Management's Discussion and Analysis

1. Results of Operations

1) Net Sales & Operating Income

In fiscal 2017, MGC Group posted consolidated net sales of ¥635,909 million, a year-on-year increase of 14.3%, and consolidated operating income of ¥62,741 million, a year-on-year increase of 43.4%.

There was a significant increase in revenue and earnings at the Group operating income level, with an increase in sales volume of engineering plastics, chemicals for semiconductors, m-xylene and specialty aromatic chemicals, in addition to that there was also a large improvement in market conditions for methanol, purified isophthalic acid, polycarbonate, methanol derivatives, alongside a weaker yen.

2) Non-operating Revenue

The Group posted non-operating revenue of ¥27,288 million, a year-on-year decrease of 4.1%. This was primarily due to the decrease in equity in earnings of overseas methanol-producing companies.

Non-operating expenses were ¥16,608 million, a year-on-year increase of 49.2%. This was primarily due to the increase in loss on valuation of investment securities.

As a result, net income attributable to owners of the parent was ¥60,531 million, a year-on-year increase of 26.1%.

3) Dividend

The year-end dividend payout for FY2017 was ¥35 per share. Since the interim dividend payout was ¥24, the annual dividend for FY2017 is ¥59 per share.

2. Segment Information

1) Natural Gas Chemicals

Net sales in the natural gas chemicals segment were ¥167,035 million, a year-on-year increase of 16.9%, and segment income was ¥14,928 million, a year-on-year increase of 4.0%.

The methanol business recorded higher revenue due to a rise in market conditions.

For methanol and ammonia-based chemicals, despite a rise in the price of raw materials, improved market conditions for neopentyl glycol and MMA-related products led to higher revenue and earnings.

Crude oil and other energy sources improved slightly due to higher crude oil prices.

2) Aromatics Chemicals

Net sales in the aromatics chemicals segment were ¥212,050 million, a year-on-year increase of 10.5%, and segment income was ¥25,106 million, a year-on-year increase of 43.2%.

Specialty aromatic chemical products recorded higher revenue and earnings primarily owing to an increase in the sales volume of m-xylenediamine and aromatic aldehydes and a weaker yen.

Commodity aromatic chemical products posted significantly higher revenue and earnings due to the increase in sales volume associated with the restarting of operations of the one series m-xylene production facility that had been suspended, in addition to the significant improvement in market conditions of purified isophthalic acid, which is in increasing demand for PET bottles, especially in emerging countries.

The foamed plastics business achieved higher sales due to product price revision, accompanied by an increase in sales volume and a rise in the price of raw materials, but profit suffered a slight drop due primarily to the rise in raw fuel prices.

3) Specialty Chemicals

Net sales in the specialty chemicals segment were ¥203,561 million, a year-on-year increase of 19.1%, and segment income was ¥38,633 million, a year-on-year increase of 44.1%.

Inorganic chemicals recorded higher revenue and earnings due to higher sales volume of chemicals for semiconductors in line with a market expansion for semiconductors.

The engineering plastics business posted significantly higher revenue and earnings. Major positive factors include substantially improved performance in the polycarbonate market amid continued strong demand primarily in China, in addition to higher sales volume in special polycarbonates and polycarbonate sheets and films.

4) Information & Advanced Materials

Net sales in the information & advanced materials segment were ¥52,735 million, a year-on-year increase of 5.1%, and segment income was ¥6,349 million, a year-on-year increase of 3.6%.

Electronics materials posted higher revenue and earnings due to reasons including strong sales volume of BT materials for semiconductor packages, primarily for memory applications.

Oxygen absorbers such as Ageless posted higher sales volume centered on exports, and lower earnings compared with the previous year due to fixed costs rose from production commencement at a new plant.

5) Other

Net sales in the other business segment were ¥526 million, a year-on-year decrease of 4.9%, and segment income was ¥261 million, a year-on-year decrease of 20.4%.

3. Financial Position

As of March 31, 2018, total consolidated assets were ¥792.4 billion, ¥54.3 billion higher than at the end of the previous fiscal year.

Current assets increased by ¥64.3 billion to ¥391.0 billion. The main causes were increases in cash and deposits and trade notes and accounts receivable.

Noncurrent assets decreased by ¥10.0 billion to ¥401.4

billion primarily due to an decrease in investment securities.

Total liabilities increased by ¥8.5 billion to ¥273.3 billion. Current liabilities increased by ¥18.6 billion primarily due to increases in trade notes and accounts payable. Noncurrent liabilities fell by ¥10.1 billion primarily as a result of reductions in long-term loans payable.

Net assets increased by ¥45.7 billion to ¥519.1 billion. This was attributable primarily to an increase in retained earnings resulting from the reporting of net income attributable to owners of the parent company.

As a result, as of March 31, 2018, the shareholders' equity ratio was 59.0%, compared to 57.5% on March 31, 2017. Net assets per share at the end of the fiscal year were ¥2,187.99, compared to ¥1,967.94 at the end of the previous fiscal year.

4. Cash Flow

As of March 31, 2018, total cash and cash equivalents were ¥90.3 billion, ¥23.1 billion higher than at the end of the previous fiscal year.

1) Operating Activity Cash Flow

Net cash provided by operating activities increased by ¥8.0 billion from the previous year to ¥90.7 billion. This was primarily due to increases in income before income taxes and dividends received from affiliates accounted for by the equity method.

2) Investing Activity Cash Flow

Net cash outflow from investing activities was ¥33.6 billion, an increase of ¥2.4 billion from the previous year. This was primarily due to higher expenditures for the purchase of noncurrent assets.

3) Financing Activity Cash Flow

Net cash outflow from financing activity was ¥33.0 billion, a decrease of ¥27.1 billion from the previous year. This was primarily due to lower expenditures for repayment of long-term debt and redemption of corporate bonds.

5. Capital Expenditure

MGC Group (including MGC and consolidated subsidiaries) capital expenditures for the consolidated fiscal year were ¥30,959 million.

By segment, capital expenditure of ¥6,076 million, ¥11,301 million, ¥11,004 million, ¥1,937 million, and ¥640 million were made in natural gas chemicals, aromatic chemicals, specialty chemicals, information and advanced materials, and other business segments and company-wide assets, respectively.

6. Research and Development

In fiscal 2017, the final year of the MGC Advance 2017 medium-term management plan, we continued working to achieve the Group vision of "creating values to share with society" conducting active research and development aimed at the fundamental objectives of strengthening the earning power of existing businesses, with a focus on core businesses, and creating and developing new businesses.

Together, the four companies' research and development divisions; the Advanced Business Development Division, which serves as the corporate research and development arm; and the Research & Development Division, the corporate support division, created a structure for leveraging synergies, advancing the effort to strengthen the earning power of existing businesses and create new businesses.

The Advanced Business Development Division is accelerating efforts to create business in new fields by engaging in research and development activities through outside partnerships, including participation in investment partnerships, collaboration with venture firms, and joint studies with public-sector research institutions. It also continues to promote commercialization of its own research and development themes, and has announced its entry into the short-range optical routing and factory-grown vegetable businesses.

There are a total of 884 MGC Group research and development personnel, including those in affiliate research and development divisions, making up around 11% of the total workforce. Expenditures on research totaled ¥18,987 million.

Research and development costs by segment were as follows:

Natural Gas Chemicals Company:	¥3,618 million
Aromatic Chemicals Company:	¥5,302 million
Specialty Chemicals Company:	¥4,632 million
Information and Advanced Materials Company:	¥5,434 million

7. Risk Factors

The following are the main foreseeable risks that have the potential to affect MGC Group's operating results, stock price and financial condition. Please note that the following does not represent an exhaustive list of risks. All forward-looking statements in the text are based on the judgment of MGC Group as of the date of submission of financial statements (June 26, 2018).

1) Economic Conditions

The business revenues of MGC Group are affected by economic conditions in the countries and regions where the Group's products are sold. In particular, market-sensitive commodities such as methanol, methanol derivatives, general-purpose aromatic chemicals, and polycarbonate resin are generally prone to declines in sales volume and selling prices during times of economic downturn, which adversely affects MGC Group's operating results and financial condition. In addition, rapid increases in raw material prices could also have an adverse effect on MGC Group's operating results and financial condition.

2) Overseas Business

MGC Group has established subsidiaries and affiliates and conducts manufacturing and sales in Asia, North America, South America, the Middle East and other regions. MGC Group makes large investments in plant and equipment at overseas subsidiaries and affiliates. The Group takes various measures to mitigate risks, but the situation in each country, such as political instability including war, terrorist attacks, and riots, or social or economic turmoil, can cause difficulties for local manufacturing activities, remittance of dividends, and recovery of investment.

Other risks that could have an adverse effect on MGC Group's operating results and financial condition include problems due to differences in legal systems, the possibility of restrictions on investments or nationalization or expropriation of assets by foreign governments, and personnel or labor issues.

3) Business Characteristics

MGC Group manufactures and sells a variety of products ranging from chemical and material products to functional products including those in the information communication and medical- and food-related fields, and conducts its business in a competitive environment. The Group competes mainly on the basis of price in commodity products, and on the basis of categories including price, market trends, quality, function, delivery time and customer service in specialty products and high-value-added products. A rise in the level of competition in these areas could lead to lower selling prices or a decrease in sales volume.

In addition, because of their characteristics, the businesses of MGC Group have risks such as those described below.

For example, MGC Group purchases raw materials including mixed xylene and electric power from outside suppliers. The Group takes measures such as purchasing from various suppliers to reduce the risk that procurement will become impossible. However, the inability of a major supplier to deliver necessary raw materials or other items could be detrimental to the Group's production activities.

Many of MGC Group's manufacturing bases have multiple production facilities that share electricity, water supply, steam, and other utilities. Consequently, if a shared utility at any base shuts down due to an accident or other trouble, the production activities of the entire base could be suspended.

The products manufactured and sold by MGC Group include some products that are sold only to specific customers. MGC Group reduces risks with measures such as entering into long-term supply contracts with these customers; however, sales could decline if customers discontinue using these products.

Electronic material products, for which the electronics industry is the primary customer segment, typically have a short product life and are constantly exposed to competition in technological innovation. Therefore, sales could decline if existing products become obsolete or if new product development is delayed.

For products other than commodity and basic chemicals, including engineering plastics and electronic materials, selling prices could drop and sales volume could decline due to the emergence of alternative products offering the same functions.

MGC Group takes all possible measures to mitigate these risks, but they could have an adverse effect on the Group's operating results and financial condition.

4) Product Defects

As stated earlier, MGC Group is engaged in a wide range of businesses and nearly all of its manufacturing bases conduct production activities in accordance with globally recognized quality management standards and ship products that conform to specifications agreed upon with customers. However, the possibility exists that defective products could be manufactured or shipped. In the event that a product with a quality defect is shipped, MGC Group may have to compensate the customer who used the defective product, users of final products, or others not only for direct damages but also for opportunity loss. In addition, MGC may lose social credibility.

To deal with this type of risk, MGC Group has obtained product liability insurance and other liability insurance.

However, the full amount of the damages for which MGC Group is ultimately liable may not be covered by this insurance, and therefore MGC Group's operating results and financial condition could be adversely affected.

5) Exchange Rate Fluctuations

The Group's business results and financial situation have been affected by exchange rate fluctuations. With regards to the impact of exchange rate fluctuations on transactions in foreign currencies such as imports and exports, MGC Group has, to a degree, hedged risk through forward exchange transactions. However, it is impossible to completely hedge the risk of exchange rate changes. Depending on the trend of exchange rates, there is the possibility of a negative impact on the Group's business results and financial situation such as decreased sales or increased losses.

Financial balance data that is valued in local currencies for MGC Group overseas subsidiaries are translated into yen when creating the Group's consolidated balance sheet. Depending on the exchange rate at the time, MGC Group's business results and financial situation could be adversely affected.

6) Interest Rate Fluctuations

When procuring essential funds, MGC Group considers their terms, financial situation, and financial environment, and determines factors such as the amounts to procure and the period and method of procurement. The Group combines fixed and variable interest rates when procuring funds in order to hedge against future interest rate changes. However, if interest rates rise, the amount of interest payments also rises, which may adversely affect MGC

Group's operating results and financial condition.

7) Marketable Security Market Price Fluctuations

MGC Group's assets include market priced marketable securities. If the market prices of the Group's marketable securities were to fall sharply, appraisal losses might occur, adversely affecting the Group's operating results and financial condition.

8) Legal Restrictions

MGC Group handles hazardous chemical substances including poisonous and deleterious substances, hazardous materials and high-pressure gas as part of its business, and is subject to various legal restrictions, both in Japan and overseas, at each stage, including manufacturing, storage, distribution and sale. In addition, with rising environmental awareness worldwide, regulations on chemical substances are becoming increasingly stringent, which could disrupt MGC Group's business activities.

Accordingly, the Group's operating results and financial condition could be adversely affected by penalties, social sanctions, remediation costs and other consequences of the failure of MGC Group to comply with legal regulations related to its business activities as well as restrictions on business that may result in the event of changes in laws and regulations or their interpretation or operation, or the tightening of regulations, and increase in costs to address these changes.

9) Natural Disasters

MGC Group has manufacturing bases not only in Japan but also in the rest of Asia, North America, South America, the Middle East and other regions. The production activities at these bases could be suspended or otherwise disrupted if equipment is damaged or trouble occurs due to the effects of natural disasters such as earthquakes, windstorms and floods. In some cases, material loss or opportunity loss caused by natural disasters may be excluded from the coverage of casualty insurance, and thus could have an adverse effect on MGC Group's operating results and financial condition.

10) Accidents and Disasters

MGC Group routinely handles hazardous chemical substances including poisonous and deleterious substances, hazardous materials and high-pressure gas as part of its business. Although MGC Group makes efforts to ensure maintenance and stable operation of production facilities while doing its best to construct a security and disaster prevention system, explosions, fires, toxic gas leaks or other accidents may occur as a result of equipment malfunction or human error. Such events could not only damage production facilities and harm employees, but also, depending on the circumstances, damage the area surrounding the production facility, harm customers, or cause environmental pollution and other damage. MGC Group takes out fire insurance, profit insurance, oil pollution insurance, liability insurance and other insurance against these risks. However, MGC Group's operating results and financial condition could be adversely affected if this insurance does not cover the full amount of the damages for which MGC Group is ultimately liable.

11) Research and Development

MGC Group conducts basic and applied research to develop new products and processes and improve existing products and processes. Research and development is complex and long-term, and results are uncertain. If MGC Group does not continue to develop new products that are accepted in the market, or if the markets for products newly developed by MGC Group do not grow as much as anticipated, the Group's future operating results and financial condition could be adversely affected.

12) Joint Ventures

MGC Group owns a number of production joint ventures not only in Japan but also overseas including Saudi Arabia, Venezuela, Thailand, China, and South Korea, and procures and sells a variety of other products. Although the Group strives to maintain its profit through joint venture agreements and other business-related agreements, there is no guarantee that the joint venture partners will make decisions that are best for MGC Group or the joint ventures as the Group does not control its joint venture partners. Moreover, these agreements might also not be renewed. Such circumstances could have an adverse effect on MGC Group's operating results and financial condition.

13) Intellectual Property

MGC Group files and obtains patents in Japan and overseas to protect the research findings used in its businesses and licenses. The Group also imposes confidentiality obligations on the parties of numerous patent licensing agreements and technology agreements in an effort to protect intellectual property while striving not to infringe on the rights of others. However, there is a possibility that MGC Group may fail to protect its own right or get involved in a dispute with a third party. Such circumstances could adversely affect the Group's operating results and financial condition.

14) Lawsuits

MGC Group faces the risk of lawsuits and other legal risks in its domestic and overseas businesses. If a major lawsuit were to be filed against the Group in the future and if the verdict were unfavorable, it could have an adverse effect on the Group's operating results and financial condition.