

# Helping to Build a Sustainable Future

By continually advancing the technologies we have amassed in developing our catalyst, precious metal recovery, and other businesses, we aim to help create an even more sustainable, affluent world for future generations.

## 1 Building a hydrogen-society



Recently, hydrogen has seen resurging interest as a next-generation energy source that does not emit CO<sub>2</sub>. In order to promote a carbon-free hydrogen society, our company is working to develop the catalysts necessary for more efficient hydrogen production, storage, transport, and utilization.



## 2 Technological innovation



Semiconductors are essential for the advancement of the technologies being adopted for the digital transformation of society, including AI, IoT, and 5G. In order to achieve carbon neutrality, energy-saving and other sectors need semiconductors with higher performance and efficiency. We will continue to contribute to these technological innovations with the power of chemistry.



## 3 Next generation mobility



A major transformation is underway in the mobility sector as part of the effort to achieve carbon neutrality by 2050. N.E. CHEMCAT is working to develop advanced technologies to meet society's changing mobility needs, including vehicle electrification and the use of green fuels.



## 4 Supporting healthcare



Our catalysts are also used in the production of pharmaceuticals and fine chemicals. The development of high-performance catalysts enables chemical synthesis with less impact on the environment. By promoting the development of sterilization and antibacterial applications, we are helping people to lead healthier lives worldwide.



## 5 Resource recycling



Precious metals are scarce and important resources. This is why N.E. CHEMCAT is helping to recycle these minerals by utilizing advanced technologies to recover them from spent catalysts. We are also promoting more effective resource use and waste reduction by developing catalyst technology for the chemical recycling of plastics.



## 6 Utilization of captured CO<sub>2</sub>



Technology for capturing and recycling CO<sub>2</sub> is attracting attention as a contribution to the fight against climate change. We are improving the performance of catalysts used in the production of green fuels synthesized from CO<sub>2</sub> and hydrogen, which will further improve the efficiency of each process stage, from CO<sub>2</sub> capture to green fuel production.



## 7 Cleaner air and water



Catalysts are indispensable for decomposing and detoxifying harmful substances found in automobile and factory emissions and in industrial wastewater. In order to contribute to a more livable planet, we are advancing our purification technology to ensure cleaner air and water.



## 8 Sustainable food supply



We are using the power of chemistry to help solve food shortages, which are becoming more serious due to global climate change and population growth. In order to enhance the diets of people worldwide, we support the production of agricultural chemicals and fertilizers with catalyst technology, while also promoting the development of high-performance catalysts that enable long-term food storage and reduce food loss.

