



Sustainability

APTSIS 15

Mitsubishi Chemical Holdings Group Investor Meeting



Health

June 12, 2012

Yoshimitsu Kobayashi
President & Chief Executive Officer
Mitsubishi Chemical Holdings Corporation



Comfort

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

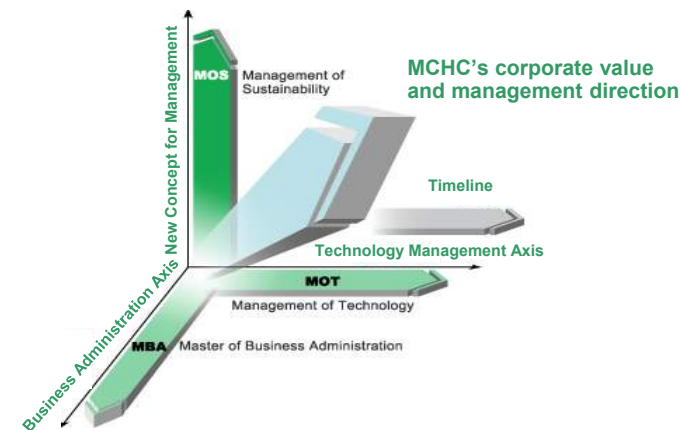
List of Abbreviations

MCHC: Mitsubishi Chemical Holdings Corporation	MOS: Management of SUSTAINABILITY
MCC: Mitsubishi Chemical Corporation	MMA: Methyl methacrylate
MTPC: Mitsubishi Tanabe Pharma Corporation	PMMA: Polymethylmethacrylate
MPI: Mitsubishi Plastics, Inc.	PHL: Phenol
MRC: Mitsubishi Rayon Co., Ltd.	PCR: Polycarbonate resin
NNE: Nishi Nippon Ethylene LLP	BPA: BPA: Bisphenol-A
AKC: Asahi Kasei Chemicals Corporation	PTA: Purified terephthalic acid
JXE: JX Nippon Oil & Energy Corporation	TPA: terephthalic acid
	PP: Polypropylene
1Q: April 1 – June 30	PVC: Polyvinyl chloride
2Q: July 1 – September 30	VCM: Vinyl chloride monomer
3Q: October 1 – December 31	CHX: Cyclohexane
4Q: January 1 – March 31	CPL: Caprolactam
1H: April 1 – September 30	PX: Para-xylene
2H: October 1 – March 31	SM: Styrene monomer
FY2011: April 1, 2011 – March 31, 2012	1,4-BG: 1,4-butandiol
FY2012: April 1, 2012 – March 31, 2013	PE: Polyethylene
	EO: Ethylene oxide
	EC: Ethylene carbonate
	EG: Ethylene glycol
	PVOH: Polyvinyl alcohol
	FCC: Fluid catalytic cracking
	GaN: Gallium nitride
	MBR: Membrane bioreactor

Today's Agenda

■ MCHC (The *KAITEKI* COMPANY)

- Review of Business Results
- Enhancing Group Strengths
- *KAITEKI* Management and MOS Indexes
- Prospects under *APTSIS 15*



- MCC Reforming Structure and Transforming Domestic Petrochemicals Business
- MTPC Healthcare Solutions and MTPC Topics
- MPI Polyester Film Business, *MAFTEC* Business, and Agribusiness Solutions
- MRC MMA/PMMA, Carbon Fibers, and Aqua

Mitsubishi Chemical Holdings Corporation

The *KAITEKI* COMPANY

1. Review of Business Results

- 1-1: Business Results and FY2012 Forecasts
- 1-2: Business Results and FY2012 Forecasts by Segment
- 1-3: Current Market Status and Forecasts for Major Products

2. Enhancing Group Strengths

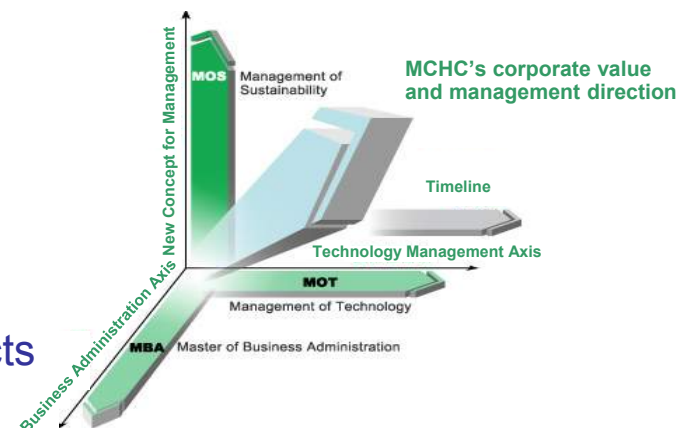
- 2-1: Further Transforming Management Structures of the MCHC Group
- 2-2: Relocating and Consolidating Head Office Functions
- 2-3: Reforming Structure and Transforming Domestic Petrochemicals Business

3. *KAITEKI* Management and MOS Indexes

- 3-1: MOS Indexes
- 3-2: Examples of MOS Results in FY2011

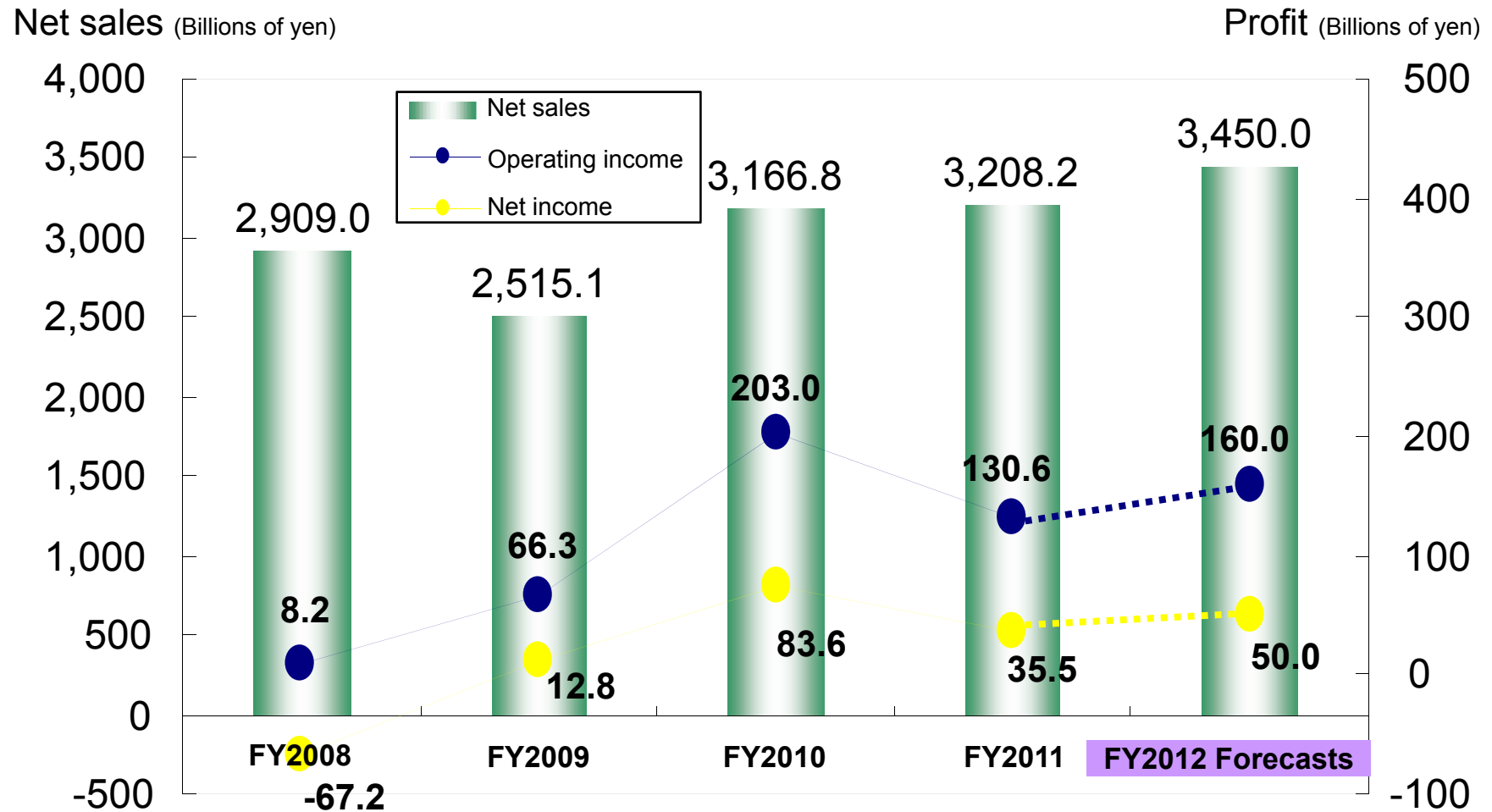
4. Prospects under *APTSIS 15*

- 4-1: *APTSIS 15* Reference Figures and Forecasts for FY2012
- 4-2: Difference between the FY2012 Forecasts and *APTSIS 15* Reference Figures by Segment
- 4-3: The *APTSIS 15* Plan



1-1: Business Results and FY2012 Forecasts

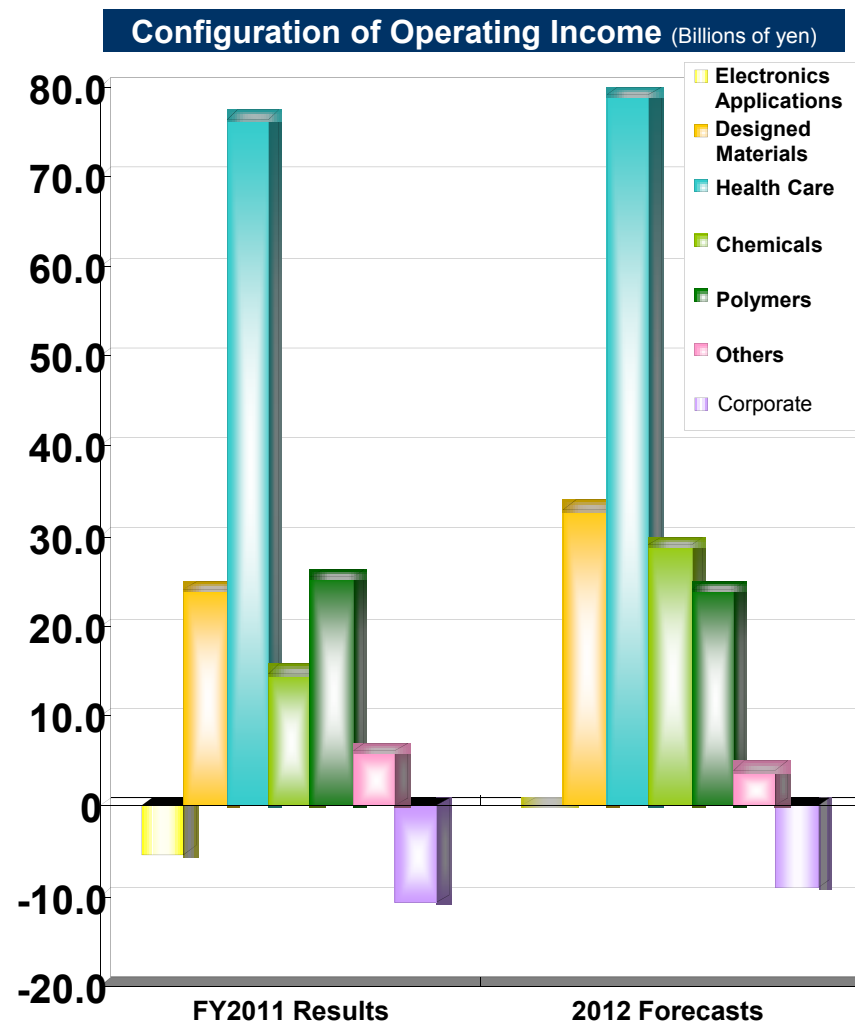
FY2011 profits down due to the Great East Japan Earthquake, strong yen, and market deterioration; aiming for recovery in FY2012



1-2: Business Results and FY2012 Forecasts by Segment

Economic climate and market changes remain a concern for FY2012, but aiming for profit increase by recovering in volumes and rigorous cost reductions

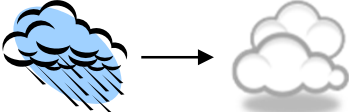


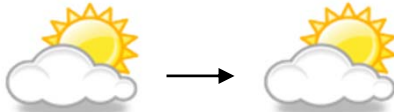


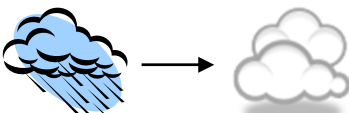


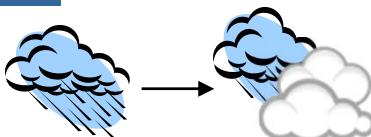


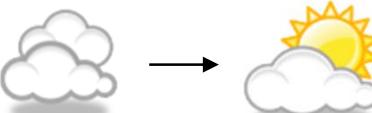


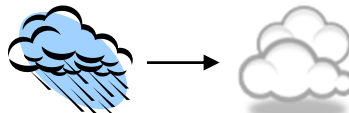


Operating Income FY2011 Results vs. FY2012 Forecasts (Billions of yen)			
	FY2011 Results	FY2012 Forecasts	Increase or Decrease
Electronics Applications	(5.3)	0	5.3
Designed Materials	23.1	33.0	9.9
Health Care	76.4	79.0	2.6
Chemicals	14.8	29.0	14.2
Polymers	23.8	24.0	0.2
Others	6.1	4.0	(2.1)
Corporate	(8.3)	(9.0)	(0.7)
Total	130.6	160.0	29.4



Some consolidated subsidiaries in the Polymers segment have been transferred to the Designed Materials segment. Part of expenses for basic research activities previously recorded in Corporate have been transferred to the Designed Materials segment, as a result of research progress. Concomitant with these changes, FY2011 results have been reclassified for comparison with fiscal 2012 forecasts.

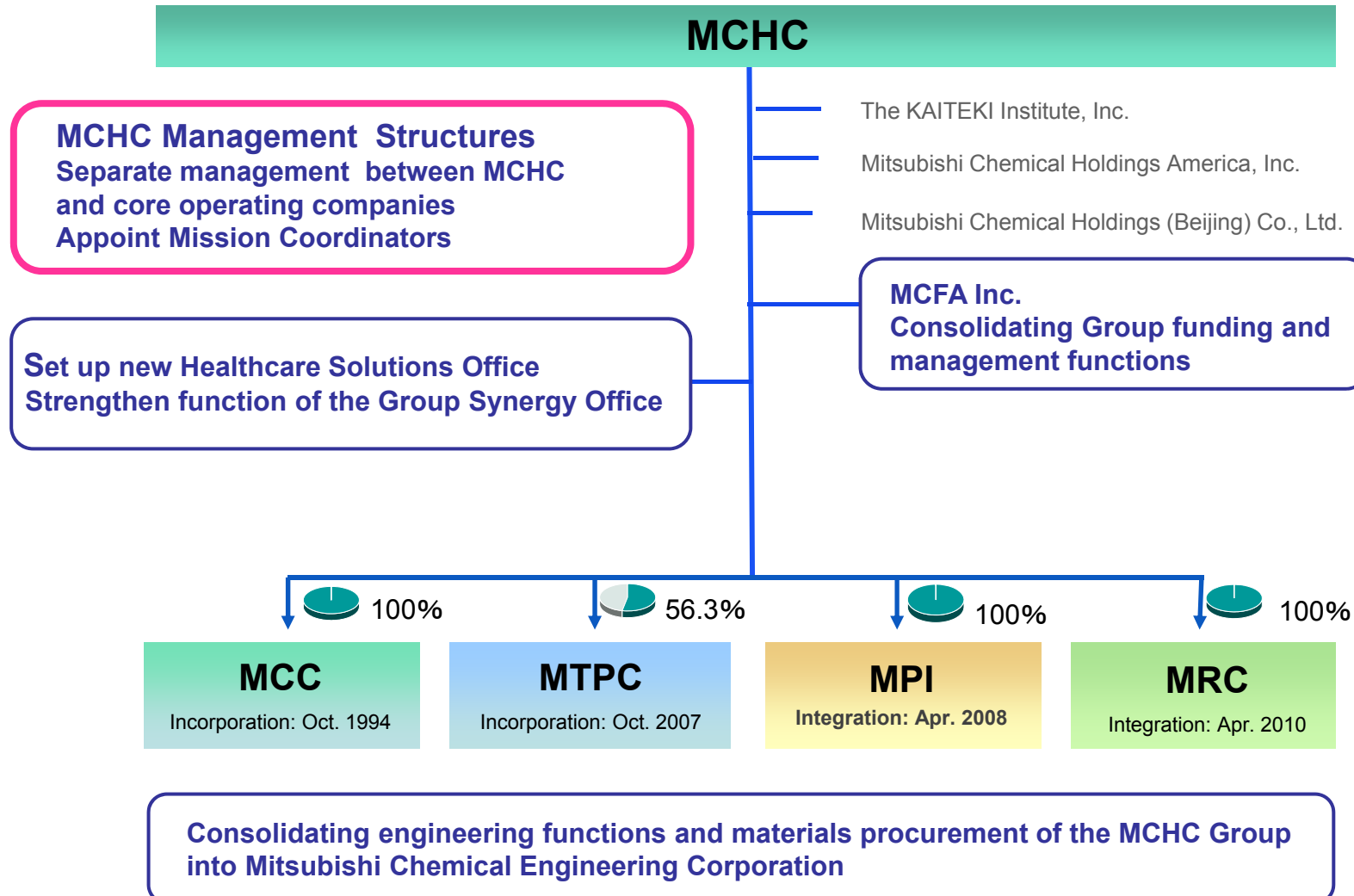
1-3: Current Market Status and Forecasts for Major Products

FY2012 forecasts vs. 4Q FY2011 results

<p>MMA/PMMA</p>  <p>MMA bottomed in Dec/Jan and the market is improving. Price adjustments, volume growth and rationalization should contribute from 1Q FY2012. In PMMA, aiming to raise capacity utilization through sales increase for FPD applications and shift to general applications in acrylic sheets.</p>	<p>Volumes </p> <p>Prices </p>	<p>Pharmaceuticals</p>  <p>FY2012 will be affected by NHI drug price revisions, but revenues should increase due to new product contributions. However, we forecast a small profit increase owing to higher SG&A and R&D costs.</p>	<p>Volumes </p> <p>Prices </p>
<p>Terephthalic acid</p>  <p>Polyester market prices are still depressed, but volumes are expected to rise smoothly throughout the year due to Asian (primarily Chinese) demand. Spreads should recover in 2H FY2012.</p>	<p>Volumes </p> <p>Prices (Spreads) </p>	<p>FPD components</p>  <p>Volumes are recovering as a whole, despite variability by product, and sales overseas should continue to expand. Competitive environment remains tough but aiming to turn around profitability through cost cuts and other such initiatives.</p>	<p>Volumes </p> <p>Prices </p>
<p>Carbon</p>  <p>We expect similar operating income in 1H FY2012 to that of 2H FY2011. In 2H, we expect export environment of cokes to improve.</p>	<p>Volumes </p> <p>Prices (Spreads) </p>	<p>PHL/PCR</p>  <p>PC demand is gradually recovering after the drop in 2H FY2011. The pace of recovery in BPA and PHL demand and pricing is slow, but we expect it to improve in 2H FY2012.</p>	<p>Volumes </p> <p>Prices (Spreads) </p>

2-1 Further Transforming Management Structures of the MCHC Group

Accelerating orchestration of Group strengths



Accelerating Group Synergy (1)

Undertaking organizational and personnel changes
to foster “synergy to grow”

- **Appoint Mission Coordinators (April 1, 2012)**
Formulate group-wide strategic plans for business areas where rapid synergies can be achieved.
Guide and advise on those business operations.

- Healthcare solutions • Specialty chemicals
- Polymer processing and information and electronics • Carbon fiber composite materials
- Water treatment system • FPD components



- **Establish new Healthcare Solutions Office (April 1, 2012)**
Further strengthen the Group healthcare strategy and promote the commercialization of new healthcare solutions business by transcending individual core operating company boundaries.
- **Strengthen function of the Group Synergy Office (April 1, 2012)**
In order to enhance proactive proposals, mediation and support functions for Group companies, synergy projects were reviewed and a director and person responsible for implementing each project were appointed.

Accelerating Group Synergy (2)

Strengthening shared Group functions
to promote “synergy to grow”

- **Consolidate Group funding and management functions (June 1, 2012)**
In order to promote the orchestration of Group strengths and achieve synergistic effects, MCFA (100% owned by MCC) became a 100% subsidiary of MCHC.
- **Consolidate engineering and materials procurement functions (April 1, 2012)**
The engineering functions at three core operating companies were consolidated into Mitsubishi Chemical Engineering in order to further raise the overall strength and pricing power of the Group engineering capabilities.
- **Integrate Group public relations functions (June 1, 2012)**
Public relations and investor relations functions at three core operating companies were consolidated into MCHC with the aim of making the functions more effective and more efficient.

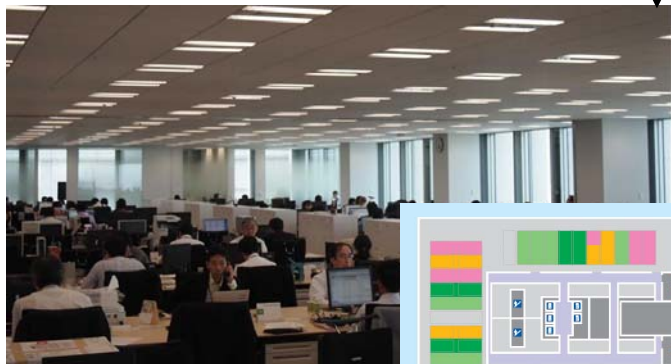
2-2: Relocating and Consolidating Head Office Functions

Fostering “synergy to grow” through proactive dialogue

- Proximity of offices for directors and core operating companies*
- Locating common functions on the same floor

*excl. MTPC

■ MCHC ■ MCC ■ MTPC ■ MPI ■ MRC



22F	■				Directors' offices
	■				Corporate Strategy Office
	■				Healthcare Solutions Office
	■				Corporate Planning Office
	■				Group Synergy Office
	■				The KAITEKI Institute, Inc.
21F	■	■	■	■	Directors' offices
		■			Business Development & Licensing Dept.
20F	■	■	■	■	Corporate div. (Corporate planning, Internal control, Internal audit, Public relations and investor relations, Administration, IP, RD, etc.)
19F	■	■	■	■	Corporate div. (HR, Finance and accounting, Information systems, etc.)
18F	■	■	■	■	Corporate div. (Environment, Safety and Quality, Technology Coordination, etc.)
	■				Business div. (Basic petrochemicals, Chemical derivatives, Polymer, Petrochemicals R&D, Petrochemicals Planning and Coordination)
17F					Meeting rooms
16F	■	■	■	■	Corporate div. (Purchasing and logistics, Marketing, etc.) Japan Polychem, Japan Polyethylene, Japan Polypropylene, etc.
15F	■				Business div. (Information and electronics, Performance products, Battery materials, Carbon) New Business Promotion Div.
14F			■		Business div. (High Performance Film Field, part of High Performance Molded Products Field)
13F			■	■	Business div. Group companies
12F					Shared office service companies, Medical center
11F					Group reception, Guest rooms, Showroom
1F					Reception

2-3: Example of Business Reorganization for Growth (Petrochemicals)

Reforming structure and transforming domestic petrochemicals business

Pursue Growth Strategy

- Expand global operation and shift to high-performance products
(Regional partners, the US shale gas revolution)
 - MMA and PMMA, performance polymers

Promote Innovation Strategy

- Deliver new materials that contribute to the environment and to the “Sustainable Carbon Society”
 - Sustainable resources (Isosorbide polymer, *GS-Pla*)

Optimize Cash-generating Businesses

- Stabilize earnings and reinforce business structure
 - Stabilize operations and minimize environmental impact
 - Reinforce business structure by leveraging high-value-added products, expanding knowledge business & improving process technologies
 - DTP, Hexene-1, BTcB

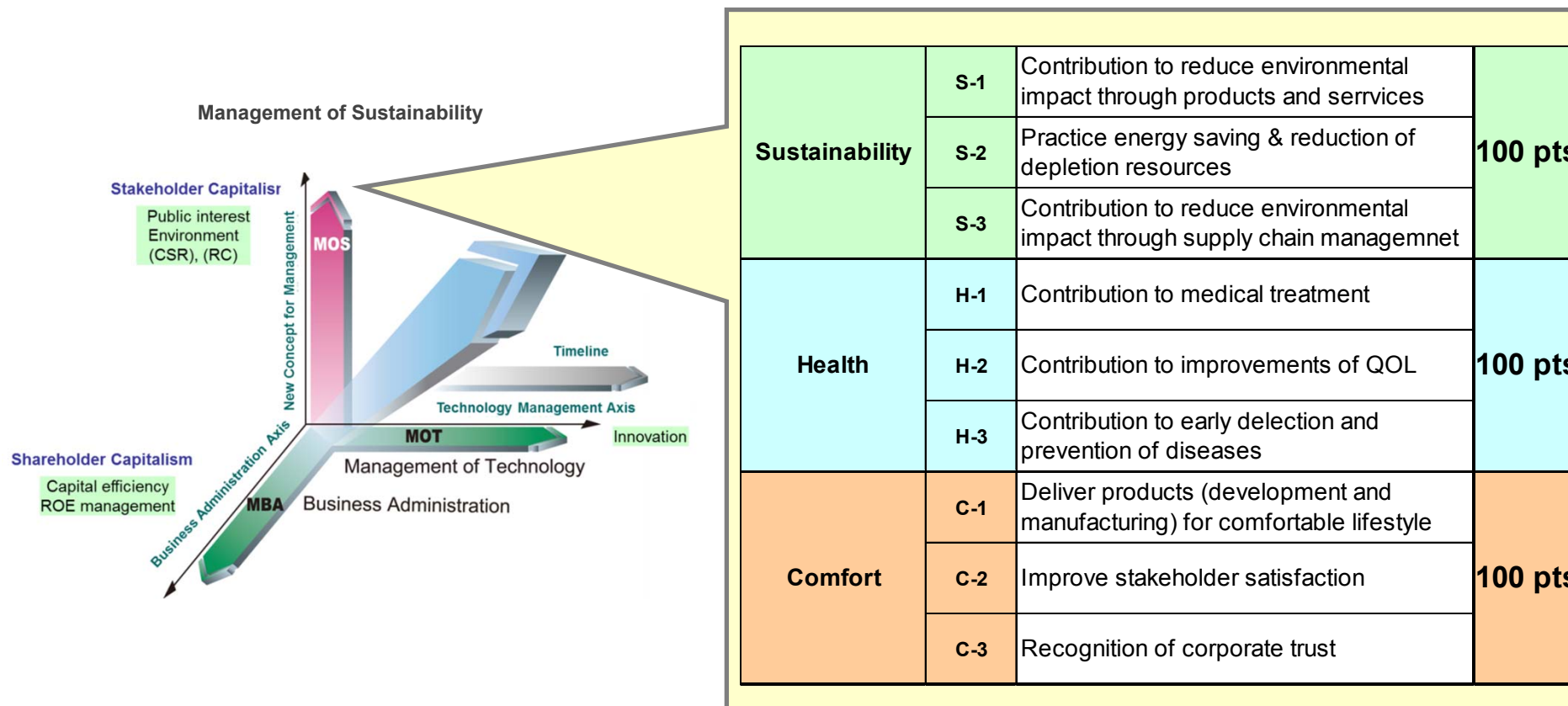
Business to be Restructured

- Implement second stage of structural reforms

DTP: Dominant technology for propylene
BTcB: Butene to crude butadiene

3-1: MOS Indexes

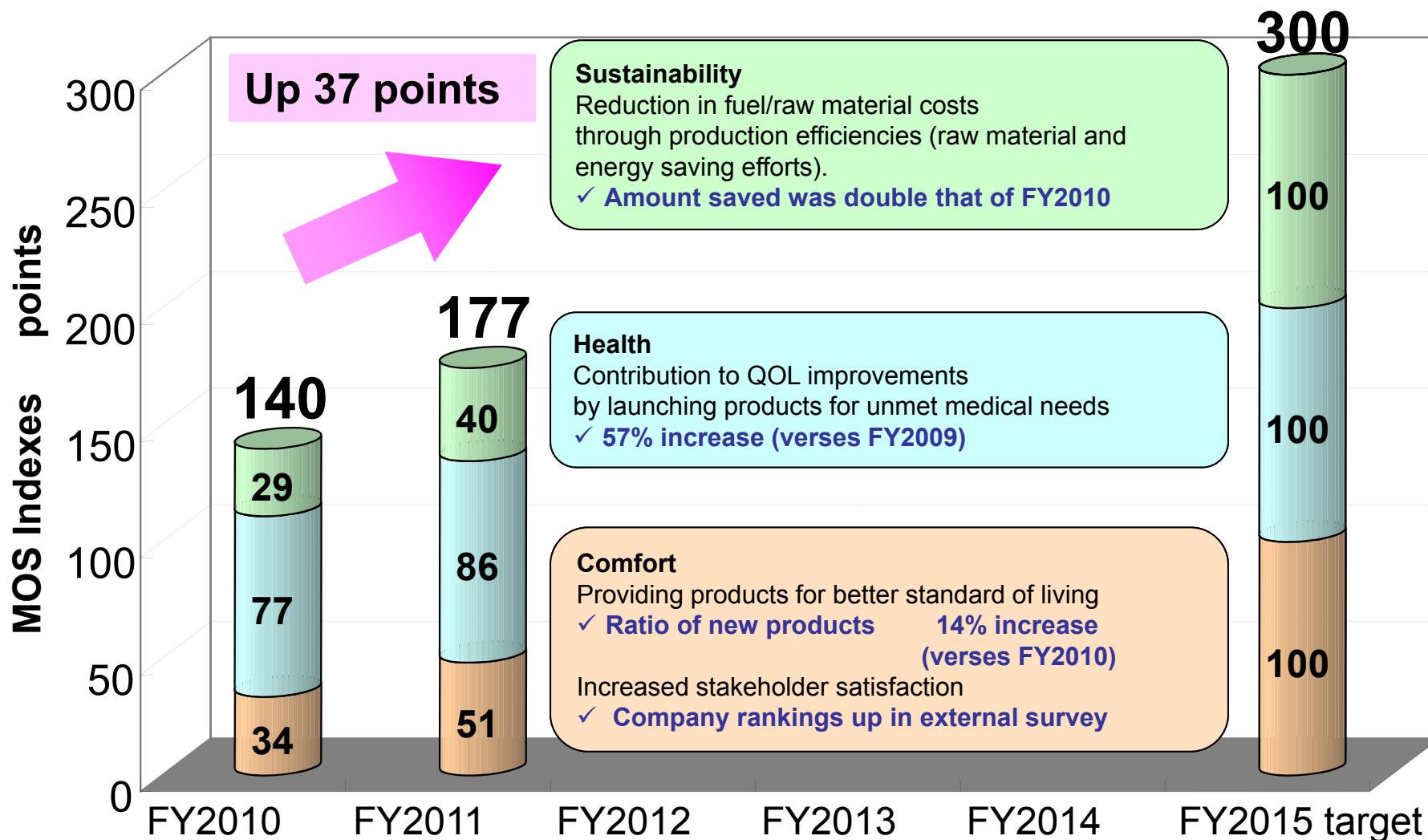
Each item to be evaluated with a target of 300 points by FY2015



Aiming to establish “My Own MOS” within Group company and organization

3-2: Trend in MOS Results

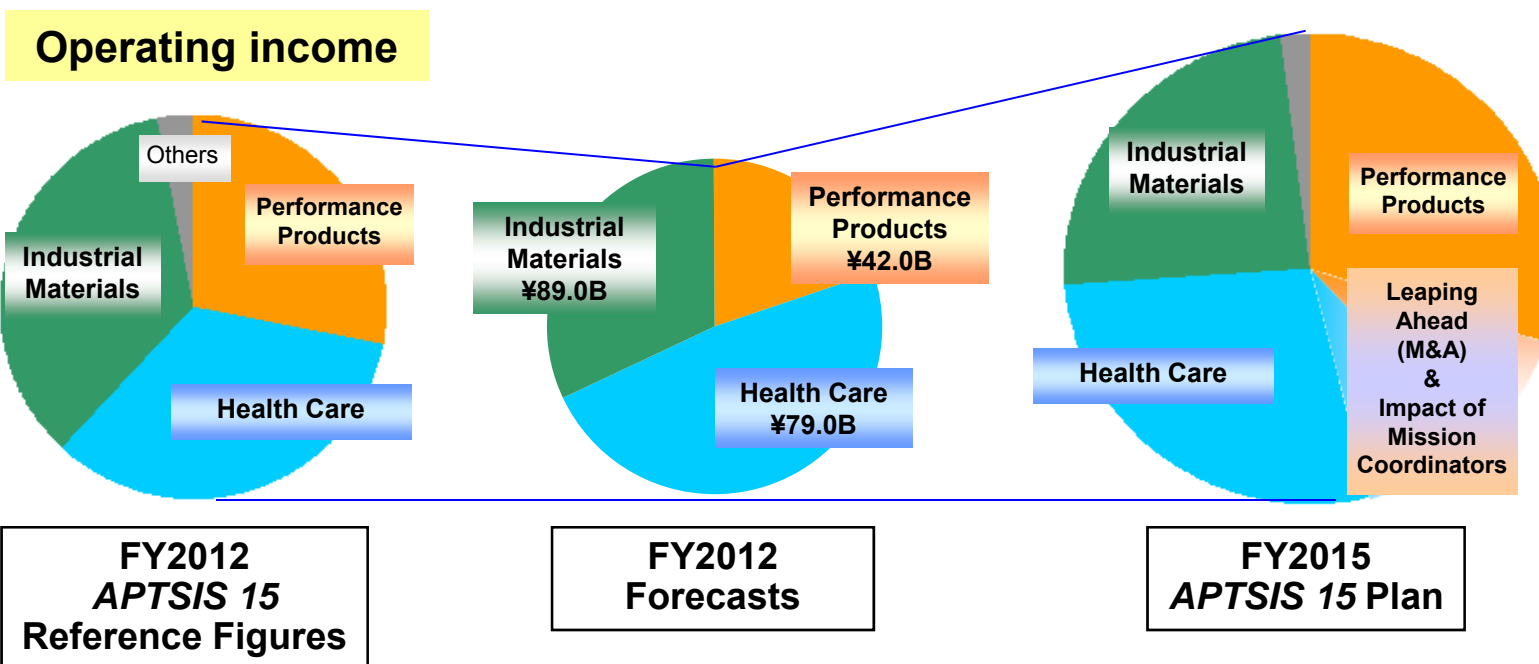
MOS Indexes quantified and monitoring began in FY2011



4-1: APTIS 15 Reference Figures and Forecasts for FY2012

* excl. Leaping Ahead (M&A)

	FY2012 APTIS 15 Reference Figures	FY2012 Forecasts	FY2015 APTIS 15 Plan
Net Sales	¥3.6 trillion	¥3.5 trillion	¥5.0 trillion (¥4.2 trillion*)
Operating Income	¥230 billion	¥160 billion	¥400 billion (¥330 billion*)



4-2: Difference between the FY2012 Forecasts and APTSIS 15 Reference Figures by Segment

Major impact from weaker market prices, slower market growth and changes in the competitive environment

Operating income (Billions of yen)

Domain	Segment	FY2012 APTSIS 15 Reference Figures	FY2012 Forecasts	Difference	Comments
Performance Products	Electronics Applications	12.0	0.0	(12.0)	Slower growth in the market and deteriorating profitability for recording media and FPD components. Delay in growth of new markets. (GaN substrates, White LED lighting/materials)
	Designed Materials	54.0	33.0	(21.0)	Slower growth in the market and deteriorating profitability for FPD components. Delay in growth of new markets. (Lithium-ion battery materials)
Health Care	Health Care	79.0	79.0	0.0	Pharmaceuticals performing better than expected but shortfall in diagnostic agents and instruments and clinical testing.
Industrial Materials	Chemicals	35.0	29.0	(6.0)	Difference in PTA spreads, otherwise virtually as expected.
	Polymers	48.0	24.0	(24.0)	Major impact from decline in market prices for MMA/PMMA and sluggish demand for light guide panels.

4-3: The *APTSIS 15* Plan

Responding to changes in business environment by reviewing *APTSIS 15* STEP 2 for FY2013-2015

■ New factors to consider since formulation of *APTSIS 15* in 3Q FY2010

- Power supply, disaster recovery demand, consumption tax increase, European sovereign debt crisis, (forex rates), etc.

■ Undertaking review based on developments in FY2012

(Situation in FY2012)

(Review perspective)

Market structure changes

- FPD components, recording media



Developing new business areas,
securing new customers, reducing costs

Delay in growth of new markets

- Lithium-ion battery materials,
White LED lighting/materials



Selecting businesses, concentrating development

Worsening economic climate

- Petrochemicals



Reforming structure and reducing costs
to improve earnings capacity from bottom up

Realizing stable earnings

- Pharmaceuticals, Food ingredients, Carbon



Further growing ability to generate stable earnings

■ Review topics

- 1) Attainability of targets
- 2) Validity of the current strategy / formulation of alternatives
- 3) New business opportunities

Business Topics

Positioning of business areas within the MCHC Group business portfolio

◆ Performance Products ◆ Health Care ◆ Industrial Materials

<p style="text-align: center;"><u>Next-generation Growth Businesses (6)</u></p> <ul style="list-style-type: none"> ◆ Organic photovoltaic modules and materials ◆ Organic photo semiconductors ◆ Advanced performance products ◆ Agribusiness solutions ◆ Healthcare solutions ◆ Sustainable resources 	<p style="text-align: center;"><u>Growth Businesses (11)</u></p> <p style="text-align: right;">Today's Topics</p> <ul style="list-style-type: none"> ◆ White LED lighting and materials ◆ Lithium-ion battery materials ◆ FPD components ◆ Performance composite materials ◆ High performance molding products ◆ Specialty chemicals ◆ Water treatment system and services ◆ Pharmaceuticals ◆ High performance graphite ◆ Performance polymers ◆ MMA/PMMA
<p style="text-align: center;"><u>Businesses to be Restructured (15)</u></p> <p>Naphtha crackers, etc.</p>	<p style="text-align: center;"><u>Cash-generating Businesses (18)</u></p> <ul style="list-style-type: none"> ◆ Recording media ◆ Performance films ◆ Food ingredients ◆ Diagnostics & support for new pharmaceutical development ◆ Terephthalic acid ◆ Coke ◆ PHL/BPA/PC ◆ PP

Mitsubishi Chemical Corporation

Reforming Structure and Transforming Domestic Petrochemicals Business

1. Overview of Structural Reforms
2. Structural Reforms of Basic Petrochemicals Business

MCHC's Business Portfolio

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Basic Strategies for Petrochemical Business

Reforming structure and transforming domestic petrochemicals business

Pursue Growth Strategy

- Expand global operation and shift to high-performance products (Regional partners, the US shale gas revolution)
 - MMA and PMMA, performance polymers

Promote Innovation Strategy

- Deliver new materials that contribute to the environment and to the 'Sustainable Carbon Society'
 - Sustainable resources (Isosorbide polymer, *GS-Pla*)

Optimize Cash-generating Businesses

- Stabilize earnings and reinforce business structure
 - Stabilize operations and minimize environmental impact
 - Reinforce business structure by leveraging high-value-added products, expanding knowledge business & improving process technologies
 - DTP, Hexene-1, BTcB

Business to be Restructured

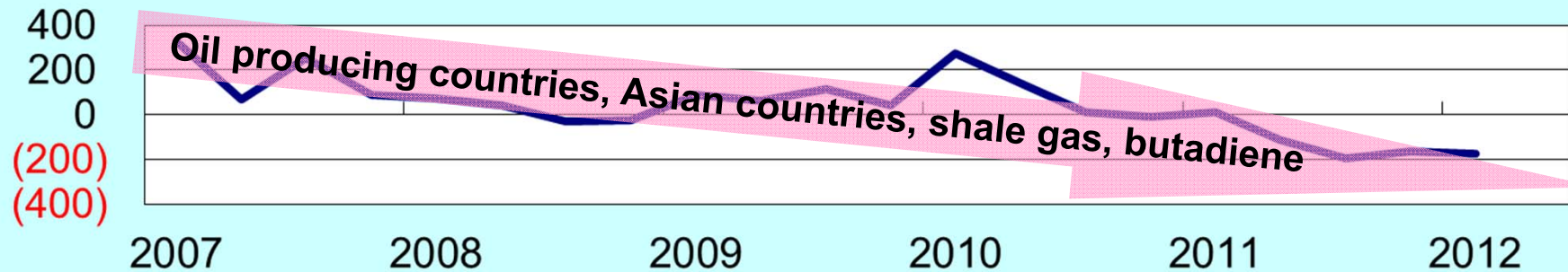
- Implement second stage of structural reforms

DTP: Dominant technology for propylene

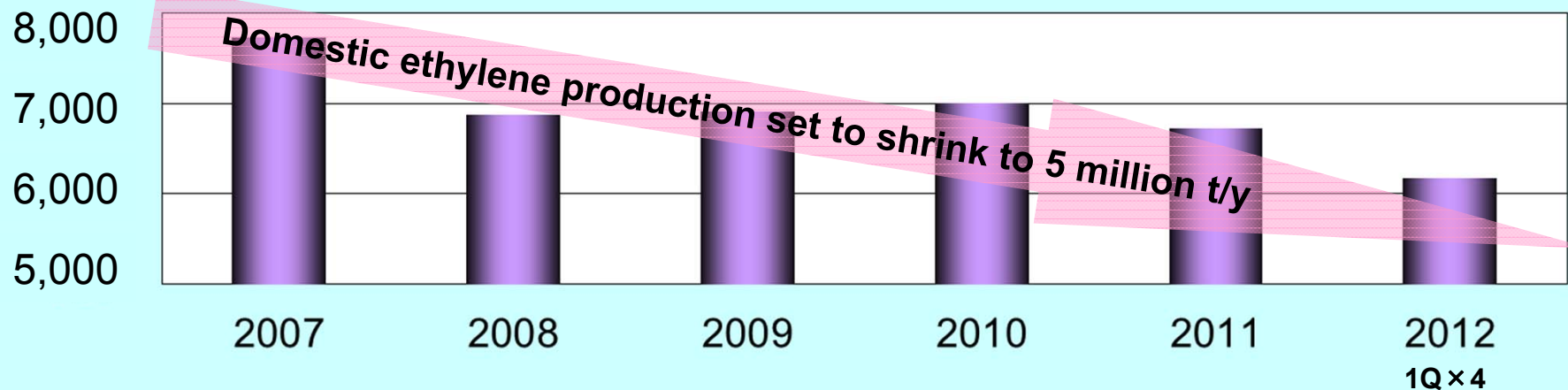
BTcB: Butene to crude butadiene

Operating Climates for Domestic Ethylene Production

Spread between ethylene and naphtha (ETY - 1.4 × MOPJ:\$/t)

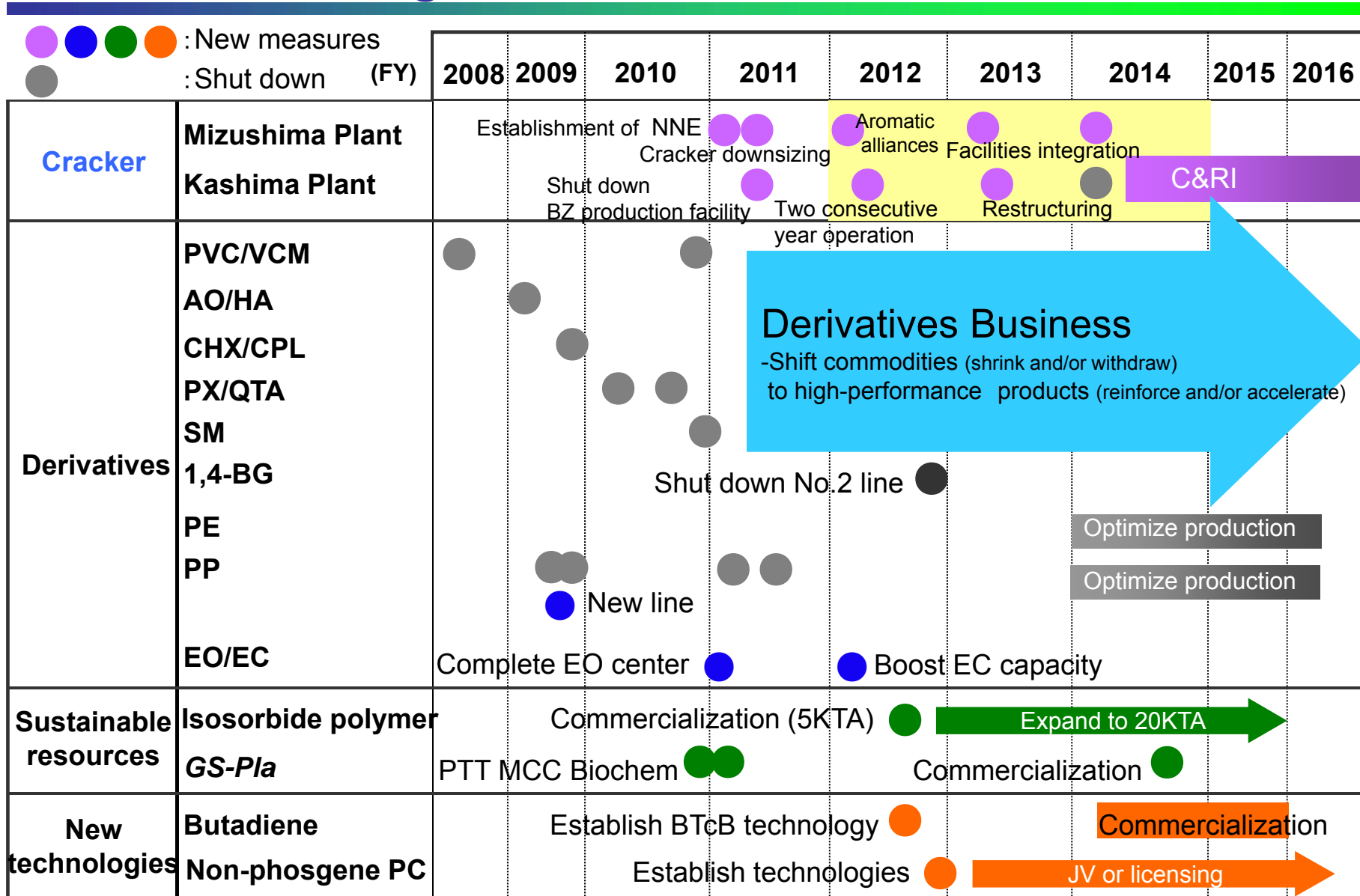


Domestic ethylene production (KTA)

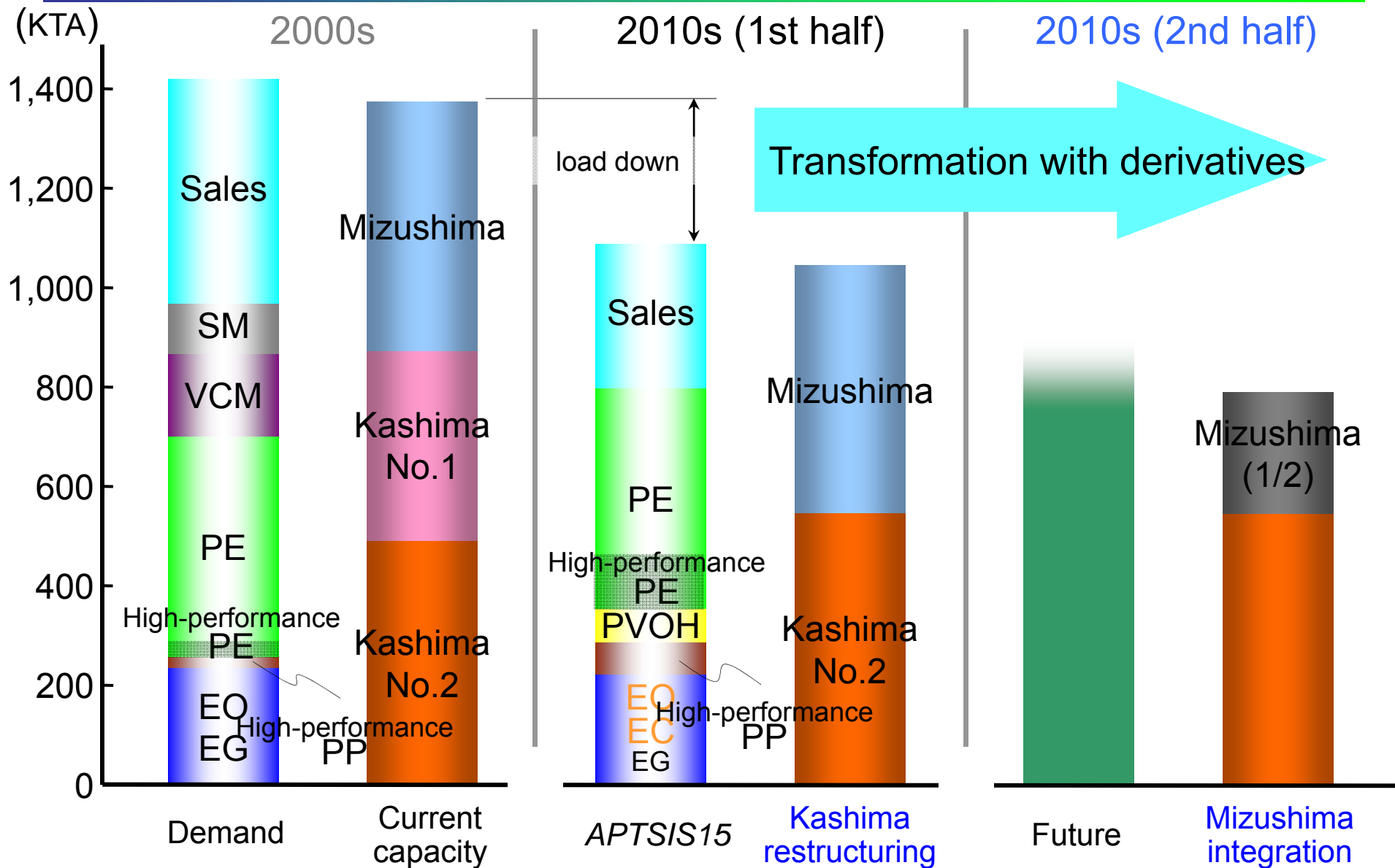


Declining export competitiveness
 ⇒ Shift to high-performance products is inevitable

Progress in Structural Reforms



Structural Reform in Ethylene Capacity



Structural Reform of the Kashima Plant

Reform structure by combining further advanced derivatives with efficient up-stream structure

1. Reinforce basic petrochemicals

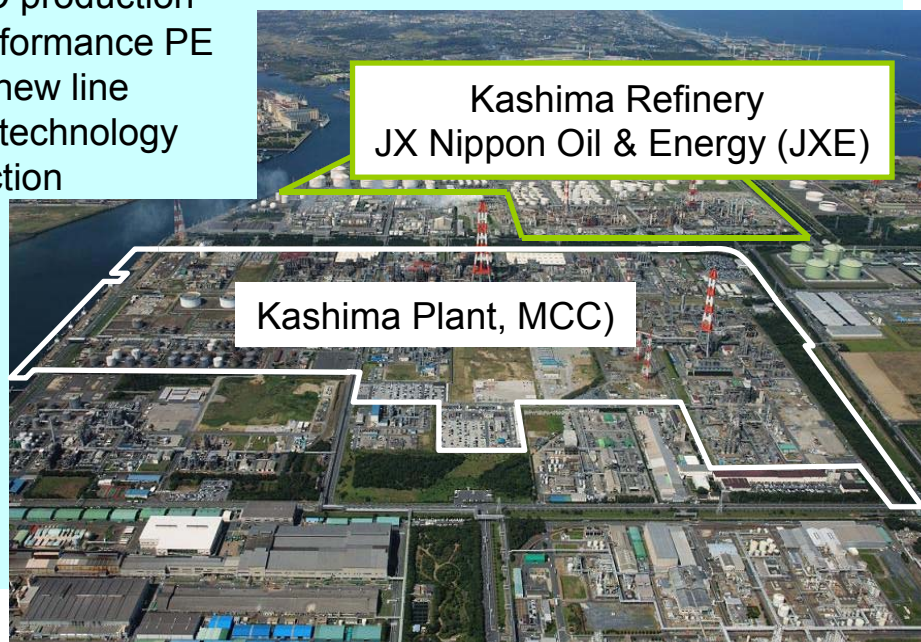
Steam cracker: Decommission No.1 cracker and expansion & fully operate No.2 cracker
Refinery partnership: Continue assessing potential for integrated application of both high resolution FCC (JXE) and BTcB (MCC)

2. Shift to high-performance products

Ethylene (EO): Complete EO center and boost EC production
(PE): Metallocene catalyst and high-performance PE
Propylene (PP): Shift to high-performance PP by new line using proprietary state-of-the-art technology
Butadiene: Produce butadiene as targeted production by using proprietary technology

3. Restructure the Kashima complex

Restructure VCM/PVC sector
Operate power plant optimally



Structural Reform of the Mizushima Plant

Maximize flexibility and benefits of integrated Kashima/Mizushima steam cracker management

1. Reinforce basic petrochemicals business

Cracker downsizing (June 2011)

Aromatics alliances with AKC (April 2012)

Refinery partnership Continue assessing potential for integrated application of both high resolution FCC (JXE) and BTcB (MCC)

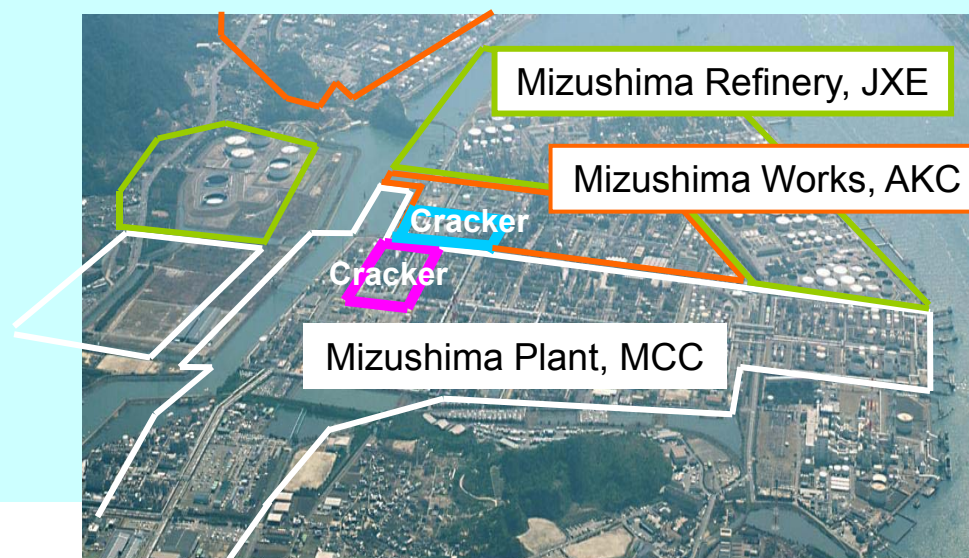
2. Optimize facilities through Nishi Nippon Ethylene LLP

Preparing for facility integration (MCC in 2013 / AKC in 2014)

3. Develop new technology

Hexene-1, DTP, BTcB

GaN substrate, Organic photovoltaic



Mitsubishi Tanabe Pharma Corporation

Healthcare Solutions and MTPC Topics

1. Healthcare Solutions

1-1: Targets for Healthcare Solutions in the MCHC Group

1-2: Mission of the Healthcare Solutions Office

1-3: Artificial Carbon Dioxide Bath Unit, *MIMAMORI-Gait*, and New Vaccine

2. MTPC Topics

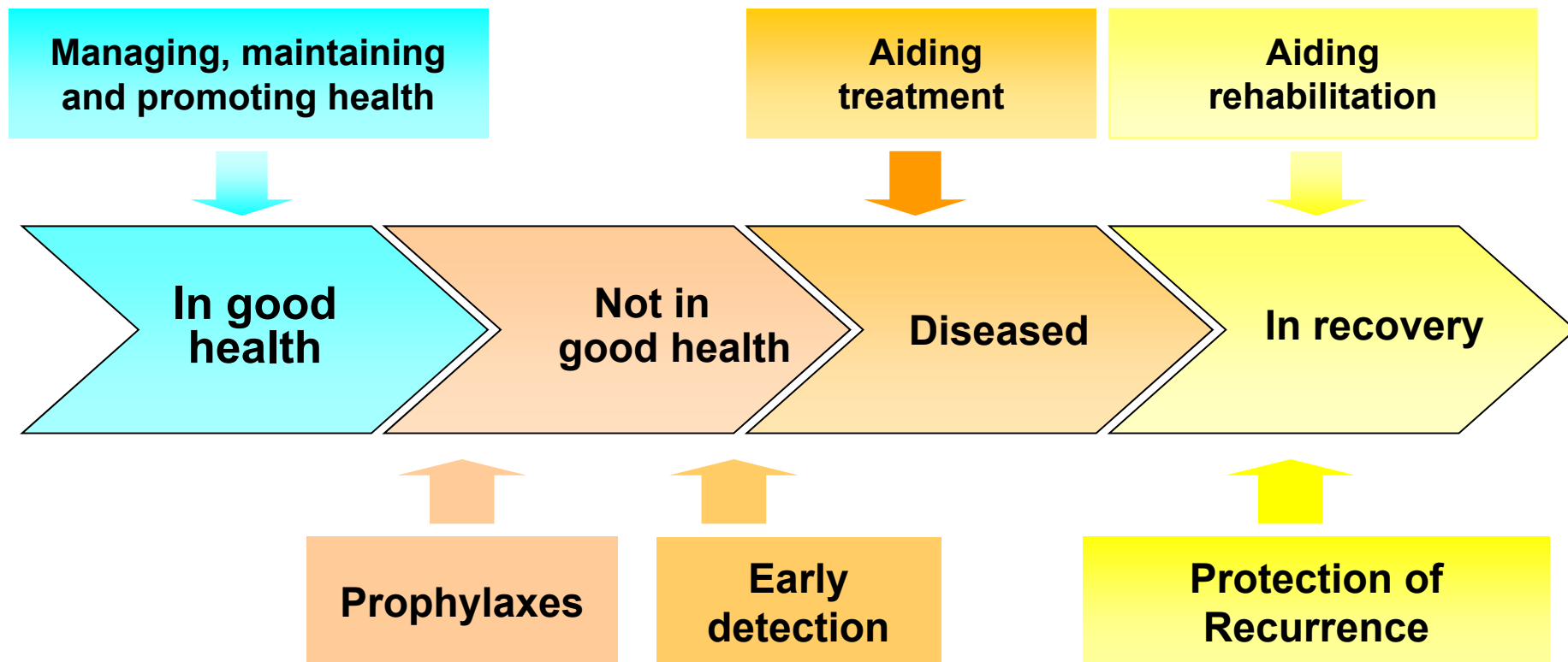
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1-1: Targets for Healthcare Solutions in the MCHC Group

Deliver full package “healthcare solutions”

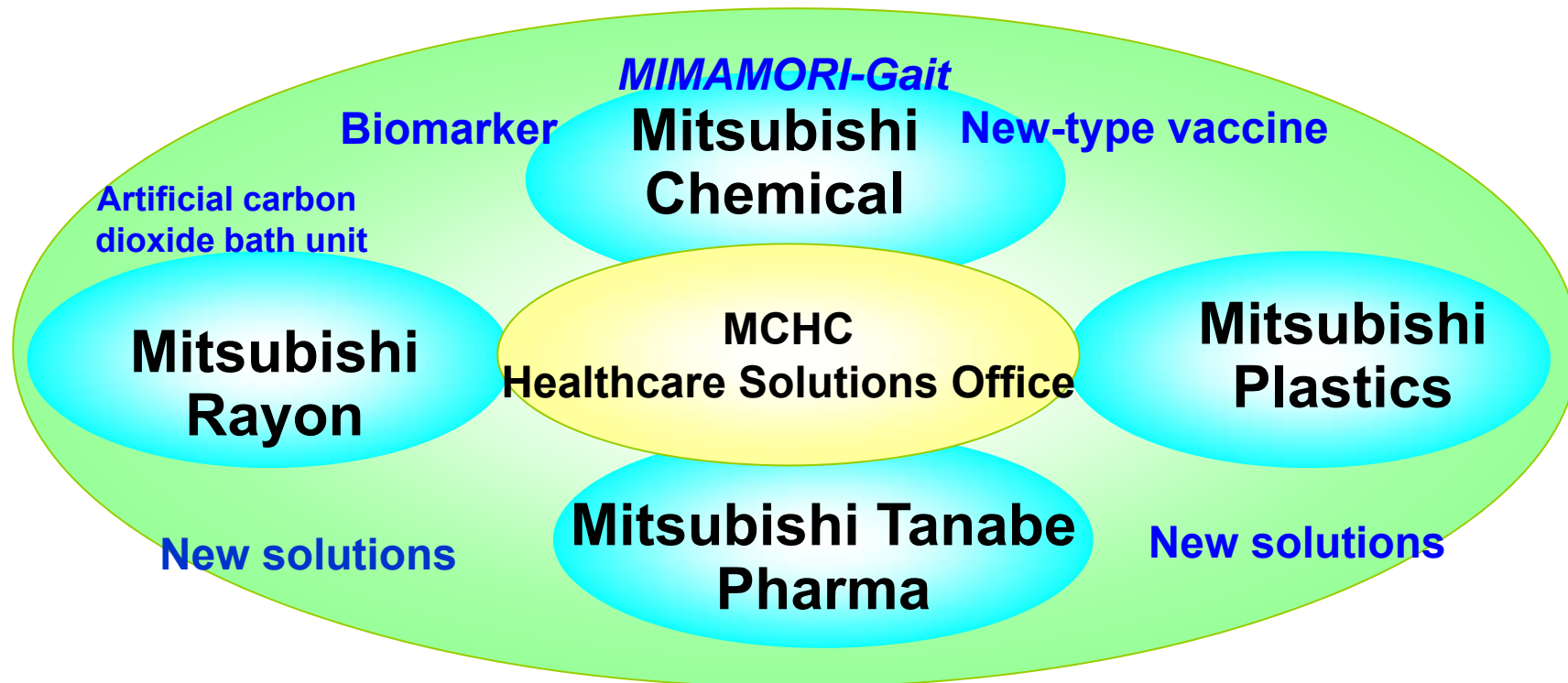
Orchestrate Group strengths to provide a variety of solutions for unmet medical needs at every stage of the medical value chain

➔ Contribute to the realization of *KAITEKI* society



1-2: Mission of the Healthcare Solutions Office

Orchestrate Group strengths to deliver full packaged “healthcare solutions”



- **Deliver new healthcare solutions businesses**
 - accelerate orchestrating Group strengths
 - pursue collaboration with other industries, governments, and academia
 - combine internal and external assets to create the optimum solutions

1-3: Artificial Carbon Dioxide Bath Unit

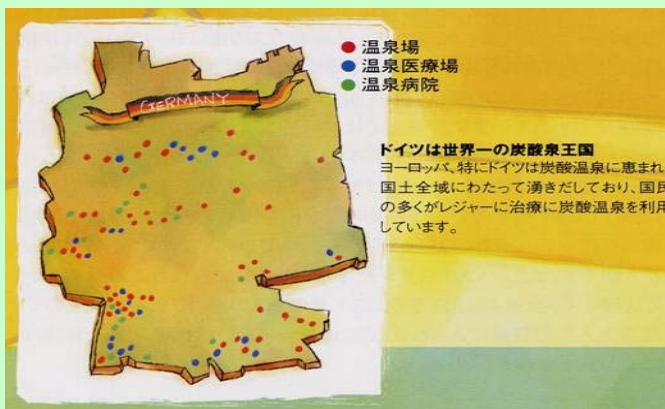


Artificial Carbon Dioxide Bath Unit (1)

Carbon dioxide bathing has a long history in healthcare

CO₂ enriched water for medical use: CO₂ concentration should be above 1000 ppm

Medical doctors in Germany have used CO₂ spas for medical use from the 16th century



Spa hospitals in Germany

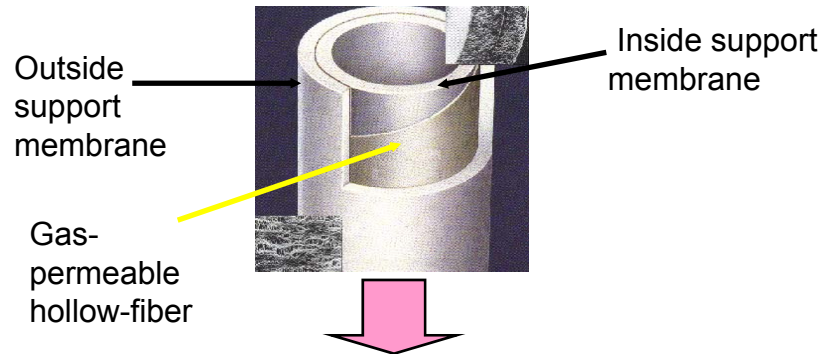


Rehabilitations in CO₂ spa, Germany

Many scientific journals report that CO₂ enriched water increases blood flow. It is considered that CO₂ enriched water increases the tissue concentration of CO₂ and induces vasodilation.

Artificial Carbon Dioxide Bath Unit (2)

Developing rehabilitation and cosmetic/beauty application



*Gas-permeable hollow-fiber

Advantage of using GPH* membrane

No complicated structure used in mixing methods

Small, light, simple devices are possible by using GPH membrane

Challenge for various areas

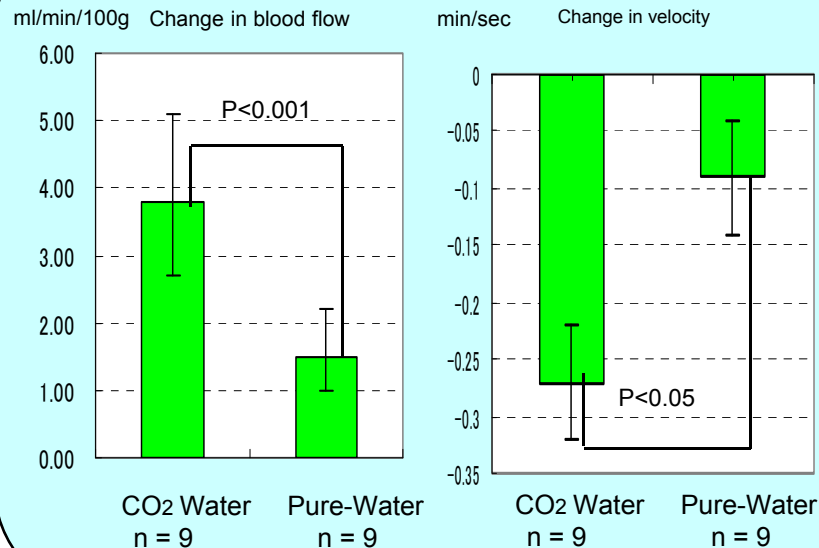
Rehabilitation

Promotion of health

Nursing homes

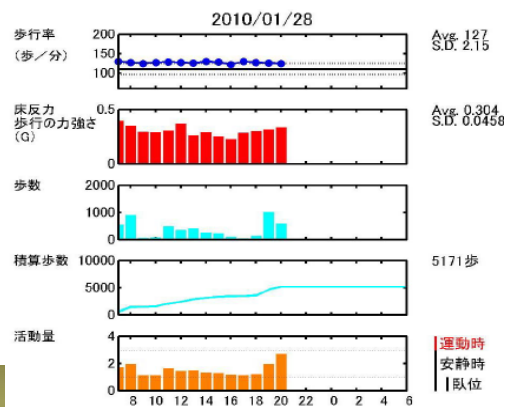
Cosmetic/beauty

Effect of artificial CO2 bathing in healthy volunteers



T. Toriyama et. al. International Angiology 21(4) 2002

1-3: MIMAMORI-Gait



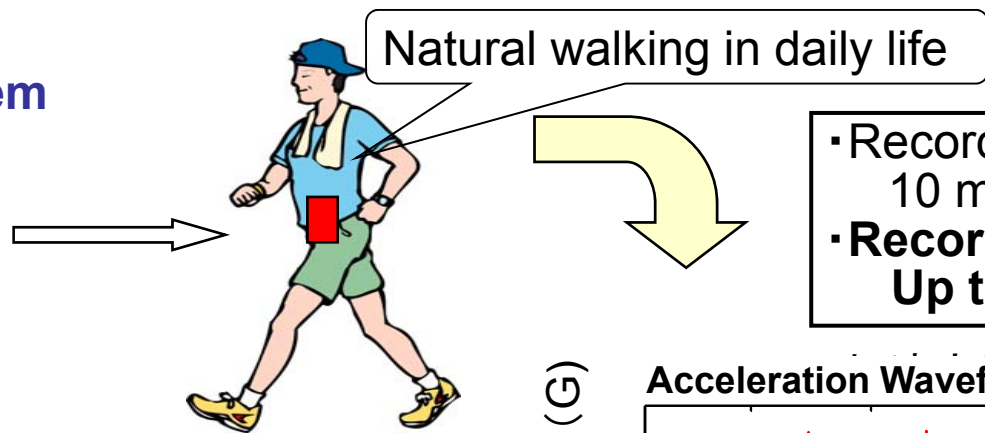
MIMAMORI-Gait (1)

High-quality gait profiling using long term measurement and unique analysis technology

Medical Devices Gait Analysis System

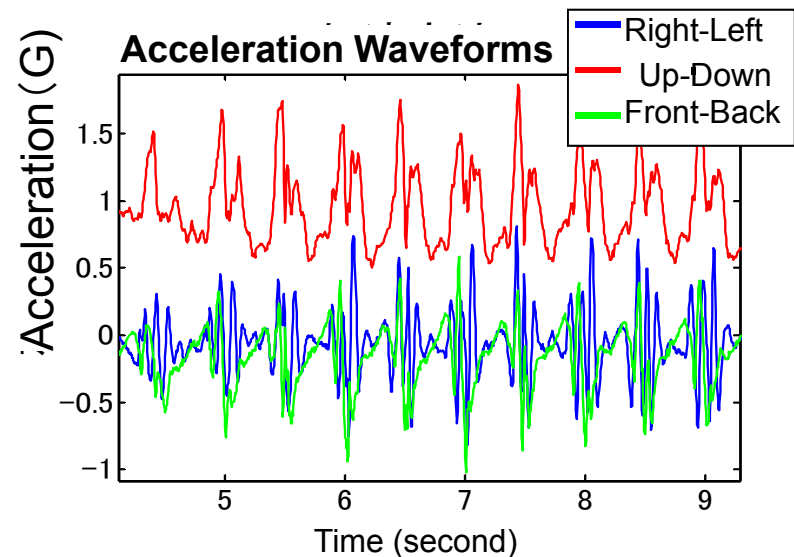


Motion Recorder with
3-Dimensional Acceleration sensor



- Recording intervals
10 m sec
- Recording period
Up to 24 hours

- ### Gait Profiling
- Cadence
 - Floor reaction (gait intensity)
 - Amount of activity



May 2011: Filed as medical device in Japan
 Medical treatment fee: Posturography (250pt)

MIMAMORI-Gait (2)

Create a new evaluation index using *MIMAMORI-Gait*

Develop a new evaluation index of disease state

Focus on diseases with failure of gait function
e.g. Parkinson's disease, knee osteoarthritis, rheumatoid arthritis
and other disorders

➡ **Apply to evaluation of drug efficacy**

Collaboration
between MCC
and MTPC

Pursue other applications

New evaluation indices for physical functions
e.g. Efficacy of rehabilitation, prevention of falls, etc.

1-3: New Vaccine

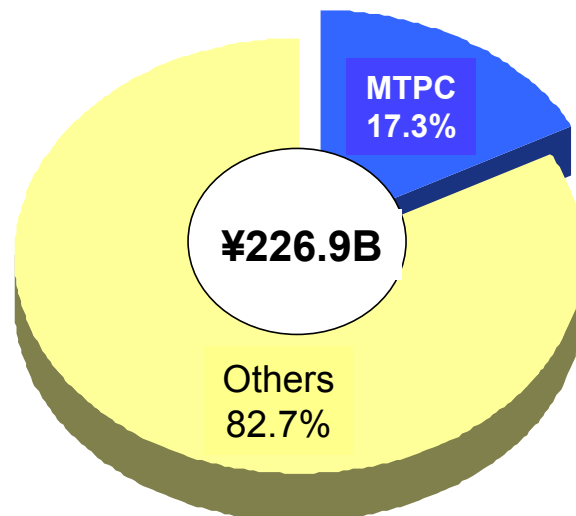


New Vaccine (1)

Strengthen MTPC's vaccine business with new vaccine

■ Strengthen vaccine business in Japan through collaboration with BIKEN*

*: The Research Foundation for Microbial Diseases of Osaka University



Share of MTPC in total Japanese vaccine market sales in FY2011

■ Licensing-in of new vaccine and new technology

- ✓ Licensing agreement for the new vaccine with Neuron Biotech, Inc. (January 2012)

- ✓ Research collaboration agreement for new vaccines with Medicago Inc (March 2012) **(Production of new vaccine in plants)**

New Vaccine (2)

Production of new vaccine in plants by Medicago



Greenhouse cultivation of *Nicotiana Benthamiana*



Introduction of viral gene to tobacco leaves



**Production of
new vaccine**

MCHC Group Closed Plant Factory

Potential to apply agribusiness solutions to pharmaceutical manufacturing

High quality control in closed plant factory system enables:

- Shorter growing period
- Stable production
- High productivity

LED



- Power savings
- Acceleration of photo-synthesis with effective wave-length

Hydroponics system



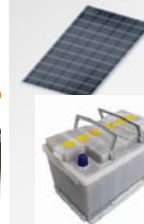
- Clean and effective growth of plants

Thermal insulation



- High level of insulation reduces energy needed for air-conditioning

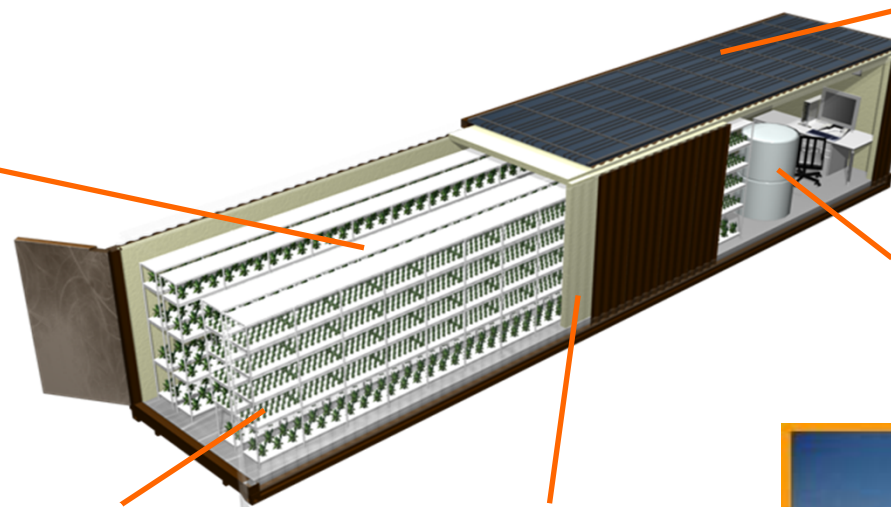
PV cell Secondary battery



- Use of green energy

Water treatment system

- Water circulation and reuse
- Reduce total water consumption



Mitsubishi Tanabe Pharma Corporation

Healthcare Solutions and MTPC Topics

1. Healthcare Solutions

1-1: Targets of Healthcare Solutions in the MCHC Group

1-2: Mission of the Healthcare Solutions Office

1-3: Artificial Carbon Dioxide Bath Unit, *MIMAMORI-Gait*, and New Vaccine

2. MTPC Topics

Progress in Domestic Operations Centering on New Products

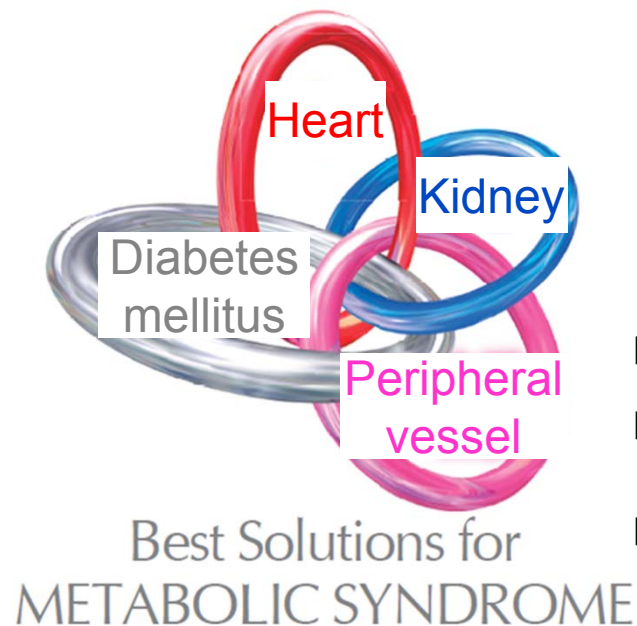
→ ◆ ● Progress

		FY2011	FY2012-
New Products	<i>Simponi</i>	Rheumatoid Arthritis, launch (Sep)	Ulcerative colitis developed by Janssen Pharmaceutical
	<i>Imsera</i>	Multiple Sclerosis, launch (Nov)	
	<i>Telavic</i>	Chronic hepatitis C, Genotype2, P3 (Dec) launch (Nov)	Expansion of combination therapy
	<i>Lexapro</i>	Depression, launch (Aug)	
	MP-513	Type2 diabetes mellitus, filed (Aug)	Approved
	TA-7284	Type2 diabetes mellitus, P3 (May)	
	MP-214	Schizophrenia, P2	P2b/3
LCM	<i>Remicade</i>	Crohn's disease, dose escalation (Aug)	Subtype Behcet's disease, P3 (Jan) Pediatric Crohn's disease, P3 (Apr) Severe Kawasaki disease
	<i>Talion</i>	Pediatric allergic rhinitis, P3 (Sep)	
	<i>Radicut</i>	Amyotrophic lateral sclerosis, P3	
	<i>Maintate</i>	Heart failure (May) Chronic atrial fibrillation, P3 (Aug)	

Key Products: Anti-diabetic Drugs

MP-513 & TA-7284

- Strategic alliance with Daiichi Sankyo Co., Ltd.
 - Promoting usages through new style of joint sales activity at unprecedented speed
 - Contributing to total care management of metabolism and CV diseases through the launch of anti-diabetic drugs



MP-513

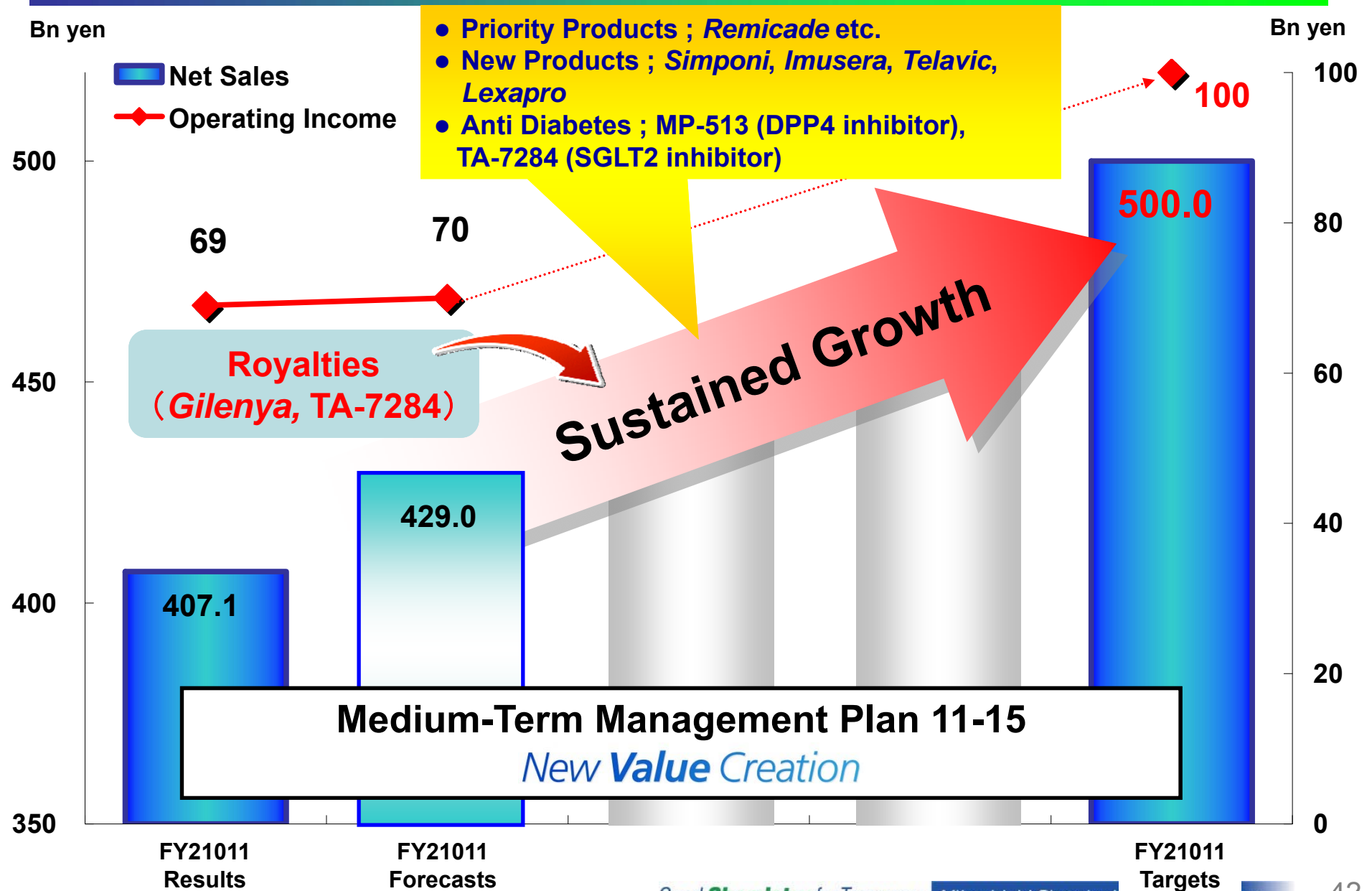
Teneligliptin

TA-7284

Canagliflozin

- DPP4 inhibitor
- To be approved in June 2012
- To be launched in September 2012
- SGLT2 inhibitor
- To be filed in 2013

Becoming a “Company that Can Continue to Create New Value”



Mitsubishi Plastics, Inc.

Polyester Film Business, *MAFTEC* Business, and Agribusiness Solutions

1. Polyester Film Business

- Strengthen global business development with establishment of business bases in China

2. *MAFTEC* Alumina Fiber Business

- Expand capacity to meet robust demand

3. Agribusiness Solutions

- Accelerate marketing in China

<p style="text-align: center;"><u>Next-generation Growth Business (6)</u></p> <ul style="list-style-type: none"> ◆ Organic photovoltaic modules and materials ◆ Organic photo semiconductors ◆ Advanced performance products ◆ Agribusiness solutions ◆ Healthcare solutions ◆ Sustainable resources 	<p style="text-align: center;"><u>Growth Business (11)</u></p> <ul style="list-style-type: none"> ◆ White LED lighting and materials ◆ Lithium-ion battery materials ◆ FPD components ◆ Performance composite materials ◆ High performance molding products ◆ Specialty chemicals ◆ Water treatment system and services ◆ Pharmaceuticals ◆ High performance graphite ◆ Performance polymers ◆ MMA/PMMA
<p style="text-align: center;"><u>Business to be Restructured (15)</u></p> <p>Naphtha crackers, etc.</p>	<p style="text-align: center;"><u>Cash-generating Business (18)</u></p> <ul style="list-style-type: none"> ◆ Recording media ◆ Diagnostics & support for new pharmaceutical development ◆ Terephthalic acid ◆ PHL/BPA/PC ◆ Performance films ◆ Coke ◆ PP ◆ Food ingredients

1. Polyester Film Business

Situation in FY2011

- Sales volumes have deteriorated due to EU financial crisis, stagnant sales in LCD TV, inventory adjustment, etc., since 2Q
- Domestic business showing recovery trend since 4Q
- Overseas business generally robust, driven by Europe and the US

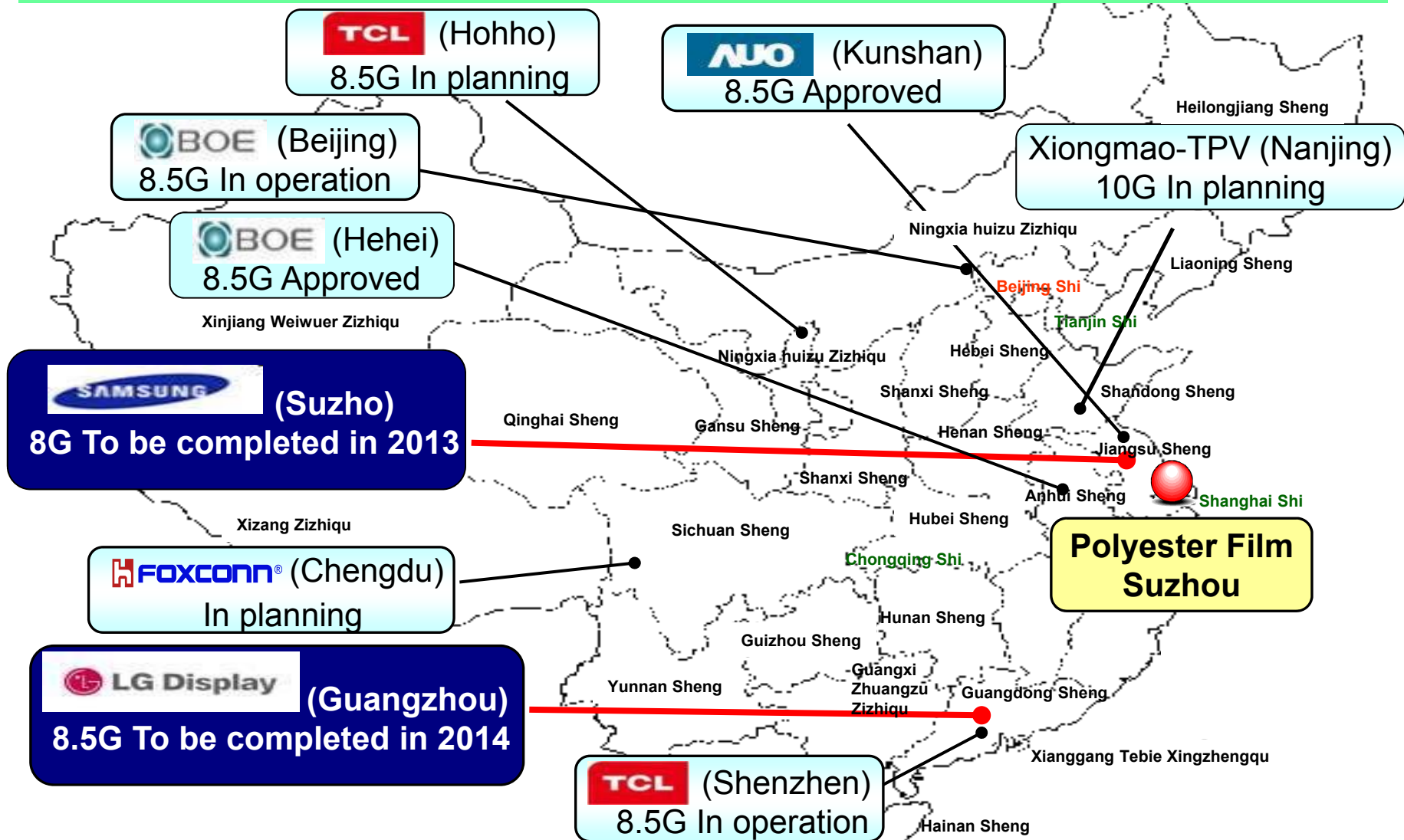
Future Measures

- Pursue business opportunities in China (Plant in operation from 2Q FY2013)
- Expand sales for non-FPD applications (touch panels, PV cells, etc.)
- Improve product mix



China Investment Plans by Panel Makers

SAMSUNG and LG announced to start operations in China



Polyester Film Strategy in China

Build a top share position in the promising China FPD polyester film market

FPD Market

FPD market expansion will be led by China after FY2012

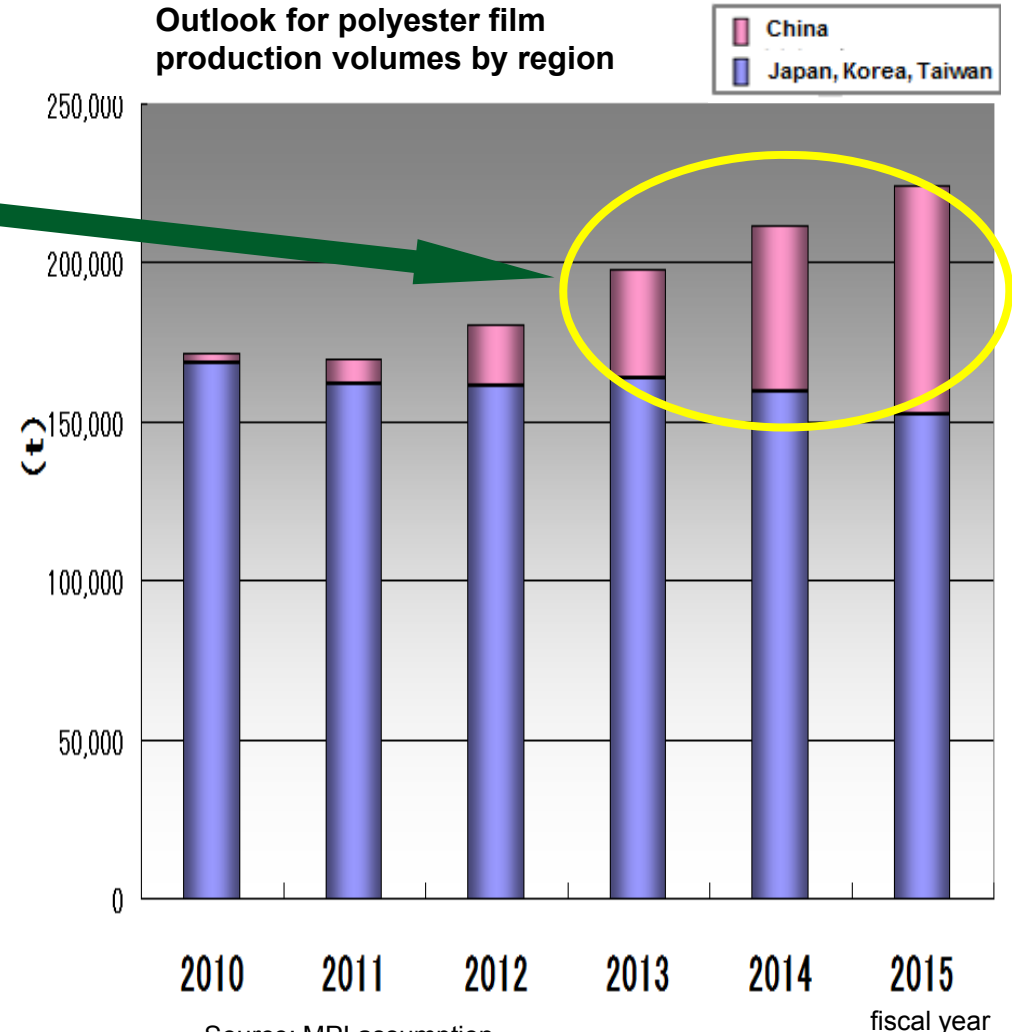
Polyester Film Strategy in China

Secure a leading FPD polyester film position in a market showing great potential

MPI Advantages

- Quality and performance
- Agility to quickly meet customers' needs
- Cutting-edge machinery and production technology

Outlook for polyester film production volumes by region



Source: MPI assumption

Global Network for Polyester Film

Develop production and sales in China to strengthen global business platforms



Germany
(Wiesbaden)
55,000t/y



USA (Greer, SC)
65,000t/y

Mitsubishi Polyester Film (Germany)

MPI (Shiga)

Mitsubishi Polyester Film (USA)

Mitsubishi Plastics Polyester
Film Suzhou Co., Ltd
Suzhou Chiangsu China
Expected to launch in 2013
23,000t/y



Japan (Shiga)
80,000t/y

PT. MC PET FILM (Indonesia)

Indonesia (Merak)
20,000t/y



2. MAFTEC Alumina Fiber Business

**Emission control and expansion in automobile production will be the growth drivers
We will have further capacity expansion come online in FY2012**

Situation in FY2011

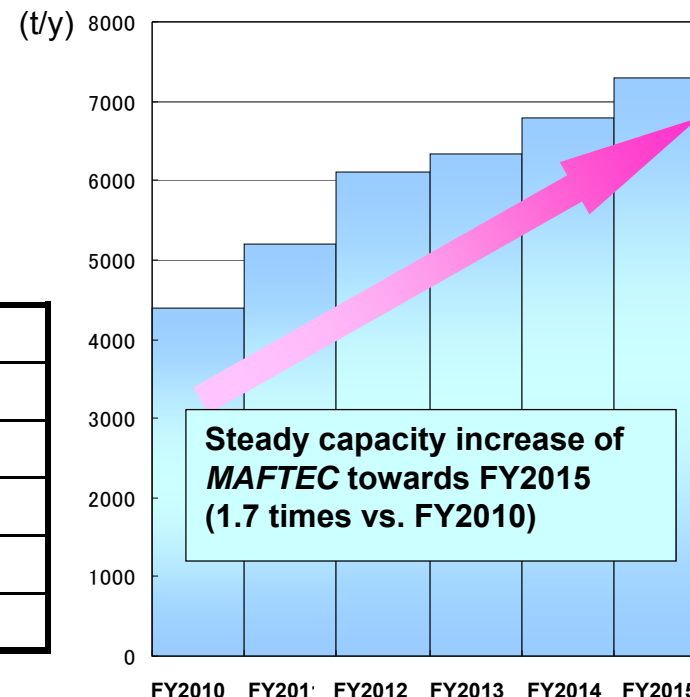
- Strong demand for *MAFTEC* due to tightened emission controls and higher energy efficiency (diesel car & direct-injection engines), in addition to an increasing automobiles production driven by the emerging economies.
- Capacity increased in line with the increasing demand:
added 1 line at the Sakaide Plant, following expansion at the Naoetsu Plant
- Achieved record-high production volume and sales volume

Future Measures

- Expand capacity as the internal combustion engine retains market dominance
- Add two lines in FY2012, starting in June and December
- Add further new lines or expand existing lines as necessary

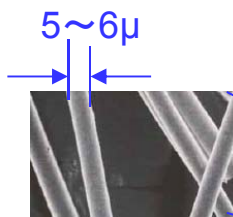
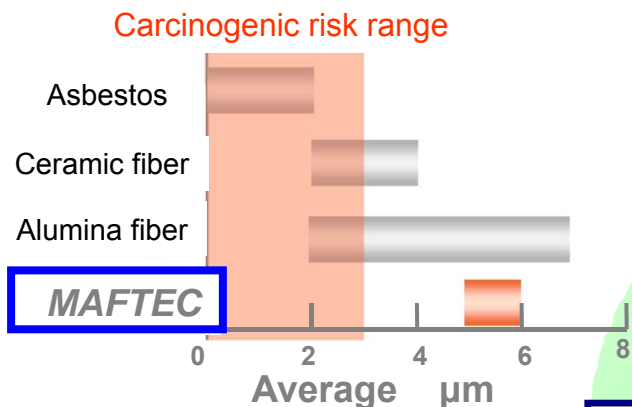
	Location	Capacity expansion
Apr. 2011	Naoetsu	300t/y
Feb.2012	Sakaide	400t/y
May 2012	Sakaide	400t/y
Dec. 2012	Sakaide	400t/y (plan)
After FY2012	TBD	Under consideration

MAFTEC production capacity

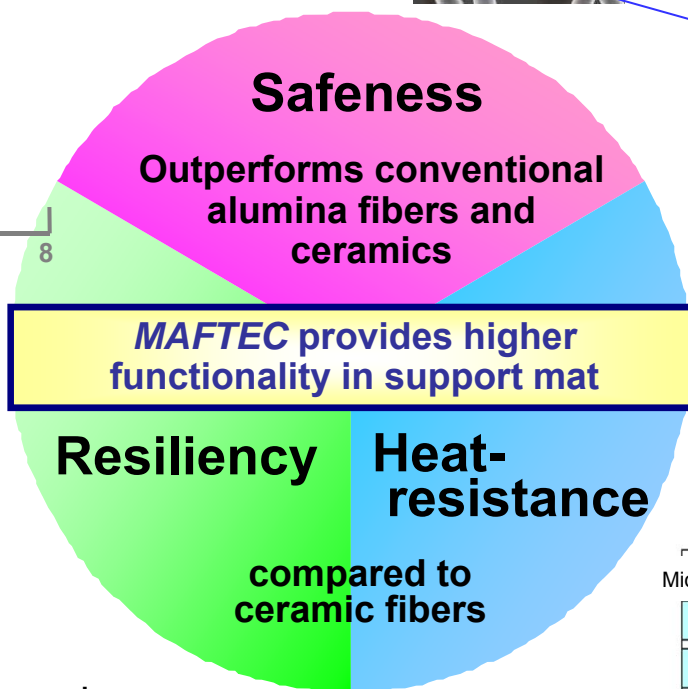
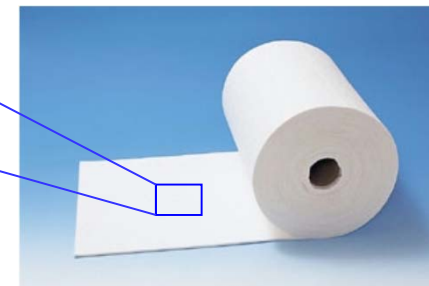


Unique Characteristics of MAFTEC

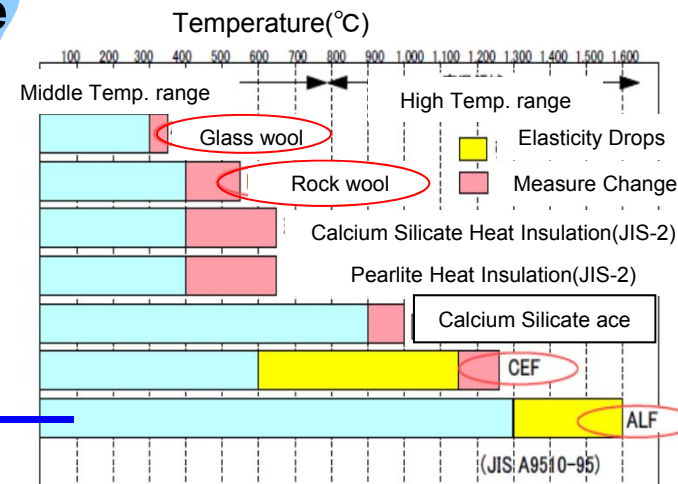
Unique technology controls fiber diameter



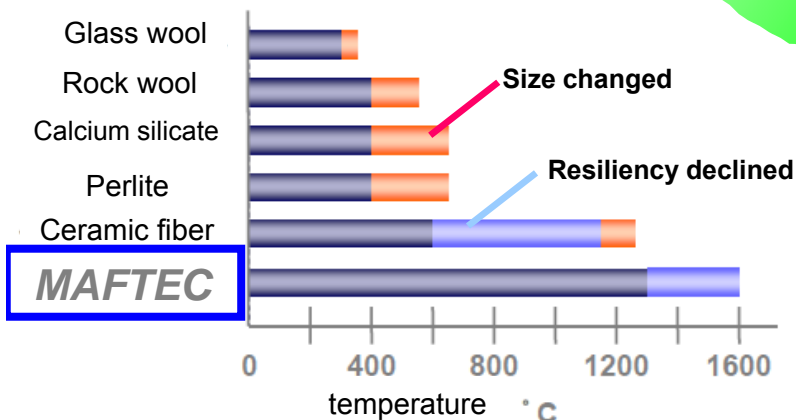
MAFTEC blanket roll



Comparison of heat-resistance for light-weight insulator



Excellent resiliency under high temperatures

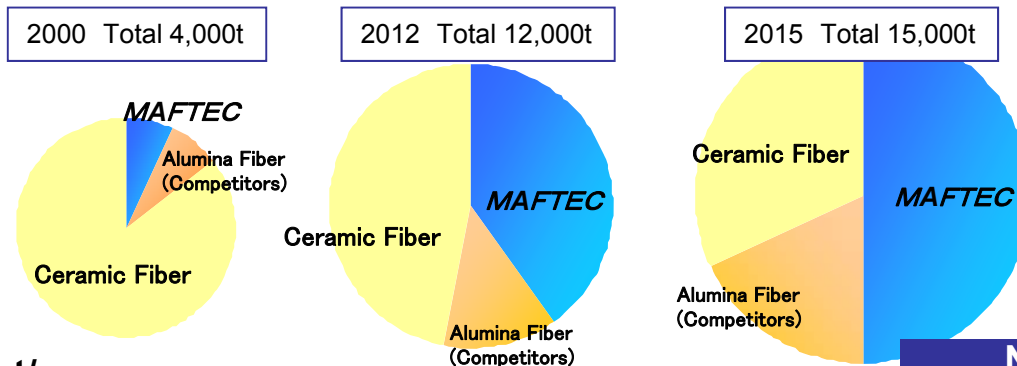


MAFTEC

Emission Control and Demand Increase for MAFTEC

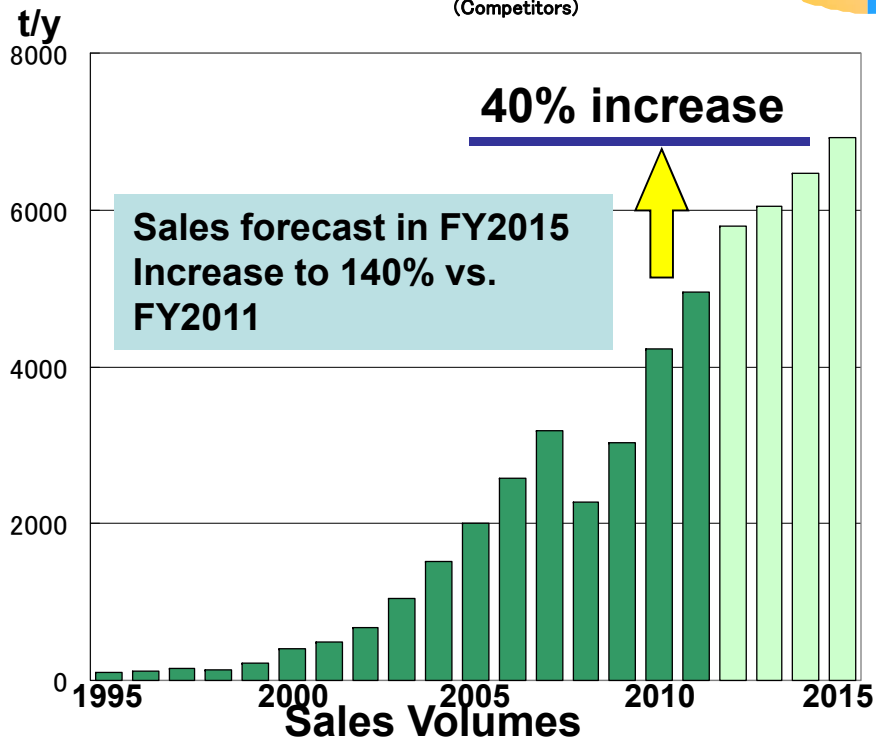
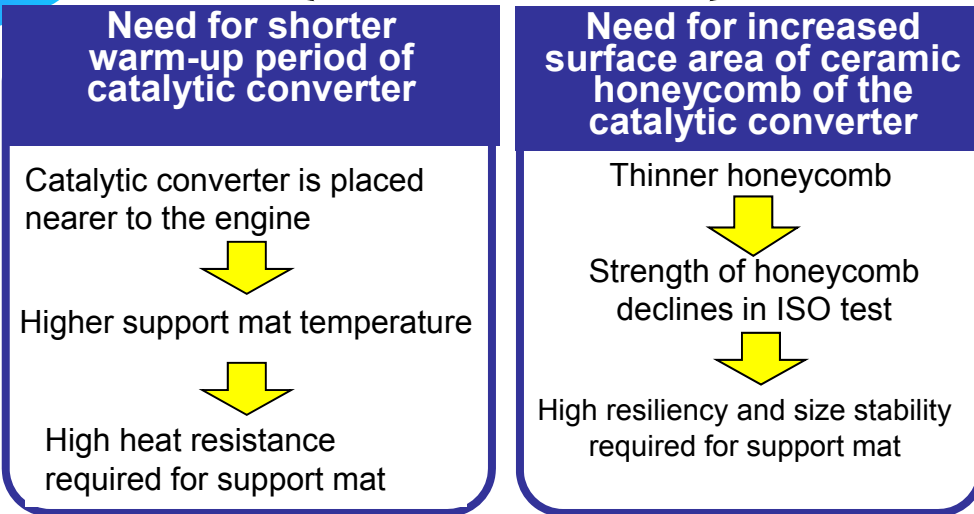
Promote advantages of MAFTEC to grow sales volumes

Outlook of global market for support mat fiber



Tighter emission control

Progress in Catalyst performance



MAFTEC demand increase

3. Agribusiness Solutions

Situation in FY2011

■ Progress in plant factory

✓ practical trial*

- Seedling production system in a closed environment under artificial light
- Tomato production system in greenhouse

*Participation in a project of the Ministry of Agriculture, Forestry and Fisheries at Chiba University

■ Acceleration of marketing in China

- ✓ Decision to establish a local office for manufacture & sales of high performance film
- ✓ Practical trial of plant factory with CHINA-CO-OP
- ✓ Evaluation of biodegradable multi film testing with Chinese Academy of Agricultural Sciences, MCC, and MPI



Seedling production system
Nae Terrace



Tomato production system
Tomatorina

Future Measures

- Set-up a local office in Chiangsu, China
(Operation will start from July 2013)
- Sell of plant factories and materials in China
- Increase field trials for biodegradable multi film in China as premarketing
- Commercialize medicinal plants



Business Expansion in China

Expand Plant Factory-related Business in China

▼ Field trial of plant factory

Partnership with CHINA-CO-OP (Nov. 2011)

Step 1: (1) Wuxi

Tomatorina

Tomato production system



Napperland

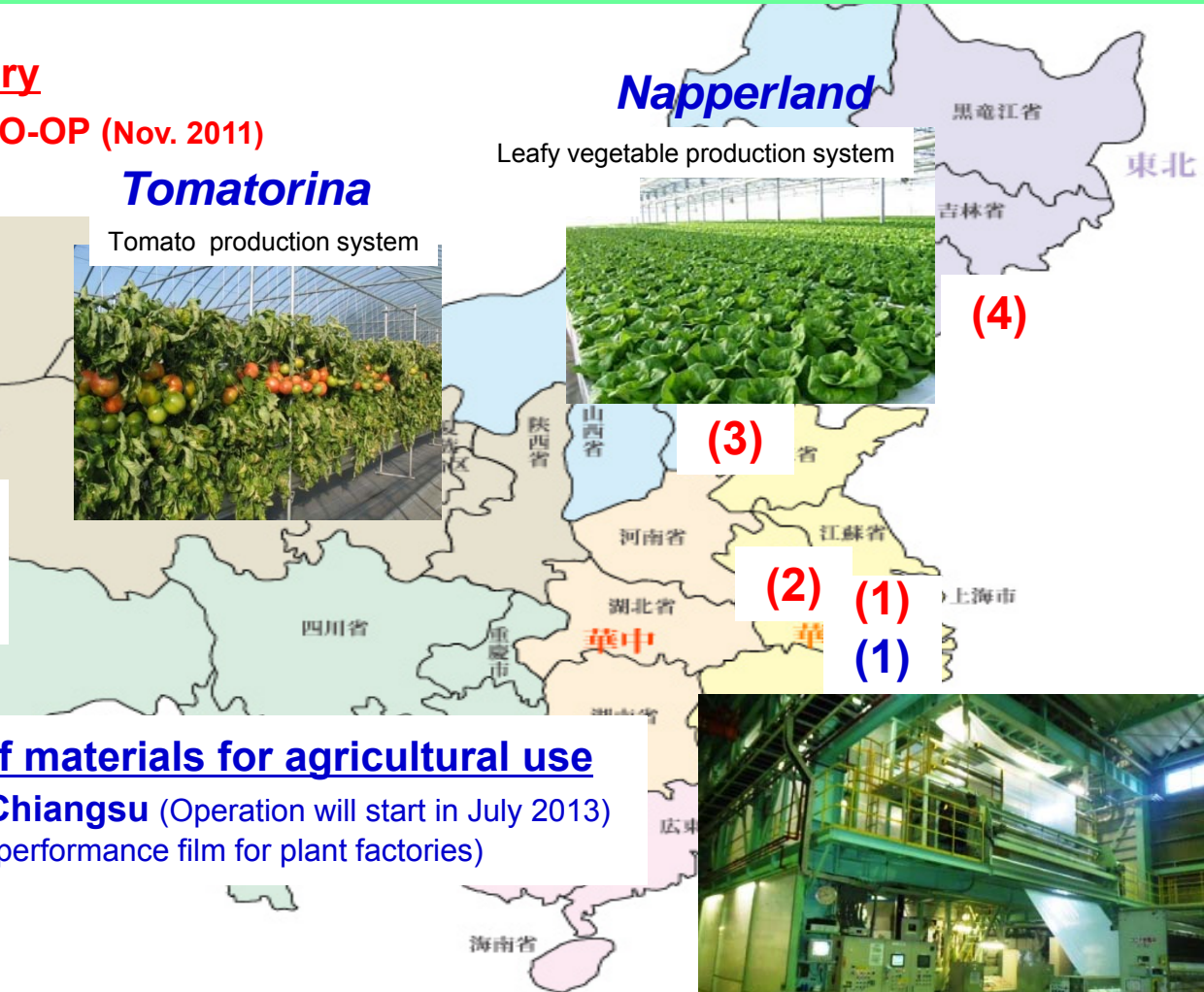
Leafy vegetable production system



Step 2: (2) Nanjing

(3) Beijing

(4) Jilin



▼ Manufacture and sales of materials for agricultural use

(1) Establish local office in Chiangu (Operation will start in July 2013)
(Manufacture and sale of high performance film for plant factories)



Mitsubishi Rayon Co., Ltd.

MMA/PMMA, Carbon Fibers, and Aqua

1. MMA/PMMA

- Update

2. Carbon Fibers and Carbon Fiber Composite Materials

- Expansion of carbon fibers for automotive applications

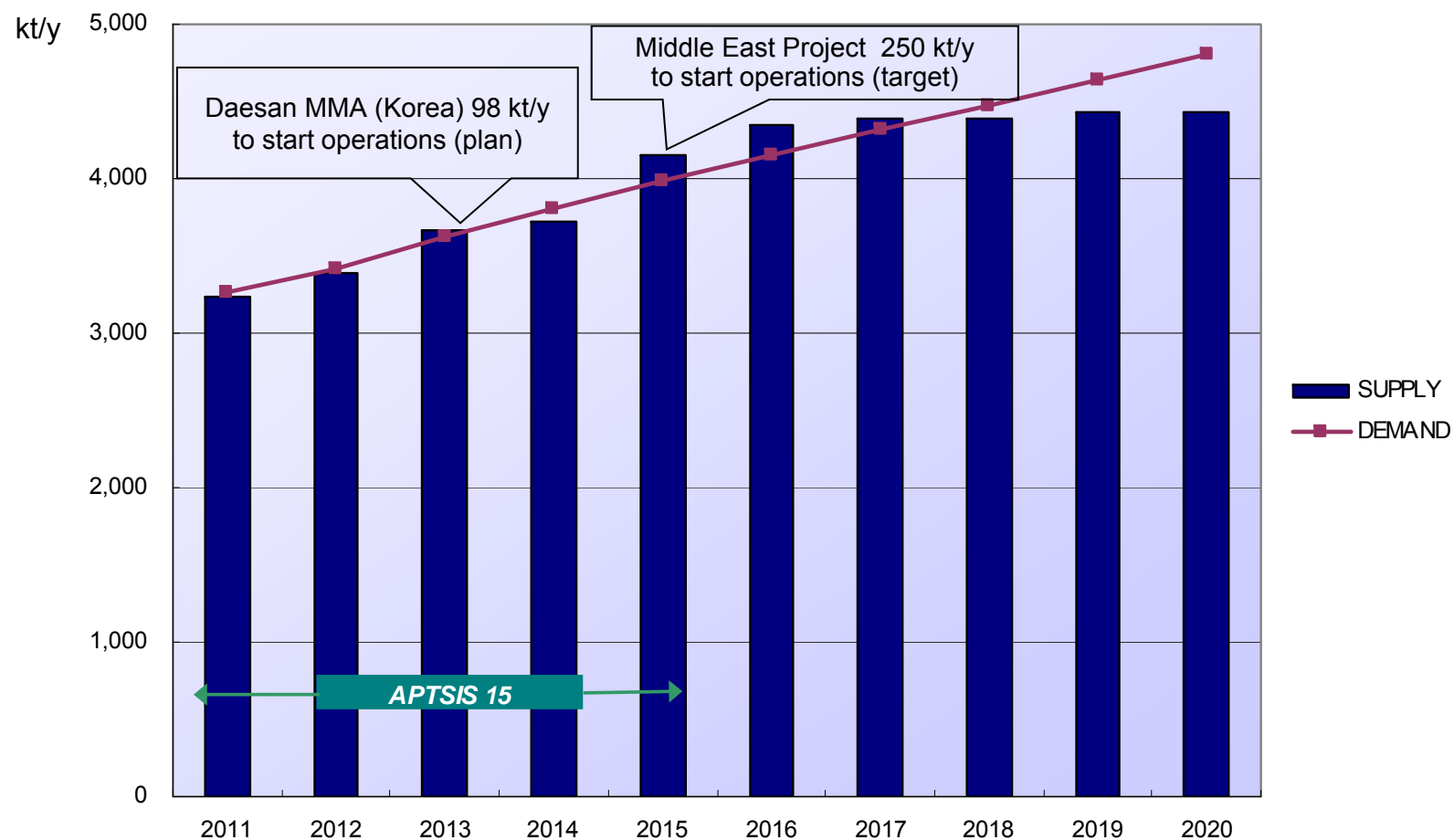
3. Aqua Business

- Business expansion in China

<p>Next-generation Growth Business (6)</p> <ul style="list-style-type: none"> ◆ Organic photovoltaic modules and materials ◆ Organic photo semiconductors ◆ Advanced performance products ◆ Agribusiness solutions ◆ Healthcare solutions ◆ Sustainable resources 	<p>Growth Business (11)</p> <ul style="list-style-type: none"> ◆ White LED lighting and materials ◆ Lithium-ion battery materials ◆ FPD components ◆ Performance composite materials ◆ High performance molding products ◆ Specialty chemicals ◆ Water treatment system and services ◆ Pharmaceuticals ◆ High performance graphite ◆ Performance polymers ◆ MMA/PMMA
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1. MMA Monomer: Global Demand Balance

Respond globally to growth drivers
and fulfill responsibility as market leader through innovation



(Estimation by MRC)

Project Plans for the MMA Chain

All projects are on schedule
Decision made to construct new methacrylic acid/esters plants

Name of project	Capacity	Progress status
Daesan-2 Project	MMA: 98,000t/y PMMA: 60,000t/y	Under construction for planned start in Q1 2013. Under construction for planned start at the end of 2012.
New methacrylic acid plant in Beaumont	Methacrylic acid: 23,000t/y	Under construction for planned start of operations in 2013.
MMA restart in Beaumont	MMA: 156,000t/y	75,000 tons operation in 2011. Preparing for full operations.
Middle East α project	MMA: 250,000t/y PMMA: 40,000t/y	In detailed design stage.
New HEMA plant in Daesan MMA	HEMA: 11,000t/y (2-Hydroxyethyl methacrylate)	Planned operational start in April 2013.
Sustainable MMA		Under co-development between the UK and Japan

Mitsubishi Rayon Co., Ltd.

MMA/PMMA, Carbon Fibers, and Aqua

1. MMA/PMMA

- Update

2. Carbon Fibers and Carbon Fiber Composite Materials

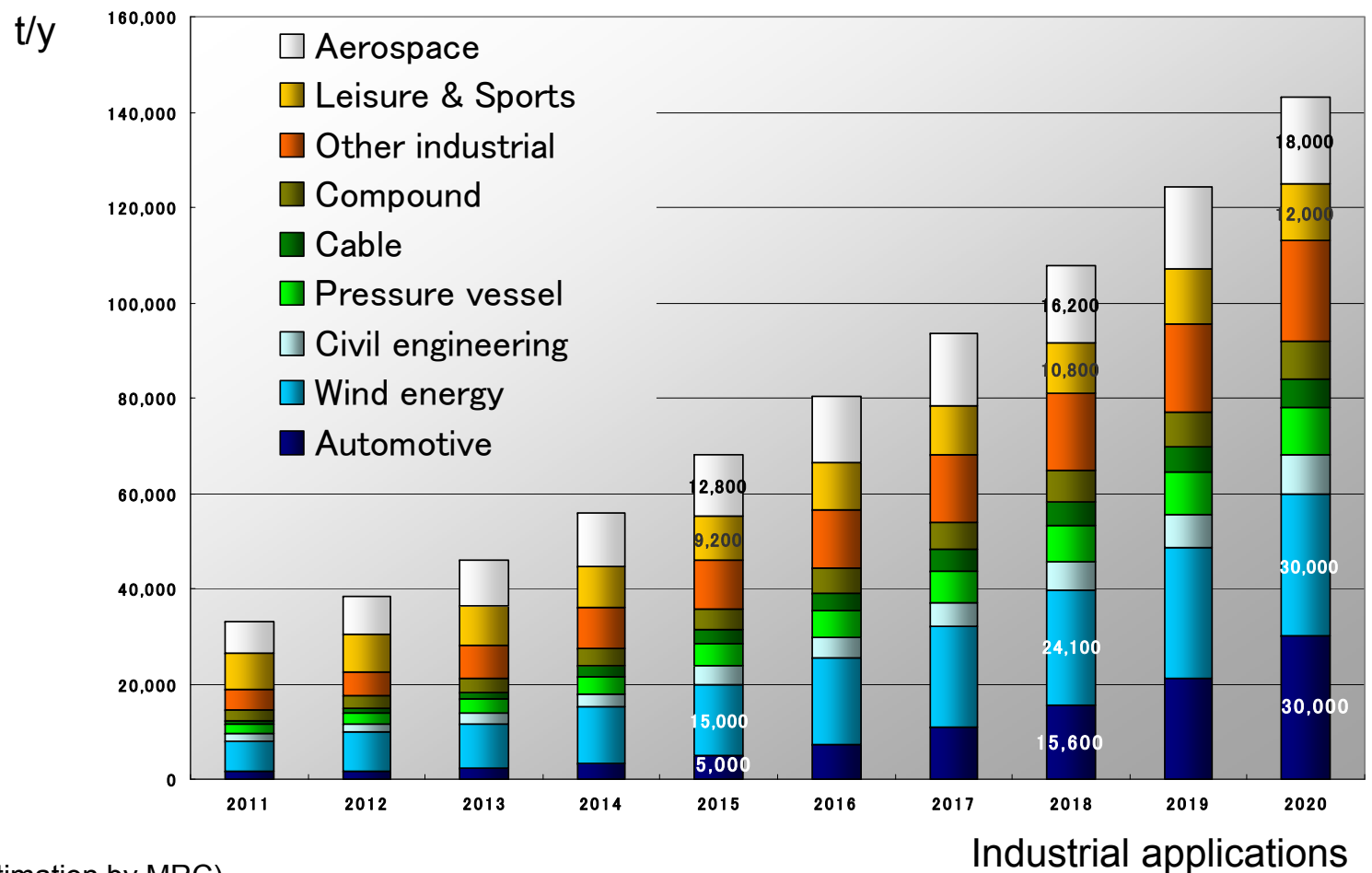
- Expansion of carbon fibers for automotive applications

3. Aqua Business

- Business expansion in China

Carbon Fiber Demand Forecasts up to 2020

Large industrial applications, mainly in wind energy, will expand
 - Rapid growth for automotive applications after 2015 -

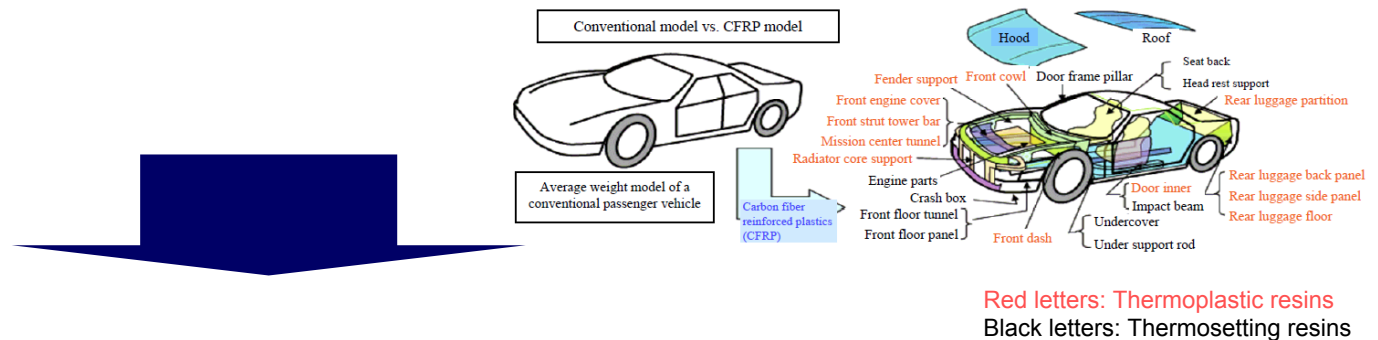


(Estimation by MRC)

Expected Carbon Fiber Applications in Automobiles

Using carbon fibers and carbon fiber composite materials to realize *KAITEKI* society

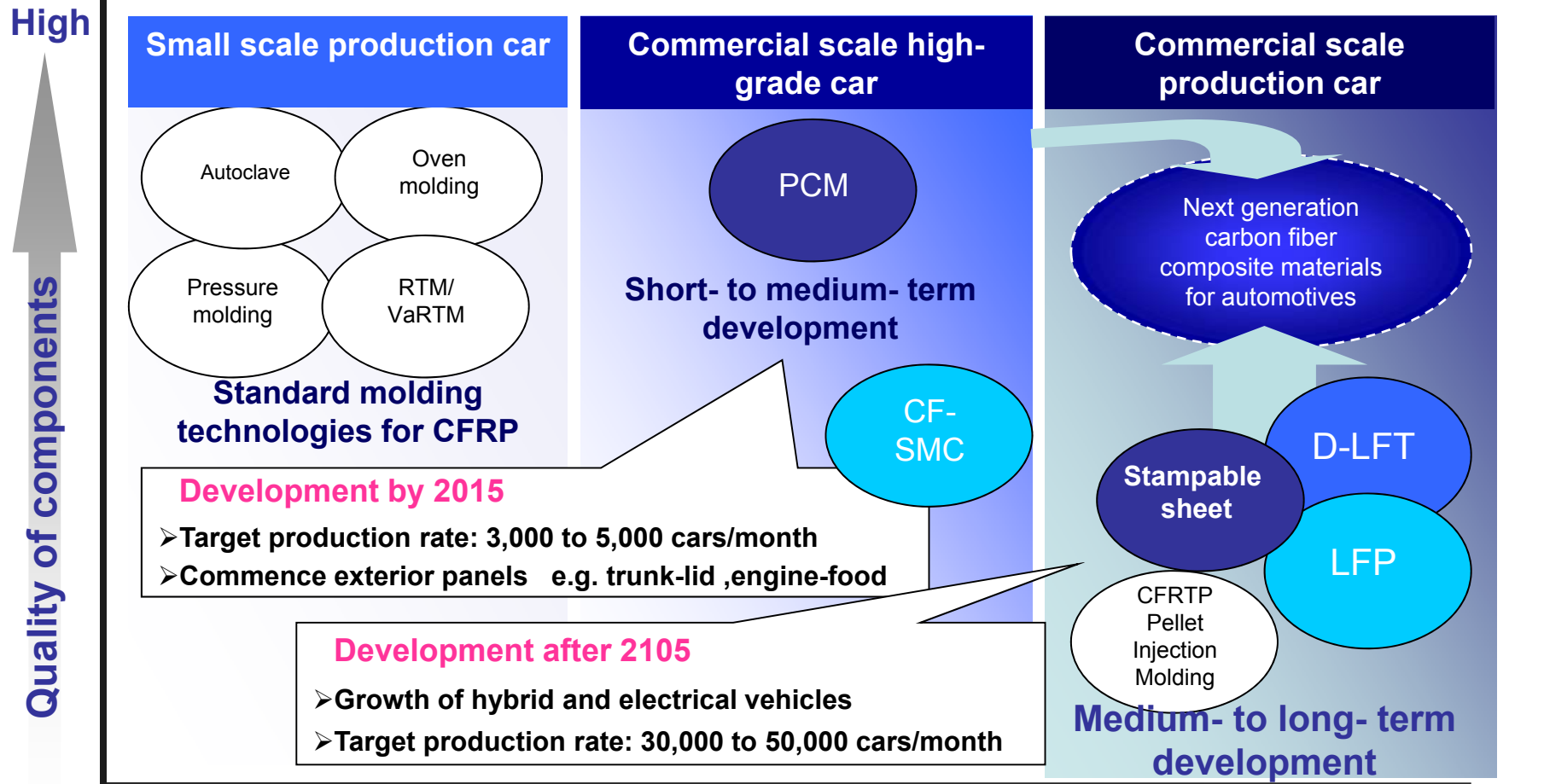
- Significant weight-saving effects
 - ✓ Contribution to CO₂ reduction
 - ✓ Reduction of total CO₂ emission in Japan by 1.5% according to JCMA's LCA Model
 - ✓ Higher degree of freedom in automobile design
 - ✓ Reduction in number of automobile parts



Boost penetration of electric/fuel cell vehicles

Molding Technologies of Carbon Fiber Composite Materials for Automobiles

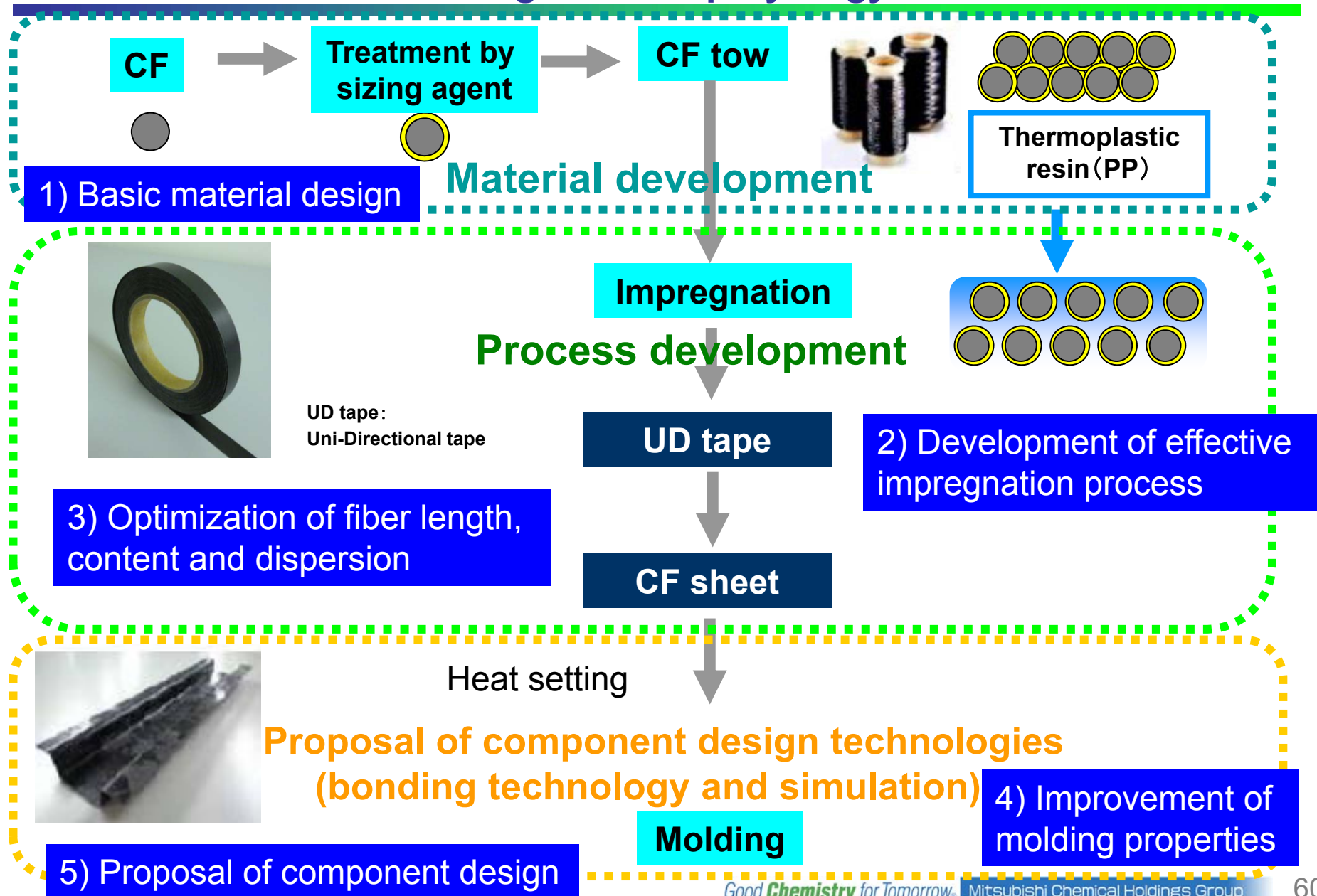
Establishment of CFRP technologies for commercial scale production vehicles



CFRP: Carbon Fiber Reinforced Plastics
 CFRTMP: Carbon Fiber Reinforced Thermoplastics
 RTM: Resin Transfer Molding
 VaRTM: Vacuum Assisted Resin Transfer Molding
 PCM: Prepreg Compression Molding
 SMC: Sheet Molding Compound
 D-LFT: Direct Long Fiber Reinforced Thermoplastics
 LFP: Long Fiber Pellet

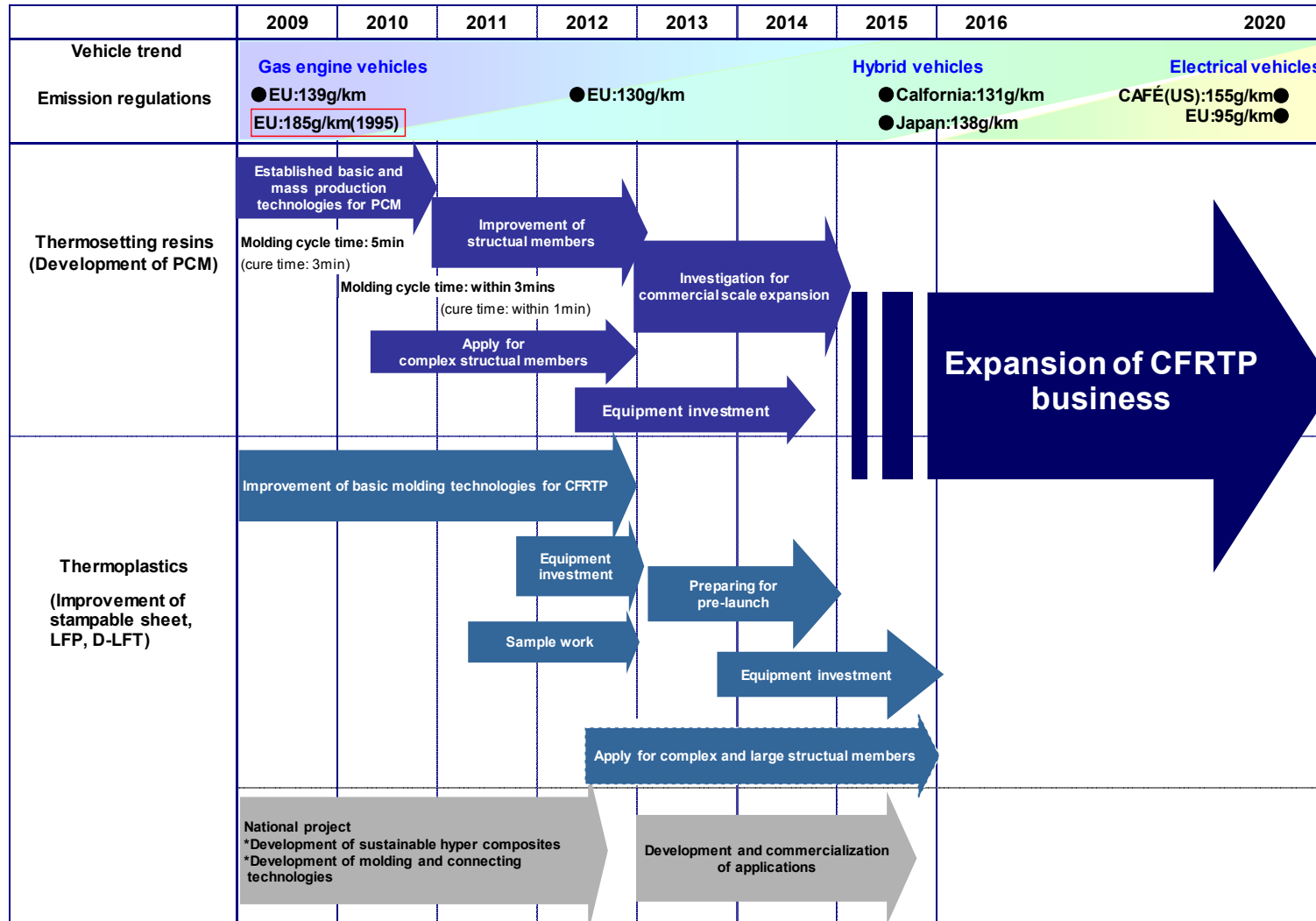
Processability, Productivity

Provide Optimized CFRTP Technologies using the Group Synergy



Automobile Market Development Roadmap

Target adoption in mass production vehicles by around 2015



Mitsubishi Rayon Co., Ltd.

MMA/PMMA, Carbon Fibers, and Aqua

1. MMA/PMMA

- Update

2. Carbon Fibers and Carbon Fiber Composite Materials

- Expansion of carbon fibers for automotive applications

3. Aqua Business

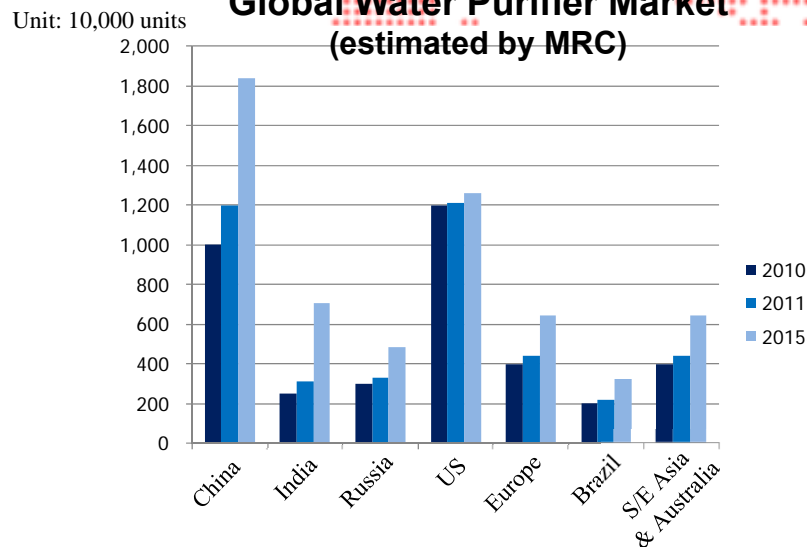
- Business expansion in China

Expansion of *Cleansui* into Overseas Markets

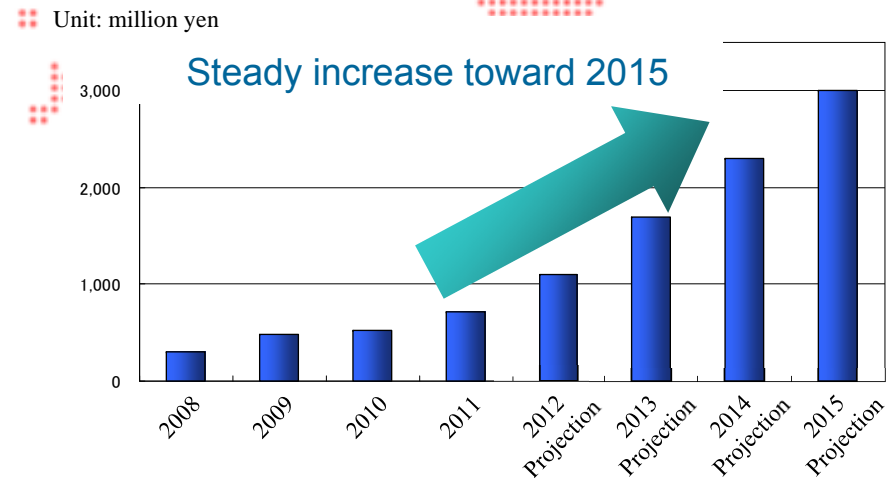
- Expansion of *Cleansui* (home-use water purifier) into overseas markets
 - Sales promotion in overseas markets in collaboration with Mitsubishi Kagaku Media/Verbatim (Australia/New Zealand, Europe, and Asia)
 - Sales promotion in the huge and increasingly health-conscious Chinese market
- Promote *Cleansui* (using hollow fiber membranes) worldwide and achieve *KAITEKI* by providing “clean & safe water”



Global Water Purifier Market
(estimated by MRC)



Changes in Overseas Sales



Business Expansion in China (1)

Accelerate MBR installation in large-scale public projects and food industry

China: Number of instances where MRC's MBR systems were used (up to FY2011)

• General industrial wastewater treatment	83
• Sewage/wastewater treatment	28
• Chemical/coal plant wastewater treatment	15
• Others	37

Total 163

- Focus on large-scale public project orders
- Expand into the food industry wastewater treatment market

[Shanxi & Shandong Provinces]

- [Major uses]
- Food/beverage plant wastewater treatment (Shandong)
 - Coal chemicals plant wastewater treatment (Shanxi) ...etc.

[North & North East China]

- [Major uses]
- Large-scale public sewage recycling
 - Agricultural wastewater treatment ...etc.

[South China]

- [Major uses]
- Wastewater treatment in electronics industry and food (starch) plants

[East China]

- [Major uses]
- Wastewater/sewage treatment to comply with regulations concerning industrial wastewater discharge in the Taihu Lake area

Business Expansion in China (2)

**Established hollow fiber membrane production facilities
in partnership with a leading local player**

Enhanced capabilities to stably manufacture and supply high-quality hollow fiber membranes based on our proprietary technologies

Using local partner's capabilities to receive MBR orders and sell hollow fiber membranes

Improved cost competitiveness of hollow fiber membrane products; gaining the advantages of local production for local consumption

**Further
strengthening
competitiveness
in the Chinese
wastewater
treatment market**

[Company Overview]

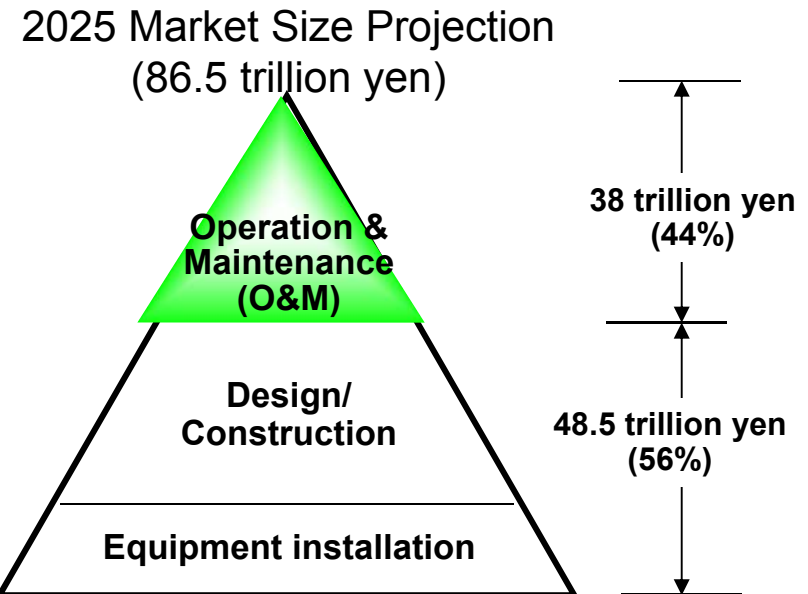
Company name: Wuxi MRC Origin Water Membrane Tech. Co., Ltd.
 Location: Wuxi City, Jiangsu Province
 Foundation: July 2001
 Total investment: RMB 142 million
 Capital composition: MRC 51%
 Beijing Origin Water Technology Co., Ltd. 49%
 Business lines: Manufacturing and sale of hollow fiber membranes for sewage/wastewater treatment; processing and sale of membrane elements



Business Expansion in China (3)

Expansion of the water treatment facility O&M (operation & maintenance) business in China

- Launch O&M business in China with a local partner who has rich experience in MBR installation (June 2012)
- O&M is expected to become the fastest growing segment in the global water treatment market. We plan to meet this demand by promoting our industrial wastewater treatment business (incl. recycling) and businesses that use affiliates' networks.



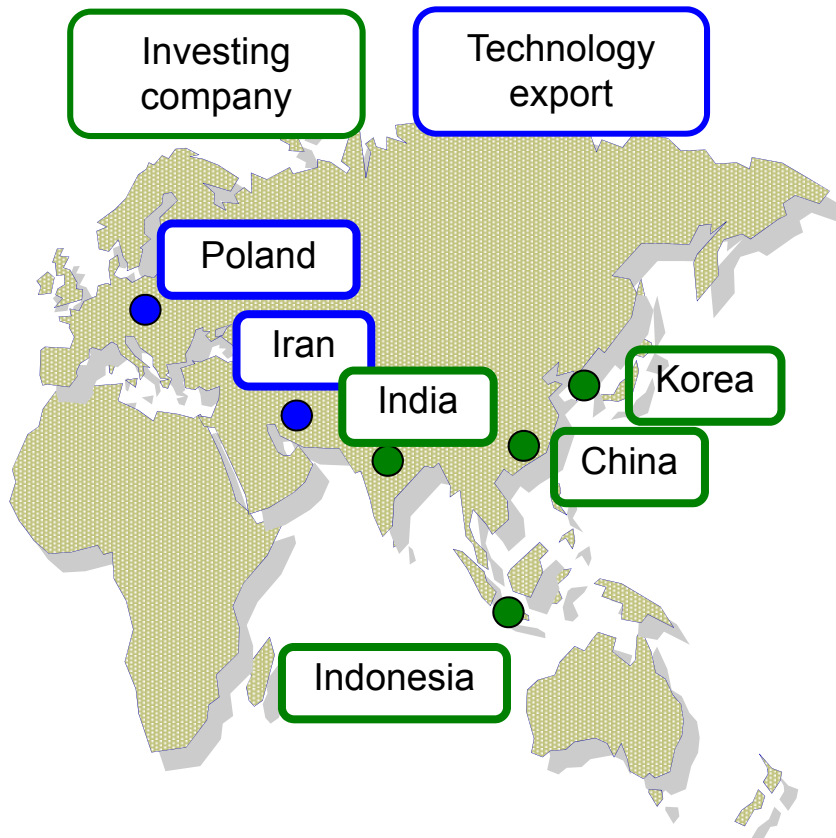
[Company Overview]

Company name: Fengxin JDL Environment Protection Ltd.
 Location: Fengxin Industrial Park, Fengxin County, Yichun City, Jiangxi Province
 Foundation: December 2010
 Capital: RMB 28 million (approx. JPY 350 million) *As of Apr. 2012
 Capital composition: MRC 51%, Jiangxi JDL 40%, Toyota Tsusho 9% (expected in June 2012)
 Business lines: Construction and operation of water supply/wastewater treatment facilities and provision of related services; recycling of water resources; sale of water treatment facilities; and provision of water treatment technology consulting services

Accelerate Wastewater System Development *APTSIS* through Maximizing Group Strengths in Aqua Business

Started super water-saving PTA plant in China
Contributing to PTA competitiveness and globalization of Aqua business

Planned PTA manufacturing plant of MCC
(approximate 10% share of the international market)



- High volume of COD waste-water is produced from large quantities of industrial water used in the PTA process
- MCC has started the world's best water-saving PTA plant, with potential for further improvement

	general	MCC China	Target
industrial water m3/t-TPA	8	6	3
Effluent load kg/t-TPA	0.4	0.2	0.2

- Contributes to environmental protection while also strengthening competitiveness and globalization of our Aqua business

APTSIS

*Mitsubishi Chemical Holdings Group Member will,
Under a mission to contribute to our Group,
Strive to provide safety and comfort, be environmentally
conscious, and improve human health
To win further trust worldwide.*

Agility

Be alert, act quickly

Principle

*Sharing theories, principles
and ideas*

Transparency

*Transparency, accountability and
compliance*

Sense of Survival

A sense of being on the verge, a sense of crisis

Internationalization

Enhancing our performance within the global market

Safety, Security & Sustainability

*Ensuring safety in manufacturing, trust in quality,
information security and environmental consciousness*