Mitsubishi Chemical Holdings Group

Medium-term Management Plan

APTSIS 15 Step 2

Investors Meeting

March 5, 2013

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

Yoshimitsu Kobayashi

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

Shotaro Yoshimura

Representative Director, Member of the Board,
Deputy Chief Executive Officer

Shigeru Tsuyuki

Member of the Board,
Deputy Chief Executive Officer

Mitsubishi Chemical Corporation

Hiroaki Ishizuka

Representative Director, Member of the Board,
President and Chief Executive Officer

Mitsubishi Tanabe Pharma Corporation

Michihiro Tsuchiya

President & Representative Director

Mitsubishi Plastics, Inc.

Takumi Ubagai

Representative Member of the Board,
President & Chief Executive Officer

Mitsubishi Rayon Co., Ltd.

Hitoshi Ochi

Representative Director and President

P4: Agenda

Actually, we first announced *APTSIS 15* in December 2010 as a five-year plan. Here we will explain the plan as *Step 1* (fiscal years 2011 and 2012) and *Step 2* (fiscal years 2013 through 2015). Huge changes in market conditions caused us to prepare to announce the revision for *Step 2* in December 2012, but further developments in the political situation, foreign exchange values, and so forth, resulted in a slight delay in the announcement. Considerable uncertainties remain, but foreign exchange has gone from ¥78/$1 to ¥93-4/$1 and we have revised the plan, taking these changes into consideration, under the so-called “Abenomics” seeking to recover the Japanese economy with “three arrows”: positive financial policy, bold monetary easing, and growth strategy encouraging private investment.

I will now explain the agenda. First, the results of the two-year *Step 1*, and then the objectives of the three-year *Step 2*. After that, I will talk about our new business portfolio management. In addition to the two-axis portfolio management method used thus far, a third axis measuring earnings volatility has been added. After the Lehman Shock and sovereign risk crisis exemplified by the situation in Greece, the Chinese market shrank, creating an oversupply situation. We also decided to review and reorganize cyclical and high-volatility businesses, discussed strategies to deal with problems, and added a Z-axis to monitor factors causing change. In addressing business strategies, we will not focus on any one of the Performance

Products, Health Care, and Industrial Materials domains, but will maintain our three-pillar strategy. I will explain the strategies the Group holds in common, that is, the changes in the resource allocation plan announced in 2010, our thinking on M&A, and how to move ahead with structural reforms. I will also discuss the business synergy attained and directions of our advance during the year since Mission Coordinators were assigned to achieve horizontal communication among our businesses. Further, I will outline the results achieved over two years of cost-cutting synergy in overlapping departments. In addition, I will examine how our Group strategy relates to shale gas, how the recent acquisition of Qualicaps Co., Ltd., which was decided in late 2012, will help our healthcare solutions business, and near future directions in both cases. Looking at regional strategies, I will talk about our views on overseas sales ratios and finally, our thinking about the environment, society, corporate governance, and technology, as well as three-dimensional management.

P5: *APTSIS 15 Step 1*: Operating Results

Let's look at the operating results of the past seven years under Mitsubishi Chemical Holdings Corporation (hereinafter MCHC). In October 2005, MCHC was established as a holding company for Mitsubishi Chemical Corporation and Mitsubishi Pharma Corporation. In October 2007, Tanabe Co., Ltd., merged with Mitsubishi Pharma and affiliated with MCHC. Mitsubishi Plastics, Inc. joined MCHC as a wholly-owned subsidiary in October 2007, and Mitsubishi Rayon Co., Ltd. became a wholly-owned subsidiary of MCHC after its management integration in October 2010. With such large mergers, business capacity grew tremendously, but with the Lehman Shock, operating income dropped sharply. It recovered in fiscal 2010, but this fiscal period has been very severe. Based on this background, I will talk about actions we will execute from the year ending in March 2014 (fiscal 2013) to the year ending in March 2016 (fiscal 2015).

P6: *APTSIS 15 Step 1*: Operating Income by Segment

As of December 2010, we forecast operating income of ¥230 billion for fiscal 2012, but we now estimate ¥100 billion, fully ¥130 billion below our original numbers. The Health Care segment did not see a significant decline, but the Electronics Applications segment also faces considerable difficulty in. Market conditions adversely affected the Designed Materials and Polymers segments as well as Chemicals segment, so materials are also seeing difficult times.

P7: Summary of Current Conditions

Here's what it looks like if you take Materials, Green Energy, and FPD-related items as a single entity. Since the forecasts made in the autumn and winter of 2010, market conditions have changed significantly. PTA trended steadily upward in fiscal 2010 and fiscal 2011. Lately, the PRC has significant oversupplies, which makes things difficult. The same is true with polyolefins and PHL/PC chains as well. We are doing our best to reduce costs, but the profit margins are such that cost reduction alone cannot restore profitability. In the relatively new business of Green Energy, our entry into the automotive lithium-ion battery materials market has been delayed. In LEDs we face oversupply of some items and our own delays in technology. The market, therefore, is in the period still before the dawn. We have seen some cases of overinvestment, and the supply-demand balance is unfavorable as well. In FPD, OPL film is doing very well, and PET film is beginning to make a comeback. We misjudged the market for PMMA (acrylic resin) light guide panels and demand has plummeted. Reacting quickly to the market, we shelved investment plans and started cost-reduction measures, but making a profit is extremely difficult.

P8: *APTSIS 15* Strategies

The basic concept behind *APTSIS 15* is "grow, innovate, and leap ahead by orchestrating the Group strengths." It's the concept of moving forward, including M&A. It's a matter of transformation into high-value-added businesses while reforming our business structure, and we are moving forward in our global business while focusing on green businesses and unmet medical needs. We will be aggressive in strategic investment. This basic strategy will not change.

P9: Viewpoints for Reconsideration (Synergy + Transformation)

Two focal points in our review are synergy and transformation. Traditionally, business life cycles have been viewed in two dimensions. Is it a next-generation growth business? Is it a business that can be grown through investment? Is it a cash cow but not a business expected to grow further? Is it a business that should be restructured or withdrawn? In other words, they were judged and separated according to their product life cycles and their growth potential and profitability. This time, however, we added another axis, looking at how the businesses were likely to change, and whether the markets were cyclical or represented high volatility. So this time, our forecasts took on a different dimension.

P10: *APTSIS 15 Step 2*: Assumptions of the Plan

Certain assumptions have changed. Assumed foreign exchange went from ¥80/$1 to ¥90/$1. Assumed naphtha price changed from ¥55,000/kl to ¥65,000/kl. But no major changes in assumptions were made.

P11: Operating Income by Segment in FY2015

Our operating income target fell by ¥120 billion from ¥400 billion to ¥280 billion. The fall in the Electronic Applications segment was especially substantial, but in terms of size, the declines in the Polymers and Chemicals segments were also considerable. We can also say that expected new businesses have not been materialized yet. The Health Care segment is relatively stable. Operating income by M&A dropped from ¥70 billion to ¥20 billion. We have given a great deal of consideration to businesses that tend to fluctuate drastically, and made conservative downward revisions for targeted operating income in each segment. The final target at this time, hence, was changed to ¥280 billion.

P13: Reconsideration of Business Management Method

This is a graphic representation of what I have just talked about. Using product life cycles based on growth potential and profitability, we used to classify our businesses into next-generation growth businesses, growth businesses, cash-generating businesses, and businesses to be restructured. We used to consider how we were to transform businesses to be restructured, how to accelerate the growth of next-generation growth businesses, and how to gain quick payoffs from investments in growth businesses. But this time, we added the Z axis of earnings volatility, and the level of volatility gave us a new aspect to consider. So now our business management method divides our businesses along three distinct axes.

P14: Defining the Type of Growth Model

Referring to volatility in operating income over the past 10 years, when volatility was greater than the average operating income ratio, businesses were termed “volatile businesses.” When volatility was low and operating income ratio was high, the businesses were termed “stable businesses.” And businesses marked for strategic growth acceleration were termed “growth driver businesses”.

P15: Performance Results and Plans by Type of Growth Model

The graphs show the results and forecasts for total net sales and operating income of our principal businesses in stable businesses, volatile businesses, and growth driver businesses. Basically, there are no major fluctuations in net sales, but operating income is affected by large up-and-down fluctuations in volatile businesses. Naturally, after the Lehman Shock in fiscal 2010, stable businesses recovered well, and continue to show relatively stable returns. Growth driver businesses have yet to make steady contributions to profits, but I hope they will live up to their potential by fiscal 2015. These forecasts total ¥260 billion.

P16: Relationships between Current Business Portfolio Management and Types of Growth Models

In current models for business portfolio management and types of growth models, next-generation growth businesses become growth driver businesses. Growth businesses, depending on the business, become growth driver or stable businesses. Cash-generating businesses become stable or volatile. Businesses to be restructured are volatile businesses. Many businesses that were cash-generating businesses under current business portfolio management are designated as businesses to be restructured.

P17: New Business Portfolio (Growth Model)

Current stable businesses include polyester film, OPL film and others, pharmaceuticals, MMA, specialty chemicals, high performance films, and coke. Of businesses considered cash-generating in 2010, many are now rated as businesses to be restructured, including major petrochemical businesses. Growth driver businesses include those currently identified as next-generation growth businesses, as well as those thought to be growth businesses but whose time line has dragged, or start-up has been delayed. Of course, we are taking a hard look at their earnings structures.

P18: Stable Businesses: Key Points of Strategy and Implementation

The profit figures we can expect from stable businesses in fiscal 2015 depend a great deal on the amount of cost reduction achieved, unit sales increases, improved product mixes, increase in production capacity, and greater profitability from overseas operations. Our goal is to raise the ¥145 billion in operating income estimated for fiscal 2012 to ¥225 billion in fiscal 2015. We used the more positive estimates of volatility in stable businesses.

P19: Volatile Businesses: Key Points of Strategy and Implementation

We will execute thorough cost reduction with Mitsubishi Plastics performance molding products, petrochemicals, and others in the Industrial Materials domain. In addition to business portfolio reforms, introduction of price formulas, and decommissioning of the No.1 naphtha cracker at the Kashima Plant of Mitsubishi Chemical, we expect considerable increase in volumes. The market exhibits high volatility, but we expect to turn the ¥20 billion deficit of fiscal 2012 into a ¥20 billion profit in fiscal 2015. In our forecasts, we set goals using the lower level of the volatility factors.

P20: Growth Driver Business: Key Points of Strategy and Implementation

Many growth driver businesses are still young, or the market development and expansion have been delayed, or they have not yet reached the top levels of technological expertise, and so on. Development and introduction of new products are vital, and we adopt goals using the upper level of the volatility factors as a base. We forecast the ¥25 billion loss in fiscal 2012 to be a profit of ¥10 billion in fiscal 2015.

P21: New Targets and Original Targets

Putting it all together, our operating income target is ¥260 billion plus an extra ¥20 billion achieved through leaping ahead (M&A) for a total of ¥280 billion. Originally, our organic growth target was ¥330 billion, but volatility + growth driver + stable businesses now give us a target of ¥260 billion. Originally, we estimated ¥70 billion from M&A, but have reduced that target to ¥20 billion.

Our net sales target was originally ¥5 trillion, but we have made a downward revision to ¥4.3 trillion.

P22: Goals for FY2015

Our ROA is 7% or more pretax. The Net D/E ratio (excluding minority interests in consolidated subsidiaries) is 0.8 and 0.5 with minority interests included. We aim to have more than 45% of our gross income from overseas. We reduced CAPEX, investments and loans from ¥1 trillion to ¥840 billion.

P23: Investments and R&D Expenditures

The original plan put investment at ¥1 trillion (a cash-flow base of ¥940 billion) and R&D at ¥750 billion. Now the plan is for ¥840 billion in investments and ¥700 million in R&D. Each field was cut slightly, but considerable cuts were made in the Electronics Applications segment, taking

¥190 billion down to ¥100 billion. These changes were necessary because of delays in market development and expansion and an oversupply situation and demonstrate that we proceed with care. Together, the total of investments and R&D expenditure is ¥1.54 trillion.

P25: "Leaping Ahead" Strategy

M&A in *Step 1* included gaining a majority share in The Nippon Synthetic Chemical Industry Co., Ltd., which produces OPL film in the Performance Products domain. We also acquired TK Industries GmbH and Challenge Co., Ltd., and acquisition of Aldila, Inc. is under way. An agreement on the acquisition of Qualicaps was concluded at the end of 2012, with closing scheduled on March 1, 2013. Qualicaps business is already under way. We concluded a sales tie-up with Daiichi Sankyo Co., Ltd. in the diabetes treatment field, centering on the new drug *Tenelia*. In the Industrial Materials domain, Mitsubishi Rayon concluded a joint venture agreement with SABIC regarding MMA/PMMA business. And, Mitsubishi Chemical established a joint venture with Posco Chemtech Co., Ltd. in the high performance graphite.

P26: Business Structural Reforms

We are implementing our business structural reforms as planned. In the Industrial Materials domain, during *APTSIS 10*, between fiscal 2008 and fiscal 2010, we closed businesses in activated carbon, fertilizer, and other businesses valued at between ¥250 billion and ¥300 billion. In fiscal 2011 and fiscal 2012, we sold the Mitsubishi Plastics pipe material business to Sekisui Chemical Co., Ltd. We shut down our performance molding products plant in Slovakia. In the Health Care domain, we integrated the Mitsubishi Tanabe Pharma Corporation's plasma derivative operations into Japan Blood Products Organization, and transferred the active pharmaceutical ingredients in the fine chemical business to API Corporation and Taisho Technics Co., Ltd. Capital ties with Choseido Pharmaceutical Co., Ltd. were dissolved. In the Industrial Materials domain, preparations are ongoing for decommissioning of the No. 1 naphtha cracker and expansion and full operation of the No. 2 naphtha cracker at the Kashima Plant of Mitsubishi Chemical in 2014. Cracker downsizing at the Mizushima Plant of Mitsubishi Chemical was completed, and formation of an alliance with Asahi Kasei Corporation in the aromatics-related business is under way. We shut down the No. 2 line of 1,4-BD in C4 chemicals. We also shut down one line each at the Kashima Plant of Mitsubishi Chemical and the Goi Plant of Japan Polypropylene

Corporation. One PP production line has been decided to shut down at the Kawasaki Plant of Japan Polypropylene.

P28: Group Synergy: Progress

In April 2012, presidents of the business corporations were named Mission Coordinators, so we have reached a position where we can see concrete results through the horizontal axis. It's been nearly a year since this organization began, and we are seeing the impact in healthcare solutions, polymer processing/information and electronics, water treatment systems and services, carbon fiber and composite materials, and specialty chemicals, among others.

P29: Synergy Units: Healthcare Solutions

Healthcare involves more than just Mitsubishi Tanabe Pharma. Mitsubishi Plastics has plant factories. Mitsubishi Chemical has *MIMAMORI-Gait* (monitoring for Parkinson disease patients) and biomarkers. Mitsubishi Rayon has an artificial carbon dioxide unit bath for medical use (adsorbs CO_2 with a hollow fiber membrane when it exceeds 1,000ppm). And we think these can be integrated to offer service-oriented businesses. We also have several projects under way, such as a healthcare information service, new commercial production systems for vaccines with plant factory technology, development of medical devices using artificial carbon dioxide unit bath, regenerative medicine including iPS cells, and others. We continue to deepen the synergy and prepare to create new business units that include related businesses.

P30: Synergy Units: Polymer Processing/Information and Electronics

Materials will be the province of Mitsubishi Chemical and Mitsubishi Rayon, and final processing and molding will be mainly handled by Mitsubishi Plastics. As a result, some very interesting products are emerging. New aspects are showing up as LED lighting materials, printed electronics, OPVs, and OLED materials, among others. As of April 1, 2013, Yuka Denshi Co., Ltd., will be transferred from Mitsubishi Chemical to Mitsubishi Plastics, which has stronger business experience in molded products. Further, mold forms for test piece generally used for a mortar compressive strength test that use polybutylene succinate (PBS) as a low material have been launched. Polycarbonates made from isosorbide polymer have long been under development at Mitsubishi Chemical and the company plans to take its 5,000 t/y production facility at Kurosaki Plant up to

16,000 t/y. Mitsubishi Chemical and Mitsubishi Plastics will jointly turn the engineering plastics into film. Remote phosphor LED lighting materials using phosphor composite is also under development by these two companies.

P31: Synergy Units: Water Treatment Systems and Services

Water-related products include flocculants from Dia-Nitrix Co Ltd., ultra-pure water treatment equipment from Nippon Rensui Co., water treatment-related engineering by Mitsubishi Chemical Engineering Corporation, membranes and MBR technology from Mitsubishi Rayon, the *Aqua Clara* mineral water business from the Kansai Coke and Chemicals Co., Ltd., Mitsubishi Chemical Medience Corporation, ion-exchange resins, and others. In March 2013, we began collaborating with Miura Co., Ltd., a leading domestic manufacturer of small once-through boilers, aiming to combine MCHC Group's strengths in membranes/MBR, flocculants, and so on, with Miura's strengths in maintenance, water analysis, and other areas. We are emphasizing operation and maintenance (O&M) businesses, and are moving into markets in ASEAN countries and the PRC.

P32: Synergy Units: Carbon Fiber and Composite Materials

Even though we have been in the carbon fiber business for 30 or 40 years, it is still a very difficult market. Still, it offers great potential, so we have set carbon fiber and composite materials as growth driver businesses. By combining Mitsubishi Chemical's range of plastics, Mitsubishi Rayon's PAN-based carbon fibers and precursors, and Mitsubishi Plastics' pitch-based carbon fibers, then cutting cycle times and reducing costs, we will start creating thermoplastic composite materials. Our Group is the only entity with both PAN-based and pitch-based carbon fibers, so we feel that a composite of the two will offer new and interesting products. The key point at the moment is how we can adapt carbon fiber and composite materials as lightweight materials in automobiles, after cost reductions are achieved, in pressure vessels, for which demand is expected to rise as use of shale gas increases, in wind power, which has been lagging somewhat but is certain to grow in the future, and in other industries where reduced weight will be advantageous.

The carbon fiber composite project was established in September 2012, and we are working on creating new products or businesses by combining our material technologies (PAN-/pitch-based, etc.). To build a consistent product chain including intermediate materials and molding products, Mitsubishi Rayon has concluded a merger agreement with Aldila, and acquired TK Industries and Challenge.

P33: Synergy Units: Specialty Chemicals

Categories in this field can be roughly divided into three: electronics materials, living and health, and coating and additives. In Japan, companies in coating and additives include Nihon Kasei Chemical Company Limited, Chuo Rika Kogyo Corporation, Mitsubishi Chemical, and API. There is some overlap and some complementation. How to consolidate and synergize the industry remains a very important point. In electronics materials, we are faced with the need to synergize semiconductor materials, resists, and EL chemicals. In living and health, three companies—Mitsubishi Chemical, Mitsubishi Kagaku Foods Corporation, and Mitsubishi Rayon — must collaborate on such things as ion-exchange resins, food ingredients, and analytical instruments, but we can expect new developments in these fields. Regarding coating and additives, we are studying collaboration among cross-border companies. And as part of that, MCHC acquired a majority share in the Nippon Synthetic Chemical Industry. Mitsubishi Rayon's subsidiary, MRC Polysaccharide Co., Ltd. will be integrated into the Food Ingredients Dept. of Mitsubishi Chemical. Further, moving ahead with M&A (leaping ahead strategies) will serve to strengthen our portfolio.

P35: Group Synergy Progress

The Group's financing and administrative functions were integrated as of June 2012. A new company, Mitsubishi Chemical Holdings Corporate Staff, Inc., will be established on April 1, 2013, to handle administrative, accounting, and human resource management functions, to enhance these functions and increase efficiency.

P36: Realizing Synergies: Objectives and Accomplishments (*Step 1/Step2*)

We had a goal of realizing ¥6 billion in the "cost and R&D" category by centralizing purchasing and so on during fiscal 2011 and fiscal 2012. Further, another ¥5 billion in savings was to be realized in businesses through the horizontal axis. Now the cost reduction estimates are ¥6.7 billion with the former and ¥3.7 billion with the latter. In the coming three years, the cost-cutting should increase to ¥22 billion and ¥16 billion, respectively. Over the five-year period, our objective is ¥48.4 billion in cost reductions, more that ¥6 billion above the initial plan.

P37: Agenda: 4. Basic Business Strategies

Looking at net sales in three domains — Performance Products, Health Care, and Industrial Materials, sales percentages of the Industrial Materials and Health Care domains were mostly unchanged at slightly over 50% and 17-18%, respectively. The Performance Products domain showed a slight increase in sales, but the percentage remained mostly unchanged. In fiscal 2010, the Industrial Materials domain accounted for about 47% of operating income, with 37% from the Health Care domain and the remaining 16% from the Performance Products domain. In fiscal 2011 and fiscal 2012, the Health Care domain increased from 37% to 56%, then to an estimated 77% for fiscal 2012, while commodities slumped. In the future, including the establishment of new businesses we are looking at ways to create an ideal profit base in three years, in which each segment contributes one-third.

P38: Performance Products: Strategies

Based on green businesses, we want to step up our pursuit of added value, and reach out to global markets. Net sales and operating income receive strong support from stable businesses such as specialty chemicals, engineering plastics, and OPL film. Volatile businesses include performance molding products. A crucial point is the expansion of the growth driver businesses. Commercialization of OPV modules and materials has already begun, but the key is whether development of their markets and technologies moves forward as scheduled. Other key issues include the delay in market development and expansion for businesses such as *AQSOA*, which absorbs water at low temperatures and is used as a material for catalysts and air conditioning systems, carbon fiber and composite materials, GaN substrates, and LED end products and movements around lithium-ion battery materials which are in an oversupply situation.

P39: Stable Businesses: Polyester Film

The new plant in the PRC will have two lines. The operation schedule for the second line is currently under review, but the first line will start operation in the second quarter of fiscal 2013. This line will be used mainly, but not exclusively, for FPD production. The key is sales of non-FDP items. We will also make further cuts in fixed costs in Japan, and focus our sales activities on film applications in non-FPD items, such as touch panels and solar batteries.

P40: Growth Driver Businesses: Carbon Fiber and Composite Materials

We want to promptly establish coordinated value chains for carbon fibers, intermediate materials, and molded products. The current situation is difficult because of the worsening supply/demand balance. We estimate the market will increase from 40,000 t/y in 2012 to 65,000 t/y in 2015. It will be critical to increase cost competitiveness under this situation and maintain the profitability of intermediate materials and molded products. We are working on enhancing intermediate material business through M&A and business alliances and establishing a sustainable earnings structure through by creating a competitively superior value chain. The main point is cost reduction to focus business development on industrial and automotive applications.

P41: Performance Products: Operating Income and Resource Allocation Plan

As a result, this is the direction of the Performance Products domain: We will allocate more resources for investments and R&D in the next three years (*Step 2*) than in the past two years (*Step 1*).

P48: Health Care: Strategies

The keys are: increase product values through Life Cycle Management (LCM) of priority products and new pharmaceuticals to nurture blockbuster products; whether to position those products as pillars of near-term profits; and how to respond to unmet medical needs. It is also important to stabilize the profits of Qualicaps and Mitsubishi Chemical Medience. Though it is still in the earliest stage, nurturing of healthcare solutions to meet unmet medical needs is vital to our strategy in the Health Care domain.

P49: Stable Businesses: Pharmaceuticals

Gilenya, a therapeutic agent for multiple sclerosis (MS) has been out-licensed to Novartis, and we can receive earnings from royalties on its sales. Its net sales reached about $1.2 billion in a little over two years since its launch, and the product is growing into a blockbuster. The target market in Japan is 10,000-20,000 patients, and 2.5 million worldwide, and we anticipate continued growth. *Remicade*, which is a major pillar of Mitsubishi Tanabe Pharma Corporation, expanded its use for treatment of Crohn’s disease and rheumatoid arthritis in the joints. Along with *Symponi*, a new agent for injection under the skin, net sales in Japan of these two products is projected to top ¥100 billion for fiscal 2013, creating a strong sales base.

P50: Stable Businesses: Pharmaceuticals

We set a target of ¥100 billion operating income with ¥500 billion net sales for fiscal 2015. We want to earn stable after-tax income of ¥100 billion through royalties for *Remicade* and *Simponi*, *Imusera*, *Telavic*, *Lexapro*, *Tenelia*, TA-7284, which will soon be certified, and *Gilenya*.

P51: Stable Businesses: Pharmaceuticals

TA-7284 is Japan's first SGLT2 inhibitor (Canagliflozin: therapeutic agent for type 2 diabetes), and acquired a recommendation for approval from a U.S. FDA Advisory Committee. In Japan, it is scheduled for filing in the first half of fiscal 2013, and we are expecting it to develop into a worldwide blockbuster product.

P52: Stable Businesses: Pharmaceuticals

We believe we can continually supply products by fully developing new pipelines.

P53: Health Care: Operating Income and Resource Allocation

We expect to see generally stable business from fiscal 2012 through fiscal 2015. We will also spend more on R&D in the next three years than in the past two years.

P56: Industrial Materials: Strategies

Stable businesses include MMA, cokes, and performance polymers. Volatile businesses include PTA, basic petrochemicals, PHL/PC chain, polyolefins, AN, and its derivatives. And growth driver businesses include sustainable resources (biomass polymer).

P57: Stable Businesses: MMA/PMMA

MMA had faced a worsening of the demand/supply balance, but demand is expected to recover starting in the second half of this year and the market will move to a tightly balanced state. Using the advantage of MMA, which has a 40% worldwide share, we will develop global operations. We are also making steady progress on the α project in the Middle East, bringing the Beaumont plant in the U.S. up to full capacity operation, and earnestly developing a plan for use of U.S. shale gas.

P58: Volatile Businesses: PTA

Spreads still range from US$100 to $115 per ton. We expect to stabilize operation by bringing up the operation rate of the two production lines in India to over 90% as a self-initiative. We will press ahead with efforts to shift to electricity purchases and shift to coal thermal power generation for cost reduction. To stabilize the spread, we will also develop a formula for linking prices to raw material costs and introduce floors/ceilings on market conditions,

P59: Industrial Materials: Operating Income and Resource Allocation Plan

We want to turn the volatile businesses' operating income to profitability in fiscal 2015.

P66: Developments that Have Surfaced as a Result of the Shale Revolution in the United States

Production volume of U.S. shale gas has increased about 20-fold in the last 10 years or so. The prices have averaged US$3/mmBTU, and will be $10/mmBTU in the Japanese market. Power companies have started examination of the shale gas procurement. We need to think of both defensive and attack strategies.

P67: State of the U.S. Chemical Industry

The U.S. is also returning to manufacturing. The focus is on ethylene and propylene, and C4 (butadiene) and C6-C8 (BTX) will be in short supply.

P68: MCHC Strategy for Responding to the U.S. Shale Revolution

The Nippon Synthetic Chemical Industry announced plans for an increase in EVOH resin production capacity using inexpensive ethylene in Houston. Mitsubishi Rayon is considering building an MMA plant that uses alpha technology.

P69: MCHC Strategy for Responding to the U.S. Shale Revolution

Looking at crackers in Japan, C2 and C3 supply volumes are in surplus, but there is a shortage of C4 and BTX. We have strategies to secure stable sources of aromatic materials through tie-ups between the Kashima Plant of Mitsubishi Chemical and Kashima Aromatics Co., Ltd., and between the Mizushima Plant of Mitsubishi Chemical and the Mizushima industrial zone, and then make use of the BtcB (butene to crude butadiene) process, for which the technology is nearly complete.

P70: MCHC Strategy for Responding to the U.S. Shale Revolution

We continue SHARQ operations for continual use of existing petroleum resources as planned. The MRC Middle East α project is under way toward a projected start of operation in fiscal 2015. We expected it to contribute to earnings for fiscal 2015 when this project was planned in 2010, but we will actually see the effect on earnings in fiscal 2016 or later.

P72: Healthcare Solutions Strategy

Pharmaceuticals, active pharmaceutical ingredients, diagnosis, and Qualicaps targeted mainly sick care. We started preparation on our concept that health care solutions will become more important based on aging populations and changing social conditions. We position regenerative medicine, companion diagnostics, artificial carbon dioxide unit baths for medical use, *MIMAMORI*-Gait, and healthcare information services in the growth driver businesses category.

P73: Business Measure: Entering the Business of New Vaccine Production Systems

We will carry forward the development of VLP vaccines by Medicago Inc. while using our enclosed plant factory system to produce tobacco leaves for vaccine production.

P74: Business Measure: Acquisition of Qualicaps

We decided to acquire Qualicaps in December 2013. It is No.1 in the world for cellulose capsules for medical use and laser printers for pharmaceutical imprinting.

P75: Synergies of Qualicaps with MCHC Group Existing Businesses

We anticipate synergistic effects between Qualicaps and various MCHC Group companies: Mitsubishi Plastics (plastics molding technology), Mitsubishi Chemical (process control), Mitsubishi Rayon (sales expansion in raw materials), and others. We think we can promote those synergies and others, including sales expansion with Mitsubishi Tanabe Pharma and two-way operating synergies with API.

P76: Business Measure: Creating the Base for a New Business Unit

We plan to establish a healthcare business operating company that includes our affiliate Qualicaps. The key is how we can turn affiliated companies into new units.

P78: Development of Overseas Operations (Regional Strategy) *Step 2*

We planned to increase the composition of overseas net sales from 34% in fiscal 2010 to 45% in fiscal 2015, but actually it is 35% now. Our target of 45% was not changed after the most recent review of our plan, but we targeted our composition of operating income at 45% even in consideration of royalty earnings.

P80: MOS Indexes

We have prepared MOS Indexes of overall corporate value including governance to quantify the “management of SUSTAINABILITY,” which covers the following main goals: never allow major accidents or major compliance violations. And three values—responding to needs for sustainability (green), health, and comfort—are quantified as criteria. In addition, “management of technology” is also quantified.

P81: Progress toward MOS Indexes (Expected Results for the MCHC Group)

We set 300 points as the overall perfect score for fiscal 2015, and rate MCHC and every other subsidiary. The current score is 190 points. Part of the score is linked to net sales. In particular, material-related companies have a tough time. Mitsubishi Tanabe Pharma is maintaining strong performance.

P82: Expanding Scope of MOS Indexes and Reconsideration of Targets

Situations have changed, and we introduced new Sustainability (Green) and Comfort Indexes, and reviewed and revised Health and Comfort Indexes.

P83: MOS Indexes toward FY2015

We are reviewing our quantification of CO_2, Quality of Life (QOL), and accident issues.

P84: MCHC Management of Technology

We are putting together ways of approaching joint quantitative evaluation: business strategy, R&D strategy, and intellectual property strategy. This can be used for evaluation of production sites and research centers. We plan to start a partial implementation of the management of technology including R&D and intellectual property indexes.