

**Panasonic IR Day 2012**

# **Energy Company Business Strategy**

**May 23, 2012**

**Panasonic Corporation**

**Energy Company**

**President Masato Ito**

*Notes: 1. This is an English translation from the original presentation in Japanese.  
2. In this presentation, "fiscal 2012" or "FY 2012" refers to the year ended March 31, 2012. In addition, "fiscal 2013" or "FY 2013" refers to the year ending March 31, 2013.*

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**1. Domain Outline**

**2. Business Policy/Growth Strategy**

**3. Summary**

**1. Domain Outline**

## 2. Business Policy/Growth Strategy

## 3. Summary

**Energy Company Outline**

■ Company Name	Energy Company
■ President	Masato Ito
■ Incorporated	January, 2012
■ Business Contents	Development , manufacture and sales of primary and rechargeable batteries, chargers, battery applied products, and photovoltaic system related products
■ Headquarter	1-1, Matsushita-cho, Moriguchi city, Osaka, Japan
■ Sites	50 sites (Japan:19, Overseas:31)
■ Number of Employees	Approx. 25,000 (Japan : approx. 9,000) *as of April 1, 2012

## Major Businesses

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Photovoltaic System



Lithium-ion Batteries



Dry Batteries



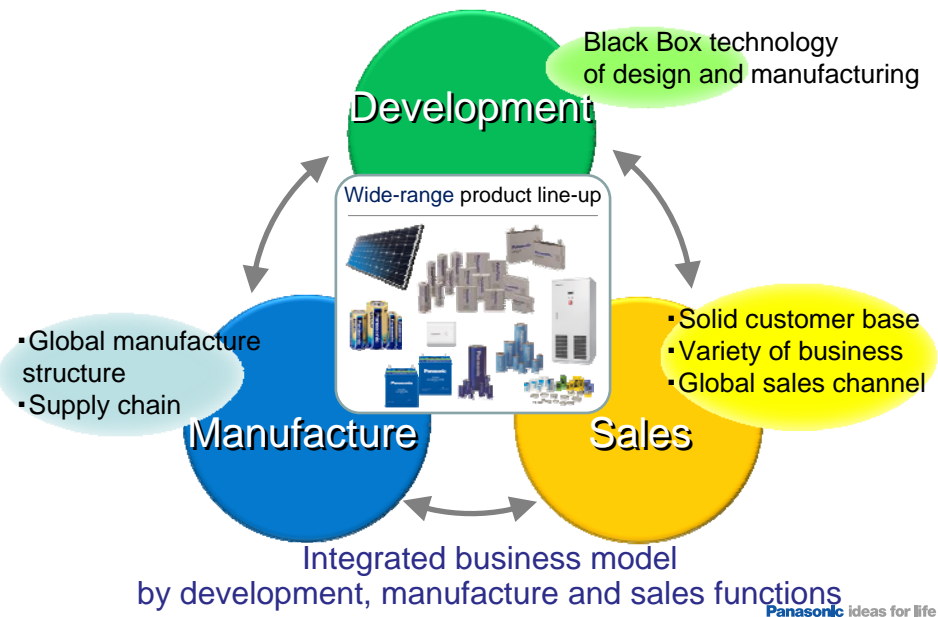
Other Products



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## Competitive Advantages

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## FY2012 Result

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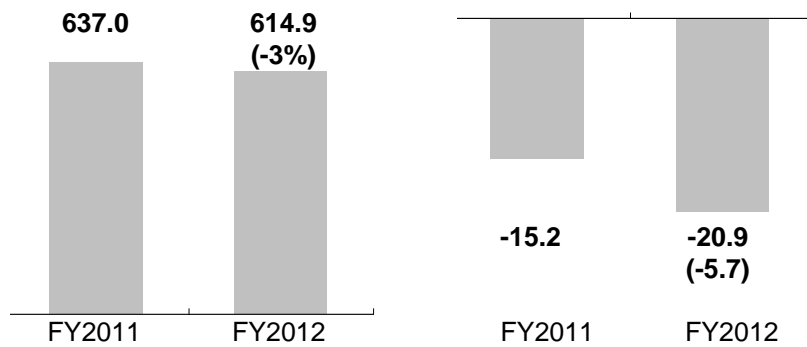
### Sales

### Operating profit

(yen: billions)

Overall sales declined from last year due mainly in the weak sales of lithium-ion batteries for consumer use on the back of deterioration of the market, strong yen and flooding in Thailand

Operating loss increased due to weak sales and price decline



\*() = vs. FY2011

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- 2. Business Policy/Growth Strategy**
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## 「Selection and Concentration」

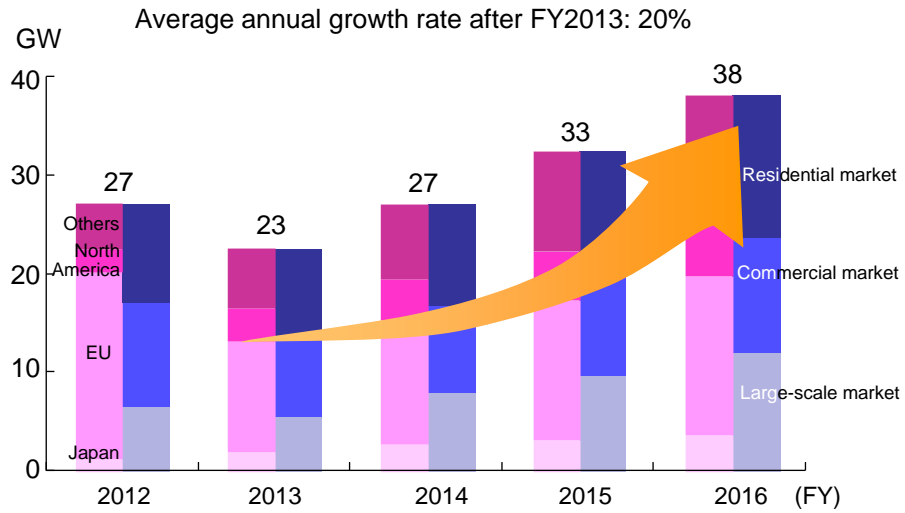
Concentrate management resources on solar & lithium-ion battery businesses (consumer, automotive, storage) as key businesses

## 「Accelerate Globalization」

Establish optimum global structure for development, design, procurement, manufacture and sales

Growth Strategy of Solar Business

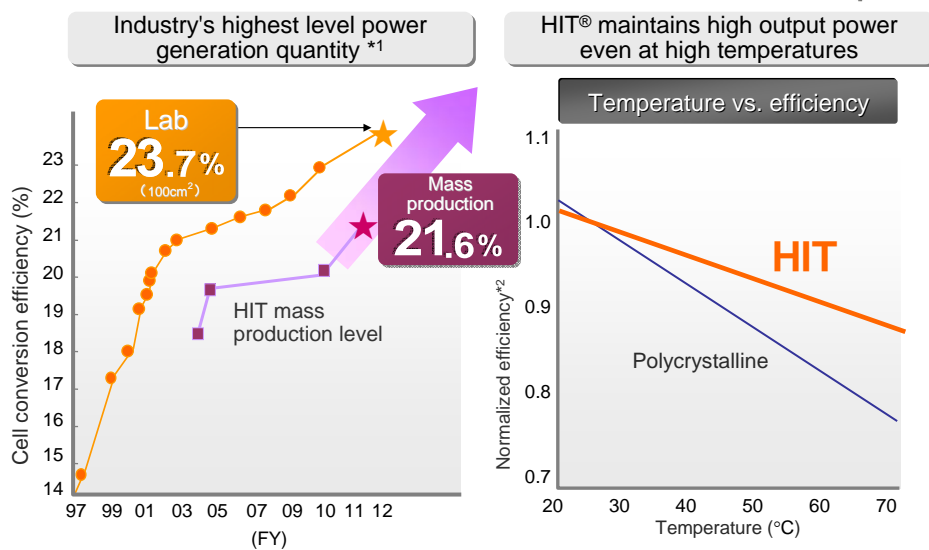
## Global Market Forecast <Solar Business> 11



\*Estimated by Panasonic

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## Competitive Advantages of "HIT® Solar Cell" 12



\*1: Based on the Company's survey using the "Annual Predicted Power Generation Calculation Formula" of Solar Power Generation Standard Group in the domestic residential solar power generation system industry

\*2: Conversion value by setting the conversion efficiency at 25°C to 1

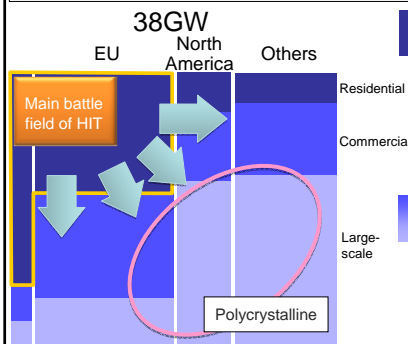
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## Growth Strategy of Solar Business (1)

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- Focus on deploying HIT in the residential market which appreciates higher conversion efficiency as added value
- Apply HIT and polycrystalline to the commercial market

FY2016 market scale by region and by application



### Efficiency preference

Features: In Japan, the market expands due to the subsidy policy  
A high efficiency product is more suitable for a limited roof area

Expand HIT sales through improving performance

### Cost preference

Features: Market is price sensitive and requires system solution

Propose solutions by primarily offering cost competitive polycrystalline products

\*Estimated by Panasonic

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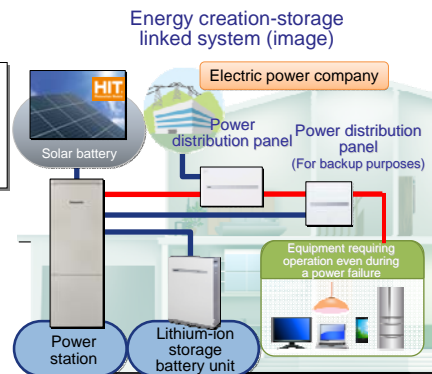
## Growth Strategy of Solar Business (2)

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**HIT<sup>®</sup>**  
High conversion efficiency and reliability

Panasonic Group's sales infrastructure  
Expand sales drastically through its broad range of sales channels

Provide energy creation-storage coordination systems  
Differentiate from other companies by taking advantage of HIT modules and solution offering



Toward No.1 domestic market share in FY2013

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## Growth Strategy of Solar Business (3)

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- Enhancement of HIT competitiveness: supply capacity and cost

- Integrate production process from wafers to cells, modules in the new Malaysian factory



Start of production: December 2012    Expansion by **1.5 times**  
Cell supply capacity: 600MW (end of FY2012)  
➡ 900MW (after operation starts at Malaysian factory)

- Further product competitiveness enhancement of HIT

- Further improvement of conversion efficiency, acceleration of next-generation HIT products

- ➡ Continue the "industry's highest level power generation quantity"\*



Launch the products with 23% or higher conversion efficiency in FY2014

\* Based on the Company's survey using the "Annual Predicted Power Generation Calculation Formula" of Solar Power Generation Standard Group in the domestic residential solar power generation system industry

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## Growth Strategy of Lithium-ion Batteries Business

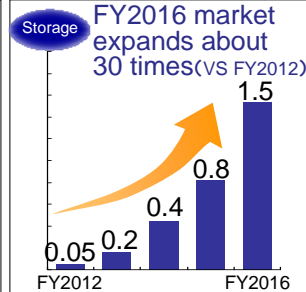
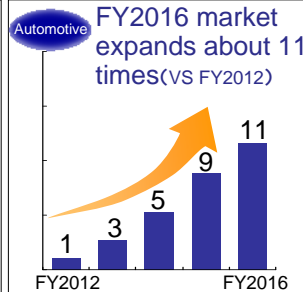
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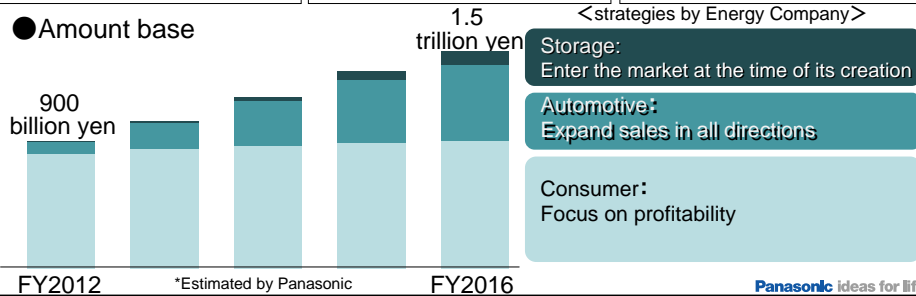
## Global Market Forecast <Lithium-ion batteries> 17

●GWh base

\*Estimated by Panasonic



●Amount base



## Competitive Advantages of Lithium-ion Battery Business 18

**Technology**

- High reliability
- High durability
- High capacity
- High power

Based upon black box technology & competitiveness of manufacturing

**Cost**

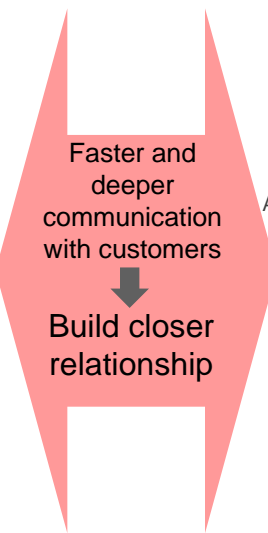
- High efficiency production
- Low cost design
- Low cost materials

Based upon black box technology & competitiveness of manufacturing

**SCM**

- Global optimal manufacture
- Speedy model development

Integration of development, manufacturing and sales functions



**Wide Range of Customers**

- General consumers
- PC manufacturers
- Automotive manufacturers
- Electric appliance manufacturers
- PT manufactures
- Education institutions
- Governments

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## Growth Strategy of Lithium-ion Battery Business (Consumer)(1) 19

- Change business structure and enhance cost competitiveness  
Enhance cost competitiveness through integrated production of battery plates, cells and packs

Material procurement  
in China & Korea

20%(FY2012) → 50%(FY2013)

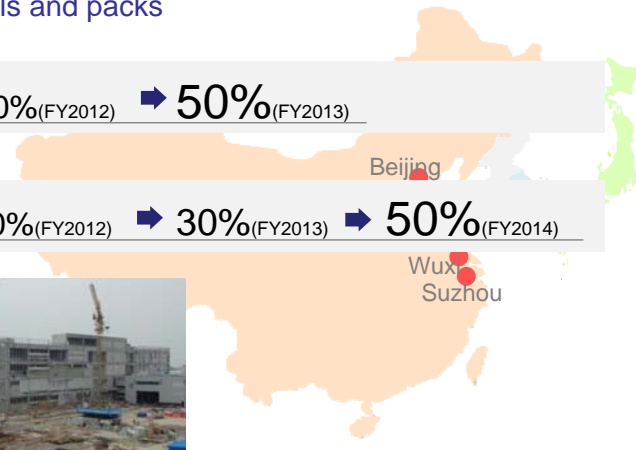
Production in China

20%(FY2012) → 30%(FY2013) → 50%(FY2014)



Suzhou new factory (as of May)

Mass production starts: 1st half in FY2013



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## Growth Strategy of Lithium-ion Battery Business (Consumer)(2) 20

- Respond to market change speedily & expand business  
by supplying optimal batteries

Target markets

Products

Note PC  
(conventional)

Cylindrical cell

Prismatic cell

Smartphone

Prismatic cell  
(large area)

Pouch cell

Slim Line Note PC  
Ultrabook PC  
Tablet PC

Cylindrical cell

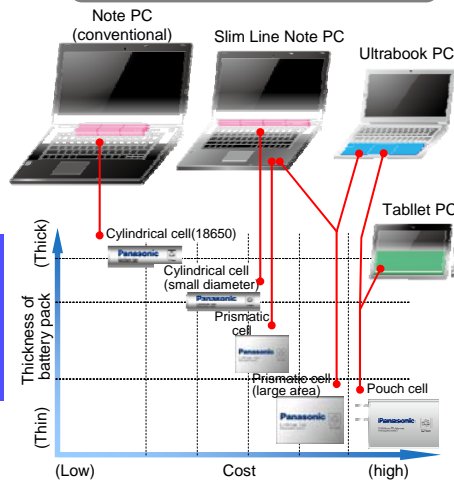
Prismatic cell  
(large area)

Pouch cell

Motor, Storage

Cylindrical cell

Cell line-ups for Note PC & examples



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## Growth Strategy of Lithium-ion Battery Business (Automotive) 21

### Expand Business in All Directions

#### ● Secure sales volume

##### ■ Secure sales volume with sales strategy of all directions

Firm orders from global major car manufacturers  
(more than 10 models in 5 car makers)

Toyota  
「Prius PHV」

Tesla (US)  
「Model S」

Ford (US)  
「Fusion, C-Max」

Audi (Germany)  
「Q5」

#### ● Increase production capacity

##### ■ Increase production capacity in 6 mass production lines from FY2013

FY2016 sales for automotive 130.0 billion yen

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## Growth Strategy of Lithium-ion Battery Business (Storage) 22

Battery storage system for public & industrial use



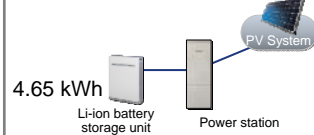
15kWh

Battery storage system for industrial & residential use



1.6/3.2 kWh

Energy creation-storage linked system for housing use



### Examples of lithium-ion batteries for storage application

Hybrid car carrier equipped with hybrid power supply system of solar generation system & Li-ion batteries



Energy creation-storage linked system at fast-food shop



Environmentally-conscious station (JR Yotsuya station)



Applications for storage are expanding in various fields

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FY2013 Forecast

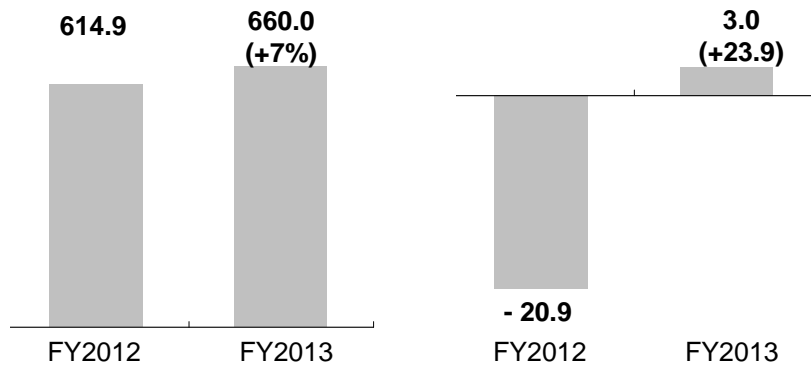
Sales

Operating profit

(yen: billions)

Strong sales mainly in solar, lithium-ion batteries for consumer and car use

Return to profitability due mainly to sales increase and cost reduction

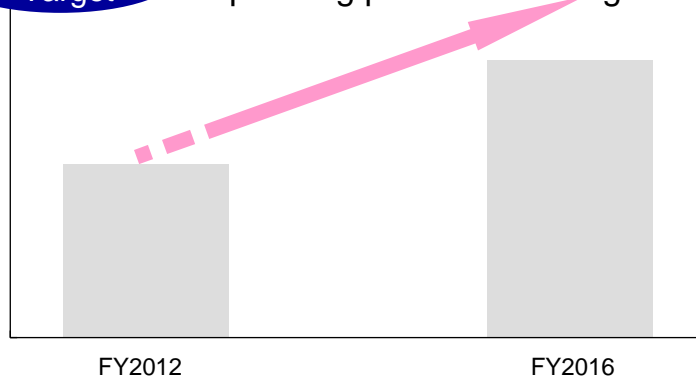


## Energy Company Mission & FY2016 Target 25

Mission	Lead and contribute to making Panasonic as No.1 Green Innovation Company in the electronics industry
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**FY2016  
Target**

Sales: More than 1 trillion yen  
Operating profit: double digit



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