Sales are expected to increase due to tightening emission regulations and the positive effect of the weak yen. Operating income decreased due to a decline in demand caused by the China lockdown and that soaring raw material and energy prices.

In addition to the reversal of estimated tax of 4.1 billion yen recorded in the first half of FY2022, operating income increased by 13.7 billion yen year on year, which resulted in a year-on-year increase of 57% to 133 yen/US$ and 139 yen/Euro in the first half of FY2022.)

Refund of income taxes
In response to the completion of the tax audits on transfer pricing taxation, the estimated tax amount of 4.1 billion yen that had been recorded since FY2015 was reversed.

The points for the consolidated financial results for the first half of FY 2022
— An increase in sales and a decrease in operating income
(1) Summary of business results by segment

- **[EN Business]**
  - Sales increased; operating income decreased
  - **Automotive related**
    - While sales increased due to the weak yen, operating income decreased due to a decline in demand caused by China lockdown and that soaring raw material and energy prices.

- **[DS Business]**
  - Increases in sales and operating income
  - **SPE related**
    - Higher sales and income due to robust capital investments in semiconductor foundries.
  - **Electronic components**
    - Sales increased due to higher demand mainly for crystal packages.

- **[E&I Business]**
  - Higher sales and income due to robust capital investments in semiconductor foundries.
  - **Insulators**
    - The shipments were sluggish as no large deal. Deficit continued due to soaring material prices.
  - **Energy Storage**
    - Despite sales increased due to the positive effect of the weak yen, operating income decreased due to soaring raw material and energy prices.

(2) Exchange Rate Effects
Sales increased 19.1 billion yen and operating income increased 7.2 billion yen on year (110 yen/US$ and 131 yen/Euro in the first half of FY2021, 133 yen/US$ and 139 yen/Euro in the first half of FY2022.)

(3) Refund of income taxes
In response to the completion of the tax audits on transfer pricing taxation, the estimated tax amount of 4.1 billion yen that had been recorded since FY2015 was reversed.

The points for the full-year forecasts for consolidated financial statements
— An increase in sales and a decrease in operating income
(1) Summary of forecasts by segment

- **[EN Business]**
  - Sales increase; operating income decreases
  - **Automotive related**
    - Sales are expected to increase due to tightening emission regulations and the positive effect of the weak yen despite a decline in sales of trucks in China.
  - Operating income decreases due to higher labor costs and soaring raw material and energy prices as a result of inflation.

- **[DS Business]**
  - Increases in sales and operating income
  - **SPE related**
    - The latest demand are assumed to be weak due to that a downward tendency in semiconductor capital investments and that new China export regulations.
  - **Electronic components**
    - Sales of crystal packages and ceramic packages for base stations will increase; sales of piezoelectric elements for HDDs are expected to decrease due to the sharp decline in data centers investment caused by economic slowdown.

- **[E&I Business]**
  - Sales increases; operating loss continues
  - **Insulators**
    - Sales are expected to increase due to the positive effect of the weak yen and improving sales prices.
    - Income is to be the same level as the previous year due to soaring raw material and energy prices.
  - **Energy Storage**
    - Deficit will continue as it takes time to realize and expand the business model that utilizes NASB® batteries.

- **[Industrial Processes]**
  - Sales are expected to increase as demands for industrial heating systems for electronic components and Lithium-ion battery cathode materials expand.

(2) Exchange Rate Effects
Sales to increase 39.3 billion yen and operating income to increase 16.6 billion yen on year (115 yen/US$ and 131 yen/Euro in FY2021, 137 yen/US$ and 137 yen/Euro in FY2022.)

- **Year-on-year**
  - Sales to increase 39.3 billion yen and operating income to increase 16.6 billion yen on year (115 yen/US$ and 131 yen/Euro in FY2021, 137 yen/US$ and 137 yen/Euro in FY2022.)

- **Effects of yen change in exchange rates in 2nd half**
  - Sales: Increase 14.0 billion yen and operating income 4.3 billion yen
  - US$: Sales 0.7 billion yen and operating income 0.3 billion yen
  - Euro: Sales 3.9 billion yen and operating income 1.0 billion yen

In addition to the reversal of estimated tax of 4.1 billion yen recorded in the first half of FY2022, as a result of the revision of the correction in October, 2022 the amount of approximately 7.7 billion yen is to be refunded, and the amount will be recorded as a positive factor for net income.

(4) Dividend Forecast
An interim dividend of 33 yen (resolved), a year-end dividend of 33 yen (planned), total dividend will be 66 yen.

(5) Sustainable Finance
Eighth Series of NGK INSULATORS, LTD. Unsecured Straight Bonds are scheduled to be issued. Issuance amount: 5 billion yen Issuance date: November 2020, onwards Maturity: 5 years

(6) Acquisition of own shares
Up to 5.5 million shares or Up to 10 billion yen Acquisition method: Market purchases Acquisition period: From October 31, 2022 to February 28, 2023 Schedule date of cancellation: March 31, 2023 (planned)