# Sustainability Performance Data 2025

## Environmental Performance

| GRI Standard | Indicators | Units | Performances 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| **GRI 302-1** | **Total energy consumed** | **MJ** | **446,863,090** | **492,598,893** | **495,086,048** |
| | Total non-renewable energy consumption | MJ | 425,865,660 | 472,400,121 | 475,005,680 |
| | Natural gas | MJ | 266,137,750 | 297,602,207 | 304,165,531 |
| | Electricity purchased | MJ | 159,727,910 | 174,797,914 | 170,840,149 |
| | **Total renewable energy consumption** | | | | |
| | Self-generated energy | MJ | 20,997,430 | 20,198,772 | 20,025,673 |
| **GRI 302-3** | **Total energy intensity** | **MJ/1000L** | **1,228.78** | **2,280.82** | **1,331.76** |
| **GRI 303-3** | **Total water withdrawal** | **$M^3$** | **1,802,772** | **1,801,049** | **1,700,330** |
| | - Surface water | $M^3$ | 0 | 0 | 0 |
| | - Ground water | $M^3$ | 0 | 0 | 0 |
| | - Sea water | $M^3$ | 0 | 0 | 0 |
| | - Produced water | $M^3$ | 0 | 0 | 0 |
| | - Third-Party water | $M^3$ | 1,802,772 | 1,801,049 | 1,700,330 |
| | **Total water recycled & water reused** | $M^3$ | 382,016 | 394,436 | 258,875 |
| | - RO Return | $M^3$ | 235,158 | 243,628 | 142,157 |
| | - RO Reject | $M^3$ | 104,317 | 106,695 | 64,614 |
| | - Condensate Return | $M^3$ | 42,541 | 22,894 | 30,305 |
| | - RO Recycle | $M^3$ | - | 21,219 | 21,799 |
| | **Water consumption intensity** | $M^3$/1000L | 4.9573 | 4.6829 | 4.5744 |
| | **Water withdrawal ( ≤ 1000 mg/L Total Dissolved Solids)** | | | | |
| **GRI 303-4** | **Total water discharge** | **$M^3$** | **697,663** | **676,693** | **653,946** |
| | **Water quality before discharge** | | | | |
| | Biochemical Oxygen Demand (BOD) | Mg/L | 66 | 48 | 129 |
| | Chemical Oxygen Demand (COD) | Mg/L | 194 | 116 | 260 |
| | Value of oil and grease from treated water (Grease and Oil) | Mg/L | 2 | 2 | 2 |
| | Total Suspended Solids (TSS) | Mg/L | 14 | 23 | 22 |
| | Total Dissolved Solids (TDS) | Mg/L | 512 | 664 | 622 |
| | **Water discharge ( ≤ 1000 mg/L Total Dissolved Solids)** | | | | |
| **GRI 303-5** | **ปริมาณการใช้น้ำสุทธิ** | **$M^3$** | **1,105,109** | **1,124,356** | **1,046,384** |
| | Water intensity | $M^3$/1000L | 3.0388 | 2.9235 | 2.8151 |
| | **Total Greenhouse Gas Emissions (GHGs)** | **$tCo_2eq$** | **144,768** | **149,392** | **133,863** |
| GRI 305-1 | Total direct GHG emission (scope 1) | $tCo_2eq$ | 22,348 | 20,963 | 17,500 |
| GRI 305-2 | Total indirect GHG emission (scope 2) | $tCo_2eq$ | 22,180 | 24,273 | 22,541 |
| GRI 305-3 | Other relevant indirect GHG emission (scope 3) | $tCo_2eq$ | 100,240 | 104,156 | 93,822 |

| GRI Standard | Indicators | Units | Performances 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| | - Purchased goods | $tCo_2eq$ | 100,240 | 104,156 | 93,822 |
| | - Capital goods [1] | $tCo_2eq$ | - | - | - |
| | - Fuel and energy related activities [1] (excluded from scope 1 & 2) | $tCo_2eq$ | - | - | - |
| | - Upstream transportation and distribution [1] | $tCo_2eq$ | - | - | - |
| | - Waste generated in operations [1] | $tCo_2eq$ | - | - | - |
| | - Business travel [1] | $tCo_2eq$ | - | - | - |
| | - Employee commuting [1] | $tCo_2eq$ | - | - | - |
| | - Upstream leased assets [1] | $tCo_2eq$ | - | - | - |
| | - Investments [1] | $tCo_2eq$ | - | - | - |
| | - Downstream transportation and distribution [1] | $tCo_2eq$ | - | - | - |
| | - Processing of sold products [1] | $tCo_2eq$ | - | - | - |
| | - Use of sold products [1] | $tCo_2eq$ | - | - | - |
| | - End of life treatment of sold products [1] | $tCo_2eq$ | - | - | - |
| | - Downstream leased assets [1] | $tCo_2eq$ | - | - | - |
| | - Franchise [1] | $tCo_2eq$ | - | - | - |
| **GRI 305-4** | GHG emissions intensity | | | | |
| | GHG emissions (scope 1 & 2) | $tCo_2eq$ | 44,528 | 45,236 | 40,048 |
| | GHG emissions intensity (scope 1 & 2) | $tCo_2eq$ /1000L | 0.1224 | 0.1176 | 0.1077 |
| **GRI 305-7** | **NOx, SO2, and other significant air emissions** | | | | |
| | Nitrogen oxide (NOx) | PPM. | 13.25 | 32.5 | 35.75 |
| | Sulfur dioxide (SO2) | PPM. | < 1.00 | < 1.00 | < 1.00 |
| | Total Suspended Particulates (TSP) | $Mg/M^3$ | 5.28 | 5.33 | 4.50 |
| **GRI 306-3** | **Total wastes generated** | **Tonnes.** | **2,225.47** | **2,359.38** | **2,204.23** |
| | Total hazardous waste generated | Ton. | 13.74 | 27.34 | 15.79 |
| | Total non-hazardous waste generated | Ton. | 2,211.73 | 2,332.04 | 2,188.44 |
| **GRI 306-4[2]** | **Total waste diverted from disposal** | **Ton.** | **-** | **-** | **2,087.57** |
| | Hazardous waste - Recycled | Ton. | - | - | 15.42 |
| | Non-hazardous waste - Recycled | Ton. | - | - | 2,072.15 |
| **GRI 306-5[2]** | **Total waste directed to disposal** | **Ton.** | **-** | **-** | **116.66** |
| | Hazardous waste - Landfilled | Ton. | - | - | 0.27 |
| | Hazardous waste - Other disposal | Ton. | - | - | 0.10 |
| | Non-hazardous waste - Landfilled | Ton. | - | - | 116.29 |

Note: N/A means data is not available or data cannot be collected

[1] The organization's greenhouse gas emissions are significantly below the disclosure threshold according to the CFO calculation criteria of the Thailand Greenhouse Gas Management Organization (TGO).

[2] Added GRI 306-4 and 306-5 for data completeness.

## Employee Performance

| GRI Standard | Indicators | Units | Performances | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2023 | | 2024 | | 2025 | |
| | | | Male | Female | Male | Female | Male | Female |
| GRI 2-7 | **Total number of employees** | **person** | **379** | | **401** | | **406** | |
| | **Total employees** | **person** | **261** | **118** | **279** | **122** | **279** | **127** |
| | - Head Office | person | 42 | 45 | 41 | 47 | 43 | 46 |
| | - Factory | person | 219 | 73 | 238 | 75 | 236 | 81 |
| GRI 401-1 | **New employee hires and employee turnover** | | | | | | | |
| | **New employee hires** | person | 55 | 17 | 42 | 9 | 27 | 25 |
| | - Head Office | person | 5 | 5 | 4 | 3 | 4 | 6 |
| | - Factory | person | 50 | 12 | 38 | 6 | 23 | 19 |
| | **New employee hiring rate** | **%** | **19.00** | | **12.72** | | **12.84** | |
| | **New employee by Age Group (Head Office)** | | | | | | | |
| | > 50 years | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | 30 - 50 years | person | N/A | N/A | 3 | 1 | 1 | 4 |
| | < 30 years | person | N/A | N/A | 1 | 2 | 3 | 2 |
| | **New employee by Age Group (Factory)** | | | | | | | |
| | > 50 years | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | 30 - 50 years | person | N/A | N/A | 9 | 2 | 3 | 7 |
| | < 30 years | person | N/A | N/A | 29 | 4 | 20 | 12 |
| | **New employee by Area (Head Office)** | | | | | | | |
| | Northern | person | N/A | N/A | 0 | 1 | 0 | 2 |
| | Central | person | N/A | N/A | 4 | 1 | 2 | 4 |
| | Northeastern | person | N/A | N/A | 0 | 1 | 2 | 0 |
| | Eastern | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | Western | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | Southern | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | **New employee by Area (Factory)** | | | | | | | |
| | Northern | person | N/A | N/A | 3 | 0 | 0 | 3 |
| | Central | person | N/A | N/A | 33 | 4 | 19 | 13 |
| | Northeastern | person | N/A | N/A | 1 | 0 | 3 | 3 |
| | Eastern | person | N/A | N/A | 0 | 1 | 0 | 0 |
| | Western | person | N/A | N/A | 1 | 0 | 0 | 0 |
| | Southern | person | N/A | N/A | 0 | 1 | 1 | 0 |
| | **Total voluntary employee turnover** | **person** | **43** | **15** | **26** | **12** | **25** | **19** |
| | - Head Office | person | 7 | 6 | 3 | 5 | 2 | 5 |
| | - Factory | person | 36 | 9 | 23 | 7 | 23 | 14 |
| | Voluntary employee turnover rate | % | 1.29 | | 0.84 | | 0.91 | |
| | **Turnover by Age Group (Head Office)** | | | | | | | |
| | > 50 years | person | N/A | N/A | 0 | 1 | 0 | 0 |
| | 30 - 50 years | person | N/A | N/A | 3 | 2 | 2 | 3 |
| | < 30 years | person | N/A | N/A | 0 | 2 | 0 | 2 |

| GRI Standard | Indicators | Units | Performances | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2023 | | 2024 | | 2025 | |
| | | | Male | Female | Male | Female | Male | Female |
| | **Turnover by Age Group (Factory)** | | | | | | | |
| | > 50 years | person | N/A | N/A | 1 | 0 | 0 | 0 |
| | 30 - 50 years | person | N/A | N/A | 7 | 3 | 10 | 6 |
| | < 30 years | person | N/A | N/A | 15 | 4 | 13 | 8 |
| | **Turnover by Area (Head Office)** | | | | | | | |
| | Northern | person | N/A | N/A | 0 | 1 | 0 | 1 |
| | Central | person | N/A | N/A | 3 | 3 | 2 | 3 |
| | Northeastern | person | N/A | N/A | 0 | 1 | 0 | 1 |
| | Eastern | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | Western | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | Southern | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | **Turnover by Area (Factory)** | | | | | | | |
| | Northern | person | N/A | N/A | 0 | 1 | 2 | 0 |
| | Central | person | N/A | N/A | 0 | 4 | 18 | 9 |
| | Northeastern | person | N/A | N/A | 20 | 0 | 3 | 4 |
| | Eastern | person | N/A | N/A | 3 | 1 | 0 | 0 |
| | Western | person | N/A | N/A | 0 | 0 | 0 | 0 |
| | Southern | person | N/A | N/A | 0 | 1 | 0 | 1 |
| **GRI 401-3** | **Parental Leave** | | | | | | | |
| | - Employees taking parental leave | person | - | 2 | - | 6 | - | 4 |
| | - Employees returning to work after parental leave | person | - | 2 | - | 6 | - | 4 |
| | - Employee returning to work retention rate | % | 100 | | 100 | | 100 | |
| **GRI 404-1** | **Training and Development** | | | | | | | |
| | Average hours of training per year per employee | hour/ person/year | 8 | | 12 | | 12 | |
| | - Head Office | hour/ person/year | 8 | | 5 | 7 | 6.4 | 6.4 |
| | - Factory | hour/ person/year | 8 | | 19 | 15 | 18.5 | 16.0 |
| | **Average hours of training by Level (Head Office)** | | | | | | | |
| | Senior Executive | hour/ person/year | N/A | N/A | 4 | 6 | 4.5 | 4 |
| | Management | hour/ person/year | N/A | N/A | 3 | 5 | 7.3 | 6.8 |
| | Employee | hour/ person/year | N/A | N/A | 8 | 11 | 7.3 | 8.4 |

| GRI Standard | Indicators | Units | Performances | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2023 | | 2024 | | 2025 | |
| | | | Male | Female | Male | Female | Male | Female |
| | **Average hours of training by Level (Head Office)** | | | | | | | |
| | Senior Executive | hour/ person/year | N/A | N/A | 12 | 15 | - | - |
| | Management | hour/ person/year | N/A | N/A | 23 | 17 | 18.5 | 15.0 |
| | Employee | hour/ person/year | N/A | N/A | 22 | 14 | 18.6 | 17.1 |
| **GRI 405-1** | **Total employees classifying by diversity** | | | | | | | |
| | **Total Employees by Level** | | | | | | | |
| | Senior Executive | person | 5 | 1 | 7 | 3 | 4 | 1 |
| | Management | person | 35 | 30 | 15 | 20 | 14 | 16 |
| | Employee | person | 221 | 87 | 257 | 99 | 261 | 110 |
| | **Total Employees by Age Group** | | | | | | | |
| | > 50 years | person | 15 | 7 | 13 | 1 | 15 | 6 |
| | 30 - 50 years | person | 134 | 69 | 149 | 83 | 151 | 86 |
| | < 30 years | person | 112 | 42 | 117 | 38 | 113 | 35 |
| | **Total Employees by Religion** | | | | | | | |
| | Buddhist | person | 255 | 116 | 268 | 121 | 269 | 125 |
| | Christ | person | 0 | 1 | 3 | 0 | 2 | 0 |
| | Islam | person | 6 | 1 | 8 | 1 | 7 | 2 |
| | Other | person | 0 | 0 | 0 | 0 | 0 | 0 |
| | Not disclosed | person | 0 | 0 | 0 | 0 | 1 | 0 |
| **GRI 405-2** | **Compensation** | | | | | | | |
| | Employees' compensation | Million Baht per year | 174.42 | 84.94 | 186.64 | 100.44 | 189.24 | 95.21 |
| | Proportion of employee compensation (Female: Male) | times | 1.08 | | 1.23 | | 1.11 | |

Note: N/A means data is not available or data cannot be collected

## Occupational Health and Safety

| GRI Standard | Indicators | Units | Performances 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| GRI 403-9 (a) | **High-consequence work-related injuries (excluding fatalities)** | | | | |
| | - Employee | person | 2 | 1 | 1 |
| | - Contractor | person | 0 | 0 | 0 |
| | - Employee Rate (Lost-Time Injury Frequency Rate: LTIFR) | Case / 1 million man-hours | N/A | 0.98 | 0.93 |
| | - Contractor Rate (Lost-Time Injury Frequency Rate: LTIFR) | Case / 1 million man-hours | N/A | 0 | 0 |
| GRI 403-9 (b) | **Recordable work-related injuries - no time off from work** | | | | |
| | - Employee | Case / 1 million man-hours | 1 | 0 | 0 |
| | - Contractor | person | 0 | 0 | 0 |
| | - Employee Rate | Case / 1 million man-hours | N/A | 0 | 0 |
| | - Contractor Rate | Case / 1 million man-hours | N/A | 0 | 0 |
| GRI 403-9 (c) | **Fatalities** | | | | |
| | - Employee | person | 0 | 0 | 0 |
| | - Contractor | person | 0 | 0 | 0 |
| GRI 403-9 (d) | **Number of Hours Worked** [1] | | | | |
| | - Employee | man-hours | 4,320 | 1,000,000 | 1,000,000 |
| | - Contractor | man-hours | 4,320 | 1,000,000 | 1,000,000 |
| GRI 403-10 | **Number of Fatalities as a Result of Work-Related Ill Health** | | | | |
| | - Employee | person | N/A | 0 | 0 |
| | - Contractor | person | N/A | 0 | 0 |
| | Number of Cases of Recordable Work-Related Ill Health | | | | |
| | - Employee | person | N/A | 0 | 0 |
| | - Contractor | person | N/A | 0 | 0 |

Note: N/A means data is not available or data cannot be collected

[1] In 2024, the Company has adjusted the method of calculating the number of working hours in accordance with the reporting standards of the Global Report Initiative Standards (GRI) by equating to 1,000,000 working hours.

## Results of measuring the amount of pollutants emitted from the chimney

| No | Measured Area | Indicators | Units | Standard Value [1] | 2023 | 2024 | 2025 | Results |
|---|---|---|---|---|---|---|---|---|
| 1 | Plant 1 / HOOD Chimney Chemical Lab Room | Total Suspended Particulates (TSP) | $mg/m^3$ | 400 | 1.9 | 2 | 1.1 | Pass |
| | | Sulfuric acid | ppm | 25 | 0.01 | 0.01 | <0.01 | Pass |
| | | Hydrogen chloride | $mg/m^3$ | 200 | <0.010(3) | <0.010(3) | <0.010 | Pass |
| | | Methyl alcohol | ppm | No standard value specified [2] | <0.001 | <0.001 | <0.001 | No standard value specified [2] |
| | | Formaldehyde | ppm | No standard value specified [2] | <0.001 | <0.001 | <0.001 | No standard value specified [2] |
| 2 | Plant 1 / Chemical HOOD Chimney | ปริมาณฝุ่นละออง (TSP) | $mg/m^3$ | 400 | 1.5 | 1.4 | 0.7 | Pass |
| | | กรดกำมะถัน (Sulfuric acid) | ppm | 25 | 0.01 | 0.01 | <0.01 | Pass |
| | | ไฮโดรเจนคลอไรด์ (Hydrogen chloride) | $mg/m^3$ | 200 | <0.010(3) | <0.010(3) | <0.010 | Pass |
| | | เมทิล แอลกอฮอล์ (Methyl alcohol) | ppm | No standard value specified [2] | <0.001 | <0.001 | <0.001 | No standard value specified [2] |
| | | ฟอร์มัลดีไฮด์ (Formaldehyde) | ppm | No standard value specified [2] | <0.001 | <0.001 | <0.001 | No standard value specified [2] |
| 3 | Plant 1 / BOILER No.1 (15 Ton) | ปริมาณฝุ่นละออง (TSP) | $mg/m^3$ | 320 | 4.5 | 4.7 | 4.2 | Pass |
| | | ซัลเฟอร์ไดออกไซด์ (SO2) | ppm | 60 | <1 | <1 | <1 | Pass |
| | | ออกไซด์ของไนโตรเจน (NOx) | ppm | 200 | 18 | 20 | 11 | Pass |
| | | คาร์บอนมอนอกไซด์ (CO) | ppm | 690 | 25 | 8 | 6 | Pass |
| 4 | โรงงาน 1 / BOILER No.2 (10 Ton) | ปริมาณฝุ่นละออง (TSP) | $mg/m^3$ | 320 | 6.1 | 5.9 | 4.8 | Pass |
| | | ซัลเฟอร์ไดออกไซด์ (SO2) | ppm | 60 | <1 | <1 | <1 | Pass |
| | | ออกไซด์ของไนโตรเจน (NOx) | ppm | 200 | 11 | 33 | 35 | Pass |
| | | คาร์บอนมอนอกไซด์ (CO) | ppm | 690 | 22 | 14 | 13 | Pass |
| 5 | Plant 1 / BOILER No.3 (10 Ton) | ปริมาณฝุ่นละออง (TSP) | $mg/m^3$ | 320 | 5 | 5.5 | 4.4 | Pass |
| | | ซัลเฟอร์ไดออกไซด์ (SO2) | ppm | 60 | <1 | <1 | <1 | Pass |
| | | ออกไซด์ของไนโตรเจน (NOx) | ppm | 200 | 20 | 40 | 48 | Pass |
| | | คาร์บอนมอนอกไซด์ (CO) | ppm | 690 | 37 | 16 | 8 | Pass |
| 6 | Plant 2 / BOILER No.4 (15 Ton) | ปริมาณฝุ่นละออง (TSP) | $mg/m^3$ | 320 | 5.6 | 5.2 | 4.6 | Pass |
| | | ซัลเฟอร์ไดออกไซด์ (SO2) | ppm | 60 | <1 | <1 | <1 | Pass |
| | | ออกไซด์ของไนโตรเจน (NOx) | ppm | 200 | 13 | 37 | 49 | Pass |
| | | คาร์บอนมอนอกไซด์ (CO) | ppm | 690 | 27 | 14 | 18 | Pass |

Note :
[1] Ministry of Industry Announcement on the determination of the amount of contaminants in air discharged from factories, B.E. 2549
[2] No standard value specified
[3] The results of measurement and analysis are certified by the Environmental Center Laboratory, Suan Dusit University, calculated at a pressure of 1 atmosphere or 760 mmHg, temperature of 25 degrees Celsius, and dry conditions (Dry Basis).

## Results of air pollution measurements from production processes

| No. | Measured Area | Indicators | Units | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|---|
| 1 | WET SCRUBBER LINE B | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 2 | WET SCRUBBER LINE C | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 3 | WET SCRUBBER LINE D | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 4 | WET SCRUBBER LINE E | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 5 | WET SCRUBBER LINE F | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 6 | WET SCRUBBER LINE G | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 7 | WET SCRUBBER LINE H | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |
| 8 | WET SCRUBBER LINE I | Hydrogen peroxide ($H_2O_2$) | ppm | <0.001 | <0.001 | <0.001 |

## Results of wastewater quality measurement from production processes

| Parameter | Units | Standard Value | 2023 | 2024 | 2025 |
|---|---|---|---|---|---|
| pH | - | 5.5 – 9.0 | 8.2 | 8.2 | 8.0 |
| Temperature | ° C | ≤ 40 | 31 | 30 | 34 |
| Biochemical Oxygen Demand (BOD) | mg/L | ≤ 500 | 66 | 48 | 129 |
| Chemical Oxygen Demand (COD) | mg/L | ≤ 750 | 194 | 116 | 260 |
| Total Suspended Solid | mg/L | ≤ 200 | 14 | 23 | 22 |
| Total Dissolved Solid | mg/L | ≤ 3,000 | 512 | 664 | 622 |
| Oil and Grease | mg/L | ≤ 10 | 2 | 2 | 2 |
| Total Kjeldahl Nitrogen | mg/ L as N | ≤ 100 | 15 | 12 | 11 |