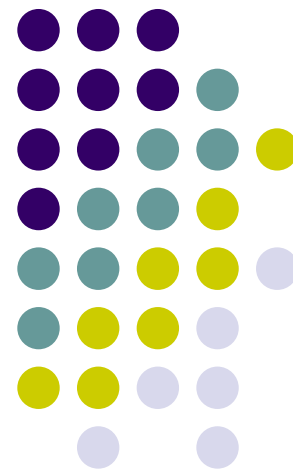


Basic Chemicals 2011 First Half Results & Business Strategy

November 1, 2011

Kenichi Hatano

Director & Senior Managing
Executive Officer



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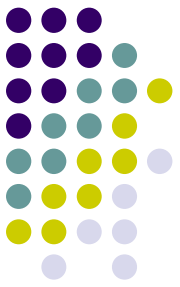
- (1) Divisions and Major Products
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II . Business Strategy

- (1) Inorganic Materials
 - High-purity alumina, DPF, Others
- (2) Caprolactam
- (3) Methyl Methacrylate
- (4) Others

I . Overview of Business

(1) Divisions and Major Products



- **Industrial Chemicals Division**

Sulfuric acid, Nitric acid, Liquid ammonia, Caustic soda, Hydrochloric acid, Methanol, Formalin, Acrylonitrile, Caprolactam



- **Inorganic Materials Division**

Alumina, Alumina hydroxide, High-purity alumina, Photocatalyst



- **Methacrylates Division**

Methyl methacrylate monomer & polymer, Acrylic sheet, SUMILOOK edge-type LED light



- **Aluminum Division**

Aluminum, High-purity aluminum

- **Specialty Chemicals Division**

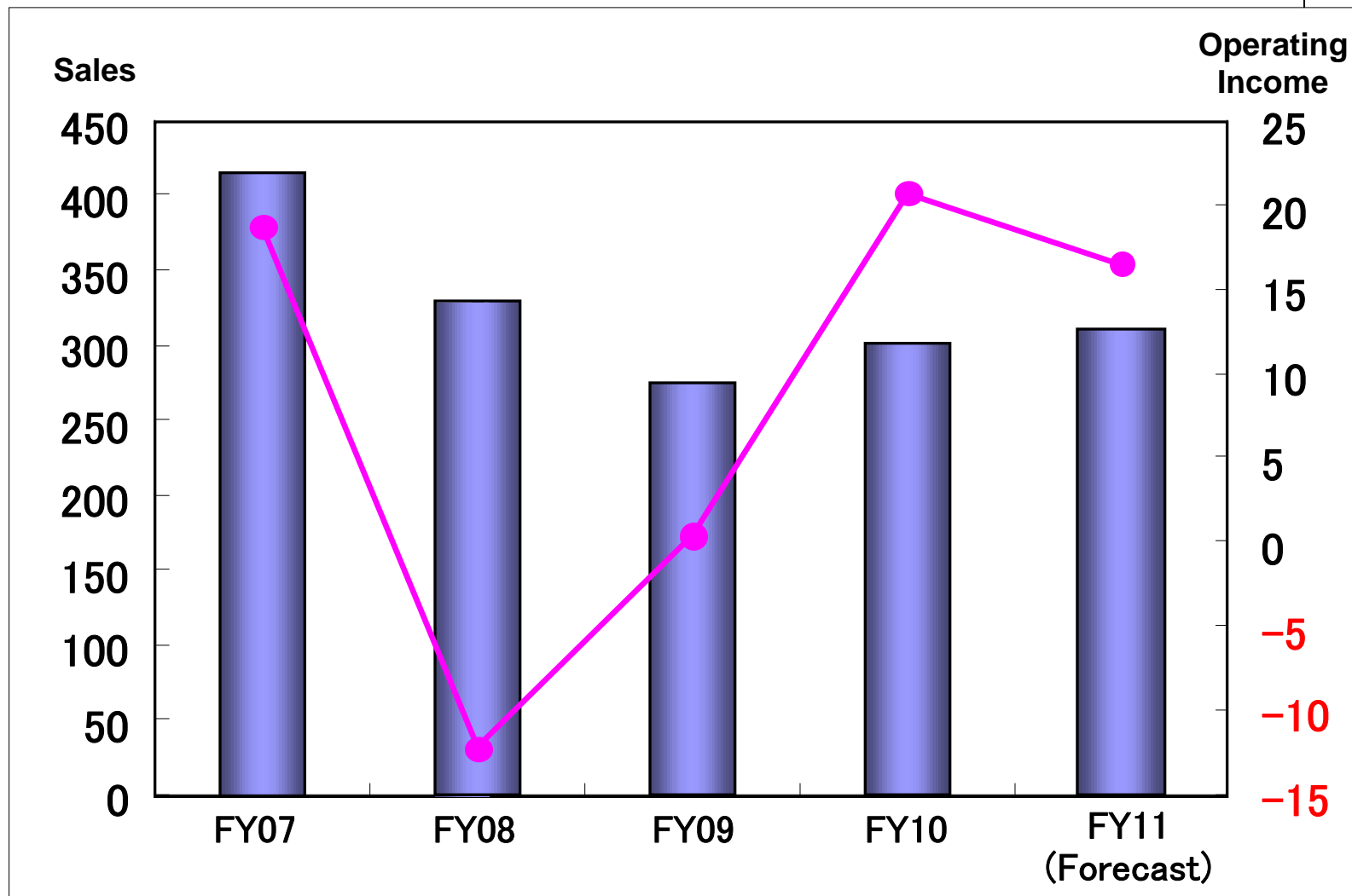
Rubber chemicals, Polymer additives, Dyestuff, Polymer emulsions

I . Overview of Business

(2) Performance Trends

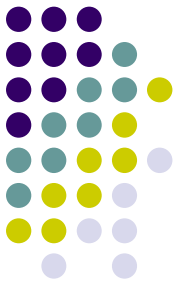


(Billions of yen)



I . Overview of Business

(3) Long-term Vision

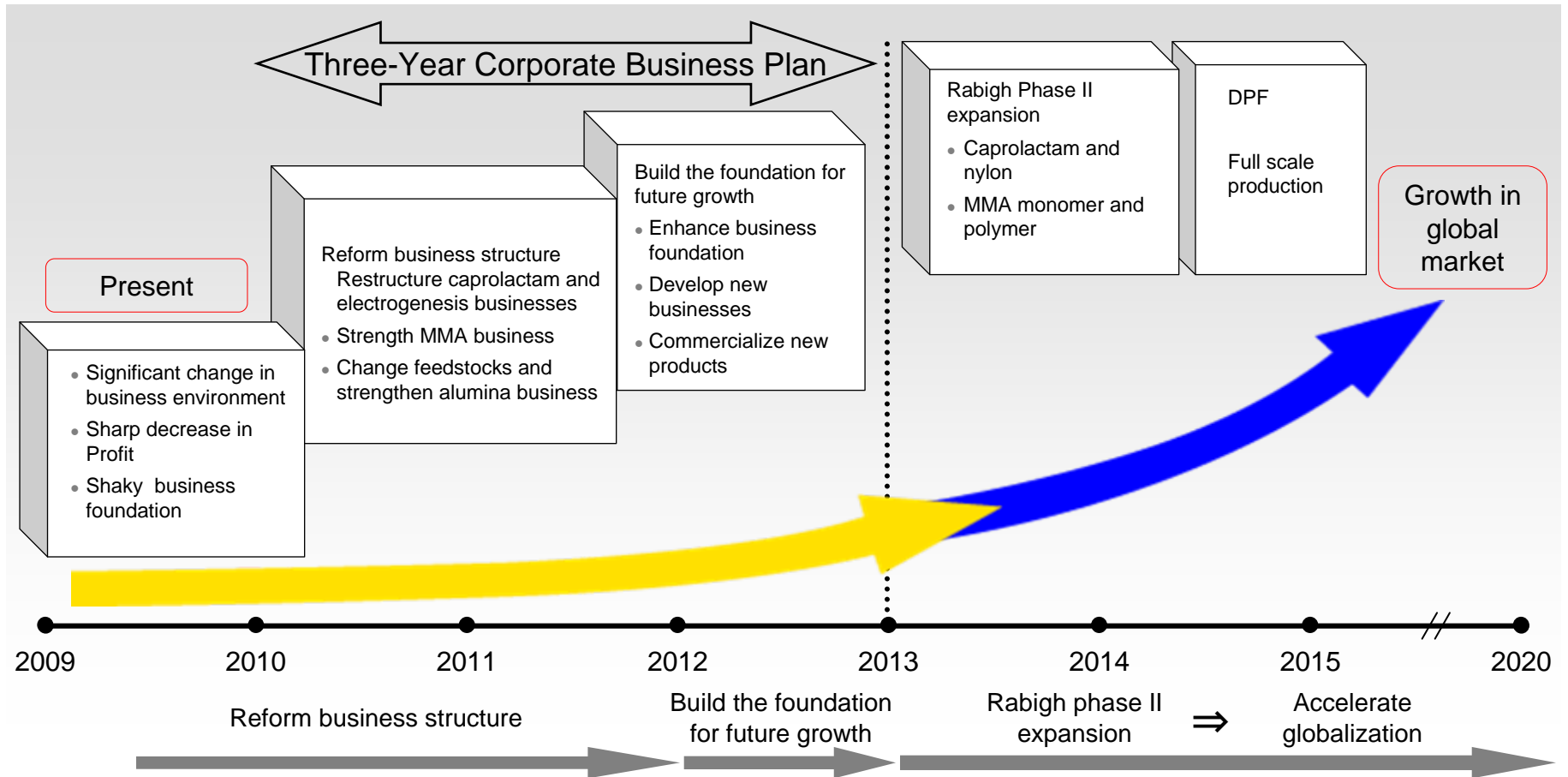


Trends in Business Environment

- Globalization
- Environmental issues, alternative energy
- Slow-growth in developed countries and fast-growth in developing countries

Three-Year Corporate Business Plan

- Reform business structure, strengthen profitability, and build the foundation for future growth

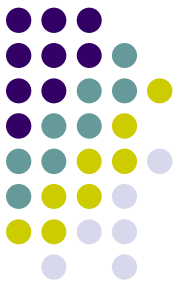


I . Overview of Business

(3) Long-term Vision

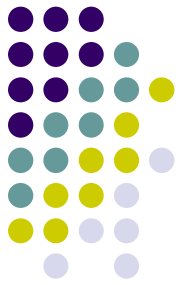
Growth Strategy for Basic Chemicals

- **Globalization: Focus on overseas markets**
 - Enter new markets in developing countries (China, India, etc.) with high growth potential, Petro Rabigh phase II Project
- **Expand businesses with good prospects**
 - Expand environmental and energy related business
 - Inorganic Materials: Develop photovoltaic cell and DPF
 - Aluminum: Develop secondary battery related materials
- **Grow global leading businesses**
 - Super high purity aluminum, High purity alumina
- **Leverage R&D to improve profitability and expand business**
- **Speed development and commercialization of new products**
- **Strengthen core business**
 - MMA·Caprolactam: Develop new catalysts, improve productivity
- **Secure cost competitive feedstock**
 - Cyclohexane, MTBE, aluminum hydrate, aluminum
- **Enhance competitiveness**
 - Enhance high value added business, improve profitability, transform culture



II. Business Strategy (1) Inorganic Materials

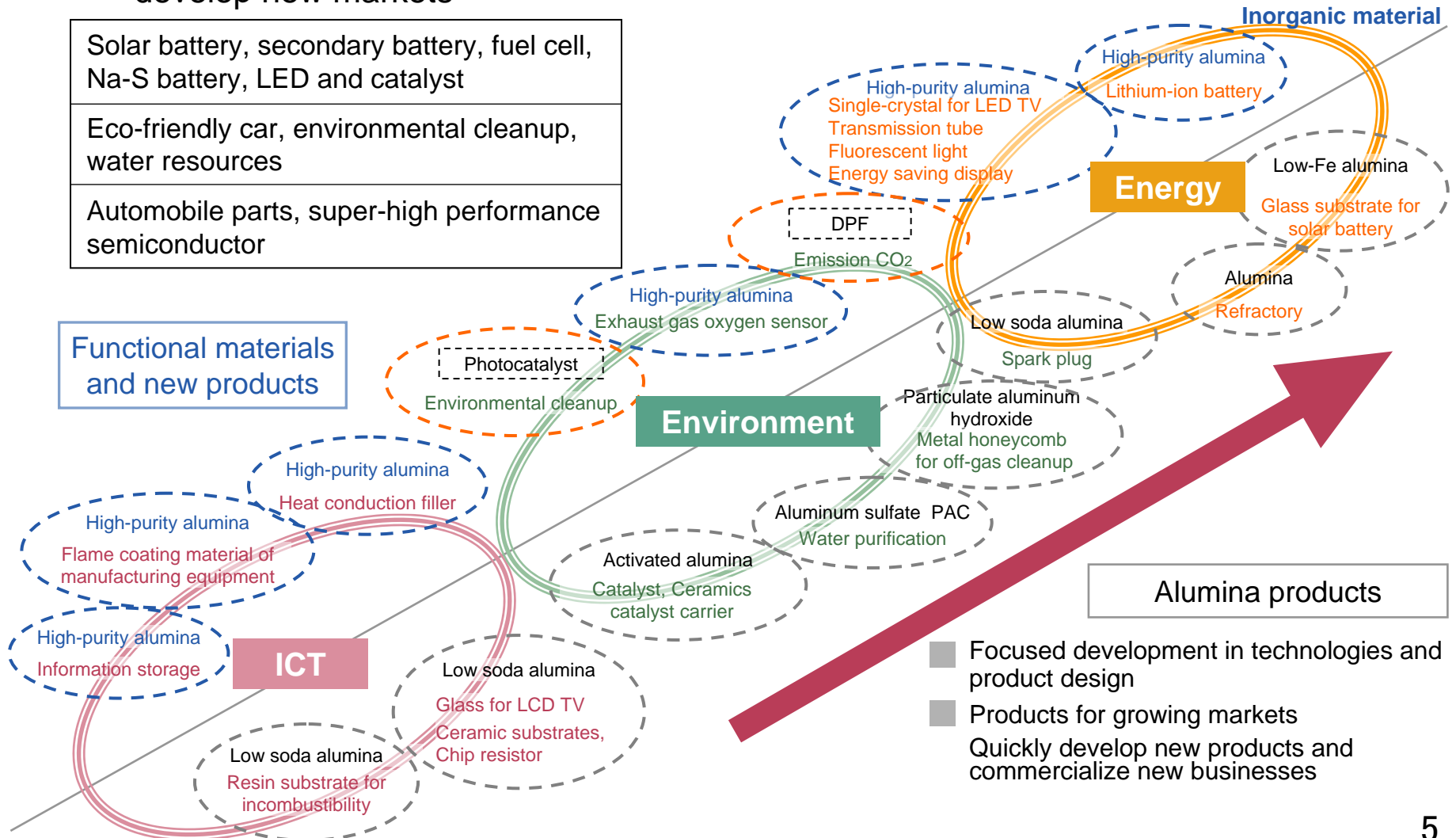
Business development in inorganic materials



Innovation in the areas of ICT, environment and energy expected to develop new markets

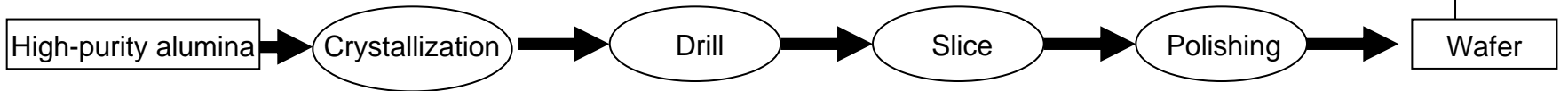
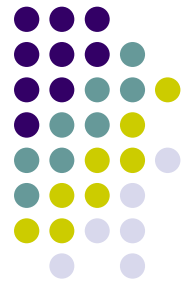
Solar battery, secondary battery, fuel cell, Na-S battery, LED and catalyst
Eco-friendly car, environmental cleanup, water resources
Automobile parts, super-high performance semiconductor

Functional materials and new products

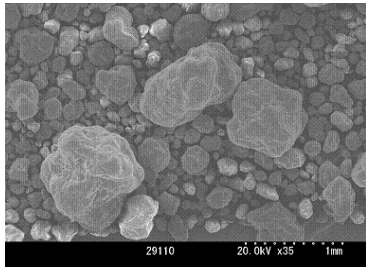


II. Business Strategy (1) Inorganic Materials

High-purity alumina 1 Production process of sapphire substrate for LEDs



Thickness of about $350\ \mu$ per $\phi 2$ wafer

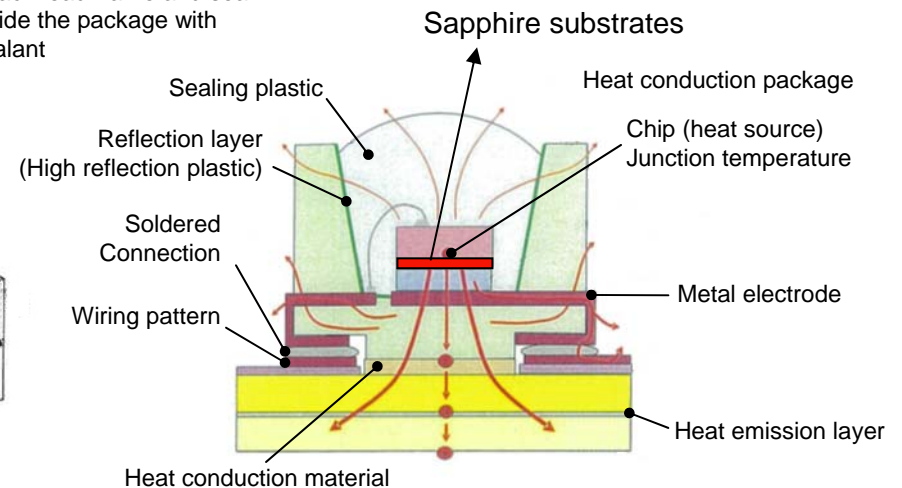
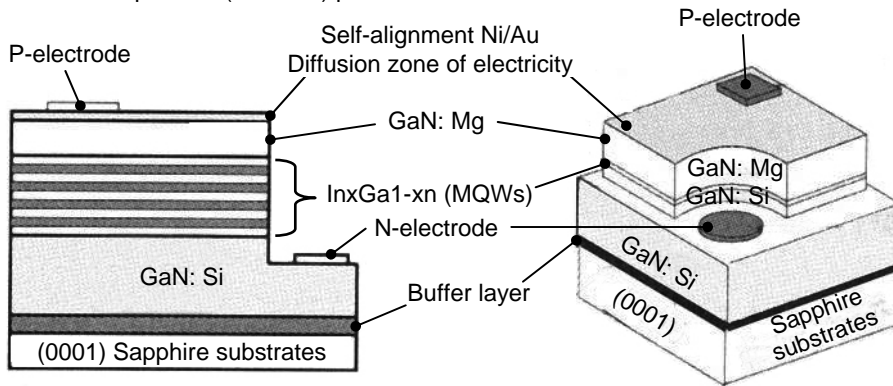


Drill by Kyropulos method



Form semiconductor layer on wafer by metal organic chemical vapor deposition (MOCVD) process

Attach lead frame and seal inside the package with sealant



(a) Inner structure (Emphasis MQW thickness)

(b) Outside

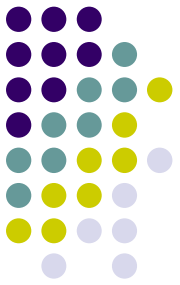
2-1 Example (a) Inner structure and (b) Outside about GaN: LED chipping

II . Business Strategy (1) Inorganic Materials

High-purity alumina 2 lithium-ion secondary battery material use

- Features of coating alumina on battery materials:
 - Improved safety when coated on anode and cathode
 - Prevent heat shrinkage of polyethylene layer when coated on separator

- Lithium-ion secondary batteries for automobiles:
 - Heat resistant layer necessary for higher capacity
 - Several battery makers have decided to use our high purity alumina



II . Business Strategy (1) Inorganic Materials

High-purity alumina 3 Plans for capacity expansion

■ 2nd phase expansion:

- Annual production capacity in Ehime Works to expand from 1,600t to 3,200t
- Investment of ¥10 billion
- Under construction with a plan to start in 1st Half of FY2012, targeting use in LED sapphire substrates

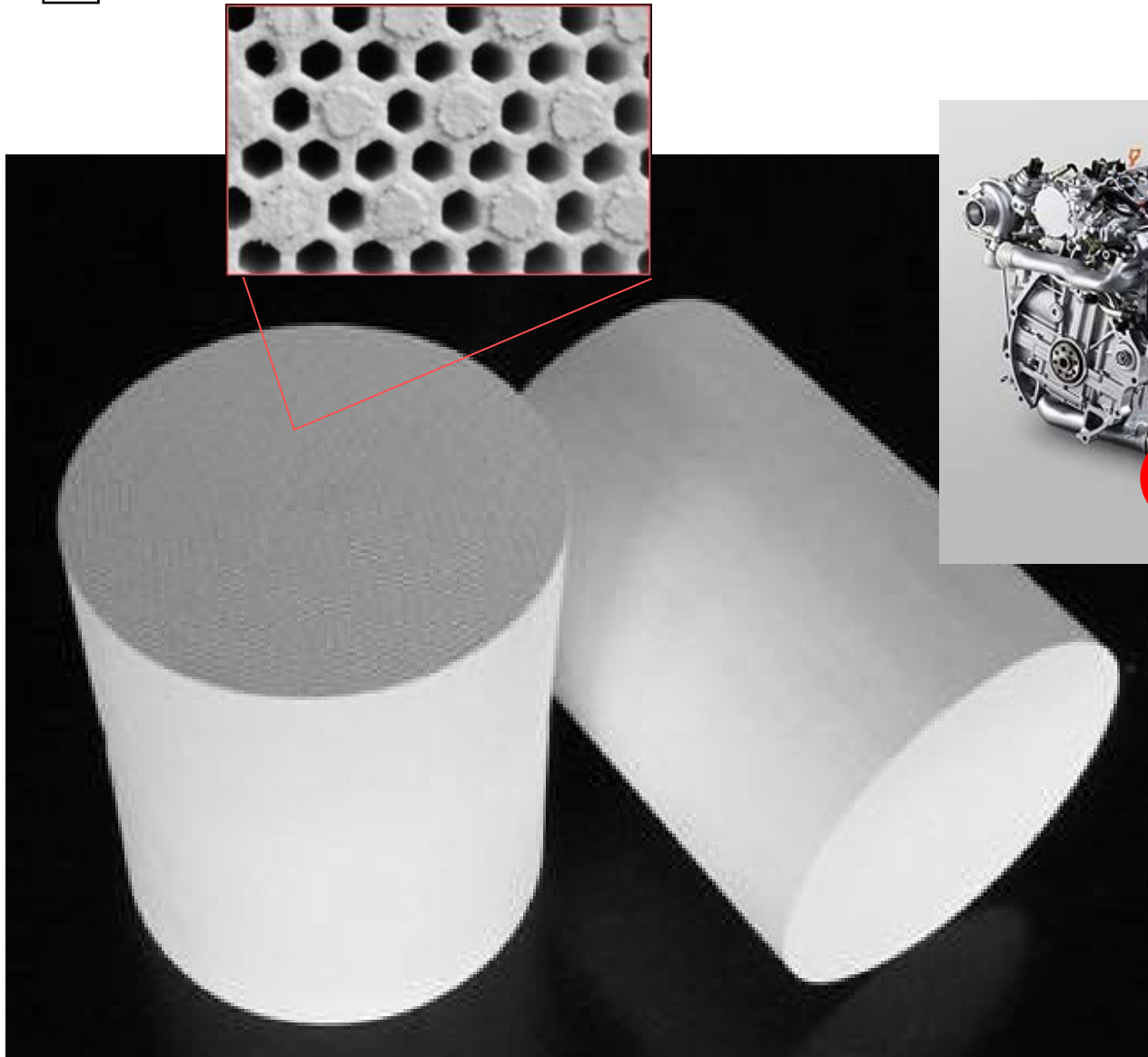
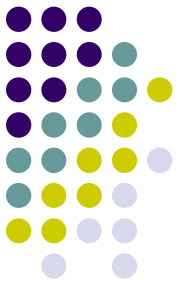
■ 3rd phase expansion:

- Planned annual capacity of 1,600t
Under study with a plan to start in April FY2013, targeting use in lithium-ion secondary batteries for automobiles



II. Business Strategy (1) Inorganic Materials

DPF 1



Diesel Engine

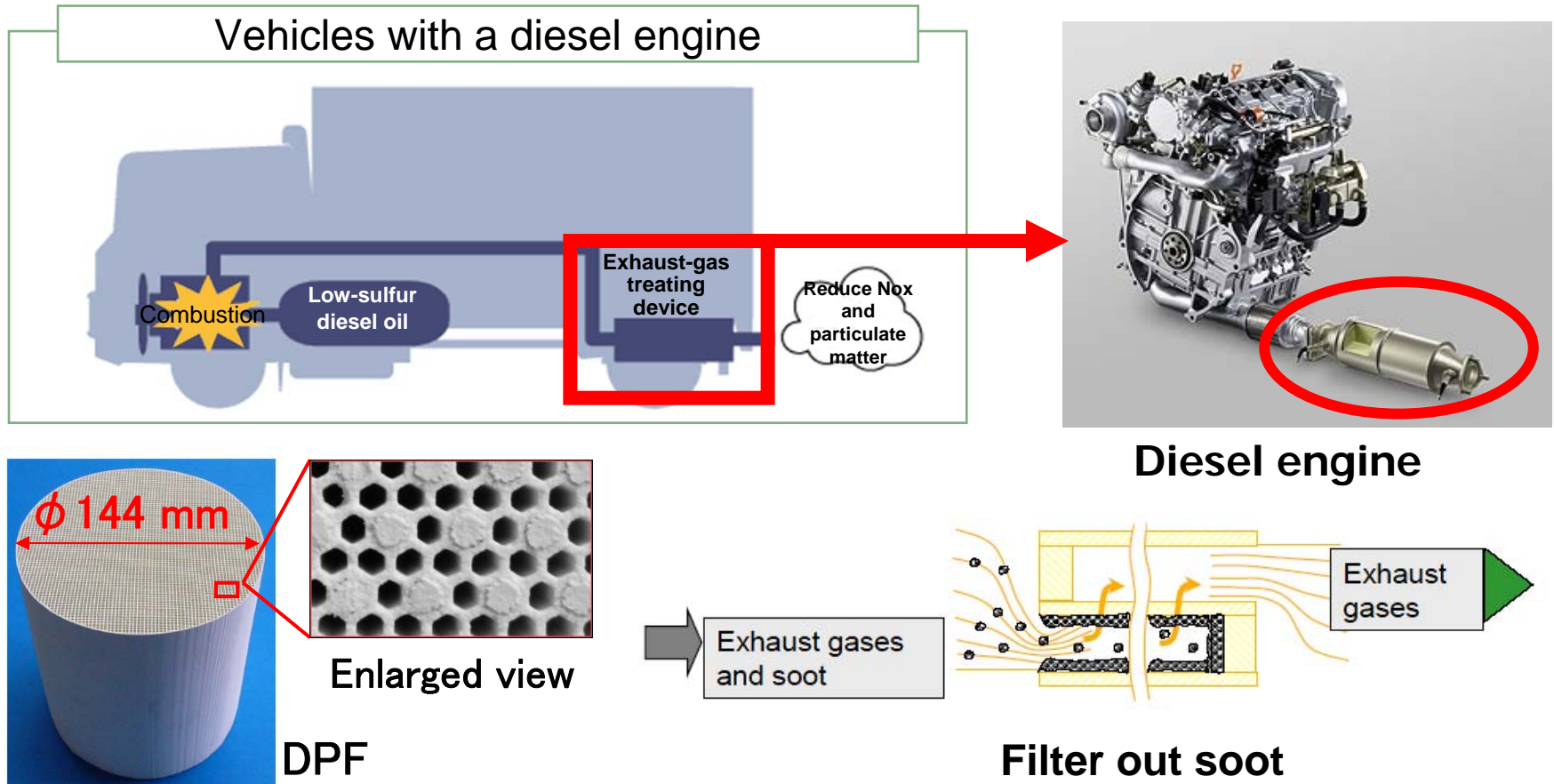
II. Business Strategy (1) Inorganic Materials



DPF 2 Diesel Particulate Filter (DPF)

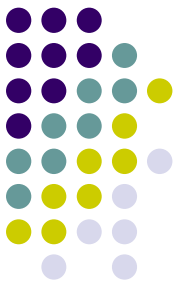
Diesel Particulate Filter (DPF)

DPF filters out soot as small as tens of nanometers from the exhaust gas of diesel engines → Regenerate by burning off soot



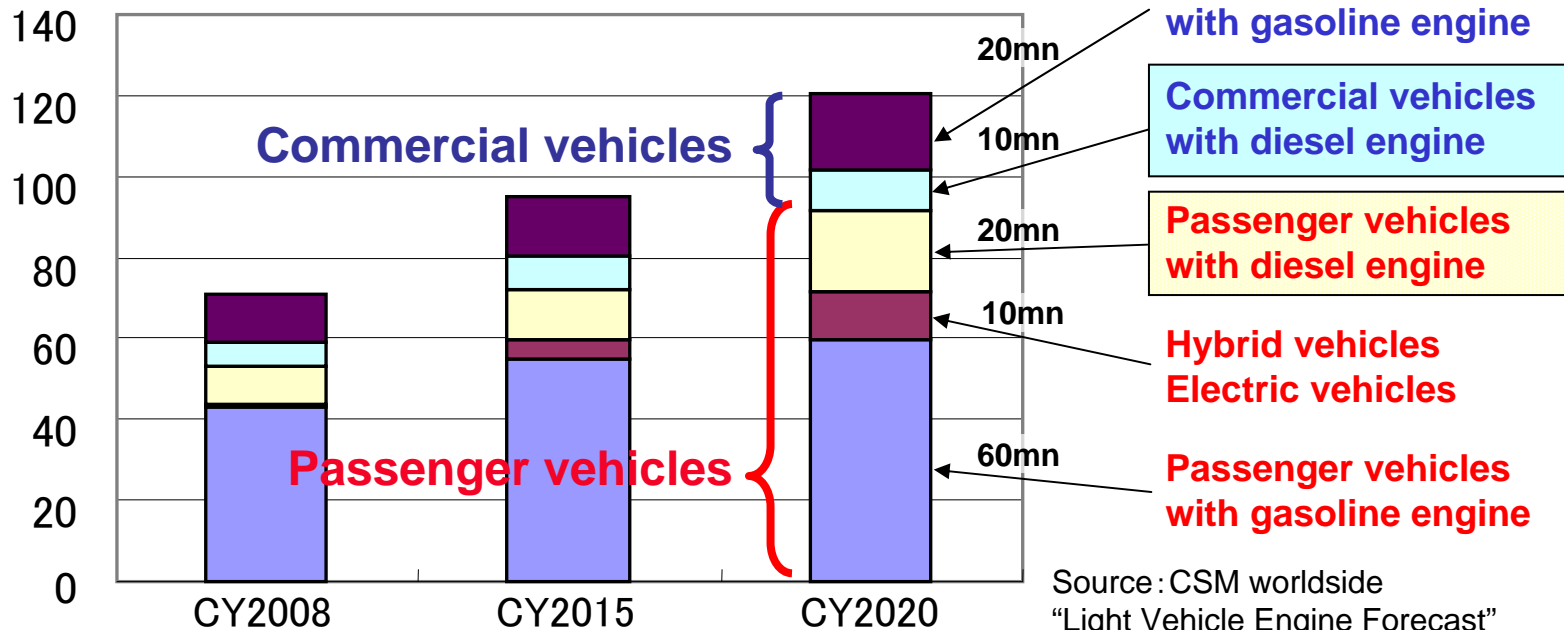
II. Business Strategy (1) Inorganic Materials

DPF 3 Forecast for global DPF market in FY2020



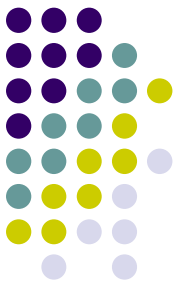
	Passenger vehicles		Commercial vehicles+ Construction machinery
	World	(EU)	World
Sales volume of vehicles with diesel engine	20mn	(12mn)	10mn
Percentage of vehicles equipped with DPF	80%	(100%)	30%
Sales volume of DPFs	16mn	(12mn)	9mn+5mn

Sales Volume (Million units/year)



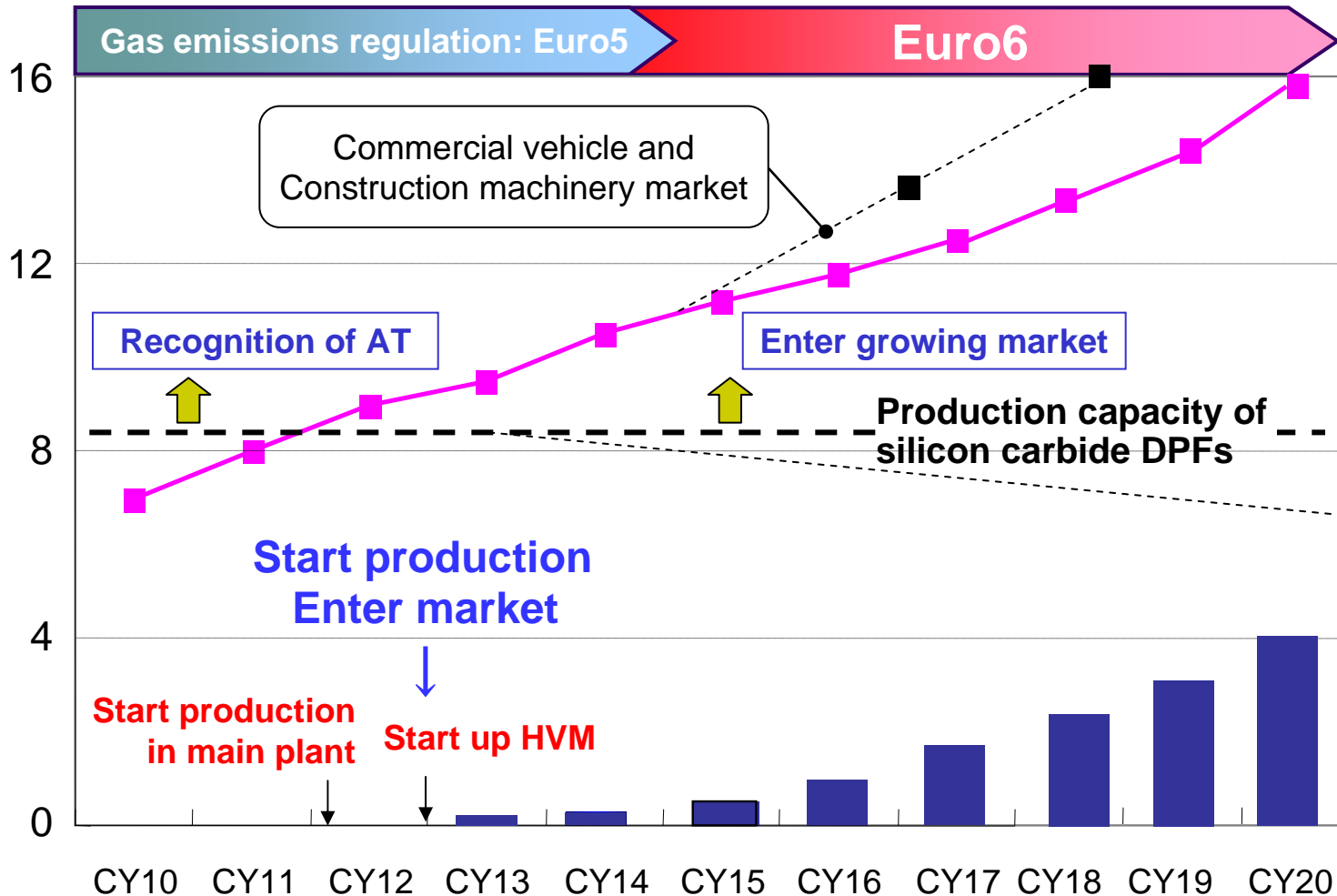
II. Business Strategy (1) Inorganic Materials

DPF 4 Commercialization schedule for our DPF business



DPF Sales
(Million units/year)

All diesel-powered passenger vehicles must be equipped with DPFs



II . Business Strategy (1) Inorganic Materials

DPF 5



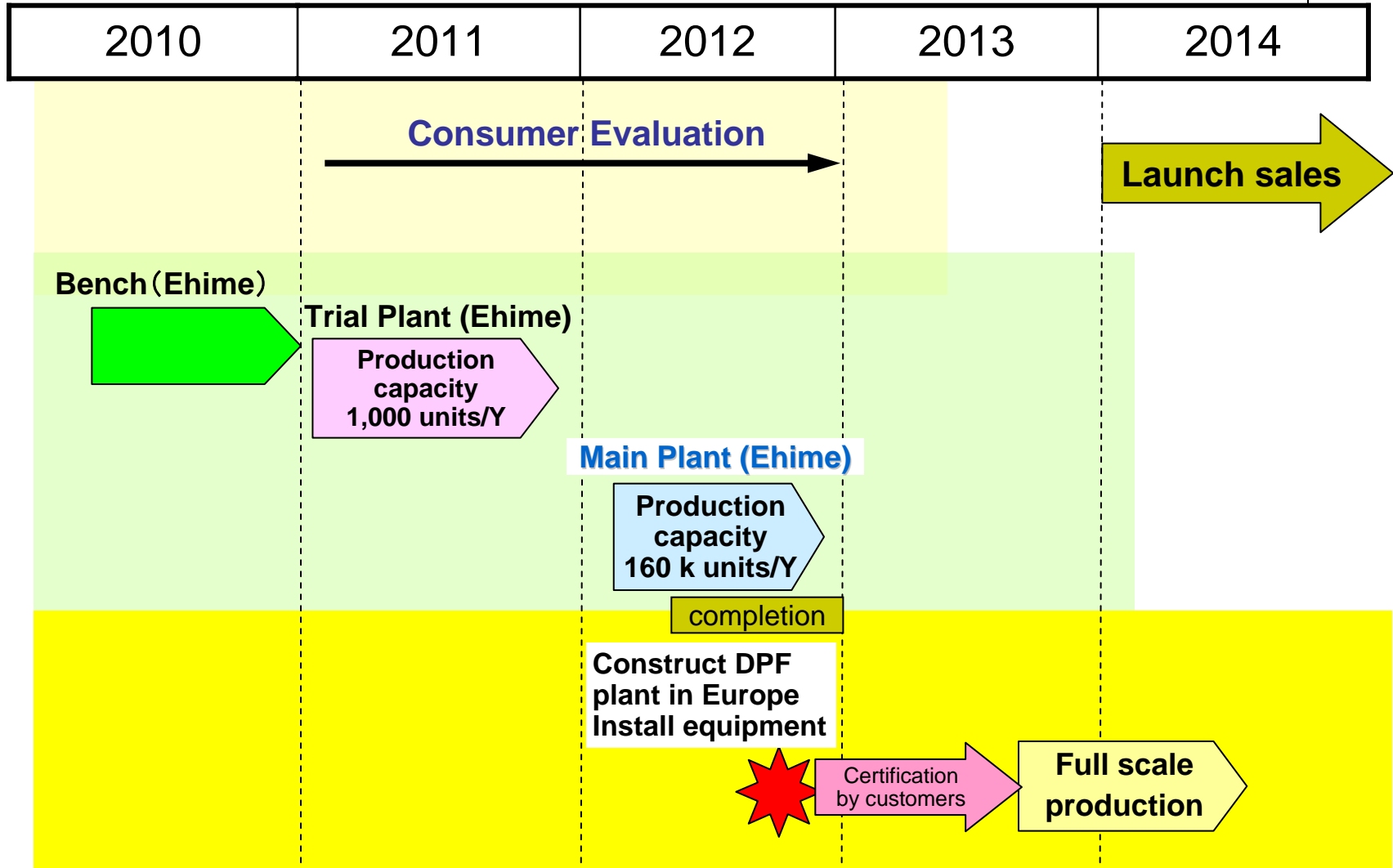
Highly cost-competitive high performance DPF made through optimal process using proprietary aluminum titanate material

- 1. Use of internally produced alumina**
- 2. Simple, optimized process**
- 3. Production process that allows recycling of defective products**
- 4. State of the art automatic inspection system**

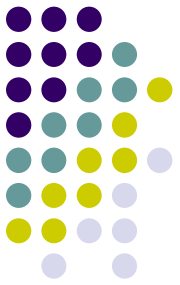
II. Business Strategy (1) Inorganic Materials



DPF 6 Commercialization schedule for our DPF business



II . Business Strategy (1) Inorganic Materials



Other businesses

Alumina Products

- Feedstock already change to aluminum hydroxide (Stable production expected)
- Alliance under study

Photocatalyst

- Develop and find new applications for antibacterial and antiviral films

II . Business Strategy (2) Caprolactam



1. Leverage high product quality to become one of the leading companies in the Asian market
(Strengthen relationships and expand sales to major customers in Taiwan and China, and also maintain premium pricing)
2. Improve catalyst and production process
(Extend life span of catalyst, streamline production process, improve productivity)
3. Reduce costs, enhance competitiveness
(Procure low cost materials etc.)
4. Studying capacity expansion in Rabigh and other areas

II . Business Strategy (3) Methyl Methacrylate



1. Develop new production process for methyl methacrylate (MMA) monomer
2. Introduce new production process for MMA polymer in the 3rd phase expansion in Singapore
3. Significantly enhance R&D capabilities in Singapore
4. Studying capacity expansion in Rabigh and other areas

II . Business Strategy (4) Other Products



Other industrial chemicals

- Restructure electrolysis business and aniline business and develop new strategy in these businesses

Aluminum

- Develop high-value added product
- Focus on non-building-material market

Resorcinol

- Improve profitability by increasing sales price and achieve full operation of production plant with an annual capacity of 30 thousand tons

Rubber Chemicals

- Quickly launch new rubber additives for tires



Forward-Looking Statements

Statements made in this material with respect to Sumitomo Chemical's plans, projections, strategies, beliefs, and future performance that are not historical facts are forward-looking statements that are based on information available at the time of the preparation of this material and include risks and uncertainties. Factors that could materially affect actual results of Sumitomo Chemical's future performance include, but are not limited to, economic conditions in the areas of Sumitomo Chemical's business, demand for Sumitomo Chemical's products in markets, downward price pressure on Sumitomo Chemical's products resulting from intensifying competition, Sumitomo Chemical's ability to continue to provide products that are accepted by customers in highly-competitive markets, and movements of currency exchange rates.