## Environmental Data

### A. Waste, Water, Energy, GHG & Air emission[1]

| Category | Environmental Performance Index | Unit | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Waste | Total general and hazardous waste | ton | 75,814 | 82,158 | 75,391 | **68,657** |
| | General waste production | ton | 45,139 | 52,618 | 49,972 | **47,965** |
| | Recycled and reused (without energy recovery) | ton | 33,813 | 41,696 | 39,245 | **38,321** |
| | Landfilled | ton | 1,872 | 1,976 | 1,368 | **1,114** |
| | Incinerated with energy recovery | ton | 8,442 | 8,160 | 8,810 | **8,275** |
| | Incinerated without energy recovery | ton | 1,012 | 786 | 549 | **255** |
| | Hazardous waste production | ton | 30,675 | 29,540 | 25,419 | **20,692** |
| | Recycled and reused (without energy recovery) | ton | 13,048 | 14,064 | 12,963 | **11,199** |
| | Landfilled | ton | 870 | 1,326 | 0 | **0** |
| | Incinerated with energy recovery | ton | 6,740 | 5,171 | 5,563 | **4,897** |
| | Incinerated without energy recovery | ton | 7,201 | 7,262 | 1,864 | **819** |
| | Others | ton | 2,816 | 1,717 | 5,029 | **3,777** |
| | Total recycled and reused | ton | 62,043 | 69,091 | 66,581 | **62,692** |
| | Total non-recycled and reused | ton | 13,771 | 13,067 | 8,810 | **5,965** |
| | Total recycled and reused rate | % | 82 | 84 | 88 | **91** |
| Water | Water withdrawal | $m^3$ | 24,961,039 | 25,872,192 | 23,398,956 | **21,467,999** |
| | Water withdrawal intensity | $m^3$/ US$ thousand revenue | 1.468 | 1.262 | 1.072 | **1.130** |
| | Ultra-pure water usage | $m^3$ | 26,304,664 | 28,660,692 | 28,571,562 | **28,923,983** |
| | Water recycled and reuse | $m^3$ | 34,437,950 | 37,817,390 | 40,121,082 | **39,474,668** |
| | Process water recycle rate | % | 72 | 72 | 76 | **78** |
| | Wastewater discharge | $m^3$ | 19,454,037 | 19,569,329 | 17,461,146 | **15,386,252** |
| | Water consumption | $m^3$ | 5,507,002 | 6,302,863 | 5,937,810 | **6,081,747** |
| | Total fresh water consumption | Million $m^3$ | 24.71 | 24.45 | 23.17 | **20.93** |

[1] The data from 2022 to 2023 does not include the facilities sold in 2022

| Category | Environmental Performance Index | Unit | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|
| Energy | Electricity consumption | MWh | 3,900,915 | 4,285,155 | 4,233,363 | **4,211,006** |
| | Renewable electricity | MWh | 706,105 | 1,030,137 | 819,863 | **844,044** |
| | Non-renewable electricity | MWh | 3,194,810 | 3,255,018 | 3,413,500 | **3,366,962** |
| | Electricity intensity | MWh/ US$ thousand revenue | 0.230 | 0.209 | 0.194 | **0.222** |
| | Total Renewable energy consumption | MWh | 706,105 | 1,030,137 | 819,863 | **844,044** |
| | Liquefied Petroleum Gas (LPG) | GJ | 16,770 | 2,273 | 3,253 | **3,340** |
| | Liquefied Natural Gas (LNG) | GJ | 324,214 | 332,561 | 333,904 | **335,803** |
| | Motor gasoline | GJ | 6,593 | 5,972 | 4,863 | **5,570** |
| | Diesel | GJ | 73,337 | 27,231 | 26,586 | **25,925** |
| | Heavy oil | GJ | 32,534 | 34,703 | 37,917 | **43,460** |
| | Total non-renewable energy consumption | MWh | 3,352,288 | 3,416,482 | 3,571,744 | **3,536,828** |
| Green House Gas (GHG)[1] | SCOPE 1 | $tCO_2e$ | 93,996 | 90,591 | 90,993 | **75,274** |
| | SCOPE 2 (Market-based) | $tCO_2e$ | 1,658,606 | 1,612,050 | 1,671,242 | **1,649,347** |
| | SCOPE 1 + SCOPE 2 (Market-based)[1] | $tCO_2e$ | 1,752,602 | 1,702,641 | 1,762,235 | **1,724,621** |
| | GHG intensity (Market-based) | $tCO_2e$ / US$ thousand revenue | 0.103 | 0.083 | 0.081 | **0.091** |
| | SCOPE 3 | $tCO_2e$ | 19,804,255[2] | 15,639,991 | 13,350,245 | **9,891,845** |
| | PFC emissions / number package output | $kgCO_2e$/kPCs | 0.00077 | 0.00062 | 0.00091 | **0.00073** |
| Air Emission | VOCs (Volatile organic compounds) | tons | 219 | 262 | 291 | **239** |

1 In 2022, ASEH Scope 1&2 emissions is 79.0412 ($tCO_2e$) and the intensity is 0.00012 ($tCO_2e$ / NT$ million revenue), Scope 3 emissions is 30.3066 ($tCO_2e$) and the intensity is 0.00005 ($tCO_2e$ / NT$ million revenue), the data for Scope 1/2/3 were verified by British Standards Institution Pacific Limited Taiwan Branch, BSI. As a result of carrying out verification and validation procedures by ISO 14064-3：2019, it is reasonable assurance for verification activity
In 2023, ASEH Scope 1&2 emissions is 65.9175 ($tCO_2e$) and the intensity is 0.00011 ($tCO_2e$ / NT$ million revenue), Scope 3 emissions is 171.0377 ($tCO_2e$) and the intensity is 0.00029 ($tCO_2e$ / NT$ million revenue), the data for Scope 1/2/3 were verified by British Standards Institution Pacific Limited Taiwan Branch, BSI. As a result of carrying out verification and validation procedures by ISO 14064-3：2019, it is reasonable assurance for verification activity

2 In 2020, Scope 3 emissions were 19,636,385 ($tCO_2e$), the data does not include the facilities sold

## B. The amount of water withdrawals and discharge in water-stressed regions[1]

| Water withdrawal | | | |
|---|---|---|---|
| | | Water withdrawals at ASEH facilities (ML) | Water withdrawals in water-stressed regions[2](ML) |
| Total water withdrawals | Surface water | 9 | 0 |
| | Groundwater | 4,256 | 0 |
| | Third-party water | 17,203 | 4,106 |
| Water withdrawals by source of water[3] | Freshwater (TDS ≤ 1,000 mg/L) | 19,429 | 4,090 |
| | Other sources of water (TDS > 1,000 mg/L) | 0 | 0 |

| Water discharge | | | |
|---|---|---|---|
| | | Water discharge at ASEH facilities (ML) | Water discharge in water-stressed regions[4](ML) |
| Water discharge by discharge destination | Surface water | 8,794 | 0 |
| | Groundwater | 0 | 0 |
| | Marine water | 826 | 0 |
| | Third-party water | 5,766 | 3,496 |
| Total water discharge | Surface water + groundwater + marine water + third-party water | 15,386 | 3,496 |
| Water discharge by source of water[5] | Freshwater (TDS ≤ 1,000 mg/L) | 372 | 0 |
| | Other sources of water (TDS > 1,000 mg/L) | 2,844 | 283 |

| Water consumption | | | |
|---|---|---|---|
| Total water consumption | Total water withdrawals - Total water discharge | 6,082 | 610 |

[1] Areas in water stress (Stress>40%): Water withdrawal in these areas accounted for 19% of the overall water withdrawal. Water discharge accounted for 23% of the total water consumption
[2] Water withdrawals in water-stressed regions (Stress>40%): (1) ASE: Shanghai Material, ISE Labs China; (2) USI: Zhangjiang, Shengxia, Jinqiao, Kunshan, Mexico; (3) SPIL: Suzhou
[3] Facilities that measure TDS in the water withdrawal: (1) ASE: Kaohsiung, Chungli, Shanghai (Material), Wuxi, Korea, Singapore, ISE Labs; (2) USI: Kunshan, Taiwan, Vietnam; (3) SPIL: Taiwan, Suzhou; Other facilities are not included in the TDS calculated
[4] Water discharge in water-stressed regions (Stress>40%): (1) ASE: Shanghai Material, ISE Labs China; (2) USI: Zhangjiang, Shengxia, Jinqiao, Kunshan, Mexico; (3) SPIL: Suzhou
[5] Facilities that measure TDS in the water discharge: (1) ASE: Kaohsiung, Japan, Singapore; (2) USI: Zhangjiang, Shengxia; Other facilities are not included in the TDS calculated

## C. Effluent quality of our facilities with on-site wastewater treatment[1]

| Item | Unit | Taiwan_to land | | Taiwan_to ocean | | China | | Japan | |
|---|---|---|---|---|---|---|---|---|---|
| | | Effluent standard | Min.~Max. | Effluent standard | Min.~Max. | Effluent Standard (Nation) | Min.~Max. | Effluent Standard (Nation) | Min.~Max. |
| pH | pH | 6~9 | 6~8.1 | 6~9 | 7.3~7.9 | 6~9 | 6.79~8.2 | 5.8~8.6 | 6.6~8 |
| COD concentration[2] | mg/L | 100 | 3.2~66.8 | 280 | 4~6.2 | 500 | 10~278 | 160 | - |
| BOD concentration[3] | mg/L | - | 1~21 | 100 | 0~11.2 | 300 | 2.2~68.63 | 160 | 0.5~1.5 |
| Suspended Solid (SS) concentration[4] | mg/L | 30 | 1.7~21.5 | 100 | 1~7.9 | 400 | 6~55 | 200 | 1.5~15 |
| $Cu^{2+}$ concentration | mg/L | 1.5 | ND~0.352 | 2 | 0.018~0.386 | 1 | 0~0.66 | 3 | - |
| $Ni^{2+}$ concentration | mg/L | 0.7 | ND~0.0193 | 1 | 0~0.113 | 0.1 | 0.002~0.1 | - | - |

| Item | Unit | Korea | | Malayisa | | Vietnam | |
|---|---|---|---|---|---|---|---|
| | | Effluent standard | Min.~Max. | Effluent standard | Min.~Max. | Effluent standard | Min.~Max. |
| pH | pH | 5.8~8.6 | 7.0~7.9 | 5.5~9.0 | 7.1~7.9 | 5~9 | 5~9 |
| COD concentration | mg/L | - | 9~10 | 200 | 4~16 | 500 | 500 |
| BOD concentration | mg/L | 80 | 5.9~23 | 50 | 1~2 | 500 | 500 |
| Suspended Solid (SS) concentration | mg/L | 80 | 0.32~6.96 | 100 | 1~4 | 500 | 500 |
| $Cu^{2+}$ concentration | mg/L | 3 | 0~0.02 | 1 | 0.05~0.26 | 2 | - |
| $Ni^{2+}$ concentration | mg/L | 3 | - | 1 | 0.1 | 0.5 | - |

[1] ASE ISE Labs China and ISE Labs are the testing laboratories where water usage is only for public facilities and domestic. ASE Singapore and the other electronic manufacturing service facilities (USI Kunshan, Huizhou, and Mexico) do not have on-site wastewater treatment. Thus, these six facilities are not included in the statistics

[2] Refer to the Class B marine areas of Marine Discharge Pipe Effluent Standards released on October 20, 2017, to the discharge water standards for marine discharge pipelines

[3] Waste water discharge from the SPIL Hsinchu Facility is diverted into the park's sewer system and waste water treatment plant in accordance with the Hsinchu Science Park Effluent Standards. Also, USI Nankang Facility is diverted into the park's sewer system and waste water treatment plant in accordance with the Nankang Industrial Park Effluent Standards. Therefore, these two facilities are not included

[4] USI Nankang Facility is diverted into the park's sewer system and waste water treatment plant in accordance with the Nankang Industrial Park Effluent Standards. Therefore, this facility is not included

[5] Waste water discharge of the SPIL Zhong Ke and Zhong Ke II facilities is diverted into the park's sewer system and waste water treatment plant in accordance with the Central Taiwan Science Park Effluent Standards, and is therefore not included

## D. Product Lifecycle Management

| Category | Index | Unit | 2023 |
|---|---|---|---|
| Life Cycle Assessment Approach | Full LCAs | % (Percentage of Total Products) | 37.78 |
| | Simplified LCAs | % (Percentage of Total Products) | 8.46 |
| | Others (green products meet international regulations & customer requirements.) | % (Percentage of Total Products) | 53.76 |
| End-of-life products and e-waste | Weight of end-of-life products and e-waste[1] | ton | 480 |
| | The percentage of end-of-life products and e-waste that were recovered[2] | % | 3 |
| | The percentage of end-of-life material recovered that was recycled[3] | % | 0 |

## E. Environmental issues Training

| Topic | Training course description | Total time (Hours) | Total participants |
|---|---|---|---|
| Environmental Management | Training courses include any environmental matters | 93,011 | 185,126 |
| Energy | Training courses include matters related to efficiency management or raising awareness to reduce energy consumption | 4,600 | 1,855 |
| Water | Training courses include matters related to water efficiency management or raising awareness of water conservation | 3,743 | 5,328 |
| Waste | Training courses include matters related to waste management or raising awareness to reduce waste | 38,235 | 42,361 |

## F. Environmental Violations

| | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Number of significant violations of legal obligations/regulations[4] | 0 | 0 | 0 | 0 |
| Amount of fines/penalties related to the above (Unit: US$) | 0 | 0 | 0 | 0 |
| Environmental liability accrued at year end (Unit: US$) | 0 | 0 | 0 | 0 |

[1] End-of-life material is defined as products, materials, and parts, including electronic waste material (e-waste), that at the end of their useful life would have been disposed of as waste. The scope of end-of-life material excludes materials that have been returned to customer
[2] End-of-life material that was recovered is defined as the above-mentioned end-of-life material that have instead been collected to be recovered or regenerated a usable product
[3] Recycled material is defined as the above-mentioned end-of-life material recovered that are used for the same purpose for which they were conceived, including products donated and/or refurbished by the entity or by third parties
[4] Fine/penalty individually costs more than US$10,000 is defined as significant

## G. Implementation of Climate-Related Information

| Item | Implementation status |
|---|---|
| Describe the board of directors' and management's oversight and governance of climate-related risks and opportunities. | The Board of Directors of the Company serves as the supervisory and governance body for climate-related issues. It is responsible for approving risk policies, overseeing climate-related risks, and making decisions pertaining to climate matters. The Board of Directors has established the Risk Management Committee and the Corporate Sustainability Committee as bodies responsible for climate-related risks and opportunities. Each committee consists of Directors who are separately responsible for managing climate risks and climate sustainability strategies, promoting sustainable developments of climate-related issues and the operation of risk management mechanisms, and implementing decisions made by the Board of Directors. We report on the management and execution status of climate-related issues to the Board of Directors on a quarterly basis, enabling the Board of Directors to understand the impact of climate change on the Company's business operations and develop corresponding strategies. |
| Describe how the identified climate risks and opportunities affect the business, strategy, and finances of the business (short, medium, and long term). | The Company regularly identifies and assesses climate-related physical and transition risks on a yearly basis. This is implemented by using questionnaires and integrating international (national) risk management tools and databases. Risks and opportunities are distinguished based on short-term (< 3 years), medium-term (3-5 years), and long-term (> 5 years) occurrences. The impacts of these risks and opportunities on the Company's finances and operations are identified, followed by proposing countermeasures and management strategies. For detailed information, please refer to the Company's Climate and Environmental Report (TCFD&TNFD), and publicly available information on our website. |
| Describe the financial impact of extreme weather events and transformative actions. | The Company conducts annual assessments of climate-related physical and transition risks. We utilize questionnaires to identify extreme weather events, including but not limited to heavy rainfall, drought, and significant temperature changes. Additionally, we assess the potential impact and influence of these weather events on our business operations and finances. For more detailed information, please consult the Company's Climate and Environmental Report, and publicly available information on our website. |
| Describe how climate risk identification, assessment, and management processes are integrated into the overall risk management system. | The executive secretariat of the Risk Management Committee collaborates with our subsidiaries to conduct an identification and assessment of climate-related physical and transition risks. This process involves using questionnaires and collecting data to identify physical and transition risks or events that could affect our business objectives, as well as their financial and operational implications. Based on the findings of this process, countermeasures and management strategies are proposed, and the results of climate risk identification are reported to the Board of Directors annually, which tracks the implementation status of our climate measures regularly. |
| If scenario analysis is used to assess resilience to climate change risks, the scenarios, parameters, assumptions, analysis factors and major financial impacts used should be described. | The Company has established climate scenarios based on the IPCC AR6 and international energy parameters, taking into account policy, technology, market, and reputational factors. These factors are used to assess the resilience of the company to climate change. For more detailed information, please refer to the Company's Climate and Environmental Report (TCFD&TNFD), and publicly available information on our website. |
| If there is a transition plan for managing climate-related risks, describe the content of the plan, and the indicators and targets used to identify and manage physical risks and transition risks. | The Company will develop a transition plan in response to the annual risk identification results. This plan will include indicators and goals for identifying and managing physical risks and transition risks. For more information, please consult the Company's Climate and Environmental Report (TCFD&TNFD), and the publicly available information on our website. |
| If internal carbon pricing is used as a planning tool, the basis for setting the price should be stated. | Internal carbon pricing is being gradually introduced based on the regions of subsidiary companies. This is done in conjunction with the budget system to encourage subsidiary companies to implement emission reduction projects. |
| If climate-related targets have been set, the activities covered, the scope of greenhouse gas emissions, the planning horizon, and the progress achieved each year should be specified. If carbon credits or renewable energy certificates (RECs) are used to achieve relevant targets, the source and quantity of carbon credits or RECs to be offset should be specified. | To access information about the annual GHG emissions and renewable energy usage, please refer to the Company's Climate and Environmental Report (TCFD&TNFD), and the publicly available information on our website. |
| Greenhouse gas inventory and assurance status. | The Company has established short-term and long-term net zero goals, with annual greenhouse gas inventories verified by third-party organizations. Progress, achievements, and specific actions are reported to the Board of Directors on a quarterly basis. For more detailed information, please refer to the Company's Climate and Environmental Report (TCFD&TNFD), and the publicly available information on our website. |

# Social Data

## A. Global Workforce Structure by Nationality/Race

| Nationality [1] | Employee | | Management Level | |
|---|---|---|---|---|
| | Number | Percentage of Total Employee (%) | Number | Percentage of Total Management Level (%) |
| Taiwan | 47,543 | 57.26% | 4,321 | 70.92% |
| China | 14,486 | 17.45% | 1,313 | 21.55% |
| Philippines | 10,345 | 12.46% | 26 | 0.43% |
| Mexico | 3,467 | 4.18% | 103 | 1.69% |
| Malaysia | 2,321 | 2.80% | 158 | 2.59% |
| South Korea | 1,881 | 2.27% | 36 | 0.59% |
| Indonesia | 1,168 | 1.41% | 1 | 0.02% |
| Vietnam | 926 | 1.12% | 29 | 0.48% |
| Japan | 401 | 0.48% | 31 | 0.51% |
| Singapore | 242 | 0.29% | 58 | 0.95% |
| Nepal | 156 | 0.19% | 0 | 0% |
| Thailand | 39 | 0.05% | 0 | 0% |
| Myanmar | 20 | 0.02% | 0 | 0% |
| U.S.A | 13 | 0.02% | 8 | 0.13% |
| India | 12 | 0.01% | 3 | 0.05% |
| United Kingdom | 5 | 0.01% | 5 | 0.08% |
| Canada | 2 | 0.00% | 1 | 0.02% |
| France | 1 | 0.00% | 0 | 0% |
| Total | 83,028 | | 6,093 | |

| Race [2] | Employee | | Management Level | |
|---|---|---|---|---|
| | Number | Percentage of Total Employee (%) | Number | Percentage of Total Management Level (%) |
| Asian | 139 | 69.15% | 25 | 62.50% |
| Hispanic or Latino | 27 | 13.43% | 3 | 7.50% |
| White | 25 | 12.44% | 11 | 27.50% |
| Native Hawaiian or Other Pacific Islander | 5 | 2.49% | 0 | 0% |
| Two or More Races | 4 | 1.99% | 1 | 2.50% |
| Black or African American | 1 | 0.50% | 0 | 0% |
| Total | 201 | | 40 | |

[1] The global workforce by nationality do not include ISE Labs employees
[2] The global workforce by race only includes ISE Labs employees

## B. Foreign Employee

| Business Unit | Category | Group | | Number | Percentage of Total Employee in Business Unit (%) |
|---|---|---|---|---|---|
| Semiconductor Assembly (packaging), Testing and Materials (ATM) | Employment Type | Regular | | 11,866 | 17.90% |
| | | Contract | | 4 | 0.01% |
| | Gender | Male | | 2 | 0.00% |
| | | Female | | 2 | 0.00% |
| | Total | | | 11,870 | |
| | Employment Visa | Gender | Male | 1,846 | 2.78% |
| | | | Female | 9,203 | 13.88% |
| | Total | | | 11,049 | |
| Electronic Manufacturing Service (EMS) | Employment Type | Regular | | 867 | 5.09% |
| | | Contract | | 2 | 0.01% |
| | Gender | Male | | 174 | 1.02% |
| | | Female | | 695 | 4.08% |
| | Total | | | 869 | |
| | Employment Visa | Gender | Male | 174 | 1.02% |
| | | | Female | 695 | 4.08% |
| | Total | | | 869 | |

## C. Employee Information[1]

| Employment Category | Gender | | Location | | | |
|---|---|---|---|---|---|---|
| | Male | Female | Taiwan | China | Rest of Asia | Americas |
| Permanent Employees | 41,701 | 35,609 | 53,845 | 12,521 | 7,258 | 3,686 |
| Temporary Employees | 2,112 | 3,807 | 3,876 | 1,945 | 96 | 2 |
| Non-guaranteed Hours Employees | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **43,816** | **39,416** | **57,721** | **14,466** | **7,354** | **3,688** |
| Full-time Employees | 43,762 | 39,379 | 57,652 | 14,466 | 7,351 | 3,672 |
| Part-time Employees | 51 | 37 | 69 | 0 | 3 | 16 |
| **Total** | **43,816** | **39,416** | **57,721** | **14,466** | **7,354** | **3,688** |

[1] The employee information: the number of employees still employed as of December 31st

## D. Male/Female Employee (by Job Position)

| Category | Group | Male | | Female | |
|---|---|---|---|---|---|
| | | Number | Group Percentage (%) | Number | Group Percentage (%) |
| Position | Management | 4,356 | 71.0% | 1,777 | 29.0% |
| | Engineering | 23,699 | 86.1% | 3,836 | 13.9% |
| | Administration | 1,872 | 32.2% | 3,938 | 67.8% |
| | Skill Job | 13,884 | 31.7% | 29,867 | 68.3% |
| Management Level | Top Management Positions[1] | 679 | 85.2% | 118 | 14.8% |
| | Middle management Positions | 1,710 | 79.5% | 441 | 20.5% |
| | Junior Management Positions | 1,533 | 64.2% | 853 | 35.8% |
| | Management Positions in Revenue-generating Function | 3,580 | 72.5% | 1,358 | 27.5% |
| STEM Related Position | | 27,140 | 81.7% | 6,064 | 18.3% |

## E. New Hire Employee

| Category | Group | Number | Percentage of Total New Hire Employee (%) |
|---|---|---|---|
| Gender | Male | 8,309 | 59.1% |
| | Female | 5,746 | 40.9% |
| Nationality | Native | 13,055 | 92.9% |
| | Foreign | 1,000 | 7.1% |
| Disabled | Male | 107 | 0.8% |
| | Female | 54 | 0.4% |
| Position | Management | 166 | 1.2% |
| | Engineering | 2,027 | 14.4% |
| | Administration | 550 | 3.9% |
| | Skill Job | 11,312 | 80.5% |
| Age | <30 | 9,523 | 67.7% |
| | 30-50 | 4,255 | 30.3% |
| | >50 | 277 | 2.0% |
| Education | Ph.D | 4 | 0.1% |
| | Master | 413 | 2.9% |
| | Bachelor | 1,756 | 12.5% |
| | Other Higher Education/ High School and Below | 11,882 | 84.5% |
| Total | | 14,055 | |

[1] Top Management Positions: Senior Manager to Senior Vice President

## F. Turnover Rate

| Category | Group | 2020 | | 2021 | | 2022 | | 2023 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number | Percentage of Group (%) | Number | Percentage of Group (%) | Number | Percentage of Group (%) | Number | Percentage of Group (%) |
| Gender | Male | 8,485 | 55.3% | 10,339 | 57.3% | 7,319 | 53.7% | 6,518 | 55.2% |
| | Female | 6,851 | 44.7% | 7,695 | 42.7% | 6,312 | 46.3% | 5,286 | 44.8% |
| Position | Management | 346 | 2.3% | 433 | 2.4% | 369 | 2.7% | 297 | 2.5% |
| | Engineering | 3,163 | 20.6% | 3,956 | 21.9% | 3,364 | 24.7% | 2,424 | 20.5% |
| | Administration | 685 | 4.5% | 843 | 4.7% | 791 | 5.8% | 684 | 5.8% |
| | Skill Job | 11,142 | 72.7% | 12,802 | 71.0% | 9,107 | 66.8% | 8,399 | 71.2% |
| Age | <30 | 8,840 | 57.6% | 9,995 | 55.4% | 6,738 | 49.4% | 6,080 | 51.5% |
| | 30-50 | 6,080 | 39.7% | 7,591 | 42.1% | 6,451 | 47.3% | 5,242 | 44.4% |
| | >50 | 416 | 2.7% | 448 | 2.5% | 442 | 3.2% | 482 | 4.1% |
| Education | Ph.D | 17 | 0.1% | 21 | 0.1% | 15 | 0.1% | 12 | 0.1% |
| | Master | 699 | 4.6% | 909 | 5.0% | 739 | 5.4% | 529 | 4.5% |
| | Bachelor | 3,306 | 21.6% | 6,420 | 35.6% | 3,809 | 28.0% | 2,963 | 25.1% |
| | Other Higher Education/ High School and Below | 11,314 | 73.8% | 10,684 | 59.2% | 9,069 | 66.5% | 8,300 | 70.3% |
| Total | | 15,336 | | 18,034 | | 13,631 | | 11,804 | |

## G. Full-time Employees in Non-executive Positions

| Category | 2020 | 2021 | 2022 | 2023 | Difference of 2022-2023 |
|---|---|---|---|---|---|
| Employee[1] | 47,753 | 48,013 | 50,061 | **52,948** | 2,887 |
| Average Compensation (NT$) | 799,730 | 914,627 | 1,001,460 | **929,206** | -72,254 |
| Median Compensation (NT$) | 670,687 | 726,063 | 771,532 | **739,048** | -32,484 |

## H. Parental Leave

| Category | Group | Number | Percentage of Group (%) | Total |
|---|---|---|---|---|
| Employees Qualified for Parental Leave in 2023 | Male | 2,947 | 65% | 4,540 |
| | Female | 1,593 | 35% | |
| Employees that Applied for Parental Leave in 2023 | Male | 306 | 32% | 960 |
| | Female | 654 | 68% | |
| Application Rate (%) | Male | 10% | | 21% |
| | Female | 41% | | |
| Employees Expected to Return to Work in 2023 After Parental Leave | Male | 243 | 31% | 779 |
| | Female | 536 | 69% | |
| Employees Return to Work in 2023 After Parental Leave and Returned as Scheduled or In Advance | Male | 205 | 33% | 615 |
| | Female | 410 | 67% | |
| Return Rate (%) | Male | 84% | | 79% |
| | Female | 76% | | |
| Actual Number of Employees Returned to Work in 2022 | Male | 204 | 32% | 632 |
| | Female | 428 | 68% | |
| Employees that Returned to Work in 2022 and Still in Service in 2023 | Male | 169 | 32% | 525 |
| | Female | 356 | 68% | |
| Retention Rate (%) | Male | 83% | | 83% |
| | Female | 83% | | |
| NewBorns in 2023 | | 1,853 | | |

[1] "Employees" here refers to those under the employment of ASEH, ASE (ASE Kaohsiung and ASE Chungli; excluding ASE Test Inc. and ASE Electronics Inc.), SPIL and USI facilities in Taiwan；only employees who have been employed and receiving regular pay for a minimum of 6 months will be included in the calculation

## I. Employee Engagement Survey[1]

| Category | Total Employee | Gender | | Age | | | | | | | Management Level | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Male | Female | <20 | 20-24 | 25-29 | 30-34 | 35-39 | 40-45 | >45 | Junior | Middle | Senior |
| Employee Experience Indicators (% in 2023) | | | | | | | | | | | | | |
| Inspiration | 79 | 78 | 82 | 67 | 80 | 75 | 76 | 78 | 80 | 84 | 83 | 88 | 85 |
| Inclusion | 82 | 81 | 83 | 75 | 83 | 80 | 81 | 82 | 82 | 83 | 83 | 88 | 83 |
| Understanding | 79 | 79 | 80 | 68 | 79 | 75 | 77 | 79 | 81 | 83 | 82 | 87 | 85 |
| Drive | 79 | 79 | 80 | 71 | 79 | 77 | 77 | 78 | 80 | 83 | 82 | 86 | 88 |
| Voice | 79 | 79 | 81 | 68 | 79 | 76 | 78 | 79 | 80 | 82 | 84 | 86 | 86 |
| Organization | 82 | 82 | 83 | 70 | 81 | 79 | 81 | 81 | 83 | 85 | 84 | 87 | 87 |
| Growth | 75 | 75 | 76 | 66 | 75 | 72 | 73 | 74 | 76 | 79 | 80 | 82 | 81 |
| Capability | 71 | 71 | 71 | 62 | 71 | 68 | 70 | 70 | 72 | 74 | 76 | 80 | 78 |
| Fair Rewards | 68 | 67 | 69 | 67 | 68 | 66 | 67 | 67 | 68 | 71 | 70 | 78 | 74 |
| Trust | 69 | 69 | 71 | 63 | 72 | 66 | 66 | 68 | 70 | 74 | 74 | 78 | 76 |
| Collaboration | 84 | 83 | 87 | 72 | 85 | 82 | 83 | 83 | 84 | 87 | 87 | 91 | 89 |
| Support | 82 | 82 | 81 | 76 | 83 | 82 | 82 | 81 | 81 | 81 | 84 | 90 | 88 |
| Employee Engagement Indicators (% in 2023) | | | | | | | | | | | | | |
| ESG | 81 | 81 | 83 | 74 | 79 | 78 | 80 | 81 | 83 | 86 | 83 | 88 | 88 |
| Retention | 70 | 70 | 71 | 62 | 62 | 64 | 67 | 70 | 75 | 79 | 72 | 80 | 78 |
| Sustainable Engagement | 77 | 76 | 78 | 76 | 76 | 76 | 77 | 76 | 76 | 80 | 76 | 84 | 87 |
| DEI - Belonging | 77 | 77 | 77 | 80 | 78 | 78 | 78 | 77 | 76 | 77 | 76 | 83 | 84 |
| DEI - Impartiality | 78 | 79 | 77 | 79 | 79 | 79 | 79 | 77 | 77 | 78 | 79 | 89 | 88 |
| DEI - Opportunity | 73 | 73 | 74 | 77 | 75 | 74 | 74 | 73 | 72 | 73 | 72 | 83 | 81 |
| Wellbeing | 62 | 61 | 63 | 65 | 62 | 61 | 62 | 61 | 61 | 65 | 60 | 69 | 74 |

[1] The Employee Engagement Survey is conducted once every two years and the next survey will be in 2025

## J. Training Hours and Training Spent

| Category | Group | | Number | Percentage of Group (%) |
|---|---|---|---|---|
| Training Hour (Hour) | Gender | Male | 3,973,683 | 53% |
| | | Female | 3,475,088 | 47% |
| | Total | | 7,448,771 | |
| | Position | Management | 485,280 | 7% |
| | | Engineering | 2,688,117 | 36% |
| | | Administration | 246,902 | 3% |
| | | Skill Job | 4,028,473 | 54% |
| | Training Type | Mandatory Trainings[1] | 3,903,480 | 52% |
| | | Non-mandatory Trainings[2] | 3,545,292 | 48% |
| Training Spent (US$) | Gender | Male | 4,794,078 | 61% |
| | | Female | 3,094,355 | 39% |
| | Total | | 7,888,433 | |
| | Age | <30 | 2,140,014 | 27% |
| | | 30-50 | 5,140,558 | 65% |
| | | >50 | 607,860 | 8% |
| | Management Level | Senior | 465,131 | 54% |
| | | Middle | 279,384 | 32% |
| | | Junior | 121,344 | 14% |
| | Training Type | Mandatory Trainings | 2,281,557 | 29% |
| | | Non-mandatory Trainings | 5,606,876 | 71% |

[1] Mandatory Trainings refer to the trainings that provide employees with the basic skills they need to carry out their daily work. For example, training on occupational health and safety, legal/regulation compliance and RBA etc.
[2] Non-mandatory Trainings refer to the trainings that develop or improve employee skills. For example, smart manufacturing, automation and quality related courses

## K. Human Capital Return on Investment

| Year | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Human Capital Return on Investment (ROI) [1] | 1.42 | 1.63 | 1.75 | **1.43** |

## L. Non-employee Workers[2]

| Working Location | Number[3] |
|---|---|
| Taiwan | 21,665 |
| China | 10,380 |
| Rest of Asia | 1,191 |
| Americas | 210 |
| Total | **33,446** |

[1] Human Capital ROI = (Total Revenue – (Total Operating Expenses - Total employee-related expenses)) / Total employee-related expenses

[2] Non-employee workers:
(1) Types and job functions include: engineering contractors, equipment maintenance, IT contractors, cleaning, janitorial services, catering, and convenience store services
(2) Contractual relationship: employed through third-party contractors
(3) The reason of non-employee workers increases than 2022: increase in engineering contractors

[3] Headcount calculation: Depending on the availability and accessibility of data from each subsidiary/factory site, the calculation includes (1) the number of wokers still employed as of December 31st and (2) the number of individuals who have been employed at any point between January 1st and December 31st (including those who have already resigned)

[4] The Workers include employee and non-employee workers (exclude visitors)

[5] Rate of occupational injury= (number of occupational injury *1,000,000)/ total hours of actually worked

[6] Rate of disability cases from occupational injuries = (number of disability cases from occupational injuries *1,000,000)/ total number of working hours, excluding number of fatalities

[7] Rate of fatalities from occupational injuries= (number of fatalities from occupational injuries *1,000,000)/ total number of working hours

[8] Rate of fatalities from occupational diseases= (number of fatalities from occupational diseases *1,000,000)/ total number of working hours

[9] Actual working hours of non-employee workers: Depending on the availability and accessibility of data from each subsidiary/ factory site, the calculation includes (1) calculating annual working hours based on actual attendance records and (2) estimating annual working hours based on the total headcount

## M. Workers[4] Occupational Health and Safety

| Category | Group | Employee | Non-employee |
|---|---|---|---|
| Category of Occupational Injuries | Number of Physical Injuries | 116 | 5 |
| | Number of Chemical Injuries | 4 | 0 |
| | Number of Ergonomic Injuries | 4 | 0 |
| | Number of Biological Injuries | 0 | 0 |
| | Number of Psychosocial Injuries | 0 | 0 |
| Total | | **124** | **5** |
| Occupational Injuries | Rate of Occupational Injury[5] | 0.72 | 0.18 |
| | Number of Disability Cases | 0 | 0 |
| | Rate of Disability[6] Cases | 0 | 0 |
| | Number of Fatalities | 0 | 0 |
| | Rate of Fatalities[7] | 0 | 0 |
| Occupational Diseases | Occupational Diseases | 28 | 0 |
| | Number of Fatalities | 0 | 0 |
| | Rate of Fatalities[8] | 0 | 0 |
| Total Number of Working Hours (Hour) | | **171,969,076** | **27,468,587**[9] |

## N. Employee Absence Statistics

| Year | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Absence Ratio (%) | 2.2% | 2.0% | 2.1% | **2.2%** |

## O. Social Involvement Key Performance

### Environmental Technology Research Projects

| | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| No. of project | 10 | 10 | 19 | 13 |
| Cost-saving of outsourced waste management (US$) | 566,000 | 1,096,000 | 5,600,000 | 949,000 |

### Industry-Academia Collaboration Programs

| | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| No. of interns | 638 | 224 | 410 | 502 |
| No. of people participated in the semiconductor courses | 169 | 862 | 209 | 453 |
| No. of semiconductor assembly technology research projects | 74 | 66 | 74 | 81 |

### Afforestation Projects

| | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| No. of planting area (hectares) | 18.05 | 13.42 | 31.79 | 31.68 |

### Volunteer

| | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| No. of volunteers participating in the event | 2,822 | 3,810 | 4,700 | 3,660 |
| No. of volunteer hours | 5,918 | 8,500 | 12,560 | 11,300 |

### Environmental Education Program

| | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| No. of courses | 31 | 45 | 1,348 | 264 |
| No. of participation | 2,700 | 1,770 | 26,017 | 11,460 |
| No. of seed teachers | 238 | 42 | 173 | 163 |
| No. of training materials/films | 38 | 27 | 59 | 53 |

# Supply Chain Data

## A. Supplier Sustainability Assessment[1]

| Category | | Supplier | | 2023 | 2023 Target |
|---|---|---|---|---|---|
| Desk Assessment | | Tier-1 Supplier | | 645 | Supplier Sustainability Assessment: 600 suppliers |
| | | Significant Supplier | Tier-1 Supplier | 215 | |
| | | | Non Tier-1 Supplier | 86 | |
| Physical Assessment | On-site and Remote Assessment | Tier-1 Supplier | | 79 | |
| | | Significant Supplier | Tier-1 Supplier | 40 | |
| | | | Non Tier-1 Supplier | 6 | |
| | RBA VAP and 3rd party Assessment | Tier-1 Supplier | | 122 | |
| | | Significant Supplier | Tier-1 Supplier | 30 | |
| | | | Non Tier-1 Supplier | 21 | |

## B. Supplier ESG Capacity Building Programs

| Category | 2023 | 2023 Target |
|---|---|---|
| Total Number of Suppliers in ESG Capacity Building Programs | 102 | 60 |
| Significant Suppliers in ESG Capacity Building Programs (%) | 27% | |

## C. Critical Direct Material Suppliers Completing RBA SAQ (%)

| Category | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Critical Direct Material Suppliers Completing RBA SAQ (%) | 64% | 71% | 78% | 86% |

## D. Critical Suppliers Obtaining GHG Certification (%)

| Category | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Critical Suppliers Obtaining ISO 14064-1 Certification (%) | 45% | 51% | 61% | 63% |

## E. Non Tier-1 Suppliers Risk Assessment

| Category | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Non Tier-1 Suppliers Conduct Risk Assessment (by Tier-1 procurement amount) (%) | 56% | 61% | 53% | 46% |

## F. Conflict Minerals

| Category | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| DRC Conflict-Free Product Lines of Packaging and Material Services (%) | 100% | 100% | 100% | 100% |
| DRC Conflict-Free Product Lines of Electronic Manufacturing Services (%) | 100% | 100% | 100% | 100% |

## G. Sustainable Raw Material

| Category | 2023 | |
|---|---|---|
| Metal Materials | Amount (tonnes) | Share of Metal used that is Recycled (%) |
| Aluminium | 180.48 | 68% |
| Cobalt | 2.08 | 7% |
| Copper | 525.44 | 55% |
| Iron/Steel | 46.88 | 2% |
| Nickel | 50.39 | 0.004% |
| Lithium | Not included | |
| Titanium | 0.09 | 3% |

[1] A total of 655 suppliers have implemented at least desk assessment or on-site assessment

## Critical Supplier List

### ASEH Critical Supplier List (ATM) in 2023

| | | | | |
|---|---|---|---|---|
| 3M | ADVANCED DICING TECHNOLOGIES LTD. | ADVANCED RECYCLING CO., LTD. | ADVANTEK | AIR LIQUIDE FAR EASTERN LTD. |
| ASE (SHANGHAI) INC. | ASE Electronics INC. | ATO TECH | CHANG WAH ELECTROMATERIALS INC. | CHEMLEADER CORPORATE |
| CHI MEI TRADING CO., LTD | CRYSTAL-OPTECH | DAEDUCK ELECTRONICS CO., LTD | DAEWON SEMICONDUCTOR PACKAGING INDUSTRIAL CO., LTD. | DISCO CORPORATION |
| Dow International Holdings Company | DUPONT | E.PAK RESOURCES (S) PTE LTD | FUJIFILM ELECTRONIC MATERIALS CO., LTD. | FURUKAWA ELECTRIC CO., LTD. |
| FUSHENG ELECTRONICS CORPORATION | GREATECH SUBSTRATES CO.,LTD. | GTA MATERIAL CO., LTD. | HAESUNG DS CO., LTD. | Henkel AG & Co. KGaA |
| HERAEUS GROUP | HSIEHCHANG TECHNOLOGY CO., LTD. | HWA SHU ENTERPRISE CO., LTD. | INNOX ADVANCED MATERIALS CO., LTD | JENTECH PRECISION INDUSTRIAL CO.,LTD |
| KINSUS INTERCONNECT TECHNOLOGY CORP | KOREA CIRCUIT | KOSTAT, INC. | KULICKE AND SOFFA INDUSTRIES INC. | KYOCERA CORPORATE |
| LEADING INTERCONNECT SEMICONDUCTOR TECHNOLOGY | LEENO INDUSTRIAL INC. | LG INNOTEK CO., LTD. | LINTEC CORPORATION | LUCANDO CHEMICAL TECHNOLOGY CO., LTD. |
| MacDermid ALPHA ELECTRONICS SOLUTIONS | MERCK PERFORMANCE MATERIALS LTD | MITSUBISHI CORPORATION PLASTICS LTD. | MITSUI CHEMICALS | MITSUI HIGH-TEC, INC. |
| MK ELECTRON CO., LTD. | MTI ECO INNO. | MURATA ELECTRONICS | NAMICS CORPORATION | NAN YA PCB CORPORATION |
| NIPPON MICROMETAL CORPORATION | NITTO CORPORATION | NU-GEN INGERNATIONAL | OTIS Co., Ltd. | PECO TEK CO., LTD. |
| RESONAC HOLDINGS CORPORATION | RESOUND TECH INC. | ROHM AND HAAS | SAMSUNG ELECTRO-MECHANICS CO..LTD | SENJU METAL INDUSTRY CO., LTD |
| SEO KWANG MANUFACTURING CO.,LTD. | SHIN-ETSU CHEMICAL CO., LTD. | SHINKO ELECTRONICS (S) PTE LTD | SIMMTECH CO., LTD. | SMALL PRECISION TOOLS PTE LTD |
| SUMITOMO BAKELITE CO., LTD. | SUN SURFACE TECHNOLOGY CO., LTD. | SUNRISE PLASTICS INDUSTRY CO., LTD. | SYTEC MATERIALS TECHNOLOGY CO.,LTD. | TAI HONG CIRCUIT IND. CO.,LTD |
| TAIFLEX SCIENTIFIC CO., LTD. | TANAKA KIKINZOKU KOGYO K.K | TECREACH KOREA. CO., LTD. | TOK TAIWAN CO., LTD. | TOKUYAMA CORPORATION |
| TOPPAN PRINTING CO., LTD. | UBOT INCORPORATED LIMITED | UMATE ELETRONIC CO., LTD | UNIMICRON TECHNOLOGY CORP. | YANTAI ZHAOJIN KANFORT PRECIOUS METALS CO., LTD. |

# Third-Party Assurance Statement

Deloitte.

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## INDEPENDENT AUDITORS' LIMITED ASSURANCE REPORT

ASE Technology Holding Co., Ltd.

We have undertaken a limited assurance engagement on the Sustainability Report ("the Report") of ASE Technology Holding Co., Ltd. ("the Company") for the year ended December 31, 2023.

**Responsibilities of Management**

The management of the Company is responsible for the preparation of the Report in accordance with Taiwan Stock Exchange Corporation Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies, Universal Standards, Sector Standards and Topic Standards published by the Global Reporting Initiative (GRI), SASB Standards published by the Sustainability Accounting Standards Board (SASB), and for such internal control as management determines is necessary to enable the preparation of the Report that are free from material misstatement resulted from fraud or error.

**Auditors' Responsibilities**

Our responsibility is to plan and conduct our limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (Revised), "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" issued by the International Auditing and Assurance Standards Board to issue a limited assurance report on whether the Report is free from material misstatement. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and, therefore, a lower assurance level is obtained than a reasonable assurance.

The information on greenhouse gas emission (scope 1, scope 2 and scope 3) and related energy and electricity consumption that is disclosed in the Report has been verified (or amended as necessary) by other third-party verification organization. Thus, the scope of this Independent Auditors' Limited Assurance Report does not include conclusion on the disclosure of information on greenhouse gas emission (scope 1, scope 2 and scope 3) and related energy and electricity consumption.

We based on our professional judgment in the planning and conducting of our work to obtain evidence supporting the limited assurance. Because of the inherent limitations of any internal control, there is an unavoidable risk that even some material misstatements may remain undetected. The procedures we performed include, but not limited to:

- Inquiring of management and the personnel responsible for the Report to obtain an understanding of the policies, procedures, including the understanding of procedure and result for materiality analysis, internal control, and information system, relevant to the Report to identify areas where a material misstatement of the Report is likely to arise.
- Selecting sample items from the Report and performing procedures such as inspection, re-calculation, re-performance, observation, and analytical procedures to obtain evidence supporting limited assurance.



**Inherent Limitations**

The Report involved non-financial information, which was subject to more inherent limitations than financial information. The information may involve significant judgment, assumptions and interpretations by the management, and the different stakeholders may have different interpretations of such information.

**Independence and Quality Control**

We have complied with the independence and other ethical requirements of the Norm of Professional Ethics for Certified Public Accountant in the Republic of China, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies Standard on Quality Management 1 "Quality Management for Public Accounting Firms" issued by the Accounting Research and Development Foundation of the Republic of China, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

**Conclusion**

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Report is not prepared, in all material respects, in accordance with the applicable criteria.

**Other Matters**

We shall not be responsible for conducting any further assurance work for any change of the Report or the applicable criteria after the issuance date of this report.

Deloitte & Touche
Taipei, Taiwan
Republic of China

August 5, 2024

# GRI Content Index

| | |
|---|---|
| Statement of use | ASEH has reported in accordance with the GRI Standards for the period 2023/1/1-2023/12/31 |
| GRI 1 used | GRI 1: Foundation 2021 |
| Applicable GRI Sector Standard(s) | N/A |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| GRI 2: General Disclosures 2021 | | | |
| The organization and its reporting practices | | | |
| 2-1 | Organizational details | 1.1 Company Profile | 14-15 |
| 2-2 | Entities included in the organization's sustainability reporting | Report Boundary | 07 |
| 2-3 | Reporting period, frequency and contact point | The reporting period of this report is from January 1, 2023 to December 31, 2023, which is the same as the reporting period of the financial report.<br>We publish the sustainability report every year in August.<br>ABOUT OUR REPORTING | -<br><br><br>07 |
| 2-4 | Restatements of information | There is no restatement of information from previous report. | - |
| 2-5 | External assurance | ABOUT OUR REPORTING<br>Third-Party Assurance Statement | 07<br>213 |
| Activities and workers | | | |
| 2-6 | Activities, value chain and other business relationships | 1.1 Company Profile | 14-15 |
| 2-7 | Employees | Appendix: Social Data - C. Employee Information | 203 |
| 2-8 | Workers who are not employees | Appendix: Social Data - L. Non-employee Workers | 209 |
| Governance | | | |
| 2-9 | Governance structure and composition | 2.1 Organization and Structure<br>3.1 Board of Directors<br>For information on the composition of the board of directors, please refer to the diversity and management objectives of board of directors at the company's official website https://ir.aseglobal.com/html/ir_board.php | 18-19<br>50 |
| 2-10 | Nomination and selection of the highest governance body | 3.1 Board of Directors | 50 |
| 2-11 | Chair of the highest governance body | 3.1 Board of Directors | 50 |
| 2-12 | Role of the highest governance body in overseeing the management of impacts | 2.1 Organization and Structure<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.4 Risk Management | 18-19<br>36-47<br>58-67 |
| 2-13 | Delegation of responsibility for managing impacts | 3.4 Risk Management | 58-67 |
| 2-14 | Role of the highest governance body in sustainability reporting | This report was approved and authorized by the Corporate Sustainability Committee. | - |
| 2-15 | Conflicts of interest | 3.1 Board of Directors<br>For more information, please refer to 2023 Annual Report " List of Major Shareholders", "Relationships among the Top Ten Shareholders", and 2023 Consolidated Financial Report " Marketable Securities Held", "Total Purchases from or Sales to Related Parties", and "Receivables from Related Parties". | 50 |
| 2-16 | Communication of critical concerns | 3.1 Board of Directors<br>For more information, please refer to 2023 Annual Report "Ch. 3.4 Corporate Governance". | 50-51 |
| 2-17 | Collective knowledge of the highest governance body | 3.1 Board of Directors | 51 |
| 2-18 | Evaluation of the performance of the highest governance body | 3.1 Board of Directors | 51-52 |
| 2-19 | Remuneration policies | 3.1 Board of Directors<br>When necessary, the company will provide recruitment incentive or termination payments based on market conditions and personal performance of directors. For the retirement benefits, please refer to page 149-150 of the 2023 Annual Report (English version). | 51-52 |
| 2-20 | Process to determine remuneration | 2.4 Materiality Assessment and Stakeholder Communication<br>3.1 Board of Directors | 36-47<br>51-52 |
| 2-21 | Annual total compensation ratio | Appendix: Social Data - G. Full-time Employees in Non-executive Positions<br>Due to the company's privacy guidelines, we do not report the annual total compensation for the organization's highest-paid individual. For more information on the ratio between annual compensation of the president and the mean of the annual compensation of all other employees, please refer to https://ir.aseglobal.com/html/ir_committees.php? | 206 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| Strategy, policies and practices | | | |
| 2-22 | Statement on sustainable development strategy | LETTER FROM THE CHAIRMAN<br>2.2 Sustainability Strategies | 11-13<br>24-27 |
| 2-23 | Policy commitments | 3.3 Business Ethics<br>3.4 Risk Management<br>3.5 Human Rights Management | 55<br>58-67<br>68 |
| 2-24 | Embedding policy commitments | 3.3 Business Ethics | 55-56 |
| 2-25 | Processes to remediate negative impacts | 2.4 Materiality Assessment and Stakeholder Communication | 36-47 |
| 2-26 | Mechanisms for seeking advice and raising concerns | 3.3 Business Ethics | 57 |
| 2-27 | Compliance with laws and regulations | 3.6 Regulatory Compliance<br>Appendix: Environmental Data - F. Environmental Violations | 74<br>200 |
| 2-28 | Membership associations | 8.5 Public Advocacy | 190-194 |
| Stakeholder engagement | | | |
| 2-29 | Approach to stakeholder engagement | 2.4 Materiality Assessment and Stakeholder Communication | 36-47 |
| 2-30 | Collective bargaining agreements | 6.1 Talent Attraction and Retention | 139 |
| GRI 3: Material Topics 2021 | | | |
| 3-1 | Process to determine material topics | 2.4 Materiality Assessment and Stakeholder Communication | 36-47 |
| 3-2 | List of material topics | 2.4 Materiality Assessment and Stakeholder Communication | 36-47 |
| GRI 201: Economic Performance 2016 | | | |
| 3-3 | Management of material topics | LETTER FROM THE CHAIRMAN<br>1.3 Financial Performance<br>2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication | 11-13<br>17<br>24-27<br>36-47 |
| 201-1 | Direct economic value generated and distributed | 1.3 Financial Performance<br>2.3 UN Sustainable Development Goals and Sustainable Value Assessment<br>3.2 Economic Performance and Tax Governance<br>For further details on financial performance, please refer to the ASEH 2023 Consolidated Financial Report: https://ir.aseglobal.com/html/ir_financial.php | 17<br>28-35<br>53-54 |
| 201-2 | Financial implications and other risks and opportunities due to climate change | TCFD Report: https://www.aseglobal.com/en/pdf/2023-climate-and-environmental-report-en.pdf | - |
| 201-3 | Defined benefit plan obligations and other retirement plans | 6.1 Talent Attraction and Retention - Compensation and Benefit Policy Retirement/pension plans for ASEH employees were formulated in compliance with relevant Taiwanese laws such as the Labor Standards Act, Labor Pension Act, and applicable laws in the countries in which ASEH offices are located. For more information, please refer to page 146-152 of the ASEH 2023 Annual Report (English version) and page 65-70 of the ASEH 2023 Financial Report (English version) | 133-134 |
| 201-4 | Financial assistance received from government | ASEH is entitled to tax incentive. Please refer to page 85 of the ASEH 2023 Consolidated Financial Report (English version). | - |
| GRI 202: Market Presence 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>6.1 Talent Attraction and Retention | 24-27<br>36-47<br>128-131 |
| 202-2 | Proportion of senior management hired from the local community | 3.1 Board of Directors<br>ASEH is a registered company established under the jurisdiction of the Republic of China. Among board members who also serve as top managements (directors who hold executives positions), 50% were local residents (with Republic of China citizenship). | 50 |
| GRI 203: Indirect Economic Impacts 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.3 UN Sustainable Development Goals and Sustainable Value Assessment<br>2.4 Materiality Assessment and Stakeholder Communication | 24-27<br>28-35<br>36-47 |
| 203-1 | Infrastructure investments and services supported | 2.3 UN Sustainable Development Goals and Sustainable Value Assessment | 28-35 |
| GRI 204: Procurement Practices 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>7.3 Supply Chain Sustainability Management | 24-27<br>36-47<br>160-165 |
| 204-1 | Proportion of spending on local suppliers | 7.2 Supply Chain Management Framework | 160 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| **GRI 205: Anti-corruption 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.3 Business Ethics | 24-27<br>36-47<br>55-57 |
| 205-1 | Operations assessed for risks related to corruption | 3.3 Business Ethics | 56 |
| 205-2 | Communication and training about anti-corruption policies and procedures | 3.3 Business Ethics<br>6.1 Talent Attraction and Retention<br>7.2 Supply Chain Management Framework | 56<br>128<br>158 |
| 205-3 | Confirmed incidents of corruption and actions taken | 3.3 Business Ethics<br>In 2023, ASEH did not engage in any political contributions. | 57 |
| **GRI 206: Anti-competitive Behavior 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.3 Business Ethics | 24-27<br>36-47<br>55-57 |
| 206-1 | Legal actions for anticompetitive behavior, antitrust, and monopoly practices | In 2023, ASEH was not subjected to any legal actions regarding anti-competitive behavior and violations of anti-trust and monopoly legislation. | - |
| **GRI 302: Energy 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>5.1 Climate Leadership | 24-27<br>36-47<br>99-109 |
| 302-1 | Energy consumption within the organization | 5.1 Climate leadership - Fossil Fuels (Non-renewable), Electricity and Renewable Energy Consumption | 107-108 |
| 302-3 | Energy intensity | 5.1 Climate leadership - Electricity and Renewable Energy Consumption | 108 |
| 302-4 | Reduction of energy consumption | 5.1 Climate leadership - Energy Resource Management | 106 |
| **GRI 303: Water and Effluents 2018** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>5.2 Water Resource | 24-27<br>36-47<br>110-114 |
| 303-1 | Interactions with water as a shared resource | 5. GREEN MANUFACTURING AND LOW-CARBON TRANSFORMATION - 2023 Key Performance<br>5.2 Water Resource | 97-98<br>110-114 |
| 303-2 | Management of water discharge related impacts | 5.2 Water resource - Wastewater management | 114 |
| 303-3 | Water withdrawal | 5.2 Water resource- Water withdrawal and reuse<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission<br>Appendix: Environmental Data-B. The amount of water withdrawals and discharge in water-stressed regions | 113<br>196<br>198 |
| 303-4 | Water discharge | 5.2 Water resource - Wastewater management<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission<br>Appendix: Environmental Data - B. The amount of water withdrawals and discharge in water-stressed regions<br>Appendix: Environmental Data - C. Water discharge in water-stressed regions (ML) | 113-114<br>196<br>198<br>199 |
| 303-5 | Water consumption | 5.2 Water resource- Water withdrawal and reuse<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission<br>Appendix: Environmental Data-B. The amount of water withdrawals and discharge in water-stressed regions | 113<br>196<br>198 |
| **GRI 305: Emissions 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>5.1 Climate Leadership | 24-27<br>36-47<br>99-109 |
| 305-1 | Direct (Scope 1) GHG emissions | 5.1 Climate leadership - Greenhouse Gas Emissions Management | 103 |
| 305-2 | Energy indirect (Scope 2) GHG emissions | 5.1 Climate leadership - Greenhouse Gas Emissions Management | 103 |
| 305-3 | Other indirect (Scope 3) GHG emissions | 5.1 Climate leadership - Greenhouse Gas Emissions Management | 104 |
| 305-4 | GHG emissions intensity | 5.1 Climate leadership - Greenhouse Gas Emissions Management<br>Appendix: Environmental Data-A. waste, water, energy, GHG & air emission | 102<br>196 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
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| 305-5 | Reduction of GHG emissions | 5.1 Climate leadership - Greenhouse Gas Emissions Management<br>5.1 Climate leadership - Energy Saving and Carbon Reduction Projects | 103<br>104-105 |
| 305-6 | Emissions of ozone-depleting substances (ODS) | 5.4 Air Emissions Control | 119 |
| 305-7 | Nitrogen oxides, sulfur oxides, and other significant air emissions | 5.4 Air Emissions Control<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission | 119<br>197 |
| **GRI 306: Waste 2020** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>5.3 Waste | 24-27<br>36-47<br>115-116 |
| 306-1 | Waste generation and significant waste-related impacts | 5.3 Waste | 115-116 |
| 306-2 | Management of significant waste-related impacts | 5.3 Waste | 115-116 |
| 306-3 | Waste generated | 5.3 Waste<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission | 115-116<br>196 |
| 306-4 | Waste diverted from disposal | 5.3 Waste<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission | 115-116<br>196 |
| 306-5 | Waste directed to disposal | 5.3 Waste<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission | 115-116<br>196 |
| **GRI 308: Supplier Environmental Assessment 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>7.3 Supply Chain Sustainability Management | 24-27<br>36-47<br>160-165 |
| 308-1 | New suppliers that were screened using environmental criteria | 3.3 Business Ethics<br>7.3 Supply Chain Sustainability Management - Supplier Sustainability Management Approach | 56<br>160-161 |
| 308-2 | Negative environmental impacts in the supply chain and actions taken | 7.3 Supply Chain Sustainability Management | 160-165 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| **GRI 401: Employment 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>6.1 Talent Attraction and Retention | 24-27<br>36-47<br>128-130 |
| 401-1 | New employee hires and employee turnover | 6.1 Talent Attraction and Retention<br>Appendix: Social Data – E. New Hire Employee, F. Turnover Rate | 128-132<br>204 |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | ASEH has provided all full-time employees with comprehensive insurance / parental leave / retirement schemes. | - |
| 401-3 | Parental leave | Appendix: Social Data – H. Parental Leave | 206 |
| **GRI 402: Labor/Management Relations 2016** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>6.1 Talent Attraction and Retention | 24-27<br>36-47<br>138-140 |
| 402-1 | Minimum notice periods regarding operational changes | Regarding employee discharges and layoffs, all ASEH sites notify their employees of significant changes to collective agreements in advance pursuant to local laws and regulations. Any labor-management dispute regarding collective agreements is submitted to the employee representatives in writing for further negotiation. | - |
| **GRI 403: Occupational Health and Safety 2018** | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>6.3 Occupational Health and Safety | 24-27<br>36-47<br>145-146 |
| 403-1 | Occupational health and safety management system | 6.3 Occupational Health and Safety | 145-146 |
| 403-2 | Hazard identification, risk assessment, and incident investigation | 6.3 Occupational Health and Safety | 145-149 |
| 403-3 | Occupational health services | 6.3 Occupational Health and Safety | 149-152 |
| 403-4 | Worker participation, consultation, and communication on occupational health and safety | 6.3 Occupational Health and Safety | 145-153 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
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| 403-5 | Worker training on occupational health and safety | 6.3 Occupational Health and Safety | 145-153 |
| 403-6 | Promotion of worker health | 6.3 Occupational Health and Safety | 145-153 |
| 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 6.3 Occupational Health and Safety | 145-153 |
| 403-8 | Workers covered by an occupational health and safety management system | 6.3 Occupational Health and Safety<br>Appendix: Social Data - M. Workers Occupational Health and Safety | 145-153<br>209 |
| 403-9 | Work-related injuries | 6.3 Occupational Health and Safety<br>Appendix: Social Data - M. Workers Occupational Health and Safety | 145-153<br>209 |
| 403-10 | Work-related ill health | 6.3 Occupational Health and Safety<br>Appendix: Social Data - M. Workers Occupational Health and Safety | 145-153<br>209 |
| GRI 404: Training and Education 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>6.2 Talent Cultivation and Development | 24-27<br>36-47<br>141-144 |
| 404-1 | Average hours of training per year per employee | 6.2 Talent Cultivation and Development | 141-144 |
| 404-2 | Programs for upgrading employee skills and transition assistance programs | 6.2 Talent Cultivation and Development<br>ASEH does not provide terminated employees with any continued employability or career transition assistance. | 141-144 |
| 404-3 | Percentage of employees receiving regular performance and career development reviews | 6.1 Talent Attraction and Retention | 137 |
| GRI 405: Diversity and Equal Opportunity 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>6.1 Talent Attraction and Retention - Diversity in Human Resources | 24-27<br>36-47<br>128-129 |
| 405-1 | Diversity of governance bodies and employees | 3.1 Board of Directors<br>6.1 Talent Attraction and Retention - Diversity in Human Resources | 51<br>128-129 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| GRI 408: Child Labor 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.5 Human Rights Management<br>7.3 Supply Chain Sustainability Management | 24-27<br>36-47<br>68-73<br>160 |
| 408-1 | Operations and suppliers at significant risk for incidents of child labor | 3.5 Human Rights Management<br>7.3 Supply Chain Sustainability Management<br>No significant risk of hire child labor and young workers exposed to hazardous work. | 68-73<br>160 |
| GRI 409: Forced or Compulsory Labor 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.5 Human Rights Management<br>7.3 Sustainable Supply Chain Management | 24-27<br>36-47<br>68-73<br>160 |
| 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labor | 3.5 Human Rights Management<br>7.3 Supply Chain Sustainability Management<br>Non-significant risk for incidents of forced or compulsory labor either. | 68-73<br>160 |
| GRI 414: Supplier Social Assessment 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>7.3 Supply Chain Sustainability Management | 24-27<br>36-47<br>160-165 |
| 414-1 | New suppliers that were screened using social criteria | 3.3 Business Ethics<br>7.3 Supply Chain Sustainability Management - Supplier Sustainability Management Approach | 56<br>160-161 |
| 414-2 | Negative social impacts in the supply chain and actions taken | 7.3 Supply Chain Sustainability Management | 160-165 |
| GRI 418: Customer Privacy 2016 | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.7 Information Security Management | 24-27<br>36-47<br>75-80 |
| 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | 3.5 Human Rights Management<br>We don't have any substantiated complaints regarding breaches of customer privacy and losses of customer data in 2023. | 73 |

| GRI Standard | Disclosure | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| Customized Standard | | | |
| Innovation Management and Sustainable Manufacturing | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>4.1 R&D and Innovation<br>4.2 Sustainable Manufacturing | 24-27<br>36-47<br>82-90<br>91-94 |
| Customer Relationship Management | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>4.3 Products and Services - Customer Service | 24-27<br>36-47<br>95 |
| Information Security Management | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>3.7 Information Security Management | 24-27<br>36-47<br>75-80 |
| Social Involvement | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>8. Corporate Citizenship | 24-27<br>36-47<br>170 |
| Local Communities | | | |
| 3-3 | Management of material topics | 2.2 Sustainability Strategies<br>2.4 Materiality Assessment and Stakeholder Communication<br>8.1 Social Involvement Overview | 24-27<br>36-47<br>175-176 |

# Sustainability Accounting Standards Board

## SEMICONDUCTORS (Applicable to ASE and SPIL Facilities)

| Topic / Code | Accounting Metric | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| **Greenhouse Gas Emissions** | | | |
| TC-SC-110a.1. | (1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds | 5.1 Climate leadership - Greenhouse gas emissions management | 103 |
| TC-SC-110a.2. | Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets | 5.1 Climate leadership - Greenhouse gas emissions managemen | 99-103 |
| **Energy Management in Manufacturing** | | | |
| TC-SC-130a.1 | (1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable | 5.1 Climate leadership - Electricity and the Use of Renewable Energy<br>Appendix: Sustainability Indicators - SEMICONDUCTORS - No. 1 | 103<br>221 |
| **Water Management** | | | |
| TC-SC-140a.1 | (1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress | 5.2 Water Resource-Water withdrawal and Reuse<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission<br>Appendix: Environmental Data - B. The amount of water withdrawals and discharge in water-stressed regions | 113<br>196<br>198 |
| **Waste Management** | | | |
| TC-SC-150a.1 | Amount of hazardous waste from manufacturing, percentage recycled | 5.3 Waste<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission | 115-116<br>196 |
| **Employee Health & Safety** | | | |
| TC-SC-320a.1 | Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards | 6.3 Occupational Health and Safety | 145-149 |
| TC-SC-320a.2 | Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations | In 2023, ASEH was fined approximately US$9,798 for violating employee health and safety protocols (there were no fines exceeding US$10,000). | - |
| **Recruiting & Managing a Global & Skilled Workforce** | | | |
| TC-SC-330a.1 | Percentage of employees that are (1) foreign nationals and (2) located offshore | 3.5 Human Rights Management<br>Appendix: Social data - B. Foreign Employee<br>Taiwan is the registered location of ASEH and the employees of ASEH's facilities outside Taiwan are considered overseas employees. Overseas employees account for 30.6% of the total ASEH employees. | 68-73<br>203 |
| **Materials Sourcing** | | | |
| TC-SC-440a.1 | Description of the management of risks associated with the use of critical materials | 7.3 Supply Chain Sustainability Management | 160-165 |
| **Intellectual Property Protection & Competitive Behavior** | | | |
| TC-SC-520a.1 | Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations | In 2023, ASEH did not suffer any financial losses from violating anti-competitive regulations. | - |

## ELECTRONIC MANUFACTURING SERVICES & ORIGINAL DESIGN MANUFACTURING (Applicable to USI Facilities)

| Topic / Code | Accounting Metric | Related Section / Explanatory Notes | Page No. |
|---|---|---|---|
| **Water Management** | | | |
| TC-ES-140a.1 | (1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress | 5.2 Water Resource<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission<br>Appendix: Environmental Data - B. The amount of water withdrawals and discharge in water-stressed regions | 113<br>196<br>198 |
| **Waste Management** | | | |
| TC-ES-150a.1 | Amount of hazardous waste from manufacturing, percentage recycled | 5.3 Waste<br>Appendix: Environmental Data - A. Waste, Water, Energy, GHG & Air emission | 115-116<br>196 |
| **Labor Practices** | | | |
| TC-ES-310a.1 | (1) Number of work stoppages and (2) total days idle | In 2023, there were no incidents that resulted in a shutdown at USI. | - |
| **Materials Sourcing** | | | |
| TC-ES-440a.1 | Description of the management of risks associated with the use of critical materials | 7.3 Supply Chain Sustainability Management | 160-165 |
| **Activity Metrics** | | | |
| TC-ES-000.C | Number of employees | Total number of USI employees is 17,031 | - |

## Sustainability Indicators — SEMICONDUCTORS

| No. | Indicators | Disclosure |
|---|---|---|
| 1 | Total energy consumption, percentage of purchased electricity and utilization rate of renewable energy with Greenhouse gas emissions of ASEH | • In 2023, total energy consumption was 15,771,140 GJ, with grid (imported) electricity accounting for 77.67 %, of the total consumption and renewable energies accounting for 19.27 %<br>• In 2023, the greenhouse gas emissions of ASEH were as follows: Scope 1: 28.7900 $tCO_2e$, Scope 2: 37.1275 $tCO_2e$, Scope 3: 171.0377 $tCO_2e$ |
| 2 | Total water withdrawal and total water consumption | In 2023, total water withdrawals amounted to 21,467,999 $m^3$, and total water consumption amounted to 6,081,747 $m^3$ |
| 3 | The weight and recycling percentage of hazardous waste generated | In 2023, total hazardous waste was produced to 20,692 tons, and the recycling rate was 78% |
| 4 | The type, number and rate of occupational incidents | Category of Occupational Injuries in 2023:<br>1. Number of Physical Injuries: 116 peoples (94%)<br>2. Number of Chemical Injuries: 4 peoples (3%)<br>3. Number of Ergonomic Injuries: 4 peoples (3%)<br>4. Number of Biological Injuries: 0 people (0%)<br>5. Number of Psychosocial Injuries: 0 people (0%) |
| 5 | Disclosure of product life cycle management: including the weight of scraped products and e-waste and the percentage of recycling | In 2023, the weight of end-of-life products and e-waste were 480 tons, and the recycling rate was 0% |
| 6 | Risk management regarding the use of critical materials | Please refer to 7.3 Supply Chain Sustainability Management |
| 7 | Total amount of monetary losses as a result of legal proceedings associated with anticompetitive behavior regulations | In 2023, ASEH did not suffer any financial losses from violating anti-competitive regulations |
| 8 | Yield of main products by product category | 1. Semiconductor Assembly (packaging), Testing and Materials (ATM): 34,205,940 kpcs<br>2. Electronic Manufacturing Service (EMS): 870,921 kpcs |

# TCFD Index

| Dimension | General industry index (2021 edition) | Comparing Section |
|---|---|---|
| Governance | a) The board's oversight of climate-related risks and opportunities. | **Sustainability Report**<br>• Board of Directors<br>3.4 Risk Management<br>**Climate and Environmental Report**[1]<br>• Letter from the Chairman<br>1.1.1 Supervision at Management Level |
| | b) Management's role in assessing and managing climate-related risks and opportunities. | **Sustainability Report**<br>3.4 Risk Management<br>**Climate and Environmental Report**<br>1.1.2 High-Level Assessment and Management |
| Strategy | a) The climate-related risks and opportunities the organization has identified over the short, medium, and long term. | **Climate and Environmental Report**<br>1.2.2 Integrated Risk Management Process<br>1.2.3 Material Climate- and Water-related Risks and Opportunities |
| | b) The impact of climate related risks and opportunities on the organization's businesses, strategy, and financial planning. | **Climate and Environmental Report**<br>1.2.3 Material Climate- and Water-related Risks and Opportunities |
| | c) The resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2℃ or lower scenario. | **Climate and Environmental Report**<br>1.2.4 Analysis of Climate Transition Risks and Financial Impacts<br>1.2.5 Physical Risk Analysis |
| Risk Management | a) The organization's processes for identifying and assessing climate-related risks. | **Climate and Environmental Report**<br>1.2.2 Integrated Risk Management Process |
| | b) The organization's processes for managing climate-related risks. | |
| | c) How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management. | **Climate and Environmental Report**<br>1.2.1 Risk Management Organization Overview |
| Metrics and Targets | a) The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. | **Climate and Environmental Report**<br>1.2.2 Integrated Risk Management Process |
| | b) Scope1, Scope2 , and if appropriate, scope3 greenhouse gas (GHG) emissions and the related risks. | **Sustainability Report**<br>5.1 Climate Leadership |
| | c) The targets used by the organization to manage climate-related risks and opportunities and performance against targets. | **Climate and Environmental Report**<br>2.1 Net-zero Transition<br>2.2 Targets and Net-zero Emission Pathways<br>2 Net zero emissions<br>3 Decarbonization Practices |

[1] Climate and Environmental Report: https://www.aseglobal.com/download/

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