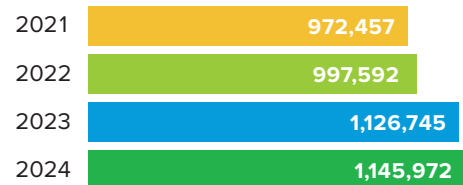
Consolidated Income Before Tax

Unit: Thousand NT\$



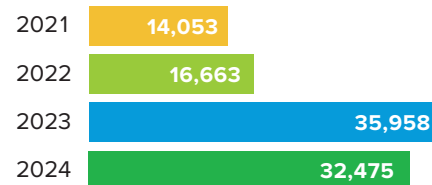
Consolidated Total Salaries

Unit: Thousand NT\$



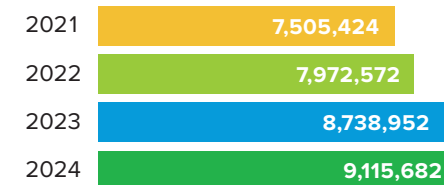
Individual Income Tax Expense

Unit: Thousand NT\$



Individual Total Assets

Unit: Thousand NT\$



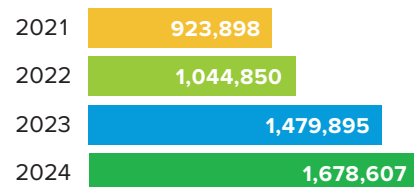
Individual Paid-in Capital

Unit: Thousand NT\$



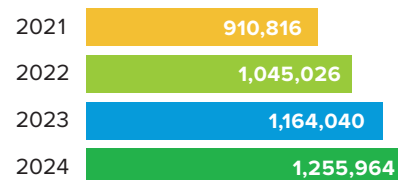
Individual Total Revenue

Unit: Thousand NT\$



Individual Net Income

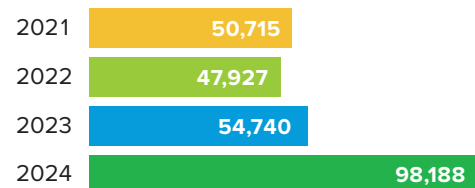
Unit: Thousand NT\$



Note : Net income attributable to owners of the parent company

Individual Operating Expense

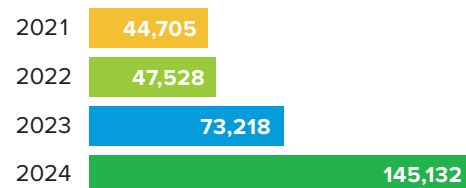
Unit: Thousand NT\$



Note : Operating Expense

Total Employee Benefits

Unit: Thousand NT\$



Note : Parent company only

Donation

Unit: Thousand NT\$



Note : The recipients of donations include associations or tax-exempt organizations. There are no political donations, such as donation made to political organizations, candidates, or any political agenda.

Sustainable Economic Activities

ECOVE actively assesses and enhances the positive impact of its economic activities on the environment and society, based on the six environmental objectives defined in the "Guidance for Identifying Sustainable Economic Activities (Second Edition)." The Company achieves these objectives by introducing innovative technologies and optimizing processing procedures, continuously improving the sustainability of its economic activities.

In 2024, approximately 81.1% of the total revenue of ECOVE can be categorized as sustainable-related economic activities. Among these, general activities account for about 4.7% (including waste removal, waste treatment, and recycling)*Note 1, while supportive activities account for approximately 76.4% (including solar energy and waste-to-energy). Sustainable economic activities not only contribute to "mitigating climate change" and "circular economy" but also demonstrate the Company's concrete actions in implementing green energy transformation and low-carbon operations.

Industry Outlook

In 2024, ECOVE continues to integrate SDGs, deepens the domestic market, expands overseas presence, and strives for more project collaboration opportunities. Additionally, we respond to the development trend towards a circular economy model in the market by actively expanding operations in waste resource utilization to enhance resource cycling efficiency. Leveraging our core capabilities and existing business expansion, we will continue to deepen our presence in the areas of "resource management," "recycling," "renewable energy," and "electrical and mechanical maintenance and refurbishment," showcasing Taiwan's technical expertise and strength in the resource cycling industry to the world.

	Resource Management	Renewable energy	Recycling	Electrical and Mechanical Maintenance and Refurbishment
Area	Provide one-stop service for waste cleanup, including waste cleanup, investment and operation management of incineration and green energy power plants, investment and operation management of biomass power plants, and investment and operation management of final disposal plants.	In line with the global trend of green energy development, we continue to strive for domestic and international solar power investment and development opportunities, as well as the maintenance of domestic solar power facilities. In response to the liberalization of the electric power industry, the relaxation of laws and regulations, and the demand for green power from net-zero carbon emission enterprises, we will actively develop the market for green power transfer and explore the possibilities of new business models that are both diversified and innovative.	In line with the government's zero-waste recycling policy, we continue to invest in the recycling of industry wastes, wastewater treatment, reclaimed water and seawater desalination in the high-tech industry.	In line with the government's net-zero transformation strategy and diversified waste treatment policies, we have been actively pursuing the extension of the life of incineration plants and the maintenance of solar power plants. In addition, gaining from the experience of operation and management of incineration plants, we have expanded the maintenance and management of utility systems in high-tech plants.
Opportunities	In response to the demand for net-zero in 2050, the waste is moving towards the strategic goal of zero-waste through resource recycling. The Ministry of Environment promulgated the "Diversified Waste Disposal Plan - Phase 2," which will continue to introduce advanced incineration technology, recycling of ash, and enhancement of the efficiency of environmental protection facilities, as well as strengthening the promotion of waste-to-energy and diversion of waste to appropriate treatment, and encouraging localities to promote the use of waste to generate renewable energy for power generation. We will invest NT\$16.69 billion in upgrading incineration plants, promoting waste-to-energy recycling, and upgrading the efficiency of environmental protection facilities. ECOVE will make reference to Taoyuan's model of biomass recycling economy integration, introduce overseas mature experience and technology to provide integrated solutions for the government, and actively develop new opportunities and participate in government tenders; it has successfully acquired the development rights to operate the Changhua Coastal Low Carbon Recycling and Disposal Center and the Chiayi Green Energy Sustainable Recycling Center. We build up a complete service map for upstream, midstream and downstream waste cleanup. Overseas, we advance to ASEAN and cooperate with complementary domestic and foreign companies, actively participate in relevant forums, and take advantage of the government's New Southbound Policy to replicate the successful model of incinerator PPP (BOT) and mature O&M (including ROT) capabilities abroad.	The 2050 net-zero target has accelerated global renewable energy development. The domestic target of installing 20GW of solar power capacity is set to be completed by 2026. Additionally, the demands from large electricity consumers and net-zero planning is pushing the transition to the sales of green electricity. Internationally, the markets in the United States, Europe, and Southeast Asia continue to thrive. Among them, the United States offers great development potential with a robust market mechanism and comprehensive incentive measures.	The government promotes a zero-waste recycling policy, encouraging waste to be recycled and reused, while the industry is practicing ESG, and enterprises are promoting the recycling and reuse of waste in their factories or the use of recycled raw materials and reclaimed water. For the existing waste solvent recycling business, we will integrate high-value technology to improve product quality for higher-end applications. In addition, we will continue to develop other waste reuse projects to solve industrial waste disposal problems and to separate more recycled resources into the industrial resource cycle. Apart from domestic initiatives, there are also plans to expand overseas, targeting regions with robust development such as Japan, South Korea, and the United States. In response to climate change, the government will expand the construction of reclaimed water and seawater demineralization plants. Based on the experience gained from the Linkou Water Resources Plant and the Reclaimed Water O&M Program, ECOVE will further consolidate the Group's engineering resources in order to bid for investment and O&M work in the government's reclaimed water, corporate reclaimed water, and government seawater desalination programs.	Based on the maintenance of the utility systems of existing high-tech plants, we will continue to develop high-tech electrical and mechanical maintenance work with high production value; utilize high-tech recycling technology to expand the opportunities for the construction of waste recycling facilities for high-tech businesses; and through the intelligent management of incineration plants, we will effectively carry out the upgrading of equipment and ageing repairs, and expand the business of incineration plants' life extension.
Risks	- The government's net-zero transformation policy aims to gradually increase the capacity for waste recycling, leading to a long-term decline in the amount of waste incineration. Incinerating high-caloric-value industrial waste reduces the volume of waste to be treated but can cause equipment damage and air pollution, leading to increased demand for treatment agents and exacerbating the waste crisis. - Some plants have not yet implemented the life extension program, which will affect the stability and increase the operational risk.	The continued reduction in barter prices by the Energy Administration and the increase in raw material prices, coupled with increasingly fierce competition from domestic photovoltaic power plants, have reduced the profitability of new plants. The focus of expansion will be shifted to overseas.	In order to avoid secondary pollution of the environment in the process of reuse, the government may gradually raise the specifications for the disposal of factory waste, and the cost of waste disposal in factories may also increase simultaneously, while the specifications of reused products will continue to increase, and continuous investment in development and investment costs will be required.	The global supply chain has been affected by the pandemic and the price of raw materials has risen sharply, while labor and material shortages have affected project costs and execution progress.

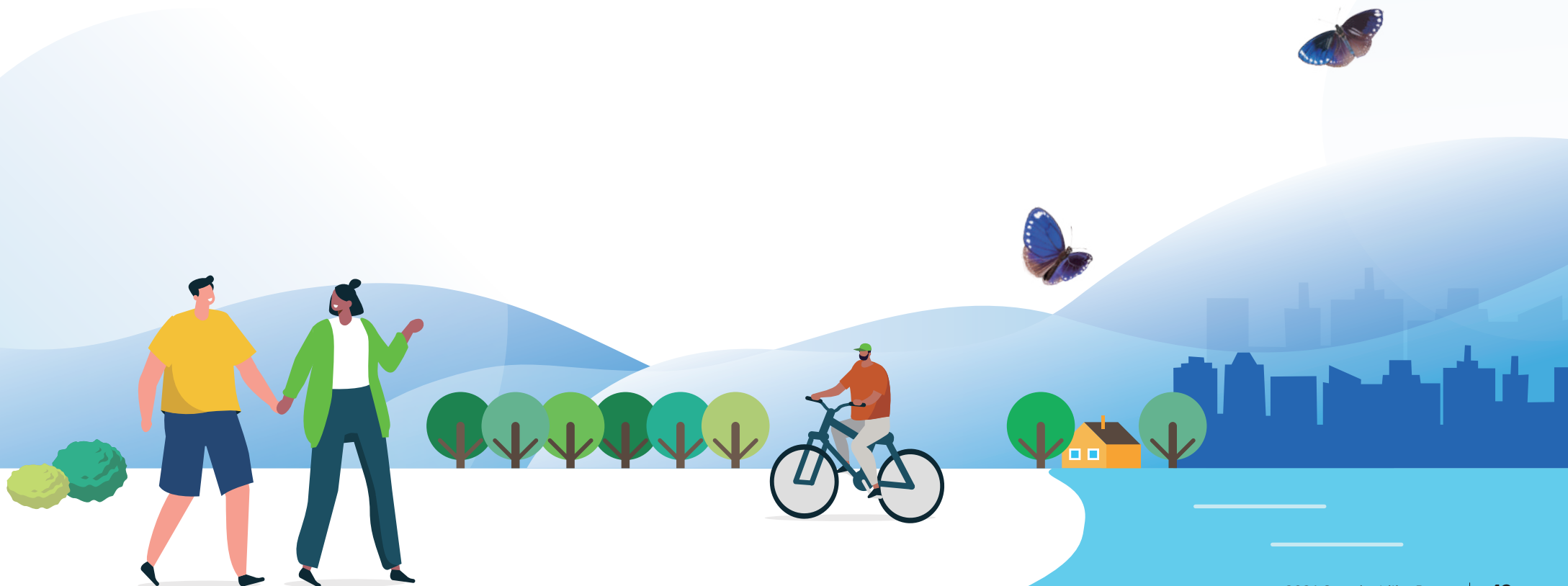
Sustainable Solutions for Future Cities: The Application of Green Technologies from Seawater Desalination to Carbon Capture

ECOVE has strengthened the integration of its core capabilities with sustainable innovation. Recently, through its subsidiary ECOVE Environment Services Corp. and its parent company CTCI, the Company has successfully secured the "Hsinchu Seawater Demineralization Plant Construction and Operation Maintenance Project" in collaboration with SUEZ, a leading company in the international water affairs and solid waste sectors, and Hong Hua Construction, which specializes in maritime engineering. The plant has a daily water production capacity of 100,000 tons. It is expected that after its completion in 2028, ECOVE Environment Services Corp. will be responsible for subsequent operations and maintenance. This is anticipated to provide stable operational revenue and demonstrate the Company's innovative capabilities in climate resilience and water resource management, as well as the potential for improved financial performance.

In addition, ECOVE Environment Services Corp. has also collaborated with HDEC Corporation to undertake the operation and maintenance project of the local sewage system in Zhongli District, Taoyuan City. This project officially commenced commercial operations in January 2025. This marks ECOVE Environment Services Corp.'s first foray into the maintenance of sewage networks, further expanding its service portfolio, creating diverse revenue opportunities, and strengthening its core competitiveness. In the future, ECOVE will continue to leverage the integrated engineering capabilities of EPC of our parent company to develop more innovative businesses related to climate adaptation, including the reuse of water and seawater desalination.

In response to changes in electricity laws and regulations and the trend towards net-zero transformation, ECOVE is actively innovating its business model. One of our subsidiaries, ECOVE Environment Consulting Corp., has added a renewable energy sales business while simultaneously developing a solar power self-consumption business. The renewable energy certificate (REC) obtained can provide corporate clients with comprehensive and diverse green energy solutions.

To expand the carbon management market, ECOVE has partnered with Membrane Technology and Research, Inc. (MTR), which specializes in membrane separation technology, to promote the application of membrane separation carbon capture technology that does not utilize any chemical solvents in the Asian market. The separation unit of the technology adopts a modular design, featuring high efficiency, scalability, and environmental advantages. It is easy to integrate into various industrial processes, further promoting commercialization and enhancing the Company's innovative deployment and future operational potential in the field of carbon neutrality solutions.



Innovation and Supply Chain

ECOVE is Taiwan's first investment holding company with a primary focus on resource cycling as its core business scope. In addition to being committed to technological innovation and actively developing patents, we have established close collaborations with the government, enterprises, and communities over the years. Upholding a corporate culture of being the "most trustworthy," we provide excellent product and service quality. In addition, we forge positive partnerships with suppliers. While pursuing sustainable operation, we also built a sustainable supply chain that co-exist and co-prosper through cooperation with suppliers.

Development, Integration and Application of New Technologies

In response to the global trend toward net-zero carbon emissions, ECOVE is actively expanding the synergies of its existing development items. These projects include resource management, renewable energy, recycling and reuse, and electromechanical maintenance and improvement. In addition, ECOVE is committed to exploring high-value technologies and policy adjustments. Carbon capture technology has been developed through experimentation and simulation to identify key parameters that affect carbon capture efficiency. This technology can also be applied to other industrial sectors for flue gas treatment, helping to reduce the potential impact of climate change. To optimize processing efficiency, increase the value of waste resources, improve energy production efficiency, and implement various applications of energy storage systems. For example, in the semiconductor industry, ECOVE continues to advance research and development in the recycling and reuse of electronic grade isopropanol (IPA), contributing to sustainable practices within the sector, and has been granted a patent for the invention of the Isopropanol Regeneration System and Process. This process can concentrate the product to a purity level of 99.9% or higher through valorization and will be introduced in the high-tech industry in the future. ECOVE has planned a second phase of process improvements in 2024. The first phase involves replacing the electric boiler of the evaporation and permeation unit with a natural gas boiler for heating. The second phase entails converting the extraction and distillation unit into an evaporation and permeation unit. Upon completion, it is anticipated that the unit carbon emissions can be further reduced by 10%, significantly decreasing the carbon footprint of the IPA product. The Company aims to improve the efficient use of resources through the development, integration and application of new technologies. This will expand the scope of recycling and indirectly reduce reliance on conventional fossil fuels, ultimately contributing to the global goal of achieving net-zero carbon emissions.

Technological Development Strategy Objectives	Application Fields
Optimization of Final Disposal	Enhancement of waste-to-energy efficiency in incinerators, integration of new incineration technologies, flue gas recirculation for denitrification, coating technology for superalloy boiler tubes, fly ash water-washing and fixed shock wave cleaning for methane residual pressure recycle, agricultural waste incineration for power generation, etc.
Increased Waste Resource Reuse Rate	Reclaimed water, pre-sorting of waste, purification of waste solvents, biomass green energy biogas centers, gasification or pyrolysis for synthesis gas power generation, recycling of waste solar panels, etc.
Enhanced Added Value of Waste Resources	Refining waste engine oil into base oil, high-value utilization of regenerated isopropyl alcohol/edge bead remover (EBR), etc.
Reducing Carbon Dioxide Emissions from Pipelines through Carbon Capture	Incinerators, other industrial boilers or processes, etc.
Improved Energy Production Efficiency	Enhancement of solar power generation efficiency, suppression of bed agglomeration in boiler furnace, power generation through waste heat recycle from flue gas, investigation and adoption of generators with optimal power generation efficiency, and wind avoidance mechanism for solar panels, etc.
Implementation of Diversified Applications for Energy Storage Systems	Energy storage for automatic frequency control, etc.

Development of Intelligent Management Tools

In response to the global digital transformation of businesses, ECOVE is dedicated to the development of intelligent solutions management, control and maintenance technologies and the implementation of advanced management tools. Through the use of technology automation, our goal is to increase work efficiency and greatly reduce dependence on human labor.

ECOVE has successfully integrated energy storage systems, solar photovoltaic technology, and electric vehicle charging stations to create a smart parking lot with solar charging and energy storage. This initiative is built upon years of rich experience accumulated through efforts in achieving net-zero transformation. Additionally, automated management technologies such as license plate recognition and parking space occupancy detection have been implemented in several large solar photovoltaic parking lots to enhance operational efficiency and the level of intelligence in parking management. The advanced Energy Management System (EMS) integrated within the solar charging and storage system can conduct simulation analyses based on real-time photovoltaic generation, energy storage levels, the status of battery exchange stations, and charging piles. It intelligently optimizes charging and discharging strategies and automatically adjusts the usage ratios of stored energy, solar energy, and grid electricity, thereby enhancing energy utilization efficiency. In addition, the energy storage equipment is equipped with various sensors that can monitor temperature, smoke, and the concentration of specific gases in real-time. In the event of an abnormal situation, the fire extinguishing system is activated within seconds, ensuring the safety of both the vehicle and people, and further enhancing the reliability and sustainable value of the system. Through the development and application of intelligent management tools, ECOVE has not only enhanced energy utilization efficiency and site safety but has also provided reliable smart solutions for sustainable urban development.

ECOVE has implemented an automated dispatch system in its waste transportation services. By utilizing AI to assess source requirements and schedule drivers, it is estimated that approximately 780 man-hours per year can be saved. Additionally, the waste collection vehicles are equipped with advanced sensing devices to assist drivers in maintaining alertness and understanding their surrounding environment. The use of driver monitoring systems with on board cameras and sensors powered by artificial intelligence can monitor the condition and behavior of drivers. This proactive approach to driver and vehicle safety improves the prevention of catastrophic consequences that can result from momentary errors, especially during long hours of driving. It contributes to comprehensive, intelligent fleet safety management.

In 2024, the Group established the Smart Innovation Department, which is responsible for the innovative development and design of AI systems for usage in plants. Upholding the Group's synergy, ECOVE has integrated the Group's development results based on operational needs. Currently implemented AI tools, such as conference voice transcription and summary helper, can significantly enhance the efficiency and accuracy when keeping meeting records.

In 2024, the Group's Digital Twin system is officially implemented into the biomass energy plants. This system digitizes all design data, including lists of equipment, pipeline information, instrument configurations, design drawings, vendor documents, and operation manuals, and then integrates them into a 3D visualization model. This initiative aims to achieve paperless management and significantly enhance data retrieval and management efficiency. Enhancing information retrieval capabilities through digital technology and utilizing 3D visualization techniques to present equipment maintenance status, along with real-time monitoring and visualization functions, enables project managers to quickly grasp engineering progress, ensure the completeness of data at each stage, and optimize operational and maintenance processes. In the future, ECOVE Chiayi Energy Corporation will implement the Group's Digital Twin system when establishing plants, further promoting the development of intelligent management.

R&D Results - Patented Technologies

ECOVE fosters innovation and is dedicated to the advancement of new technologies. Over the past four years, our R&D budget has steadily increased, demonstrating our company's strong commitment to technological innovation and our proactive approach to meeting the challenges of the future. Consequences that can result from momentary errors, especially during long hours of driving. It contributes to comprehensive, intelligent fleet safety management. In 2024, the R&D expenditure exceeded NT\$11 million. This series of investments will enhance our competitiveness, and the implementation of new technologies will also create new business opportunities.

Annual R&D Expenditure over the Past Four Years

Unit: Thousand NT\$

Item/Year	2021	2022	2023	2024
Research and development (R&D) expenses (Note)	7,549	8,602	9,456	11,121

Note: R&D expenses are the labor expenditures incurred by the R&D Center for the development of new technologies and systems. The cost of value-added application of new technologies or the integration costs of systems with other project systems shall be absorbed by the relevant project costs.

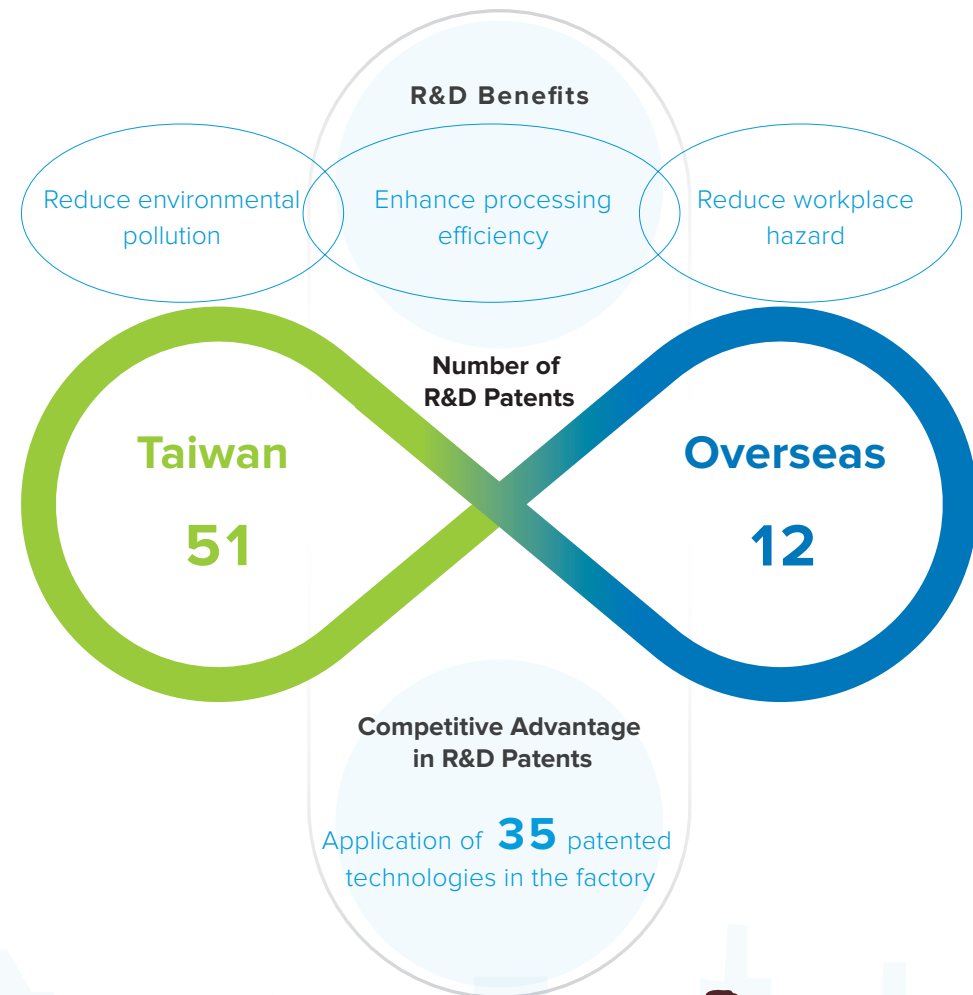
ECOVE places great importance on the management of intellectual property rights, and relevant patent operations are conducted according to standard operating procedures. Additionally, an incentive system is established to encourage innovation among employees. Once the patent certificates are issued, they are publicly disclosed on the company's official website and briefly explained during regular management meetings, highlighting the core content and applications. In 2024, the Company obtained a new patent for the "Acid Removal System Utilizing High-Efficiency Calcium Oxide and Sodium Bicarbonate Reaction Devices in Incineration Plants." Additionally, there are four pending invention patent applications, namely, "Method for Fixed Separation Process of Solar Module Recycling with Flattening and Energy-Saving Features," "Condensation Reduction and Recycling System for Volatile Organic Compounds," "System for Enhancing Fuel Utilization Efficiency of Solid Oxide Fuel Cells Using Membrane Separation Units," and "Recovery System and Method for Edge Bead Remover." Since 2007, a total of 51 domestic patents, 11 patents from Mainland China, and 1 patent from the United States have been obtained by the end of 2024.

The Company also focuses on environmental sustainability and promoting occupational health and safety. Among its research and development achievements, 35 patented technologies effectively improve incinerator operation, exhaust gas treatment and recycling and reuse efficiency, thereby reducing environmental pollution and providing a competitive edge to improve operational performance.

Number of Accumulated R&D Patents Obtained over the Past Four Years

Year	2021	2022	2023	2024
Number of R&D Patents	52	56	62	63

→ Number of Accumulated R&D Patents Obtained over the Past Four Years



Service Quality

ECOVE has established a comprehensive and systematic service quality management process to ensure that every service meets international standards and satisfies customer needs. The Company adheres to a customer-centric philosophy, providing clients with diverse communication channels such as telephone, surveys, and project follow-ups to gain a deeper understanding of customer needs. Additionally, the Company proactively sends out surveys annually to the responsible personnel and their supervisors of ongoing projects for feedback, incorporating customer opinions into improvement plans.

→ Customer Communication Channels

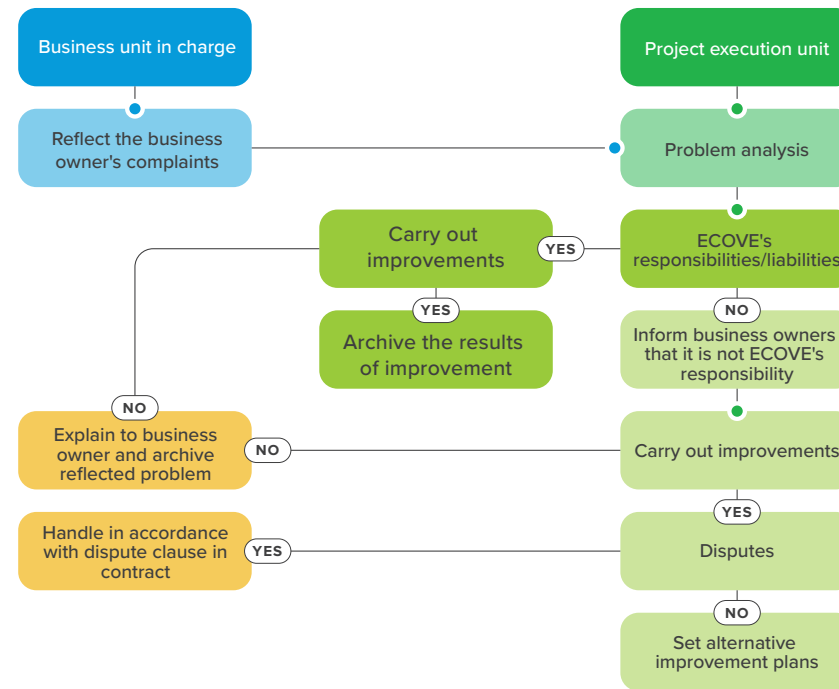
Telephone	(02)2162-1689
Email	sales@ecove.com
Fax	(02)2162-1681
Questionnaire	Questionnaires are disseminated to all customers (owners)

Number of Customer Surveys for the Past Four Years

Year	2021	2022	2023	2024
Number of customer surveys	128	129	126	103

In response to the relevant suggestions put forth by our clients, we have established a comprehensive process for handling customer feedback, ensuring timely responses to our clients. We require the executing units to conduct a careful and thorough analysis of the root causes of issues, propose improvement plans and processes, and enhance the general quality of customer service. In 2024, we received 23 pieces of feedback from questionnaires, primarily praising our personnel for their execution of projects. For example, they actively participated in the Company's circular economy project meetings, completed engineering tasks on time and with quality, demonstrated high levels of cooperation, and received local recognition for their diligence and effective communication with relevant agencies. Additionally, there were clients of construction projects who suggested that the Company strengthen communication and coordination with the owners, increase the owners' work tasks that the Company can assist, and reduce interface coordination with other vendors during maintenance periods to improve efficiency. The project personnel have been informed internally, and follow-up improvements have been confirmed. In 2024, there have been no verified complaints regarding violations of customer privacy.

→ Workflow of customer (owner) suggestion



Surveys of Customer Satisfaction

To ensure that our service quality meets customer expectations and needs, ECOVE conducts an annual customer satisfaction survey in accordance with the subsidiaries' Enhancement of Customer Service Operation Management Guidelines. This survey serves as the basis for improving our service quality. The survey covers several aspects, including occupational safety and health, work quality, execution efficiency, communication and coordination, work attitude, and professional expertise, etc. In the survey with a maximum satisfaction score of 10 points, the average score obtained in the 2024 assessment was 9.4 points, exceeding the annual target of customer satisfaction of over 9 points. In this context, we define a score of 7 or above as satisfactory. In 2024, the number of satisfied customers reached 98.1%, exceeding the target value of 90%.

	2021	2022	2023	2024	Goal of Customer Satisfaction for 2024
Customer Satisfaction Score	9.4	9.3	9.3	9.4	9.0
Percentage of Satisfied Customers (%)	99.2	99.2	94.1	98.1	90.0
Customer Coverage Rate (%)	100%	100%	100%	100%	100%

Sustainable Supply Chain Management GRI 2-6, 308, 414

With the vision of "The most reliable provider of industry-leading 'resource cycling' services", ECOVE, as Taiwan's largest environmental resource management company, plays an important role in helping supply chain vendors to move towards sustainability by promoting and implementing sustainable supply chain management, so as to cope with future risks and opportunities, and enhance their sustainability.

Overview of Supply Chain

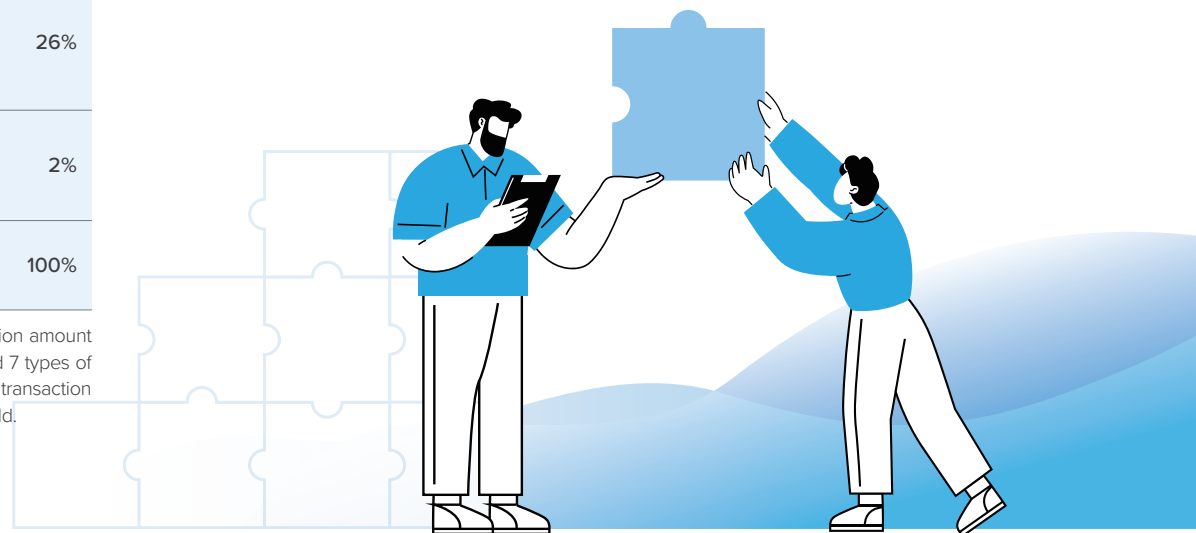
In order to provide better service quality, our supply chain vendors are primarily classified into three major categories: equipment suppliers, engineering contractors, and labor contractors. These major categories of vendors provide the necessary equipment, materials, maintenance assistance, improvement project implementation, and manpower support for ECOVE's operational facilities and stations. This includes various equipment parts, consumables (including chemicals and disposable supplies), and service providers for major maintenance, emergency repairs, equipment inspections, and labor workforce. By collaborating with various suppliers and contractors, we ensure stable operation of ECOVE's daily maintenance and successful completion of various project works. The number of manufacturers and the annual procurement amount indicate that, in addition to routine equipment maintenance materials and operational consumables, ECOVE's major procurement expenses are primarily focused on maintenance, updates, and repairs to keep the equipment running smoothly and on project contracts.

Supplier Category in 2024	Number of Suppliers	Proportion of Suppliers	Proportion Amount of Procurement
Materials suppliers (Inclusive of chemicals, consumables, etc.)	120	52%	72%
Engineering contractors (Provision of professional services, such as annual maintenance, emergency repair, equipment maintenance, etc.)	97	42%	26%
Labor contractors (Provision of professional services, such as manpower, etc.)	15	6%	2%
Total	232	100%	100%

Note: The cumulative number of suppliers is calculated based on the condition that the accumulated transaction amount in the current year with suppliers under the control authority of the Company exceeds NT\$300,000 and 7 types of specific chemical suppliers. Suppliers meeting this condition account for over 98% of the total annual transaction amount, while the remaining portion represents the proportion of transaction amounts below this threshold.

To effectively manage our suppliers, we have further categorized them into tiers. Suppliers that account for the top 80% of annual cumulative transaction amounts, with transactions exceeding NT\$300,000 and involving seven types of specific chemical products (quicklime, sodium bicarbonate, activated carbon, cement, chelating agents, urea, and ammonia water), are classified as first-tier suppliers. Among these, suppliers with an annual cumulative transaction amount exceeding US\$3 million are designated as first-tier focus suppliers. Those identified as high-risk suppliers following the SAQ questionnaire assessment will be subject to on-site audits and control measures.

	Number of Suppliers	Proportion Amount of Procurement
First-Tier Supplier	27	82%
First-Tier Focus Supplier	3	48%
High-Risk Supplier	3	4%



■ Supply Chain Sustainability Development Strategy

In accordance with the sustainable development strategy of the supply chain of the Group's parent company, CTCI, ECOVE has invited suppliers to join us in our sustainable development strategy in the five aspects of "zero tolerance for unethical conduct", "full protection of employee rights", "safety first", "local procurement" and "biodiversity". We manage vendors' information through the supplier and subcontractor section of CTCI and also provide a whistleblowing platform, thereby establishing a comprehensive communication mechanism:

				
Zero tolerance for unethical conduct	Full protection of employee rights	Safety first	Local procurement	Biodiversity
ECOVE is focused on the ethical management of suppliers. We refer to the list of sanctioned suppliers on the government's e-procurement website on a quarterly basis. Should a supplier is found to be in violation of the procurement law and suspended, the same punishment shall be meted out. In order to operate with integrity and sustainability, the Group currently commissions a neutral third-party, Deloitte Taiwan, to run a whistleblowing website. If any unfair or unjust behavior, improper handling, or incidents with possible violation of the laws, regulations, and professional standards are found, reports can be filed directly on the site. There were no reports filed in 2024.	ECOVE values the employee rights of our suppliers. We stipulated that for contractors to commence work on site in Taiwan, their employees must be covered by labor insurance while those based overseas must comply with local regulations before they can commence work on site. Contractors are also required to purchase liability insurance for construction projects to protect the rights of both our employees and contractors' employees.	ECOVE is focused on the HSE conditions of each workplace. Besides requiring subcontractors working on site to conform to HSE regulations, we also communicate with suppliers and partners on ECOVE's HSE policies to enable them to fully appreciate and implement the HSE requirements so as to create together a safe and healthy workplace. Contractors shall hold safety advocacy meetings before work when they enter the work site every day.	If the items that need to be purchased and the vendors that provide services can be sourced locally, they will not be procured from elsewhere. By doing this, we reduce energy consumption and carbon footprint arising from transportation while creating job opportunities locally and elevating the employment rate.	Suppliers are required to assess and disclose their dependence on and impact on local and global biodiversity, committing to zero deforestation and gradually reducing negative impacts while enhancing positive impacts. When suppliers reduce risks related to biodiversity, their processes of extraction, production, procurement, supply chain management, utilization, and disposal must fully comply with sustainable development principles.

■ Strengthening the Culture of Sustainable Supply Chain Management

In order to improve the procurement team's understanding of sustainability issues, ECOVE actively organizes sustainability training for its employees. These training courses are tailored to the specific needs of the company and aim to increase the awareness and expertise of employees in the area of sustainability and to enable them to apply this knowledge in their daily procurement activities.

Statistics on Sustainable-related Education and Training Outcomes for Procurement Personnel in 2024

The Name of the Sustainable-related Education and Training Courses for Procurement Personnel	Number of enrolled participants	Coverage ratio	Number of hours of attendance
iPAS Net Zero Carbon Planning Management Course	1	100%	15
2023 Third Taiwan Sustainable Engineering Forum	8	100%	16
All Employees ESG: Steering Towards Net Zero EPC – The Path of CTCI's Sustainable Strategy	8	100%	8
Energy Conservation Measures and Renewable Energy Management	8	100%	12
Trends and Actions Toward Net Zero in Domestic and International Contexts	8	100%	16
Experience Sharing and Reflection on Practical Cases of Net Zero Architecture	8	100%	8
Trends of Net Zero Carbon Emissions and Their Impact and Opportunities for Enterprises	8	100%	12
Introduction to Greenhouse Gas Inventory Standards and Development Trends	8	100%	16
Introduction to Carbon Neutrality	8	100%	8
Total	65	-	111

Enhancing Sustainable Risk Management

■ Supplier Code of Conduct and Vendor's Commitments to Corporate Sustainable Management and Net Zero

ECOVE is actively committed to promoting corporate social responsibility and developing partnerships. We adhere to the principles outlined in the United Nations Global Compact, Universal Declaration of Human Rights, and the UN Framework and Guiding Principles on Business and Human Rights. In line with these standards on human rights, labor practices, environment, and anti-corruption, we have established the "ECOVE Supplier Code of Conduct." It is applicable to all suppliers, their subsidiaries, affiliates and contractors, and ECOVE continuously requires suppliers and contractors to comply with sustainable standards related to labor and human rights, health and safety, environment, ethical practices and management system. The code applies to all suppliers, including their subsidiaries, affiliated companies, and contractors, who provide goods or services to ECOVE. It mandates that all their business activities, including those of their subsidiaries, affiliated companies, and contractors, fully comply with the provisions of the code as well as with the applicable laws and regulations in their respective jurisdictions.

Meanwhile, ECOVE formulates the "Vendor's Commitments to Corporate Sustainable Management and Net Zero," and the Company has been requiring all new suppliers to sign the agreement since 2023. Alongside maximizing shareholder benefits, ECOVE also prioritizes the rights and interests of relevant stakeholders, adheres to socially recognized ethical norms, and promotes net zero emissions to address the impact of climate change and mitigate global warming. The Company aims to work collaboratively with all stakeholders to create a fair and equitable society and a sustainable living environment.

In terms of practical management, all contracts include the clause "The contract may be terminated or rescinded at any time by the Company if Party B has violated its corporate social responsibility policy and has caused a significant negative impact on the environment and society" to reinforce the actual implementation of the undertaking of social responsibility.

 Labor and Human Rights	 Safety and Health	 Environment	 Code of Ethics	 Management System
■ Freedom to employment ■ Child labor ■ Working hours ■ Compensation and benefits ■ Humane treatment ■ Discrimination ■ Freedom of association	■ Life-saving rules (LSR) ■ Occupational safety ■ Occupational health ■ Behavioral safety ■ Emergency response ■ Occupational injury and illness	■ Environmental permits and reporting ■ Pollution prevention and resource conservation ■ Dangerous or hazardous substances ■ Wastewater and solid waste ■ Exhaust emissions ■ Net zero emissions ■ Biodiversity and forests with zero deforestation	■ Ethical corporate management ■ Legitimate earnings ■ Information disclosure ■ Intellectual property ■ Fair trade, advertising, and competition ■ Privacy ■ Source of mineral products	■ Management responsibility ■ Legal and customer requirements ■ Risk evaluation and risk management ■ Improve corporate responsibility performance ■ Training ■ Review and evaluation ■ Improvement ■ Files and records



ECOVE Supplier Code of Conduct



Vendor's Commitments to Corporate Sustainable Management and Net Zero

Sustainable Supply Chain Management Mechanisms

■ Sustainability Risk Survey

In order to assess the sustainability risk situation of suppliers and the implementation level of sustainable practices, ECOVE has issued a self-assessment questionnaire (SAQ) on sustainability risk to first-tier suppliers. Through an investigation across eight dimensions, the potential risks of suppliers are identified. Based on the scoring results, suppliers who score below 50 points and fall within the lowest 5% among all suppliers are classified as high-risk vendors. Subsequently, on-site visits are arranged for these high-risk vendors to help them understand the importance of the survey items and provide improvement suggestions, such as avoiding the placement of clutter near fire safety equipment and promoting the conservation of water resources, in order to further manage risks.

SAQ Survey Dimensions

A Environmental Considerations

- Exhaust emissions
- Wastewater discharge
- Hazardous industrial waste (Waste liquid)
- Toxic substances
- Environmental management system
- Dedicated unit/personnel for environmental protection
- Environmental protection permit
- Work stoppage or penalty incidents

B Environmental Management

- Materials
- Water resources
- Wastewater and waste
- Environmental performance of lower-tier suppliers

C Occupational Safety and Health Management

- Statutory dangerous and hazardous substances
- Hazardous machinery and equipment
- Occupational disasters
- Safety performance
- Occupational Safety and Health Management Plan
- Safety and Health Work Rules
- Occupational Safety and Health Management System

D Labor Conditions

- Hiring employees
- Employee compensation
- Working hours
- Work hour management
- Labor-management relations
- Forced labor
- Compliance with laws and regulations
- Promotion of a healthy workplace
- Complaint mechanism for labor issues
- Evaluation of labor conditions of lower-tier suppliers

E Human Rights

- Investment
- No discrimination
- Freedom of association for employees
- Collective bargaining rights for employees
- Child labor
- Forced or compulsory labor
- Safety practices
- Rights of local residents
- Complaint mechanism for human rights issues
- Evaluation of human rights of lower-tier suppliers

F Social Impact

- Anti-corruption
- Anti-competitive behaviors
- Complaint mechanism for social impact issues
- Evaluation of social impact of lower-tier suppliers

G Management Governance

- Corporate governance
- Legal compliance
- Risk management
- Debt ratio
- Business continuity plan
- Information security
- Management and control of operation and governance of lower-tier suppliers

H Reduction of Greenhouse Gas

- CTCI Supplier Net Zero Alliance
- Greenhouse gas inventory
- Natural ecology

Response Rate of the 2024 ECOVE SAQ Survey

	Target Quantity	Target Response Rate	Actual Response Rate
First-Tier Supplier	27	70%	100%
First-Tier Focus Supplier	3	70%	100%

Note: The first-tier focus suppliers are included within the first-tier suppliers.

The 2024 SAQ assessment results indicate a total of three high-risk suppliers. The assessment dimensions and risk factors are detailed in the table below. For the aforementioned suppliers, on-site audits are scheduled to be conducted in 2025; we require suppliers to address deficiencies and providing guidance and improvement recommendations.

Dimension	Risk Factors
Environmental Aspect	Whether the company has an environmental management system, any records, or has control in energy, water resources, wastewater, and waste
Social Aspect	Whether there has been a high percentage of contracted employees who have experienced occupational accidents, unrecorded safety performance, and the absence of established occupational safety and health regulations, as well as issues related to forced labor, promotion of a healthy workplace, non-discrimination, freedom of association for employees, and the rights to collective bargaining
Economic Aspect	Whether the company has risk management organization, contingency plans, or procedures

■ Establishment of Supplier Sustainability Capabilities

To implement the management and control of sustainability risks among suppliers, the CTCI Group hosted the "2024 Fourth Taiwan Sustainable Engineering Forum" in December 2024. The theme of the forum is "Sustainable Future - Artificial Intelligence * Natural Solutions * Sustainable Talent." Renowned experts and scholars, as well as key engineering and technical service providers, were invited to participate. The forum featured keynote speeches addressing trends related to COP29, ESG, and other topics, as participants explore new international sustainability trends and collaboratively creating value chain impact.

To enhance suppliers' performance on ESG issues, ECOVE actively invites suppliers to participate in

sustainability-related activities such as the Sustainable Engineering Forum, lectures, and sustainability newsletters. We continue to communicate and engage with suppliers to strengthen their sustainability literacy, promoting and deepening our concept of sustainable net zero throughout the supply chain.

In addition, regarding suppliers of equipment and facilities, ECOVE plans to collaborate with external consultants in 2025 through a government guidance program to assist suppliers in conducting greenhouse gas inventories and providing recommendations for energy conservation and carbon reduction. For subcontractors, ECOVE's carbon seed personnel will assist suppliers in conducting greenhouse gas inventories and providing recommendations for energy conservation and carbon reduction, with the aim of significantly enhancing the suppliers' capabilities in sustainable carbon reduction.

Project Name	New Knowledge of Sustainability Just for You
Project Content	- By regularly sending out newsletters on diverse themes, we convey global sustainable development trends and enhance the soft power of our vendors. - Invite suppliers to participate in sustainability-related activities such as engineering forums and environmental education events to enhance their sustainability literacy.
Target	First-tier suppliers, members of the Supplier Net Zero Alliance
Number of Suppliers	27
Benefits	Enhancing the sustainability awareness of suppliers: - Completion of sharing information on three issues of sustainable newsletter. - In collaboration with the Group to organize one session of the sustainable engineering forum and invite one supplier to participate. - In collaboration with the Group to invite suppliers to participate in a session focused on energy conservation and carbon reduction initiatives in factories and offices, with a total of three suppliers participating to discuss specific implementation strategies.

Note: The Supplier Net Zero Alliance includes suppliers that frequently collaborate, those willing to jointly reduce carbon emissions, and suppliers who have signed the "Supplier Net Zero Alliance Declaration."

■ Supplier Performance Evaluation and Audit Guidance

To assess the risks and competitiveness of the supply chain, ECOVE has established a mechanism for supplier evaluation, audit, and guidance. The evaluation, assessment, and audit of supplier and contractor supply and execution quality are conducted by cross-departmental teams comprising the Procurement Center, project managers, the Occupational Health and Safety Management Department, and on-site team leaders. These teams evaluate and assess the quality of supply and execution by suppliers and contractors. On top of listing the quality of suppliers and contractors, costs, service standards, environmental protection, OSH, and technologies into the evaluation items to ensure their quality standards and safety and health, we also uphold the spirit of PDCA, requiring suppliers and contractors to rectify their deficiencies, and we provide necessary guidance in a timely manner, so that ECOVE's supply chain can maintain the best competitive state and mitigate the risk of operational disruptions. For equipment and material suppliers, a comprehensive evaluation is conducted to assess their commitment to compliance, delivery control, product quality, defect handling, and any disputed matters. This evaluation aims to examine the overall service and quality provided by the suppliers and serves as a basis for incentivizing them and providing improvement recommendations.

→ Supplier Audit/Evaluation Items



As for contractors, the Occupational Health and Safety Management Department conducts periodic audits and provides guidance at various construction sites. In terms of the use of hazardous substances such as chemicals, gas, and fuel, suppliers are required to provide information on the components, safety information, and inspection report. Contractors will also be evaluated upon completion of each contract.

A total of 227 evaluations were conducted in 2024, targeting vendors whose annual transaction volume exceeded

a certain threshold. The "execute-feedback" mechanism was consistently promoted to assess vendors' actual performance and provide valuable insights for future vendor selection.

If the evaluation results indicate non-compliance or unsatisfactory performance, the supplier will be coordinated for improvement. In case improvement has not been made, the vendor will be listed as an unqualified vendor. Upon review and confirmation from the responsible manager, it will be included on the "List of Unqualified Vendors" and contract will be terminated.

Score	2024			
	Equipment		Contracting	
	Number	Proportion	Number	Proportion
8.5~10	64	56%	48	43%
6.5~8.4	51	44%	61	54%
<6.4	0	0	3	3%
Subtotal	115		112	
Total	227			

Note 1.Evaluation Criteria: A (10-8.5) Highly recommended, B (8.4-6.5) Preferred, C (6.4-4.5) Can be considered, D (4.4-2.5) Avoid using, E (2.4-1) Not suitable for use.

Note 2.Vendors with a score below 6.4 fall within the range of 6.2 to 6.1 .

Note 3.Suspension: The department will not engage with the vendor during the suspension period if their score is below 2.4 or if they are on the list of rejected suppliers by the Public Construction Commission of the Executive Yuan, unless approved by the highest procurement authority.

■ Contractor Visit and Communication

As the COVID-19 pandemic subsides in 2023, the supply of essential chemical agents for incineration plants has been properly arranged, and the risks associated with procurement and storage have gradually decreased. In addition to the evaluation of the contractor's construction results conducted by the supervisors from various units, the Company also enhances its positive influence on suppliers through procurement strategies.

In 2024, the Company conducted on-site visits and in-depth discussions with key equipment suppliers and subcontractors. Through the process of factory inspection, a total of 30 evaluations and audits of contractors were conducted. The audit content covered aspects such as quality, safety, and compliance with regulations, and further guidance was provided to the vendors to implement corporate social responsibility policies. The evaluation results will serve as an important reference for future procurement and contracting decisions.

In the future, the Company will continue to engage in diverse interactive methods to gain a deeper understanding of the internal operations of suppliers and contractors, and to ensure that their quality management meets the established standards. For example, site visit inspections when key equipment is sent out for maintenance, inspection of customized equipment and materials prior to delivery, and on-site operation audit during annual maintenance will be conducted by quality control and safety and health teams. Through on-site inquiries and visits, we propose recommendations and assist in improvements to enhance the management and execution capabilities of our partners.

In addition, for the development of new suppliers, the Company conducts a comprehensive evaluation through on-site visits. This evaluation includes assessing contracting and management capabilities, facility conditions, manpower allocation, material management, quality control, and warehouse management. These assessments serve as a reference for trial orders and subsequent collaborations, ensuring supply chain stability and overall operational efficiency.

■ Green Procurement

ECOVE recognizes green procurement and green consumption as essential core values in promoting sustainable development within the Company. In response to the policy on green consumption, the concept of the green living circle has been introduced into the Company. This includes implementing green procurement of environmentally friendly products that are "low-pollution, energy-saving, and recyclable," as well as adopting other green services in daily life, such as green office environments and green transportation. In both production and daily life, ECOVE aims to achieve energy efficiency, carbon reduction, and a love for the Earth as sustainable development goals.

Green Procurement Amount in the Past Four Years

Unit: Thousand NT\$

Year	2021	2022	2023	2024
Green procurement amount	61,825	72,740	190,497	95,495

Note: In 2023, due to the undertaking of multiple solar photovoltaic installation projects and the purchase of a large quantity of modules, the amount of green procurement was higher than in previous years.

Since 2014, the cumulative amount of green procurement has exceeded NT\$770 million.

■ Supply Chain Carbon Reduction

Based on our commitment to sustainable business practices, ECOVE aims to encourage suppliers to fulfill their responsibility to protect the environment. We want to work with our suppliers to create a fair and just society and promote a sustainable living environment. In addition to requiring suppliers to provide a favorable working environment, high-quality products, and timely delivery, we actively encourage suppliers to address carbon reduction and sustainable development. With this in mind, we have set the following targets: By 2027, all major pharmaceutical manufacturers will complete their carbon inventory and at least 70% of them will achieve ISO 14064 certification. By 2030, 100% of critical pharmaceutical manufacturers will complete their carbon inventories, ISO 14064 external verification and 40% of critical pharmaceutical manufacturers will obtain ISO 14067 certification. In 2024, four key pharmaceutical manufacturers have achieved the short-term goal of completing carbon audits, and two additional key pharmaceutical manufacturers have obtained ISO 14064 verification.

The major operating bases of ECOVE are all located in Taiwan; ECOVE implements the local procurement policy in compliance with the parent company's sustainable supply chain development strategy. We believe that local procurement is conducive to local economic development and can minimize the negative impact on the environment by reducing carbon emissions from transportation. Except for special machinery components, ECOVE strives to source locally without affecting the stable operations, safety, and fairness of procurement. We screen local vendors with potential for the re-engineering of worn parts and equipment and provide them the opportunities to win trial orders and improve autonomy. The spare part engineering is mostly contracted to local vendors to reduce carbon emissions and waste and to create local employment and business opportunities.

Local Procurement Amount in the Past Four Years

Year	2021	2022	2023	2024
Local procurement ratio (%)	91.4	94.5	95.4	64.2

Note 1. Local procurement is defined as procurement conducted in New Taiwan Dollars with local vendors in Taiwan.

Note 2. The ratio of local procurement is subject to the variation in procurement amounts due to the presence of important equipment (including foreign original parts and technicians) and the occurrence of minor and major maintenance cycles (3-year minor maintenance and 6-year major maintenance).

Note 3. In 2024, due to the ECOVE Chiayi Energy Corporation's EPC project, which primarily involves procurement from foreign manufacturers, the local procurement ratio has decreased compared to previous years.



Climate Governance GRI 201-2、305-1~5；SASB IF-WM-110a.1、110a.3

In response to the impacts of global climate change, ECOVE recognizes that climate change may pose both risks and opportunities for our related businesses. Therefore, starting in 2020, we have implemented the management framework recommended by the Task Force on Climate-related Financial Disclosures (TCFD). This framework encompasses four core elements: governance, strategy, risk management, and metrics and targets. We continuously assess climate change risks related to our operations each year, adapting to the latest international developments to enhance the organization's resilience in addressing climate change. In 2024, we have incorporated the International Sustainability Standards Board's ("ISSB") IFRS S2 on Climate-related Disclosures, which was published in June 2023. The Company has assessed the standards and simultaneously complete the independent report (Publications - ECOVE Environment Corporation)(Hyperlink to be added).

Climate Governance and High-Level Management

The climate governance mechanism of ECOVE is overseen by the Board of Directors as the highest governing body, and relevant responsibilities are executed through the Sustainability Development Committee and the Risk Management Executive Committee. The "Sustainability Development Committee" of ECOVE is responsible for coordinating corporate social responsibility, environmental protection (including climate-related risks and opportunities), and corporate governance matters. However, regarding the risks faced during operations, the "Risk Management Guidelines" issued in 2017 (which cover "information security risks," "health and safety environmental risks," "operational risks," "quality management risks," and "climate and natural risks") is the legal source to establish the "Risk Management Executive Committee" and formulate the "Risk Management Policy" as the highest guiding principle and management procedure for the Company's risk management. The executive committee is required to report to the Board of Directors at least once a year. Since the "Risk Management Executive Committee" serves as the decision-making body for the Company's risk management, the environmental protection-related risks assessed by the Sustainability Development Committee (including climate-related risks and opportunities) are also integrated into the Company's overall risk management process. The Chairman of the Board serves as the chief supervisor of the Sustainable Development Committee, with the President serving as the chairman of the committee. Members include the Chairmen and Presidents of the subsidiary companies. The committee is divided into three main groups: social participation, environmental protection, and corporate governance. Each group sets annual work objectives (encompassing climate indicators and the status of target execution) to fulfill corporate responsibilities. At the end of each year, the committee reports to the Board of Directors on the "results of the current year's execution and the work plan for the next year," enabling the Board to fully grasp the Company's achievements and plans regarding social responsibility, corporate governance, and the execution of climate goals. After hearing the report, the Board may provide necessary guidance and urge relevant adjustments as needed to effectively fulfill its supervisory responsibilities.

Meanwhile, in order to ensure that Board members continue to have climate and environmental stewardship, all members of the Board of Directors of the Company have completed relevant training in accordance with the "Guidelines for Continuing Education for Directors and Supervisors of Exchange-listed and OTC-listed companies." The training sessions are coordinated by the Group's Secretariat of the Board of Directors in accordance with the needs of the directors' professional functions or external trends. The training content covers corporate governance, business ethics and compliance, risk management, corporate sustainability, information security, and climate-related issues, etc., aiming to enhance the Board's understanding and supervision capability of emerging issues, as well as the effectiveness of corporate governance.

Climate Performance Incentive System

The remuneration of the Company's directors and managers follows the guidelines and criteria set forth by the Remuneration Committee and the Board of Directors, including the "Guidelines for Director Performance Evaluation and Remuneration System" and the "Guidelines for Manager Performance Evaluation and Remuneration System." The remuneration takes into account industry norms, as well as the Company's performance, individual contributions, and achievements, aiming to provide reasonable compensation. It covers the achievement of various financial targets (accounting for approximately 65% of the total) and non-financial performance indicators (accounting for approximately 35% of the total). The industrial model of ECOVE is highly related to sustainable development, thus linking the sustainable goals to the performance of each executive (including the Chief Executive Officer and other senior executives) and departmental KPIs is one of the factors considered for performance bonus distribution. The required achievement indicators cover the rate of renewable energy generation and the rate of environmental protection (including greenhouse gas reduction). The purpose of the established "Climate Performance Reward System" is to connect sustainable goals with each executive (including the Board of Directors and managers) and align them with departmental performance objectives, thereby strengthening the implementation of the Company's environmental management goals. It also enhances vertical management and communication. By requiring departmental performance objectives, employees are encouraged to set personal environmental performance goals, effectively promoting ESG-related work through a two-way channel from the bottom up and top down, enabling the Company to achieve its established environmental objectives.

Performance Objectives	KPI Items	Weighting
ESG Plan Achievement Rate	- Carbon Reduction Target Achievement Rate (16%) - Carbon Reduction Target Achievement Rate for Solar Photovoltaic (4%) - Carbon Reduction Target Achievement Rate for Reuse (4%) - ECOVE Waste Management Corp. Carbon Reduction Target Achievement Rate (4%) - Carbon Reduction Target Achievement Rate for Offices (4%) - NOx Emission Target Achievement Rate for Incineration Plants (4%) - Number of Improvement Proposals Meeting the Group's Requirements (15%)	10%
	- Response Rate of First-Tier Suppliers and Key First-Tier Suppliers to the ESG Questionnaire (5%) - Retention Rate of New Employees >87% (5%) - Social Engagement: Step by Step: Factories for Sustainable Environmental Education - 20 sessions (10%) - Total Hours of Volunteer Service >4,000 hours (10%)	
	- Reaching Top 5% in Corporate Governance Evaluation (15%) - Top 5% in S&P ESG Evaluation (10%) - Number of Patents Acquired (10%)	

Strategies

The Company refers to the physical risks outlined by the TCFD (immediate risks - heavy rainfall flooding, water scarcity, strong winds; long-term risks - high temperatures) and transition risks (policy and regulation, market, technology, reputation). Opportunities are categorized into five major areas: resource efficiency, energy sources, products and services, market, and resilience. The assessment of the impact on the overall business and operational aspects of ECOVE will be conducted over different time frames (short-term: within 3 years, medium-term: 3-5 years, long-term: over 5 years) using two evaluation criteria: incidence rate (already occurred, almost certain, very likely, likely, almost unlikely to occur) and impact level (extremely minor, minor, moderate, significant, extremely significant). A risk and opportunity matrix will be created based on these evaluations. The time intervals are detailed in the table below.

Expected Time Frames for Climate-Related Risks and Opportunities Impacting the Company

Period	Definition	Connection with the Schedule for Strategic Decision-Making Planning
Short-term	Less than 3 years (2024-2026)	The planning cycle for major decisions of the Company is reviewed and adjusted approximately every three years on average.
Medium-term	From 3 to 5 years (2027-2029)	The Company's strategic decisions typically yield significant results within five years.
Long-term	Over 5 years (currently under discussion until 2030)	The Company actively cooperates with the national "2050 Net-Zero Emissions Roadmap" and related policies, planning to achieve net zero emissions by 2050.



TCFD Report

Identification of Significant Climate Risks and Opportunities

ECOVE's climate-related risk issues encompass a total of 13 items (including 10 transition risks and 3 physical risks). After a systematic assessment, 3 significant climate risks were ultimately identified. ECOVE follows the Task Force on Climate-related Financial Disclosures (TCFD) framework to conduct a quantitative analysis of financial risks, assessing their potential impact on operating costs, capital expenditures, and revenue. Based on the characteristics of risks and their likelihood of occurrence, corresponding management measures and adaptation strategies will be formulated to enhance climate resilience and reduce potential financial impacts and operational risks.

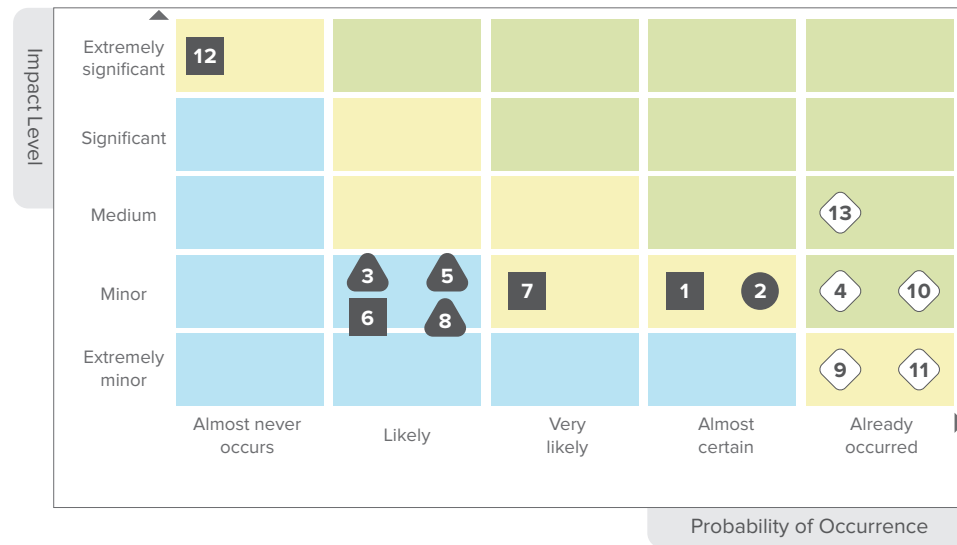
After assessment, the impact level of the three major risks is determined to be moderate to minor, and none have caused significant financial impact on the Company. The classification of risk issues is as follows:

- (1) Significant risk issues: The transition to a low-carbon economy has resulted in increased equipment costs, changes in customer behaviors, and damage to photovoltaic equipment due to strong winds, leading to an inability to generate electricity. There are three issues in total, all of which have already occurred, thus they are categorized as significant risk issues.
- (2) Moderate risk issues: The establishment of greenhouse gas reduction targets, building efficiency/labeling regulations and standards, the reduction of high-carbon investment demands from customers, damage to photovoltaic equipment due to flooding resulting in an inability to generate electricity, insufficient water supply caused by changes in rainfall leading to the need for incineration systems to reduce load, and financial crises are identified. There are six issues in total, all of which are very likely to occur and are anticipated to impose minor impact on the Company, thus they are categorized as moderate risk issues.
- (3) Non-significant risk issues: The following four issues are considered non-significant: general environmental regulations, loss of waste disposal service market due to green movement requirements, lower-than-expected transformation to low-carbon technologies, and price increases of raw materials due to carbon fees. These issues have not yet actually occurred, and their anticipated impact on the Company is deemed minor. The probability of occurrence is only possible, and the expected impact on the Company remains minor; therefore, they are classified as non-significant risk issues.

ECOVE's issues on climate-related opportunities encompass six key areas: enhancing the power generation efficiency of incineration plants, introducing dry deacidification system to reduce water consumption in waste treatment, participating in the carbon trading market, responding to government climate adaptation policies with increased demand for reclamation and desalination plant, addressing net-zero transformation policies with an increase in renewable energy sales, and developing reuse services.

- (1) Significant opportunities issues: Five issues, namely, enhancing the power generation efficiency of incineration plants, introducing dry deacidification system to reduce water consumption in waste treatment, responding to government climate adaptation policies with increased demand for reclaimed water plants and seawater desalination, addressing net-zero transformation policies with an increase in renewable energy sales, and developing reuse services, are significant because they are the Company's established policies, the market demand is high, and the technology has reached maturity.
- (2) Non-significant opportunities issues: The topic of participating in the carbon trading market is classified as a non-significant issue because it has not yet been incorporated into Company policy, and there remain uncertainties regarding the demand in the carbon trading market and the acceptable market price.

ECOVE Climate Change-Related Risk Identification Matrix



Climate Change Risk Types	Sources	Risk Levels
13 Physical	Unable to generate electricity due to strong wind damaging the photovoltaic equipment	High
4 Transition	Low-carbon transformation leads to increased equipment costs	High
10 Transition	Shift in customer behaviors	High
9 Transition	Financial crisis	Moderate
1 Transition	Setting targets of greenhouse gas reduction	Moderate
2 Transition	Construction efficiency or labeling regulations and standards	Moderate
7 Transition	Reduction in the demands of high carbon emissions investment from clients	Moderate
11 Physical	Unable to generate electricity due to flooding damaging the photovoltaic equipment	Moderate
3 Transition	General environmental regulations	Relatively low
5 Transition	Low-carbon technology transformation falling below expectations	Relatively low
6 Transition	Loss of waste collection service market due to the demand for green transportation	Relatively low
8 Transition	Raw materials have increased in price due to carbon fees	Relatively low
12 Physical	Insufficient water supply due to changes in rainfall, necessitating a reduction in the incineration system's load	low

ECOVE Climate Change-Related Opportunity Identification Matrix



Climate Change Opportunity	Level
1 Enhancing the power generation efficiency of the incineration plant	High
2 Introducing dry deacidification system to reduce water consumption in waste treatment	High
4 Responding to government climate adaptation policies with increased demand for reclamation and desalination plant	High
5 Addressing net-zero transformation policies with an increase in renewable energy sales	High
6 Development of resource reuse services	High
3 Participation in the carbon trading market	Low

- ◇ Already occurred
- ▲ Short-term (within the next 3 years)
- Medium-term (in 3-5 years)
- Long-term (more than 5 years into the future, estimated by 2030)

Climate Risk Scenario Analysis

When conducting a physical risk analysis, the impact of climate change varies by geographic location. ECOVE utilizes future climate projection results from Taiwan's scientific research institutions, specifically the National Science and Technology Center for Disaster Reduction (NCDR), as reference data for scenario assumptions regarding spatial downscaling in the Taiwan region. Additionally, the Company employs the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), utilizing the latest AR6 warming scenarios and climate projection data. The analysis primarily considers changes in the number of consecutive dry days in the region during the baseline period (1995 to 2014) and the SSP5-8.5 (very high emissions) scenario for 2030 to assess potential water scarcity risks that may arise in the future. Furthermore, it evaluates changes in maximum daily rainfall to assess the potential flooding impacts of extreme weather on the region, as well as changes in the number of warm days to evaluate the duration of high temperatures and their effects on ECOVE's operational activities. Regarding transition risks, ECOVE primarily assesses the impacts on its operations related to low-carbon products and services, changes in customer consumption behavior, the financial system, regulations, and low-carbon transition issues under a net-zero emissions scenario (NZE) with a temperature increase of 1.5°C.

ECOVE Climate-Related Risk Climate Scenario Settings

Risk Type	Selected Scenario	Scenario Content
Physical risk	IPCC AR6 SSP5-8.5	According to our country's scientific research unit (National Science and Technology Center for Disaster Reduction), the future climate estimation results for spatial downscaling in the Taiwan region serve as reference material. The primary consideration is the variation in the number of consecutive days without rainfall in the region during the baseline period (1995 to 2014) and under the SSP5-8.5 (extremely high emissions) scenario for 2030. This serves as a basis for ECOVE to assess the potential risk of water shortages in the future. Additionally, the assessment includes the variation in the maximum daily rainfall to evaluate the potential flooding impacts of extreme weather on the region. Furthermore, the changes in the number of warm days are analyzed to assess the duration of high temperatures and the potential strong winds brought by typhoons, which may affect ECOVE's operational activities. - Heavy rain and flooding: Depending on their location, various sites may experience flooding of 50 centimeters or more, and it is assumed that this will persist for one day. - Water shortage: All locations have reached a drought scale; therefore, it is assumed that each location will face a 20% reduction in supply for a continuous period of 90 days. - High temperature: Based on the highest environmental temperature recorded at each location and the number of days exceeding 35°C, the following outcomes may occur: 1. Increased electricity demand at each location; 2. Potential impacts on incineration processing and the cooling capacity of air conditioning equipment. - Strong winds: The number of typhoons in the future is projected to decrease from 4-5 per year to 3-4 by the middle of the 21st century, and further to 1-2 by the end of the 21st century. Therefore, assuming that the number of typhoons affecting Taiwan in the future will be three, and that they will be strong typhoons with wind speeds exceeding 51 meters per second (equivalent to a wind force of level 16 or higher).
Transition Risk	Net-zero emissions scenario (NZE)	To achieve the goal of limiting global warming to 1.5°C, plans are being developed to attain net-zero emissions from energy-related and industrial processes by 2050. These plans are based on the principles of technical feasibility, economic benefits, and social acceptability, while also ensuring sustained economic growth and a stable energy supply.

Financial Impacts and Management Practices Related to Climate Change Risks at ECOVE

Risk Type	Risk Issues	Details of Risk	Duration of Impact	Financial Impact	Management Method
Physical	Unable to generate electricity due to strong wind damaging the photovoltaic equipment	Under the scenario of extremely high emissions (SSP5-8.5), the future frequency of typhoons impacting Taiwan is projected to be three times per year, with these being intense typhoons. This may result in damage to solar photovoltaic module equipment, rendering it unable to generate electricity.	Already occurred	When a severe typhoon causes damage to rooftop solar power systems due to strong winds, in addition to equipment losses, there are also sales losses incurred during the repair period when power generation is not possible. According to the 2024 estimates of losses from wind disasters, the total amount is projected to be less than 5% of pre-tax income.	By adopting a transfer method, the enhancement of insurance content is expected to involve an investment amount that is less than 1% of pre-tax income.
Transition	Low-carbon transformation leads to increased equipment costs	In response to carbon reduction targets, the specifications for equipment have been upgraded to exceed the contractual standards for low-carbon equipment, resulting in a budget overrun.	Already occurred	Taking the Gangshan EfW Plant as an example, the initial setup and construction costs for low-carbon equipment increased by less than 5% of the pre-tax income compared to the original equipment costs.	Extending the service life of equipment to reduce the frequency of replacements.
Transition	Change in customer behaviors	In response to the increased sustainability awareness of government agencies, the resource recycle rate will be gradually improved, reducing the proportion of waste incineration.	Short, medium, and long term	Preliminary assessments indicate that by 2030, based on the reconstruction plans for incineration plants in various counties and cities, the change in the volume of waste entering the facilities is approximately 1% under the scenario of population growth assessment, with revenue reduction amounting to less than 5% of pre-tax income.	- Continuously monitor the capacity of waste intake to ensure that the volume received aligns with the planned specifications. Simultaneously, continue to optimize waste treatment efficiency. - Invest in waste-to-energy power plants to enhance the efficiency of waste energy recycle and improve profitability, with an estimated investment amount of approximately NT\$3.5 million.
		Decreased demand for outsourcing waste solvent treatment: With the trend towards waste reduction and recycling in waste management, the demand for outsourcing waste solvent treatment has diminished, leading to a reduction in the volume of waste solvent treatment operations. High-tech manufacturers are progressively promoting zero-waste centers within industrial parks, resulting in a gradual decline in the reuse of waste shipping out of these science parks.		According to changes in the high-tech industry, it is estimated that the monthly intake of waste solvents will decrease by 30%, which is expected to impact revenue by less than 5% of pre-tax income.	Collaborate with high-tech manufacturers to introduce concentration equipment and assist in the optimization and sales of high-concentration waste solvents.

Financial Impacts and Management Practices Related to Climate Change Opportunities at ECOVE

Opportunity Item	Details of Opportunity	Period of Incidence	Financial Impact	Management Method
Enhancing the power generation efficiency of the incineration plant	Enhancement of waste-to-energy efficiency and development of biomass power generation in response to the government's zero-waste recycling policy.	Short-term	The increase in new contracts and the increase in power sales revenue will result in approximately NT\$50 to NT\$100 billion in revenue.	- Through the successful experience of the Taoyuan Biomass Energy Plant and Chiayi Green Energy Sustainable Cycle Center, we establish long-term partnerships for key equipment to enhance our competitive advantage. - Continuously optimize energy efficiency through the parent company's green technology to enhance competitive advantage.
Introducing dry deacidification system to reduce water consumption in waste treatment	Since the incineration plants have introduced dry deacidification system, the water consumption in waste treatment has been reduced, leading to the decrease of the expense of purchasing water.	Already occurred, short-term	Water conservation contributes to a reduction of 0.2 to 0.26 metric tons of water per metric ton of waste.	- Applied for relevant technology patents to protect innovative achievements and enhance the Company's technological competitiveness; patents were obtained in 2024. - Through system improvements to utilize waste heat, further implementation of waste heat recovery boilers will be introduced to increase electricity generation.
Responding to government climate adaptation policies with increased demand for reclamation and desalination plant	Responding to government climate adaptation policies, the Company will set up more reclamation and desalination plants.	Short-term	Increase business items, with an estimated market size of approximately NT\$150 billion.	- Actively combine the advantages of plant construction and green technology of our parent company, CTCL, to enhance our competitiveness. - Actively seek partners with advanced desalination and reclaimed water technologies to enhance competitiveness.
Addressing net-zero transformation policies with an increase in renewable energy sales	In response to the increasing demand for solar energy installations both domestically and internationally, it is anticipated that there will be an increase in solar energy installation business and an enhancement in operating revenue.	Short-term	The market opportunity for green electricity supply is approximately NT\$500 million to NT\$1 billion.	- Proactively promote the resupply business and enhance the synergy of green power resupply with the Group's supply chain counseling. - Actively invest in photovoltaic business in overseas mature markets to enhance revenue.
Development of resource reuse services	In response to the demands of the technology industry and the future market needs arising from policy developments, we will develop relevant reuse services (carbon reduction services, waste from the Energy Resource Center, low-carbon electricity, and waste plastics) to increase operating revenue.	Long-term	The market size is approximately between NT\$3.4 billion and NT\$10 billion.	ECOVE will continue to invest in various waste recycling businesses and increase the amount of waste recycled. The development of innovative technologies that achieve high efficiency and energy reuse promotes business growth and enables the capture of market opportunities.

Risk Management

In order to effectively assess climate-related risks and opportunities, ECOVE has incorporated climate and natural risk types into its "Risk Management Guidelines." This approach allows for the systematic management of potential risks faced by various operating companies. Following discussions by the "Risk Management Executive Committee," priority risk issues are identified, and control measures are proposed. The climate change risk management representative (a member of the Sustainable Development Committee), based on the results of ECOVE's identification of climate change risks, compiles and reports to the Risk Management Executive Committee on significant or immediate risk issues. The Risk Management Executive Committee shall compile the risk assessment results to be provided as a reference for the audit unit to draw up the annual audit plan. The audit office will report the audit results to the Board of Directors to facilitate the board's monitoring of climate-related issues. In accordance with the "Risk Management Regulations", ECOVE systematically identifies climate risks that may be faced during operations. Climate risk consists of two major types, transformational and physical, which are further differentiated into regulations, technology, market, reputation, and immediate and long-term. Opportunities are divided into five categories namely, resource efficiency, energy sources, products and services, market, and resilience. The risk and opportunity matrices are evaluated and drawn based on the two consideration factors of incidence rate and level of impact. After discussion by the Risk Management Committee, the material risks and opportunities which ECOVE may face are determined, and effective actions are adopted to manage risks or harness the possible opportunities so as to strengthen the operational system and competitiveness of the Company and its subsidiaries.

Climate Indicators and Targets

■ Greenhouse Gas Management:

In response to the issue of climate change, ECOVE has initiated greenhouse gas inventory operations starting from 2022 as the base year. Each year, the Company completes the inventory for the previous year covering Scopes 1, 2, and 3, and commissions a third-party organization to conduct external verification to ensure the accuracy of the data and the credibility of the disclosures. ECOVE adheres to the greenhouse gas reduction targets set forth by the Science Based Targets initiative (SBTi), in which its parent company, CTCI Group, is an active participant. This initiative aims to limit global warming to within 1.5°C and establishes a scientifically-based carbon reduction pathway. Furthermore, ECOVE aligns with the objectives promoted by the Net Zero Emissions Alliance, committing to achieve net zero emissions at its office locations by 2030 and at its production sites by 2050.

In addition, ECOVE actively participates in domestic and international climate action initiatives, such as the Carbon Disclosure Project (CDP), to enhance the transparency of climate-related information and strengthen the Company's ability to identify and manage climate risks.

The emission intensity targets for each area are described below:

● Waste removal:

The self-managed waste transportation segment has regularly conducted organizational greenhouse gas self-inventories, with 2022 as the base year. The average fuel consumption of 500,000 kilometers is calculated at 167.3 kiloliters, which serves as the basis for emission intensity control. The total emission intensity in 2022 was 454.898 metric tons of CO₂e per 500,000 kilometers. In 2024, carbon emissions were 403.444 metric tons of CO₂e per 500,000 kilometers, representing a reduction of approximately 11.3% compared to the baseline year. Since Scope 1 accounts for about 99% of the emissions from the waste removal sector, we will continue to control the intensity of Scope 1 emissions from waste removal by upgrading to the latest energy-efficient vehicles.

In 2024, the total carbon emissions per ton of waste at the incineration plant were 441 kilograms of CO₂e. The average carbon emissions from waste treatment per ton of garbage in the base year of 2022 were 456 kilograms of CO₂e, representing a decrease of 3.5%. The goal is to maintain a reduction of 1% per year until before 2030.

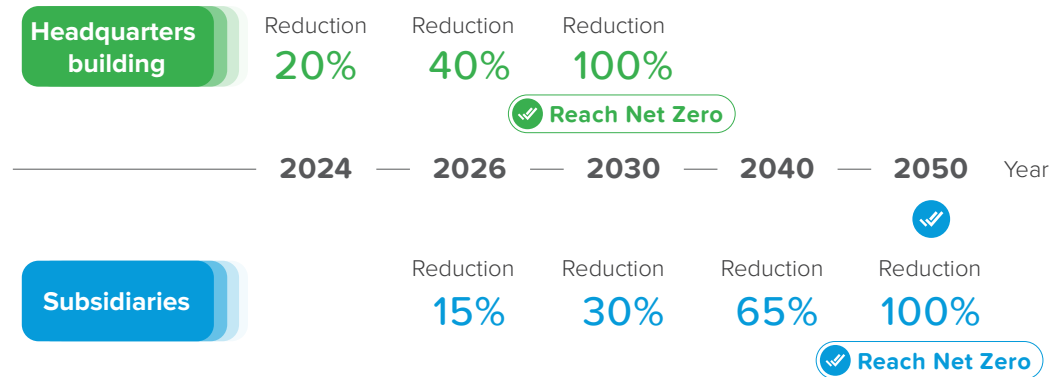
● Recycling and reuse sector:

In the base year of 2022, the total greenhouse gas emission intensity of IPA recycled products was 12.07 kilograms of CO₂e per thousand New Taiwan Dollars. In 2024, the emission intensity was 9.71 kg CO₂e per thousand New Taiwan Dollars, representing a reduction of approximately 19.53% compared to the base year. Due to the upgrade of equipment or the installation of variable frequency drives in 2024, energy efficiency has been improved, resulting in a decrease in total emission intensity.

● Renewable energy sector:

In the base year of 2022, total solar photovoltaic greenhouse gas emission intensity was 0.67 kg CO₂e per thousand New Taiwan Dollars (Scope 1 emission intensity was 0.01 kg CO₂e per thousand New Taiwan Dollars, and Scope 2 emission intensity was 0.66 kg CO₂e per thousand New Taiwan Dollars). In 2024, carbon emission decrease by approximately 11.42% compared to the base year. The short-term objective is to reduce purchased electricity by utilizing self-generated power for newly established projects. Additionally, we will continue to adopt power generation modules with higher average power output per unit area to enhance generation efficiency and further develop solar photovoltaic projects to increase green energy production. Secondly, the goal of reduction will be achieved by purchasing renewable energy certificates.

→ Carbon Reduction Target Planning (Scope 1 and 2)



Greenhouse gas emission-related risks in each sector:

● Waste collection:

Scope 1: Mainly derived from emissions generated by fuel consumption of waste collection vehicles. An increase in the number of vehicles due to changes in waste collection volume leads to an increase in greenhouse gas emissions.

Scope 2: Emissions originating from the electricity used in offices, with relatively low-risk concerns.

● Waste incineration:

Scope 1: Emissions will be affected by changes in the amount of waste entering the plants during the year, the nature of the waste, and the actual heating value.

Scope 2: Main emissions are those generated by purchased electricity, which is related to the operation of the incinerator for the year. If the efficiency of the power generation is good in a year, there is no need to purchase electricity, and correspondingly the risk of emissions is relatively low.

● Recycling

Scope 1: The primary source of emissions is natural gas used in the process stage gas boilers. Increased processing volume will result in higher gas consumption and, consequently, increased emissions.

Scope 2: Emissions originate from purchased electricity, mainly related to the process stage distillation units. Changes in processing volume will also affect emissions due to the associated electricity consumption.

● Renewable energy

Scope 1: The main source of emissions is fuel consumption from government vehicles. To reduce emissions from fuel consumption, the vehicles can be replaced with hybrid or electric vehicles. There are relatively low emission risks in this scope.

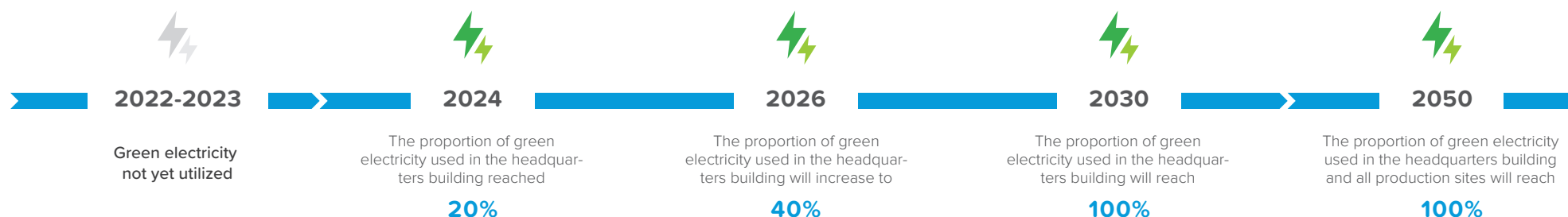
Scope 2: Emissions primarily result from purchased electricity for charging stations and monitoring systems. There are minimal emission risks in this scope.

■Promoting Internal Carbon Pricing:

To enhance the integration of climate action with operational strategy, ECOVE has introduced an internal carbon pricing system in 2024. This system encompasses Scope 1 and Scope 2 greenhouse gas inventories, employing a shadow price of NT\$300 per metric ton of carbon dioxide equivalent for management purposes, with formal implementation planned for 2025. This mechanism incorporates carbon costs as a deduction in the financial objective KPI for gross profit margin achievement rate, and discloses it in management reports, thereby strengthening the integration of carbon costs with operational decision-making. This system aims to promote cost-benefit analysis to advance low-carbon investments and enhance energy efficiency. It also incorporates climate-related issues into decision-making and risk assessment processes, conducts investment analysis testing, and adjusts strategic financial planning. This approach enables the identification of low-carbon opportunities and regulatory changes, gradually achieving climate strategies and objectives.

■Resource Management:

→ Establish the goal usage volume of renewable energy



■Water Resource Management:

Headquarters Building	2022	2023	2024	2024 Target	2025 Target
Water consumption (cubic meters/year)	1,381.6	1,768.3	1,786.3	1,768.3	1,738.0
Water use intensity (cubic meters/person)	13.5	15.1	15.8	15.1	15.1

Total water consumption in each plant	2021	2022	2023	2024	2024 Target	2025 Target
Water consumption (metric tons)	1,700,844	1,719,979	1,595,511	1,761,221	-	-
Unit wastewater consumption (metric tons/ton of waste)	0.84	0.83	0.83	0.81	0.83	0.82

Note: The sources of tap water usage come from the Keelung, Southern Taoyuan, Biomass Energy, Miaoli, Houli, Wurih, Xizhou, Tainan, and Gangshan plants, calculated using data from the Taiwan Water Corporation's water bill.

Most Reliable

ECOVE Ranked in the Top 5% for Corporate Governance Evaluation for 11 Consecutive Years

The results of the 11th Corporate Governance Evaluation organized by the Taiwan Stock Exchange in collaboration with the Taipei Exchange have been announced. ECOVE has once again distinguished itself with outstanding corporate governance performance, emerging from over 1,700 participating listed companies to achieve the highest rating in the top 5% for 11 consecutive years, demonstrating its continued leadership in corporate governance performance among over-the-counter companies.

ECOVE firmly believes that sustainable governance is the cornerstone of company operation, viewing it as the highest guiding principle. The Company actively adheres to the continuously improving corporate governance blueprint and regulatory requirements set forth by the competent authorities. In addition to continuously optimizing various systems to comply with policies and regulations, ECOVE also deeply instills ethical management in every level and daily operation. For 11 consecutive years, the Company has been honored with being listed in the top 5% of all participated companies; this is the best recognition of ECOVE's long-term and unwavering efforts. ECOVE not only demonstrated remarkable results in various evaluation dimensions such as "protecting shareholder rights and treating shareholders equally," "strengthening the structure and operation of the Board of Directors," "enhancing information transparency," and "promoting sustainable development," but also actively responded to stakeholders' concerns regarding sustainability issues by closely integrating the three major aspects of ESG, making contributions in economic, environmental, and social dimensions, and continuously improving the effectiveness of sustainable governance.

In the future, ECOVE is committed to its vision of being "the most trusted leader in sustainable resource circulation," continuously deepening and expanding the height and breadth of corporate governance to create greater sustainable value.



ECOVE has been awarded the top 5% in corporate governance evaluation for eleven consecutive years, with the award presented by Director Peng Jinlong of the Financial Supervisory Commission, and General Manager Diao Xiuhua representing the company to receive the award.



Environmental Sustainability

In response to climate change and global warming, we are committed to actively enhancing environmental protection performances during operating activities to make a sustainable environment.

63	Environmental Sustainability
64	Climate Change Management
66	Environmental Performance
72	Environmental management performance
78	Biodiversity
87	Most Reliable

Performance Highlights

National Enterprise Environmental Protection Award

- The 6th National Enterprise Environmental Protection Award, Ministry of Environment – Keelung EfW Plant, Miaoli EfW Plant, and Tainan EfW Plant

Incineration Plant Evaluation

- Top-ranked in Ministry of Environment's Incineration Plant Evaluation – Keelung EfW Plant, Miaoli EfW Plant

CommonWealth Magazine

- 1.5°C Temperature Control Label Certification

Taiwan Institute for Sustainable Energy (TAISE)

- Taiwan Corporate Sustainability Awards - Gold Level - ECOVE Solvent Recycling Corp.

CDP Carbon Disclosure Project Rating

- Level B in Management

Greenhouse Gas Reduction

- Corporate headquarters - 20.5%, carbon intensity of ECOVE Waste Management Corp. - 11.3%, carbon intensity of ECOVE Solvent Recycling Corp. - 19.53%, and carbon intensity of solar power -74.6%

Renewable Energy

- Total renewable energy generation exceeding 1.65 billion kWh

Reclaimed Water

- Cumulative reclaimed water production - 19,812,203 cubic meters

Recycling and Reuse

- The amount of waste IPA recycled and processed is approximately 14,913 metric tons

Environmental Sustainability

Practitioner of Resource Cycle and Environmental Sustainability

Under the goal of net zero emission by 2050, ECOVE has been committed to green investment and operation services in resource recycling and renewable energy. With a circular economy mindset and an environmentally friendly perspective, ECOVE has been actively cooperating with the government's policies on net zero carbon emission and the environment to provide low-pollution, low-emission, and high-energy-efficiency resource recycling and renewable energy, with a view to achieving a win-win situation for ECOVE, its partners, stakeholders, and the environment, and to do its utmost to safeguard the sustainability of the ecosystem and biodiversity.

Since 2017, ECOVE has taken the lead in adopting the BS 8001 Circular Economy Guidelines, which aims to enhance economic, environmental and social benefits through optimal resource management, and to improve the recycling rate and Resource Cycling Efficiency™ of every resource, so as to achieve the implementation of and compliance with the principles and models of the circular economy in the whole business area. Since 2022, ECOVE has been conducting a comprehensive carbon inventory of its consolidated subsidiaries and obtaining external verification, as well as applying for carbon footprint certification for its waste incineration services, in order to provide lower carbon services. Currently, there are four plants that have obtained product carbon footprint certification: Keelung Plant, Miaoli Plant, Xizhou Plant, and Gangshan Plant.

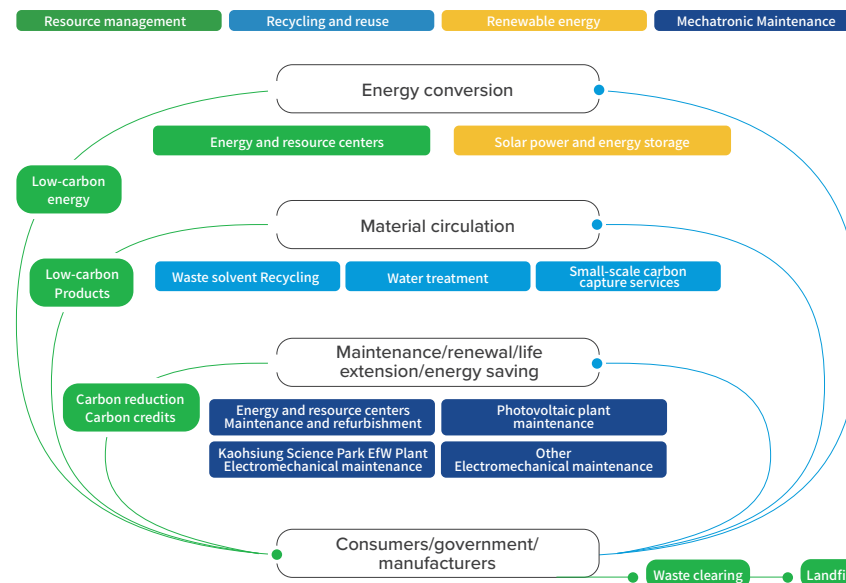


2017 - Obtained the world's first "BS 8001 Circular Economy" certificate

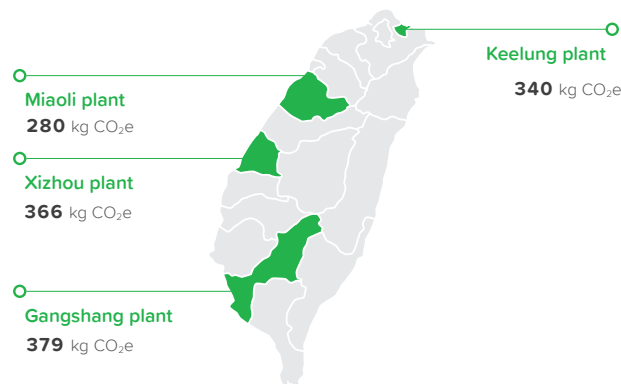
Targeting "Energy from Waste (EFW) with Efficiency Enhancement," ECOVE obtained the world's first "BS 8001 Circular Economy" certificate. The Chairman, Jun Jer Liao (right) represented the Company in receiving the certificate from Mr. Peter Pu, President of the British Standards Institution (BSI).

The Taoyuan Biomass Energy Center officially commenced operations in 2024, as it is Taiwan's first new-generation incinerator, with an energy efficiency of up to 27%. Additionally, it features the largest anaerobic digestion power generation facility from food waste biogas in Taiwan. In total, ECOVE facilities processed 2,698,878 metric tons of waste through incineration throughout the year, generating 1,531,608 MWh of energy, resulting in a carbon reduction benefit of 780,900 metric tons of CO₂e. The anaerobic treatment of food waste amounted to 15,632 metric tons, producing 1,656.2 MWh of energy-from-waste, with a carbon reduction benefit of 818.2 metric tons of CO₂e. The recycling of waste solvents reached 14,913 metric tons, yielding 3,883 metric tons of products. The reclaimed water production reached 19.81 million metric tons, equivalent to the daily water consumption of 69.032 million people, while the total wastewater treatment in Taiwan was approximately 26.28 million metric tons. In terms of solar power, the annual electricity generation reached 121,546 MWh, with an annual carbon reduction benefit of approximately 60,000 metric tons, and the service electricity supplied amounted to 14,332 MWh, assisting industries in achieving a carbon reduction benefit of about 7,000 metric tons.

→ ECOVE Business Model - Implementing Circular Economy



Carbon Footprint Certification



Climate Change Management

Greenhouse Gas Inventory

In response to the government's net-zero carbon policy, ECOVE is conducting comprehensive greenhouse gas emission inventories. Organizational-level greenhouse gas inventories are conducted for subsidiaries with operational control, and third-party certifications are obtained. In addition, self-assessments are carried out for other operated energy-from-waste plants. Using the year 2022 as the base year, ECOVE Headquarters has set reduction targets as follows: a 20% reduction by 2024, a 40% reduction by 2026, and achieving net-zero emissions by 2030. For subsidiaries in the areas of waste management, recycling and renewable energy, which are under long-term operational control, a 15% reduction is set for 2026 and net zero for 2050.

Region	Scope	Annual performance (metric tons CO ₂ e)		
		2022	2023	2024
Headquarters Building	Scope 1 emissions	0.43	-	0.09
	Scope 2 emissions	123.00	123.60	97.98
	Total scope 1+2 emissions	123.43	123.60	98.07
Production Sites	Scope 1 emissions	5.25	3.96	1.38
	Scope 2 emissions	228.63	252.78	55.46
	Total scope 1+2 emissions	233.87	256.74	56.84
Subsidiary	Scope 1 emissions	196,931.90	213,841.20	163,409.23
	Scope 2 emissions	1,305.73	1,251.01	1,134.08
	Total scope 1+2 emissions	198,237.63	215,092.21	164,543.31
Total	Scope 1 emissions	196,937.58	213,845.16	163,410.76
	Scope 2 emissions	1,657.36	1,627.38	1,287.53
	Total scope 1+2 emissions	198,594.93	215,472.54	164,698.29



- 1: The biomass emissions equivalent from waste incineration is calculated based on garbage sampling analysis.
- 2: The emission factor data for 2024 is sourced from the announcement by the Bureau of Energy, MOEA, stating that the carbon emission factor for electricity in 2023 is 0.494 kg CO₂e/kWh, with a Global Warming Potential (GWP) value based on IPCC AR6.
- 3: Due to the difficulty of disaggregating electricity consumption, Scope 2 emissions for ECOVE include the electricity consumption of its subsidiary headquarters as well.
- 4: In 2024, former subsidiaries ECOVE Solar Energy Corporation and South One Solar merged into ECOVE Environment Corporation.
- 5: The target for the headquarters building in 2024 is a 20% reduction in total emissions compared to the base year, with an actual reduction of approximately 20.5%.
- 6: The carbon dioxide emission intensity of the subsidiaries is detailed in each chapter.
- 7: Scope 1 emissions account for 99% of the total emissions.
- 8: The types of greenhouse gas inventories include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).
- 9: The biological source carbon dioxide emissions amount to 210,570.057 metric tons of CO₂e per year.
- 10: 2022 has been established as the base year because it was the first year of the implementation of greenhouse gas inventory.
- 11: The method for compiling greenhouse gas emissions is the operational control method.
- 12: The method used is ISO 14064-1:2018.

Scope 3 emissions	Object	Category	Emissions in 2022 (metric tons of CO ₂ e)	Emissions in 2023 (metric tons of CO ₂ e)	Emissions in 2024 (metric tons of CO ₂ e)
Business type					
Operational Headquarters	ECOVE	Category 7: Commuting	0.69	2.25	62.13
		Category 6: Business Travel	-	0.96	-
		Category 2: Capital Goods	-	-	306.5010
		Category 3: Upstream Fuel and Energy Resources	21.74	24.46	30.7847
		Category 5: Waste Management of Operational Waste	2.28	1.33	1.2006
		Category 15: Investment	198,471.50	215,348.94	164,543.31

Note 1: Inventory of Scope 3 is conducted based on the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011 Edition) (abbreviated as GHG Protocol).

Note 2: Due to the difficulty of separating water usage, Scope 3 for ECOVE includes the water consumption of other subsidiary headquarters. Investment emissions include: ECOVE Waste Management Corp., ECOVE Miaoli Energy Corp., ECOVE Environment Service Corp., ECOVE Wujih Energy Corp., ECOVE Solvent Recycling Corp., ECOVE Chiayi Energy Corporation, ECOVE Resources Co., Ltd., SINOGAL, ECOVE Resource Recycling Corp., ECOVE Gangshan Energy Corp., ECOVE Solar Power Corp., G.D. International, LLC, Lumberton Solar W2-090, LLC.

Note 3: In 2024, former subsidiaries ECOVE Solar Energy Corporation and South One Solar merged into ECOVE Environment Corporation, increasing capital property inventory.

ECOVE Environment Service Corp. cooperated with the Group to conduct an organizational greenhouse gas inventory of nergy-from-waste plants managed by the Group in 2022, to determine the emissions of each emission source, and then continue to improve energy conservation and energy efficiency, and set 2022 as the base year to control the intensity of emissions. The emission intensity for 2024 is 441 kgCO₂/t, representing a reduction of approximately 3.3% compared to the base year of 2022. This decrease is primarily attributed to ongoing energy conservation efforts and improvements in energy efficiency.

Item	2022 (Base Year)	2023	2024
Intensity of emissions (Greenhouse gas emissions/waste disposal quantity of the year)	456	469	441

Note 1: GHG emissions are Scope 1 + Scope 2 emissions from each nergy-from-waste plant.

Note 2: The unit is kgCO₂/ton of waste.

Note 3: The emission intensity for 2024 is better than 2023, thanks to ongoing energy conservation efforts and improvements in energy efficiency.



Environmental Performance

GRI 303, 306 ; SASB IF-WM-120a.1, 3 ; SASB IF-WM-420a.1

Waste Collection and Management

ECOVE Waste Management Corp. provides waste collection and transportation, as well as waste incineration residue removal services. The number of customers it served exceeds 22,000. In 2024, the total amount of waste collected and managed by ECOVE was 244,355 metric tons, which accounted for 30% of the total amount of waste collected and managed by domestic large-scale municipal waste recycling (incineration) plants on behalf of private organizations. To effectively manage waste quality, ECOVE utilizes an intelligent management system that screens vendor qualifications, approves waste types, establishes and stores entry data, and performs real-time monitoring of entry information. Through the analysis of entry statistics, waste quality is effectively controlled. In 2022, the management system was further optimized by adding functionality to interface with the declaration system of the Ministry of the Environment. This allows for the rapid and accurate upload of data to the regulatory center, ensuring legal compliance and reducing redundant work. In addition, the environmental protection laws and regulations/entry management information can be updated and announced immediately, and the management system can be introduced into each energy from waste plant to establish a list of unsuitable wastes or manufacturers, so as to strengthen the management of energy from waste plants, and at the same time, analyze the characteristics of wastes in each area to enhance the efficiency of incinerator combustion. The decrease in the ratio of waste management received in 2024 is attributed to the expiration of the contract for the Wurih plant in September 2024, along with the commencement of operations at the Taiwan Cement Corporation (TCC) DAKA Renewable Resource Recycling Center (RRRC) and the Taoyuan Biomass Energy Plant.

To enhance incineration efficiency, maintain processing effectiveness, and ensure the safety of waste removal vehicles entering the facility, ECOVE Waste Management Corp. conducted on-site guidance and inspections for business units and waste removal organizations in 2024, auditing a total of 47 business units and 1 waste removal organization. Through audits, the company checked the quality of the production process, the output and storage conditions of waste, the clearance permit deadlines, and the proper operation rates of waste transport vehicles. Additionally, we promote relevant environmental regulations and the management specifications for the entry and exit of energy from waste plants, providing recommendations for optimizing waste management.

The audit results indicate that all 12 business units that previously violated the incineration plant's entry regulations have completed improvements following guidance. An investigation was conducted on the waste output and disposal conditions of 29 business units. Three business units require enhanced awareness campaigns and further investigation. One business unit needs to have the waste it generates further analyzed and conduct sampling tests. Additionally, two business units underwent on-site inspections due to concerns regarding the waste entering the facility. Among them, the waste testing from Li Sing Environmental Co., Ltd. revealed the presence of PVC components, and the chlorine content exceeded the acceptable standards; therefore, their application for entry was rejected. In addition, the inspection agency reviewed one business unit and found no areas requiring improvement. Through this guidance and audit, we ensure that the business units and disposal organizations comply with environmental protection regulations, enhance waste management efficiency, and maintain the stable operation of the incineration plant.

To enhance the efficiency of waste collection operations, a waste collection dispatch management system was introduced in 2021. This system digitized traditional paper-based operations such as vehicle dispatch management, driver management, and vehicle management. This not only reduced paper usage but also improved operational efficiency and decreased the burden of manual tasks. In 2023, further optimizations were made, including the addition of features for warnings on abnormal results of alcohol testing, attendance anomalies, and API reporting, aimed at enhancing safety management and improving the accuracy of reported weights. In 2024, based on feedback from the user units and the waste collection drivers, continuous system optimization and adjustments were carried out to enhance operational convenience and overall management efficiency.

Statistics on total waste collected and managed by ECOVE (metric tons)

Year	2021	2022	2023	2024
Total amount of waste collected and managed	269,739	287,251	271,268 ^{Note 1}	244,335 ^{Note 2}
Collection and management of waste volume ratios ^{Note 3}	25%	35%	36%	30%

Note 1: In 2023, the total incoming volume for the Gangshan Plant was revised downward due to the revamping implemented in accordance with the contract.

Note 2: The contract for the Wurih plant expired in September 2024, and it was returned to the Environmental Protection Bureau, Taichung City Government. After that, there has not been the option for self-collection; therefore, the incoming volume has been revised downward.

Note 3: Waste Volume Ratio = Total amount of waste collected and managed by ECOVE / Total amount of waste collected and managed by private organizations commissioned by domestic large-scale municipal waste recycling (incineration) plants*100%.



Energy from Waste Performance

ECOVE Environment Service Corp., a subsidiary of ECOVE, focuses on the operational management of energy resource centers (waste incineration power plants and biomass energy centers). It converts high calorific value waste into electrical energy through incineration technology, while low calorific value waste is processed through advanced anaerobic fermentation to generate biogas for electricity production, which is then resold as one of Taiwan's sources of electricity. This process not only reduces dependence on fossil fuels but also effectively decreases the environmental pollution caused by waste landfill. ECOVE Environment Service Corp. utilizes optimal operational techniques to enhance energy conversion efficiency, ensuring the maximization of waste resource utilization benefits while simultaneously reducing waste, emissions of exhaust gases, and wastewater discharge. The company actively implements its mission of "optimizing resource recycling efficiency" to promote sustainable environmental development.

Currently, ECOVE Environment Service Corp. manages a total of nine large energy resource centers in Taiwan, which include a biomass energy center equipped with anaerobic digestion facilities from food waste, as well as two small-scale industrial waste incineration plants. The company undertakes operations for nine local environmental protection bureaus and government agencies. In 2024, the total amount of waste entering the large-scale energy resource centers (general waste and general utility waste) was 2,167,563 metric tons, and ECOVE Environment Service Corp. accounted for 34.32% of the total amount of waste entering the plant in Taiwan. The energy resource centers reported that the total amount of general waste was 1,568,036 metric tons, accounting for 72.34% of the total incoming volume; the amount of general industrial waste was 599,527 metric tons, representing 27.66% of the total incoming volume. According to the latest statistics released by the Ministry of Environment, the average waste generated per person in Taiwan is approximately 1.36 kilograms per day. Of this amount, 35.77% is processed through incineration. The processing volume at ECOVE Environment Service Corp. corresponds to the annual waste generation of approximately 8.83 million people. In 2024, the anaerobic treatment volume from food waste reached 15,631.93 metric tons. Additionally, in 2024, the incineration capacity for general industrial waste at small-scale incineration facilities was 32,755 metric tons, while the processing volume for hazardous industrial waste was 415 metric tons, which constitutes 0.015% of ECOVE Environment Service Corp.'s total processing volume. The total amount of waste processed through energy recovery incineration and food waste treatment is 2,681,340 metric tons.

In addition to Taiwan, our waste incineration services have also expanded overseas, with our subsidiary SINOGAL undertaking general waste disposal business in the Macau region. With a local population of approximately 700,000 people, the total intake of waste in 2024 was 580,033 metric tons, of which general waste accounted for 421,431 metric tons, representing 72.66% of the total, and general industrial waste accounted for 158,602 metric tons, representing 27.34% of the total. Based on the average of the past four years, the annual average total intake was 539,710 metric tons, and the average total processing quantity was 525,155 metric tons.

1 9 large-scale energy resource centers including Keelung Plant, Southern Taoyuan Plant, Biomass Plant, Miaoli Plant, Houli Plant, Wurih Plant, Xizhou Plant, Chengxi Plant and Gangshan Plant.

2 The main source of data is from the Solid Waste Incinerator Management System (SWIMS) of the Environmental Management Administration, Ministry of Environment. Based on the total waste intake of 6,314,882 metric tons from 27 waste energy from waste plants plants in Taiwan in 2024.

Item		2021	2022	2023	2024
Total volume of incoming waste (metric tons)	EfW plant operated and managed by ECOVE Environment Service Corp.	2,028,671	2,095,875	1,925,902	2,167,563
	SINOGAL (Macau plant)	518,281	505,971	554,560	580,033
	Total	2,546,952	2,601,847	2,480,462	2,747,596
Total volume of waste treated (metric tons)	EfW plant operated and managed by ECOVE Environment Service Corp.	2,023,527	2,069,685	1,911,631	2,141,796
	SINOGAL (Macau plant)	521,223	501,183	554,303	523,912
	Total	2,544,750	2,570,868	2,465,934	2,665,708

Item	2024
Total volume of waste treated by anaerobic treatment from food waste (metric tons)	15,632

Total volume of waste treated by small-scale industrial waste incineration plants (metric tons)

Item	2021	2022	2023	2024
General industrial waste	35,298	32,273	35,065	32,755
Hazardous industrial waste	320	259	422	415

■Energy-from-Waste Power Generation

The energy from waste plants operated and managed by ECOVE Environment Service Corp. (including Macau and excluding the two small plants (no power generation)) not only treat waste, but also generate electricity from the heat generated by incinerating waste. The percentage of waste-to-energy power generation is 98.8%. In 2024, a total of 2,665,708 metric tons of waste was incinerated, generating a total of 1,531,608 MWh of electricity. After deducting the incineration plant's self-consumption, the total amount of electricity to be sold back to the power company was about 1,252,847 MWh, which means that 81.80% of the total amount of electricity generated will be exported to the power grid. The electricity to be sold back in 2024 can supply the annual electricity consumption of approximately 290,000 customers in Taiwan and 30,000 customers in Macau. With the electricity generated from the incineration plant, a total of about 780,900 metric tons of CO₂e was reduced in 2024 for Taiwan and Macau power companies. The anaerobic digestion power generation system for food waste has achieved an electricity output of 1,656.2 MWh, resulting in a carbon reduction benefit of 818.2 metric tons of CO₂e.

Plant Type	Total power generation (MWh)	Amount of power sold (MWh)	Power generation per ton of waste in 2024 (MWh)	Power generation per ton of waste in 2023 (MWh)	Power generation difference per ton of waste (MWh)	Total greenhouse gas (GHG) emissions reduced ^{Note 1} ^{Note 2} (metric tons of carbon dioxide equivalent)
Keelung	118,708	93,788	0.61	0.62	-0.01	58,642
Southern Taoyuan	132,425	114,244	0.53	0.46	0.07	65,418
Biomass Energy	185,834	162,185	0.89	-	-	91,802
Miaoli	93,738	74,198	0.59	0.59	0.00	46,307
Houli	156,999	129,317	0.62	0.59	0.03	77,558
Wurih	176,741	142,502	0.64	0.65	-0.01	87,310
Xizhou	177,170	150,539	0.60	0.57	0.03	87,522
Chengxi	110,759	86,307	0.57	0.54	0.03	54,715
Gangshan	166,561	132,433	0.54	0.57	-0.03	82,281
Taiwan (Subtotal)	1,318,936	1,085,513	0.62	0.57	0.05	651,554
Macau (Subtotal)	212,672	167,334	0.41	0.39	0.02	129,305
Total	1,531,608	1,252,847	-	-	-	780,859

Note 1: Greenhouse Gas Emission Reduction in Macau (metric tons of carbon dioxide equivalent) = Macau total electricity generation × 0.608 kg/kWh (Power discharge coefficient: 0.608 kg/kWh is the emission factor announced by Companhia de Electricidade de Macau S.A. in 2023)

Note 2: Greenhouse Gas Emission Reduction in Taiwan (metric tons of carbon dioxide equivalent) = Taiwan total electricity generation × 0.494 kg/kWh (Power discharge coefficient: 0.494 kg/kWh is the emission factor announced by the Energy Bureau, Ministry of Economic Affairs in 2023).

4 Waste used for power generation accounted for 98.88% of the total incoming waste, the difference may be due to the effect of evaporation of water on the surface of the waste in the storage pits or the size of the storage pits.

5 According to Taiwan Power Company (Taipower), the average household electricity consumption from January 2024 to December 2024 was 3,699 kilowatt-hours (kWh) per household.

6 According to Companhia de Electricidade de Macau, the average monthly electricity consumption per household is 463 kilowatt-hours (kWh). Therefore, the average annual electricity consumption per household is approximately 5,554 kilowatt-hours (kWh).

■ Solar Photovoltaics

Solar photovoltaics is one of the world's most important clean energy sources and one of the key development projects of the National Development Council's "12 Key Strategies Toward National Net Zero." ECOVE actively focuses on the development, investment, construction and operation of solar power systems. By the end of 2024, the cumulative developed capacity both domestically and internationally is approximately 164 MW. The Company has collaborated with key partners such as the Taiwan High Speed Rail, Kaohsiung Metro, Taipei Metro, Taichung Metro, Port of Kaohsiung, and Tainan City Government to complete multiple project installations, ensuring a stable supply of renewable energy.

Cumulative Achievements of Solar Photovoltaics

ECOVE has cumulatively established solar power generation, utilizing diverse methods of electricity generation to provide stable renewable energy, thereby contributing to net-zero emissions and sustainable development.

Ground-mounted site: 40 MWp
Rooftop site: 63 MWp
Floating site: 5 MWp

Total installed capacity:
108 MWp (116 sites)

Furthermore, with the integration of renewable energy generation into the power grid, Taiwan Power Company has launched a power auxiliary service market to address its volatility and promote the development of energy storage systems. ECOVE has currently established a 5 MW energy storage project, providing Taiwan Power Company with ancillary services to assist in the stable operation of the power grid.

With the amendments to the Electricity Act and the Renewable Energy Development Act, Taiwan has fully opened up direct supply, transfer, and sales transactions for renewable energy, providing enterprises with more options for green electricity procurement. ECOVE has long been deeply engaged in the solar energy sector in Taiwan and officially entered the green electricity trading market in 2021, assisting enterprises in achieving their carbon neutrality and net-zero emission goals. As of the end of 2024, nine green electricity supply contracts have been signed, and efforts to expand collaboration opportunities continue, providing enterprises with the highest quality green energy solutions.

Ground-mounted/Lumberton Photovoltaic Power Plant, New Jersey, USA/9.5 MWp



Rooftop type/Taichung Metro Beitun Depot/2.9 MWp



Floating/High-Speed Rail Wurih detention basin/0.3 MWp



Total power generation of ECOVE and its subsidiaries (including Lumberton) in each year

	2021	2022	2023	2024
Total solar power generation (MWh)	80,337	113,916	123,212	121,546
Total transfer supply solar power (MWh)	0	241	12,857	14,332
Environmental carbon reduction performance	Reduction of CO ₂ e (metric tons)			
	40,892	56,389	60,990	60,044
	Equivalent to 1 year of CO ₂ absorption in Daan Park	105	145	157
			157	155

Note : The CO₂e reduction coefficients are based on those published by Bureau of Energy, MOEA 0.509 (2021), 0.495 (2022), 0.495 (2023), and 0.494 (2024) kg CO₂e/kWh.

Recycling

In an environment with limited resources, ECOVE firmly believes that the circular economy is the key to sustainable operations. Through innovative design, flexible business models, and enhanced resource efficiency, we aim to reduce pollution and waste at the source, creating maximum value with minimal resources. ECOVE is actively promoting the value-added processing of waste materials. For instance, the waste isopropyl alcohol (IPA) produced from the concentration and purification process is being transformed into industrial-grade products for reintroduction into the market. Additionally, wastewater treatment technologies are being utilized to convert wastewater into reclaimed water, which is supplied for industrial cooling or irrigation purposes. These practical actions not only enhance the efficiency of resource utilization but also successfully transform waste into economically valuable resources, achieving a win-win situation for both environmental and economic benefits.

Wastewater Treatment and Reclaimed Water

The core operations of ECOVE in the water resource sector encompass three main categories: wastewater treatment, river restoration, and water resource regeneration. We integrate various technologies, including primary treatment, secondary treatment, advanced treatment, and ecological engineering methods, to precisely remove pollutants from water. Furthermore, we aim to achieve the recovery and reuse of water resources, providing comprehensive solutions for the sustainable development of the water environment.

To ensure that the effluent quality from the wastewater treatment plant meets standards and is transparent, we have established an automatic continuous monitoring system within the plant. This system monitors the effluent water quality trends around the clock and provides relevant data in real-time for inquiry by regulatory authorities and the public, demonstrating ECOVE's professionalism and responsibility in water resource management.

■ Wastewater Treatment

The current operational site for wastewater treatment is Linkou Water Resources Plant. The treatment process consists of pretreatment and primary treatment to remove garbage and suspended solids from the water, followed by secondary biological treatment to tame microorganisms to remove water-soluble contaminants, and then simple tertiary treatment to produce recycled water for internal/external use. The commercial operation of the Zhongli BOT sewer system is expected to begin on January 1, 2025.

In 2024, the total volume of wastewater treated reached 26,275,867 cubic meters. According to the estimation criteria set forth by the Ministry of the Interior's "Technical Specifications for the Design of Sewage Treatment Facilities" (225 liters of sewage per person per day), the efforts and achievements of ECOVE in sewage treatment and water resource reuse are equivalent to serving 116.78 million person-days, which corresponds to processing nearly 4.99 days' worth of sewage generated by the entire population of Taiwan.

IPA Recovery and Carbon Reduction

ECOVE's subsidiary, ECOVE Solvent Recycling Corp., focuses on the high value-added recycling of waste resources. The technology of recycling is extended to apply to the waste Isopropyl Alcohol (IPA) produced by the semiconductor industry, which is then concentrated and purified to be converted into an industrial-grade product that can be re-sold to the market, thus effectively re-utilizing the resources. In 2024, the processing of approximately 14,913 metric tons of waste isopropyl alcohol equates to a reduction of 10,990 metric tons of carbon dioxide emissions.

IPA Treatment by ECOVE Solvent Recycling Corp.

	2021	2022	2023	2024
Total weight of solvent waste processed (metric tons/year)	Approximately 11,096	Approximately 14,710	Approximately 15,885	Approximately 14,913
Reduction in CO ₂ emissions (metric tons/year)	8,177	10,841	11,707	10,990
Recycled product volume (metric tons/year)	1,462	3,122	4,073	3,883
Carbon reduction efficiency of recycled product (metric tons/year)	1,158	2,436	4,337	4,007

Note 1: Reference data is sourced from the Ministry of the Environment's Environmental Resource Database - Carbon Footprint Emission Factors. According to this data, incinerating 1 ton of waste, such as waste isopropyl alcohol, in Tainan Science Park incineration plant results in the emission of 737 kgCO₂e.

Note 2: The carbon footprint of the native IPA product is 1.5 kg CO₂e/kg.

Wastewater treatment capacity (cubic meter/year)

Linkou Water Resources Plant			
Designed treatment capacity: 23,000 cubic meters per day			
2021	2022	2023	2024
9,668,768	10,428,963	9,310,030	9,693,752



■River Restoration

In terms of river restoration, we are responsible for the operation of the New Taipei City Gravel Contact Oxidation Treatment and the Zhonggang Water Resource Center. We are committed to improving water quality by allowing wastewater to flow through underground gravel areas while aerating to supply oxygen. This process enables microorganisms to attach to the gravel, forming a biofilm that decomposes pollutants and effectively enhances water quality. In addition, the ground facilities combine an ecological park and observation corridors, serving the functions of ecological conservation, recreation, and environmental education. This not only improves the water environment but also provides the public with opportunities to connect with nature and learn about the water resource cycle.



Annual treatment volume for river regulation (cubic meter/year)

New Taipei City Gravel Contact Oxidation Treatment and Water Resource Center				
2021	2022	2023	2024	
17,628,881	14,652,124	15,468,568	15,633,142	



Zhonggang Water Resource Center				
2021	2022	2023	2024	
579,576	707,845	967,659	948,973	



■Water Reclamation

In the field of water reclamation, we are actively establishing operations, including TSMC Southern Taiwan Science Park Wastewater Reclamation Plant and Linkou Water Resources Plant. Through advanced technology, we convert wastewater into reusable water sources, effectively enhancing the efficiency of water resource circulation.

The TSMC Southern Taiwan Science Park Wastewater Reclamation Plant utilizes advanced membrane filtration methods to remove contaminants from water. It employs technologies developed by the Industrial Technology Research Institute, including Biological New Environmental Technology (BioNET), anaerobic fluidized bed (AFB), and fluidized bed crystallizer (FBC), to conduct in-depth treatment of specific pollutants such as boron and nitrogen, ensuring that the water quality meets the standards required for high-tech manufacturing processes. The reclaimed water produced by the plant is consolidated at Yongkang Water Resources Recycling Center and Anping Water Resources Recycling Center, supplying 67,000 cubic meters daily to the high-tech industry. The cumulative production of reclaimed water reached 19,812,203 cubic meters, equivalent to the daily water consumption of 69.032 million people, continuously enhancing the efficiency of water resource utilization.

Reclaimed Water Production (Cubic Meter/Year)

Plant Type	2021	2022	2023	2024
TSMC Southern Taiwan Science Park Wastewater Reclamation Plant and Linkou Water Resources Plant	51,199	41,091	13,702,057	19,812,203

Note: TSMC Southern Taiwan Science Park Wastewater Reclamation Plant was completed and officially began operations in September 2022.

Environmental Management Performance

GRI 302, 303, 306 ; SASB IF-WM-110b.1, 120a.1, 000.D

Energy and Resource Conservation

■ Operational Headquarters

The main sources of carbon emissions from ECOVE's operational headquarters are office electricity consumption and fuel consumption of official vehicles. The headquarters office building is a Diamond-class intelligent building. Carbon reduction is carried out through energy-saving promotion, adjusting the air-conditioning temperature of the computer room, reducing the amount of lighting in ineffective lighting areas, and adjusting the intelligent energy-saving time slots. With 2022 as the base year for carbon emissions from the operating headquarters, the plan is to achieve net-zero carbon emissions from the headquarters by 2030, with a short-term target of a 20% reduction in Scope 1 and Scope 2 carbon emissions by 2024, and a mid-term target of a 40% reduction by 2026.

In 2024, the total electricity consumption of the headquarters building is approximately 261,300 kWh, with an Energy Use Intensity (EUI) of 107.25 kWh per square meter and an emission intensity of 0.867 metric tons of CO₂e per person. The increase in electricity consumption is attributed to the aging of data storage equipment and a significant volume of data processing, which has led to higher energy usage. By late 2024, energy-efficient equipment has been gradually replaced, and by the end of 2024, electricity consumption has returned to previous levels. The primary reason for the reduction in per capita carbon emissions compared to 2022 is the use of green electricity.

Currently, ECOVE's company vehicles have fully adopted hybrid vehicles, and there are plans to gradually replace them with electric vehicles to reduce carbon emissions and pollution. In 2024, 63,000 kWh of green electricity was utilized, achieving a 20% reduction in overall greenhouse gas emissions compared to the base year (with an actual reduction of 20.5%). It is anticipated that by 2026, the use of green electricity will be increased to 40% of total electricity consumption, and by 2030, the headquarters will fully utilize green electricity. In addition, ECOVE also responds to the government's green office initiatives by implementing five major indicators and 35 measures, including energy resource conservation, waste reduction at the source, green procurement, environmental greening, and advocacy and promotion. ECOVE has adopted 30 of these measures, demonstrating its commitment to making a positive impact on the environment.

	2022	2023	2024		2024 Target		2025 Target		2030 Target	
			Gray Electricity	Green Electricity	Gray Electricity	Green Electricity	Gray Electricity	Green Electricity	Gray Electricity	Green Electricity
Total Electricity Consumption (10,000 kWh/year)	24.17	25.00	19.83	6.3	20	5	16.7	7.8	0	25.6
EUI (kWh/square meter)	99.17	102.58	107.25		102.58		100.71		92.33	
Per Capita Carbon Emissions (metric tons CO ₂ e/person)	1.21	1.06	0.867		0.874		0.680		0	



Waste Collection and Transportation

ECOVE Waste Management Corp. focuses on waste transportation and management, optimizing transportation routes and introducing environmentally friendly vehicles to reduce fuel consumption and carbon emissions. In 2024, the average fuel consumption reached 150.7 kiloliters per 500,000 kilometers, a decrease of approximately 10% compared to the base year of 2022. The carbon dioxide emission intensity (total carbon emissions in Scope 1 and Scope 2) was 403.471 metric tons CO₂e, a decrease of approximately 11.3%.

To further reduce carbon emissions, ECOVE Waste Management Corp. has established short-, medium-, and long-term carbon reduction plans, using 2022 as the base year. The targets are to reduce emission intensity by 15% by 2026, by 30% by 2030, and to achieve net-zero emissions by 2050. In the short term, the waste collection vehicles will be replaced with the latest environmentally friendly models, and the garbage compaction vehicles will gradually be converted to hybrid power, with an expected reduction in fuel consumption of over 20% per vehicle.

Furthermore, by optimizing delivery routes and implementing a paperless dispatch system, we can further reduce pollution and resource consumption. Since 2022, the primary vehicles used for waste collection have been Stage 6 vehicles. By the end of 2024, the proportion of Stage 5 vehicles or higher has reached 89.6%, continuously enhancing the environmental efficiency of waste collection operations.

Environmental Performance of Environmentally Friendly Vehicles for ECOVE Waste Management Corp.

	Unit	2021	2022	2023	2024
Fleet size of waste removal vehicles	Number of vehicles	24	25	26	29
Diesel consumption of operating vehicles	Liter/year	283,576	298,391	312,040	344,419
Kilometers driven	Kilometer/year	842,458	891,785	960,546	1,142,633
Average unit fuel consumption	Kiloliter/500,000 kilometers	168.30	167.30	162.43	150.71
Total fuel consumption of all vehicles (GJ)	GJ	10,464	11,011	11,514	12,709
Carbon dioxide emission intensity	Metric ton CO ₂ e/500,000 kilometers	-	454.86	435.01	403.44

Note 1. Total fuel consumption of all vehicles (gigajoules): Diesel usage (in liters)*3,690 (joules/liter).

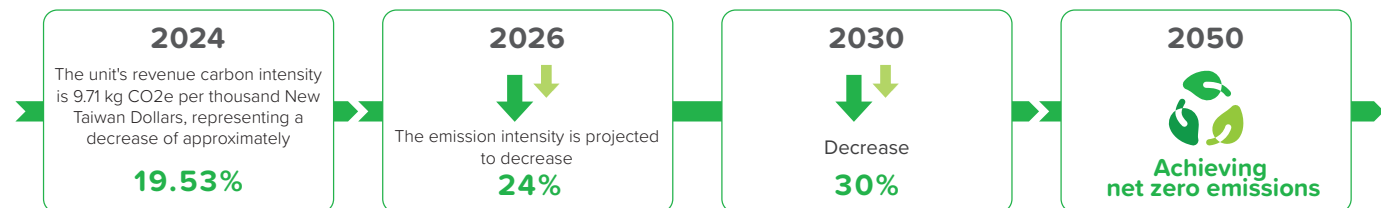
Note 2. Average fuel consumption per unit: Diesel usage of operating vehicles (in liters)/Operating distance traveled (in kilometers) * 500,000 kilometers.

Note 3. Carbon dioxide emission intensity: Total carbon emissions/Total distance traveled (in kilometers) * 500,000 kilometers.

Recycling

ECOVE Solvent Recycling Corp. continues to promote energy-saving and carbon reduction measures. In 2024, the cooling water tower was updated, resulting in a reduction of 4.1 tons of carbon emissions annually. Additionally, variable frequency drives were installed to further decrease energy consumption, leading to an additional annual reduction of 3.9 tons of carbon emissions. In addition, the electric boiler has been replaced with a once-through boiler in the third quarter, enhancing energy utilization efficiency.

Using 2022 as the base year, the carbon emission intensity of ECOVE Solvent Recycling Corp.'s unit revenue is 12.07 kilograms of CO₂e per thousand New Taiwan Dollars, and a carbon reduction target has been established:



In 2024, the proportion of green electricity usage reached 8.8%. In the short term, we will continue to reduce carbon intensity through process optimization while enhancing energy efficiency to achieve sustainable development goals.

Waste Incineration

ECOVE actively introduces the green technologies of the Group to continuously improve energy efficiency and resource conservation in its operational energy from waste plants. In 2024, a total of 26 energy/resource-saving initiatives were implemented, including the replacement of energy-saving lamps for the plant's interior lighting, the installation of inverters for large-scale wind turbines, the replacement of air condenser fans with FRP material, the renewal of chilled-water machines and improvement of furnace beds, the application of heat pumps, and the conversion of soot blowers to vibration wave ash cleaning, among other things. As a result of these energy-saving measures, a total of 5,953 metric tons of carbon dioxide equivalent were reduced in 2024.

2024 Implementation Plan

Electricity Conservation and Increase in Electricity Generation (kWh)

A total of 19 items with annual electricity saving of about 11.985 million kWh.

Fuel Conservation (kL)

A total of 2 items with an annual diesel saving of about 9.34 kiloliters.

Water Conservation (metric tons)

A total of 5 items with an annual water saving of about 39,000 cubic meters.

Water Consumption

■ Operational Headquarters

ECOVE's headquarters building relies 100% on tap water as its water source and does not draw water from any other bodies of water. All wastewater is discharged into the sewage system. In addition to extensively using automatic sensor faucets to reduce water consumption, ECOVE also controls the water flow and timing to conserve water. They have also created various water-saving slogans to remind employees to save water at all times. Rainwater harvesting systems have been installed on the rooftop of the building and at construction sites to collect rainwater for irrigation of plants or for use during construction activities. The total water consumption in 2024 was 1,786.3 cubic meters. The water use intensity was 15.807 cubic meters per person. The primary reason for the increase in water consumption is the heightened usage of the training center on the eighth floor, which has led to a slight rise in per-unit water usage. Efforts to promote water conservation will be strengthened.

Item	2022	2023	2024		2025 Target
			Execution Status	Target	
Water consumption (cubic meters/year)	1,381.6	1,768.3	1,786.3	1,768.3	1738.0
Water use intensity (cubic meters/person)	13.55	15.11	15.81	15.11	15.11

■ Waste Incineration

All 9 large-scale energy-from-waste plants and 2 small-scale incineration plants operated by ECOVE Environment Service Corp., a subsidiary of ECOVE, source 100% of their water from the municipal water supply. This water is primarily used for the production of boiler feedwater or the generation of soft water for process purposes. Various types of wastewaters, including process wastewater, vehicle washing wastewater, and employee domestic wastewater, are collected and treated in the on-site wastewater treatment system to meet design standards. After treatment, the water is introduced into an internal recycling system, such as for waste gas cooling, to achieve the goal of water usage reduction. By switching to a dry acid removal system at the Taoyuan and Gangshan plants after the renovation and improvement, it is expected to contribute 0.04 metric tons of water per ton of waste, thus achieving the goal of water conservation.

Total Water Consumption in Each Plant

	2021	2022	2023	2024	2024 Target	2025 Target
Water consumption (metric tons)	1,700,844	1,719,979	1,595,511	1,761,221	-	-
Unit wastewater consumption (metric tons/ton of waste)	0.84	0.83	0.83	0.81	0.83	0.82

Note: The sources of tap water usage come from the Keelung, Southern Taoyuan, Biomass Energy, Miaoli, Houli, Wuri, Xizhou, Tainan, Gangshan, Taohang, and Nanke plants, calculated using data from the Taiwan Water Corporation's water bill.

Groundwater Withdrawal (metric tons)

	2021	2022	2023	2024
Wurih plant	72,257	1,232	76,884	3,472

Note: Groundwater is used as a supplemental source of water when Taichung's water supply is insufficient. The amount of groundwater withdrawn is subject to the influence of weather and cannot be predicted.

Starting from 2022, Southern Taoyuan Plant has implemented a pilot project for fly ash water-washing service. The water source for cleaning is tap water, and each ton of fly ash requires 3 tons of water. After treatment, the waste water meets the discharge standards of the Zhongli Industrial Park and is discharged into the industrial park's sewer system.

■ Recycling

ECOVE Solvent Recycling Corp.'s operational water is primarily used for cooling systems, and the water source is 100% from the public water supply. Therefore, there are no significant impacts on water sources.

Total Water Consumption of ECOVE Solvent Recycling Corp.

Year	2021	2022	2023	2024	2024 Target	2025 Target
Water consumption (metric tons/year)	4,257	8,256	8,840	10,965	10,000	10,000
Water usage intensity (tons/IPA product)	2.15	2.65	2.17	2.82	-	-

Waste

■ Operational Headquarters

The general waste disposal method for the headquarters building is incineration, which generated 3.38 metric tons in 2024. Recycling management is implemented for paper, metal, plastic, and food waste. Through recycling management, reduction of general waste is made possible. In 2024, the management of recycling for paper containers (including lunch boxes, beverage cups, etc.) was further enhanced.

	2022	2023	2024	2024 Target	2025 Target
Waste production (metric tons/year)	3.3	3.5	3.4	3.5	3.4
Per capita waste production (kg/person)	3.24	29.7	29.9	29.7	29.7

■ Waste Incineration

In 2024, the 9 large-scale energy-from-waste plants and 2 small-scale incineration plants operated and managed by ECOVE ESC generated 296,333 metric tons of bottom slag, or an average of 136.25 kilograms of bottom slag per ton of waste treated; and 69,909 metric tons of fly ash, or an average of 32.14 kilograms of fly ash per ton of waste treated. The bottom slag is sampled and tested in accordance with the regulations to confirm compliance with the bottom slag reuse management method, and then transported to the bottom slag reuse site or temporary storage plant, with an average reuse rate of 97.20% in 2024; the fly ash is stabilized and then packaged in bags, or sent to the melting and reuse and washing for reuse, and the stabilized material is sampled and tested before being sent to qualified landfill sites for sanitary landfill, so that no methane fugitive emissions will occur during the landfill process. A total of 15,381 metric tons of fly ash was sent for reuse in 2024, increasing the reuse rate from 5.65% in 2022 to 22.00%.

The Gangshan Plant has installed a bottom slag sorting system to recover and reuse the metals in the bottom slag to further reduce the amount of bottom slag, and the Southern Taoyuan and Gangshan Plants have begun to adopt a new dry deacidification system, so that fly ash production can be further reduced.

Taiwan's current large-scale energy-from-waste plants⁷ do not receive hazardous waste, and the bottom slag and fly ash stabilizers are considered to be general utility waste according to the hazardous waste identification standards. Each plant is required by law and contract to test the frequency of compliance with the standards before final landfill disposal, and legal landfills must be equipped with an impermeable layer to isolate the natural body of water and an independent wastewater collection and treatment system, and there has not been any need to assist in the improvement of the landfill for substances released.

⁷ A waste incineration plant that has a designed daily processing capacity of over 300 metric tons and is owned, managed, or supervised by the municipal or county (city) competent authority or executing agency.

Bottom Slag and Fly Ash Generation Volume from Incinerators

Item	Unit	2022	2023	2024
Bottom slag	Total amount generated (metric tons)	276,210	262,623	296,333
	Average amount produced per one ton of waste treated (kg)	133.46	137.38	136.25
	Bottom slag reuse rate (%)	-	93.54	97.20
Fly ash	Total amount generated (metric tons)	64,064	57,264	69,909
	Average amount produced per one ton of waste treated (kg)	30.95	29.96	32.14
	Fly ash reuse rate (%)	5.65%	16.64	22.00

Note: In 2024, the statistics include the addition of two small-scale incineration plants for the measurement of bottom slag and fly ash quantities. The generation of bottom ash is influenced by the composition of the waste, while the quantity of fly ash is affected by the amount of chemical agents used for controlling air pollutants in the flue gas after incineration. Therefore, the production of bottom slag and fly ash at energy-from-waste plants may vary slightly from year to year.

■ Recycling

The main source of waste from the wastewater treatment plant is sludge, and the amount of waste in the last four years is shown in the table below:

TSMC Southern Taiwan Science Park Wastewater Reclamation Plant and Linkou Water Resources Plant

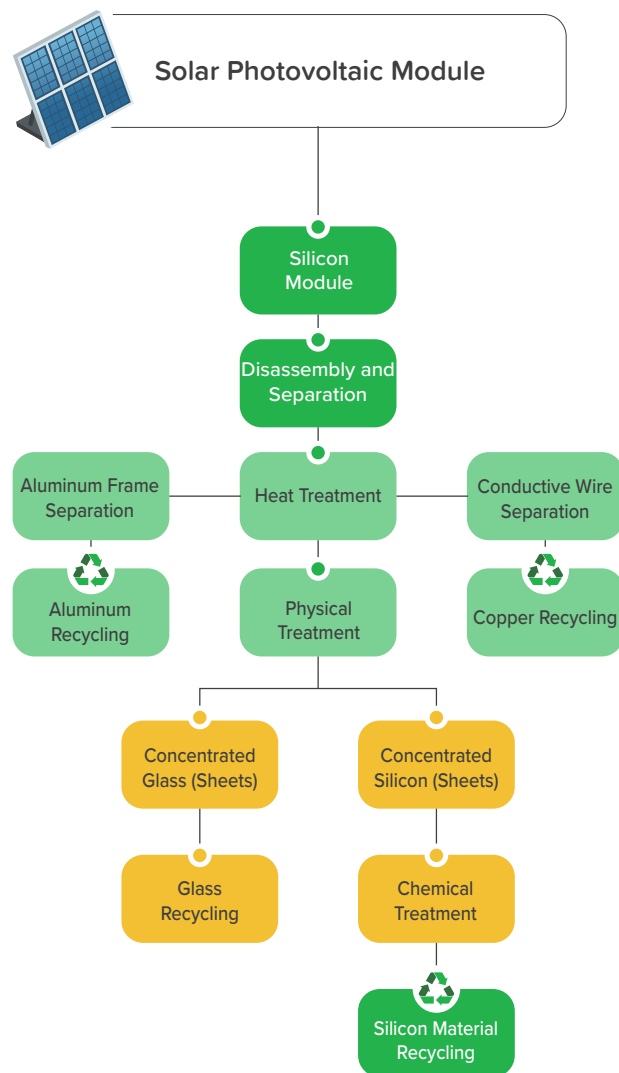
Item	Year	2021	2022	2023	2024
Waste (metric tons)		654.77	813.59	3,524.63	2,590.91

■ Solar Photovoltaics

Solar panels mainly consist of modules, brackets, inverters, junction boxes, cables, and other electrical equipment. According to the "Regulations on the Installation and Management of Renewable Energy Power Generation Equipment," Article 17 states that solar panel installers are required to pay module recycling fees. These fees are collected by the Ministry of Environment to establish a module recycling mechanism for proper management of retired photovoltaic modules. ECOVE complies with the relevant regulations regarding the disposal of retired photovoltaic modules. The current disposal method involves centralized storage of retired solar panels and registering their serial numbers for module material tracking. When the recycling quantity specified by the Ministry of Environment is reached, waste solar panel transportation companies are commissioned to handle the disposal in accordance with regulations, ensuring that the recycling of discarded modules is compliant and environmentally friendly.

Item	Year	2021	2022	2023	2024
Temporary stock of waste solar panels (metric tons)		1.1	0.8	0.1	0.3

→ Solar Photovoltaic Module Disposal Process



Pollution Control

■ Waste Incineration

In order to effectively control the emission of air pollutants, ECOVE Environment Service Corp. has set up a continuous emission monitoring system (CEMS) to monitor seven items, including exhaust gas flow rate, oxygen content, sulfur oxides (SOx), nitrogen oxides (NOx), hydrogen chloride (HCl), carbon monoxide (CO), and opacity, which are continuously monitored 24 hours a day and uploaded real-time to the website of the Ministry of Environment⁸ to ensure transparency. Currently, the monitoring data of the 9 large energy-from-waste plants and two small-scale incineration plants operated by ECOVE Environment Service Corp. can be queried through an online system.

In addition, regular on-site inspections are conducted on a monthly or quarterly basis to assess various parameters including sulfur oxides, nitrogen oxides, particulate matter, heavy metals, and dioxins to ensure that emissions comply with environmental regulations. The Ministry of Environment imposes air pollution fees on fixed sources of pollution, including sulfur oxides, nitrogen oxides, volatile organic compounds (VOCs), particulate matter, heavy metals, and dioxins. Among these, nitrogen oxides (NOx) have higher emission levels and are classified as key performance indicators (KPIs) for management. Taking 2022 as the base year, the nitrogen oxide emission intensity of ECOVE Environment Service Corp. was 0.93 kilograms per metric ton of waste. Through enhanced pollution control measures, this intensity has further decreased to 0.81 kilograms per metric ton of waste in 2024, thereby continuously improving air quality and fulfilling environmental sustainability objectives.

Item	Pollutant Emission Intensity (kilograms per metric ton of waste)						
	2021	2022	2023	2024	Goals for 2024	Goals for 2025	Goals for 2030
Nitrogen oxides	0.96	0.93	0.92	0.81	0.84	0.83	0.75
Sulfur oxides	0.06	0.07	0.08	0.07	-	-	-
Volatile organic compounds (VOCs)	0.02	0.02	0.02	0.06	-	-	-
Particulate matters	0.02	0.03	0.02	0.02	-	-	-
Dioxin	6.21E-08	4.55E-08	8.32E-08	9.20E-08	-	-	-
Mercury (Hg)	5.57E-06	4.52E-06	9.75E-06	1.54E-05	-	-	-
Cadmium (Cd)	2.86E-06	3.29E-06	5.24E-06	4.32E-06	-	-	-
Lead (Pb)	2.76E-05	3.20E-05	6.97E-05	5.43E-05	-	-	-

Note: Pollutant emissions from each plant are based on the amount of air pollution charges reported by each plant. The biogas plants for volatile organic compounds will establish their own coefficients following the adoption of the announced coefficients. The increase in dioxins and mercury is attributed to the rise in the calorific value of waste.

8 https://swims.epa.gov.tw/swims/swims_net/Statistics/Statistics_Month.aspx



ISO 14001 Environmental
Management System



Water quality analysis

■ Recycling

ECOVE SRC has also introduced an environmental management system (ISO 14001) to regularly monitor the emission pipeline, and changed the fuel used for the original boiler from heavy oil to natural gas to reduce the emission of air pollutants; however, due to the increase in the amount of recycling volume year by year, the amount of natural gas used has also increased.

	2021	2022	2023	2024	Goals for 2024	Goals for 2025
NOx emissions (kg/year)	443.06	733.02	837.68	801.34	921.40	810
Sulfur oxide emissions (kg/year)	0	0	0	0	0	0
Volatile organic compounds emissions (kg/year)	1,113.44	1,213.54	1,473.15	1,651.38	1,632.2	1,650
Particulate matter emissions (kg/year)	13	23.61	25.60	24.01	28.2	24.15

Wastewater treatment/waste water reclamation plant laboratory provides accurate water quality data, but it requires a longer analysis time, making it difficult to reflect changes in water quality in real-time. To improve real-time monitoring capability, the plant is equipped with an automatic continuous monitoring system. This system utilizes automated analyzers to provide rapid but less precise water quality data; however, it makes real-time data of discharged water quality trends readily available and enables operational units to quickly respond and adapt to the trends in discharged water quality. It also serves as a reference for regulatory authorities and the general public.

Through water quality analysis and automated continuous monitoring, in 2024, 100% of the wastewater discharges from all wastewater plants complied with the standards for discharges or industrial zones, ensuring that water quality complies with regulatory requirements and maintaining environmental safety.

■ Achievement of Water Quality Standards for Discharged Water from Various Water Treatment Plants

	2021		2022		2023		2024	
	BOD	SS	BOD	SS	BOD	SS	BOD	SS
Linkou Water Resources Center	100%	100%	100%	100%	100%	100%	100%	100%
New Taipei City Gravel Contact Oxidation Treatment and Water Resource Center	100%	100%	100%	100%	100%	100%	100%	100%
Zhonggang Water Resource Center	100%	100%	100%	100%	100%	100%	100%	100%
TSMC Reclaimed Water Plant at Southern Taiwan Science Park	-	-	-	-	100%	100%	100%	100%

Biodiversity GRI 304

Biodiversity Commitment

The stability of the human living environment is significantly influenced by biodiversity, and the maintenance of biodiversity is key to achieving sustainable development. Whether it is the raw materials required for business operations or the necessities of daily life such as food, clothing, housing, and transportation, all rely on natural resources. However, with the accelerated development of society, natural resources are being rapidly consumed, which impacts the balance of ecosystems.

ECOVE recognizes the importance of biodiversity for climate stability and sustainable development. Therefore, we have formulated the "Biodiversity and Zero Logging Policy Commitment" to demonstrate our responsibility towards ecological conservation. By collaborating with upstream and downstream partners and stakeholders, we will expand our influence and commit to creating a stable and healthy ecological environment, contributing to sustainability for future generations. We commit to and implement the following actions:

01

The products or services provided must align with zero deforestation goals, and operational locations and value chain activities should avoid biodiversity hotspots as defined by national or international standards.

02

If existing operational sites cover any part of biodiversity hotspots, we commit to proposing strategies for avoidance, mitigation, restoration, and compensation to minimize the impact on these areas.

03

Regularly monitor the ecological environment surrounding operational sites and assess the impact.

04

Implement biodiversity risk assessment, including self-owned sites and neighboring areas, as well as upstream and downstream activities.

05

Support for biodiversity conservation activities or initiatives.

06

Engage in discussions with upstream and downstream value chains, stakeholders, and partners to collaboratively achieve the aforementioned commitments.



ESG 生物多样性与零伐木政策承诺

ECOVE Biodiversity and Zero Deforestation Policy Commitments

ESG 生物多样性及淨零排放以減緩氣候變遷造成的全球暖化，也深知自然生態保護的重要性。針對生物多样性訂定 2030 年目標營運據點達到無淨損失及符合零毀林標準；2050 年目標營運據點達到淨 E 向影響及價值鏈達到無淨損失與符合零毀林標準。我們承諾：

ECOVE implements energy-saving and Net Zero to mitigate global warming caused by climate change, also know the importance of natural ecological protection. ECOVE has set targets for biodiversity conservation. By 2030, our operational sites aim to achieve No Net Loss (NNL) and adhere to Zero Deforestation standards. By 2050, our operational sites strive to achieve Net Positive Impact (NPI), while our value chain aims for No Net Loss and compliance with Zero Deforestation standards. We commit to:

- 1. 所提供的產品或服務需符合零毀林標準，營運據點避開生物多样性熱區。
- 2. 既有的營運據點鄰近範圍如有觸及生物多样性熱區，承諾提出避免、減輕、恢復及補償的策略，以降低對該區域的影響。
- 3. 定期監測營運據點周圍的生態環境及評估影響。
- 4. 實施生物多样性風險鑑別，包括自有據點與鄰近地區、上游及下游活動。
- 5. 支持生物多样性保育活動或倡議。
- 6. 與上、下游價值鏈以及利害關係人溝通，合作達成上述的承諾。
- 7. Provide products or services that comply with Zero Deforestation standards and avoiding biodiversity hotspots in our operational sites.
- 8. For existing operational sites that encompass biodiversity hotspots, we commit to implementing strategies of avoidance, mitigation, restoration, and compensation to reduce the impact on those areas.
- 9. Regularly monitor the ecological environment surrounding operational sites and assess their impact.
- 10. Implementing biodiversity risk identification, including own operations, adjacent areas to own operations, upstream activities, and downstream activities.
- 11. Support biodiversity conservation activities or initiatives.
- 12. Engage with upstream and downstream value chains and stakeholders to achieve the



Ecological and Environment Protection Strategies and Planning

The Environmental Protection Unit under the Sustainable Development Committee of ECOVE is responsible for the strategic planning and implementation of the nature and biodiversity strategy, covering the headquarters building and all operational sites in Taiwan. Establish short-term, medium-term, and long-term goals for biodiversity conservation. The medium-term goal is to achieve No Net Loss (NNL) and Zero Deforestation in its operation sites by 2030. The long-term goal is to achieve Net Positive Impact (NPI) and No Net Loss and Zero Deforestation in its value chain in its operation sites by 2050.

Ecological Environment Protection Target Planning

– 2023

- Suggest avoidance and mitigation measures
- Reduce the impact of unavoidable shocks by taking restoration measures
- Compensate for unrecoverable impacts (e.g., restoration of the environment)

– 2025

- Completion of the inclusion of biodiversity and zero-deforestation related policies in the Code of Conduct

– 2030

- Achievement of NNL for biodiversity at operation sites
- Zero-deforestation monitoring at the operation sites

– 2050

- Achievement of NPI at operation sites
- NNL in value chain
- Compliance with Zero Deforestation Standards in value chain

Note 1: NNL is a zero change in total ecosystem species at the point of operation using restoration.

Note 2: NPI is the amount of change in the total number of organisms in the operation that is positive by means of restoration and compensation.

Natural-Related Risks and Opportunities

In order to gain a better understanding of the boundaries between organizational operations and nature-related risks and opportunities, ECOVE adheres to the framework of the Task Force on Nature-related Financial Disclosures (TNFD). Utilizing the LEAP methodology, the Company systematically assesses and discloses nature-related risks and opportunities.

→ The process is introduced as follows

Confirm the assessment scope

filter out operational sites near ecologically sensitive areas and biodiversity hotspots, and conduct preliminary environmental dependency and impact identification to ensure that the assessment scope encompasses important regions.

Locate

Evaluation

Conduct a thorough analysis of environmental dependencies and impacts.

For the selected sites, assess their reliance on natural resources (such as water sources and raw materials) and their environmental impacts (such as carbon emissions and land use changes), resulting in a matrix.

LEAP

Prepare

Assess

Identification of risks and opportunities

Based on the materiality of reliance and impact assessment results, identify key issues and incorporate them into the risk management mechanism, while continuously tracking business opportunities.

Develop strategies

to address significant risks and opportunities and formulate specific management strategies and action plans to mitigate negative impacts and seize potential business opportunities.



Analysis of Ecologically Sensitive Areas and Hot Spots

To comprehensively understand the ecological environment surrounding operational sites and to confirm the interactions between the Company's business activities and the ecosystem, thereby facilitating effective ecological conservation and sustainable management, ECOVE utilizes the Taiwan Biodiversity Network (TBN) from the Council of Agriculture, Executive Yuan, as well as the World Database on Protected Areas (WDPA) to identify biologically sensitive areas and biodiversity hotspots across all operational sites. The identification results are as follows: Keelung Incineration Plant is partly located in a biodiversity hotspot, while Miaoli Incineration Plant and Tainan Incineration Plant are adjacent to ecologically sensitive areas and are also situated within a biodiversity conservation corridor.

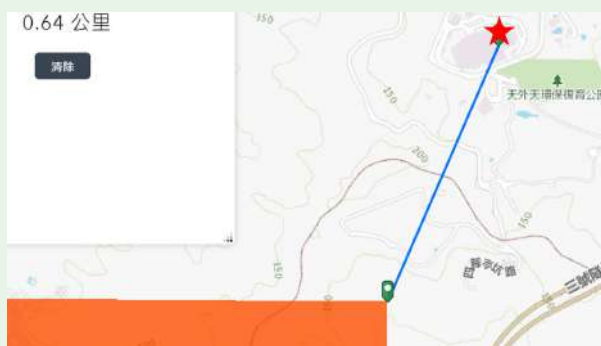
Bases of operation	Proximity to sensitive areas (within 2 kilometers)	Biodiversity hotspot (within 2 kilometers)	CR	EN	VU	NT
ECOVE Miaoli Energy Corp. (Miaoli EfW Plant)	Coastal Wetland Conservation Axis in Taoyuan, Hsinchu, and Miaoli, Important Wildlife Habitat for Chinese White Dolphins	No	1	3	2	6
Tainan EfW Plant	Wetland Conservation Axis along the Coast of Jiannan, Black-faced Spoonbill Reserve, Cigu Important Wildfowl Habitat	No	0	8	32	1
Keelung EfW Plant	No	Accessible (0.64km)	0	1	21	0

Note 1: The Miaoli EfW plant is located near the habitat of the Chinese White Dolphin, but there is no wastewater discharge during the operation process, which has no negative environmental impacts, please refer to the following figure.

Note 2: The Tainan EfW plant is located near the Black-faced Spoonbill Reserve and the Cigu Important Wildfowl Habitat, but there is no wastewater discharge during the operation process, which has no negative environmental impacts, please refer to the following figure.

Note 3: Since the rooftop and parking lot solar farms are located in existing buildings, they are not included in this analysis.

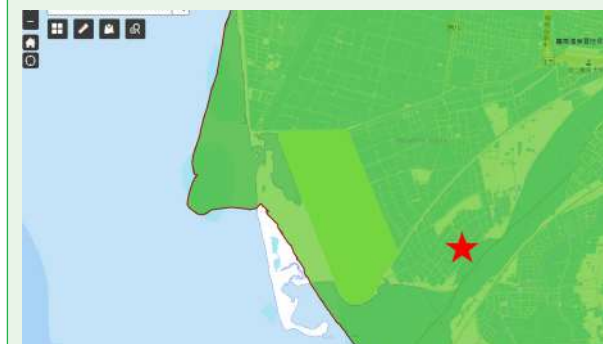
Keelung EfW Plant Analysis Chart



ECOVE Miaoli Energy Corp. (Miaoli EfW Plant) Analysis Chart



Tainan EfW Plant Analysis Chart



Note 1: The red star indicates the location of the plant.

Note 2: The orange area represents the biodiversity hotspot.

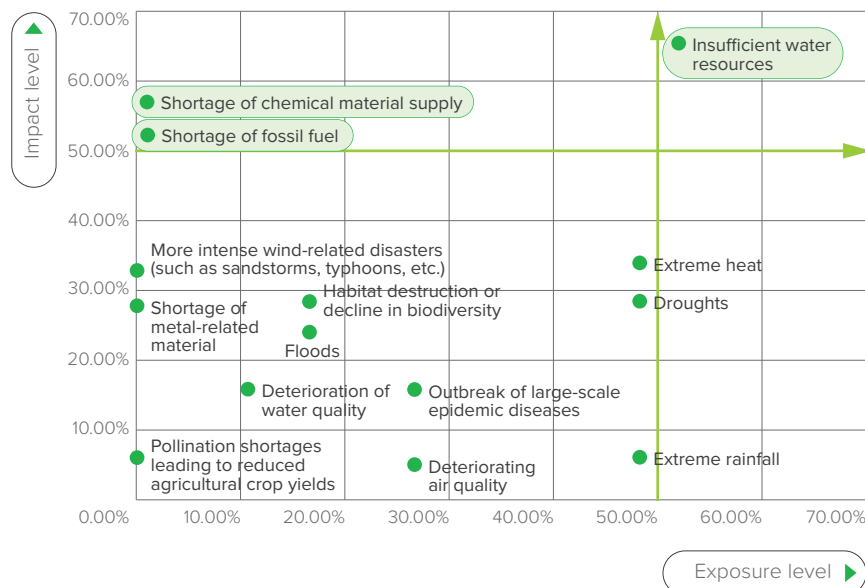
Note 3: The green area represents the ecologically sensitive zone.

Analysis of the Natural Ecosystem Dependency of Operational Locations

This risk identification operation is based on a survey form as the primary tool, combined with in-depth interviews and discussions with colleagues from the operational units, ultimately resulting in the formation of a risk issue matrix for systematic analysis. This method aids in comprehensively understanding the risk issues that require heightened attention during operations.

The analysis results indicate a high-exposure issue—water resource scarcity—that may have a direct impact on operational efficiency and the work environment for employees. Additionally, two potential high-risk issues have been identified: "shortage of fossil fuel supply" and "shortage of chemical material supply," which pose potential challenges to supply chain stability and production continuity. In response to the aforementioned risks, we return to the operational level to establish a risk management mechanism, which includes continuous monitoring, contingency planning, and resource allocation, in order to mitigate potential impacts. Meanwhile, we are also strengthening our risk tracking and early warning mechanisms to ensure that we can quickly adjust our operational strategies in the face of future challenges, thereby maintaining stable operations and achieving sustainable development goals.

→ Matrix Analysis of Operational Locations Dependency



Risk Summary of Operational Locations Dependency

Dependency Items	Details of Risk	Risk Event	Financial Impact	Management Strategies
Insufficient water resources	Operational sites rely on water resources as a crucial raw material; any water shortages or restrictions will impact the operational processes.	Insufficient water supply causing the incineration system's load shedding	A reduction of 1% in production is approximately NT\$110,000 per day	- Develop backup water supply pipelines; - Deploy water trucks when necessary; - Process improvement to reduce the demand for cooling water usage.
Shortage of chemical material supply	The shortage of chemical materials, such as quicklime and urea, has impacted the Company	Price increase: Potential impact on operating costs	A 10% increase in price is expected to affect the gross profit by approximately NT\$100,000 per factory annually	- Diverse supplier strategy: Establish partnerships with multiple suppliers to reduce reliance on a single source, thereby enhancing supply stability. - Explore other alternative chemicals, such as ammonia water to substitute urea - Establish a safety stock by reserving critical chemicals based on demand forecasts to address short-term supply fluctuations.
Shortage of fossil fuel	The shortage of fossil fuel supply, such as diesel, has impacted the Company	Price increase: Potential impact on operating costs	A 10% increase in price is expected to affect the gross profit by approximately NT\$300,000 per factory annually	- Enhance system reliability and reduce fuel consumption during unplanned downtime - Implement shockwave cleaning ashes to reduce the frequency of scheduled annual maintenance

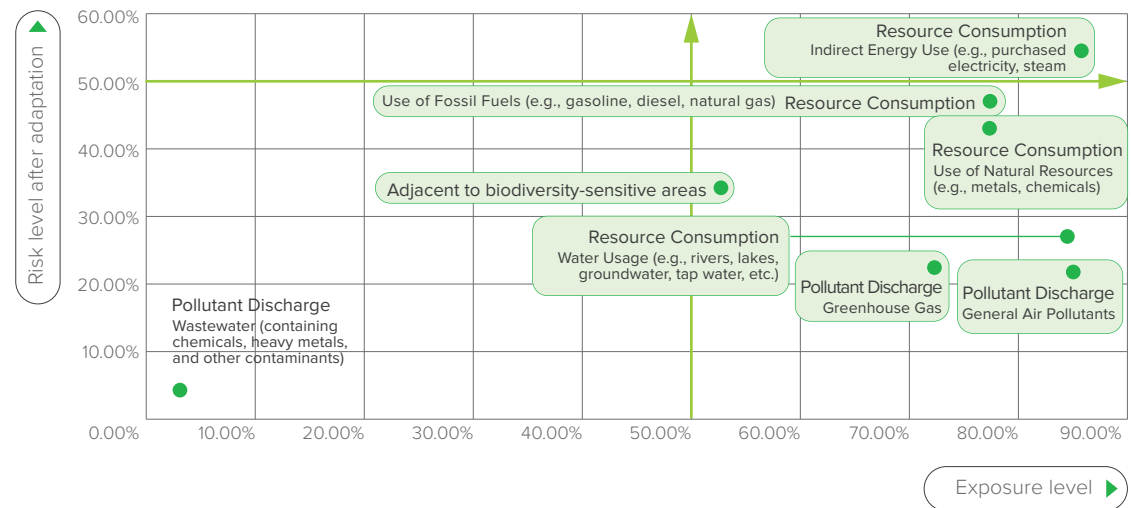
Opportunity Summary of Operational Locations Dependency

Dependency Items	Details of Opportunity	Financial Impact	Management Strategies
Insufficient water resources	Process improvements to reduce water usage and consumption Development of low water consumption processes	A reduction of 1% in production is approximately NT\$80,000 per day	Establish water usage targets
Shortage of chemical material supply	Optimize processes to enhance the efficiency of existing chemicals, obtain patents, and increase the competitiveness of BOT and ROT projects.	Enhance resource efficiency and reduce the impact of using chemical agents	Continuously develop competitive processes and apply for patent protection
Shortage of fossil fuel	Introduce biomass fuels and seize opportunities in low-carbon fuel	Increase corporate competitiveness	Regularly track and test the effectiveness to evaluate the implementation timeline, and timely adjust strategies to respond to new challenges and opportunities.

Analysis of the Natural Ecosystem Impact of Operational Locations

After identifying operational dependencies and potential risks, we conducted a systematic analysis using the same matrix to assess the potential impacts of business operations on the environment. The results indicate six high-exposure issues, including: emissions of air pollutants, water resource usage, direct use of fossil fuels, use of chemical resources, greenhouse gas emissions, and proximity to biodiversity-sensitive areas. These environmental impacts are not only related to resource availability and ecological balance but are also closely tied to the company's regulatory compliance and social responsibility. Furthermore, the use of indirect energy remains a high-risk issue even after adjustments. The carbon emissions from indirect energy and the proportion of renewable energy will directly impact the carbon footprint and carbon reduction targets during the operational process. Therefore, in response to this issue, we will continue to strengthen our energy management and low-carbon transformation strategies to reduce environmental impact while enhancing the operational resilience and sustainable competitiveness of the enterprise.

→ Matrix Analysis of Operational Locations Impact



Risk Summary of Operational Locations Impact

Impact Items	Details of Risk	Impact on the Natural Environment	Financial Impact	Management Strategies
Air pollutant emissions	Air pollutants generated during operations	- Deterioration of air quality: Impact on the health of nearby residents, increasing the risk of respiratory diseases. - Formation of acid rain: Sulfur dioxide (SO₂) and nitrogen oxides (NO_x) enter the atmosphere and react with water molecules, leading to the acidification of soil and water sources. This phenomenon adversely affects agriculture and ecosystems. - Ecological damage: Nitrogen oxides and ozone contribute to the formation of photochemical smog, which affects living organisms and plants.	Failure to comply with regulations may result in penalties under environmental laws	Establish management targets for the reduction of air pollutant emissions, decreasing year by year
Usage of water resources	Water resources, fossil fuels, chemical agents, and indirect energy serve as important inputs for production	Excessive extraction of water resources may reduce the levels of rivers, lakes, and groundwater, thereby impacting the water cycle of the local ecosystem	If there is a shortage of water resources or the government strengthens water resource management, businesses may have to pay higher water extraction fees, resulting in increased production costs	Establish water usage targets
Direct use of fossil fuels		- Increase in carbon emissions: The direct combustion of fossil fuels produces a substantial amount of CO₂, which contributes to global warming and extreme weather events. - The extraction and transportation processes may lead to ecological destruction; for instance, the extraction of oil and coal can damage forest and grassland ecosystems.	Under the climate scenario of Net Zero Emissions (NZE), if carbon fees are imposed, annual expenditures are expected to increase by less than NT\$1.2 million.	- Introduction of biomass fuel - Enhance system reliability and reduce fuel consumption during unplanned downtime - Implement shockwave cleaning ashes to reduce the frequency of scheduled annual maintenance

Impact Items	Details of Risk	Impact on the Natural Environment	Financial Impact	Management Strategies
Usage of chemical resources	Water resources, fossil fuels, chemical agents, and indirect energy serve as important inputs for production	The excavation and transportation processes may lead to ecological damage	Suppliers are required to absorb additional environmental maintenance costs, leading to a cost pass-through. A price increase of 10% is anticipated to affect gross profit by approximately NT\$100,000 per factory annually	Improve the manufacturing process to reduce the use of chemical agents
Indirect energy		The use of traditional coal-fired methods to produce indirect energy will increase greenhouse gas emissions	If greenhouse gas emissions increase, carbon fee expenditures will rise	Development of energy conservation and carbon reduction strategies
Greenhouse gas emissions	Greenhouse gas generated during operations	- Rising global greenhouse gas concentrations - Intensified capacity for global warming - Changes in global average temperature - Global sea level rise - Increased frequency of extreme weather events	Under the climate scenario of Net Zero Emissions (NZE), if carbon fees are imposed, annual expenditures are expected to increase by less than NT\$1.2 million.	- Develop greenhouse gas reduction strategies - Establish carbon reduction targets
Adjacent to biodiversity sensitive areas	Operational activities may impact local biodiversity	Proximity to important conservation corridors may result in operational activities causing noise and other anthropogenic disturbances, potentially altering wildlife behavior patterns and subsequently affecting the overall stability of the ecosystem.	If operations lead to ecological damage, additional costs may be incurred for habitat restoration and vegetation rehabilitation.	- Establish management values for exhaust emissions that exceed regulatory standards to reduce environmental impact. - Promote the resource utilization of ash to reduce the environmental burden. - During the operational period, enhance equipment maintenance and noise source management to reduce machinery operating sounds, thereby preventing noise interference with surrounding wildlife. - Considering the proximity of the Miaoli plant to the habitat of Purple crow butterfly tulliolus butterfly, regular biological monitoring and documentation will be conducted to understand the ecological changes surrounding the plant area. This information will serve as a basis for operational adjustments, ensuring the implementation of eco-friendly management practices.

Opportunity Summary of Operational Locations Impact

Impact Items	Opportunity Category	Financial Impact	Management Strategies
Usage of water resources	The government plans to establish a wide network of waste water reclamation plants and seawater desalination plants, leveraging the dual advantages of CTCI (ECOVE's parent company) and ECOVE, to actively pursue opportunities for the establishment of these water facilities.	The potential market opportunity is approximately NT\$150 billion.	1. Actively develop green technology 2. Improve processes to reduce energy resource consumption and greenhouse gas emissions
Direct use of fossil fuels			
Indirect energy			
Greenhouse gas emissions	Actively develop carbon reduction technologies and provide low-carbon services	Enhance goodwill, reduce operational costs, and increase market opportunities	
Adjacent to biodiversity sensitive areas	Collaborate with conservation organizations to promote environmental education and ecological protection	Enhancement of goodwill	Integrating environmental education resources to incorporate biodiversity education content and implement habitat conservation actions

Biodiversity Project I Lifelong Conservation Plan for the Purple Crow Butterfly

Protecting the Purple Crow Butterfly

● A Precious Asset of Biodiversity

The purple crow butterfly belongs to the family of Nymphalidae and is one of the most representative butterflies in East Asia and Southeast Asia. Its wings are deep brown or black, and due to their unique structure, they can refract light, displaying a dazzling iridescent blue and purple color. This is also the origin of the name "purple crow butterfly." However, what is most striking about the purple crow butterfly is not only its appearance but also its large-scale migratory behavior in Taiwan.

Every winter, before the arrival of the season, the purple crow butterfly population migrates from northern Taiwan to the south, gathering in specific valleys or forests to escape the cold weather. This large-scale seasonal migration behavior is extremely rare and, alongside the Monarch Butterfly of Mexico, represents one of only two butterfly species in the entire world that engage in such extensive migration. This phenomenon makes the Purple Butterfly Valley in Taiwan a world-class attraction that draws global attention.

Butterflies play a crucial role in the ecosystem, not only as pollinators that assist in plant reproduction but also as an important component of the food chain, influencing ecological balance. Due to their extreme sensitivity to environmental changes, butterflies are regarded as important indicators of ecological health. However, due to habitat destruction, pesticide use, and the impacts of climate change, the population of the purple crow butterfly has significantly declined in recent years, drawing attention from various sectors of society.

The Actions of ECOVE

● Protecting the Sustainable Future of the Purple Crow Butterfly through Actions

ECOVE is committed to ecological conservation and actively implements biodiversity management strategies. The Zhunan Wetlands adjacent to the ECOVE Miaoli EfW Plant is one of the most important breeding grounds for the Purple crow butterfly tulliolus butterfly. Additionally, several operational sites from Keelung to Chiayi coincide significantly with the migratory pathways of the purple crow butterfly. This realization deepens our awareness of our responsibilities and obligations in protecting biodiversity. In collaboration with Taiwan Purplecrow Butterfly Ecological Preservation Association, ECOVE is committed to maintaining their habitats and creating a friendly living environment for these beautiful purple fairies.



- 1 Invite the client to join us in protecting the purple crow butterflies.
- 2 The EfW plant has established a special area for environmental education on the purple crow butterfly, promoting ecological knowledge about the purple crow butterfly to the public
- 3 ECOVE has held a workshop to train colleagues to become seed teachers and ecological guides for the purple crow butterfly

Purple Crow Butterfly Conservation Plan

The promotion of the Purple Crow Butterfly Conservation Program encompasses three major aspects: habitat creation, environmental education, and the promotion of corporate culture:

● Establishing a habitat friendly to purple crow butterflies

Establishment of butterfly rest stations: Pilot programs for purple crow butterfly rest stations will be implemented at existing locations, providing supplies and a resting environment during their migration, thereby reducing survival pressures caused by environmental changes. Based on the butterfly periods of the purple crow butterfly in the northern, central, southern, and eastern regions, as well as the local climatic conditions, we have collaborated with the Taiwan purple crow butterfly Ecological Preservation Association to develop a reference guide for friendly planting. This guide is intended to provide companies with reference points for site selection and construction design.

● Promoting environmental education and knowledge dissemination

Purple crow butterfly environmental education zone: An environmental education zone for the purple crow butterfly will be established at a location near the butterfly pathway. Environmental education programs will be designed, and seed teacher workshops will be held to train staff to become guides to promote knowledge of the ecology of purple crow butterfly to the general public.

ESG digital platform knowledge sharing: ECOVE has integrated environmental education materials on the purple crow butterfly and established a dedicated section for the purple crow butterfly on the corporate ESG official website, providing the latest conservation information and knowledge to expand its influence.

● Corporate culture and public promotion

Development of cultural and creative products: Incorporating the characteristics of the purple crow butterfly, we designed LINE stickers, commemorative coasters, eco-friendly stickers, and educational cards to enhance public awareness and understanding of the purple crow butterfly.

Sustainability report and corporate image design: Integrating the imagery of the purple crow butterfly into the corporate brand, showcasing the conservation concept of the purple crow butterfly on the cover of the Sustainability Report and various promotional materials, while continuously promoting the value of biodiversity in corporate activities and promotional items.

● Collaborating with the Taiwan Purple Crow Butterfly Ecological Preservation Association to enhance conservation efforts

Habitat health survey: The Zhunan Bao'an Forest adjacent to the Miaoli EfW Plant serves as the largest breeding ground for the purple crow butterfly tulliolus butterfly. The Miaoli Plant will conduct regular terrestrial plant ecological surveys to assess the health status of the habitat's vegetation and will provide the data to the Taiwan purple crow butterfly Ecological Preservation Association for reference.

Training and assistance for volunteer tagging of purple crow butterflies: Actively cooperating with the Taiwan purple crow butterfly Ecological Preservation Association to implement tagging operations, utilizing scientific monitoring to understand the migration paths and population changes of the purple crow butterflies.

Design and guidance of purple crow butterfly-friendly vegetation: Based on the butterfly periods of the purple crow butterfly in the northern, central, southern, and eastern regions, as well as the local climatic conditions, we have collaborated with the Taiwan purple crow butterfly Ecological Preservation Association to develop a reference guide for friendly planting. This guide is intended to provide companies with reference points for site selection and construction design.

Taiwan is renowned as the "kingdom of butterflies," and the purple crow butterfly is one of the most representative migratory butterflies of this land. Through the conservation efforts for the purple crow butterfly, ECOVE not only fulfills its commitment to biodiversity but also

4



6



- 4 Designing LINE stickers and commemorative coasters that incorporate the characteristics of the purple crow butterfly
- 5 Colleagues assisted in the execution of the purple crow butterfly tagging operation at Maolin
- 6 Colleagues assisted in conducting an ecological survey of the purple crow butterfly at Miaoli Plant.

demonstrates its responsibility towards sustainable environmental development. In the future, we will continue to deepen our conservation programs by integrating engineering expertise with environmental management experience. We will collaborate with various sectors of society to jointly protect the habitat of the purple crow butterfly, allowing these beautiful purple wings to gracefully flutter for generations, witnessing the possibility of harmonious coexistence between business and nature.

一輩紫的守護：ECOVE 崑崙 X 紫斑蝶貼圖小百科

	每到冬天，喜愛溫暖氣候的紫斑蝶，就會南遷至蝶谷避冬，台灣的紫蝶幽谷是全球唯二大規模越冬型蝴蝶谷之一，是世界級的生態景觀！
	春天來臨，紫斑蝶便啟程由南至北返回繁殖地，途中飛越高速公路護網，彼此鼓勵前行。
	就像紫斑蝶那閃耀的幻色翅膀一樣漂亮，這張貼圖是 ECOVE 送給你的讚美！
	大自然中有許多紫斑蝶的蜜源植物，就讓可愛的紫斑蝶跟你/妳一起在生活中享受美食吧！
	圓翅紫斑蝶，2 面翅膀都有斑點 辨識口訣：圓翅 2 面點， 讓我們伸出 2 隻手指頭，一起比個耶！
	小紫斑蝶，僅 1 面翅膀有斑點 辨識口訣：小紫點 1 面， 大聲喊出「+1」，和 ECOVE 一起守護紫斑蝶！
	斯氏紫斑蝶，翅膀上有 3 個斑點 辨識口訣：斯氏有 3 面點， 像 OK 手勢一樣，伸出 3 個手指頭比個 OK，守護環境，交給我們沒問題！
	端紫斑蝶，翅膀上有亂亂的斑點 辨識口訣：端紫亂亂點， 如果覺得腦袋有點小混亂也別擔心，整理一下就能記住這些紫斑蝶的特徵！

Most Reliable

Renovation of Old Factory Achieved Remarkable Results and Received Recognition from the Ministry of the Environment.

Since July 2017, the subsidiary ECOVE Environment Services Corp. (under ECOVE) has been responsible for the operations and maintenance of the Gangshan plant. The plant has faced challenges due to limited incineration capacity and excessive inflow of raw waste, resulting in frequent overflow of the waste storage pit. After taking over the contract, ECOVE Environment Services Corp. conducted a comprehensive review of all systems and identified two key factors that significantly impact incineration processing efficiency: poor incineration efficiency of the furnace bed and leaks in the exhaust gas system. Regarding the issues with the furnace bed, the team prioritized the organization of the air box, removing internal dust accumulation to ensure smooth primary air delivery and provide sufficient combustion air. For the exhaust gas system, the team repaired the flue gas leakage points and replaced the filter bags to reduce differential pressure and enhance exhaust gas filtration efficiency. In November 2021, ECOVE Environment Services Corp. officially undertook the Gangshan ROT project and initiated a comprehensive equipment and system improvement plan, primarily covering the following four key areas:

I. Equipment replacement and system upgrade

Replacement of outdated equipment, including bag-type dust collectors, Distributed Control Systems (DCS), steam turbine Programmable Logic Controllers (PLC), garbage hoist rail tracks, and hoist PLCs. The renewal of the DCS, gas turbines, and crane PLC not only ensure a reliable supply of spare parts in the future but also enhance system stability. Additionally, the renewal of the crane tracks reduces abnormal conditions and improves equipment reliability.

II. Enhancing operational efficiency

To enhance incineration efficiency, modifications were made including the lowering of the drying section grate, the replacement of high-alloy coated furnace tubes, and the replacement of the ACC fan blades with Fiber Reinforced Plastic (FRP) blades. The lowering of the furnace bed effectively reduces the slagging condition of the furnace wall. The high-alloy coated furnace tubes enhance waste heat absorption, thereby increasing steam production. Additionally, the lightweight FRP fan blades reduce the load and decrease power consumption. Additionally, the installation of variable frequency control systems for the primary and secondary air fans has replaced the fixed operation mode, resulting in a reduction of current from an average of 92A to 27A, achieving an energy savings of 70%.

III. Reduction of air pollutant emissions

To reduce pollutant emissions, catalytic filter bags and a Selective Catalytic Reduction (SCR) system have been introduced, and sodium bicarbonate is now used as the acid removal agent. Sodium bicarbonate exhibits a higher reaction temperature for deacidification. When used in conjunction with catalytic filter bags, it effectively reduces the concentration of nitrogen oxides (NOx) emissions, further decreasing pollutant discharge and complying with environmental protection standards, thereby being environmentally friendly.

IV. Recycling and reuse of energy resources

In line with the principles of a circular economy, we are promoting the recycling of bottom slag metals, the application of waste heat recovery boilers, and the use of regenerative variable frequency drives for cranes. The bottom ash is processed through magnetic separation and eddy current technology to recover metal resources. The recovery of residual heat from flue gas generates steam, which serves as a thermal source for the process, replacing the steam extracted from the turbine. The crane grab energy recovery technology converts previously consumed electrical energy into reusable energy. These measures reflect the principles of resource recycling and sustainable management.

V. Results and outlook

Following a series of equipment improvements and system optimizations, the operational performance in 2024 has significantly improved compared to 2023. The unexpected downtime has been reduced by 422 hours, the average incineration volume has increased by 23%, and the amount of bottom ash metal recovered has reached 1,715 tons. In the future, ECOVE Environment Services Corp. will continue to deepen technological upgrades and environmental innovations to enhance operational efficiency, while implementing resource recycling and sustainable development, thereby contributing greater value to environmental protection.



1 Calcium oxide is replaced by sodium bicarbonate as the deacidification agent



2 Replacement of ACC fans with Fiberglass Reinforced Plastic (FRP) blades and other modifications



Social co-prosperity

We are committed to investing resources in each year toward long-term advocacy for a friendly workplace, a safety and healthy work environment, and to carry out environmental protection education, so that ECOVE's values are not limited to industry net worth.

- 91 Talent Caring
- 108 Safe and Healthy Workplace
- 120 Social Participation
- 131 Most Reliable

Performance Highlights

Occupational Safety and Health Administration Sustainability Report Evaluation

- Outstanding and New Model Enterprise for Leading Healthy and Sustainable Workforce Initiatives

Excellent Workplace Safety and Health Unit

- ECOVE Solvent Recycling Corp., Tainan EfW Plant, Nanke EfW Plant, Houli EfW Plant, Gangshan EfW plant

Safety and Health Family Performance Award

- Excellent Performance Award - Tainan EfW Plant

Blood Dioxin Tracking Test for Employees

- continuous for 20 years (all five test results show lower dioxin concentration compared to the general population in Taiwan, indicating a stable trend)

Retention Rate of New Employees

- 89.1%

Volunteer Hours

- 3,952 hours

Five Environmental Education Facilities Receiving Certification from the Ministry of Environment

- Keelung EfW Plant, Miaoli EfW Plant, Houli EfW Plant, Tainan EfW Plant, and Nanke EfW Plant

Environmental Education Visits

- 182 sessions and 6,082 participants

Step by Step: Factories for Sustainable Environmental Education

- 22 events and 1,221 participants

Talent Caring GRI 2-7, 2-8, 202, 402, 404, 405

ECOVE is committed to creating a happy and friendly working environment, providing comprehensive support and care for our employees. Through holistic talent development and professional training programs, we empower our colleagues to continuously enhance their careers. We integrate individual career planning with the company's long-term strategic goals to cultivate a team with core competitiveness, enabling every employee to realize their full potential on the ECOVE platform.

We firmly believe that employee growth and corporate prosperity go hand in hand. Therefore, we actively foster a workplace culture that inspires potential, encourages collaboration and innovation. Every member of ECOVE is a partner on the path to a sustainable and brighter future.

Talent Attraction and Retention

Employee Composition and Distribution

As a company focused on the circular economy, ECOVE recognizes that professional talent is the key driver of sustainable development. Thus, we actively invest in talent recruitment and training. As of 2024, ECOVE employed 937 staff members (excluding overseas employees and board members), along with 115 non-employee workers including long-term contractors for security (36), cleaning (69), and landscaping services (10) (excluding overseas contractors).

Given the nature of our operations, the majority of our employees are male, accounting for 77.4% of the workforce, with 96.6% being full-time employees, reflecting our stable employment model. Notably, all employees are local talent from Taiwan, demonstrating our commitment to supporting local economic development and job creation. In 2024, ECOVE employed 16 persons with disabilities, surpassing the legal requirements in Taiwan, showcasing our firm commitment to a fair, inclusive, and friendly workplace.

ECOVE Employee Number of Employees and Gender Distribution

Year		2021		2022		2023		2024	
Employment Type	Gender	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)	Number of Employees	Percentage (%)
Full-Time	Male	707	79.3	693	77.8	708	76.0	704	75.1
	Female	166	18.6	183	20.5	202	21.7	201	21.5
Contract/ Temporary*	Male	12	1.3	11	1.2	15	1.6	21	2.2
	Female	6	0.7	4	0.5	6	0.6	11	1.2
Total		891	100	891	100	931	100	937	100

Year		2021		2022		2023		2024	
Age Group	Gender	Number of Employees	% of Total	Number of Employees	% of Total	Number of Employees	% of Total	Number of Employees	% of Total
≤30	Male	62	7.0	80	9.0	80	8.6	95	10.1
	Female	20	2.2	29	3.3	340	4.2	32	3.4
31–50	Male	472	53.0	456	51.2	471	50.6	456	48.7
	Female	128	14.4	132	14.8	138	14.8	145	15.5
>50	Male	185	20.8	168	18.9	172	18.5	174	18.6
	Female	24	2.7	26	2.9	31	3.3	35	3.7

Note: *1: Contract/Temporary includes contract-based and dispatched workers.

Note: *2: All ECOVE employees are full-time employees.

Category		2023						2024					
		♂ Male	Percentage (%)	♀ Female	Percentage (%)	Subtotal	Percentage (%)	♂ Male	Percentage (%)	♀ Female	Percentage (%)	Subtotal	Percentage (%)
Age Group	≤30	87	68.50	40	31.50	127	13.64	95	74.80	32	25.20	127	13.55
	30-50	475	77.36	139	22.64	614	65.95	455	75.71	146	24.29	601	64.14
	>50	161	84.74	29	15.26	190	20.41	174	83.25	35	16.75	209	22.31
Non-Management	Engineering	123	82.55	26	17.45	149	16.00	116	78.91	31	21.09	147	15.69
	Specialist	7	6.36	103	93.64	110	11.82	6	5.50	103	94.50	109	11.63
	Technical	485	87.39	70	12.61	555	59.61	479	87.09	71	12.91	550	58.70
Management	Executive	7	100.00	0	0.00	7	0.75	4	100.00	0	0.00	4	0.43
	Middle Manager	21	75.00	7	25.00	28	3.01	39	86.67	6	13.33	45	4.80
	Frontline Manager	80	97.56	2	2.44	82	8.81	81	98.78	1	1.22	82	8.75
Contract Type	Permanent	708	77.80	202	22.20	910	97.74	704	77.79	201	22.21	905	96.58
	Contract	15	78.95	4	21.05	19	2.04	21	70.00	9	30.00	30	3.20
	Dispatched	0	0.00	2	100.00	2	0.21	0	0.00	2	100.00	2	0.21
Work Location	Taiwan	715	77.46	208	22.54	923	99.14	717	77.10	213	22.90	930	99.25
	Overseas	8	100.00	0	0.00	8	0.86	7	100.00	0	0.00	7	0.75
STEM-related jobs	STEM employees	176	18.90	33	3.54	209	22.45	181	19.32	37	3.95	218	23.27
	STEM employees	547	58.75	175	18.80	722	77.55	543	57.95	176	18.78	719	76.73

Note 1. Management include supervisors and above.

Note 2. Non-Management include Engineering (professional engineers), Technical (site operation technicians), and Others (e.g., finance, accounting, legal, auditing, HR, administration, and logistics).

Note 3. STEM: This includes the Executive Management Office, Operation Department 1, Operation Department 2, Business Development Division, Technology Development Division, Marketing & Sales Department, Waste Disposal Management Department, Operations Management Office, QA Department, SHM Department, Procurement Center, IT Department, Audit Department, and other related departments. The job categories cover engineering positions (including both managerial and non-managerial roles), in addition to staff from the Finance and Accounting Departments.

■ Inclusive Employment Practices

ECOVE is committed to promoting diversity, inclusion, and social responsibility by creating an equitable and friendly workplace. In addition to full compliance with labor regulations, these practices are embedded as strategic goals within the company's Sustainable Development Committee, and have been consistently achieved for multiple consecutive years.

All of ECOVE's primary operations are based in Taiwan, and 100% of our executive leadership are local residents. Furthermore, the company has exceeded legal requirements for hiring Indigenous peoples and persons with disabilities, affirming our dedication to equal employment and social integration.

		2022				2023				2024			
		Legally Required Number of Employees	Actual Number of Employees	Surplus/Deficit	Hiring Ratio (%)	Legally Required Number of Employees	Actual Number of Employees	Surplus/Deficit	Hiring Ratio (%)	Legally Required Number of Employees	Actual Number of Employees	Surplus/Deficit	Hiring Ratio (%)
Indigenous	Excl. foreign labor	7	8	Surplus of 1	1.04	8	11	Surplus of 3	1.36	8	12	Surplus of 4	1.28
Persons with Disabilities	Excl. foreign labor; severely disabled counted as two persons	7	18	Surplus of 11	2.34	8	18	Surplus of 10	2.22	8	22	Surplus of 14	2.53
Employee Nationality	(Excluding ROC Nationals)	3 countries Vietnam, Malaysia, Indonesia				1 country Vietnam				None			

New Hires and Departures

In 2024, ECOVE hired 128 new employees, accounting for 13.7% of the total workforce. The majority of new hires were within the 31–50 age group. The number of departures was 69, representing 7.36% of all employees, which aligns with the 2024 turnover rate target (5–8%) set in 2021. Additionally, three employees met retirement qualifications and chose to retire voluntarily.

ECOVE attaches great importance to talent sustainability. The Sustainable Development Committee has set a new hire retention rate target of 85%. In 2024, the company achieved a retention rate of 89.1%. Through comprehensive training, employee care, mentor programs, and new employee satisfaction surveys, we continuously improve retention and satisfaction, ensuring the mutual growth of the company and its employees, and the realization of sustainable management.

	% of Total Employees	% in Management
Indigenous	1.28%	8.33%
Persons with Disabilities	1.71	6.25%

Age and Gender Distribution of New Hires (Past 4 Years)

Year		2021		2022		2023		2024	
Age Group	Gender	New Hires	% of Total Employees	New Hires	% of Total Employees	New Hires	% of Total Employees	New Hires	% of Total Employees
≤30	Male	31	3.5	47	5.3	49	5.3	44	4.7
	Female	9	1.0	17	1.9	21	2.3	7	0.7
31–50	Male	79	8.9	75	8.4	85	9.1	53	5.7
	Female	22	2.5	28	3.1	24	2.6	13	1.4
>50	Male	22	2.5	14	1.6	20	2.1	10	1.1
	Female	2	0.2	0	0.0	3	0.3	1	0.1
Total New Hires & % of Employees		165	18.5	181	20.3	202	21.7	128	13.7
Average Recruitment Cost per Person (NTD)		12,067							

Age and Gender Distribution of Employee Departures (Past 4 Years)

Year		2021		2022		2023		2024	
Age Group	Gender	Departures	% of Total Employees	Departures	% of Total Employees	Departures	% of Total Employees	Departures	% of Total Employees
≤30	Male	8	0.9	9	1.0	8	0.9	6	0.6
	Female	4	0.4	2	0.2	2	0.2	4	0.4
31–50	Male	39	4.4	33	3.7	39	4.2	34	3.6
	Female	5	0.6	10	1.1	9	1.0	8	0.9
>50	Male	15	1.7	10	1.1	11	1.2	17	1.8
	Female	0	0.0	0	0.0	2	0.2	0	0.0
Total Departures & % of Employees		71	8.0	64	7.2	71	7.6	69	7.36

		2023		2024	
		Population	% of Population	Population	% of Population
Gender	Male	58	6.23	57	6.08
	Female	13	1.40	12	1.28
Age	≤30	10	1.07	10	1.07
	31–50	48	5.16	42	4.48
	>50	13	1.40	17	1.81
Management	Executive	0	0.00	1	0.11
	Middle Manager	4	0.43	2	0.21
	Frontline Manager	5	0.54	3	0.32
Non-Management	Engineering	19	2.04	6	0.64
	Specialist	8	0.86	7	0.75
	Technical	35	3.76	50	5.34
Nationality	Taiwan	71	7.63	69	7.36
	Overseas	0	0.00	0	0.00
Full-time Employee	Voluntary Turnover Rate	7.63%		6.94%	
	Involuntary Turnover Rate	0.00%		0.43% ^{Note}	
	Dismissal for Poor Performance	0.00%		0.00%	
	Total Turnover Rate	7.63%		7.36%	
Contract and Dispatched Worker Turnover		0.00%		0.00%	

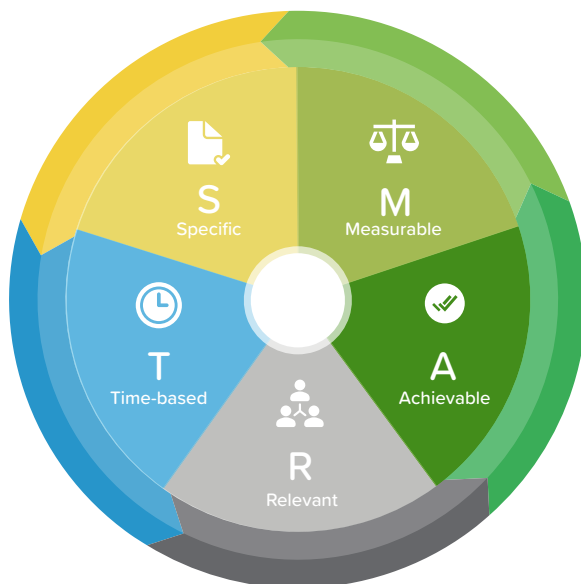
Note: In 2024, there were 3 retirements and 1 death, all categorized as involuntary departures.

Promotion and Compensation

ECOVE is dedicated to providing fair and competitive compensation policies to attract, retain, and motivate outstanding talent. An annual performance appraisal is conducted every September for all employees who have passed their probationary period; new employees still on probation are evaluated at the end of their probation period through a dedicated assessment. Salary adjustments and bonus payments are primarily based on individual performance, job responsibilities, and future development potential. We are committed to ensuring that adjustments and bonus standards are not influenced by employment type, gender, or age.

In addition, the company has established a performance improvement counseling mechanism. For employees whose work performance requires improvement, the department supervisor and the employee jointly develop a specific counseling plan lasting three months. This plan follows the SMART principles (Specific, Measurable, Achievable, Relevant, and Time-based), outlining clear improvement actions, completion timelines, and evaluation criteria. During the counseling period, supervisors regularly review progress, document results, and provide timely feedback and suggestions to ensure the plan is effectively implemented and objectives are met.

→ Performance Improvement Counseling Mechanism Principles



ECOVE actively participates in market salary surveys to ensure the provision of competitive total compensation and continuously safeguard the quality of life for employees. In 2024, at ECOVE's primary operating base in Taiwan, the minimum monthly salary for female entry-level employees was 1.04 times the statutory minimum wage, and 1.08 times for male entry-level employees. Each year, the company conducts a comprehensive salary review and adjustment based on market survey results and employees' competencies and performance. Furthermore, salary adjustments are made in line with the "Living Wage" assessment results, ensuring that employee compensation is not only competitive in the market but also meets their basic living needs.

The core objective of ECOVE's living wage policy is to ensure that employees and their families can maintain a reasonable standard of living in areas such as food, clothing, housing, transportation, education, and insurance. This wage standard not only meets the legal minimum requirements for basic working hours but is also adjusted by referencing data provided by competent authorities, ensuring employee income is sufficient to cover essential expenses and stably support their families. The calculation of the living wage adopts the average per capita consumption expenditure data from the "Household Income and Expenditure Survey" published by the Directorate-General of Budget, Accounting and Statistics, Executive Yuan, and compares the cost of living across various counties and cities to verify that the current wages meet employees' basic needs. This approach ensures employees enjoy adequate protection above the minimum wage, enhancing their job satisfaction and well-being.

	2024	
	Monthly Base Salary Ratio	Annual Compensation Ratio
	Female/Male	Female/Male
Management	1.2116	1.1224
Non-management	0.9003	0.8231

Note 1.Starting salary standards are the same for both genders at each job level. Salary differences across levels relate to individual years of service; at the same level and seniority, there is no difference by gender.

Note 2.Compensation includes base salary, allowances, bonuses, benefits, overtime pay, compensatory leave, and any other subsidies; dispatched worker compensation is not included in the statistics.

Note 3.Management: Supervisors and above.

Note 4.Non-management: Engineering (professional engineers), Technical (site operation technicians), Others (finance, accounting, legal, auditing, HR, administration, and general affairs).

Note 5.For safety reasons, female employees are not assigned to shift work and therefore do not receive night shift allowances.

Note 6.Monthly base salary and annual compensation ratio statistics include only those employed from January 1 to December 31, 2024.

Note 7.As there are no female executives, the base salary ratios for senior, middle, and entry-level management have not been calculated separately.



Living Wage
Statement

In 2024, the highest annual total compensation for an individual at ECOVE was 12.15 times the median annual total compensation for other employees. The highest annual total compensation growth rate was 3.21 times the median growth rate for other employees. In 2024, the average annual salary for full-time, non-management employees was NTD 1,256,000, and the median was NTD 906,000. For more details, please refer to the [Market Observation Post System](#).

Item	2023(a)	2024(b)	Difference (b-a)/a
Average annual salary of full-time, non-management employees (NTD, thousands)	1,017	1,256	23.50%
Median annual salary of full-time, non-management employees (NTD, thousands)	902	906	0.44%

Note 1. Data definitions follow the Taipei Exchange reporting requirements for average and median annual salaries of full-time, non-management employees.

Note 2. The notable data variation is primarily attributed to the corporate changes at ECOVE Environment Corporation in 2024.

Human Rights Protection and Welfare

GRI 2-23~24、401-2~3 ; SASB IF-WM-310a.2

ECOVE adheres to the human rights policies established by the CTCI Group, actively supporting the core principles of the United Nations Global Compact (UNGC), the Universal Declaration of Human Rights, and the UN Guiding Principles on Business and Human Rights. We are committed to ensuring that no employee, in any workplace environment, is subject to discrimination, exclusion, or unfair treatment based on gender, race, religion, political affiliation, sexual orientation, job level, nationality, or age. The employee Code of Conduct clearly stipulates that all employees must maintain a healthy, safe, and respectful workplace that values diversity. The company strictly prohibits any form of sexual harassment, violence, threats, or intimidation, and requires all employees to treat each other with respect and foster a fair and dignified workplace culture.

To ensure that the human rights policy is effectively communicated and internalized, ECOVE actively promotes and implements relevant training for employees, offering two mandatory courses: new employee orientation and Compliance Week activities. New employee orientation is required for all new hires and covers topics such as sexual harassment prevention, the Code of Conduct, and personal data protection. These courses help employees understand the company's values and rules of conduct, increasing compliance. In 2024, new employee orientation accumulated 512 hours of training with a 100% participation rate.

Every year, ECOVE holds Compliance Week activities to strengthen employees' knowledge of regulations and operating procedures, enhance risk identification, prevention, and response capabilities, and avoid compliance incidents. The courses cover occupational safety and health, quality, administration, HR, and more. Key topics include workplace sexual harassment prevention, gender equality, codes of ethical conduct, personal data and trade secret protection, integrity compliance, and occupational safety regulations. In 2024, a total of 896.5 hours of training was completed, with 100% participation. Additionally, ECOVE provides elective courses at CTCI University, covering subjects such as compliance, the Personal Data Protection Act, prevention of illegal acts, labor standards, and prevention of overwork, helping employees deepen their understanding of human rights and compliance.

In response to incidents of sexual harassment, ECOVE has established a dedicated "Sexual Harassment Complaint Handling Committee." The committee is chaired by a department head from the General Management Office, with other members coordinated by the highest executives of the General Management Office to ensure representation from various unit heads, with the proportion of female members not being less than half. A dedicated hotline (02)2162-1688#56112 and a specific email address: HR@ecove.com are also provided for employees to file complaints. When a sexual harassment or suspected incident occurs, the committee will initiate an investigation procedure, conducting the investigation based on principles of confidentiality and non-disclosure, and will present the investigation results within three months. If the allegations are substantiated, penalties will be imposed based on the nature and severity of the incident.

ECOVE is committed to safeguarding employees' freedom of association and strictly adheres to regulations prohibiting child labor. We uphold the belief of caring for employees and creating shared benefits, striving to provide a good working environment and smooth communication channels. In 2024, ECOVE did not experience any incidents of sexual harassment complaints or unlawful discrimination, nor did it face strikes or work stoppages due to labor disputes, which is a result of the company's continuous efforts and commitment to human rights and labor regulations.

The main human rights issues for ECOVE cover both the operational phase (employees, contractors) and the procurement phase (suppliers). Through management processes such as identifying human rights issues, affected parties, due diligence investigations, and complaint channels, we assess high-risk human rights issues and parties annually, and subsequently formulate risk mitigation measures and compensation systems. In 2024, the identified potential risk human rights issues include forced labor/hours, safety, and health. Compared to 2023, the risk value slightly decreased from 14.29% to 14.09%. The ECOVE Health Center has established a systematic health management model, conducting surveys on overwork and work load/types, and performing statistical analysis on health check results, aiming to achieve comprehensive health management while preventing occupational diseases and actively promoting employees' personal health. For human rights management concerning suppliers and contractors, please refer to the sections on "Innovation and Supply Chain" and "Safe and Healthy Workplace." We will continue to strengthen human rights advocacy among our partner manufacturers to enhance human rights protection.



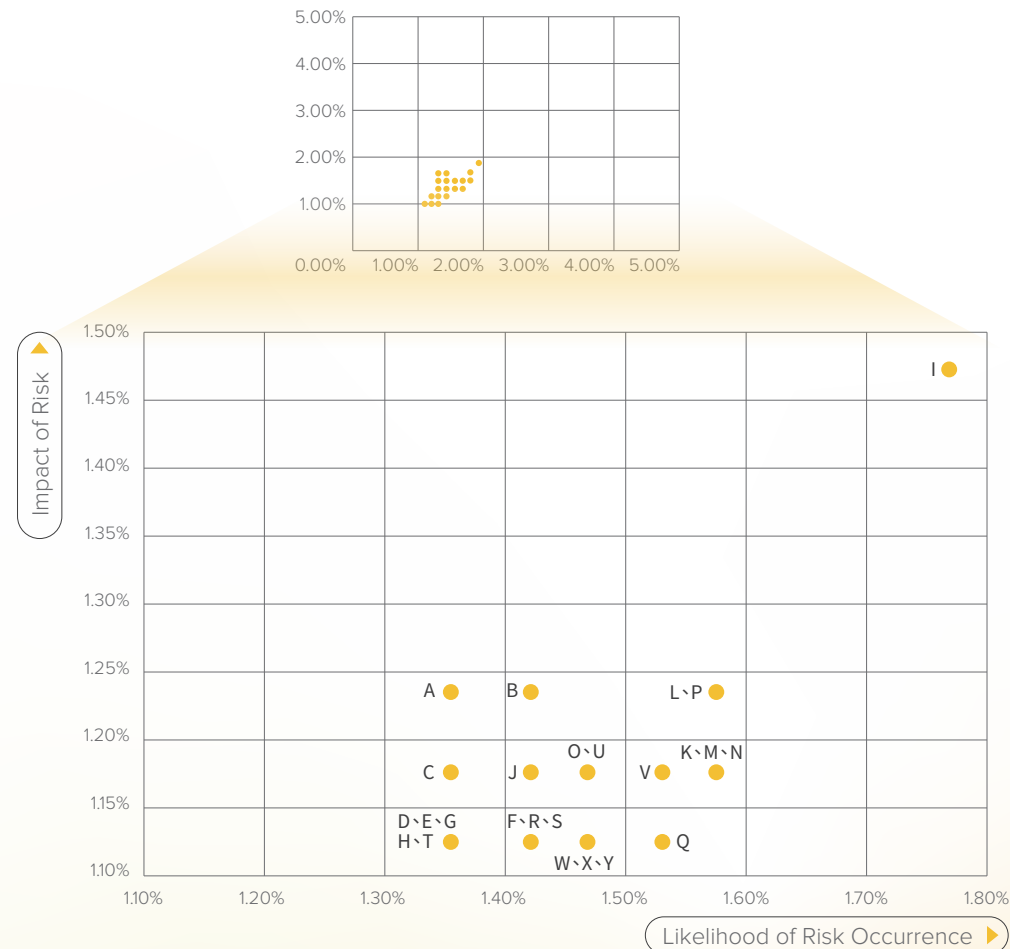
Human Rights Policy

Policy / Subject	Target Audience	Human Rights Issue	Due Diligence Method	Grievance Mechan
Code of Conduct	All Employees	Workplace Safety	Occupational safety and health (OSH) risk assessment	 Employee Feedback Mailbox HR@ecove.com
	All Employees	Health Management	Health Check	
	All Employees	Forced Labor / Excessive Workload	Working hours management, workload/type survey	
	All Employees	Employment of Child Labor	Recruitment audit	
	All Employees	Unlawful Harm, Discrimination, Sexual Harassment	Risk identification and assessment	
	Female Employees (pregnancy, postpartum)	Maternity Protection	Workplace and hazard identification, personal health risk assessment	
	All Employees	Equal Pay	HR and Compensation Committees	
	All Employees	Personal Data/Privacy Protection	Rewards and Penalties Review Committee	
	All Employees	Labor Disputes	Employee Satisfaction Survey	
	All Employees	Freedom of Association		
	All Employees	Right to Collective Bargaining		
Supplier Code of Conduct	Suppliers & Contractor Employees	Health Management	Sustainable Supplier Risk Assessment	 External Reporting Platform https://secure.conductwatch.com/ctci/
	Suppliers & Contractor Employees	Workplace Safety		
	Suppliers & Contractor Employees	Freedom of Association		
	Suppliers & Contractor Employees	Right to Collective Bargaining		
	Suppliers & Contractor Employees	Employment of Child Labor		
	Suppliers & Contractor Employees	Equal Pay		
	Suppliers & Contractor Employees	Human Trafficking		
	Suppliers & Contractor Employees	Forced Labor / Excessive Workload		
Privacy Policy	Customers	Information Security, Privacy	Information Security	
OSH Policy	Community	Environmental Rights, Noise	Site Environmental Monitoring	

ECOVE Human Rights Impact Assessment Table

Human Rights Issue	Target	Risk Assessment Method	2022 Risk	2023 Risk	2024 Risk
Sexual Harassment	All Employees	Number of substantiated cases			
Working Hours	All Employees	Number of employees working >54 overtime hours/month			
Safety	All Employees	Number of workplace injuries (**Excluding cases with monthly overtime exceeding 54 hours.)			
Privacy	All Employees	Number of substantiated cases			
Labor Disputes	All Employees	Number of substantiated cases	13.50%	14.29%	14.09%
Health	All Employees	Number of high-risk health check follow-ups (**Excluding cases with monthly overtime exceeding 54 hours.)			
Workplace Violence	All Employees	Number of substantiated cases			
Maternity Protection	All Employees	Number of high-risk maternity follow-ups			
Overwork	All Employees	Number of substantiated cases (**Excluding cases with monthly overtime exceeding 54 hours)			

Human Rights Impact Assessment



A-Inequitable benefits and working conditions for non-full-time workers (part-time or seasonal)
 B-Failing to provide legally mandated annual leave at the work location
 C-Extensive use of contract or outsourced labor
 D-Termination of employment without due process protections
 E-Paying wages under unsafe conditions, exposing employees to violence, theft, or other harmful acts.
 F-Wages paid below the legal minimum in the country of employment
 G-ages insufficient to cover basic needs (including food, housing, and education)
 H-Coercing employees by withholding wages, remuneration, or documents
 I-Requirement for employees to work excessive or unpaid overtime
 J-Job loss due to automation or the introduction of artificial intelligence
 K-Discriminatory treatment of job applicants or employees with disabilities
 L-Absence of equal opportunity policies to reduce workplace discrimination
 M-Workplace discrimination

N-Requirement for employees with mental health conditions to take unpaid leave or reduce working hours
 O-Lack of appropriate restroom facilities for transgender and intersex employees
 P-Migrant workers subjected to unfair recruitment and wage practices
 Q-Lack of systems to identify, prevent, and address occupational risks
 R-Providing no benefits to non-traditional families (e.g., same-sex partners, adoptive families)
 S-Improper handling, storage, disposal, or intentional exposure of employees' personal information
 T-Discrimination against female employees based on age, race, marital status, pregnancy, childbirth, disability, or statutory infectious diseases such as HIV/AIDS
 U-Operational pollution emissions posing risks to human health or ecosystems
 V-Insufficient protective equipment and training for laborers
 W-Female employees not receiving equal pay for equal work or facing unequal treatment
 X-Failure to conduct credible environmental impact assessments
 Y-Business operations severely impacting biodiversity

Human Rights Risk Mitigation Measures

Risk Topic	Forced Labor / Working Hours	Health	Safe Environment
Mitigation Measures	- Abnormal workload and work assessment - Health evaluation for extended overtime	- Regular health checks - Identification and tracking of high-risk groups - Health promotion and activity planning - On-site physician services - Health education by nurses and care for employees with health anomalies - Health education seminars	- Regular OSH Committee meetings - Regular safety and health education/training - Regular safety and health promotion - OSH evaluation for all - Safety competitions 5S assessments
Compensation Measures	- Overtime compensation - Job suitability assessment	- Employee feedback platform - Employee Assistance Programs (EAPs) - Job suitability arrangements - Employee grievance hotline	Occupational injury compensation applications

Communication Channels

Establishing diverse and transparent communication channels is critical to promoting labor-management harmony and enhancing employee satisfaction throughout the company's sustainable development journey. ECOVE offers multiple channels to collect employee suggestions and demands, demonstrating a high regard for employee voices. These channels include labor-management meetings, face-to-face forums, internal grievance mailboxes, the employee feedback platform, and engagement surveys. Additionally, the Group's "my CTCI APP" serves as a digital platform that further improves the convenience and immediacy of communication, allowing employees to submit feedback and track responses anytime, anywhere.

These communication mechanisms collectively foster an efficient, transparent, and inclusive corporate culture, encouraging employees to participate in decision-making while promoting mutual understanding and trust. With comprehensive communication in place, there were no incidents of labor disputes or violations of labor laws at ECOVE in 2024.

Channel	Description
Employee Feedback Platform	- Five categories: facility management, employee mailbox, improvement proposals, sexual harassment complaints, and whistleblowing on code of conduct violations. - Confidential handling to protect the rights of complainants.
Internal Grievance Mailbox	Employees may provide feedback via HR@ecove.com.
Labor-Management Meeting	- Equal representation from labor and management. - Meetings held quarterly to discuss labor conditions, benefits, work efficiency, etc.
my CTCI APP	Integrates HR, training, and real-time information systems, enabling seamless communication.
Engagement Survey	- An employee engagement survey is conducted every two year. - The survey gathers insights into employees' views on their working environment and conditions.
Internal Customer Satisfaction Survey	- An internal customer satisfaction survey is conducted every year. - The average score in the past two years has remained above 8.8.

Employee Engagement Survey

Employee Engagement Survey

ECOVE adheres to an employee-centric management philosophy and conducts a company-wide engagement survey every two years. In 2023, a total of 813 employees participated in the survey, with a response rate of 98% and an overall engagement score of 76%. The survey covers a wide range of topics, including management effectiveness, career planning, and compensation and benefits. Results showed the highest levels of employee agreement in areas such as “compliance with safety regulations,” “alignment between personal work and company goals,” and “awareness of benefits.”

For areas with relatively lower engagement scores, ECOVE proactively implements improvement actions, such as enhancing the transparency of career planning and talent allocation, establishing a resource-sharing mechanism for technical experts, strengthening emotional connection and communication skills among supervisors, and designing key talent retention mechanisms. All these measures are carried out according to plan and are continuously reviewed and optimized to systematically increase employees’ identification with and commitment to the company.

	Number of Respondents	Response Rate	Engagement Score
2021	781	96%	80%
2023	813	98%	76%

Employee Care and Diverse Benefits

ECOVE is dedicated to creating a secure and supportive work environment. In addition to providing statutory labor insurance, health insurance, and retirement pensions, the company also offers comprehensive support in four key areas: work-life balance, maternity and family care, health and insurance, and employee development. For expatriate employees, ECOVE provides full airfare subsidies, home leave, and relocation allowances to reduce the burden of balancing family and work. Through thorough protection and thoughtful care, ECOVE ensures that employees can focus on their work without concerns, fostering shared sustainable value and mutual growth for both the company and its people.

Implementing parental leave policies not only reflects our strong commitment to work-life balance for employees, but also serves as a vital corporate strategy for sustainable development. These policies support the global Sustainable Development Goals (SDGs), specifically Goal 5 (Gender Equality) and Goal 8 (Decent Work and Economic Growth), by enabling employees to concentrate on family care during the critical early stages of a child’s life and reducing the pressure of balancing work and parenting. This helps improve workplace satisfaction for parents and strengthens their sense of identification and belonging with the company.

Parental Leave Statistics	2021			2022			2023			2024		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Number eligible for parental leave (A)*	59	16	75	54	15	69	52	14	66	55	14	69
Number of applications (B)	1	3	4	2	5	7	1	4	5	1	1	2
Number expected to return to work (C)	1	3	4	2	6	8	1	4	5	1	1	2
Actual number who returned to work (D)	1	3	4	2	5	7	0	4	4	0	1	1
Number who returned previous year (E)	2	3	5	1	3	4	2	5	7	0	3	3
Number who stayed for one year after return (F)	2	3	5	1	3	4	2	4	6	0	3	3
Application Rate (%) (B/A)	1.7%	18.8%	5.3%	3.7%	33.3%	10.1%	1.9%	28.6%	7.6%	1.82%	7.14%	2.90%
Return Rate (%) (D/C)	100.0%	100.0%	100.0%	100.0%	83.3%	87.5%	0.0%	100.0%	80.0%	0.0%	100.0%	50.0%
Retention Rate (%) (F/E)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	80.0%	85.7%	0.0%	100.0%	100.0%

Note 1. The number of employees eligible for parental leave is calculated based on those who have taken maternity or paternity leave during the current year and the previous three years. Information for those who did not take such leave is not included for privacy reasons.

Note 2. Data for 2021 and 2022 was recalculated due to a redefinition of the leave year.

Comprehensive Employee Benefits

Comprehensive Employee Benefits Program

Category	Item	Description			
Work-Life Balance	General Unpaid Leave	Employees may apply for unpaid leave due to illness.			
	Flexible Working Hours	- Flexible working hours: Clock-in between 7:30–8:30 AM, clock-out between 4:30–5:30 PM. - Employees with children under 3 may request to adjust working hours or reduce working hours by one hour per day. - For employees who personally breastfeed their children under the age of two, the Company provides two breastfeeding breaks per day, each lasting 30 minutes. Additionally, when overtime work exceeds one hour beyond regular working hours, an extra 30-minute breastfeeding break is granted. All breastfeeding breaks are recognized as paid working hours in accordance with relevant labor regulations. - Leave less than a full day may be applied in half-hour increments; every accumulated 8 hours counts as one day.			
	Part-Time Employment	Employees with special needs or external experts may be hired as part-time employees, working 16 hours per week.			
	Parental Leave Without Pay	Employees with at least six months’ service may apply for unpaid parental leave for each child under 3, up to 2 years maximum (total for multiple children).			
Maternity & Family Care	Maternity Leave	Female employees are entitled to 10 weeks of maternity leave (since Sept. 1, 2023, increased from 8 weeks).			
	Paternity & Accompaniment Leave	Male employees are entitled to 10 days of paternity or accompaniment leave for prenatal check-ups or childbirth (since Sept. 1, 2023, increased from 7 days).			
	Family Care Leave	Up to 7 days per year for family care (e.g., vaccination, serious illness, emergencies), counted as unpaid personal leave.			
	Well-being Care Leave	Care reasons include personal health check-ups, accompanying children to medical appointments or caring for children during school closures, and accompanying parents or spouses to medical appointments, among others. Employees may apply for up to 7 days per year, which are not counted toward personal leave. For employees with children under the age of 6, an additional 3 days per child will be granted (effective July 1, 2025).			
Childbirth	Childbirth Allowance	The Group grants a childbirth allowance of NTD 3,000 for each newborn child to support employees' family growth.			
Health & Insurance	Lactation Room	Secure, private space with biometric entry, dedicated refrigerator, sink, emergency alarm, privacy sofa, and fireproof curtains.			
	Health Checkups	- Regular health checks every two years. - Starting from January 1, 2024, the annual subsidy amount has been increased. To address the varying needs of different age groups, the subsidy has been adjusted to increase progressively with employees' age, as follows:			
		Target	Frequency	New Amount	Original Amount
		Executives	-	50% of the total subsidy amount	
		Age 65+	Annually	6,000	1,500
		Age 40–65	Once every two years	6,000	3,000
		Under 40		4,000	3,000
	Group Insurance	- Company covers employee medical, life, accident, and occupational injury insurance. - Optional coverage for employees and family (company covers 50% of cost).			
Employee Development	Language Training	50% subsidy for each TOEIC test (no limit on number of tests), up to NTD 12,000 total.			
	Professional Training	Short-term training (up to 6 weeks) fully subsidized by the company.			
	PMP Certification	Subsidy of up to NTD 12,000 for PMP exam and first-year PMI membership.			
	External Internships	Employees on internships/study trips over 6 weeks receive full pay and related subsidies.			

Category	Item	Description
Stock Ownership & Rewards	Employee Stock Ownership	- The "ECOVE Environment Corporation Employee Stock Ownership Association" was established to implement the employee stock trust program. - Employees may voluntarily allocate 5%, 10%, or 15% of their monthly salary based on their financial situation, with the Company providing a 50% matching contribution of the self-allocated amount. - Eligibility: Regular employees who have passed the probation period, as well as contract or dispatched employees with at least three years of service. - As of the end of 2024, a total of 645 employees had participated in the program, representing a participation rate of 68%.
	Further Studies	- Employees recommended for further studies at domestic/overseas universities, with full tuition, materials, and thesis costs covered by the company. - Over 6 employees sponsored for EMBA as of 2024.

Labor Pension Fund Supervisory Committee established, with full compliance and adequate funding for both old and new schemes (6% of monthly wages to individual pension accounts).

ECOVE and its subsidiaries set up an employee welfare committee, and in 2020, the "CTCI Group Joint Employee Welfare Committee" was established to provide travel, family days, club activities, sports days, year-end teeth and various allowances. In 2024, a 2-day and 1-night staff tour will be held in the northern, central and southern districts, with more than 700 people participating. Set up a "Welfare Corner Platform" to provide online subsidy application and activity registration, and introduce a welfare point mechanism to replace physical gift certificates, so that employees can flexibly redeem travel, shopping and various gift certificates, and improve the convenience and flexibility of welfare use.

■ ECOVE employees actively participate in company trips.

In order to promote employee relations, in addition to providing employee care and assistance, and handling employee opinions (including proposal improvement, employee complaints, illegal infringement, sexual harassment, and reporting), we also entrust external professional units to handle CTCI Group's employee professional counseling psychological employee assistance programs (EAPs), provide free consulting services, and provide online self-assessment questionnaires, psychological health education information, resource channels and other information to assess employees' overwork, depression, physical and mental adaptation, and assist colleagues to deal with and face problems, so as to create a healthy working environment. Promote physical and mental well-being.

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CTCI
員工協助方案
EMPLOYEE
ASSISTANCE
PROGRAMS





Talent Cultivation and Development

Training and Industry-Academia Collaboration GRI 404

To keep pace with rapid industry changes and cultivate employees' ongoing professional and language skills, ECOVE proactively promotes diverse education and training policies, demonstrating our commitment to and support for employee growth. Each employee is entitled to one fully subsidized TOEIC exam during their employment, as well as subsidies for foreign language courses to encourage continuous improvement in language proficiency. If business needs require participation in short-term professional training or in-service graduate studies (domestic or overseas), the company will cover all associated costs, including tuition, materials, and travel expenses, ensuring employees' peace of mind during upskilling.

Based on business attributes and professional requirements, ECOVE has developed the "Employee Continuing Education Management Guidelines," which guide annual training plans and ensure training effectiveness through performance reviews. To enhance global competitiveness, the company encourages employees to pursue foreign language certifications (e.g., English, Japanese, German, Arabic), offering subsidies, online learning resources, book loans, and discounts on tutoring courses to create a supportive learning environment.

This training and education policy not only strengthens employee skills and language capabilities but also boosts adaptability and competitiveness in the workplace. Continuous investment in employee development enhances the value of our human capital.

To strengthen employees' professional skills and support cultural integration, new staff are required to take core courses such as green energy, carbon neutrality, carbon cycle basics, information security, and sustainability. This helps accelerate alignment with company values. Each year, all employees complete training in ethics, sexual harassment prevention, data protection, trade secret and IP protection, phishing awareness, and workplace safety, enhancing risk awareness and professional standards.

For managers, a three-level leadership program covers basic, general, and advanced strategy training, progressively developing practical management and innovation skills to prepare leaders for diverse challenges. For retirees, a reemployment system supports knowledge transfer and talent retention, helping staff transition to new roles while preserving valuable expertise and reducing skill gaps within the company.

→ ECOVE Education and Training Framework



■ Fostering the Next Generation of Professionals through Industry-Academia Collaboration

To build on previous cooperation programs and meet the company's growth needs, ECOVE continued to deepen collaboration with relevant academic departments in 2024. This included campus recruitment events, company information sessions, and internship programs that fostered resource sharing and talent development. ECOVE participated in 13 campus recruitment events at universities across Taiwan and held company information sessions at Yunlin University of Science and Technology and National Formosa University. Internship collaborations involved six universities, resulting in 14 interns, one of whom became a full-time employee after graduation. These efforts demonstrate ECOVE's commitment to talent cultivation.

Through long-term industry-academia cooperation and professional training, ECOVE not only nurtures technical professionals but also strengthens links between industry and academia, driving talent development in the incineration sector and opening the door to a forward-looking future.

■ Performance Appraisal

To thoroughly assess each employee's annual performance and potential, ECOVE has developed a unique evaluation system based on objective management and performance management principles. Performance appraisals are linked to salary adjustments and bonuses to incentivize employees. Except for consultants, interns, employees on leave for more than nine months, and new hires joining after the start of the appraisal period, all employees are included in the annual appraisal.



Performance Management System

Applicable To: All employees

How It Operates:

Objective Management

Departmental goals are cascaded down to individual goals at the beginning of each year, derived from corporate strategies, department objectives, key supervisor tasks, and individual KPIs. During the year, supervisors regularly review progress to ensure both continuous performance improvement and achievement of business objectives.

Multi-Dimensional Performance Evaluation

Two scoring dimensions are used:

Score A

Supervisors assess whether employees demonstrate the key competencies for their current position or potential for higher roles, as well as alignment with corporate values (linked to salary adjustments).

Score B

Based on personal goal achievement, execution, work attitude, contribution, and communication (linked to annual bonus).

Team-Based Evaluation

Goals are set at the department level and aligned with company strategy. Supervisors and employees work together to achieve these goals, and all evaluations are balanced and confirmed by subsidiary GMs.

Agile Performance Dialogue

Employees and supervisors set annual goals at the start of the year, regularly track progress, conduct monthly feedback meetings, and review achievements at year-end, with improvement suggestions and goal-setting for the next stage.

Implementation Details

KPI is set at the beginning of the year.

Year-end performance evaluation.

Mid-year review and discussion.

Annual performance appraisal meeting.

Confirm the bottom-performing employees and arrange a 3-month Performance Improvement Plan (PIP), with monthly reviews, extendable up to 6 months.

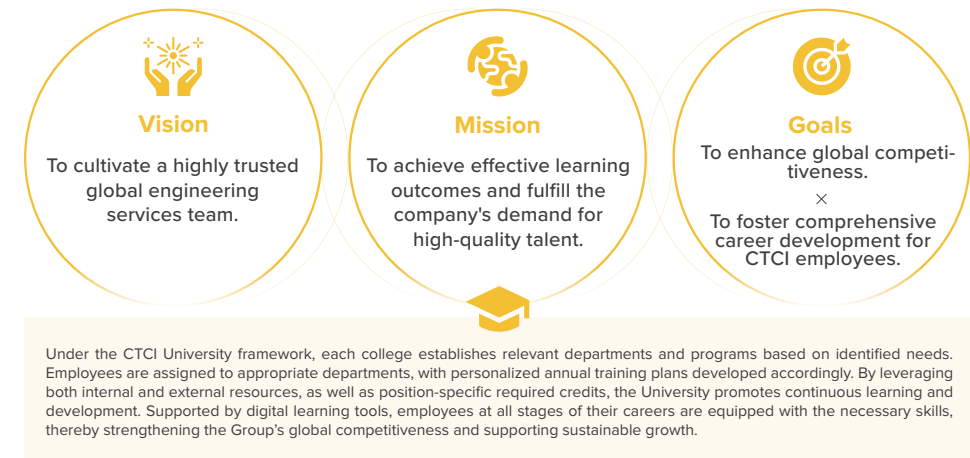
In recent years, bottom-performer elimination has been strictly implemented. The elimination rate has been reduced from 5% to 3%.

Internal Mobility and Promotion

To strengthen talent development and maximize the use of human resources, ECOVE has established mechanisms for internal job rotations. Employees can apply for internal transfers based on their career plans, providing opportunities for diverse experience and stimulating innovation. In 2024, the internal job vacancy fill rate was 100%.

Learning Platform: CTCI University

The CTCI University digital platform offers employees a borderless learning experience, combining TOEIC courses and YouTube resources to transform professional knowledge into efficient learning content and support career growth. Modeled after a university system, CTCI University is organized into six colleges, each providing targeted professional training for different career tracks. Employees are assigned to departments and tailored annual training plans are created to support continuous learning at every career stage.



In 2024, ECOVE Group implemented a diverse range of training programs—including online learning, in-person sessions, and external courses—accumulating a total of 49,755.38 training hours. These programs covered areas such as incinerator operations, occupational safety and health, personal health management, general education, and management, thereby effectively enhancing employees' professional competencies and safety awareness. The annual training expenditure reached approximately NT\$2.31 million, demonstrating the company's commitment to employee growth and laying a solid foundation of talent to support sustainable development.

CTCI University Digital Platform Course Hours – ECOVE Employees

Year		2021				2022			2023			2024		
Role		Gender	Number of Employees	Total Training Hours	Average Hours per Employee	Number of Employees	Total Training Hours	Average Hours per Employee	Number of Employees	Total Training Hours	Average Hours per Employee	Number of Employees	Total Training Hours	Average Hours per Employee
Management		Female	12	281	23.4	8	189	23.6	10	136.10	13.6	7	139.90	19.99
		Male	149	5,794	38.9	72	3,028	42.1	145	3,753.15	25.9	124	6885.68	55.53
Non-Management	Engineering	Female	25	741	29.6	27	1,306	48.3	25	1,034.94	41.4	31	2145.22	69.20
		Male	131	4,334	33.1	131	5,335	40.7	112	4,279.34	38.2	116	7454.34	64.26
	Technical	Female	43	1,089	25.3	55	1,293	23.5	68	1,039.02	15.3	71	3968.00	55.89
		Male	430	10,400	24.2	491	13,262	27	424	9,146.29	21.6	479	24453.42	51.05
	Specialist	Female	92	2,132	23.2	97	2,890	29.7	105	2,825.54	26.9	103	4191.32	40.69
		Male	9	218	24.2	10	271	27.1	42	632.40	15.1	6	517.50	86.25
Total		Female	172	4,243	24.7	187	5,677	30.3	208	5,035.60	24.2	212	10444.44	49.27
		Male	719	20,745	28.9	704	21,895	31.1	723	17,811.18	24.6	725	39310.94	54.22

Note 1. The number of employees is based on the number of staff employed as of December 31, 2024.

Note 2. Average training hours = Total training hours ÷ Number of employees.

Note 3. In 2024, the average training hours increased due to a higher number of employee transfers and certifications obtained through training.

ECOVE remains deeply committed to talent cultivation, striving to attract and nurture individuals with professional competence and high potential. Through systematic education and training programs, the company provides employees with comprehensive and personalized career development support. This includes onboarding programs for new hires, continuous learning opportunities for current employees, and the implementation of Individual Development Plans (IDPs) tailored to each employee. By promoting management skills, establishing a mentorship system, and leveraging platforms such as CTCI University, ECOVE offers diverse learning opportunities to support employees' ongoing growth and development at every stage of their careers.

For elite talent development, ECOVE has conducted a comprehensive talent review to identify the Group's key positions, high-potential talents, and young-potential employees. Based on the competencies and skills required for the Group's future development and considering employees' past performance, the company has established phased talent selection criteria. Tailor-made rotation programs and succession planning mechanisms are implemented for these talents according to their potential and development needs, ensuring that key positions are well prepared to meet future challenges and risks.

ECOVE actively fulfills its corporate social responsibility by integrating sustainability topics into its corporate culture. Through a series of internalization activities, the company enhances employees' awareness and engagement with ESG issues, fosters a sense of identification, and encourages proactive participation in daily operations, thereby amplifying its sustainability impact.

As the first step in promoting "ESG for all employees," ECOVE has incorporated ESG topics into its meeting procedures. For all internal meetings with more than five participants, the meeting must begin with an "ESG Moment" to broaden employees' perspectives beyond their immediate responsibilities, encouraging greater attention to sustainability and environmental protection issues.

The Sustainability Microfilm and ESG Award are initiatives organized by the CTCI Group to encourage employees to submit proposals themed around climate action—including net-zero EPC, circular economy, biodiversity, and social impact topics such as talent development, diversity, equity, and inclusion (DEI), and social engagement.

Upholding the spirit of "ESG for all employees," ECOVE employees actively participated in these initiatives in 2024. In the Sustainability Microfilm competition, the entry "Spreading Love for Sustainability Together" received an Excellence Award. In the ESG Award for Sustainable Excellence and Impact, ECOVE colleagues won in both the climate action and social impact categories, with projects focused on biodiversity—namely, "Purple Butterflies Reflected Because of You" and "Flourishing Ecology—Biodiversity LINE Stickers."

By promoting the ESG Moment, employees are encouraged to pay greater attention to ESG and sustainability issues.

集團生物多樣性-關注物種-紫斑蝶簡介(五)紫斑蝶的三大特色

特色一：幻色
是一種物理色，因為翅膀上每個鱗片上有許多小凹洞，陽光照射到鱗片時，凹洞造成光線多次干涉，並和鏡射作用而形成的現象，會隨著陽光照射角度的不同產生藍色至藍紫色的變化。

特色二：假死
假死是紫斑蝶避天敵捕食的方法，很多動物或昆蟲不吃死掉的東西，紫斑蝶靠著假死時身體不動及保護色融入週邊環境，讓一些以動態視覺方式判斷並進行捕食的敵人無法找到牠們而逃過一劫。

特色三：毛筆器
雄性斑蝶用以吸引雌斑蝶，分泌並散發性費洛蒙的器官，同時也因其特殊氣味有驅敵的作用。

*Reference: 台灣新創生態教育協會

減碳基本功~碳盤查

減碳就像減重，先知道自己的重量，才能訂定減重目標及規劃減重計畫，碳盤查，就是用國際一致性的標準與方法，來計算各種排放源（如製程排放、能源使用排放等）的溫室氣體排放量，盤查的範圍包含直接排放（範疇一）及間接排放（範疇二），若想進一步推動供應鏈減碳，則可將範圍再擴大到其他間接排放（範疇三），只要掌握主要的排放源，就能計算碳盤查，從中找出減量潛力、訂定減碳計畫，並透過實行計畫來達到減碳效益。

盤查五步驟「測、算、報、查」

1.測	2.算	3.算	4.報	5.查
設定盤查的組織邊界範圍	盤查範圍內的排放源	運用計算工具估算排放量	建立清單並撰寫報告書	透過驗證機構進行驗證

*Reference: 經濟部

Upholding the spirit of "ESG for all employees," ECOVE employees received recognition in both the climate action and social impact categories.

永續微電影

2024中鼎集團 永續微電影徵件啟動

2024中鼎集團永續微電影得獎作品名單

Award	Corp.	dept.	Name	Film Name
首獎	中鼎	品牌管理部	陳怡靜	地球永續的初心者-CHILL 鵝
優等獎	中鼎	永續與淨零辦公室	方贊禾	中鼎門前有小河《五分港溪篇》
優等獎	信鼎/輝鼎	信鼎/操作組 信鼎/行政 輝鼎/行政室	黃于玲 郭美霞 張瑞寧 陳晏慈	愛永續~有志一同 E 起傳遞愛



Award	Corp.	dept.	Name	Proposal title
金獎 (Gold)	崑鼎	品質管理部	許瑞雲、何淑貞、廖佳豪、林舒臻	蝶蝶相印，紫因有你

中鼎集團社會影響力 個人獎
Social Impact Award (Individual)

Award	Corp.	dept.	Name	Proposal title
首獎	信鼎	信鼎/操作組	黃于玲	愛永續~有志一同 E 起傳遞愛



Safe and Healthy Workplace GRI 403 ; SASB IF-WM-320a.1, 3

In terms of occupational safety and employee health management, ECOVE has fully implemented ISO 45001 to strengthen the construction of the occupational health and safety management system, effectively preventing occupational hazards and ensuring the safety and health of employees. We emphasize creating a safe workplace through risk identification and control, employee participation, and continuous improvement, highlighting a preventive approach and timely handling of potential occupational health risks to ensure that all employees can not only avoid accidents during work but also promptly identify and address potential hazards.

At the same time, ECOVE provides a series of health and safety assurance measures, including mandatory occupational safety training, emergency response drills, and regular physical and mental health check-ups. We also place special emphasis on employee participation mechanisms by establishing a representative system for employees and holding regular communication meetings to ensure that every employee can take initiative in their work and participate in discussions and improvements regarding occupational health and safety issues.

For our partners, ECOVE similarly requires collaborators to adhere to high standards of safety and health management regulations and actively engage in safety cooperation and technical exchanges. ECOVE regularly conducts safety management reviews and assessments of partners to ensure that all members of the supply chain comply with the requirements of ISO 45001, jointly ensuring the safety of the work environment and reducing the risk of workplace injuries and accidents.

ISO 45001 Certified

ECOVE has always adhered to the core spirit of prioritizing safety, health, and the environment, following seven major occupational safety and health policies to ensure that all operational sites meet the highest safety standards. Since 2009, ECOVE's ECOVE ESC and ten incineration plants have obtained OHSAS 18001 and TOSHMS certifications, and in 2011, in response to the Ministry of Labor's policies, they upgraded to CNS 15506, continuously passing verification. Since 2018, ECOVE ESC's ten operational sites, ECOVE WMC, ECOVE SRC, and SINOGAL have gradually obtained ISO and CNS 45001 certifications, ensuring that the occupational safety and health management systems, internal audits, and verification coverage at each operational site reach 100%, applicable to all employees, contractors, and subcontractors. In 2024, ECOVE ESC, ECOVE WMC, and ECOVE SRC once again passed ISO and CNS 45001 certifications, ensuring the continuous and effective operation of the occupational safety and health system.

Note: The 10 operational points include the headquarters (ECOVE), Keelung plant, Southern Taoyuan plant, Miaoli plant, Houli plant, Wurih plant, Xizhou plant, Tainan plant, Nanke plant, and Gangshan plant; ECOVE MEC does not meet the staffing standards, but the locations are set up within verified operational sites. The headquarters (ECOVE) is located within the same building as ECOVE ESC, and the ECOVE MEC site is within the ECOVE ESC Miaoli plant. All employees and non-employees are included within the scope of the occupational safety and health management system.



ISO 45001
Certification

Award Achievements

To actively promote the development of a safety and health culture and strengthen self-management in safety and health, ECOVE encourages various units to participate in external safety and health evaluations, consistently achieving excellent results, showcasing our effectiveness in promoting safety and health. In 2024, ECOVE and its subsidiaries received the following awards:

Company	ECOVE ESC	ECOVE ESC	ECOVE ESC	ECOVE ESC	ECOVE ESC	ECOVE SRC	ECOVE ESC	ECOVE
Name of Award	Occupational Safety Achievement Excellent Award	112 Years of Safety and Health Family Performance Evaluation-Excellent Award	Occupational Safety Achievement Excellent Award	Occupational Safety Achievement Excellent Award	Occupational Safety Achievement Excellent Award	Occupational Safety Achievement Excellent Award	Occupational Safety Achievement Excellent Award	Emerging Role Model Award
From	Tainan Labor Bureau	Tainan Labor Bureau	Occupational Safety and Health Administration	Occupational Safety and Health Administration	Kaohsiung City Government	Occupational Safety and Health Administration	Occupational Safety and Health Administration	Occupational Safety and Health Administration
Awarded unit	Tainan plant	Tainan plant	Tainan plant	Houli plant	Gangshan plant	ECOVE SRC	Nanke plant	ECOVE
								
								

Policies and Committees

ECOVE's health, safety, and environmental policy is always centered on fulfilling environmental protection and creating a safe and healthy working environment. Furthermore, it integrates the spirit of the ISO 45001 Occupational Health and Safety Management System, committed to creating a worry-free working environment for employees and partners, ensuring their physical and mental health and well-being.

Upholding Safety as Our Top Priority

We are committed to prioritizing safety and providing a secure and reassuring workplace. Throughout company operations and project execution, we strive to foster a culture of safety with the ultimate goal of achieving zero occupational injuries and fatalities.



Promoting Employee Health and Well-being

We actively promote autonomous workplace health management, strengthen both physical and mental health protection and care, and create a healthy working environment to enhance employees' overall well-being.



Protecting the Environment and Promoting Sustainable Development

We deliver professional services in compliance with environmental requirements, promote energy conservation, carbon reduction, pollution prevention, and resource recycling, and work with stakeholders to foster holistic well-being.



Implementing Risk Management Mechanisms

We identify potential hazards related to occupational safety, health, and environmental (HSE) activities, assess and address risks, prevent occupational injuries and environmental pollution, and continually enhance our overall HSE performance.



Fulfilling Legal and Contractual Obligations

We identify applicable laws, regulations, and contractual requirements, monitor and enforce the implementation of HSE plans, and ensure that company and project operations comply with HSE requirements, fulfilling our compliance obligations.



Promoting Participation and Training

We encourage participation in HSE training, enhance HSE awareness and competence, provide consultation to contractors and employees, and maintain open channels for communication and feedback.



Continuous Improvement of the HSE Management System

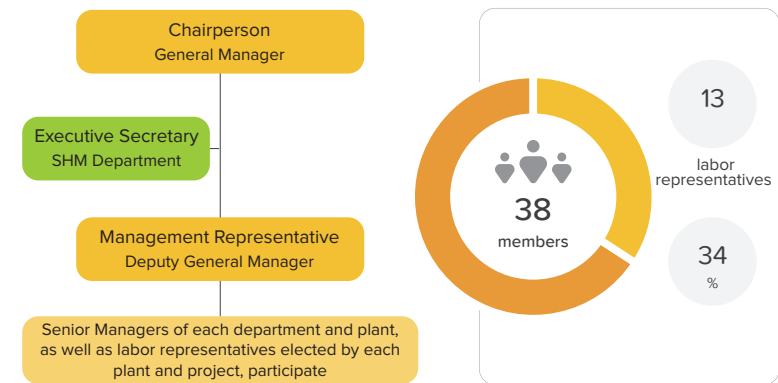
We continuously review and optimize all HSE activities, strive to improve workplace health and working conditions, ensure a sound and feasible HSE management system, and enhance the system's suitability, adequacy, and effectiveness.



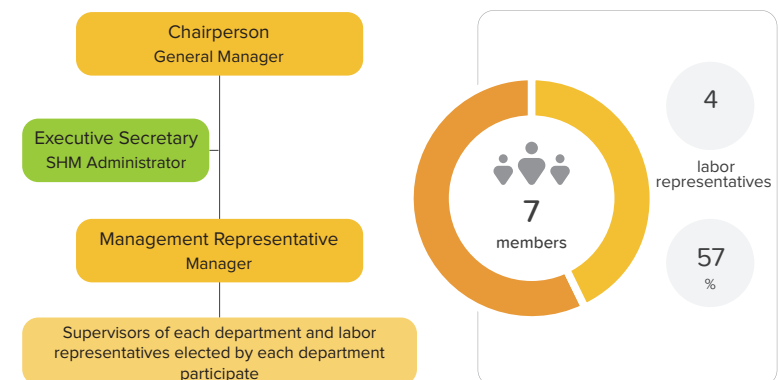
The Occupational Safety and Health Committee is an important organization within the ECOVE safety management system, responsible for coordinating and guiding all employees in matters of occupational health and safety. This committee is composed of both management and employee representatives, tasked with monitoring workplace safety conditions, promoting safety culture, investigating and handling incidents, and regularly reporting safety management progress to management. It ensures that the safety training needs of employees are met, as well as the continuous improvement and effectiveness of safety management policies and measures.

In ECOVE and its subsidiaries, ECOVE ESC and ECOVE WMC have reached the legal scale and established committees, while ECOVE, ECOVE WEC, ECOVE MEC, and ECOVE SRC have not met the establishment standards and therefore do not have committees. However, the spirit of the system is still followed on-site, allowing employees to regularly participate in weekly or monthly meetings with supervisors to communicate on occupational safety and health issues on the agenda. The Occupational Safety and Health Committees of ECOVE ESC and ECOVE WMC meet quarterly, and the results of these meetings are communicated to employees and non-employees through the website or bulletin boards to convey the spirit and content of the safety committee.

ECOVE Environment Services Corporation Occupational Safety and Health Committee



ECOVE Waste Management Corporation Corporation Occupational Safety and Health Committee



 Safety and Environmental Policy Statement



Risk Assessment and Operational Safety Control

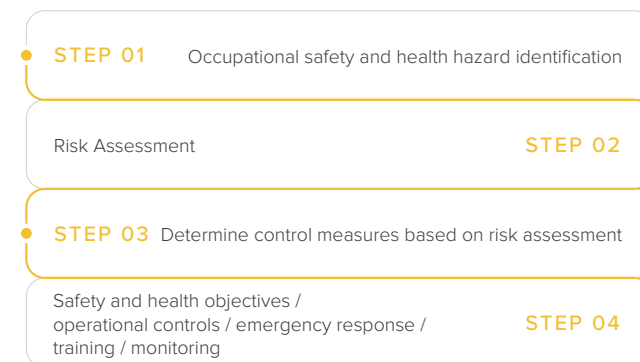
ECOVE and its subsidiaries adopt a tiered management strategy, integrating a risk management committee to systematically identify, assess, and control occupational safety and health risks. The core of safety and environmental risk management involves conducting at least two comprehensive risk assessments annually, covering operational processes, chemical management, hand tool usage, and environmental exposure. Risks are categorized based on their severity, and corresponding standards are established to ensure employee safety. To enhance risk awareness, the company regularly holds promotional activities to ensure that all regulations are implemented in daily operations.

In terms of occupational safety and health discussions, ECOVE provides employees with an email system, proposal improvement, and reporting mechanisms through the EIP (Enterprise Information Platform) to achieve rapid hazard reporting and allow for anonymous feedback, thereby protecting employee rights and strengthening the organization's ability to respond to potential risks in real-time. Additionally, ECOVE conducts regular on-site audits to review the applicability of operational standards and makes adjustments based on on-site feedback to ensure continuous optimization of standards. Through dynamic adjustments to operational regulations, the company not only enhances the efficiency of operational processes but also further strengthens overall workplace safety, ensuring employee health and workplace safety.

We have established a series of operational safety control regulations for high-risk and hazardous jobs, such as rotating equipment maintenance, pipeline maintenance, hot work operations, confined space operations, elevated work, hoisting operations, and electrical work, to ensure that each high-risk operation is conducted in a controllable environment, striving to achieve the goal of "zero accidents."

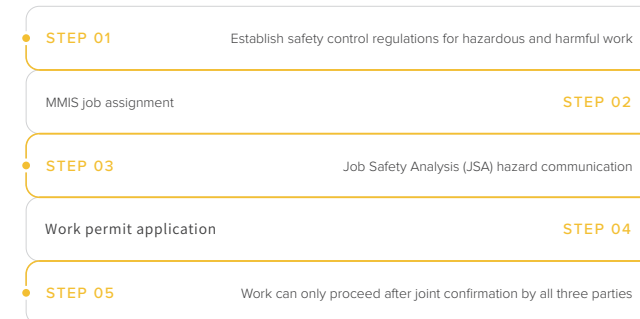
ECOVE utilizes the self-developed MMIS (Maintenance Management Information System) for daily work task allocation, and during morning meetings, potential hazards are identified and safety regulations are promoted through Job Safety Analysis (JSA) to ensure that employees understand the operational risks. Before operations commence, operators, maintenance personnel, and safety personnel must jointly inspect the on-site safety conditions according to risk control regulations, including de-energizing, isolating, and implementing lockout/tagout procedures, confirming that there are no hazards before starting work to ensure safety throughout the process.

→ Occupational Health and Safety Environmental Risk Assessment Process



Equipment Isolation Tag

→ Occupational Safety Control



Operation, Maintenance, and Safety and Health Tripartite Meeting

Strengthening Security Management and Auditing

To strengthen safety management, ECOVE ESC continuously improves through an auditing system and implements safety management and improvements in a gradual manner. Through audit verification, the safety knowledge and skills of employees are confirmed, areas needing enhancement are identified, and these are incorporated into training programs and the basis for revising operational standards to ensure the continuous optimization of safety management. ECOVE ESC promotes a three-tier auditing management system to ensure the implementation of safety management. The audit results are reported in committee meetings, detailing the number of sessions and deficiencies, while the improvement aspects are managed by the responsible departments for each incineration plant and project. Additionally, the effectiveness of improvements is confirmed through a re-audit mechanism to ensure the continuous advancement of safety management.

→ Third-Level Audit Management

Project-Specific Inspections

The Safety and Health Management Department and each project team conduct irregular cross-audits. Any issues found during inspections are to be promptly corrected, followed by a comprehensive review to achieve the greatest overall effectiveness.

Joint Occupational Safety and Health Inspection

Plant managers, occupational safety supervisors, and supervisors from each department jointly inspect on-site personnel and contractors. If any unsafe behavior, condition, or environment is found, immediate corrective actions are taken, followed by analysis and review.

BBS (Behavior-Based Safety) Individual Behavior Observation

Promote BBS individual behavior safety observations, carried out by peers. If any findings could potentially lead to near-miss incidents, they should be reviewed for improvement and extra points added to the KPI performance indicators.

Operational Safety Observation

On-site supervisors conduct operational safety observations of personnel and contractors to ensure that work is being carried out in accordance with established operational standards.



The Safety and Health Management Department requires subordinate units to conduct root cause analysis and develop improvement measures in response to audit deficiencies. After implementing corrections, they report back to the relevant departments (Operations Departments One and Two or Project Department) and notify the Safety and Health Management Department. The results of the improvements will be presented at senior meetings and concluded. Audits include internal inspections, cross-project audits, and regular or irregular inspections conducted by external supervisory agencies according to annual policies, with results immediately communicated to project units for effective improvement.



ISO 45001 External Audit Site Inspection (Taking Miaoli Plant as an Example)



External Supervision and Inspection Operations at Taoyuan International Airport (Taking Waste Cleaning Facilities at Taoyuan International Airport as an Example)

Management of Machinery and Equipment and Contractor Management

ECOVE ESC enhances machinery and equipment management through the MMIS system, ensuring the safe and stable operation of the incineration plant. Regular inspections of machinery and equipment at each operational incineration plant are included in the schedule, and maintenance and repair tracking are planned through the electronic system to eliminate management oversights. Additionally, an automatic inspection plan has been established, covering pre-operation checks, in-operation observations and audits, and post-operation confirmations, which are incorporated into an evaluation mechanism to ensure the implementation of safety control processes. Through electronic verification of licenses and permits, the qualifications and validity of operators' certificates are effectively confirmed, ensuring operational safety.

In terms of project management, ECOVE ESC clearly specifies safety and health regulations and hazard factors in the procurement project specifications and carefully selects contractors. Annual safety and health training is provided to enhance awareness of occupational safety laws and to teach workers how to protect themselves in unsafe situations. Hazard notifications and agreement meetings are conducted before operations, reviewing the equipment and machinery entering the site; daily toolbox meetings and inspections are held during construction, with immediate corrections made for any identified issues. After completion, contractors are evaluated based on the seven major performance indicators of occupational safety, with those rated below D classified as unqualified, ensuring continuous improvement of safety management standards. Each plant employs facial or fingerprint recognition systems for access control, reviewing the qualifications of construction personnel before integrating them into the system. During construction, regular blood pressure and alcohol tests are conducted, and any abnormalities detected result in immediate cessation of work, along with reminders for health management. Vehicle safety and hazardous material management are promoted through JSA analysis during morning meetings, assessing personnel health conditions before operations, adjusting work for those unfit, prohibiting alcohol beverages on-site, and conducting alcohol tests as needed. Vehicle maintenance is managed through the MMIS system, and in 2024, ECOVE WMC's fleet experienced four traffic accidents¹.



Control of contractor access to the facility through a facial fingerprint recognition system, along with periodic blood pressure measurements and alcohol testing.

→ Occupational Accident Investigation Mechanism Flowchart



¹ In 2024, four traffic accidents occurred due to drivers not paying attention to their surroundings, resulting in minor collisions. Subsequent to these incidents, defensive driving and traffic safety regulation awareness courses have been conducted for the drivers at fault.

Occupational Hazard Prevention

ECOVE conducts a comprehensive review of potential hazards in its operations through risk identification and assessment mechanisms, combining various measures such as education and training, operational safety control processes, and emergency response drills to ensure that employees are equipped to handle potential risks. Additionally, ECOVE strengthens its investigation and improvement mechanisms for occupational accident incidents, ensuring that every event leads to learning and enhancement, further optimizing the safety of the work environment. We believe that a safe working environment is not only the responsibility of the company but also a common goal that all employees strive for together. By continuously promoting safety and health-related plans and systems, the company is committed to creating a disaster-free workplace culture. In the future, ECOVE will continue to invest manpower and resources to provide employees with a healthy and safe working environment, achieving the goal of zero accidents and jointly moving towards a new milestone in corporate sustainability.

For ECOVE and its subsidiaries, providing a safe, healthy, and friendly working environment is the core mission of business operations. "Safety first" is not just a slogan; it is the foundation of daily work for all employees, deeply embedded in every operational detail and internalized as a guideline for action. ECOVE implements safety management through a systematic approach, covering general safety and health education training, specialized hazard education training (such as confined space operations, elevated work, hot work, hoisting operations, etc.), hazard awareness education training, and contractor safety and health education training, providing all employees with comprehensive and effective safety knowledge and skill guidance. In total, 66 emergency response drills, 188 occupational safety-related training sessions, and 4,263 participants were involved in training throughout the year.

In addition, the company regularly conducts emergency response drills to simulate various unexpected situations, ensuring that employees have sufficient response capabilities in real dangers. At the same time, supervisors at all levels continuously remind employees of the importance of safety in their daily work, interpreting their commitment to safety through practical actions. To strengthen safety awareness, the company innovatively replaces traditional textual teaching with the sharing of "safety maxims," conveying safety concepts through concise and powerful phrases, embedding a safety culture in the hearts of employees.

ECOVE Occupational Injury Statistics

Year	2021		2022		2023		2024		Calculation Method
	Employees	Contractors	Employees	Contractors	Employees	Contractors	Employees	Contractors	
Total Hours Worked (Hours)	2,340,240	716,012	2,386,674	904,768	2,649,530	998,420	2,813,377	1,022,907	Total hours worked by employees and contractors are calculated based on the sum of hours worked according to daily personnel access control.
Disability Injury Severity Rate ISR	13.93	0	0	0	0.83	0	2.06	0	Total loss days X 200,000 / Total hours worked
Disability Injury Frequency Rate IFR	0.09	0	0	0	0.15	0	0.07	0	Disability injury loss cases X 200,000 / Total hours worked
Total Recordable Incident Rate TRCR	0.17	0	0	0	0.15	0	0.07	0	TRCR: Total number of OSHA recordable incidents * 200,000 / Annual total cumulative hours worked; Total number of OSHA recordable incidents includes fatalities, disabilities, restricted or transferred work, and medical treatment incidents.
Occupational Disease Rate	0	0	0	0	0	0	0	0	Occupational disease cases X 200,000 / Total hours worked
Number of Deaths	0	0	0	0	0	0	0	0	-
Number of False Alarm Incidents	1	0	2	0	0	0	0	0	-

Note 1: In 2024, ECOVE MEC, ECOVE WMC, and SRC did not experience any occupational accidents, while ECOVE ESC had 1 occupational safety and health disability incident.

Note 2: In 2024, the disability injury frequency rate, disability injury severity rate, and number of deaths for contractors and subcontractors were all 0.

Note 3: In 2024, there were 33 inspections conducted by the respective regulatory units, with 2 penalty cases.

Note 4: Recordable safety incidents primarily include fatalities, disabilities, restricted or transferred work injuries, and non-emergency incidents (medical).

Note 5: According to Article 37 of Taiwan's Occupational Safety and Health Act, a major occupational accident must be reported within 8 hours.

ECOVE Occupational Injury Category Table

Category	2021		2022		2023		2024	
	Employees	Contractors	Employees	Contractors	Employees	Contractors	Employees	Contractors
Number of People (Injury Category)	1 (Burns)	0	0	0	2 (Falls, entanglement, and crush injuries)	0	1 (Falls, entanglement, and crush injuries)	0

Note 1: Definition of disabling injury: The number of days the injured person is temporarily (or permanently) unable to return to work is more than one day (excluding the day of injury and the day of return to work).

Note 2: The ratio of occupational injury cases to total employees in 2024: 1 (number of occupational injuries) / 937 (total number of Kundin employees) = 0.1067%. The case was male.

Note 3: In 2024, the number of cases for each injury category among contractors and subcontractors was 0.

Note 4: Source management was implemented for individual incident cases, such as thoroughly repairing safety nets (for disabling incidents), installing guardrails, and purchasing new fire protection equipment (for non-disabling incidents), to improve facility/equipment risks.

Occupational Health Management

■ Health Check and Comprehensive Health Management: Creating a Safe Workplace

ECOVE values employee health and creates a safe workplace through a robust health management system. New employees undergo health checks, while current employees have regular health examinations every two years, with examination items exceeding regulatory standards. For high-risk operations, such as dust environments, special health checks are conducted annually. In the 2023 health checks, moderate abnormalities and above accounted for 46.6%, with guidance and follow-up provided by healthcare professionals; in 2024, there were no level 3 or 4 abnormalities in special health checks, indicating the effectiveness of protective and monitoring mechanisms.

■ Professional Healthcare Team On-Site, Providing Immediate Health Consultations

The company has dedicated nurses and contracted occupational specialists who regularly provide on-site services at ECOVE and its subsidiaries, conducting hazard assessments at work sites and offering interpretations of health check reports, follow-up care for employees with moderate to severe abnormalities, chronic disease management, and injury tracking services. In 2024, a total of 18 on-site medical service sessions were held, accumulating 48 hours, with 83 individuals consulted, including 3 subjects under maternal health protection. Employees can utilize this free resource to receive guidance on physical and mental health, further enhancing health awareness and self-protection capabilities.

■ Workplace Health Education: Enhancing Self-Protection Skills

We regularly assess the occupational hazards employees may encounter and conduct relevant training to help employees understand the risks in their work environment, learn how to protect themselves, and reduce health impacts. Additionally, we organize health promotion activities based on regular health check results and common diseases, such as:

Introduction to Stroke and Hypertension

Reminding employees to pay attention to hypertension, known as the "silent killer," and learn to quickly identify stroke symptoms.

Vision Care Seminar

Guiding employees on how to reduce the adverse effects of prolonged exposure to electronic devices on their eyes through diet, nutritional supplements, and eye exercises.

Stress Relief, Starting from the Heart

Continuously promoting the Employee Assistance Program (EAP), publishing articles on stress management, and holding essential oil relaxation workshops to help employees alleviate physical and mental stress.

In 2024, we held a total of 15 health seminars, attracting 247 participants, making health management not just a system but an integral part of the corporate culture.

Through rigorous health management, professional healthcare support, and ongoing health promotion activities, ECOVE will continue to deepen health care measures, safeguarding the physical and mental health of every employee and creating a safer, healthier workplace environment!

On-site medical services



On-site Service - Nanke Plant



On-site Services - Facilities at Taoyuan International Airport



On-site Services - Second Headquarters



On-site Service - Tainan Plant

To care for employee health, the CTCI Group has established a "Health Care System Platform," which provides functions such as health knowledge, hospital appointment scheduling for health check-ups, health questionnaire completion, health promotion activities, and medical health consultation registration. We are also committed to promoting the intelligent and systematic "Hygeia Health Management System," which effectively utilizes collected and analyzed health check data to grasp employee health information, report statistics, and risk management.

While promoting corporate health and sustainable development, we deeply recognize the importance of health management for contractors. Therefore, we actively collaborate with contractors to ensure that their work environment and employee health receive adequate attention and protection. Our contractor health management measures cover the following key aspects:



Through these measures, we work hand in hand with contractors to create a safe, healthy, and sustainable work environment, ensuring that every worker can work with peace of mind under health and protection. In addition, we continue to optimize employee welfare measures, allowing every colleague in the ECOVE family to focus on learning and growth without worries. Starting in 2024, we will adjust the health check content based on the needs of different age groups to ensure that health management is more personalized and comprehensive. Furthermore, we will enhance the health check subsidy amounts for employees: those under 40 will see a 33% increase in their health check subsidy every two years, employees aged 40-65 will see a 100% increase every two years, and those aged 65 and above will see a 300% increase in their annual health check subsidy, providing colleagues with more comprehensive health care.

Target	Check Frequency	New Quota	Original Quota
Group Qualification Assistant Level (including) and above	-	50% of Total Subsidy	
65 years old (inclusive) and above	Once a year	6,000	1,500
40-65 years old	Once every two years	6,000	3,000
Under 40 years old		4,000	3,000

Health Management and Seminars

The health seminars, health certifications, and health promotion activities of ECOVE and its subsidiaries in 2024 are briefly outlined as follows:

	Topics	Sessions	Total Participants
Health Lectures	Stress Relief and Emotional Management Related Lectures (Essential Oil Sleep Spray, Pain Relief Essential Oil Roll-On, Stress Management and Emotional Adjustment, etc.)	8	122
	Vision Care Lectures	3	53
	Physical Fitness Testing	1	32
	Introduction to Stroke and Hypertension	1	21
	Use of CPR and AED	2	19
Ministry of Health and Welfare National Health Administration Certification	Healthy Workplace	Health Promotion Workplace	Keelung Plant, Southern Taoyuan Plant, Miaoli Plant, Houli Plant, Wurih Plant, Nanke Plant, Tainan Plant, Xizhou Plant
		Healthy Activation Workplace	Second Headquarters, Facilities at Taoyuan International Airport, Xizhou Plant, Gangshan Plant
	AED Safe Locations		Keelung Plant, Southern Taoyuan Plant, Facilities at Taoyuan International Airport, Miaoli Plant, Houli Plant, Wurih Plant, Xizhou Plant, Nanke Plant, Tainan Plant, Gangshan Plant

Photos related to health seminars



Vision Health Seminar - Tainan Plant



Stress Relief and Emotional Management Seminar - Keelung Plant



Vaccination

Health Promotion Activity: Influenza Vaccination

■Dioxin tracking and detection - Strictly monitoring the working environment to protect the health of our colleagues!

Since 2008, every four years, the Environmental Trace Toxicology Research Center of Cheng Kung University has been commissioned to conduct blood dioxin testing and tracking for representative employees of the incineration plant, combined with health checks, dietary assessments, and occupational exposure evaluations for analysis. The results show that the dioxin concentration in employees' blood is lower than the average in Taiwan and the recommended values by WHO, reflecting the company's effective measures in air pollution control and employee health protection. As of 2024, five tests have been completed, with the next one scheduled for 2028. Additionally, safety and health training is conducted before annual maintenance work to reinforce the correct use of protective equipment and operational safety, ensuring the health and safety of employees at work.



Blood Test



Doctor's Consultation

Detection Year	2008	2012	2016	2020	2024
Blood Dioxin Levels (pg WHO98-TEQ/g lipid)	11.1	13.3	14.6	12.1	9.7

The only company conducting blood dioxin tracking for employees in the country, with test results consistently below the average value of 19.7 pg WHO98-TEQ/g lipid for the Taiwanese population.

In 2024, blood tests for polychlorinated dibenzo-p-dioxins/furans were conducted on 38 operators of the company's municipal waste incinerators, with an average value of 9.7 pg WHO98-TEQ/g lipid. This is significantly lower than the average values from previous years, which were 12.1 pg WHO98-TEQ/g lipid in 2020 and 14.6 pg WHO98-TEQ/g lipid in 2016. Additionally, there was no elevated level compared to workers in other metal smelting industries, indicating that the concentration of polychlorinated dibenzo-p-dioxins/furans in the blood of our incinerator operators has not increased due to exposure in the work environment, despite their long-term work at the incinerators.

However, polychlorinated dibenzo-p-dioxins/furans are cumulative and may increase with occupational exposure time, improper use of protective equipment, aging of workers, and abnormal dietary habits. Therefore, the company will continue to provide relevant health education to employees. In addition to the correct use of safety protective equipment, we will also emphasize the importance of a balanced diet and regular exercise, and we will continue to monitor the concentration of polychlorinated dibenzo-p-dioxins/furans in workers' blood.

In the future, the company will continue to pay attention to the latest news and academic research, and will continuously improve the protective measures for incinerator operators. We will also track the latest developments in related fields to ensure that we provide the most comprehensive health and safety protection for our employees. Through ongoing learning and improvement, we are committed to creating a safer working environment for our staff.

Safety and Health Environmental Series Activities

The Safety and Health Environmental Series of activities is held annually. In 2024, we will continue to remind all colleagues of the importance of building a safety consensus, recognizing potential hazards, and implementing safety measures through the safety open letter from the General Manager of ECOVE. Additionally, supervisors at all levels will provide on-site guidance and inspect work safety requirements. Emergency response training will utilize hands-on teaching to immerse colleagues in real situations, helping them understand how to respond when faced with actual emergencies. Management will also continuously engage in safety reflections, proposing innovative or improvement suggestions to achieve the implementation of safety and health practices.

■Safety

Safety and Health Environment Open Letter

Chairman's Open Letter: Internalizing Safety Awareness, Implementing Safety and Health Mechanisms, Demonstrating Safety Importance



Visible Leadership

All management levels personally host safety and health environment meetings



Safety and Health Environment Capability Training



Safety and Health Environment Promotion Meetings



Employee General/On-the-Job Safety and Health Education Training

On-site Inspections



Emergency Response Drills



Comprehensive Fire Emergency Response Drills



First Aid and Bandaging Emergency Response Drills



Contractor Safety Management



Contractor Education and Training/Agreement Organization

Regular Safety and Health Environment Training for On-site Supervisors

Operational Safety Control

Technology Application



XR Virtual Reality Application

Contractor Safety Management



Contractor Blood Pressure Measurement



Contractor Toolbox Meetings

Internal and External Safety Audits



ISO 45001 Occupational Health and Safety System Certification



Joint Inspection by Fire Brigade

Social Participation



ECOVE volunteers
invested

3,952 hours

Connected with

17,554 people
externally



Community Activities Linking Operations

- Taiwan in My Eyes 120h
- Environmental Education Facilities, Empowering a Green Future
- Step by step: Factories for Sustainable Environmental Education
 - Purple crow butterfly Conservation Joins Environmental Education



Long-term Community Building

- Foster good relations with neighbors and integrate into the community
- Protect the community environment and be a good local neighbor



Corporate Volunteerism for Mutual Benefit

- Friendly charity, caring for the disadvantaged
- Multiculturalism is present, cultivating future influence
- Responding to international initiatives, green sustainability



Social Participation GRI 203

ECOVE firmly believes that a company's value comes not only from operational performance but also from its active contributions to society. As a responsible corporate citizen, we are committed to promoting social development, striving to align business operations with social responsibility, and fostering a sustainable and prosperous future. We have long focused on social needs, transforming our corporate influence into positive social energy through three main pillars: "Community Activities Linking Operations," "Long-term Community Building," and "Corporate Volunteerism for Mutual Benefit." The company actively encourages employees to participate in volunteer services, caring not only for local communities and disadvantaged groups but also hoping that employees gain a sense of achievement and life balance while giving back, thereby creating a warmer corporate culture.

In 2024, ECOVE will continue to engage in public welfare actions, caring for local disadvantaged groups. Throughout the year, a total of 502 people took part in volunteer activities, accumulating 3,952 hours of service, demonstrating our commitment to corporate citizenship through tangible actions. We will continue to deepen our social participation, leveraging corporate strength to promote social well-being, and work together to create a warmer and more sustainable future.

3,952 hours

Operations-related community activities

Environmental protection is not only about technology and policy but also relies heavily on public participation and awareness. Therefore, ECOVE actively promotes environmental education through diverse learning channels and hands-on experiences, instilling environmental consciousness in people's hearts. Currently, five of the company's locations have been certified as environmental education facilities, becoming enjoyable learning bases for the public. Among them, the Miaoli Plant has even been selected as a designated visiting facility for the international event "Explore Taiwan 120h," fully demonstrating the importance and impact of its environmental education efforts.

In order to cultivate the correct values regarding environmental protection in the next generation and promote the concept of sustainable living, ECOVE has partnered with the CTCI Education Foundation since 2018 to launch the "Step by step: Factories for Sustainable Environmental Education" program. This initiative targets elementary schools across Taiwan, actively entering campuses to root environmental education, allowing children to establish a consciousness of sustainable development from a young age. In 2021, ECOVE and the CTCI Education Foundation joined forces again to initiate the second phase of the "Step by step: Factories for Sustainable Environmental Education" program, continuing to deepen environmental education and aligning it with the United Nations Sustainable Development Goals (SDGs). With an international perspective, they promote local environmental education, and in 2024, they will collaborate with the Taiwan Purple crow butterfly Ecological Conservation Association to incorporate butterfly conservation into the curriculum. Through these efforts, we not only convey environmental knowledge but also hope to inspire the younger generation to become practitioners of environmental protection in the future, working together to create a more sustainable planet.

"Taiwan in My Eyes 120h"

The "Taiwan in My Eyes 120h" initiative is a collaborative international event organized by the CTCI Education Foundation (CTCI Education Foundation, abbreviated as CTCIEF) and the Center for Corporate Sustainability (CCS). Each year, it specifically arranges for both domestic and international undergraduate and graduate students from universities to form groups and visit benchmark enterprises in Taiwan, integrating the United Nations Sustainable Development Goals (SDGs).

The opening ceremony and first-day exploration in 2024 designated the headquarters of ECOVE as a visit target. The headquarters building, designed with intelligent energy management and eco-friendly concepts, has obtained the "Taiwan Green Building EEWH Diamond Level," "Smart Building Diamond Level" dual certifications, and "U.S. Green Building LEED Gold Certification." Through the visit, participants learned that the overall planning of ECOVE's headquarters not only features human-centered, practical, and comfortable flexible office spaces but also incorporates advanced green building and smart building design techniques. This creates an intelligent green building that can engage in dialogue with people, facilities, and the environment while achieving energy conservation, sustainability, and environmental symbiosis. Participants also voiced their experiences through social media platforms like Facebook, showcasing Taiwan's deep commitment to sustainability to the world. In 2025, the Miaoli plant was once again selected as a designated visit location, marking the eighth consecutive time it has been chosen for this program. Through themed exhibition spaces and various multimedia functions, the visit connects the operations of the incineration plant with relevant environmental protection concepts, creating a Green Dream Works. Under the guidance of ECOVE colleagues, participants were educated on practical knowledge regarding waste resource classification, waste incineration treatment, air pollution control technologies, and energy recovery and power generation, enhancing their knowledge and values related to environmental protection and rooting the concept of sustainability.

8 years
of cooperation



Taiwan in My Eyes 120h - Fantastic Ten
- The ECOVE headquarters building has been designated as a site for visits, and the participating teams took photos in front of the headquarters.



Exploring Taiwan's 120h - Fantastic Ten - Group
Photo of Miaoli Plant Green Dream Works

Environmental Education Facilities: Empowering a Green Future

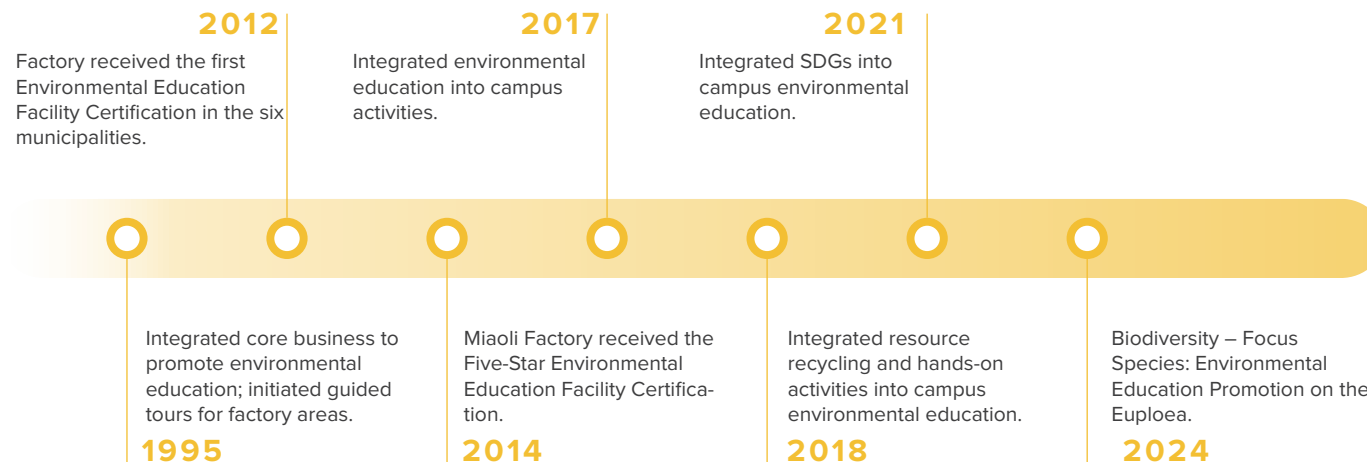
ECOVE has long been committed to environmental education and promotes a sustainable development model of Resource Cycling, environmental protection, and community co-existence through a close integration of its professional expertise and local resources. We firmly believe that environmental education should not be limited to knowledge transfer but should also be integrated into industrial practices. By using real-life cases, we aim to help students and the general public understand the key values of environmental protection, thereby strengthening public participation and expanding our influence. Therefore, ECOVE actively invests in the certification of environmental education facilities, transforming incineration plants into multifunctional environmental learning bases that encompass education, research, conservation, culture, and recreation. We tailor diverse environmental education programs based on the unique processing characteristics, geographical conditions, and cultural backgrounds of each facility, allowing visitors to gain an in-depth understanding of waste treatment and resource recycling operations, while also experiencing the practical process of the circular economy through interactive experiences.

Through this operational integration, ECOVE not only optimizes its own environmental protection technologies and resource management efficiency but also deepens collaboration with the community, expanding the impact of environmental education and ultimately realizing a sustainable vision of shared prosperity for enterprises, society, and the environment.

ECOVE has currently obtained certification for five environmental education venues, integrating its core business to diversify environmental education facilities. This transforms rigid and difficult-to-understand environmental knowledge into engaging experiential courses, promoting knowledge and skills related to environmental protection. Colleagues leverage their expertise in various fields, such as focusing on the green life cycle, utilizing technology to achieve a green supply chain and product carbon footprint, and maximizing the core values of the industry through ecological, production, and lifestyle resources. By obtaining certification for environmental education facilities, we aim to change everyone's environmental education DNA. Each venue under our brand has its unique teaching system and mission of environmental protection inheritance. In the future, we will continue to develop new environmental education courses, providing neighborhoods and communities with more engaging and locally distinctive environmental education services.

ECOVE's environmental education facility has 14 certified instructors who have passed the "Environmental Education Personnel" certification from the Ministry of the Environment's National Environmental Research Institute. They provide professional environmental education lectures and guided tours for the public, along with rich interactive experiences. In 2024, a total of 182 environmental education sessions will be offered, with 6,082 participants.

→ ECOVE Environmental Education Journey



5 plants



Environmental protection is not far from us, nor is it difficult. Through various environmental education programs, we can practice green actions in our daily lives, be friendly to the land, and protect the Earth! The Kundi Environmental Education Team offers a variety of environmental education courses, including new teaching materials on SDGs that are practical for daily life, waste incineration power generation, sustainable living, and DIY recycling courses. All courses are completely free, and we welcome applications from all sectors!

Activity items: Various environmental education visits. Target audience: Schools, organizations, groups, and community units can all apply.

Application method: Please contact the environmental education specialist via E-MAIL: ecovecsr@ecove.com.

Environmental Education Centers × Diverse Characteristic Courses: Promote Environmental Sustainability

Factory Type	Environmental Education Theme	Content
Keelung plant	Turning Waste into Treasure, Witnessing Environmental Regeneration	Through rich and diverse teaching experiences, it explains that while waste incineration has its imperfections, it also has its value, such as the transformation of former sanitary landfills into rehabilitation parks. It is hoped to inspire visitors to take action and care for the environment, ensuring that our beautiful Earth is preserved.
Miaoli plant	Green Dream Works × Technological Interactive Experience	Inspired by the "Green Dream Works," five fictional green aliens with different personalities and specialties are set to carry out various environmental protection missions from outer space to Earth, representing the environmental efforts of the Incineration plant. Through a unique themed exhibition space, interactive games, and multimedia features with wireless internet, it connects more information about the Incineration plant's operations and environmental knowledge, creating a rich and engaging environmental education atmosphere. Surrounded by wetland ecology, Purple crow butterfly ecology, coastal plants, etc., it is the only incineration facility in the country that coexists harmoniously with wetlands. A five-star intelligent facility is being created, and in response to the pandemic, ECOVE has independently developed online environmental education courses, planning to continue promoting both physical and online environmental education courses without being affected in the future.
Houli plant	Incineration × Water Resource Dual Focus	Combining garbage incineration treatment and Dajia River water resource conservation as the main teaching theme, it allows visitors to understand how the Incineration plant addresses waste management issues under the principles and goals of "stabilization," "sanitation," and "resource recovery." Through "The Past and Present of Dajia River," visitors gain a comprehensive understanding of the plant's wastewater treatment and water quality monitoring mechanisms, further appreciating the importance of water resource conservation.
Tainan plant	Co-generation × Circular Economy	Planning high-quality environmental education space that integrates cultural and natural characteristics, along with garbage incineration treatment, co-generation, resource recycling and reuse creative teaching, and kitchen waste composting education as the main teaching themes, it becomes a place that combines waste incineration and environmental education functions.
Nanke plant	Three Core Courses, Practicing Sustainable Production	Transforming the concept and practice of sustainable production into environmental education, three sets of environmental education courses have been developed focusing on water resources, waste management, and natural conservation using existing resources and characteristics.



Visit to Keelung Plant by the Environmental Protection Bureau of Keelung City.



Miaoli Plant Environmental Education Mini Trip from Shanjiao Elementary School to Miaoli Plant

Step by step: Factories for Sustainable Environmental Education

Environmental education is not just about the transmission of knowledge; it is also about the cultivation of values and the development of action. In order to help the next generation understand the relationship between humans and nature, as well as between humans and the social and economic environment, and to foster the correct concepts of environmental protection and sustainable lifestyles from a young age, ECOVE has partnered with the CTCI Education Foundation to promote the "Step by step: Factories for Sustainable Environmental Education" program for seven consecutive years. Through enjoyable and educational activities, children learn through experience and grow through practice.

This project focuses on the operation and management of incinerators, as well as recycling and reuse, as core teaching materials. It aims to deepen the content continuously, designing age-appropriate activities for different age groups, while integrating the concept of the SDGs (United Nations Sustainable Development Goals). It includes eco-friendly hands-on experiences, such as making handmade paper fans and reusing seeds, allowing children to participate actively and build environmental awareness through practical activities. At the same time, we use visual education to guide children in understanding global environmental issues, such as the fact that there are up to 100 million tons of plastic waste in the oceans, thereby inspiring their sense of action, starting with rejecting straws and other plastic products, to contribute to the planet.

In 2024, the "Step by step: Factories for Sustainable Environmental Education" program enters its fourth year of the second phase, with its influence continuing to expand. This year, a total of 22 events were held, with 1,221 teachers and students participating, reaching across Taiwan from the northern Keelung plant and Dingnei Elementary School all the way down to the southern Tainan plant and Xinxing Elementary School, even reaching remote areas in the east, bringing environmental education to Hualien Jiamin Elementary School and Sanzan Elementary School, allowing children with fewer resources to access comprehensive environmental education. ECOVE believes that the impact of environmental education should not be confined to the classroom but should start with children, gradually influencing families, further expanding to communities, and ultimately leading the entire society to place greater emphasis on environmental protection. In the future, we will continue to promote this program, providing more children with the opportunity to engage with environmental education, turning environmental awareness into a part of their lives, and working together for a cleaner and more sustainable future.

For **7**
consecutive
years

"Step by step: Factories for Sustainable Environmental Education" Project Social Benefits

	2021	2022	2023	2024
Execution Sessions	21 sessions	21 sessions	25 sessions	22 sessions
Number of Participating Teachers and Students	2,759 people	3,117 people	3,000 people	1,221 people

The results from the feedback survey indicate that 100% of participants recognize and know that the environmental education activities are organized by the CTCI Education Foundation and ECOVE, and 97% agree that ECOVE effectively cultivates students' environmental awareness and promotes a sustainable campus atmosphere.



The ECOVE environmental education team visited Keelung Plant Dingnei Elementary School, leading the children to learn about the Keelung Plant.



The ECOVE Environmental Education Team visited Dalu Elementary School in Taoyuan to introduce the children to the Southern Taoyuan Plant Incineration Plant.



The ECOVE environmental education team visited Taoyuan Touzhou Elementary School, providing a lively explanation of the waste treatment process at the Taoyuan Bio-energy center, helping the children understand the importance of waste reduction.



The ECOVE environmental education team visited Houli Plant and Neipu Elementary School, allowing students to learn about the Houli Incineration Plant and promoting waste reduction.



The ECOVE Environmental Education Team visited the Tainan plant and Xin Xing Elementary School, where they engaged students in DIY activities to create recycled paper, allowing them to learn about resource cycling and reuse in their daily lives.



The ECOVE Environmental Education Team visited Sanzan Elementary School in the rural area of Hualien to promote the importance of waste reduction.

Long-term Community Building

In the past, waste incineration plants and other environmental facilities were often regarded as "NIMBY facilities," provoking resentment and concerns among residents. However, ECOVE has successfully reversed this stereotype through long-term environmental improvements and community engagement, transforming what was once a heavily resisted facility into a "neighborly and enjoyable facility" that coexists and thrives with the community. To reduce the impact on the surrounding environment, ECOVE actively promotes pollution reduction, energy conservation, carbon reduction, and environmental beautification, while also taking part in community affairs. They not only organize coastal clean-up events but also participate in local community activities over the long term, making the incineration plant not just a place for waste disposal but a part of the community. These efforts have gradually transformed the once-rejected environmental facility into a friendly place that residents are willing to accept and even eager to participate in.

In addition, ECOVE has invested in community building for many years, organizing material donation events each year to encourage employees to donate toys, clothing, and books. With the philosophy of "making the most of resources and creating a cycle of goodness," these heartfelt resources are redistributed to those in need. At the same time, ECOVE encourages employees to actively participate in community and environmental education issues, further influencing owners and supply chain partners to collectively foster a corporate volunteer culture and practice corporate social responsibility. ECOVE's efforts have not only gained recognition from the community but have also demonstrated remarkable results in the field of corporate sustainability. In 2024, ECOVE actively responded to the group's ESG Award for Sustainable Excellence Impact Award, winning with two proposals. Among them, the proposal "Purple Butterflies Reflected Because of You," centered on species of concern to the group, combines environmental education with ecological conservation, embodying the spirit of ESG and successfully gaining the judges' favor. In the future, ECOVE will continue to deepen community engagement and environmental sustainability actions, using the award-winning proposals as benchmarks to continuously optimize operational models and promote environmental education, contributing more tangible impact to the sustainable development of the Earth.

Promote harmony among neighbors and integrate into the community

ECOVE upholds the concept of "mutual benefit in the local community" and actively participates in and supports the cultural development and environmental education of various communities. Through long-term and in-depth interactions, we are committed to playing the role of a facilitator in promoting environmental protection, cultural preservation, and community cohesion, working hand in hand with communities to create a sustainable future.

■ Deepening Local Culture: Long-term Participation in the Jiushe Cultural Festival

In the Jiushe community of Taichung City, the Houli plant has co-organized the "Jiushe Cultural Festival" for 21 consecutive years. This event combines local traditional culture with modern environmental concepts, providing a platform for both exchange and inheritance. Through participation, community residents not only gain a deeper understanding of local cultural arts but also subtly enhance their environmental awareness, fostering community cohesion and sense of identity.

■ Environmental Education Integrated with Community Characteristics

ECOVE's various plants, based on local characteristics, collaborate with community associations to integrate environmental concepts into daily life, achieving an educational model that emphasizes both knowledge transfer and practical action. For example, the Tainan plant, leveraging the area's rich natural resources, signed a memorandum of cooperation on environmental education with the Chengxi Community Development Association in An'nan District, Tainan City. They invited professional environmental education instructors to conduct courses, emphasizing the reuse of resource waste. Through hands-on teaching, students create artworks

using simple tools and everyday waste, inspiring their creativity and environmental awareness.

The Miaoli plant not only integrates environmental education courses with field visits to the Mingde and Wennei communities, introducing local characteristic industries and ecological environments, but also participates in the local government's "2024 Miaoli Sustainable 365: Wonderful Moments of Environmental Education" and assists the CTCI Education Foundation in organizing the "Little Sustainable Engineer Camp," visiting nearby Zhunan Wetlands to understand the local Purple crow butterfly ecological environment.

■ Participating in Local Actions: Co-creating Diverse Cultures and Sustainable Living

ECOVE has long supported and participated in cultural and ecological activities in various communities, encouraging employees to actively engage with their families, demonstrating the company's top-down commitment to sustainable participation:

- Taipei Area: Co-hosting the "Autumn Earth Art Festival" with the Taipei Beautiful River Cultural Promotion Association to raise public awareness of urban river ecology.
- Southern Region: The Tainan plant participated in the Mother's Day event in the Chengxi community; the Gangshan plant organized the "Net Zero Mission Challenge, Walking Together in the Forest," promoting low-carbon living and nature conservation.
- Overseas Locations: The Macau plant participated in the "Walk for Millions" activity, supporting local public welfare through practical actions and enhancing the corporate social responsibility image.
- Technology Park: The Nanke plant team participated in "Sports at Nanke", promoting healthy living and community cohesion within the park.

These activities showcase the diverse exchanges between ECOVE and the community, allowing employees to deepen their understanding of environmental and cultural issues through participation.

ECOVE participated in the Autumn Earth Art Festival organized by the Beautiful Waterways Association.



Nanke Plant responds to the Southern Science Park Administration's "2024 Sports at Nanke" event, promoting good sports habits.



Miaoli plant 2024 Miaoli Sustainable 365: Wonderful Moments of Environmental Education



Gangshan Plant's "Net Zero Mission Challenge: Walking Together in Forest"



The Miaoli plant's "Little Sustainable Engineer Camp" provides an on-site experience at the green dream factory located in the Miaoli plant, where participants learn how the incineration plant operates and how to improve equipment efficiency. They also visit the nearby Zhunan Wetlands to gain a practical understanding of the ecological environment of Purple crow butterfly.



Protecting the Community Environment, Good Neighbors locally

ECOVE is not only a promoter of the circular economy but also a good neighbor dedicated to protecting the community environment. For a long time, we have taken practical actions to safeguard the living environment of our facilities and surrounding communities, including:

Daily environmental maintenance

Our various operational sites have long been committed to maintaining the facility and surrounding environment, regularly and irregularly conducting road cleaning operations, rehabilitating lawns, and utilizing waste as installation art, among other activities.

Beach cleaning, forest cleaning, and green space adoption initiatives

For operational sites near coastlines and forests, such as the Keelung plant, Southern Taoyuan plant, Bio-energy center, Miaoli plant, Xizhou plant, Nanke plant, and Tainan plant, ECOVE has long promoted beach and forest cleaning activities. Although single cleaning efforts cannot eradicate the problem of marine and forest waste, these actions have successfully raised colleagues' awareness and participation in environmental issues, further implementing plastic reduction and avoidance in daily life. In 2024, a total of 1,181.5 hours were dedicated to community service, with 10 beach/forest cleaning events held, collecting 6,772 kilograms of waste. Additionally, in 2024, ECOVE began adopting green spaces, taking care of nearly 4,600 square meters of green space in the Guanyin Industrial Park, creating a positive image for the park and bringing lasting greenery and vitality to the industrial community.

Caring for local biodiversity

ECOVE continues to deepen its commitment to biodiversity. In addition to environmental cleaning, we actively engage in species conservation and ecological education, integrating nature protection into our corporate sustainability strategy. Since 2020, we have participated in the "Tamsui River Covenant" initiative by CommonWealth Magazine for five consecutive years, actively participating in environmental actions for the Tamsui River; in 2024, we focused on "biodiversity" and collaborated with the Guandu International Nature Art Festival to promote the action "Strengthening Green Water Vitality, Protecting Wetland Biodiversity" at Guandu Nature Park, advocating for aquatic ecological protection and the concept of symbiosis and mutual prosperity.

Moreover, regarding the species Purple crow butterfly that ECOVE is concerned about, we have leveraged the advantages of environmental education to create a series of activities, including hosting an Purple crow butterfly ecological lecture, inviting the Taiwan Purple crow butterfly Conservation Association as speakers, attracting about 230 participants. At the same time, we established Purple crow butterfly environmental education zones at various plants to promote knowledge about Purple crow butterfly's habitat and migration. To cultivate professional environmental education guides, we organized environmental education seed teacher training workshops. In addition to educational promotion, we actively participated in the tagging activities in Maolin and the survey of Purple crow butterfly-friendly plants in Zhunan Wetland, where nearly a thousand Purple crow butterfly were tagged. Through hands-on operations, we gained a deeper understanding of the migration process of Purple crow butterfly; furthermore, we designed LINE stickers that combine Purple crow butterfly characteristics with everyday language, integrating conservation concepts into daily life.

As the relationship between businesses and society becomes increasingly close, ECOVE will continue to expand cooperation with local communities, public sectors, non-profit organizations, and other parties to actively implement the corporate mission of friendliness, mutual benefit, and sustainable development, injecting a continuous stream of positive energy into the co-creation of a better living environment.



Xizhou Plant Clean-up Activity



Tainan plant participated in a beach cleanup activity at the top of Taijiang.



Bio-energy center Beach Clean-up Activity



ECOVE SRC Guanyin Industrial Park Green Space Adoption

Friendly Corporate Volunteers for the Common Good

ECOVE colleagues have come together with love to establish the "Friendly Charity Society," continuously launching diverse charitable initiatives and calling on employees to participate together, injecting positive energy into society. Corporate social responsibility should not just be an idea; it should be integrated into the daily actions of every employee. ECOVE also combines practices such as resource reuse and material sharing, merging environmental protection with charity, promoting a cycle of goodness, and realizing the values of sustainability and mutual benefit.

Friendly Public Welfare, Caring for the Disadvantaged

ECOVE is deeply committed to local social care, encouraging employees to proactively propose charitable actions through the "Friendly Charity Society" and exploring diverse ways to help others. We collaborate with charitable organizations and communities to continuously promote actions that care for disadvantaged groups, including GUANYIN LOVE HOME, the Taichung Baby Care Program, and the Chung-Yi Social Welfare Foundation's Invoice Collection, as well as purchasing cookies from the Hualien Dawn Shelter Workshop to help social welfare organizations in earthquake disaster areas regain stable living conditions. Starting in 2024, we will also collaborate with the Sunshine Social Welfare Foundation to hold "Sustainable Giving: Spreading Love at Christmas," where we will adopt children's wish lists and donate Christmas gifts and daily necessities, ensuring that the warmth of the holiday season continues and embodying the concepts of sharing and sustainability. These activities are actively participated in by our colleagues, allowing the company's compassion to reach every corner of the community and achieve long-term and tangible positive impacts.

■ Finding a New Home for Resources: Sharing Resources to Extend Love

Upholding the core spirit of "cherishing every resource," ECOVE has long promoted resource reuse and material circulation. Through the "Friendly Charity Society," it integrates internal and external charitable resources, giving items a new life and ensuring they truly reach those in need. For example:

- Love Computer Dream Project × Digital support for disadvantaged students: The company refurbishes computers that are no longer in use but still functional and donates them to underprivileged students to support their digital learning needs, thereby narrowing the educational gap. This program has been ongoing for ten years and has received strong affirmation from teachers and students.
- Food bank collaboration to support disadvantaged families: By partnering with food banks, ECOVE regularly donates food and daily necessities to underprivileged families, helping them maintain basic living standards, avoid waste, and promote effective resource allocation.
- Old Shoes Saves Lives: Since 2020, ECOVE has participated in the "Life Without Spare Old Shoes Saves Lives" program for five consecutive years, donating old shoes and supplies to assist residents in impoverished areas around the world, maximizing the value of idle resources.
- Donate Books, Spread the Love of the Sunshine: For two consecutive years, ECOVE has held book exchange events to encourage colleagues to engage in knowledge sharing and material circulation. Books that are not exchanged are fully donated to the Sunshine Social Welfare Foundation, continuing the value of reading and spreading knowledge and warmth.

■ In-depth Community Care

The volunteer teams at ECOVE's various plants actively participate in local community welfare actions, identifying local needs and providing tangible support. For example, the Houli plant collaborates with the Jiushe community activities by donating care packages that include essential living supplies. ECOVE Waste Management Corporation and the Southern Taoyuan plant engage in the Love Home activity to gain a deeper understanding of the materials lacking in homes, offering practical support and feedback. The offerings for the Zhongyuan Festival at each business location are organized and then returned to nearby community units to ensure that the resources are utilized to their fullest potential.

The value of a company lies not only in its output but also in its ability to bring about positive change in society. ECOVE will continue to realize its vision of friendly coexistence and sustainable development through practical actions.



The International Christian Care Association "Life Without Spare Old Shoes Saves Lives" event



Donating love computers for 10 consecutive years



Taipei colleagues to Chung-Yi Social Welfare Foundation Invoice Collection



ECOVE Waste Management Corporation held the Taichung Baby Care Program charity event.

Friendly Charity Society Charity Activities	Content	2021	2022	2023	2024
Love Computer Dream Project	Donating Computers	v	v	v	v
GUANYIN LOVE HOME	Donating supplies needed for the home, assisting with organizing love invoices, folding DM, and labeling	Cancelled due to the pandemic	v	v	v
Taichung Baby Care Program	Preparing adoption letters, folding promotional materials for Guanyin Love Home, organizing invoices, cleaning the premises			v	v
Chung-Yi Social Welfare Foundation Invoice Collection	Street fundraising for invoices			v	v
Life Without Spare Old Shoes Saves Lives	Donating gently used old shoes, clothing, and backpacks	v	v	v	v
Donate Books, Spread the Love of the Sunshine	Donating books		v	v	
Sustainable Giving: Spreading Love at Christmas	Sunshine Social Welfare Foundation Christmas gifts for burn and facial disfigurement children			v	v
Disaster Area Care	Purchasing cookies from Hualien Dawn Shelter Workshop to help earthquake disaster area social welfare organizations regain stable living				v
Food Bank	Donating food			v	v

Through a series of public welfare actions, ECOVE transforms the influence of enterprises into social positive energy, ensuring that care is not just a one-time donation but a continuous cycle of goodness, bringing more warmth and hope to society.



To ensure the effective use of resources, the offerings gathered by the company Zhongyuan Pudu are returned to local community organizations.



The Houli plant connects with community care and distributes love boxes with the village chief of Jiushe.



ECOVE colleagues respond to "Sustainable Giving: Spreading Love at Christmas"



Support Hualien by purchasing cookies from the Hualien Dawn Shelter Workshop, helping social welfare organizations in earthquake-affected areas regain stable lives and embrace a positive future.

Social Action Engagement

Types of Activities:

Year	Unit	2022		2023		2024	
Environmental Education Activities	NTD	1,037,828	26.0%	2,069,101	39.0%	2,623,518	46.0%
Community Building	NTD	1,226,240	30.7%	1,548,360	29.2%	1,689,545	29.6%
Corporate Volunteering	NTD	1,728,640	43.3%	1,682,320	31.7%	1,391,390	24.4%
Total	NTD	3,992,708		5,299,781		5,704,453	

Input form:

Year	Unit	2022		2023		2024	
Volunteer Workforce	NTD	3,905,280	97.8%	5,178,880	97.7%	5,651,360	99.1%
Activity Expenditure	NTD	87,428	2.2%	120,901	2.3%	53,093	0.9%
Total	NTD	3,992,708		5,299,781		5,704,453	

Multiculturalism is Present, Cultivating Future Influence

To deepen cultural connotations and promote cultural economic development, ECOVE in 2024 will focus on two major activities: the "Little Sustainable Engineer Camp" and the "City Seekers - Biodiversity Collaboration Project," actively promoting environmental education and ecological conservation. In addition, ECOVE encourages employees to practice green consumption through the Green New Life Movement, supporting ESG-friendly vendors and fostering a positive cycle of culture, environment, and economy, achieving the cultural value of "more local, more international."

Cultivating Future Talent

Little Sustainable Engineer Camp, Transforming Children into Sustainability Advocates

The "Little Sustainable Engineer Camp," jointly organized by ECOVE, the CTCL Education Foundation, and its parent company CTCL Engineering, attracted enthusiastic participation from 49 students from 29 elementary schools in 2024. This event aims to enhance children's professional knowledge in environmental sustainability and engineering, cultivate autonomous learning abilities, and inspire future talents. The camp's activities cover sustainable living, environmental education, and workplace visits for engineers. Through observation experiences, SDGs board games, and creative DIY engineering projects, students integrate the concept of sustainable development into practical actions. At the end of the event, the students presented their reflections in groups during the graduation ceremony, sharing their learning outcomes and insights from the three days, showcasing their commitment and creativity towards environmental sustainability. It is hoped that through the "Little Sustainable Engineer Camp," children will not only learn engineering knowledge but also become future advocates for sustainability, embracing challenges with the spirit of engineers and bravely navigating towards the future.

Ecological Conservation Action

The City Seekers Project connects nine major exhibition halls to co-create a biodiversity conservation network.

The "City Seekers - Biodiversity Collaboration Project" is an activity jointly organized by ECOVE and its parent company, CTCL. Starting from the theme of biodiversity, ECOVE will work together with the Zhishan Cultural and Ecological Garden and the nine cultural heritage pavilions to practice ecological conservation and invite the public to care about the issue of biodiversity, from participating in surveys to implementing conservation projects, and taking practical actions to protect the environment.

Green Consumption

Employee New Lifestyle Movement, Supporting ESG-Friendly Industries

The cultural industry combines employees' green new lifestyle movement, and after a vote completed by colleagues, 15 featured vendors with ESG highlights were selected. Employees are free to choose and purchase according to their needs, allowing them to use healthy and environmentally friendly products, contributing to the planet. From a sustainable management perspective, it is hoped that through the green new lifestyle movement, employees and their families will be encouraged to prioritize health, while also supporting environmental and social concerns through green consumption power. The sustainability and net-zero office focuses on communicating and understanding the ESG content of vendors. During the negotiation process, local materials, friendly products, and employment opportunities for disadvantaged groups are reviewed to reduce energy consumption on the environment and society. This not only provides employees with better consumption choices but also fosters a symbiotic relationship with the planet and the environment, boosting the cultural economy.

2024 小小永續工程師營隊 Little Sustainable Engineer Camp 工程師最好玩的營隊 JOIN US

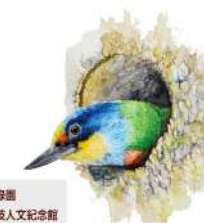


The Little Sustainable Engineer Camp enhances students' knowledge of environmental sustainability and engineering-related expertise, fostering their ability to learn independently.

ECO尋蹤者 seeker

「城市尋蹤者」巡迴展 協作藝文館所生態調查成果

本次展覽透過照片、影片、標本、生態繪圖
邀您一起發現臺北生物的多樣與美麗！



主辦：芝山文化生態綠園
展覽地點：孫運璿科技人文紀念館
「捷運小南門站三號出口」
展覽時間：即日起至12月8日

1 MHT
2024

2024 "City Seekers - Biodiversity Collaboration Project": Based on the theme of biodiversity, we practiced eco-conservation together with the Zhishan Cultural and Ecological Garden and 9 major cultural heritage pavilions

Responding to International Initiatives

ECOVE actively connects with external initiatives, with the director and colleagues serving as initiative ambassadors. Through the power of multimedia, it conveys the spirit of important international initiatives and shares ECOVE's execution results. Participation in these activities not only enhances colleagues' awareness of issues such as climate change and ecological environment but also integrates charitable concepts, calling for everyone to recognize their ability and responsibility to change the world in the face of global climate change. As long as we care for the land we live on with heart and action, we can support our planet and create more positive impacts for society.

The ECOVE Group responds to international initiatives by having colleagues from its various companies serve as initiative ambassadors. They lead all employees in establishing corporate citizenship awareness, integrating sustainability and environmental issues into daily life, while also internalizing the attention and importance of volunteer activities into the corporate culture.



Initiative Ambassador	Initiatives	ECOVE Practices	Connection with ECOVE's Operational Activities	Corresponding SDGs
	Earth Hour	On March 23rd from 8:30 to 9:30 PM, we joined the global initiative to turn off lights for one hour, setting a new record for energy savings and raising public awareness about climate change and energy conservation.	The incineration plant, resource recycling, and water resource center are all high-energy consumption facilities. ECOVE implements energy-saving technologies, smart energy management, and equipment optimization to consistently achieve carbon reduction goals and enhance energy efficiency.	 
	World Water Day	ECOVE's Linkou Water Resource Center can process approximately 23,000 tons (CMD) of domestic wastewater daily. After treatment to meet discharge standards, clean water is released into rivers, and reclaimed water is provided for recycling and reuse.	As a wastewater treatment and reclaimed water supply entity, ECOVE enhances the water resource recovery rate, reduces freshwater demand, and optimizes water cycle management to support sustainable urban water resource development.	 
	World Environment Day	ECOVE Waste Management Corporation utilizes <i>Hermetia illucens</i> to rapidly decompose kitchen waste, producing organic fertilizer from its waste, which serves as a natural fertilizer for fruits and vegetables. Its larvae are also a good source of protein for feeding chickens, pigs, and other animals, thus completing the circular economy! ECOVE Waste Management Corporation uses vehicles that meet "European emission standards," purchasing low-carbon and low-energy vehicles to reduce energy consumption and lower emissions, working together to create a green, low-carbon home.	Incineration treatment and organic waste management are core businesses of ECOVE. By introducing <i>Hermetia illucens</i> technology, we enhance the efficiency of organic waste reuse, reduce the amount of waste incineration and carbon emissions; eco-friendly vehicles optimize operational logistics, implementing low-carbon transportation strategies.	  
	World Animal Day	ECOVE focuses on the native Taiwanese species Purple crow butterfly near its operational sites to address biodiversity issues. The security forest next to the Miaoli incineration plant is the largest breeding ground for Taiwan's Purple crow butterfly, and the migratory butterfly paths from the Keelung plant to multiple incineration plants in Chiayi overlap significantly, deepening ECOVE's sense of responsibility and obligation to protect biodiversity. We designate it as an ecologically significant species and collaborate with the Purple crow butterfly Association to contribute to its conservation.	The operation of the incineration plant is closely related to biodiversity. ECOVE minimizes the ecological impact of incineration plant operations by adjusting green space planning, habitat restoration projects, and environmental monitoring.	 
	International Volunteer Day	ECOVE has always adhered to the philosophy of "Every Resource Counts," collaborating with professionals from different functions within the group. Over the years, we have participated in environmental protection and social care activities, continuously striving towards the United Nations Sustainable Development Goals. In 2024, ECOVE's partners actively participated in various volunteer services, accumulating over 3,900 hours of volunteer time, including love home activities held in northern, central, and southern Taiwan, providing care and donations to vulnerable groups. Additionally, we organized 10 beach and forest clean-up activities and over 200 environmental education events across Taiwan to promote environmental protection.	ECOVE's social responsibility extends to environmental and community engagement. Through employee volunteer activities, we deepen the spirit of ESG (Environmental, Social, Governance) and integrate environmental education with public participation, enhancing the interactive value between the enterprise and society.	  

Most Reliable

All Out - A Diverse Sustainable Action Classroom

Our Spirit: The Most Trustworthy Guardians of the Environment

As a company dedicated to Resource Cycling and waste management, we firmly believe that sustainable development is not only the foundation of corporate growth but also a responsibility towards future generations. The company upholds the spirit of being "the most trustworthy," focusing not only on providing advanced resource recycling technologies but also actively promoting environmental education and the practice of corporate social responsibility (CSR). Our environmental education activities aim to inspire the next generation to pay attention to and take action on environmental issues, and in conjunction with our core business, lead society towards a future of Resource Cycling.

Diverse Practices of Environmental Education Activities

Since 2018, our company has actively engaged in the Resource Cycling reuse initiative and, in order to fulfill our corporate social responsibility, launched the "Step by step: Factories for Sustainable Environmental Education." This program focuses on our operational locations and aims to impart environmental education knowledge to nearby elementary schools. This initiative has not only had a profound impact on education but has also effectively given back to the local community, enhancing our brand image. The company uses schools as the primary promotion venue, striving to raise students' awareness of environmental protection and resource recycling. To date, the program has conducted a total of 154 courses, with participation reaching as high as 18,213 people.

Our course design places special emphasis on fun and interactivity. Through simple and easy-to-understand childlike images, models, straightforward explanations, and interactive games, we vividly present the impact of waste on the environment and the Waste-to-Energy process. This helps students understand the principles of incineration power generation and emphasizes the importance of Resource Recycling. In addition to theoretical education, to help children grasp this concept more deeply, we also convey environmental protection ideas through hands-on activities. Students can personally participate in making recycled paper, seed crafts, and other activities, reusing items that are no longer needed and practicing creative ways of being environmentally friendly. Such practical activities not only deepen students' understanding of environmental protection but also concretize the concept of Resource Recycling, achieving a balance between education and practice. In this process, the impact is not limited to the children; teachers also gain a deeper understanding of the importance of resource recycling through observation, moving beyond a superficial execution of daily recycling. This is a direct exchange between those who handle waste and the public, and through this dialogue, we achieve effective communication, eliminating the gap between front-end and back-end operations, significantly enhancing the public's actual efforts to protect the environment.

As a responsible enterprise, we not only focus on the development of our own business but also care about the sustainable development of society and the environment. Through this, we fulfill our corporate social responsibility and actively create a positive impact on society. Through these efforts, we hope to continue making more contributions to environmental protection and resource recycling in the future, and to inspire more people to participate together, promoting a win-win situation for both society and the environment.



Explaining the process of waste incineration through a model.



By making recycled paper through hands-on activities, we advocate for Resource Recycling and the company philosophy "Every Resource Counts."



Through the process of waste sorting, explain the correct concepts of waste classification and how to identify environmental labels on products.



Appendix

- 133 About This Report
- 134 GRI Standards Comparison Table
- 137 SASB Comparison Table
- 139 Climate-Related Information of TWSE/TPEX Listed Company
- 144 Independent Assurance Opinion Statement

About This Report

ECOVE Environment Corp. (hereinafter referred to as "ECOVE" or "the Company") has been publishing sustainability reports for 15 consecutive years since 2010. Each year, the Company proactively discloses non-financial information to all stakeholders who are concerned about ECOVE, consistently conveying its commitment to sustainable business practices. The Company strives to engage in effective communication with stakeholders and address their needs. The 2024 Sustainability Report was published in August 2025, and the next report is scheduled for release in August 2026.

The information and statistics in this Report were all established upon standardized format as part of

the standard procedures of internal management. In accordance with the "Principles of Sustainable Information Management and Disclosure," we ensure the credibility of data and information quality through internal control processes.

Time Period of Information Disclosure	January 1, 2024 to December 31, 2024
GRI level	GGRI Standards (2021) adherence
Assurance level	Type II - High level of assurance
External verification/ Assurance	- Financial data - PricewaterhouseCoopers (PwC) - Quality management - ISO 9001:2015 - Environmental management systems - ISO 14001:2015 - Greenhouse Gas (GHG) inventory - ISO 14064:2018 - Occupational Safety and Health (OSH) management - ISO 45001:2018 - Sustainability data - AA 1000 AS V3
Contact Information	Contact person HO SHU-CHEN Telephone 02-21621688, Extension: 56139 Mailbox ecovecsr@ecove.com

Boundaries of information disclosure

Within the organization

This report discloses information of ECOVE which covering the period from January 1, 2024, to December 31, 2024, including various initiatives and performance data related to business management, environmental protection, and social engagement. The scope of this report mainly covers ECOVE and its other subsidiaries in Taiwan (excluding BoReTech and ECOVE Chiayi Energy Corporation), and the licensed period of ECOVE Wujih Energy Corp. expired in September 2024, and the company intended for a specific project closed; the activities of each of these subsidiaries are set out separately in the report.

Outside the organization

Boundaries of disclosure outside of the organization include government, customers, shareholders, suppliers, and the community.

Investigation

Internal reviews

The information and statistics found in this Report were collected and compiled by our employees from various departments. They were first verified by departmental supervisors, and then confirmed by the Reporting Team. Concurrently, we also commissioned external consulting team to offer suggestions for improvements. Once all the data and information was complete, it was reviewed by each department head on a case-by-case basis and finally submitted to the Board of Directors for approval. The information and statistics in this Report were all established upon standardized format as part of our internal control to ensure that the numbers and the quality of the information are reliable.

External investigations

The financial data in this report is the Annual Financial Report certified by PwC and were calculated in NTD. The environmental management system (ISO 14001), quality management system (ISO 9001), and OSH management system (ISO 45001) have been verified by impartial third parties. The sustainability information in this report was verified by an impartial third party based on AA 1000 AS.

GRI Standards Comparison Table

GRI Sustainability Reporting Standards (GRI Standards) Topic Correlation Table

Statement of Use ECOVE has prepared its reporting in accordance with the GRI Standards. The reporting period covers the period from January 1, 2024, to December 31, 2024.

GRI Standards/ Other Sources	Disclosed Item	Corresponding Sections and Chapters	Page
GRI 2: General Disclosures			
2-1	Organizational Details	About ECOVE	3
2-2	Entities included in the organization's sustainability report	About This Report	133
2-3	Reporting period, frequency, and contact person	About This Report	133
2-4	Restatements of information	P.91 In the year 2023, for 30-year-old females, the original number was mistakenly printed as 340 people, and has been corrected to 39 people.	91
2-5	External assurance	About This Report	133
2-6	Activities, value chain, and other business relationships	About ECOVE Sustainable Supply Chain Management	3 46
2-7	Employees	Talent attraction and retention	91
2-8	Non-employee workers	Talent attraction and retention	91
2-9	Governance structure and composition	Management Governance	25
2-10	Nominating and selecting the highest governance body	Management Governance	25
2-11	Chair of the highest governance body	Management Governance	25
2-12	The highest governing body oversees the role of impact management	Sustainability Policy and Promotion Structure	9
2-13	The person responsible for managing impacts	Sustainability Policy and Promotion Structure	9
2-14	The role of the highest governance body in sustainability reporting	About This Report	133
2-15	Conflict of Interest	Management Governance	25
2-16	Communicating critical concerns	Corporate Sustainability Promotion Framework	9
2-17	Collective knowledge of highest governance body	Management Governance	25
2-18	Evaluating the highest governance body's performance	Management Governance	25
2-19	Remuneration policies	Management Governance	11
2-20	Compensation decision process	Management Governance	10
2-21	Annual total compensation ratio	Talent attraction and retention	91
2-22	Statement regarding sustainable development strategy	Message from the Chairman	1
2-23	Policy Commitment	Business Ethics and Regulatory Compliance Sustainable Supply Chain Management Human Rights Protection and Welfare	28 46 96

GRI 2: General
Disclosures 2021

The GRI standard used for reporting GRI 1 GRI 1: Basic 2021 **Applicable GRI Sector Disclosures** The applicable GRI sector disclosures have not been determined yet.

GRI Standards/ Other Sources	Disclosed Item	Corresponding Sections and Chapters	Page
GRI 2: General Disclosures 2021	2-24	Incorporating Policy Commitments	Business Ethics and Regulatory Compliance Sustainable Supply Chain Management Human Rights Protection and Welfare 28 46 96
	2-25	Procedures for Remedying Negative Impacts	Materiality Analysis 12
	2-26	Mechanisms for Seeking Advice and Raising Concerns	Business Ethics and Legal Compliance 28
	2-27	Legal Compliance	Business Ethics and Legal Compliance 29
	2-28	Membership of associations	Participation in External Organizations 23
	2-29	Stakeholder Engagement Policy	Materiality Analysis 12
	2-30	Collective bargaining agreements	Not signed -
Material topics			
GRI 3: Material Topics 2021	3-1	Process for Determining Material Topics	Materiality Analysis 12
	3-2	List of Material Topics	Materiality Analysis 16
Corporate Governance and Ethical Corporate Management			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 205: Anti- corruption	205-1	Operations assessed for risks related to corruption	Business Ethics and Legal Compliance 28
	205-2	Communication and training about anti-corruption policies and procedures	Business Ethics and Legal Compliance 28
	205-3	Confirmed incidents of corruption and actions taken	Business Ethics and Legal Compliance 28
Innovative Technology and Services			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
Specific to ECOVE	-	Enhancement of operational management experience and application of AI technology in digital transformation; consulting services for waste cleanup technology; construction of environmental protection and pollution prevention projects; equipment maintenance and sales agency; planning services for incinerator improvement; development of new technology applications for renewable energy/recycling and reuse	Development, Integration and Application of New Technologies Development of Intelligent Management Tools 43

GRI Standards/ Other Sources	Disclosed Item	Corresponding Sections and Chapters	Page
Sustainable Management of Supply Chain			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 204: Procurement Practices	204-1	Proportion of spending on local suppliers	Sustainable Supply Chain Management 52
GRI 308: Supplier Environmental Assessment	308-1	New suppliers screened by environmental criteria	Sustainable Supply Chain Management 46
	308-2	Negative environmental impact and actions taken in supply chain	Sustainable Supply Chain Management 46
GRI 414: Supplier Social Assessment	414-1	New suppliers screened by social criteria	Sustainable Supply Chain Management 46
	414-2	Negative social impact and actions taken in supply chain	Sustainable Supply Chain Management 46
Customer Service and Management			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 418: Customer Privacy	418-1	Substantiated complaints regarding concerning breaches of customer privacy and losses of customer data	Information Security 35
Climate Strategy and Net Zero Effectiveness			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 201: Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	Climate Governance 54
GRI 302: Energy	302-1	Energy consumption within the organization	Energy and Resource Conservation 72
	302-2	External Energy Consumption of the Organization	Information not available -
	302-3	Energy intensity	Energy and Resource Conservation 72
	302-4	Reduction of energy consumption	Energy and Resource Conservation 72
	302-5	Reductions in the energy requirements of products and services	Energy and Resource Conservation 72
GRI 305: Emissions	305-1	Direct (Scope 1) greenhouse gas (GHG) emissions	Greenhouse Gas Inventory 64
	305-2	Energy indirect (Scope 2) greenhouse gas (GHG) emissions	Greenhouse Gas Inventory 64
	305-3	Other indirect (Scope 3) greenhouse gas (GHG) emissions	Greenhouse Gas Inventory 64
	305-4	GHG emissions intensity	Greenhouse Gas Inventory 64
	305-5	Reduction of GHG emissions	Greenhouse Gas Inventory 64
	305-6	Emissions of ozone-depleting substances (ODS)	Information not available -
	305-7	NOx, SOx, and other significant air emissions	Real-time uploading to the Environmental Protection Administration via the continuous monitoring system -

GRI Standards/ Other Sources	Disclosed Item	Corresponding Sections and Chapters	Page
Information Security and Privacy Protection			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 418: Customer Privacy	418-1	Substantiated complaints regarding concerning breaches of customer privacy and losses of customer data	Information Security 35
Pollution Control			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 305: Emissions	305-1	Direct (Scope 1) greenhouse gas (GHG) emissions	Greenhouse Gas Inventory 64
	305-2	Energy indirect (Scope 2) greenhouse gas (GHG) emissions	Greenhouse Gas Inventory 64
	305-3	Other indirect (Scope 3) greenhouse gas (GHG) emissions	Greenhouse Gas Inventory 65
	305-4	GHG emissions intensity	Greenhouse Gas Inventory 64
	305-5	Reduction of GHG emissions	Greenhouse Gas Inventory 64
	305-6	Emissions of ozone-depleting substances (ODS)	Information not available -
GRI 305: Emissions	305-7	NOx, SOx, and other significant air emissions	Real-time uploading to the Environmental Protection Administration via the continuous monitoring system -
Waste Management Efficiency			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
GRI 302: Energy	302-1	Energy consumption within the organization	Energy and Resource Conservation 72
	302-2	External Energy Consumption of the Organization	Information not available -
	302-3	Energy intensity	Energy and Resource Conservation 72
	302-4	Reduction of energy consumption	Energy and Resource Conservation 72
	302-5	Reductions in the energy requirements of products and services	Energy and Resource Conservation 72
GRI 306: Waste	306-1	Waste generation and significant waste-related impacts	Waste 75
	306-2	Management of significant waste-related impacts	Waste 75
	306-3	Waste generated	Waste 75
	306-4	Waste diverted from disposal	Waste 75
	306-5	Waste directed to disposal	Waste 75
Renewable Energy			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis 12
Specific to ECOVE	-	Performance and Environmental Benefits of Renewable Energy Generation	Waste-to-Energy Performance 67

GRI Standards/ Other Sources	Disclosed Item		Corresponding Sections and Chapters	Page
Safe and Healthy Work Environment				
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis	12
GRI 403: Occupational Health and Safety 2018	403-1	Occupational Safety and Health Management System	Safe and Healthy Workplace	108
	403-2	Hazard identification, risk assessment, and accident investigation		111
	403-3	Occupational Health Services		115
GRI 403: Occupational Health and Safety 2018	403-4	Worker participation, consultation and communications regarding occupational health and safety	Safe and Healthy Workplace	110
	403-5	Worker training regarding occupational health and safety		117
	403-6	Worker health promotions		117
	403-7	Preventing and mitigating occupational health and safety impacts directly related to business relationships		113
	403-8	Workers covered by occupational safety and health management system		108
	403-9	Occupational hazards		114
	403-10	Occupational disease		114
	Talent Recruitment and Retention			
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis	12
GRI 202: Market Presence	202-1	Ratio of standard entry level wage by gender compared to local minimum wage	Talent attraction and retention	95
	202-2	Proportion of senior management hired from the local community	Talent attraction and retention	93
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	Ethical management Talent attraction and retention	91
	405-2	Ratio of basic salary and remuneration of women to men	Talent attraction and retention	96
Human Rights Management				
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis	12
GRI 401: Employment	401-1	New employee hires and employee turnover	Talent attraction and retention	93
	401-2	Benefits for full-time employees	Employee Care Diverse Benefits	100
	401-3	Parental leave	Employee Caring	100
GRI 414: Supplier Social Assessment	414-1	New suppliers screened by social criteria	Sustainable Supply Chain Management	100
	414-2	Negative social impact and actions taken in supply chain	Sustainable Supply Chain Management	48

GRI Standards/ Other Sources	Disclosed Item		Corresponding Sections and Chapters	Page
Career Development and Training				
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis	12
GRI 404: Training and Education	404-1	Average hours of training per year per employee	Talent Cultivation and Development	105
	404-2	Programs for upgrading employee skills and transition assistance programs	Talent Cultivation and Development	104
	404-3	Percentage of employees receiving regular performance and career development reviews	Talent attraction and retention	104
Enhancement of Social Impact				
GRI 3: Material Topics 2021	3-3	Management of Material Topics	Materiality Analysis	12
GRI 203: Indirect Economic Impacts	203-1	Development and impact of infrastructure investments and services supported	Social Participation	125
	203-2	Significant indirect economic impacts	Social Participation	125
GRI 200: Economic Series				
Series	Disclosed Item	Description	Corresponding Sections and Chapters	Page
GRI 201: Economic Performance	201-1	Direct economic value generated and distributed (EVG&D) on an accruals basis	Business Results and Industry Outlook	39
	201-3	Defined benefit plan obligations and other retirement plans	Human Rights Protection and Welfare	93
GRI 206: Anti-competitive Behavior	206-1	Legal actions of anti-competitive behavior, antitrust and monopoly practice	Business Ethics and Legal Compliance	29
GRI 400: Social Series				
Series	Disclosed Item	Description	Corresponding Sections and Chapters	Page
GRI 402: Labor/Management Relations	402-1	Minimum notice periods regarding operational changes	Talent attraction and retention	95
GRI 406: Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	Human Rights Protection and Welfare	96
GRI 415: Public Policy	415-1	Political contributions	Business Ethics and Legal Compliance	28
GRI 416: Customer Health and Safety	416-2	Assessment of the health and safety impacts of product and service categories	Business Ethics and Legal Compliance	29
GRI 417: Marketing and Labeling	417-2	Incidents of non-compliance concerning product and service information and labeling	Business Ethics and Legal Compliance	29

*For each of the above provisions, the 2016 version is used, except for the GRI 306 series, which uses the 2020 version, and GRI 303 and 403 series, which use the 2018 version.

SASB Comparison Table

Theme	Code	Category	Measuring Unit	Accounting Metric	Chapter	Page
GHG	IF-WM-110a.1	Quantitative	Metric tons (t) CO ₂ e; %	Under emissions-limiting regulations and emissions-reporting regulations: Scope 1 emissions Percentage of Scope 1 emissions	Greenhouse gas inventory/P. XX In 2024, Scope 1 emissions amount to XXXX metric tons of CO ₂ e, accounting for XX%	64
	IF-WM-110a.2	Quantitative	Million British Thermal Units (MMBtu); %	1. Volume of generated biogas 2. Percentage of biogas combustion 3. Percentage of biogas used as energy	All the waste collected and transported by ECOVE is treated by incineration, and there was no biogas generated in landfills	-
	IF-WM-110a.3	Discussion and Analysis	N/A	Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	Climate indicators and goals/P. XX Using the year 2022 as the base year, ECOVE Headquarters has set reduction targets as follows: a 20% reduction by 2024, a 40% reduction by 2026, and achieving net-zero emissions by 2030. For subsidiaries in the areas of waste management, recycling and renewable energy, which are under long-term operational control, a 15% reduction is set for 2026 and net zero for 2050.	58
Fleet Fuel Management	IF-WM-110b.1	Quantitative	Gigajoules (GJ);	1. Fleet fuel consumed	Energy and resource conservation/P. XX In 2024, vehicles of ECOVE Waste Management Corp. (under ECOVE) consumed 344,419 liters of diesel; no natural gas or renewable energy was utilized	73
			%	2. Percentage of natural gas consumed 3. Percentage of renewable energy consumed		
	IF-WM-110b.2	Quantitative	%	Percentage of alternative fuel vehicles in fleet	There were no vehicles using alternative fuels	-
Air Quality	IF-WM-120a.1	Quantitative	Metric tons (t)	Air emissions of the following pollutants: 1. NO _x (excluding N ₂ O) 2. SO _x 3. VOCs 4. HAPs	Pollution Prevention/P. XX 2024 Emission Levels: NO _x (excluding N ₂ O): 2,573 Sox: 144 VOCs: 1,777 HAPs (dioxins, mercury, cadmium, etc.): 0.0392	76
				Number of Violations Related to Air Quality Permits, Standards, and Regulations	Business Ethics and Regulatory Compliance/P. XX Four Violations in 2024	29
	IF-WM-120a.3	Quantitative	Number			
Management of Leachate & Hazardous Waste	IF-WM-150a.1	Quantitative	Metric tons (t); %	1. Total Toxic Release Inventory (TRI) releases; 2. Percentage of emissions discharged into water	All waste collected and transported by ECOVE was treated by incineration and was not buried. Hence, there was no relevant situation.	-
	IF-WM-150a.2	Quantitative	Number	Number of corrective actions implemented for landfill releases		
	IF-WM-150a.3	Quantitative	Number	Number of incidents of non-compliance associated with environmental impacts		
Labor Practices	IF-WM-310a.1	Quantitative	%	Percentage of active workforce covered under collective bargaining agreements	No collective agreements have been signed	-
	IF-WM-310a.2	Quantitative	Number; Number of days	Number; Days idle	Human Rights Protection and Welfare/P. XX In 2024, no work stoppage incidents occurred, therefore the number of workers affected: 0; Days of idleness: 0.	96

Theme	Code	Category	Measuring Unit	Accounting Metric	Chapter	Page
Workforce Health & Safety	IF-WM-320a.1	Quantitative	Rate	For direct employees and outsourcer/contractor employees:	Workplace Accident Prevention/P. XX	114
				1. Total recordable incident rate (TRIR)	Direct employees and outsourced/contractor employees: 1. Total recordable incident rate: 6 out of 937, or 0.0064% 2. Fatality rate: 0% 3. Near miss frequency rate: 0%	
				2. Fatality rate		
				3. Near miss frequency rate (NMFR)		
	IF-WM-320a.3	Quantitative	Number	Number of road accidents and incidents	Mechanical Equipment Management and Contractor Management Number of road traffic accidents: 4	113
Recycling & Resource Recovery	IF-WM-420a.1	Quantitative	Metric tons (t); %	1. Amount of waste incinerated	Performance of Waste-to-Energy Conversion/P. XX The total incineration volume for 2024 is 2,681,340metric tons.	67
				2. Percentage of hazardous substances	ECOVE's main operation is general waste incineration without any hazardous substance recycle activities.	-
				3. Percentage used for energy recovery	The energy recovery percentage for all incoming waste at ECOVE is 100%, as all waste is incinerated to generate heat for electricity production.	-
	IF-WM-420a.2	Quantitative	%	Customer type by:	ECOVE primarily engages in the incineration treatment of general waste and does not involve recycling or composting activities.	-
				1. Percentage of customers receiving recycling services		
				2. Percentage of customers receiving composting services		
	IF-WM-420a.3	Quantitative	Metric tons (t)	Amount of material:	ECOVE does not recycle or compost; please refer to the Waste-to-Energy section for information on waste-to-energy conversion.	-
				1. Recycled; 2. Composted; 3. Processed as waste-to-energy		
IF-WM-420a.4	Quantitative	Metric tons (t); %	Amount of electronic waste collected and percentage recovered through recycling	ECOVE does not have an operational item specifically dedicated to the recycling of electronic waste.	-	
	Code	Category	Measuring Unit	Activity Metric	Chapter	Page
Activity Metrics	IF-WM-000.A	Quantitative	Number	Number of Customers by Category: 1. Municipal; 2. Commercial; 3. Industrial; 4. Residential; 5. Other	Waste Conversion Performance/P. XX 1. Municipal: In 2024, ECOVE undertook business with 9 local environmental protection bureaus and government agencies. 3. Industrial: In 2024, ECOVE served over 22,000 industrial clients.	-
	IF-WM-000.B	Quantitative	Number	Vehicle fleet size	Energy and Resource Conservation/P. XX Transportation Fleet Size: 29 Vehicles	-
	IF-WM-000.C	Quantitative	Number	The quantities of various types of equipment are as follows: 1. Landfill; 2. Waste Transfer Station; 3. Recycling Center; 4. Composting Center; 5. Incinerator; 6. Other Facilities.	About ECOVE/P. XX In 2024, ECOVE was responsible for the operation of 11 incinerators and owned 116 solar power plants.	-
	IF-WM-000.D	Quantitative	Metric tons (t)	Amount Managed by Customer Category: 1. Municipal; 2. Commercial; 3. Industrial; 4. Residential; 5. Other	Waste Conversion Performance/P. XX 1. Municipal: General waste amounts to 1,568,036 metric tons 3. Industrial: General business waste amounts to 599,527 metric tons	-

Climate-Related Information of TWSE/TPEX Listed Company

The risks and opportunities posed by climate change to companies and the corresponding response measures implemented by companies.

Item	Execution Situation
1. Articulate the Board of Directors and Management's oversight and governance of climate-related risks and opportunities.	The highest committee responsible for climate risk control within ECOVE is the Risk Management Executive Committee, composed of the Board of Directors, Chairman, Audit Unit, General Manager, Executive Secretary, and department heads of subsidiary companies. The President serves as the Commissioner of the Risk Management Committee and convenes regular quarterly meetings. After discussions in the Risk Management Committee, prioritized risk issues are identified, and control measures are proposed to be reported to the Chairman and the Board of Directors.
2. Describe how the identified climate risks and opportunities impact the Company's business, strategy, and finances (short-term, medium-term, long-term).	ECOVE has identified material climate risk issues through a risk matrix, as detailed below: Transition/Physical Risks: 1. Low carbon transition leads to higher equipment costs (short term): In response to carbon reduction targets, the specifications for equipment have been upgraded to exceed the contractual standards for low-carbon equipment, resulting in a budget overrun. 2. Damage to photovoltaic equipment due to strong wind: A severe typhoon may lead to damage to solar photovoltaic modules, rendering them unable to generate electricity. 3. Changes in customer behavior (short-term, medium-term, long-term): (1) In response to the increased sustainability awareness of government agencies, the resource recycle rate will be gradually improved, reducing the proportion of waste incineration. (2) With the trend towards waste management focusing on reduction and recycling, the demand for outsourcing waste solvent treatment has decreased, resulting in a reduction in the volume of waste solvent treatment operations. Transformation Opportunities: 1. Enhancing the power generation efficiency of incineration plants (short-term): Newly established plants improve power generation efficiency, resulting in a decrease in self-consumption rate (for example, the newly established ECOVE Chiayi Energy Corporation has a power generation efficiency of over 27%). 2. Reducing water consumption for waste treatment by introducing a dry deacidification system (short term): Since the incineration plants have introduced dry deacidification system, the water consumption in waste treatment has been reduced, leading to the decrease of the expense of purchasing water. 3. In response to government climate adaptation measures, there is an increasing demand for waste water reclamation plants and seawater desalination (short-term): With economic development, the supply of freshwater will be insufficient, making the establishment of waste water reclamation plants and desalination facilities an inevitable trend. The Group can leverage the dual advantages of CTCI (ECOVE's parent company) and ECOVE to actively pursue opportunities for the establishment of these water facilities. 4. Increase in renewable energy power sales business in response to net zero transition policy (short-term): In response to the increasing demand for solar energy installations both domestically and internationally, it is anticipated that there will be an increase in solar energy installation business and an increase in operating revenue. 5. Development of related reuse services (medium to long-term): In response to the demands of the technology industry and the future market needs arising from policy developments, we will collaborate with technology businesses to jointly assess or seek out and evaluate high-quality technologies.
3. Describe the impact on finance of extreme weather events and transition actions	Extreme weather events: Future severe typhoons affecting Taiwan may lead to damage to solar photovoltaic modules, rendering them unable to generate electricity. Transition actions: Adopt a transfer method to strengthen insurance content Financial impact: Less than 0.5% of the pre-tax income for 2024, indicating a minor effect.
4. Describe how climate risk identification, assessment, and management should be integrated into the overall risk management system.	In order to effectively assess climate-related risks and opportunities, ECOVE has incorporated climate and natural risk types into its "Risk Management Guidelines." This approach allows for the systematic management of potential risks faced by various operating companies. Following discussions by the "Risk Management Executive Committee," priority risk issues are identified, and control measures are proposed. The climate change risk management representative (a member of the Sustainable Development Committee), based on the results of ECOVE's identification of climate change risks, compiles and reports to the Risk Management Executive Committee on significant or immediate risk issues. The Risk Management Executive Committee shall compile the risk assessment results to be provided as a reference for the audit unit to draw up the annual audit plan. The audit office will report the audit results to the Board of Directors to facilitate the board's monitoring of climate-related issues. In accordance with the "Risk Management Regulations", ECOVE systematically identifies climate risks that may be faced during operations. Climate risk consists of two major types, transformational and physical, which are further differentiated into regulations, technology, market, reputation, and immediate and long-term. Opportunities are divided into five categories namely, resource efficiency, energy sources, products and services, market, and resilience. The risk and opportunity matrices are evaluated and drawn based on the two consideration factors of incidence rate and level of impact. After discussion by the Risk Management Committee, the material risks and opportunities which ECOVE may face are determined, and effective actions are adopted to manage risks or harness the possible opportunities so as to strengthen the operational system and competitiveness of the Company and its subsidiaries.

Item	Execution Situation
5. If conducting scenario analysis to assess resilience against climate change risks, it is necessary to explain the following elements: the scenario used, parameters, assumptions, analysis factors, and the primary financial impacts.	The analysis primarily considers changes in the number of consecutive dry days in the region during the baseline period (1995 to 2014) and the SSP5-8.5 (very high emissions) scenario for 2030 to assess potential water scarcity risks that may arise in the future. Furthermore, it evaluates changes in maximum daily rainfall to assess the potential flooding impacts of extreme weather on the region, as well as changes in the number of warm days to evaluate the duration of high temperatures and their effects on ECOVE's operational activities. Regarding transition risks, ECOVE primarily assesses the impacts on its operations related to low-carbon products and services, changes in customer consumption behavior, the financial system, regulations, and low-carbon transition issues under a net-zero emissions scenario (NZE) with a temperature increase of 1.5°C. The analysis parameters include organizational greenhouse gas emissions, estimated carbon tax, waste disposal volume, renewable energy installation costs, renewable energy feed-in tariffs, maximum consecutive dry days, and raw material procurement volume, corresponding to the parameters of various analysis items. The primary financial impact is the increase in operating costs or the decrease in operating revenue resulting from physical/transition risks.
6. If there is a transition plan in place to address climate-related risks, please provide an explanation of the plan's content, as well as the indicators and objectives used to identify and manage physical risks and transition risks.	The Company uses the indicator of water resource management as a measure of physical risk, and greenhouse gas reduction target as an indicator of transition risk. The assessment criteria for each indicator consider risks to be significant and significant if they result in a significant financial impact exceeding 5% of the pre-tax income for 2024. After assessing the relevant transition and physical risks, no significant risks were identified. The description of the transition plan is as follows: 1. Resource Management: With 2022 as the base year for carbon emissions from the operating headquarters, the plan is to achieve net-zero carbon emissions from the headquarters by 2030, with a short-term target of a 20% reduction in Scope 1 and Scope 2 carbon emissions by 2024, and a mid-term target of a 40% reduction by 2026 and the establishment of renewable energy use. 2024: The proportion of green electricity used in the headquarters building reached 20%. 2026: The proportion of green electricity used in the headquarters building will increase to 40%. 2030: The proportion of green electricity used in the headquarters building will reach 100%. 2050: The proportion of green electricity used in the headquarters building and all production sites will reach 100%. 2. Water Resource Management: ECOVE's headquarters building relies 100% on tap water as its water source and does not draw water from any other bodies of water. All wastewater is discharged into the sewage system. In addition to extensively using automatic sensor faucets to reduce water consumption, ECOVE also controls the water flow and timing to conserve water. They have also created various water-saving slogans to remind employees to save water at all times. Rainwater harvesting systems have been installed on the rooftop of the building and at construction sites to collect rainwater for irrigation of plants or for use during construction activities. The total water consumption in 2024 was 1,786.3 cubic meters. The water use intensity was 15.807 cubic meters per person. The primary reason for the minor increase in water consumption is the heightened usage of the training center on the eighth floor, which has led to a slight rise in per-unit water usage. Efforts to promote water conservation will be strengthened. 3. Waste Management: The general waste disposal method for the headquarters building is incineration, which generated 3.38 metric tons in 2024. Recycling management is implemented for paper, metal, plastic, and food waste. Through recycling management, reduction of general waste is made possible. In 2024, the management of recycling for paper containers (including lunch boxes, beverage cups, etc.) was further enhanced.
7. If using internal carbon pricing as a planning tool, it is important to explain the price-setting foundation.	At present, the internal carbon fee operation mechanism is based on the shadow price method, which incorporates the costs and benefits of carbon reduction into the investment analysis to assist in the decision-making of carbon reduction measures. The price is based on the general carbon fee rate of NT\$300 per ton of carbon as announced by the Ministry of Environment.

Item	Execution Situation
8. If climate-related goals have been set, it is important to provide information on the covered activities, scope of greenhouse gas emissions, planning timeframe, and annual progress towards achieving the goals. If carbon offsets or Renewable Energy Certificates (RECs) are used to achieve these goals, the source and quantity of carbon offsets or the number of RECs should be explained.	ECOVE is conducting comprehensive greenhouse gas emission inventories. Organizational-level greenhouse gas inventories are conducted for subsidiaries with operational control, and third-party certifications are obtained. In addition, self-assessments are carried out for other operated incineration plants. Using the year 2022 as the base year, ECOVE Headquarters has set reduction targets as follows: a 20% reduction by 2024, a 40% reduction by 2026, and achieving net-zero emissions by 2030. For subsidiaries in the areas of waste management, recycling and renewable energy, which are under long-term operational control, a 15% reduction is set for 2026 and net zero for 2050. Reduction Planning Process for Headquarters and All Areas: 1. Headquarters: The main source of emissions is purchased electricity in Scope 2, and carbon emissions have been reduced by purchasing green electricity from 2024 onwards. The amount of green power purchased in 2024 was 63,000 kWh, accounting for more than 20% of total electricity consumption. 2. Waste removal: ECOVE Environment Service Corp. cooperated with the Group to conduct an organizational greenhouse gas inventory of waste incineration plants managed by the Group in 2022, to determine the emissions of each emission source, and then continue to improve energy conservation and energy efficiency. The total carbon emission per ton of waste from the incineration plants in 2024 is 440 kg CO₂e. In comparison to the base year of 2022, the average carbon emissions from waste treatment per ton were 456 kg CO₂e, representing a decrease of 3.5%. The target is to maintain a reduction of 1% annually until before 2030. The carbon reduction target of the waste removal of ECOVE Waste Management Corp. is to achieve a 30% reduction by 2030 and to reach net zero by 2050. In the short term, this will be accomplished by actively updating the transportation fleet to the latest environmentally friendly vehicles to reduce carbon emissions. In the medium to long term, carbon reduction will be achieved through the replacement of vehicles with new energy vehicles. In the base year of 2022, the carbon emissions per ton of waste were 455 metric tons CO₂e, and in 2024, the carbon emissions per ton of waste were reduced to 403 metric tons CO₂e, representing a reduction of approximately 11%. 3. Renewable energy sector: Total solar photovoltaic GHG emission intensity of 0.67 kg CO₂e/\$1,000 (Scope 1 emission intensity of 0.01 kg CO₂e/\$1,000, Scope 2 emission intensity of 0.66 kg CO₂e/\$1,000) in the baseline year of 2022. The emission intensity for 2024 is approximately 0.17 kg CO₂e per thousand New Taiwan Dollars. The primary reason is that the electricity used by the plants is recognized as self-generated solar power, thereby reducing the recognition of purchased electricity. 4. Recycling and reuse sector: In the base year of 2022, the total greenhouse gas emission intensity of IPA recycled products was 12.07 kilograms of CO₂e per thousand New Taiwan Dollars. In 2024, the emission intensity was 9.71 kg CO₂e per thousand New Taiwan Dollars, representing a reduction of approximately 19.53% compared to the base year. Due to the upgrade of equipment or the installation of variable frequency drives in 2024, energy efficiency has been improved and 46.74 tons of carbon were reduced, resulting in a decrease in total emission intensity.
9. Greenhouse Gas Inventory and Confirmation of Status and Reduction Targets, Strategies, and Specific Action Plans (also completed in Attached Table 1-1 and 1-2).	Please refer to the attached table "1-1 The Company's Greenhouse Gas Inventory and Assurance Status for the Last Two Years" and "1-2 Greenhouse Gas Reduction Targets, Strategies and Specific Action Plans."

Attached Table 1-1 The Company's Greenhouse Gas Inventory and Assurance Status for the Last Two Years

1-1-1 Greenhouse Gas Inventory Information

The most recent two years of GHG emissions (metric tons of CO ₂ e), intensity (metric tons of CO ₂ e per million New Taiwan Dollars), and the scope of the data are described.	GHG emissions in 2023: 215,473 metric tons; Emission intensity: 28.35 metric tons of CO ₂ e per million New Taiwan Dollars)
	GHG emissions in 2024: 164,698 metric tons; Emission intensity: 19.31 metric tons of CO ₂ e per million New Taiwan Dollars)
Note 1: Direct emissions (Scope 1, i.e., emissions directly from sources owned or controlled by the company), indirect emissions from energy (Scope 2, i.e., indirect GHG emissions from inputs of electricity, heat, or steam), and other indirect emissions (Scope 3, i.e., emissions from the company's activities that are not indirect emissions from energy, but are from sources owned or controlled by other companies). Note 2: The scope of information on direct emissions and indirect energy emissions shall be handled in accordance with the timetable set forth in Article 4-1 and 2 of the "Rules Governing the Preparation and Filing of Sustainability Reports by TPEX Listed Companies" of the Taipei Exchange (hereinafter referred to as "the Rules"), and other information on indirect emissions may be disclosed on a voluntary basis. Note 3: Greenhouse Gas Inventory Standard: Greenhouse Gas Protocol (GHG Protocol) or ISO 14064-1 published by the International Organization for Standardization (ISO). Note 4: The intensity of GHG emissions can be calculated per unit of product/service or turnover, but at least the data calculated by turnover (NT\$ million) should be stated.	

Attached Table 1-2 Greenhouse Gas Reduction Targets, Strategies and Specific Action Plans

1-1-2 Greenhouse Gas Assurance Information

A description of the status of assurance for the two most recent years ended on the date of printing of the annual report, including the scope of assurance, the assurance organization, the assurance criteria and the opinion of the assurance.	The scope of GHG verification in 2023 is ECOVE and its consolidated subsidiaries. ECOVE, ECOVE Wujih Energy Corp. and ECOVE Miaoli Energy Corp. are in accordance with 14064-1:2018, and the rest of the subsidiaries are in accordance with GHG Protocol, which have been verified by SGS Taiwan Limited.
	The scope of GHG verification in 2024 is ECOVE and its consolidated subsidiaries. ECOVE, ECOVE Wujih Energy Corp. and ECOVE Miaoli Energy Corp. are in accordance with 14064-1:2018, and the rest of the subsidiaries are in accordance with GHG Protocol, which have been verified by SGS Taiwan Limited.
Note 1: This shall be done in accordance with the time schedule stipulated in Article 4-1, Paragraph 3 of these Rules. Note 2: A fiduciary institution shall comply with the requirements for fiduciary institutions for sustainability reports established by the Taiwan Stock Exchange and the Taipei Exchange. Note 3: The disclosure can be found in the Best Practice Reference Sample on the website of the Center for Corporate Governance of the Taiwan Stock Exchange.	

Describe the base year of GHG reduction and its data, reduction targets, strategies and specific action plans and achievement of reduction targets.	- Using the year 2022 as the base year, ECOVE Headquarters has set reduction targets (Scope 1 + Scope 2) as follows: a 20% reduction by 2024, a 40% reduction by 2026, and achieving net-zero emissions by 2030. For unitary subsidiaries under operational control, the areas of waste cleanup, recycling, and renewable energy are set to be reduced by 15% by 2026 and reach net zero by 2050. - Reduction strategies and specific action plans for the headquarters and various fields: - Headquarters: Absolute reduction target, 123.43 metric tons of CO₂e in the base year (Scope 1 + Scope 2), public vehicles have been fully hybridized, and will be phased out gradually to electric vehicles to reduce carbon emissions and pollution, and plans to purchase 63,000 kWh of green power in 2024 (accounting for 24% of the total electricity consumption), raising it to 40% in 2026, and by 2030 the operating headquarters will be fully powered by green power. The total carbon emissions in 2024 were 98.07 metric tons CO₂e, representing a reduction of approximately 20.5%. - Waste cleaning sector: (1) The emission intensity of waste removal (ECOVE Waste Management Corp.) in the base year of 2022 is 454.86 metric tons of CO₂e per 500,000 kilometers of waste removal. In the short term, fuel consumption will be reduced by more than 20% per unit by actively replacing the removal vehicles with the latest environmentally friendly vehicles, and at the same time introducing petrol-electric power to the waste compression vehicles. Emission intensity in 2024 was 11.3% lower than in 2022, at 403.4440 metric tons of CO₂e/per 500,000 km. (2) Waste incineration will continue to improve energy conservation and energy efficiency, and in 2024 completed a total of 26 energy/resource conservation programs, including the replacement of energy-saving lamps in the plant, the addition of inverters to large wind turbines, the replacement of air condenser fans with FRP material, the renewal of chilled water machines and improvement of furnace beds, the use of heat pumps, and the soot blower switching to shockwave cleaning, and so on. As a result of these energy-saving measures, a total of 5,953 metric tons of carbon dioxide equivalent were reduced in 2024. - Recycling sector: Emission intensity was 12.07 kg CO₂e/\$1,000 of revenue in 2022 (base year), and 9.71 kg CO₂e/\$1,000 of revenue in 2024, a decrease of 19.53%, which is in line with the target. Meanwhile, In 2024, the proportion of green electricity usage reached 8.8%. In the short term, we will continue to reduce carbon intensity through process optimization while enhancing energy efficiency to achieve the goal of reducing 15% of the emission intensity by 2026. - Renewable energy sector: The emission intensity for the base year 2022 was 0.67 kg CO₂e per thousand NTD, while the emission intensity for 2023 is 0.17 kg CO₂e per thousand NTD, representing a reduction of approximately 41.24%, which meets the target. The primary reason for this decrease is that the electricity used in the plant has been recognized as self-generated solar power, thereby reducing the need for purchased electricity.
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Note 1: This shall be done in accordance with the time schedule stipulated in Article 4-1, Paragraph 4 of these Rules.

Note 2: The base year should be the year in which the consolidated financial statements are completed. For example, in accordance with Article 4-1, Paragraph 2 of the Rules, a company with a capital of NT\$10 billion or more should complete the consolidated financial statements for the year 2024 in 2025, so the base year should be the year 2024; if a company has completed the consolidated financial statements earlier than that date, it can use that earlier year as the base year, and the data of the base year can be calculated by a single year or the average of several years.

Note 3: The disclosure can be found in the Best Practice Reference Sample on the website of the Center for Corporate Governance of the Taiwan Stock Exchange.

Energy Consumption Table

Region	Energy type	Unit	Annual usage			
			2021	2022	2023	2024
Headquarters	Non-renewable electricity	MWh	336	242	250	198
	Gasoline		47	2	0	0.7
	Renewable electricity		0	0	0	63
	Non-renewable electricity		1,754	2,644	2,789	2,545
Production locations and subsidiaries	Gasoline	MWh	191	718	75	512
	Diesel		5,411	5,234	5,217	5,986
	Natural gas		2,835	4,578	4,871	4,754
	Liquefied petroleum gas		1	5	3	3
	Renewable electricity		90	120	120	120
Headquarters+Subsidiaries	Non-renewable electricity +fuel	MWh	10,573	13,431	13,206	13,998
	Renewable electricity		90	120	120	183

Note 1: 1 kWh = 3.6 MJ.

Note 2: 1 kilocalorie = 4,184 joules.

Note 3: Thermal value of automobile = 7800 kcal/liter, taken from the website of Bureau of Energy, Ministry of Economic Affairs: "Heat Content of Energy products" $\approx$ 32.6352 MJ/liter

Note 4: Thermal value of diesel fuel = 8400 kcal/liter, taken from the website of Bureau of Energy, Ministry of Economic Affairs: "Heat Content of Energy products" $\approx$ 35.1456 MJ/liter

Note 5: Thermal value of liquefied petroleum gas = 6635 kcal/liter, taken from the website of Bureau of Energy, Ministry of Economic Affairs: "Heat Content of Energy products" $\approx$ 27.7608 MJ/liter

Note 6: 1 kiloliter of gasoline = 0.747 metric tons, as sourced from the conversion table for petroleum product volume and weight units provided by the Energy Administration, Ministry of Economic Affairs

Note 7: The increase in gasoline consumption is primarily due to the shift from the use of private vehicles for business travel, which were previously reimbursed, to the use of official vehicles, along with the recording of fuel consumption.

Note 8: Due to the unstable nature and low calorific value of the waste, diesel is used for auxiliary combustion, resulting in an increase in the amount of diesel used.

Waste Statistics Table

Region	Processing Method	Unit	2021	2022	2023	2024
Headquarters	Recycling	Metric tons (t)	0	165	166	1.88
	Landfill		0	0	0	0
	Incineration (with energy recovery)		3	3.34	3.47	3.38
	Incineration (without energy recovery)		0	0	0	0
	Other		0	0	0	0
	Unknown		0	0	0	0
Subsidiaries	Recycling	Metric tons (t)	52,673.83	51,939.32	55,570.38	57,175.42
	Landfill		25,859.26	25,100.33	24,826.16	19,974.38
	Incineration (with energy recovery)		0	0	0.06	127.49
	Incineration (without energy recovery)		0	0	0	0
	Other (government-designated centralized storage)		1.1	0.8	0.12	0.3
	Unknown		0	0	0	0
Headquarters + Subsidiaries	Recycling	Metric tons (t)	52,673.83	51,940.97	55,572.04	57,177.30
	Landfill		25,859.26	25,100.33	24,826.16	19,974.38
	Incineration (with energy recovery)		3	3.34	3.53	130.87
	Incineration (without energy recovery)		0	0	0	0
	Other (government-designated centralized storage)		1.1	0.8	0.12	0.3
	Unknown		0	0	0	0

Note 1: Originally, in 2023, ECOVE Waste Management Corp. was located at ECOVE Wujih Energy Corp. (Wurih Incineration Plant), and therefore there was no separate statistic for waste generation. Statistics began after the office relocation in 2024, resulting in an increase in the incineration volume of the subsidiary.

Note 2: In 2024, damage caused by typhoons resulted in an increase in the number of discarded solar panel modules.

Independent Assurance Opinion Statement



ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE ECOVE Environment Corporation's SUSTAINABILITY REPORT FOR 2024

NATURE AND SCOPE OF THE ASSURANCE
SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by ECOVE Environment Corporation (hereinafter referred to as ECOVE) to conduct an independent assurance of the Sustainability Report for 2024 (hereinafter referred to as the Report). The assurance is based on the SGS Sustainability Report Assurance methodology and AA1000 Assurance Standardv3 Type 2 high level during 2025/Mar/04 to 2025/Apr/30. The disclosure scope of this report covers ECOVE and its subsidiaries in Taiwan (excluding BioReTech and Jading). The boundary is not the same as ECOVE's consolidated financial statements.

SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

INTENDED USERS OF THIS ASSURANCE STATEMENT
This Assurance Statement is provided with the intention of informing all ECOVE's Stakeholders.

RESPONSIBILITIES
The information in the ECOVE's Sustainability Report of 2024 and its presentation are the responsibility of the directors or governing body and the management of ECOVE. SGS has not been involved in the preparation of any of the material included in the Report.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance based upon sufficient and appropriate objective evidence.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE
The assurance of this report has been conducted according to the AA1000 Assurance Standard (AA1000AS v3), a standard used globally to provide assurance on sustainability-related information across organizations of all types, including the evaluation of the nature and extent to which an organization adheres to the AccountAbility Principles (AA1000AP-2018).

Assurance has been conducted at a type 2 high level of scrutiny.

SCOPE OF ASSURANCE AND REPORTING CRITERIA
The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

Select specific reporting criteria included in the contract

Reporting Criteria Options	
1	AA1000 Accountability Principles (2018)
2	GRI (In Accordance with)
3	SASB: Infrastructure Sector – Waste Management (2023-12)

- The evaluation of the reliability and quality of specified sustainability performance information in ECOVE's Report is limited to determined material topics or those clearly marked in the report as conducted in accordance with type 2 of AA1000AS v3 sustainability assurance engagement at a high level of scrutiny for ECOVE and moderate level of scrutiny for its subsidiaries.
- The evaluation of the report against the requirements of GRI Standards, includes GRI 1, GRI 2, GRI 3, 200, 300 and 400 series claimed in the GRI content index as material and is conducted in accordance with the standards.
- The evaluation of the report against the SASB Disclosures and Metrics included in the Infrastructure Sector – Waste Management (Version 2023-12) and conducted alongside an evaluation of accuracy assurance at high level of scrutiny.

SPECIFIED PERFORMANCE INFORMATION AND DISCLOSURES INCLUDED IN SCOPE
The specified performance information in ECOVE's Sustainability Report includes the data for 2024, which is related to GRI 2, GRI 3, GRI 200, 300 and 400 series claimed in the GRI content index as material and the SASB Disclosures and Metrics included in the Infrastructure Sector – Waste Management Sustainability Accounting Standard (Version 2023-12).

ASSURANCE METHODOLOGY
The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR Committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant.

LIMITATIONS
Financial data drawn directly from independently audited financial accounts, Task Force on Climate-related Financial Disclosures (TCFD) has not been checked back to source as part of this assurance process.

INDEPENDENCE AND COMPETENCE
The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from ECOVE, being free from bias and conflicts of interest with the organization, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with professional qualifications such as ISO 26000, ISO 20121, ISO 50001, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

FINDINGS AND CONCLUSIONS

ASSURANCE OPINION
On the basis of the methodology described and the assurance work performed, we are satisfied that the specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the AA1000 AccountAbility Principles (2018).

We believe that the organization has chosen an appropriate level of assurance for this stage in their reporting.

ADHERENCE TO AA1000 ACCOUNTABILITY PRINCIPLES (2018)

INCLUSIVITY
ECOVE has demonstrated a strong commitment to stakeholder inclusivity and engagement. The organization has effectively integrated stakeholder engagement processes into its governance, strategy, and decision-making frameworks, ensuring involvement from senior management, cross-functional teams, and diverse geographical regions. Through various engagement initiatives, including surveys and communications with employees, customers, investors, suppliers, CSR experts, and other stakeholders, ECOVE fosters a comprehensive understanding of stakeholder concerns.

MATERIALITY
ECOVE has established and integrated a multifaceted methodology, incorporating operational impact assessment processes, to identify the organization's material issues. It has developed an impact-based materiality analysis process and established corresponding sustainability objectives. This report appropriately addresses the identified issues based on their materiality and priority.

RESPONSIVENESS
The report includes coverage given to stakeholder engagement and channels for stakeholder feedback. ECOVE has responded to its material sustainability topics, related impacts and stakeholders in a comprehensive, accurate, timely, accessible and balanced manner.

IMPACT
ECOVE has identified and demonstrated its sustainability performance across environmental, social, and governance dimensions through various processes, including activities, policies, programs, decisions, and product services. These efforts are overseen by governance bodies and senior management, with appropriate disclosure and reporting in its reports. For the future report, it's recommended to establish a monetized methodology to quantify impact levels and prioritize them.

QUALITY AND RELIABILITY OF SPECIFIED PERFORMANCE INFORMATION
On the basis of the methodology described and the verification work performed, we checked minutes of meetings, management documents, ERP system reports, receipts, ISO certification, etc. We have confidence that the specified performance information included in the scope of assurance is reliable at a high level of scrutiny for ECOVE.

ADHERENCE TO GRI
The report, ECOVE's Sustainability Report of 2024, is reporting in accordance with the GRI Universal Standards 2021. The significant impacts were assessed and disclosed in accordance with the guidance defined in GRI 3: Material Topic 2021 and the relevant 200/300/400 series Topic Standard related to the material topics claimed in the GRI content index. The report has properly disclosed information related to ECOVE's contributions to sustainability development. The implementation and high level of integration of ESG practices have effectively exerted internal influence, with cross-organizational integration facilitating the alignment and evaluation of performance. For future reports, it is recommended that ECOVE further apply monetization criteria for operational impact assessment to enhance the identification and assessment of key impacts or opportunities.

ADHERENCE TO SASB
ECOVE has referenced with SASB's Standard, Infrastructure Sector – Waste Management (Version 2023-12) to disclose information of material topics that are vital for enterprise value creation. The reporting boundaries of the disclosed information correspond to the financial data reported in ECOVE's audited individual financial statements. ECOVE used SASB accounting and activity metrics to assess and manage the topic-related risks and opportunities, where relevant quantitative information was assessed for its accuracy and completeness to support the comparability of the data reported. Process to identify, assess, and manage topic-related risks and opportunities were integrated into ECOVE's overall management process. In the future it is recommended to benchmark regularly to peer disclosures to gain a comprehensive understanding of evolving expectations among investors and other stakeholders.

Signed:
For and on behalf of SGS Taiwan Ltd.



Stephen Pao
Business Assurance Director
Taipei, Taiwan
04 June, 2025
WWW.SGS.COM



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