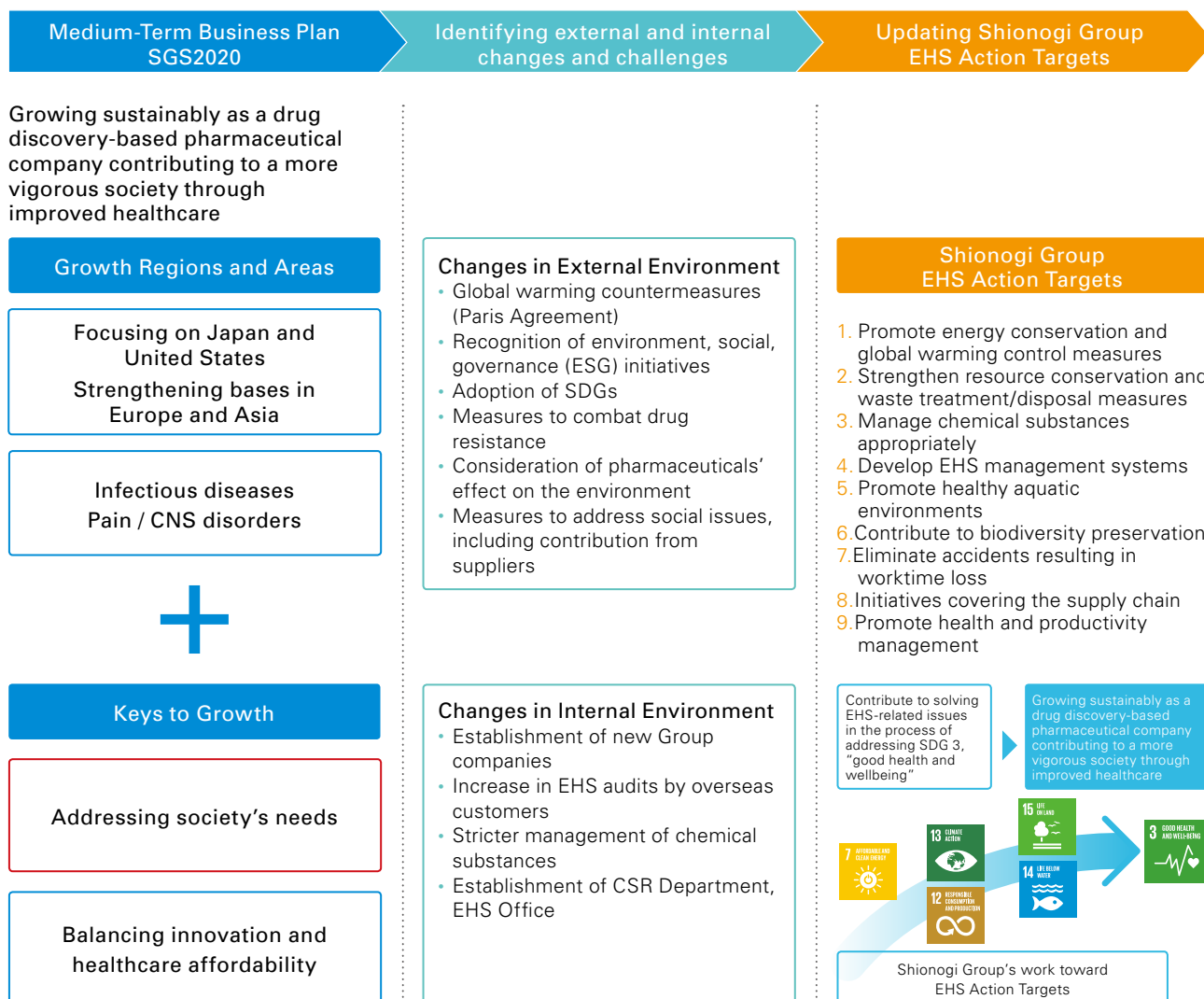


EHS Initiatives

Shionogi has established the Shionogi Group EHS Policy and built a companywide EHS management system. Our EHS initiatives encompass not only the Group but also extend to engage our suppliers. We are helping to create safe workplaces and enrich society by protecting the global environment, preventing pollution, and ensuring the health and safety of all those who work with us as well as the communities in which we operate.

In our goal of “Growing sustainably as a drug discovery-based pharmaceutical company contributing to a more vigorous society through improved healthcare” as outlined in the updated Medium-Term Business Plan SGS2020, we take this opportunity to update the Shionogi Group EHS Action Targets to identify external and internal changes and challenges and incorporate the targets and results from Phase 5 of the Shionogi Group Environmental Protection Plan.



02 Shionogi, Growing in Harmony with Society

EHS Activities

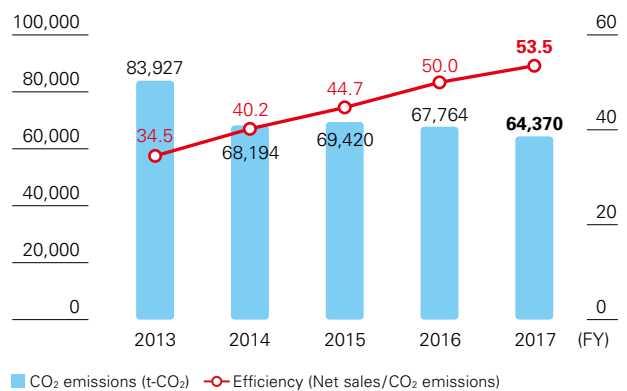
Climate Change Risks and Energy Conservation and Global Warming Control Measures

Rising average atmospheric temperatures are expected to increase the number of infectious disease outbreaks, modify the distribution of organisms transmitting infectious diseases, and adversely affect the aquatic environment, undermining social infrastructure and expanding the need for medicines for infectious diseases. This situation poses risks to pharmaceutical companies if they fail to fulfill their social responsibility to offer the drugs needed to treat such diseases*. On the other hand, it can also generate important business opportunities for pharmaceutical companies.

The Shionogi Group is actively working on CO₂ emission reduction to contribute to global warming alleviation, and to that end has adopted the goal of reducing CO₂ emissions in fiscal 2020 by 33% from the fiscal 2005 benchmark. In fiscal 2014, we switched to natural gas energy supply equipment at the Kanegasaki Plant and installed a cogeneration power system, greatly reducing our CO₂ emissions.

In addition, we have adopted hybrid cars for our fleet used by sales personnel, except in frigid regions. We are also working to prevent leaks from equipment that uses chlorofluorocarbons (CFCs), and are exploring conversion to non-CFC equipment.

CO₂ emissions



* For details of Shionogi's endeavors in fulfilling its social responsibilities in the infectious diseases area, please refer to pages 12–15.

Water Risk Assessment and Initiatives to Protect Aquatic Environments

There are concerns over the risk of water resource shortages and water pollution caused by climate change and associated problems including abnormal weather conditions and natural disasters. At key facilities involved in manufacturing and R&D, the Shionogi Group is using the WRI Aqueduct* to ascertain the water supply needed to ensure business viability now and in the future, and assess risk from emissions. Looking ahead, the Group will strive to further reduce water risk by practicing appropriate waste water management while also offering a stable supply of pharmaceuticals.

The Shionogi Group is working to protect water resources by using them more effectively and managing

wastewater quality. In addition to our efforts to conserve water, at water treatment facilities we set voluntary management figures that exceed mandated levels and constantly monitor wastewater for irregularities. At facilities that manufacture antibiotics, the antibiotics contained in waste water are deactivated prior to commencing central processing at our water treatment facilities. We have confirmed that, upon discharge, the levels remaining in the treated wastewater pose no threat to the natural environment. In addition, upon the introduction of each new product, we confirm that the level of pharmaceutical ingredients in treated wastewater is not sufficient to affect the natural environment.

* Water risk mapping tool, developed and released by World Resources Institute (WRI)

⇒ Click on this link for further detail on EHS activities and results
<http://www.shionogi.co.jp/en/company/csr/activities/environment.html>

Adoption of Biomass Bottles

We have adopted biomass bottles (plant-derived polyethylene bottles) as packaging containers for *Cymbalta* capsules as well as for *Irbetan* and *Pirespa* tablets. Biomass bottles are pharmaceutical packaging containers made of polyethylene derived from materials left over from sugarcane processing. By switching to biomass bottles from conventional bottles made from petroleum-derived polyethylene, we can reduce CO₂ emissions while also conserving fossil fuel resources. Since sugarcane-derived polyethylene accounts for over 90% of the raw materials of our biomass bottles, they are compliant with biomass

plastic identification labeling standards set by the Japan BioPlastics Association (the product container bears the label, as shown in the photo).



Strengthening CSR Management

Shionogi has joined the Pharmaceutical Supply Chain Initiative (PSCI), an NPO established to promote CSR procurement* in the pharmaceutical industry, with more than 20 corporate members among global pharmaceutical companies. The PSCI Principles, which articulate what the industry expects from the supply chain, are wide-ranging. They list not only environment, safety and health, but also workers' rights, ethics and related management systems. Shionogi agrees with these principles and abides by them. As well as Shionogi, we understand that action across the

entire value chain—including third parties working with us as important business partners—is needed to ensure fulfillment of our corporate social responsibility. We require agreement from all third parties working with us, and to ward against product risk and also improve supply chain risk management, we distribute self-assessment questionnaires to suppliers to check on adherence to the Principles, conducting on-site audits based particularly on replies concerning the environment and health and safety.

* Requiring third parties working with us to engage in corporate social responsibility (CSR) activities also

PSCI Principles (Extracted items only)

[Ethics]

1. Business integrity and fair competition
2. Identification of concerns
3. Animal welfare
4. Privacy

[Labor]

1. Freely chosen employment
2. Child labor and young workers
3. Non-discrimination
4. Fair treatment
5. Wages, benefits and working hours
6. Freedom of association

[Environment]

1. Environmental authorizations
2. Waste and emissions
3. Spills and releases

[Management systems]

1. Commitment and accountability
2. Legal and customer requirements
3. Risk management
4. Documentation
5. Training and competency
6. Continual improvement

[Health and Safety]

1. Worker protection
2. Process safety
3. Emergency preparedness and response
4. Communication of hazard information

PSCI

PHARMACEUTICAL SUPPLY CHAIN INITIATIVE