

Summary of the Medium-term Management Plan Briefing Session

Briefing Session Outline

Thursday, March 3, 2022, 10:00 a.m. - 11:00 a.m. / Japan Standard Time

Zoom Webinar

For institutional investors and analysts

(Slide 1)

I will explain the Medium-term Management Plan (2022-2024), which covers the first phase of MEC 2030 Vision.

(Slide 2)

Today's agenda is as shown on the slide. First, I will explain the concepts for formulation of the Medium-term Management Plan ("Mid-term Plan") and the positioning of the Mid-term Plan. Second, I will talk about the desired state that we seek to achieve by 2030, i.e., our 2030 vision. Third, I will explain the Mid-term Plan (2022-24), or Phase 1 of the Vision, and fourth, I will explain our capital policy.

(Slide 4: Philosophy System)

Our corporate motto is "Enjoy your work." I think this is most important. Our company has continued to contribute to society by developing original technologies through vigorous research and development activities. Creating technologies through research and development is the source of our competitiveness. We have continued our business operations while earning the trust of stakeholders by repeating the process of generating profits and redistributing/reinvesting them over a long period of time. The foundation for all of this is the idea of "enjoy your work." This corporate motto was established shortly after the company was founded in 1969. If employees enjoy their work and can fully demonstrate their abilities, then it will directly lead to customer satisfaction. And, this eventually enables us to continue to return profits and reinvest them in our business. So enjoying work is extremely important. As shown on the slide, below the corporate motto is the Management Philosophy, 2030 Vision and then Mid-term Plan.

(Slide 5: Positioning of the Medium-term Management Plan)

Our new Mid-term Plan, which covers the period 2022 to 2024, is Phase 1 of the 2030 Vision.

(Slide 7: Corporate Image to be Achieved)

MEC has been operating globally for many years. Considering the time when globalization was

thriving, nowadays the pursuit of globalization is not as easy as it used to be. Semiconductors and electronic components are needed all over the world, and the supply chain is spread across the globe. So even in this difficult and complex situation, I believe we must strategically promote globalization to become a true global company. I think we are at the stage where we should actively take on new challenges to achieve that goal. So we put this first.

Second—and this is also very important—we aspire to remain an R&D-oriented company. As I mentioned at the beginning, it is extremely important to continue to develop technologies. We must differentiate ourselves through our unique technologies. Developing new technologies—in the sense that those technologies create value that is different from that of other companies—is part of our DNA, and it is essential for us to remain an R&D-oriented company. I believe if we do not develop technologies, we have no existing value.

Strengthen our competitiveness and make reinvestments; broaden the opportunities for employees to thrive and play an active role; and contribute to society through our customers. To achieve all these, we must remain an R&D-oriented company. We should produce new technological seeds from existing core technologies or other technologies, through research and development.

Third, we aspire to have another face as an AI company. MEC has produced value by performing chemical or physical treatment on “surfaces” (where a substance is in contact with another substance). Our key products are chemicals mainly for electronic substrates, so our major business field is the interface between copper and resin. As a company that has delved deeply into this field, we have accumulated some very unique data. These data include images of unique surface topography. By using image identification technology and undergoing some kind of learning process, it is possible to make various predictions based on these data. Acquiring such a prediction capability will not only help us generate significant R&D results, but also improve the quality of production management and achieve improved efficiency. However, without being confined to these internal achievements, the unique prediction technology itself can be a business opportunity. For this reason, in our vision we have included the goal of having another face as an AI company.

(Slide 8: Our Business Model to Be a Company That Grows Continuously)

As an R&D-oriented company, MEC will continue to contribute to society by providing valuable products to our customers. We will strive to contribute to society through technologies supporting 5G, high-speed Internet, cloud computing, and autonomous driving.

(Slide 9: Guides for the Period to 2030)

Change the concept of “Making”

If we are doing something that does not suit the times, then we should make changes without hesitation. Regarding production, we are going back to basics and striving to increase productivity.

Regarding development, until now we have focused on the development of technologies and products for electronic substrates. But in the future, without confining our attention only to that area, we will promote development in a way that we can leverage our core technologies. Also, for operations other than development and production, we intend to review our work processes and ways of doing things in light of the most current common practice, and change what should be changed.

Change the concept of "Selling" and "Gaining"

If we make things, then we sell them. Instead of not only selling chemicals, we do business with the aim of helping customers improve their productivity and non-defective rate, cut unnecessary investments, and reduce environmental impact. By encouraging customers to use our processes and technologies in their operations where environmental impact is significant, we aim to improve our customers' operational efficiency and as a result reduce environmental impact. We are providing information on technologies, but I feel that in the future we should work to ensure that we are properly compensated for the value of the information we provide.

(Slide 10: Our Envisioned Human Resource Image and Organizations)

This slide shows the ideal image of MEC employees and organization.

"Strive to develop human resources capable of self-reliance, self-discipline, and solidarity," "Be enthusiastic and continuously challenge oneself," and "Acquire fundamental digital literacy." Work at MEC needs to be done in collaboration to some extent. So, we expect our employees to be able to think and act independently while also working collaboratively in a team. And the important thing is enthusiasm. What ultimately drives people is enthusiasm. And it is impossible to avoid taking on challenges. We must take on challenges. Otherwise, we will not be able to generate value.

I believe from now on, every member at MEC should have basic digital literacy.

All of these are linked to "enjoy your work," which I mentioned at the beginning. In addition, I want everyone to do their work as a professional, not as an amateur. If we are all professionals, we can respect each other, and if we respect each other, then we will be able to do good work and work together.

(Slide 11: Logic of the Medium-term Management Plan)

This slide shows the positioning of the Mid-term Plan. I think the important thing is that all employees at MEC work with ownership toward achieving the goals of the Mid-term Plan.

(Slide 13: Changes in Social Trends)

How should our company proceed amid significant social change and transformation?

Regarding the progress of digital transformation (DX), the COVID-19 pandemic has accelerated DX considerably. Our business is particularly related to semiconductors, and the advancement of DX will act as a tailwind for us.

In today's bipolar world led by the United States and China, the pursuit of globalization is not as easy as it used to be. However, we have to do business in this bipolar world led by the United States and China. Now the situation is becoming more complex and chaotic. We must consider how we can bring value to the world in such a complex and chaotic situation.

Next is the "shift toward decarbonization." Decarbonization requires the development of new, innovative technologies to improve efficiency. So in the long run, the shift toward decarbonization will further increase demand for semiconductors.

Regarding the "Tackling on the SDGs," I believe that we can help advance the SDGs by contributing to improving our customers' yield rates, non-defect rates, productivity, and throughput, and reducing environmental impacts. We must incorporate the SDGs into our business and work toward achieving them as our own goals. We also view the SDGs as an opportunity to discover new business seeds and opportunities.

(Slide 14: Numerical Targets for 2024 [Consolidated])

Sales targets are not presented on the slide. Our semiconductor-related business accounts for approximately half of total sales, and is mainly related to high-definition and high-density semiconductor devices such as logic and memory chips. Semiconductor manufacturers demonstrate a strong appetite for investment, and manufacturers of package substrates, which are used in the post-process of semiconductor manufacturing, also have aggressive investment plans. Furthermore, manufacturers of semiconductor manufacturing equipment have also announced ambitious investment plans. From these facts, there is no doubt that our business will expand considerably in the future. In such an environment, we will work hard to increase sales.

At least half of our sales are related to semiconductor logic and memory chips, and the rest are mainly from products for electronic components, electronic substrates, and displays. We expect that the sales of these products will also increase in the medium term. Currently our sales are growing at a certain rate. Believing this reflects high market expectations, we will formulate and implement strategic business plans to drive sales.

We have announced our numerical targets for operating profit margin and ROE—20% or higher and 10% or higher, respectively. We consider these to be the minimum levels we must attain. In fiscal 2021, we have already exceeded these numerical targets. So basically, we will aim for better figures. There are no particular risks involved.

We will work hard to raise the profit margin and ROE in order to improve capital efficiency. Being fully aware that an operating profit margin of 20% or higher and an ROE of 10% or higher are the minimum levels that we should target, we will work to strengthen our business structure while reviewing the portfolio in order to meet these targets, even if there is a temporary economic downturn or recession.

(Slide 16: Semiconductor Market Forecast)

Against the background of the progress of DX and social trends toward decarbonization, data volume will increase and communication will be faster. Sensing, monitoring, simulation, etc. will become essential. The semiconductor industry has always been largely influenced by global economic conditions, but now we expect that although there will be some ups and downs in the short and medium term, the semiconductor market will expand significantly regardless of the economic conditions. Since 2000, or since entering the 21st century, MEC's performance has grown in a manner similar to the growth of the global semiconductor market. We expect this trend will continue for the time being.

(Slide 18: Management Issues in Our Business Fields)

First let me talk about technology and marketing.

To respond to the technological shift from physical adhesion to chemical adhesion, we will seek to establish chemical adhesion technologies. "Physical adhesion" is a technology that roughens a copper surface and bonds resin onto the copper surface to obtain excellent copper-to-resin adhesion. "Chemical adhesion" is a technology for bonding resin to a flat copper surface that has not been mechanically or chemically roughened. Chemical adhesion technology is very important. Our chemical adhesion technology is the most advanced of its kind. This is the field on which we have focused and will continue to focus our R&D efforts. However, in the field of package substrates, it's still a long way off before excellent copper-to-resin adhesion can be achieved by chemical adhesion alone without any surface roughening treatment.

Regarding "Develop applications for existing technologies," we are looking to expand applications for our existing technologies in fields closer to semiconductors and the display field.

Regarding "Enter new markets" and "Create new business," we are looking to create new businesses related to thermal conduction, recycling, and AI for recognition and prediction. We will strive to develop seeds in these areas and utilize them for future business opportunities.

The next is about production and logistics.

We need to develop a global production strategy and establish a stable procurement, production, and supply system from a consolidated perspective. I feel that the manufacturer's operations—procuring raw materials, manufacturing products, and delivering them to customers—are becoming far more complex than in the past. I also feel that demand for quality control is increasing year by year. Therefore, we must work hard once again to establish an efficient and robust system.

(Slide 19: Semiconductor Market Forecast)

Logic and memory chips used in smartphones, PCs, data centers, and 5G infrastructure account for the largest sales volume in the semiconductor market. Our major business fields are logic and memory

chips, and analog LSIs, as surrounded by the red dotted line in the table on the lower right-hand side. These products all use high-definition, high-density package substrates. The high-density and high-definition substrate field is our main battlefield.

(Slide 20: Changes in Technologies for Physical Adhesion)

The CZ series is a product for roughening the copper surface to enhance copper-to-resin adhesion. The current mainstream is "CZ-8101," and I think this will continue for the time being. For package substrates with higher density and definition, "CZ-8201" will be used to create even finer roughened surfaces. The product "CZ-8401 + Chemical Adhesion," which is under development, achieves even finer surface roughness than CZ-8201. We expect that sales for CZ-8401 + Chemical Adhesion will grow considerably from the next mid-term plan onward.

(Slide 21: Roughening and Non-Roughening Technologies)

We consider non-roughening technology, i.e., chemical adhesion, to be the most important technology that needs to be developed. So we have focused, and will continue to focus, our R&D efforts on this technology.

We have great confidence in non-roughening technology. Non-roughening technology involves no mechanical or physical treatment to create a rough metal surface for the resin to grip onto. It is necessary to increase the adhesion strength between the flat surface of copper and the resin. To this end, a thin film is applied to the surface of copper. The compatibility between resin and film is very important. In addition, coordination with the pre- and post-processes is also very important. Due to such difficulties, instead of using the non-roughening (chemical adhesion) treatment alone, a hybrid type of surface treatment (for example, adding pretreatment, such as slight roughening, prior to the chemical adhesion process) will be used in the most advanced areas. It's still a long way off before the complete non-roughening treatment (= chemical treatment) will be used in the mass production of package substrates. However, non-roughening treatment (chemical treatment) will be used in some very limited applications.

We expect that by the time state-of-the-art non-roughening chemical treatment alone is used for cutting-edge package substrates, the demand for roughening treatment will probably be significantly higher than it is now. There will be a very limited number of applications that require non-roughening or chemical treatment alone. Non-roughening or chemical treatment is a technology needed for ultra-high density or ultra-high frequency substrates, but we forecast that for general-purpose electronic substrates, the demand for roughening technology will increase.

(Slide 22: Enter New Markets Based on Core Technologies)

We are now reviewing our organizational structure in order to do something new through a product-

out approach.

(Slide 23: Future Image of Global Production & Logistics)

As part of the initiatives from the perspective of the SDGs, we will work to eliminate waste for example by reviewing logistics operations.

(Slide 25: Linking Management Strategy and Human Resource Strategy)

The most important thing I would like to say here is that we will promote human resource development in a way that aligns with our future business strategy. This policy applies to both recruitment and training/development.

In the current fiscal term, we will review the employee compensation system to improve labor and employment conditions. I am proud that MEC is a company that values its employees. After all, a company's source of value is its employees.

(Slide 26: Direction of Human Resource Strategy)

Human resources are actually capital, rather than resources that can be used and then thrown away. Our employees are the most important assets of our company. Our employees bring value to our customers and deliver returns to our shareholders. We will manage our operations while adhering to the concept of regarding employees as assets.

(Slide 28: MEC's Value Creation Model)

The distinctive features of our company are the corporate motto of "enjoy your work," "research and development," and "metal surface treatment technology." After solidifying our corporate governance and management foundations, we work to enhance product and service competitiveness through research and development and then provide competitive products and services to our customers. By repeating this cycle continuously, we make profits, reinvest them, and grow.

Next, have a look at the output side. In the production of PCBs and cutting-edge package substrates (the yellow portion in the middle of the slide), we always aim to improve yield, reduce waste and maximize productivity.

As a result, our technologies will be used in a wider range of applications, thereby contributing to society, for example through contributing to the realization of 5G communications and autonomous driving, the widespread use of AI, and the advancement of DX. Of course, we will also take on the challenge of helping to achieve the SDGs and contributing to the realization of a decarbonized society.

(Slide 29: CSR Materiality [Key Issues])

This is also a very important point.

Our company is pursuing research and development that opens up the future. This is one of our most important characteristics and a core part of what we do.

We develop and provide high value-added products. Such products will contribute to improving our customers' productivity and yield, thereby helping to reduce their environmental impact.

As a chemical manufacturer, we recognize environmental protection as being extremely important.

Also, as we are operating globally, we have set proper procurement, production, and logistics activities as key issues for us.

Other key issues are quality and safety, utilization of diverse human resources, and Reinforcement of management foundations. These are very important, but I don't think this is much different to other companies. Regarding the utilization of diverse human resources, we focus our attention on how to enable individual employees to work enjoyably with a sense of fulfillment.

(Slide 30: SDGs That Involve the Company)

We will set specific targets for the relevant SDGs and work to achieve those targets.

(Slide 31: Issues to Be Addressed in the Future)

As in the past, we will strive to contribute to the reduction of environmental impact and to the development of society, industry, and our customers' businesses.

Also, to address new issues and respond to societal demands, we will strive further to reduce environmental impact and protect the environment.

(Slide 32: Capital Policy)

Regarding R&D investment, we will invest about 10% of consolidated sales every year. R&D is the source of our value. We will continue to make upfront investments.

We are planning capital investment of about 5 billion yen over the next three years. This figure includes the approximately 3 billion yen for the construction of a new production plant, which was recently announced in a press release.

As for shareholder returns, we strive to pay stable dividends with a consolidated dividend payout ratio of 30% as our basic policy. Regarding the acquisition of own shares, we will acquire our own shares in a flexible manner according to the situation.

Our investment policy is to make investments only when opportunities arise while maintaining our operating profit margin and ROE at 20% or above and at 10% or above, respectively.