

**Mitsubishi Chemical Holdings Group**  
**Presentation of Mid-term Management Plan**

**Investors Meeting**

December 8, 2010

The forward-looking statements are based largely on information available as of the date hereof, and are subject to risks and uncertainties that may be beyond company control. Actual results could differ largely due to numerous factors, including but not limited to the following: Group companies engage in businesses across many different fields, such as information and electronics, performance products, polymers and processed products, pharmaceuticals, carbon and inorganic products, and petrochemicals, and these businesses are subject to influences such as world demand, exchange rates, price and procurement volume of crude oil and naphtha, market price trends, speed in technology innovation, National Health Insurance price revisions, product liabilities, lawsuits, laws and regulations.

## In attendance on company side:

### **Mitsubishi Chemical Holdings Corporation (MCHC)**

Yoshimitsu Kobayashi

Representative Director, Member of the Board,  
President & Chief Executive Officer  
(Representative Director, Member of the Board,  
President and Chief Executive Officer,  
Mitsubishi Chemical Corporation)

Shotaro Yoshimura

Representative Director, Member of the Board,  
Senior Managing Executive Officer  
(Member of the Board,  
Senior Managing Executive Officer,  
Mitsubishi Chemical Corporation)

Hitoshi Ochi

Member of the Board, Managing Executive Officer

### **Mitsubishi Tanabe Pharma Corporation**

Michihiro Tsuchiya

President & Representative Director

### **Mitsubishi Plastics, Inc.**

Hiroshi Yoshida

Representative Member of the Board,  
President & Chief Executive Officer

### **Mitsubishi Rayon Co., Ltd.**

Masanao Kambara

Representative Director and President

## **Presentation—Yoshimitsu Kobayashi**

Thank you all for making time to attend today's gathering. We will review *APTSIS 10*, which ends this fiscal year, and outline our business initiatives through 2015 under the five-year *APTSIS 15*.

### **P3: Agenda**

After reviewing *APTSIS 10*, we will detail *APTSIS 15* and finish by explaining the deployment of our *KAITEKI* indexes. Please note that we are still quantifying these indexes and deliberating on how to finalize and incorporate them into our operations, so we will only explain our basic stance today.

### **P4: Review of *APTSIS 10***

*APTSIS 10* got off to a difficult start, as we had to push back the announcement from February 2008 to May that year in light of a major accident at the Kashima Plant. And after September 15, 2008, when Lehman Brothers filed for bankruptcy protection, we revamped our *APTSIS 10* slogan as, "Respond to economic contraction by business reform, accelerating innovation, and leaping ahead."

### **P5: Operating Results under *APTSIS 10***

Here, we present our operating income and net income under phases 1 and 2 of the *KAKUSHIN* Plan and *APTSIS 10*. I'd like you to look at operating income and earnings after adjusting for extraordinary items because of the impact of those accounting factors on net income. You will note that we have regained the earnings levels of fiscal 2004 through 2007.

### **P6: Operating Income by Business Segment**

The table on the left compares our fiscal 2010 forecasts with our targets for the final year of *APTSIS 10* and excludes the declines of fiscal 2008 and 2009. We targeted 190 billion yen in operating income for the final year of *APTSIS 10*, but we will likely reach at least 203 billion yen in fiscal 2010.

The Performance Products domain will represent 20% of that total, with the Health Care domain contributing 37% and Industrial Materials domain accounting for 42%.

The reference table on the right presents the operating income results of growth and innovation strategies, excluding those for leaping ahead through M&As. Only our Chemicals segment will achieve a better figure than our target, and this is largely because our terephthalic acid and coke

operations are performing quite solidly. The 11 billion yen change for the Chemicals segment over fiscal 2010 estimates includes results from restructuring.

At the same time, Mitsubishi Rayon, Nippon Synthetic Chemical Industry, and Quadrant, as well as other new companies in the Group, have added 49 billion yen to operating income.

#### **P7: Strategic Investments for Leaping Ahead**

MCHC characterizes mergers and acquisitions as strategic investments.

We have invested around 250 billion yen to bring four companies into the Group, so we thus look to increase fiscal 2010 net sales by 640 billion yen and operating income by 49 billion yen.

We have also made 15 billion yen in growth strategy investments, notably for a capital and business alliance with Pioneer, spending for our OPV modules business, and our acquisition of Freecom.

#### **P8: Restructuring of Businesses**

This slide presents amounts for withdrawals from unprofitable businesses as a result of restructuring.

We will shut down styrene monomer and polyvinyl chloride chain operations in March next year. So after including that impact, net sales will drop 320 billion yen, reducing a 17 billion yen operating loss to zero, with an accumulated extraordinary loss of 17 billion yen.

We pushed ahead with a project to cut fixed costs by 35 billion yen in fiscal 2009 and 32 billion yen in fiscal 2010.

In April 2011, we plan to launch a joint venture with Asahi Kasei to unify naphtha cracker operations in

Mizushima.

#### **P9: Basic Strategies and Results**

Under *APTSIS 10*, we focused on growth businesses, notably flat panel display components and pharmaceuticals, while significantly trimming assets as part of structural reforms. For operations under our innovation strategy, we focused acceleration on white LEDs and four lithium-ion battery materials for hybrid electric vehicles. Leaping ahead efforts centered on promptly materializing mergers and acquisitions.

Our prime strategic initiatives through *APTSIS 10* were to integrate Mitsubishi Rayon and restructure, as well as to agree to unify naphtha cracker operations of Mitsubishi Chemical and Asahi Kasei Chemicals in Mizushima.

We thus look to exceed our operating income target. We project a return on assets of just 4.6%. We expect to reduce greenhouse gas emissions as planned.

That completes my overview of *APTSIS 10*.

#### **P10: From *APTSIS 10* to *APTSIS 15***

Here, we show our key issues and goals by business area in the shift from *APTSIS 10* to *APTSIS 15*.

We have three overall objectives. The first is to swiftly strengthen our financial position and reduce assets. The second is to generate integration synergies with Mitsubishi Rayon. And the third is to address compliance issues and prevent recurrences. We have also set specific priorities for each business segment.

**P11: APTSIS 15**

The prime focus of *APTSIS 15* is on orchestrating group strengths to generate synergies. The challenge is to realize such synergies not only between our four core Group companies but also with our alliance partners.

We have also formulated the *KAITEKI* concept to identify the extent to which we can contribute as a chemical enterprise to addressing such concerns as environmental, population and water and other resource issues for society in the 21st century.

So, we consider orchestration and *KAITEKI* as major focuses.

**P12: Aspirations 2025 and Goals 2015**

We applied the same techniques as for *APTSIS 10*. We are exploring what we should do now in light of the projected impacts 10, 20, and 30 years ahead.

**P13: Vision 2025—Global Trends**

To summarize, a major focus in terms of the paradigm shift we anticipate is how the chemicals industry can contribute to sustainability, switch to renewable resources and energy, and address environmental, water, and population issues.

As populations age, we question whether the conventional blockbuster sales model will be sustainable and we do not believe that allocating as much as 100 billion yen or more to R&D will necessarily guarantee positive results. It will likely become vital to personalize overall healthcare and to look into systematizing healthcare solutions.

It will be crucial to address two world domains. One will be Europe, the United States, and Japan, where the prime focus will be high added value in response

to demands for sustainability, the environment, and new energy. The other will be China, India, and elsewhere in Asia, where the main preference will be commodities.

**P14: Aspirations 2025**

As under *APTSIS 10*, we have positioned Sustainability, Health, and Comfort as our three main decision criteria in launching new businesses and in growing existing operations.

**P15: MCHC's Corporate Value**

We will augment traditional economic benchmarks, like return on equity, sales, and operating income, with *KAITEKI* values, which encompass sustainability for the planet, humankind, and society. We aim to quantify *KAITEKI* values, internally assess and apply them, disseminate them externally, and ultimately position them as industry standards.

So, MCHC's corporate value will be the sum of economic and *KAITEKI* values.

**P16: Goals 2015**

For 2015, we target 400 billion yen in operating income, of which 330 billion yen would come from our growth and innovation strategies, and another 70 billion yen would be from leaping ahead. We look for a return on assets exceeding 8%, a net debt-to-equity ratio of 1.0, an overseas sales ratio of more than 45%, and net sales of around 5 trillion yen. One of our *KAITEKI* index goals will be to lower our environmental impact by 30% from fiscal 2005 levels.

**P17: Vision 2015—Revenues and Operating Income**

For fiscal 2010, we project net sales of 3.2 trillion yen and operating income of 203 billion yen.

Contributions to operating income from the Performance Products, Health Care, and Industrial Materials domains will not be of equal amounts. By fiscal 2015, however, we should generate 5 trillion yen in net sales and 400 billion yen in operating income, and our portfolio should draw on equal operating income contributions from those three domains.

### **P18: APTSYS 15 Strategies and Initiatives**

The basic strategies slogan of *APTSYS 15* is to “Grow, innovate, and leap ahead by orchestrating the Group’s strengths.” We aim to become a Group that generates synergies in pursuing strategies of growth, innovation, and leaping ahead.

### **P19: Assumptions**

In formulating *APTSYS 15*, we assumed that the price of naphtha would be 50,000 yen per kiloliter through fiscal 2012 and 55,000 yen per kiloliter through fiscal 2015. That would mean oil would be 95 dollars a barrel through fiscal 2012 and 105 dollars a barrel through fiscal 2015. We assume an exchange rate of 80 yen to the dollar. We expect drug price revisions every two years, with the use of generics expanding.

### **P20: Business Portfolio**

The chart on this slide presents our portfolio of four businesses. They are next-generation growth businesses, growth businesses, cash-generating businesses (businesses that may not produce significant growth but nonetheless generate cash), and businesses that need restructuring. We have categorized these businesses according to profitability, including the return on invested capital, as well as market share and growth, and their attractiveness.

As in *APTSYS 10*, next-generation growth businesses include organic photovoltaic modules and materials, organic photo semiconductors, healthcare solutions, and sustainable resources. We added advanced performance products and agribusiness solutions to the mix under *APTSYS 15*. We reduced the number of next-generation growth business from seven under *APTSYS 10*, to six. That is because we have placed lithium-ion battery materials and white LED lighting and materials in the growth business category as they now generate more than 10 billion yen in sales.

We have 11 growth businesses. They include flat panel display components, performance composite materials, high-performance molding products, specialty chemicals, water treatment systems and services, pharmaceuticals, high-performance graphite, performance polymers, and MMA/PMMA.

Our cash-generating businesses are cash cows, having operated for a long time and providing high sales.

We have 15 businesses in the category “to be restructured”, most of which are now small businesses.

I will be explaining our Performance Products, Health Care, and Industrial Materials operations in terms of these four categories.

### **P21: Strategies**

The basic stance of *APTSYS 15* is to keep generating synergies, improving our financial position, and reforming our business structure. Our growth strategy is to accelerate our transformation to deliver high-performance products and high-value-added businesses and to expand green businesses. This

strategy also seeks to bolster our drug development pipeline to fulfill unmet medical needs beyond 2015 and to operate globally, particularly in Asia.

### **P22: Growth Strategy**

I will now present our basic approaches in our three domains.

In Performance Products, we will draw on the expertise of the cluster of our four business companies to build high-value-added businesses, expand green businesses, and accelerate our global expansion.

In Health Care, we will employ life cycle management to increase the sales of *Remicade* and key major products. We will step up efforts to maximize profits from new ethical drugs and increase drug approvals. We will also accelerate the globalization of our operations and strengthen our pipeline.

In Industrial Materials, we will accelerate globalization in businesses in which we are the number one or two player, and will strengthen ties with regional partners. We will pursue balanced growth in our MMA and PMMA product chain. At the same time, we will continue to restructure in Japan, centered on our naphtha cracker operations.

### **P23: Strategy for Innovation**

I will now outline our approach for six next-generation growth businesses.

We have recategorized white LED lighting and materials, lithium-ion battery materials, and automotive chemical components as growth businesses.

As well as organic photovoltaic modules and materials, organic photo semiconductors, healthcare solutions, and sustainable resources, our next-generation growth businesses now include agribusiness solutions and advanced performance products, which I will detail a little later.

### **P24: Investments and R&D**

As I explained earlier, we aim to generate net sales of 5 trillion yen and operating income of 400 billion yen by fiscal 2015. To that end, over the next five years we will invest roughly 1 trillion yen, spending 750 billion yen on R&D and 500 to 600 billion yen on M&A.

Most of the investments will be on the Performance Products domain, which comprise the Electronics Applications segment and the Designed Materials segment, and the Health Care domain.

### **P25: Leaping Ahead (M&A)**

As explained a little earlier, our M&As will largely be for the Performance Products and Health Care domains, and we plan to accelerate global expansion.

### **P26: Performance Products**

I will start by talking about the Performance Products domain.

### **P27: Performance Products—Strategies**

Our basic strategy is to further add value and accelerate global expansion, centered on green businesses.

### **P28: Performance Products—Growth Strategy 1**

By 2015, we aim to increase sales of performance composite materials from the current 42 billion yen to 110 billion yen.

In carbon fibers, the addition of Mitsubishi Rayon has enabled us to generate various synergies, bolster our lineup, and broaden our product chain and business. We will leverage increased capacity to cultivate core technologies.

In alumina fibers, where we are doing very well, we aim to maintain our top market share by expanding beyond applications for diesel engine emission controls.

In high-performance molding products, we will extend our operations from Europe to China and elsewhere in Asia by drawing on our integrated technologies in engineering plastics, resins, and carbon and glass fibers, principally from Quadrant.

We have many specialty chemicals companies in the Group, including Chuo Rika Kogyo, Nippon Synthetic Chemical Industry, Nippon Kasei Chemical, Mitsubishi Rayon, and Mitsubishi Plastics. We seek to generate synergies from these companies, including from organizational streamlining, to produce 110 billion yen in specialty chemicals sales by fiscal 2015.

#### **P29: Performance Products—Growth Strategy 2**

Green business expansion is central to our growth strategy.

In white LED lighting and materials, the business model is based on outsourcing production and assembly. We will reinforce our capabilities in gallium nitride (GaN) substrates, phosphors, and other materials, and cultivate our *Verbatim* brand globally, to generate 100 billion yen in sales. We are pushing ahead with joint research in GaN substrates with Professor Shuji Nakamura of the University of California, Santa Barbara, and aim to begin mass

production of this material next year. We rolled out *Verbatim*-branded lighting in Europe in September this year.

The Designed Materials domain is also a major strategic priority for us.

We seek to become a global leader in lithium-ion battery materials, increasing sales from the current 17 billion yen to 80 billion yen by fiscal 2015. We will draw on Lucite International's sites to build plants in Europe and the United States that each produces 10,000 metric tons annually of electrolytes, additionally boosting production in Yokkaichi. We will also strengthen our capabilities in all other materials, including anodes, cathodes, and separators.

#### **P30: Performance Products—Growth Strategy 3**

In flat panel display components, we are seeing Samsung, LG, and Taiwanese manufacturers shift to China. It is therefore vital for that we globalize our manufacturing structure and other operations, centered on producing in China. To remain a leading global player, we will concentrate investments in OPL and PET films, acrylic resin plates for light guide plates, and color resists to generate sales of 190 billion yen.

In water treatment systems and services, we will expand our industrial water reclamation business using membrane bioreactors, centered on PVDF membranes, and are preparing to expand in the Chinese market.

#### **P31: Performance Products—Innovation Strategy**

We have started making steady progress toward reaching our fiscal 2015 sales goals for four of our next-generation growth businesses that I outlined

earlier.

### **P32: Performance Products—Cash-Generating Businesses**

Our cash-generating businesses are our cash cows in the Performance Products domain.

We aim to maintain our global lead in recording media, while entering the LED lighting business under the *Verbatim* brand. Note that we are not including lighting revenues in our net sales figures.

In performance films, we will step up our expansion into medical, battery, and other applications.

In food ingredients, we will strengthen our capabilities in erythritol and other fermentation technologies, and will look into cultivating the Chinese market.

### **P33: Performance Products—Operating Income and Resource Allocation Plans**

We plan to increase R&D spending by 30%, investing a relatively large 440 billion yen over five years.

### **P35: Health Care Strategies**

I will not discuss this slide today, as I have already outlined our healthcare approach.

### **P36: Health Care—Growth Strategy 1**

This slide shows our current drug pipeline. We do not have so many substances in Phase 1, but we have quite a solid lineup in Phase 2 and 3, and those in the pink boxes are expected to contribute significantly to profitability. FTY720 is undergoing Phase 2 trials in Japan. It recently received U.S. and Russian approval, and sales should start first in the United States. MP424, MP513, TA-7284 and other

Vertex-deployed agents should also contribute much to earnings.

### **P37: Health Care—Growth Strategy 2**

In our domestic healthcare business, we are managing the life cycles of *Remicade*, *Radicut*, and other current main products. We aim to expand sales and maintain profits by securing additional dosage and formulation approvals. We will deploy such new offerings as escitalopram, MP424, FTY720, and TA-7284 to maximize domestic earnings.

### **P38: Health Care—Growth Strategy 3**

Our main overseas priorities are on the United States and China. In China, we are cultivating markets for *Radicut* and *Talion*. The prime focus is on securing royalties for FTY720, licensed out to Novartis, and TA-7284, licensed out to Johnson & Johnson.

Another priority is to build our market presence by securing early approvals, including for such renal treatments as MCI-196 and MP-146, which we developed in-house and are looking to market independently in the United States and Europe.

### **P39: Health Care—Innovation Strategy**

Under *APTSIS 15*, we look to build on the *APTSIS 10* goal of cultivating personalized medicine capabilities, while offering both treatment and preventive care. Mitsubishi Tanabe Pharma, Mitsubishi Chemical Medience, and other Group companies already offer medical and healthcare solutions, and we will leverage synergies to use Mitsubishi Tanabe Pharma's vaccines and Mitsubishi Chemical Medience's information services for people with health insurance in broadly cultivating healthcare solutions.



#### **P40: Health Care—Cash-Generating Businesses**

We aim to increase sales from Mitsubishi Chemical Medience's diagnostics and support for new pharmaceutical development from 81 billion yen in fiscal 2010 to 115 billion yen in fiscal 2015. We will build this area into a cash cow, drawing on a clinical trial collaboration with Tsukuba University—the first such effort between industry and academia in Japan—and a medical IT analysis service that we are working on with NTT Data.

In generics, we are targeting fiscal 2015 sales of 50 billion yen on the strength of the launches of major products and the creation of a low-cost manufacturing and sales structure.

#### **P41: Health Care—Operating Income and Resource Allocation Plans**

We will invest in biologics technologies and facilities. We will lift R&D spending from the average 73 billion yen allocated annually under *APTSIS 10* to 82 billion yen annually under *APTSIS 15*.

#### **P43: Industrial Materials—Strategies**

Our priorities for Industrial Materials, our third key business domain, are to globalize and shift to high-performance products.

Our growth strategy is to strengthen collaboration with regional partners, particularly in the MMA and PMMA chain, performance polymers, and high-performance graphite, particularly needle coke.

Our innovation strategy is to cultivate sustainable resources, centered on polymers made from biomass resources, and to contribute to the environment and carbon sustainability for society.

Many of our cash-generating businesses provide

sales of around 200 billion yen each. We will position them for the future by improving process technologies and minimizing costs, including in the PTA, coke, polypropylene, and phenol chains.

#### **P44: Industrial Materials—Growth Strategy**

We look for 430 billion yen in fiscal 2015 sales from our MMA and PMMA businesses. We will reopen plants and take other steps to attain a global market share of 45% for these products. We will push ahead to secure a market share of 60% to 80% in light guide plates for flat panel displays.

In performance polymers, we will cultivate global automotive and healthcare demand.

Our high-performance graphite strategy is to secure coal tar sources, largely from China, and draw on technology transfers in our knowledge business for growth.

#### **P45: Industrial Materials—Global Operations**

China and other Asian markets will be central to our globalization.

We are moving forward with the Alpha Project in Saudi Arabia for MMA monomers.

I will detail our collaboration with SINOPEC a little later.

#### **P46: Industrial Materials—New Process for C3/C4 and Sustainable Resources**

To prepare for reduced cracker production capacity and possible C3 and C4 shortages, we are making good progress on a project with JGC to make propylene from dimethyl ether. With tight demand and supply conditions for C4, we are working on process technologies to convert butane to crude

butadiene. And while it will take several decades to reach fruition, we will make preparations for sustainable resource-based crackers and biorefineries.

#### **P47: Industrial Materials—Innovation Strategy**

One example of sustainable resources is the use of isosorbide in bio-based engineering plastic offering outstanding optical properties for flat panel displays. We are collaborating with PTT of Thailand to lower the costs of *GS Pla*. We will cultivate bio-based polyethylene produced by Braskem of Brazil. Mitsubishi Plastics will build its polylactic acid compounds and other businesses.

#### **P48: Industrial Materials—Cash-Generating Businesses**

In PTA, we aim to generate 260 billion yen in net sales, lowering costs, refining our technologies, strengthening our knowledge business, and partnering with Chinese and Indian companies.

In coke, we seek 250 billion yen in net sales, and will deploy comprehensive coal chemistry.

We will increase sales of PP and compounds, particularly for the automotive market.

In PHL, BPA, and PC, we will launch a BPA and PC joint venture with China's SINOPEC in June 2011, and aim to generate 40 billion yen in sales from that operation in fiscal 2015. PHL, BPA, and PC operations should thus produce an aggregate 135 billion yen in net sales. We ultimately aim to expand overseas by using a non-phosgene DPC process.

#### **P49: Industrial Materials—Restructuring of Ethylene Center and Optimization of Derivatives**

Integration of ethylene center operations of

Mitsubishi Chemical and Asahi Kasei Chemicals in Mizushima and flexible downsizing will be the centerpieces of restructuring. In Kashima, we are undertaking regional partnerships to lower costs and will explore collaboration with refineries. Depending on circumstances, we will consider a single cracker in Mizushima and collaboration there with refineries.

#### **P50: Industrial Materials—Operating Income and Resource Allocation Plan**

Here, we plan to increase investments in MMA and other areas, while lowering R&D spending.

#### **P51: Industrial Materials—Operating Income by Segment**

With total operating income of 400 billion yen planned for fiscal 2015, we anticipate a good balance from three main drivers, comprised of 120 billion yen from Health Care, 130 billion yen from Performance Products, and 105 billion yen from Industrial Materials.

#### **P53: Global Operations**

Overseas businesses currently account for 34% of net sales. We seek to raise this proportion to 45% by fiscal 2015. These businesses currently represent 26% of operating income, and we seek to increase that to 50% by fiscal 2015, drawing on royalties from Johnson & Johnson, Novartis, and other companies.

#### **P55: Synergies**

When we announced our agreement on November 19, 2009, to integrate with Mitsubishi Rayon, we projected 10 billion yen from synergies. We now look to generate 43 billion yen from synergies by fiscal 2015.

#### **P57: Enhancing Shareholder Value**

We continue to target a payout ratio of at least 30%

to boost shareholder value. We will prioritize a balance of stable dividends while maintaining sufficient internal reserves to fund business development.

**P58: Management of Sustainability**

We are currently exploring sustainability management because we consider it important in management to go beyond economic benchmarks to encompass the public interest and the environment.

**P59: KAITEKI Activities**

CSR forms part of our *KAITEKI* values.

**P60: KAITEKI Indexes**

We are looking to quantify our Sustainability, Health, and Comfort index components.

**P61: Targets**

We plan to monitor overall evaluations encompassing everything from procurement to production and stakeholders, harnessing PDCA cycles in this process.

**P62: Organization for KAITEKI Project**

We will push ahead with a common approach, including for business companies, with a chief *KAITEKI* officer overseeing efforts.

**P63: The KAITEKI Institute: Focuses and Progress**

This institute began operating in April 2009. MCHC is currently considering how best to prepare for the next 20 to 50 years.

**P64: Aspiration—The MCHC Group**

The philosophy of “Good Chemistry for Tomorrow” underpins everything that the Group does. Our aspiration is to realize *KAITEKI* by factoring in our

corporate activities decision criteria of Sustainability, Health, and Comfort in exploring new businesses, while maintaining a balance between our Health Care, Performance Products, and Industrial Materials business domains.