

Safety & environmental responsibility



Safety and sustainability are essential aspects of our commitment to corporate responsibility. Our goal is to achieve world-class safety, health, and environmental (SH&E) performance across our operations to benefit our employees, communities and the environment.



Our commitment to safety

As a manufacturer of basic chemicals and materials, we deal with a broad range of hazardous and toxic substances in the course of our operations. Our ongoing mission is to create a culture that emphasizes safety and good work habits in all aspects and areas of the workplace and beyond to protect the lives and health of our employees and local communities.

Our safety management system plays a key role in this mission. The CEO sets the tone by sending all employees a safety-focused email the first week of each month. A one-minute animated safety video is shown on cafeteria TVs during mealtimes for plant employees. Our instant safety reward program encourages vigilance in the workplace with cash awards for reporting potential safety issues, awarding incentives to 76 employees in 2018. We also issue quarterly updates to our overseas travel pocket card with safety guidelines and more detailed local emergency contact information.

Our commitment to safety extends across our entire supply chain from raw materials to product delivery. We hold quarterly safety training programs and monthly meetings with suppliers and subcontractors to review performance and share feedback. We also require temporary workers to pass a safety training course before they are allowed to work on-site.

In 2018, we promoted safety across the organization through a number of targeted initiatives. We conducted regular hazard and operability (HAZOP) reviews at our plants to systematically identify potential hazards and failure points. We began implementation of a new chemical management system and launched a new safety leadership training program for managers. We also continued to promote employee health and safety on and off the job through smoking cessation programs.

In addition to the above activities, we recognized excellence in safety performance at the annual OCI SH&E

Excellence Awards. The grand prize was presented to Production Team 1 at our Gwangyang plant for its work to improve the safety of storage tanks and related facilities. The Chlor Alkali Department at our Gunsan plant was also recognized for its safety culture improvement program.

Reviewing our safety performance, a total of four significant safety incidents occurred at our Korean worksites in 2018, none of which resulted in fatalities. Two injuries occurred while performing maintenance tasks, one while conducting an inspection, and one when arriving at work. Overall, our lost time injury rate (LTIR) per million hours worked decreased from 1.40 during the year as we made real progress toward ensuring the safety of our employees and communities.

Our commitment to the environment

Our comprehensive approach to reducing the environmental impact of every manufacturing process at each plant site focuses on fundamentally reducing resource usage and pollution emissions at the source. Our focus on reducing per-unit consumption of energy, materials, and water encompasses process innovations and optimizations as well as increased utilization of by-products and recycling.

Energy consumption decreased 4.9% to 40,082 TJ (terajoules) in 2018 due to lower operating rates for our polysilicon operations related to an extended shutdown of a portion of our polysilicon operations following a gas leakage incident. Toxic chemical use increased

by 5% to 324,423 metric tons due to increased production of intermediate substances. Materials consumption decreased 1.5% to 1,410,904 metric tons due to lower polysilicon production as previously mentioned. Our overall waste recycling ratio rose from 39% to 59%.

Korea's Act on the Registration and Evaluation of Chemicals (K-REACH) came into effect on January 1, 2015. As of the end of 2018, we had completed registration for the 26 chemical substances that we import, manufacture, or sell that were included on the list of 510 priority existing chemical substances subject to registration.

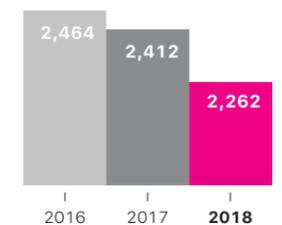
We are an active participant in efforts to reduce both direct and indirect greenhouse gas emissions. In 2018, the first year in the second phase of the Korea Emissions Trading Scheme (KETS), our overall GHG emissions decreased by 4.7% from 2017 due to reduced polysilicon production. Our per-unit GHG emissions cost also fell 9.5% over 2017 for the same reason. We believe our ongoing GHG reduction projects combined with efforts to optimize our manufacturing processes will enable us to gradually decrease CO₂ emissions going forward as we work to achieve our emissions targets and support national goals.

Conducting a routine safety inspection



CO₂ emissions

Total emissions (in ktCO₂-eq)



Lost time injury rate (LTIR)

