

The Mid-term Management Plan, *APTSIS 10*

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Good afternoon, ladies and gentlemen. Thank you very much for taking time out of your busy schedule to be with us today. This meeting was originally supposed to take place on February 13, 2008, but with the fire at the Kashima Plant at the end of last year, it's been pushed back by exactly three months, and we are making this announcement today.

Over the past three months, as you are aware, for our exchange rates and oil prices have changed drastically. What should be the assumptions going forward against the situation? I suppose you will have some questions on that, but basically, in this new mid-term management plan, *APTSIS 10* (April 1, 2008 to March 31, 2011: FY2008 to FY2010), we are assuming the naphtha price of ¥68,000 and exchange rate of ¥105 to the US dollar.

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First of all, *APTSIS 10*. This is the name we decided for our new mid-term management plan. On May 31, 2007, in this very same place after becoming the president in April, I held a meeting to explain to you what policies and what future course of the MCHC Group I had in mind going forward. At that meeting, I promised you to announce a new mid-term management plan for FY2008 through FY2010, in the spring of 2008. On that occasion, I did use this term: *APTSIS*. I spent some time in bed to coin this acronym. In this very volatile time, speed or agility, I think, is most important. Basics would be safety, security, as well as sustainability. I made this acronym based on such key concepts.

Starting this April, this has been designated as the motto of the MCHC Group. With the company declaration that reads "Mitsubishi Chemical Holdings Group Member will, under a mission to contribute to our Group, strive to provide safety and comfort, be economically conscious, and improve human health to win further trust worldwide." "Apt" is an adjective meaning "appropriate" and "-sis" is a suffix, as in "analysis" and "catalysis," that indicates that something is a behavior, process, status, or condition. The whole concept implies a proper state or behavior as well. In other words, be flexible in carrying out what's proper in a proper manner. That's the basic spirit of *APTSIS*.

One year ago, I also talked about *Project 10/20*, which we have worked on for two and a half years. In essence, a corporate cannot rely on a natural business development or environment and be complacent with consequent profits or losses. Rather, we need to look 20 years ahead and predict paradigm shift in other changes and envision how we, the MCHC Group, plan to respond to those changes and based on that vision from 2025, back-cast and visualize what is needed of us in 10 years' time.

In that process, we came up with "sustainability", "health", and "comfort" as three criteria for internal decision-making. That was the consensus reached internally. Everything will be decided based on those criteria. That's what I explained a year ago.

Now, it's been a year since, and during this time, there were a fire at the Kashima

Plant, compliance issues, and other challenges that we had to face, but we spent almost a year to put together a plan to guide us for FY2008 through FY2010 in a concrete and quantitative manner, while leveraging investments made during the previous mid-term management plan, *KAKUSHIN Plan, Phase 2*, we will aim at growing, innovating, and leaping ahead. Based on this, we put together this new mid-term management plan, *APTSIS 10*.

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Before explaining *APTSIS 10*, let me go over the results and outcome of the previous mid-term management plan, *KAKUSHIN Plan, Phase 2*. What are the lessons learned? As you can see, *KAKUSHIN Plan, Phase 2* covered the period between April 2005 and March 2008. It completed this past March. Under the policy of portfolio management with emphasis on sustainable growth, it focused on integration of Group strengths and pursuit of further growth and improvement of financial condition.

Strategic initiatives implemented during this period included, as you are aware: establishment of MCHC in October 2005, merger of Mitsubishi Pharma Corporation and Tanabe Seiyaku Co., Ltd. into Mitsubishi Tanabe Pharma Corporation (MTPC) in October 2007, and making Mitsubishi Plastics, Inc. (MPI) into a wholly-owned subsidiary and consolidation of functional products businesses in April 2008. We also identified and implemented five R&D-focused areas. These were measures implemented.

As for numerical targets during this period, ROA of 5.5% or higher and D/E ratio of 1.5 or lower were achieved, but because of worsening of business conditions for the terephthalic acid and a fire at the Kashima Plant and delays in establishing and developing the performance products market, operating income of ¥140 billion or higher was not achieved. We were about 10% short of that target.

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In *KAKUSHIN Plan, Phase 2*, capital expenditures and investments and loans of ¥430 billion were carried out over a three-year period. As you can see, ¥190 billion in Petrochemicals and ¥150 billion in Performance and Functional Products, and Health Care: ¥41 billion, including ¥133 billion large investments in Petrochemicals and ¥29 billion large investments in Performance and Functional Products. We expect these to generate operating income of ¥11.5 billion in petrochemicals and ¥7 billion in Performance and Functional Products respectively during the *APTSIS 10* period.

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There are remaining challenges from *KAKUSHIN Plan, Phase 2*. Major ones are as follows. For the entire Group, there is a further need for enhancing frontline capabilities to properly address accidents and compliance requirements. This is true not just in manufacturing, but in sales and marketing and corporate as well. We need to enhance frontline capabilities further.

In addition, we are not doing enough in terms of overseas business expansion. We also need to accelerate new business development. This did not proceed as quickly as we had hoped for.

In Petrochemicals, we need to ensure stable profitability, and we also need to ensure

strategic restructuring of terephthalic acid business. We also need specific measures and actions to address the 2008 -2010 issue.

In Performance and Functional Products, we need better product and business lifecycle management, and at the same time create and nurture larger growth drivers. We also need to bring about early realization of benefits from the new MPI integration.

In Health Care, remaining challenges are early realization of benefits from a merger of MTPC, including cost synergy of ¥24 billion, as well as acceleration of overseas business development and an early resolution of hepatitis C problem. Those are the remaining challenges.

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Earlier, I said that “sustainability,” “health,” and “comfort” are the key words used to envision what we aspire to be in 2025 and what we should be in 2015 so as to focus on the vision for the next three years. Here, you can see our view on the business environment towards 2025. As a chemical company, we need to make positive contributions in terms of resource usage and environmental protection in order to survive, and in relation to health care, the era of mega pharma is giving way to new business models. More generally, we believe US hegemony is weakening, and we can see rise of many different countries competing and coexisting. Rapid growth of BRICs, mainly China and India, and many other economies is observed. Against such a backdrop, all business sectors are undergoing major restructuring on an international scale. The fundamental question is how is the MCHC Group to operate in these circumstances?

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As you can see here, the MCHC Group will be a global leading company based on good chemistry. That is our aspiration for 2025. Of course, we will continue to emphasize chemistry.

“Sustainability” and “comfort” may seem two conflicting concepts, so certain technology innovation should be achieved to realize solutions to those two challenges. Concurrently, to use a German term, *aufheben*, or sublation, would be required toward 2025.

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As for what we should be in 2015, all of the five elements listed here would be needed: provision of high quality through safe and stable production systems, meaning reliability on quality and profitability such as operating income targets of ¥400 billion or higher; be an innovative organization; human resources that are active, global, and willing to challenge; as well as the need to reduce CO₂ and GHG emissions by 20% or more. All of these need to be achieved. This is the profit portfolio or profit structure that we have in mind.

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On May 8, 2008, we announced the financial results for FY2007: net sales of ¥2.9 trillion with operating income of ¥125 billion; health care accounting for 42%; performance products, 32%; and chemicals, 17%. By FY2010, we aspire to achieve net sales of ¥3.7 trillion with operating income of ¥190 billion or more.

As I will explain in detail later, conventionally, we used as business categories:

Petrochemicals, Performance and Functional Products, and Health Care, but starting this fiscal year, FY2008, the segmentation will change. As business domains, we will have Performance Products, Health Care, and Chemicals, three domains. Furthermore, within Performance Products, we will have Electronics Applications and Designed Materials. Health Care consists of Health Care, and within Chemicals we will have Chemicals and Polymers, so altogether, there will be five segments used starting this fiscal year for information disclosure and management purposes. Details are shown on slides 59 and 60.

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Let me now talk about the basic strategy and measures of *APTSIS 10*. There are five or so different perspectives from which to look at this. One is business company specific perspective, such as Mitsubishi Chemical Corporation (MCC), MPI, and MTPC. Second is along the three key words of “sustainability”, “health”, and “comfort”. Third is along the technology or business or market, such as Performance Products, Health Care, and Chemicals, or furthermore, the five segments such as Electronics Applications, Designed Materials, Health Care, Chemicals, and Polymers. Fourth is business-portfolio-specific perspective, which I will elaborate on now, namely existing growth businesses, next-generation growth businesses, stable businesses, and businesses to be restructured. Lastly but not the least, there is perspective in terms of growing, innovating, and leaping ahead, and today, I would like to speak from this last perspective, namely growing, innovating, and leaping ahead.

Growing means to improve the product and business lifecycles of existing businesses and, by adding higher functionality, realize organic growth so as to ensure profit. This will be in relation to existing growth businesses. Innovating means, based on seven next-generation growth businesses, to aim to attain ¥50 billion or so in operating income by around 2015. Leaping ahead is to achieve non-linear growth through mergers and acquisitions and alliances to expedite introduction of new businesses. I will explain from this perspective: the three-face perspective. Please, bear in mind three axes meaning, or namely, technology, market, and time.

Here is the basic benchmark. We forecast the operating income of ¥190 billion or more. The sum of each business would actually be ¥210 billion, but we are also factoring minus ¥20 billion contingency and, therefore, ¥190 billion. ROA (income before income taxes) is 6% or higher. Contribution to reduce CO₂ emissions set at 20% reduction in terms of unit energy consumption. There are the key numerical targets. As other targets, ROE of 8% or higher and EBITDA of ¥350 billion or more. Please note that since we will be placing emphasis on growth, including merger and acquisition options, D/E ratio has not been established as a key indicator in this plan.

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As I said earlier, assumptions are, for naphtha price, ¥68,000/kl, and for foreign exchange rates, stronger yen, or ¥105 to the dollar. We are assuming that the official drug prices to be revised every two years.

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Business portfolio is categorized by our corporate profitability, our advantage in the respective markets, and market attractiveness and growth potential. We have quadrant-based portfolio management. Existing growth businesses consist of, or comprise the core of the growth strategy. There are 15 businesses altogether. To the left, you can see next-generation growth businesses where we expect future

growth. They are the core of our innovation strategy. In addition to the current five focused R&D businesses, we have added organic photovoltaic modules and lithium-ion battery materials for hybrid electric vehicles (HEVs). Altogether, they are seven.

Stable businesses include blast furnace coke, olefins and aromatics, and performance chemicals. Businesses to be restructured have been reduced in number than in *KAKUSHIN Plan, Phase 2*, but there are still some remaining including terephthalic acid.

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This is the basic strategy of *APTSIS 10*. The concept is growing, innovating, and leaping ahead. In terms of growing, we will shift for high-performance products and high value-added businesses as well as efficient product and business lifecycle management for organic growth. In terms of innovating, we will accelerate the commercialization of the seven next-generation growth businesses, maybe not big enough by 2010, but we will pursue innovation. In terms of leaping ahead, we will implement strategic investment for alliances and mergers and acquisitions to gain on time and to supplement our businesses. Let me elaborate on each.

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First is achieving growth strategies. As I will explain in detail later, in Performance Products, we shall maintain and further expand existing global businesses and expand in original or unique business and number-one niche businesses in growing markets. In Health Care, we shall ensure early realization of benefits from the MTPC merger, steady progress in key development projects such as *Remicade* and *Radicut*. We will also strive to develop business infrastructure to be a global research-driven pharmaceutical company. In Chemicals, we shall shift to performance products and realize benefits of ¥133 billion investments which we executed in *KAKUSHIN Plan, Phase 2*.

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We want to realize benefits of investments made during *KAKUSHIN Plan, Phase 2*, but, further, to facilitate our innovation and growth in terms of resource allocation, we are thinking of capital expenditures of ¥590 billion over a three-year period. That's 1.4 times the size during *KAKUSHIN Plan, Phase 2*, and our R&D expenditures of ¥425 billion, again, 1.5 times. Investments include ¥250 billion for leaping ahead, mergers and acquisitions. Altogether, investment would be ¥840 billion over a three-year period. Total resource allocation would amount to ¥1.3 trillion.

For capital expenditures and R&D expenditures, Electronics Applications and Designed Materials would account for about 30%, one-third, Health Care. In *KAKUSHIN Plan, Phase 2*, Petrochemicals (now Chemicals) accounted for 40%, but in *APTSIS 10*, Performance Products and Health Care would be even higher rates than Chemicals in terms of resource allocation. Corporate and others include R&D buildings, production engineering-related, CO₂ reductions investments, amounting to about ¥5 billion, as well as safety investments and services business, as well as information systems.

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Investments to let us leap ahead is eyed at around ¥250 billion. The amount would

bring the D/E ratio to around 1.0. Large-scale mergers and acquisitions may be carried out for existing growth businesses, performance product businesses, and for global businesses.

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In FY2015, we should have net sales of over ¥4 trillion and operating income of over ¥400 billion. As a preliminary step for FY2010, the final year of *APTSIS 10*, our target shall be ¥3.7 trillion in sales and ¥190 billion-plus in operating income.

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Efforts to achieve this target should be driven by growth business, both existing and next-generation, plus M&As. Currently, such businesses account for 67% of operating income. With further selection and focus, we want to raise this figure to 88% in FY2015 and transform our business structure into one with high-profit margins.

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Let us now look at Performance Products. What we are trying to do here is to focus on how to orchestrate a cluster of all the technologies that we have for all the products at MCC and MPI. We would like to capitalize on the combined strengths as an integrated chemical player. This should open up new horizons for growth. The growth strategy, therefore, is to further expand the existing global businesses and, at the same time, build on only one and/or number-one niche businesses. The innovation strategy is to establish the next growth driver. We should not simply focus on materials, but also look into areas closer to end products, including devices, and create a larger-value chain.

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Let us look at the five areas in Electronics Applications. For recording media, the market is finally taking up after Blu-ray Discs, or BD, established their position as the mainstay format. We have maintained the number one global market share in Recordable DVDs over six continuous years. We certainly want to further extend that record, reinforce our BD operations, including dye-based discs. We would also like to capitalize on the Verbatim brand in the field of non-optical recording media, such as portable hard disk drives and flash memories on a global basis. This is just for marketing and not manufacturing.

For imaging, we would accelerate time to market for new products, such as chemical toners and reinforce our global sales channels, so as to maintain the number-one position as an independent component supplier. Our competitive advantage in digital printing should be maintained as well. For high-performance polyester films, we shall maintain our number-one position in the optical film market for flat-panel displays, while expanding new applications, such as non-organic photovoltaic components and high-performance process films.

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For semi-conductor-related materials and services, the focus would be on electronic chemicals, wafer recycling, precision cleaning, and synthetic silica. Our synthetic silica operations are number one in the world. It may currently be on a smaller scale

than other businesses, but capacity here should be ramped up gradually.

For electronic device components, we shall expansion of sales in areas such as plastic metal composites and engineering plastic films by working closely with our customers.

In Designed Materials, we shall maintain our number-one position in alumina fibers, leverage the higher rigidity and higher elasticity property of our pitch-based carbon fiber and composites to expand their applications.

For food ingredients, we would like to develop our business in China.

For high-performance packaging films, markets share expansion in high-gas barrier films and development of new applications, such as photovoltaic components, would be the focus.

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Now, let us look at the longer-term innovation strategy and the seven next-generation growth businesses. The horizontal axis shows the timeline for commercialization. Solid-state lighting is already in the commercial phase, as are lithium-ion battery materials, although application for HEVs is taking time, and next-generation displays. Chemical components for automobiles and bio-based polymers are available around the corner.

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For further detail, let us turn to the next slide. The next-generation growth businesses identified here all have a relatively large end-use market and build on the wider technology portfolio at the MCHC Group.

Carbon neutral is another important theme. Collaboration with the Chemicals is planned for bio-based polymers and chemical components for automobiles so as to leverage petrochemical process technologies and catalyst technologies. For bio-based polymers, sales of *GS Pla*, green sustainable plastic, which is a thermoplastic polyester resin synthesized from succinic acid and 1,4-butanediol, have grown to the 2,000-ton level. We would like to expand this further in Europe, etc.

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This chart is a description of how the seven next-generation growth businesses should pick up in around FY2010 to 2015. It shows the timing, estimated net sales, and operating income with the left end of the arrows indicating when each business comes online: gallium nitride substrates in FY2007; organic LED modules in FY2009 or 2010; anodes, cathodes, electrolytes, and separators in the latter half of FY2008; glazing, etc., in around FY2009. We hope to have prototypes for organic photovoltaic modules by FY2010.

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This chart shows operating income for the total Performance Products in FY2008, 2010, and 2015. In FY2015, we expect contribution from next-generation growth businesses to become level with existing growth businesses. This is reflected in our resource allocation plan for the coming three years in which investment will rise to

¥210 billion from ¥149 billion and R&D expenditures up to ¥97 billion from ¥77 billion compared to *KAKUSHIN Plan, Phase 2*,.

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Now Health Care, and the growth strategy here is three-pronged: to realize the benefits of the MTPC merger as soon as possible, to push ahead with key pharmaceuticals development projects, and to establish a bridgehead for us to become a global research-driven pharmaceutical company. The innovation strategy is to mobilize all the Group resources, which cover diagnostic systems, pharmaceuticals, information technology, and analytical technology towards personalized medicine.

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Let me explain key drug development projects. By FY2010, contribution is expected from new indications for *Remicade* and *Radicut* as part of our lifecycle management efforts. Sales and marketing efforts should also be stepped up here. In the pipeline here in Japan, there are three drugs for which we are eyeing regulatory approval in the FY2010 to 2015 time frame. Two for diabetes, and one for hepatitis C, which is licensed in from Vertex. For the US and Europe, we are developing two drugs for nephrology. MCI-196 is for hyperphosphatemia based on ion-exchange resin. MP-146 is for chronic kidney disease based on activated carbon. These drugs should help us develop our overseas sales channels in an efficient way with a relatively small team of medical representatives. Our target timeline is around FY2010 to 2013 for application and approval.

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This slide shows how we are trying to quickly develop our direct sales network in the US and Europe with the two nephrology drugs. In Europe, we will leverage the existing sales channels for *Argatroban* (selective antithrombin agent).

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The expertise that lay within the Group at Moleculence Corporation on drug discovery at Mitsubishi Chemical Group Science and Technology Research Center, Inc. and at Mitsubishi Chemical Medience Corporation on diagnostic reagents should all be combined with that of MTPC to support drug discovery with a particular focus on biomarkers. The goal is to realize targeted medicine through collaboration across the Group based on biomarkers.

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Towards that goal, investment for Health Care in the coming three years will rise to ¥75 billion from ¥41 billion in the previous three-year period. Obviously, the merger makes the difference. R&D will also go up from ¥165 billion to ¥249 billion, or over ¥80 billion every year.

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Now, let us look at Chemicals. Here, the challenge is to manage the shift to high-performance products while addressing the 2008 - 2010 issue. The growth strategy is to focus on existing growth businesses, such as C4 chemicals, PTMG; polycarbonate-bisphenol-A chain at the Kurosaki Plant and near Beijing;

polypropylene, including compounds, for automotive applications; as well as high-performance polymers. The other part of the growth strategy is to fully build on the investments executed in *KAKUSHIN Plan, Phase 2*.

The innovation strategy for Chemicals is to create new, environmentally-friendly material, such as bio-based polymers or lightweight polymers for automotive applications. I will talk about stable businesses and business to be restructured for later.

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This slide shows an example of our effort to realize a shift to high-performance products. With polycarbonate, the shift is from commodity applications, which have thin margins, to areas such as medical products. Our hope is to increase the ratio of high-performance products from 27% now to over 30% in FY2010. With polypropylene, the shift would be to higher value-added applications, including food and medical, so that in FY2010 such products should account for 50% compared with the current 36%.

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This slide shows how we would like to build on the investments executed in *KAKUSHIN Plan, Phase 2*. We have additional or new capacity, including that for polycarbonate, in the Kurosaki Plant and in China, for polypropylene in the Kashima Plant, for performance polymer in the US, have streamlined the Mizushima Plant and built new production facility for PTMG in China. All combined, they should contribute for about ¥12 billion in FY2010.

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The innovation strategy for Chemicals is two-pronged. For automotive chemical components, the focus is on coating technology for polycarbonate, which forms the basis for plastic glazing material to substitute glass, and polypropylene for plastic exterior body panels. The other aspect is bio-based polymers: the carbon-neutral, green-sustainable plastic, *GS Pla*, and isosorbide polymer for optical applications.

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Among stable businesses, blast furnace coke is doing well despite the tripling of coking coal prices. Here we shall maintain stable production through maintenance of production capacity and by further addressing environmental issues. For petrochemicals-related businesses, the newly consolidated polyethylene operations much shift its focus to higher-value-added applications. Part of such operations needs to be reviewed in view of the asset-light strategy, and various measures will be taken in this regard.

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On the restructuring front, another round of reorganization shall be considered to terephthalic acid operations, mainly through alliances and collaboration. Investment in Chemicals domain will go down from ¥190 billion to ¥155 billion. We will make the necessary investment for safety, aging management, and CO₂ reduction, but unlike during the *KAKUSHIN Plan, Phase 2*, we are not planning major investments. R&D expenses, in contrast, will increase from ¥39 billion to ¥64 billion so as to drive our innovation strategy.

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This slide shows the breakdown of operating income by business domains and segments.

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Now, looking at overseas business, which currently accounts for 27% of Group total sales, we would like to raise the proportion to 30%. The business of our Group so far has been fairly domestic compared with others, but we would now like to change that and accelerate growth in the share of overseas business. Overseas sales should rise from the current ¥800 billion to the ¥1 trillion level.

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On shareholder value, dividends will be paid to the extent possible based on the need for internal reserves and a consideration of consolidated results. Our priority would be a stable dividend payout. We hope to keep the payout ratio at or above the 30% mark.

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After the fire at the Kashima Plant and on compliance issues, all operating fronts: manufacturing, corporate, or sales within the Group, are working hard to reinforce their frontline capabilities and practice responsible conduct. We are looking at various aspects, such as the organizational structure, education and training, as well as securing human resources and people power. MCHC is taking the lead in the drive to strengthen the foundation of the whole Group by reinforcing overall governance in terms of both portfolio management and compliance and by good orchestration of the three operating companies. The establishment of the Group Synergy Office in the holding company is part of that effort.

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Needless to say, safety comes first, and we are reaffirming that priority within the Group. Our pursuit here may include a review on the organizational structure as well.

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Our efforts to reduce CO₂ emissions are not limited to emission from our own activities. It extends to end-use emission and energy consumption. Our carbon-neutral offerings shall extend across organic photovoltaic modules, high-efficiency lighting, weight-reduced vehicles, and bio-based polymers. Over the longer term, we should like to take up the challenge of developing the technology to use CO₂ as a carbon source, something that most likely can only be done by a chemical company.

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We have earlier announced the plan to close Mitsubishi Kagaku Institute of Life Sciences in March 2010. The Institute has played a vital role over its 39-year history. Particularly, in the early days of life sciences. However, now that the Group pharmaceuticals operations have been reorganized into MTPC, a new formation may be warranted to focus on issues such as the global environment in line

with the concept of sustainability, health, and comfort.

MCHC is, therefore, preparing for a new institute to be established next April tentatively called "Institute of Kaiteki Biosphere." The Institute is to study, among others, the issue of CO₂ not just with a view to emission reduction, but also to proactively utilizing it as a carbon source. Artificial photosynthesis is the ultimate human dream. We are seeking ways to ensure that the institute becomes an ambitious, forward-looking organization with a 30 or 50 yearlong time horizon, one that is open, innovative, and may encompass social sciences as well.

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This brings me to the end of today's presentation. I have talked about our new mid-term management plan, *APTSIS 10*, for the three years up to FY2010, which is based on back-casting from what we aspire to be in FY2025 and what we should be in FY2015. Thank you very much for your attention.