# **Business Report** LPG and Other Energies

### **Business Overview**

The LPG and LPG equipment sales businesses are being expanded. In addition, we are conducting LNG sales, fuel supply business, and sales of coke and petroleum products.

Sales in LPG and other energy businesses increased 15.6% year-on-year to 110.5 billion yen, and operating income increased 17.6% to 2.3 billion yen. The number of LPG customers increased by 1,000 to total 604,000 with a sales volume of 475,000 tonnes at the end of FY2022.

	2020	2021	2022
Net Sales (billion yen)	73.8	95.5	110.5
Operating Income (billion yen)	1.9	2.0	2.3
LPG Sales Volume (thousand tonnes)	462	486	475

## Strengthening of the LPG Business

#### Increasing demand across our retail service territories and in wholesale

In addition to proactively developing demand throughout our core service territories of the three Tokai prefectures and Kurashiki City in Okayama Prefecture, we are working to develop residential, commercial, and industrial demand in the Hokuriku, Shizuoka, and Nagano areas. We are also working to expand our share of wholesale sales through contracted delivery and systemization support.

#### Stable Energy Procurement at a Reasonable Price

We are making every effort to achieve low-cost, stable LPG procurement by taking advantage of economies of scale and our own strengths as operators of one of the largest secondary terminals in Japan (storage capacity of over 5,000 tonnes).

#### Enhancing Filling and Delivery Foundations

We are promoting improved efficiency of filling and delivery by reviewing the locations of our base facilities and other aspects of our operations. Moving forward, we are looking to improve



efficiency even further by using remote meter reading technology and AI-based delivery route optimization in combination with our filling and delivery system.

## **TOPIC**

#### Using LPWA wireless communications and AI

Toho Liquefied Gas Co., Ltd. is in the process of installing low-power, wide-area (LPWA) wireless communications terminals at its LPG supply facilities. The use of LPWA technology will enable remote meter reading of our customers' gas consumption. Also, in collaboration with Optimind Inc., a Nagoya University launched AI venture in logistics, we have developed a system that uses AI to automatically identify and

display on a driver's smartphone optimal delivery routes. The implementation of these technologies in our delivery system will contribute both to reducing the burden on our delivery staff and ensuring a stable supply of gas.



Displaying an optimal delivery route on the driver's smartphone

## **Expanding our LNG business**

LNG is delivered from the Chita Midorihama and Yokkaichi plants to satellite facilities on the customer's premises by LNG tanker trucks. The LNG is stored and then vaporized at the satellite facilities to supply clean, low-carbon natural gas.



Typical workflow from a shipping locale to a facility using gas