The 11th (FY2022–FY2024) Medium-term RC Basic Plan and FY2022 Results

[Ratings] Achieved Nearly achieved Unachieved

Environmental Protection

Objectives for FY2022–FY2024

- Energy saved: 6,000 kL (over 3 years)
- Energy consumption intensity: 5% reduction from FY2019 levels (annual reduction of 1%, 96.9 L/t-production)
- CO_2 emissions*1 for FY2030: 30% or greater reduction from FY2014 levels (including Group companies in Japan)
- Fuel consumption intensity for road transport: 4% reduction from FY2020 levels (annual reduction of 1%, 33.7 L/1,000 t-km)
- Promote modal shifts
- Water use intensity: reduction to at least FY2020 levels (8.45 m^3/t-production)
- Maintain zero emissions*2: (Quantity of final off-site landfill) ≤ (Total amount of waste generated × 0.1%)
- Emissions of substances subject to the PRTR Law*3: 25% reduction from FY2015 levels (81 t/yr)*4

FY2022 Actual Figures

- Energy saved: 8,314 kL • Energy consumption intensity: Increased 9.2%
- CO_2 emissions: Decreased 14.0%*5
- Fuel consumption intensity for road transport: Increased 1.4%
- Modal shift promotion ongoing • Water use intensity: Increased 6.1% from FY2020 levels
- Zero emissions maintained
- Emissions of substances subject to the PRTR Law: Decreased 24.6%

Priority Initiatives

1. Promoted energy-saving activities and technical investigations to reduce emissions of waste/PRTR substances.
2. Promoted reduction in CO_2 emissions toward achieving carbon neutrality
3. Currently considering building a system that totals up product-specific CO_2 emissions
4. Ensured appropriate management of equipment that uses fluorocarbons and strove to control fluorocarbon emissions
5. Promoted certification of Environmental Contribution Products, including those manufactured by Group companies

Process Safety and Disaster Prevention

Objectives for FY2022–FY2024

- Zero Class A*6 or Class B*7 process safety accidents (aiming to completely avoid serious process safety accidents)

FY2022 Actual Figures

- Class A process safety accidents: 0 • Class B process safety accidents: 0

Priority Initiatives

1. Strove to strengthen the culture of prioritizing safety through monthly safety efforts, safety behavior checks, and more.
2. Implemented systematic risk assessment and other activities to prevent trouble.
3. Systematically implemented deterioration countermeasures, seismic countermeasures, and more.
4. Strove to continuously improve safety management systems.
5. Systematically implemented and enhanced training provided by outside entities and education/training/drills at plants and research centers.

Occupational Safety and Health

Objectives for FY2022–FY2024

- Zero injuries with loss of workdays*8 (including contractors)
- Zero injuries without loss of workdays*9 (including contractors)

FY2022 Actual Figures

- Injuries with loss of workdays: 2 • Injuries without loss of workdays: 5

Priority Initiatives

1. Promoted basic safety activities and implemented other activities to prevent troubles.
2. Implemented systematic safety measures through efforts such as persistently sharing cases of industrial injuries throughout the company.
3. Verified the status and strove for continuous improvement of various safety activities.
4. Systematically implemented workplace safety training and enhanced training/drills.
5. Supported contractors' safety activities through safety training, patrols, and more.

*1 The emissions reduction target is in fact for greenhouse gases (GHG), but most GHG is actually carbon dioxide (CO_2). Therefore, it is referred to as CO_2 here.
*2 Zero emissions: Reducing the quantity of waste subject to final disposal at off-site landfills to 0.1% or less of the total amount of waste generated
*3 PRTR Law: Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement
*4 Due to amendment of the PRTR Law, this objective is scheduled to be reviewed within the period of the 11th Medium-term RC Basic Plan.
*5 Including a carbon credit offset of 7.3% due to the purchase of carbon-neutral city gas
*6 Class A: Level 9 or higher according to the Nippon Shokubai method on the Japan Petrochemical Industry Association chart
*7 Class B: Level 3 to 8 according to the Nippon Shokubai method on the Japan Petrochemical Industry Association chart
*8 Injury with loss of workdays: Injury requiring at least one lost workday for medical treatment
*9 Injury without loss of workdays: Injury requiring no loss of workdays for medical treatment

Chemical Safety

Objectives for FY2022–FY2024

- Completely avoid (legal/social) problems with chemical products

FY2022 Actual Figures

- Cases involving problems with chemical products: 0

Priority Initiatives

1. Systematically conducted internal training and held explanatory meetings concerning laws and regulations for management of chemical substances both inside and outside of Japan.
2. Revised SDS on time in accordance with the requirements of relevant laws and regulations, including amendment to the PRTR Law.
3. Submitted notices and information before the prescribed deadlines based on legal obligations under domestic and foreign laws and regulations, and when requested by the authorities.

Quality

Objectives for FY2022–FY2024

- To achieve zero serious quality complaints
- To improve customer satisfaction by strictly complying with quality-related laws and promoting priority initiatives regarding quality

FY2022 Actual Figures

- Serious complaints about quality: 0
- Accomplished quality priority initiatives designed to improve customer satisfaction

Priority Initiatives

1. Continuously made improvements by effectively using the quality management system through audit, inspection, quality meetings, and the like.
2. Promoted activities to prevent quality complaints and issues, as planned.
3. Implemented quality education and quality awareness-raising activities to foster a quality-first mindset, as planned.

Communication with Society

Objectives for FY2022–FY2024

- Engage in dialogue with and disclose information to stakeholders

FY2022 Actual Figures

- Published the RC Report and published and revised the TCFD Report

Expanding RC initiatives to Group Companies (Common Items with Group Companies)

Objectives for FY2022–FY2024

1. Environmental protection:
   Reduce energy consumption intensity
   Set a CO_2*1 emissions reduction objective (Group companies outside Japan)
   Reduce the volume of waste sent to off-site landfills for disposal (Group companies in Japan)
   Reduce the total volume of waste (Group companies outside Japan)
   Reduce emissions of substances subject to the PRTR Law (Group companies in Japan)
2. Process safety and disaster prevention:
   Completely avoid disasters and accidents (equivalent to Class A and Class B process safety accidents on the Nippon Shokubai scale)
3. Occupational safety and health:
   Completely avoid injuries with loss of workdays
4. Chemical product safety:
   Completely avoid (legal or social) problems with chemical products
5. Quality:
   Completely avoid serious complaints about quality
6. Communication with society:
   Engage in dialogue with and properly disclose information to stakeholders

FY2022 Actual Figures

- Energy consumption intensity: Decreased at 7 out of 12 companies
- Volume of waste sent to off-site landfills for disposal: Decreased 31% YoY (Group companies in Japan)
- Volume of total waste: Increased 2.7% YoY (Group companies outside Japan)
- Emissions of substances subject to the PRTR Law: Decreased 12% YoY (Group companies in Japan)
- Disasters: 0 • Accidents: 0 • Injuries with loss of workdays: 4
- Cases involving problems with chemical products: 0 • Serious complaints about quality: 0
- Published environmental reports, and participated in local community events

Priority Initiatives

- Conducted RC discussions and audits of Group companies in an effort to improve the Group's overall quality of RC initiatives