# New Mid-term Management Plan MGC Will2014

# May 11, 2012



Mitsubishi Gas Chemical Company, Inc



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# **1. Message from the President**



Today, we regret to report that MGC was unable to achieve the targets of MGC Will 2011, the previous mid-term Management Plan. This was partly due to unexpected external factors during the period of the plan. During that period, however, we made aggressive investments in our core businesses. These include methanol in Venezuela and Brunei, hydrogen peroxide in Zhangjiagang, China, electronics chemicals in South Korea, Taiwan, Singapore, and the USA, polycarbonate in Shanghai, polyacetal in Thailand and South Korea, and BT laminates in Thailand. We have confidence that these investments will make positive contributions to our future earnings. MGC has a wide range of products, from basic chemicals such as methanol, to high-performance products such as AGELESS® oxygen absorber. In the methanol business, the company has production sites in Saudi Arabia, Venezuela, and Brunei. With good access to natural gas resources for raw material supply, this production network enables the company to distribute methanol throughout the world. In high-performance products such as electronics chemicals, sheets/films, BT products, and AGELESS® oxygen absorber, the co-creation of value with customers allows us to offer differentiated products with a development platform. This accounts for our tangible presence in all market segments. In these core businesses, we will not only continue to make the most of their existing strengths, but also take an M&A approach to strengthen our business even further.

On the other hand, we have concluded that loss-making businesses require structural reform. Unexpected deterioration in the business environment and increasing competition have surpassed our efforts to make these operations profitable within the existing framework. Although we have already set up structural reform projects in cooperation with the relevant businesses, we will continue to study all possibilities and implement reform plans as soon as they are ready.

Another challenge is to accelerate the development of new businesses. In addition to our existing research and development activity, we have set up the "Next Generation Business Project Group" to integrate internal resources through a cross-organizational approach.

By strengthening both Business and Corporate Groups through these measures, we aim to achieve the Group Vision and targets through the overall will and ability of the whole company during the period of MGC Will 2014, the new mid-term Management Plan.

President

# 2. Review of MGC Will 2011

Consolidated parameters	FY2009	FY2010	FY2011	FY2011(planned)
Net sales (billion yen)	384.5	451.0	452.2	550.0
Operating income (billion yen)	4.0	23.3	9.0	40.0
Ordinary income (billion yen)	7.3	36.3	26.1	50.0
ROA (%)*	1.4	6.5	4.5	≥9.0
D/E ratio	0.62	0.66	0.66	≦0.6

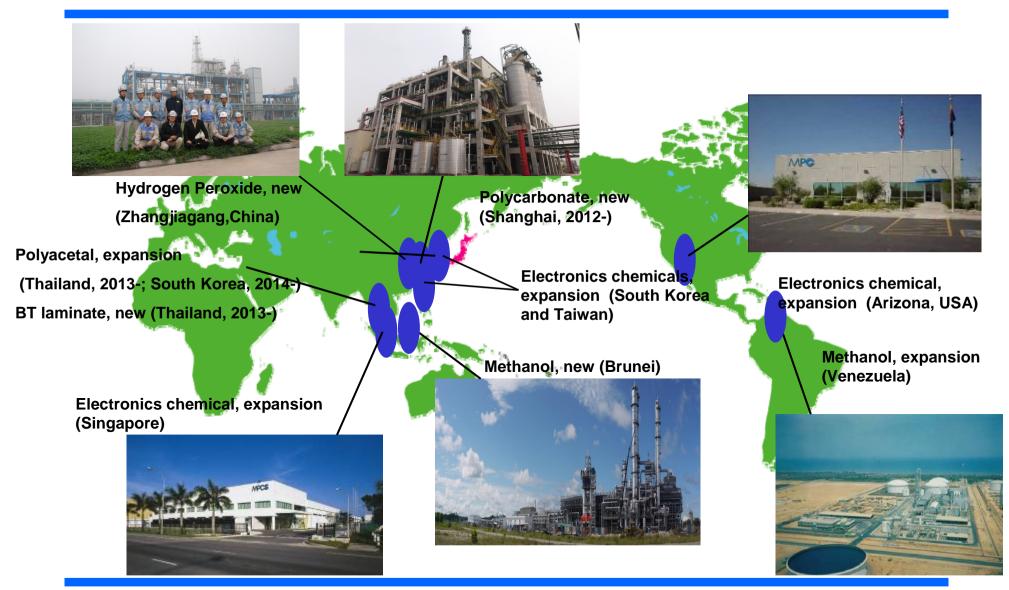
\* Ordinary income/total assets

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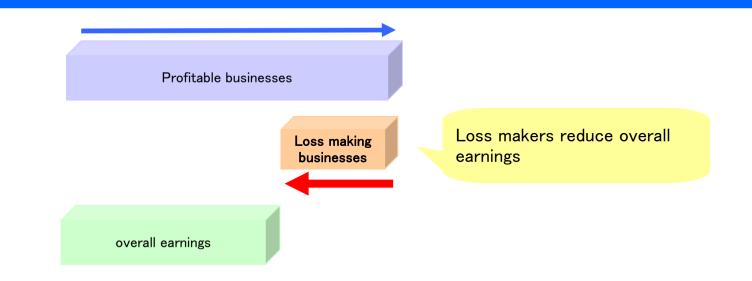
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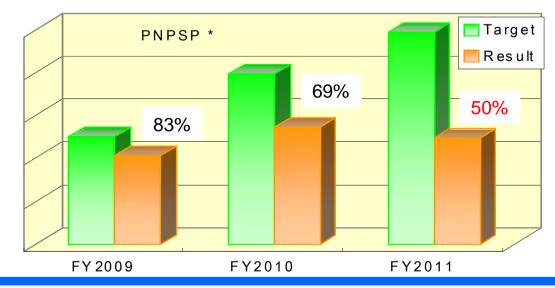
# 2. Review of MGC Will 2011: Major Investments





### 2. Review of MGC Will 2011: Challenges

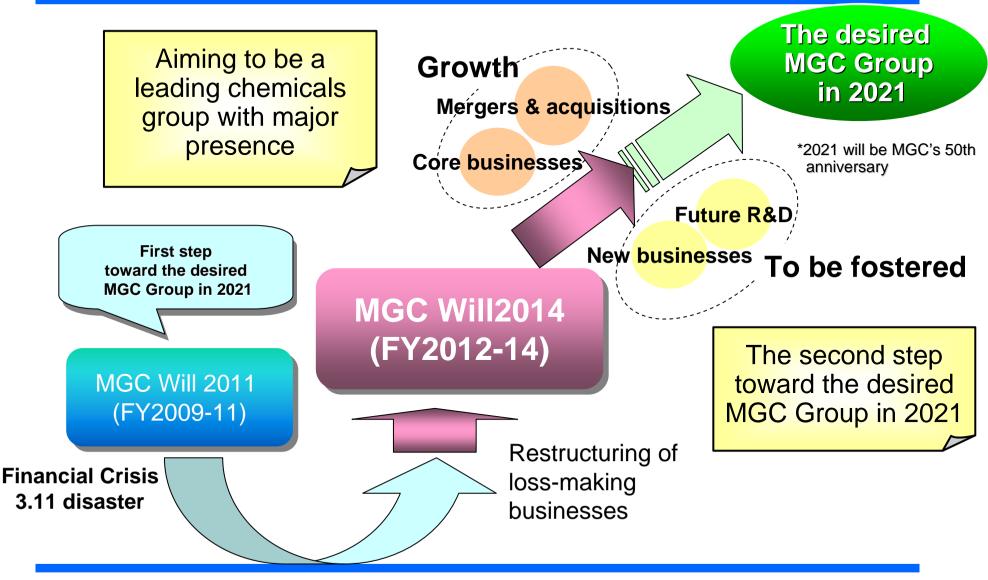




PNSNP only accounted for 50% of the target in Will 2011. The sales amount itself remained almost same during Will 2011.

•PNSNP: Percentage of Net Sales from New Products against the target in Will 2011

# **3. MGC Will2014**, New Mid-term Management Plan



# 3. MGC Will2014: Philosophy and Group Vision

### ○ MGC management philosophy

MGC contributes to the peace and development of society through the creation of a diverse range of values through chemistry.

### ○ "The desired MGC Group in 2021"

Gaining society's trust through taking CSR in all corporate activities R&D oriented company with global excellence and high value added businesses Net sales over ¥1 trillion, one of the "Global Top 30" chemical manufacturers

### ○ MGC Group Vision

The MGC Group aims to develop and grow sustainably on the global stage as a leading chemicals group with major presence and a strong platform of proprietary technology while taking CSR in all its activities.



## 4. Strategies

#### ○ Strengthening the core businesses

Six core businesses (Methanol, MXDA/Nylon-MXD6, H<sub>2</sub>O<sub>2</sub>/Electronics Chemicals, Polycarbonate Sheets & Films, BT materials, AGELESS)

#### ○ Restructuring loss-making businesses

Ammonia, Isophtalic acid, and coenzyme Q10

#### ○ Accelerating development of new businesses

Next Generation Business Project Group (new structural materials, next-generation battery materials, and medical packing solutions)

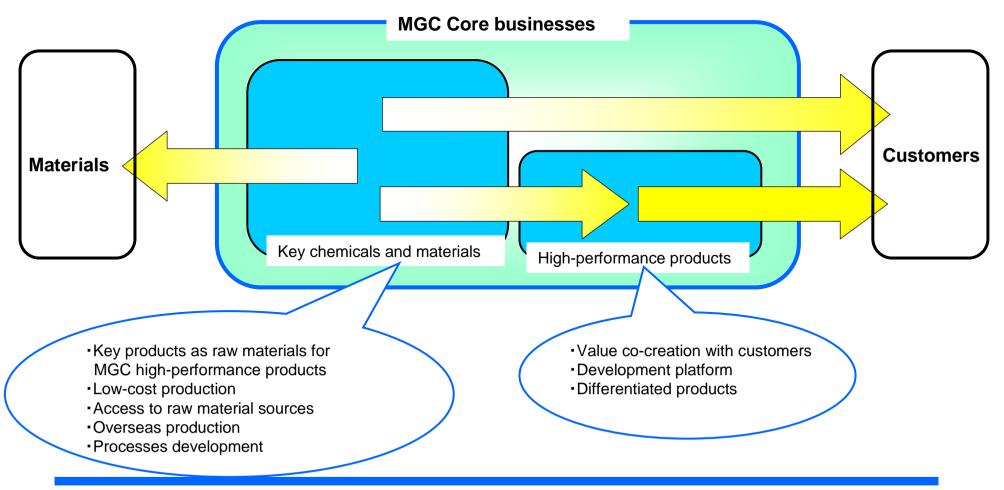
#### O Improving total enterprise quality in support of sustainable growth

Developing global human resources, improving the ability of the manufacturing, production with low environmental impact, and higher group-wide business efficiency

# 4. Strategies: Strengthening the core businesses

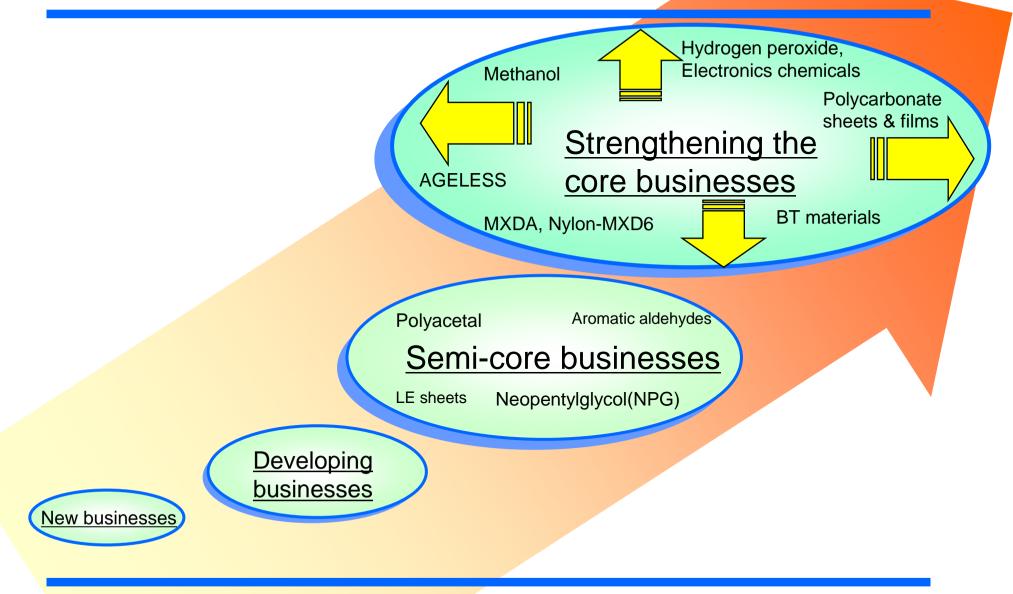
·Wide range of businesses from chemicals and materials to high-performance products

- ·Key chemicals and materials: methanol, hydrogen peroxide and polycarbonates
- High-performance products: electronics chemicals, sheets and films, BT laminates, and the AGELESS, oxygen absorber.





### 4. Strategies: Strengthening the core businesses





## 4. Strategies: Investment plans

- O Investment amount during MGC Will2014: 140 billion yen
- More than 50% of strategic investments in overseas locations (other than maintenance and improvements)

Accelerates global development of core and semi-core businesses

O Strategic investment in Japan:

Core and semi-core businesses: Strengthen the business foundation even further by technology development.

Developing and new businesses: Develop future core and semi-core businesses

#### Major overseas investments

- Methanol, new overseas plant
- •NPG, new site in Saudi Arabia
- Hydrogen peroxide/electronics chemicals, polycarbonate sheets/films and polyacetal expansion of overseas sites
- •BT resin, new site in Thailand

#### Major domestic investments

- •Cyanate, new site in Niigata
- •MXDA, expansion in Mizushima
- hydrogenated poly-carboxylic acid production in Mizushima
- research building and prototype facility
- at MGC Electrotechno in Shirakawa

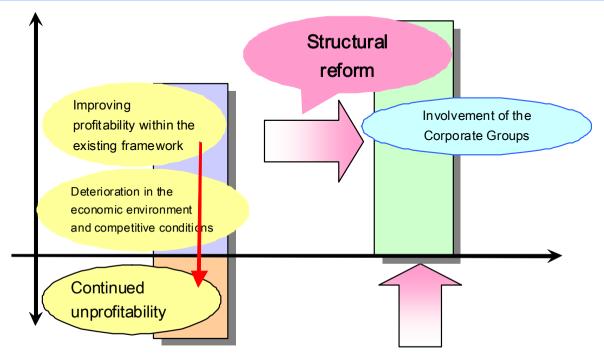


# **Strategies: M&A**

- Take a M&A approach to accelerate the strengthening of core businesses and the development of future core businesses.
- Aimed at creating synergies by securing business resources such as sales channels, technology, and development ability.
- In February 2012, the Mergers and Acquisitions Office was set up in the Corporate Planning Division to start discussion with business divisions.
- A total of ¥100 billion yen of mergers & acquisitions by 2021
- Effects of mergers & acquisitions are not reflected in MGC
   Will2014 targets.

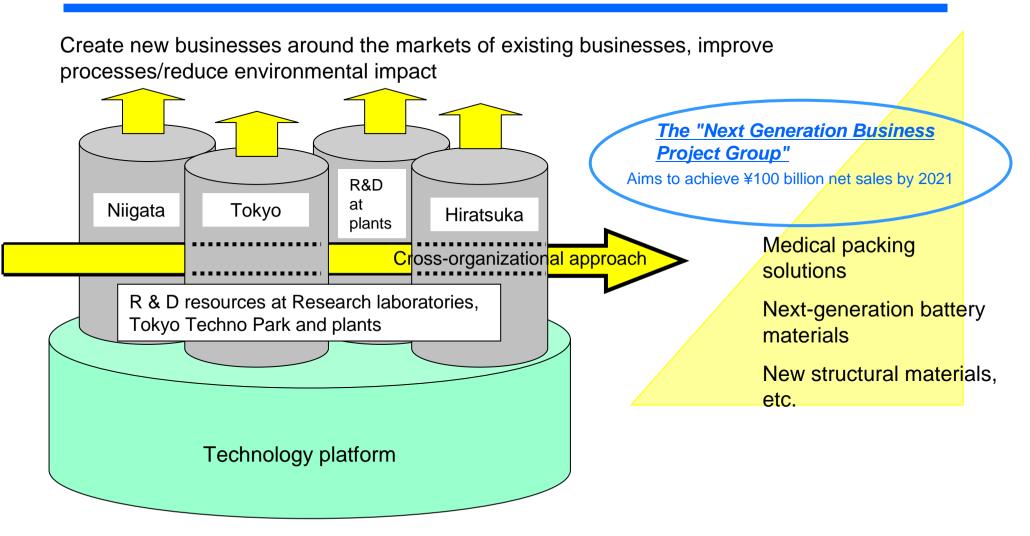
#### MGC

### 4. Strategies: Loss-making businesses



- O The restructuring covers the ammonia, isophtalic acid, and coenzyme Q10 businesses. Under the previous Mid-term Management Plan, all three businesses made efforts to recover profitability within the existing framework. However, they continued to post losses due to unexpected deterioration in the business environment and increasing competition.
- $\bigcirc$  MGC will work on structural reform while studying all possible options.
- From the beginning, the Corporate Groups are involved in the discussion.

# 4. Strategies: Accelerating new business development



R&D expenses during MGC Will2014 period: ¥50 billion

# 5. Targets for FY2014

Consolidated parameters	FY2011 result	FY2012 forecast	FY2012 planned
Net sales (billion yen)	452.2	500.0	600.0
Operating income (billion yen)	9.0	18.0	40.0
Ordinary income (billion yen)	26.1	34.0	60.0
ROA* * Ordinary income/total assets	4.5%	5.5%	9.0%

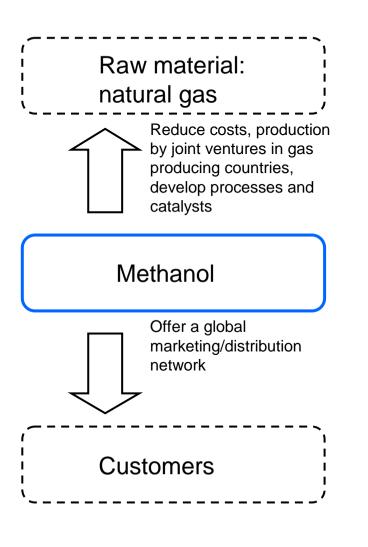


### 6. Strategies for Individual Businesses: Grouping of businesses

	Core businesses	Businesses covered by structural reform	
Natural Gas Chemicals	☆ Methanol	★ Ammonia ★ Coenzyme Q10	
Aromatic Chemicals	☆ MXDA/Nylon-MXD6	★ Isophthalic Acid	
Specialty Chemicals	<ul> <li>☆ Hydrogen Peroxide/ Electronics Chemicals</li> <li>☆ Polycarbonate Sheets &amp; Films</li> </ul>		
Information & Advanced Materials	<ul> <li>☆ BT Materials</li> <li>☆ Oxygen Absorber AGELESS</li> </ul>		

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### 6. Strategies for Individual Businesses: MGC Methanol



#### Strengths

- Locations near natural gas resources ensure good access to raw materials.
- Offers all functions required for business in a complete package.

Production processes, proprietary catalysts, production operations, technical services, logistics, derivatives business, global marketing

#### Will2014 Business Strategies

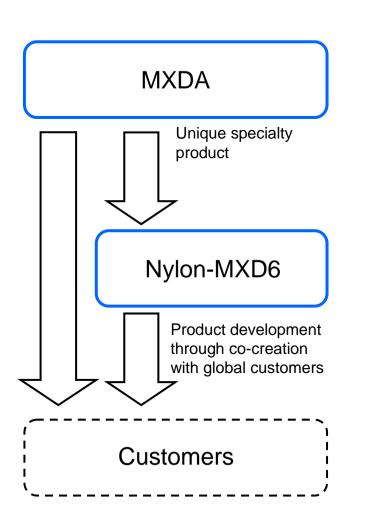
- Metor 2 (Venezuela) and BMC (Brunei) started operation in 2010. Aims to achieve annual global production of 8 million tons in combination with AR-RAZI in Saudi Arabia (World demand: 55 million tons/year).
- Fine-tune catalyst and production technologies
- Demand is increasing in China and other markets.

Study the possibility of expanding the plant under the next plan and building a new plant elsewhere, and make preparations for further progress.





### 6. Strategies for Individual Businesses: N MXDA and Nylon-MXD6



#### Strengths

- MGC's unique developments: MGC is the only manufacturer and supplier of these products.
- In-house production of key product (MXDA)
- Finds a broad range of applications including polyamides, epoxy resins, and isocyanates.

- Expand sales markets by establishing global networks for sales, technical services, and product development that cover East Europe, Oceania, and Latin America.
- Develop markets in collaboration with external partners such as customers and trade companies.
- Increase capacity by building sites in new overseas locations.

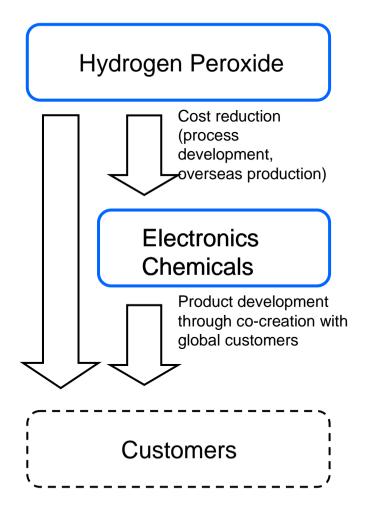




# 6. Strategies for Individual Businesses:



#### Hydrogen peroxide and electronics chemicals



#### Strengths

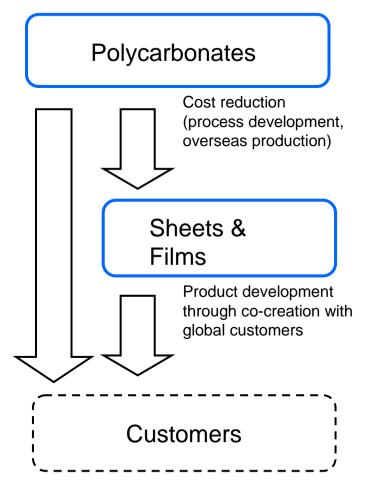
- ✓ Solid relationships with strong globally operating customers
- Global networks for production, supply, and quality assurance
- In-house production from hydrogen peroxide ensures high product quality.

- Enhance hydrogen peroxide production plants in China and other Asian countries.
- ✓ Develop new cost-competitive processes for hydrogen peroxide.
- For electronics chemicals, MGC plans to continue developing products to meet market needs and expand existing production sites around the world.
- Promote the development of new applications such as sterilization and health care.





### 6. Strategies for Individual Businesses: Polycarbonates, Sheets & Films



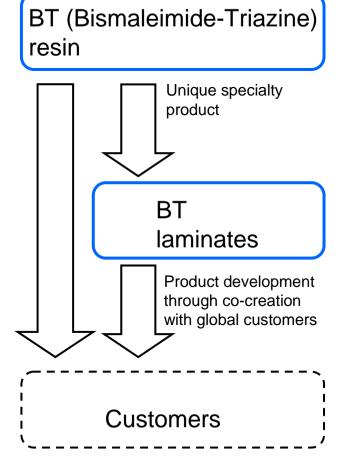
#### Strengths

- Polycarbonate resin brand "Iupilon"
- The product development, technical services, and product lineup fully meet customer needs.
- Production in Japan, Thailand, and China

- The Chinese plant started operation in 2012, and now plans further expansion.
- Increase cost competitiveness and reduce environmental impact.
- Align all products (polycarbonate resin, specialty polycarbonate resin, and sheets & films) closely with customer needs to strengthen the brand further.



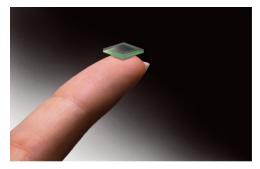
### 6. Strategies for Individual Businesses: MGC BT materials (for semiconductor package substrates)



#### Strengths

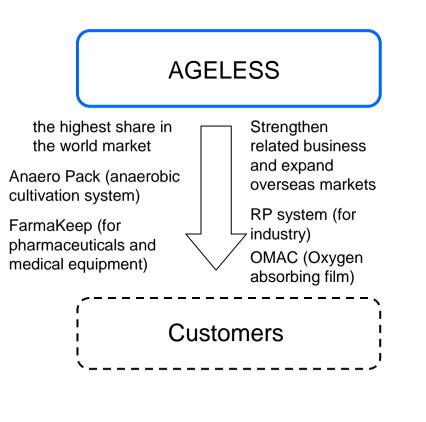
- MGC is the top manufacturer of materials for semiconductor package substrates.
- ✓ Highest production capacity and supply stability in the industry
- Product lineup and development system designed to meet customer needs
- In-house production of key products

- Construct a new plant in Thailand (to start operation in 2013).
- Strengthen overseas marketing.
- Develop products in keeping with customer development roadmaps.





### 6. Strategies for Individual Businesses: AGELESS oxygen absorber



#### Strengths

- MGC is a pioneer in producing oxygen absorber, for foods freshness preservation.
- Product lineup aligned with customer needs

- Accelerate the development of overseas markets.
- Develop and launch global products that can be produced at much lower costs.
- Enhance the development of markets for medical products and electronic components.





### 6. Strategies for Individual Businesses: MGC Loss-making businesses

#### Ammonia, Isophtalic acid, and Coenzyme Q10 businesses

- All three businesses play important roles: The ammonia business supplies key materials and utilities to the derivative business; the isophtalic acid business supports the entire operation for aromatic chemicals; and the coenzyme Q10 business forms the core of new biological business.
- O Under the previous Three-year Medium-term Management Plan, all three businesses made efforts to recover profitability within the existing framework.
- However, MGC decided that structural reform was unavoidable in these operations, which continued to post losses due to unexpected deterioration in the business environment and increasing competition.
- MGC has already launched a structural reform project for each of the relevant businesses, where discussion has begun with members from the Corporate Groups. We will examine all possibilities and implement reform plans as soon as they are ready.
- O Economic effects are not reflected in MGC Will2014 targets.



# 7. Targets by Segments (consolidated)

Figures in billion yen

	FY2011 (Actual)	FY2012 (Forecast)	FY2014 (Plan)
	Sales	Sales	Sales
	<b>Operation Income</b>	<b>Operation Income</b>	<b>Operation Income</b>
	Ordinary Income	Ordinary Income	Ordinary Income
Natural Gas Chemicals	159.9	169.8	200.0
	0.3	2.2	6.0
	15.2	16.3	23.0
Aromatic Chemicals	127.1	137.7	150.0
	(1.0)	1.7	6.0
	(2.1)	(0.0)	4.5
Specialty Chemicals	122.1	142.9	190.0
	7.5	9.7	22.5
	8.4	10.2	24.0
Information & Advanced Materials	51.8	59.2	70.0
	3.7	6.4	7.5
	3.7	6.3	7.0



#### **MGC** business philosophy

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#### **MGC Group Vision**

The MGC Group aims to develop and grow sustainably on the global stage as a leading chemicals group with major presence and a strong platform of proprietary technology while taking CSR in all its activities.