

…A happy New Year!

I would like to extend our warmest New Year greetings of 2023.

First, to summarize last year, as COVID-19 continues for the third year, business activities based on the New Normal have taken root in each company. Maintaining a balance between preventing the spread of the disease and economic & social activities are expected to lead to a recovery centered on consumption and investment. However, there are concerns about an economic slowdown caused by a further rise in raw material prices due to the prolonged situation in Ukraine, supply constraints, and a sharp depreciation of the yen due to rapidly rising interest rates in Europe and the United States.

Now, since the declaration of “Carbon Neutrality in 2050” by former Prime Minister Yoshihide Suga in October 2020, the debate for decarbonization has been growing rapidly in Japan. In the last year, we, LEMA has published “LEMA Carbon Neutral Scenario”, and in April of last year, we explained to the relevant ministries and published on the website. In this Scenario, while electrification will progress on some applications, there are also cases that internal combustion engines are essential such as in areas where there is no electricity, and thus further efforts must be made for better fuel efficiency and lower exhaust emissions on internal combustion engines as well as dealing with carbon-neutral fuels.

There are many options for this carbon-neutral fuel, including biofuels and, so-called, “e-fuels” synthesized from hydrogen and CO₂, but there are still many challenges in terms of supply and cost. On the other hand, there are increasing expectations on the carbon-neutral fuels since the current engine and fuel supply infrastructure can be used as it is. So, in February last year, we invited Euglena Co., Ltd. to give us a lecture on the new biodiesel fuel. In addition, as a survey of trends in carbon-neutral fuels, we exchanged views with The Japan Gas Association and The Conference of LP Gas Associated Organizations to find out what direction each energy industry is heading.

We plan to continue to collect such information and hold discussions with our members to brush up the carbon-neutral scenario.

Next, I will introduce the production results of land-use engines handled by our association last year. Our association publishes monthly production figures on its website, and the year before last, total production for the period from January to

December 2021 in Japan and overseas totaled 14.7 million units (124% of the previous year), a remarkable recovery amid the pandemic. On the other hand, total production from January to September 2022 was 10,333,000 units (93% of the same month last year). This included 8,656,000 units in gasoline engine (92% of the previous year), 1,598,000 units in diesel engine (98% of the previous year), and 79,000 units in Gas engine (123% of the previous year). If production continues at this rate, total production from January to December 2022 is expected to be 13,777,000 units (94% of the previous year).

Although the economy has recovered from the downturn caused by the COVID-19, the situation in Ukraine and supply chain issues such as the lack of semiconductors and other components are expected to affect production growth.

Now, with regard to carbon neutrality, as I mentioned earlier, I believe that many internal combustion engines will still be active in 2050. Therefore, we believe that fuel which can achieve carbon neutrality, and further efficiency increase of internal combustion engines themselves will continue to be a major theme. We look forward to your continued support as we share and disseminate information with our members, related organizations, universities, and research institutes toward carbon neutrality of internal combustion engines.

Last but not least, I would like to express my sincerity from the bottom of my heart that this year will be a good year for all of you, and wish you all the best for your continued growth and happiness.