● Completed ◐ Partially completed ○ Under preparation

Managerial Issue	Achievements in 2019			Plans for 2020			
	Goals	Achievements	Completion	Goals	Plans	Deadline	Responsible Team
Reducing Environmental impact in the product design and raw material acquisition phases	Improving the chemical management process and establishing its system	Completed the G.CIS	●	Innovating the chemical management process	Stabilize the G.CIS at Korean worksites and lay the basis for its dissemination overseas	Dec.	Chemical Safety& Legal Regulation Project
	Updating LCA at Korean plants	Conducted LCA on two products at the Daejeon Plant	●	Conducting LCA	Conduct LCA on two products at the Hungary Plant	2021	CSR Team
	Identifying eco-friendly raw materials and developing their application technology	Mass-produced tires from renewable silica Independently identified sustainable materials and used these materials for research Expanded the application of compounds from recycled butyl rubber and green carbon - Recycled butyl rubber: All global plants - Green carbon: Plants in Daejeon, Geumsan, and Indonesia	●	Identifying eco-friendly raw materials and developing their application technology	Develop compound technology using renewable materials Identify new plant-based renewable materials Expand compounds made of recycled butyl rubber and green carbon Develop compounds from recycled rubber	Dec.	Advanced Material Technology Project Material Management Team
	Defining eco-friendly products and resetting goals	Redefined eco-friendly products Set mid/long-term goals on the ratio of eco-friendly products	●				
Reducing environmental impact in the manufacturing phase	Reducing the generation of waste and increasing its recycling	Maintained waste discharge intensity at 40kg/ton of finished product or under Increased the recycling of waste at the Daejeon/Geumsan Plants	◐	Reducing the generation of waste and increasing waste recycling	Increase the recycling of waste resources at the Daejeon/Geumsan Plants Tighten the management of waste treatment companies	Dec.	EHS Planning Team
	Minimizing the discharge of pollutants	Introduced high-efficiency denitrification equipment (continued) Improved the level of hazardous chemical management Expanded the installation of odor/dust reduction equipment at the mixing/calendaring process Improved on the sand filters installed at the wastewater treatment facility at the Daejeon Plant	●	Minimizing the discharge of pollutants	Introduce high-efficiency denitrification equipment (continued) Introduce digital technology to environmental pollution control equipment Improve on the odor/dust reduction equipment at the mixing and calendaring process	Dec.	Safety & Environment Team
	Developing energy-saving curing technology	Completed assessments on curing conditions to reduce TBR N_2 gas	●	Developing energy-saving curing technology	Evaluate the mass application of curing conditions that reduce TBR N_2 gas	Dec.	Cure Optimization Research Project
	Promoting shared growth with local communities	Operated the Donggrami consultation group at the Daejeon Plant	●	Promoting shared growth with local communities	Operate the Donggrami consultation group at the Daejeon Plant (continued)	Dec.	Safety & Environment Team
Reducing environmental impact in the product use/disposal phases	Optimizing tire weight	Developed compounds with improved wear performance for ultra-lightweight tires Developed optimal tire weight design technology Extended the application of lightweight design structures	●	Optimizing tire weight	Develop materials to optimize tire weight Develop design technology and expand its product application	Dec.	Optimizing WGT TFT RE Platform Development Project

1) G.CIS: Global Chemical Information System
2) LCA: Life Cycle Assessment