Environmental data

Response to climate change for decarbonization

| Item | | Coverage | Unit | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2024 Annual target | |
|---|----------------|-------------------|-------|------------|---------|---------|---------|---------|--------------------------|---|
| CO2 emission reduction rate (compared to 2013) | | Group | % | 2.2 | 8.0 | 11.3 | 5.0 | 12.0 | 15% or more | |
| Gross profit basic unit index (compared to 2013) | | ex | Group | % | 57 | 55 | 48 | 42 | 39 | - |
| (CO2 emission | ns / gross pro | ofit) | | | | | | | | |
| Energy intensity index (compared to 2015) (Energy amount / Production amount) | | Group | % | 102 | 109 | 107 | 105 | 109 | - | |
| | Scope 1 | heavy oil | Group | Thousand - | 14.2 | 13.8 | 11.6 | 14.4 | 11.9 | - |
| | | Natural gas | | | 8.6 | 8.2 | 8.6 | 8.4 | 8.4 | |
| CO2 | | subtotal | | | 22.8 | 22.1 | 20.2 | 22.8 | 20.3 | |
| emissions | Scope 2 | Electric power | | | 14.9 | 14.2 | 13.3 | 13.6 | 13.5 | |
| CITIOSIONS | | Non-energy origin | | | 9.3 | 8.0 | 9.1 | 9.3 | 8.6 | |
| | | subtotal | | | 24.2 | 22.2 | 22.4 | 22.9 | 22.1 | |
| | total | | | | 47.0 | 44.3 | 42.6 | 45.7 | 42.3 | |
| | | Electric power | | | 6,600 | 6,891 | 6,997 | 7,548 | 7,290 | 3 |
| | | heavy oil | | | 5,296 | 5,156 | 4,312 | 5,379 | 4,418 | |
| Amount of en | ergy | Natural gas | Group | KL | 4,462 | 4,258 | 4,321 | 4,347 | 4,275 | |
| | | others | | | 8 | 7 | 6 | 13 | 10 | - |
| | | total | | | 16,367 | 16,311 | 15,637 | 17,287 | 15,993 | |
| So x emissions | | Group | tons | 7.6 | 6.4 | 3.7 | 7.5 | 6.2 | - | |
| No x emissions | | | Group | tons | 17.0 | 15.5 | 17.2 | 16.0 | 15.6 | - |

Wastewater and waste management

| Item | | Cavarage | I I a in | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2024 |
|--------------------------------------|----------------------|----------|----------|---------|---------|---------|---------|---------|---------------|
| | | Coverage | Unit | | | | | | Annual target |
| Recycling rate | | Group | % | 18.9 | 19.3 | 21.5 | 20.0 | 20.0 | 25% or more |
| In-house processing rate | | Group | % | 64 | 62 | 61 | 62 | 65 | - |
| Final disposal rate | | Group | % | 0.7 | 0.8 | 0.7 | 0.8 | 0.6 | - |
| Amount of industrial waste generated | | Group | tons | 18,099 | 17,835 | 19,053 | 20,900 | 20,400 | - |
| In-house processing amount | | Group | tons | 11,601 | 11,094 | 11,601 | 13,000 | 13,200 | - |
| External emissions | | Group | tons | 6,498 | 6,741 | 7,452 | 7,900 | 7,200 | - |
| Final landfill disposal amount | | Group | tons | 133 | 143 | 137 | 170 | 132 | - |
| Dougo | External Internal | | tons | 886 | 1,312 | 1,455 | 1,961 | 1,753 | - |
| Reuse Recycled amount | | Group | tons | 2,539 | 2,125 | 2,651 | 2,207 | 2,270 | - |
| Recycled arribunt | Total | | tons | 3,425 | 3,437 | 4,105 | 4,168 | 4,023 | - |
| Water discharge (COD load) | | Group | tons | 20.5 | 21.4 | 18.0 | 20.3 | 17.7 | - |
| Water discharge (SS load) | | Group | tons | 9.6 | 8.9 | 16.7 | 21.9 | 13.3 | - |

Securing water resources

| Item | Coverage | Unit | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2024 Annual target |
|---------------|----------|-------------|---------|---------|---------|---------|---------|--------------------------|
| Water (usage) | Group | 10,000 tons | 625 | 589 | 594 | 599 | 580 | - |

Expand sales of eco-friendly products

| | Itom | Coverage | Unit | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2024 |
|---|---------------------------------------|---------------|-------|---------|-----------------|---------|---------|---------------|---------|
| | Item | Coverage | Offic | FY 2016 | F1 2019 F1 2020 | FY 2021 | F1 2022 | Annual target | |
| Production volume of environment-friendly | | Osaka Organic | % | - | | 9.4 | 8.9 | 15% or more | |
| | products (to total production volume) | Chemistry | | | | | | | |

Thorough environmental compliance

| Item | | Coverage | Unit | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2024 Annual target |
|--|---------------------|----------------------------|--------|---------|---------|---------|---------|---------|--------------------------|
| PRTR emission reduction rate (compared to FY2019) | | Osaka Organic Chemistry | % | - | - | 3.2 | 4.5 | 15.1 | 60% or more |
| | n-hexane | Osaka Organic Chemistry | tons | 16.0 | 5.1 | 4.8 | 5.6 | 5.6 | - |
| | Methyl methacrylate | | tons | 11.6 | 2.1 | 1.8 | 1.0 | 1.7 | - |
| PRTR emissions | Methyl acrylate | | tons | 12.4 | 2.3 | 2.6 | 3.0 | 1.9 | - |
| | others | | tons | 26.1 | 11.6 | 11.2 | 10.6 | 8.7 | - |
| | Total | | tons | 66.1 | 21.1 | 20.4 | 20.1 | 17.9 | - |
| Number of serious environmental accidents / legal violations | | Group | number | *0 | 0 | 0 | 0 | 0 | - |

^{*}One environmental accident in 2018.

The cause of the leakage of methyl chloride (low concentration) is due to equipment abnormality, and there is no external influence.

 $[\]cdot$ Data period : From April of the reporting year to March of the following year