

Address Energy Issues toward a Non-Carbon Society

Target for 2030

Contribute to the creation and widespread use of renewable energies through highly functional materials.

To build the carbon neutral society envisioned under the Paris Agreement, the Fujifilm Group will develop and make available energy-related technologies that use highly functional materials from three aspects: energy creation, energy storage and energy conservation. We continue contributing to renewable energy creation and dissemination through accelerating the introduction and widespread use of renewable energies in society by our technologies.

Outline of Activities in FY2018

- Participated in an industry, government, and academia project hosted by the New Energy and Industrial Technology Development Organization (NEDO) to develop the all-solid-state lithium-ion batteries, the next-generation storage batteries for electric vehicles, as one of 23 companies, including automobile and battery manufacturers.

Future Activities and Targets

- We will continue participating in the NEDO activities and R&D collaborating with other companies.

Ensure Product and Chemical Safety

Target for 2030

Minimize adverse effects on human health and the environment through the manufacture and use of chemicals.

Because the Fujifilm Group manufactures a wide range of products including chemical products, highly functional materials, optical devices, office equipment, and medical equipment, we have established management rules for each manufacturing process of our products from two perspectives: management of the handling of chemical substances and management of information on chemical substances in our products. We have implemented global operations management across the Group and we have established a system to acquire accurate information on the laws and regulations in each country and region around the world to start a prompt preparation in an early stage. This has allowed us to maintain comprehensive and efficient management of chemical substances.

Outline of Activities in FY2018

- Completed the review of chemical substances used globally in products according to our voluntary management policy for specific chemical substances preceding regulation in each country. Created and enforced management plans for alternatives and reduction of chemical usage and emissions.
- An alternative test method for skin sensitization test, ADRA has been adopted in OECD test guidelines 442C*. For in vitro skin corrosion tests using 3-dimensional reconstructed human epidermis model, LabCyte EPI-MODEL 24 was also adopted into OECD test guidelines 431.
- Started full-scale operation of a chemical information communication system, chemSHERPA in China.
- Started development of a safety prediction method that takes account of animal welfare.
- Started education program for reagent users concerning chemical substance handling.



LabCyte EPI-MODEL 24

* OECD test guidelines: Guidelines specified by the Organization for Economic Co-operation and Development (OECD) to standardize testing methods to assess the characteristics and safety of chemical substances.

► **Related Data and Information:**

Management Performance Page 61 *Management of Chemical Substance*

Future Activities and Targets

- Further reduce usage and emissions of hazardous substances and replace them with safer alternatives based on the chemical substance management plan.
- Complete transfer to the new version of chemSHERPA within FY2019 and utilize IT tools such as RPA to make the legal compliance system more robust.
- Further expansion of chemical handling education program to reagent product users and improvement of internal education.
- Develop a highly accurate safety prediction method.
- Build a next-generation chemical substance management system.
- Utilize alternative methods to animal testing for internal safety evaluations.