

## Fiscal 2023 initiatives that contribute to solving the five social issues



### Innovation

#### Renewal of the Research Center to strengthen R&D functions

To accelerate the creation of innovation that contributes to solving social issues while utilizing and integrating the four core technologies —polymer, biomedical, environmental, and analysis and simulation technologies— that Toyobo has developed and to strengthen our R&D functions, we will undertake a major renewal of the Research Center, our hub for R&D in Otsu, Shiga Prefecture. As the first phase in the work, in January 2023 we completed the Pilot Plant Building that will engage in development and testing of prototypes aimed at the practical application of new products and technologies, centered on high-performance films.



### Innovation

#### Conclusion of comprehensive partnership agreement with Kobe University, and public implementation of joint research outcomes

On April 11, 2022, Kobe University and Toyobo signed an “Agreement on the Promotion of Comprehensive Industry-Academia Collaboration” with the aim of advancing research and technology and contributing to society. Following exchanges of human resource and joint research that includes the development of energy-saving seawater desalination technology using forward osmosis (FO) membranes, the parties have now agreed to further strengthen their partnership. From here on out, the parties will accelerate the public implementation of research outcomes by advancing joint research primarily in the environment field, such as membrane technology that contributes to carbon neutrality, and in the life science field, which leads to enhancement of quality of life (QOL), while also studying measures to contribute to more active human resources exchanges and to human resource development.

 [Conclusion of comprehensive partnership agreement with Kobe University](#)



### Employee well-being and human rights in the supply chain

#### First “Top 500 Company” certification under the 2023 Health & Productivity Management Outstanding Organizations Recognition Program

In March 2023, Toyobo received its first certification as a “Top 500 Company” (large enterprise category), a certification given to outstanding organizations in the 2023 Certified Health & Productivity Management Outstanding Organization Recognition Program conducted jointly by the Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi (Japan Health Council).



### A healthy lifestyle and health care

#### Strengthening of development and production structure for PCR test reagents and genetic diagnostics raw materials


We will invest approximately ¥6.5 billion in the Tsuruga Biochemicals Plant (Tsuruga, Fukui Prefecture) and establish a new facility to manufacture PCR test reagents used in genetic testing and raw materials for genetic diagnostic such as enzymes and antibodies. Construction is set to begin in March 2023, followed by operation in November 2024.



### Smart communities and comfortable spaces

#### BREATHAIR® adoption by Nishikyushu Shinkansen “Kamome”

On September 23, 2022, Toyobo's BREATHAIR® 3D network-structured fiber materials, which features light weight, high resilience, outstanding durability, and breathability, was adopted for use in all non-reserved seats of the Nishikyushu Shinkansen “Kamome” train newly operated by Kyushu Railway Company.

 [BREATHAIR® adopted by Nishikyushu Shinkansen “Kamome”](#)





### A decarbonized and circular society

#### New film production facility and start of mass production

Our Inuyama Plant (Inuyama, Aichi Prefecture) built a new facility to produce biaxially-oriented polypropylene (OPP) films for food packaging and industrial materials and began mass production of some brands in February 2023. In the facility, we have introduced state-of-the-art film-making machinery that reflects our many years of know-how in the film business, and are strengthening our supply structure for environmentally conscious film products. We will ramp up production of brands in turn at later dates.

#### Other examples of a decarbonized and circular society


-  [Acquisition of SBT initiative certification for greenhouse gas emission reduction targets](#)
-  [Issuance of sustainability-linked bonds](#)



### Clean water areas, air, and soil, and the preservation of biodiversity

#### Cooperation with the “Lake Biwa 100-Point Survey” Acceleration of initiatives to preserve biodiversity

The Research Center, Toyobo's R&D base in Shiga Prefecture, has been involved in activities to preserve biodiversity at Lake Biwa. Since fiscal 2023, it has accelerated its efforts through cooperation with the “Lake Biwa 100-Point Survey” conducted by the Center for Biodiversity Science of Ryukoku University. The Research Center will take part in the yearly sampling work conducted by voluntary organizations and local companies, while independently performing regular sampling of Lake Biwa water at the company premises and cooperating with the collection of data over time.

 [Acceleration of initiatives to preserve biodiversity at Lake Biwa](#)