

FY2010-12 Medium-term Plan

## New Frontier 2012

Growth in New Markets and Businesses

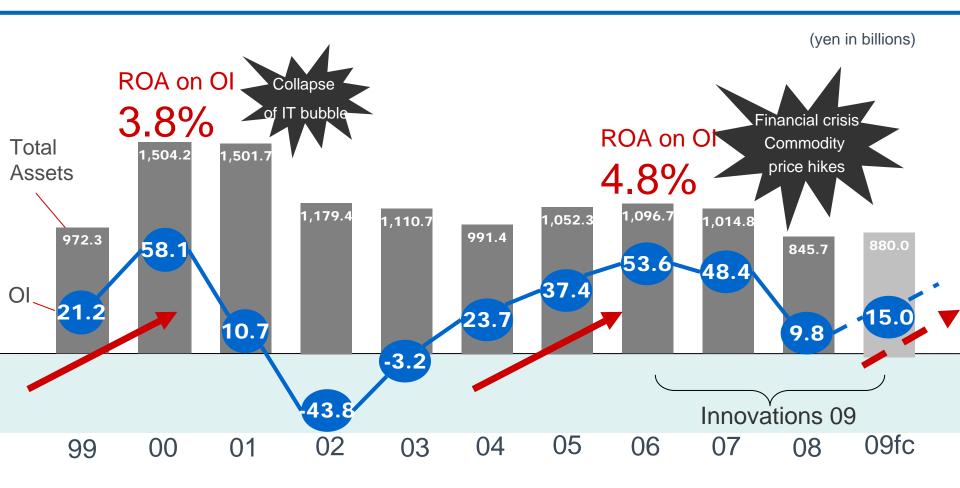
April 2010
Masao Yoshida
President of Furukawa Electric

2006-2009 2010-2015 2001-2003 2004-2005 Innovations 09 Survival Plan Vision 2015 Striving for Excellence Eco and Energy, Concentration on Multiple pillars Automotive, Electronics, Market Safety and security, optical communication based on materials Photonics, Eco Ubiquitous technology Development of products OFS buyout and exit Tackling risks ahead with top market share, Shift to high-profit Action from unprofitable of time, strategic fund, global management businesses resumption of dividend product lines Overseas 22% 26% 35% (target) 50% (target) Sales Ratio

Started one year ahead of the planned end of Survival Plan

The strategic fund suggested viable directions

Presented our longterm R&D vision when we announced Innovations 09



Tax system reforms caused operating income to decline.

Asset risk emerged due to the financial crisis and commodity price hikes.

We will reduce asset risk to ensure sustainable growth.

## Corporate Philosophy

Drawing on more than a century of expertise in the development and fabrication of advanced materials, we will contribute to the realization of a sustainable society through continuous technological innovation.

Our vision for the future

Toward a more profitable, innovative, and dynamic global presence

## We will generate growth in

## **New Frontiers**

while aiming to be more resilient to change

## 1. Transform business portfolio and develop of new business

- 1) Globally expand our Transmission Infrastructure business
- 2) Drive progress in our Functional Materials business
- 3) Develop new eco-friendly business
- 4) Tighten our traditional businesses

## 2. Reform our organizational climate

## 3. Improve our financial strength

1. Transformation of business portfolio and development of new business

# 1) Global expansion in Transmission Infrastructure business

## **Emergings drive growth**

Average GDP growth over next 5 years (2010-14)

China	+9.6%
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India +7.5%

**ASEAN5** +5.2%

**Brazil** +3.6%

**Russia** +3.5%

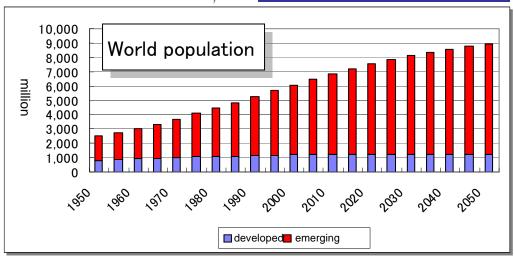
US +2.3%

Japan +2.0%

EU +1.9%

BRICs and ASEAN countries with high population growth rates will drive economic growth

Expanding opportunities for transmission infrastructure like electricity grids and telecoms



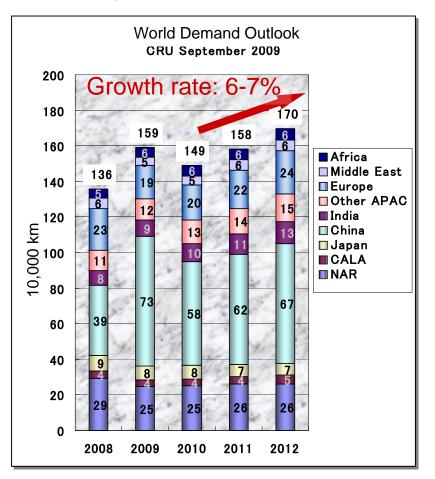
Source: International Monetary Fund, World Economic Outlook Database, October 2009

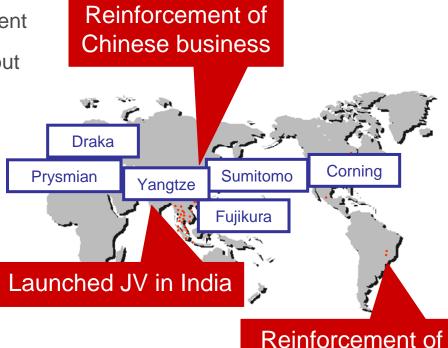
Brazilian business

## **Telecommunications**

## Outlook for optical fiber market

Increasing traffic will drive 3G mobile investment in emerging countries and cloud computing in advanced countries. Demand will drop once but rebound again, mainly in Asia





## Our strategy

In March, we launched an optic fiber JV in India. We will also reinforce our Chinese business.

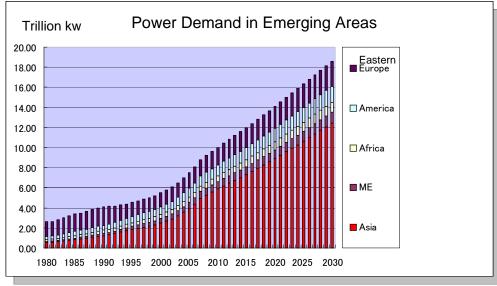
As a result, we anticipate 10% growth in length, exceeding market growth

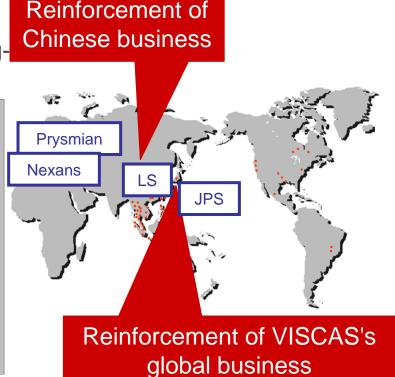
## Energy

Outlook for ultra-high-voltage cable market

New installs in emerging countries and renewals in developed countries will drive long-

term growth.





Source: EIA International Energy Outlook 2009

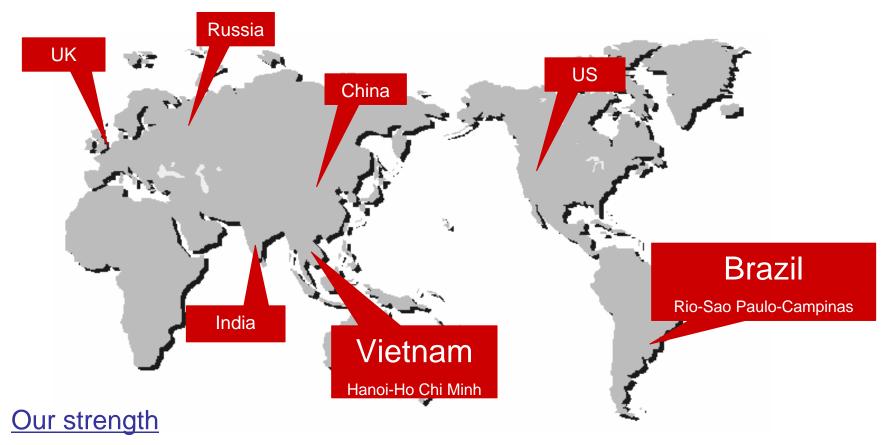
## Our strategy

Reinforce production capacity to keep the largest share of UHV cable in China, which procures only cables made in China

With a Chinese subsidiary and VISCAS, Furukawa is the world's largest supplier of UHV cables

## Outlook for high-speed railway market

Big projects in emerging countries are in progress

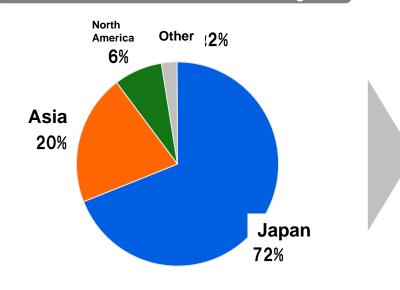


Furukawa can provide products with proven records in Japan and Taiwan, like optical cables, power cables, trolley cables, in-tunnel radio systems, and heat-sink devices

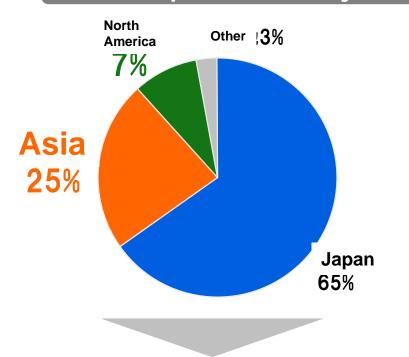
## **Overseas Sales**

Aiming for 35% of total from overseas by expanding sales in Asian markets





FY2012 plan: **350** bn yen



We aim to exceed 50% in the long run

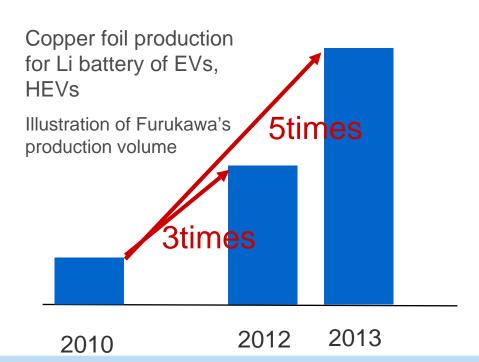
1. Transformation of business portfolio and development of new business

## 2) Progress in Functional materials business

## Foils for Li batteries for EVs, HEVs

(Metals, Light Metals)

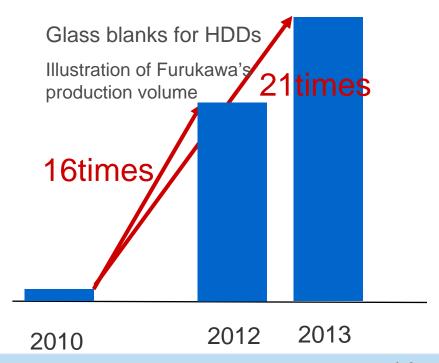
Adding to demand from electronics applications, Li battery demand for next-generation vehicles will begin in 2011-12, and surge in 2013. We will reinforce our production capacity.



## Blank disks for HDDs

(Electronics Automotive)

Aiming to be the #1 supplier and the only one to supply both aluminum and glass disks, we will establish original processes and stable production capabilities.



Micro cell PET foam sheet

(Energy Industrial)

Entry into LED TV market

Tape for semiconductor wafer production (Energy Industrial)

Raising productivity of new plant

Aluminum wire harness

(Electronics Automotive)

Promoting as an alternative to heavier copper wires

Aluminum compressor wheel
(Light Metals)

Establishing position as the global #1

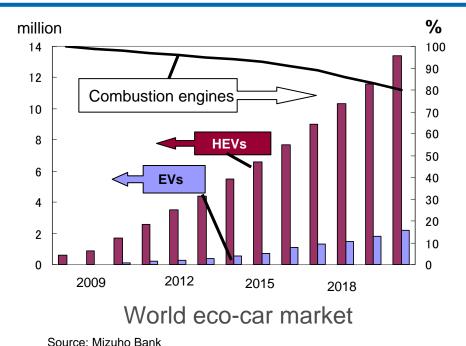
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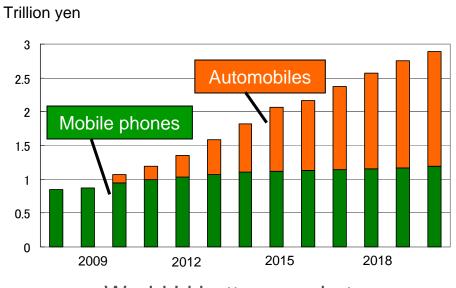
## 3) Development of new eco-friendly business

## Green Energy Revolution

	Vehicles	E	nerç	ЭУ	Telecom
Political Elements		sures toward a low-carbon society			
	Priority given to g	Priority given to green products			
Economic	Recession in advanced countries and growth in emerging countries				countries
Elements	Difficulty obtaining rare metals, Volatility of oil and metal			orices	
		Environmental action			
Social Elements	Fuel-efficiency	Power-efficiency			
	Spread of	Spread of Infrastr		ure in emerging c	ountries
	HEV/EV	Smart grids		Modal shift	Cloud computing
		Energy recycling			Hi-speed wireless
	HEVs/EVs	Home electronics, sensors, networks		High-density trunk lines	
Technological Elements	Electricity			sors, networks	High-speed servers
	Lightweight	Low-loss energy transmission		Linear motors	Mass storage
		High-efficiency energy exchange		Smart phones	

## Market growth: Eco-cars, Li batteries, Smart grids FURUKAWA ELECTRIC





World Li battery market

Source: Daiwa Securities

## Smart Grid Investment 2010–2030 Trillion yen US EU Japan Total Smart meters 1.7 1.3 0.5 3.5

1.8 12.3 Power control 5.9 4.5 Inverters 4.3 3.8 12.6 Super conductivity 5.5 2.2 15 32 32 **Batteries** 6.4 69

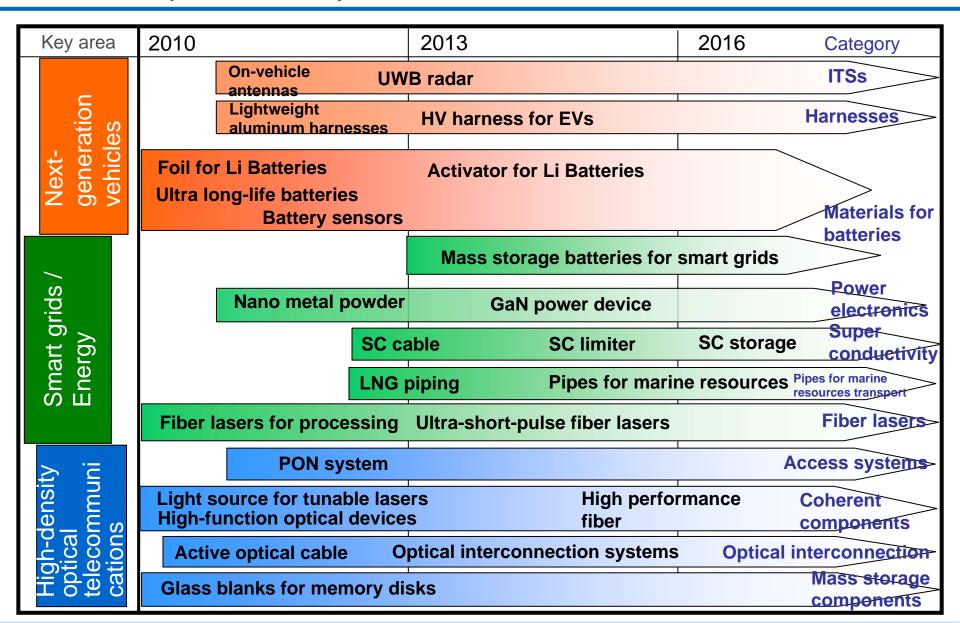
Power control
Inverters
Super
conductivity
cable

**Smart meters** 

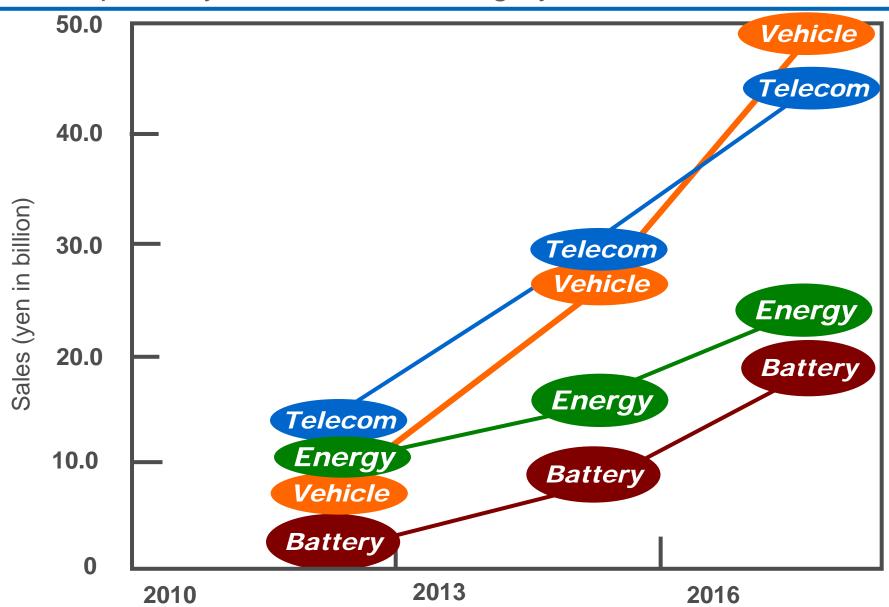
Source) Nomura securities

## Road map for development of new eco business

**FURUKAWA ELECTRIC** 



## Sales plans by new business category

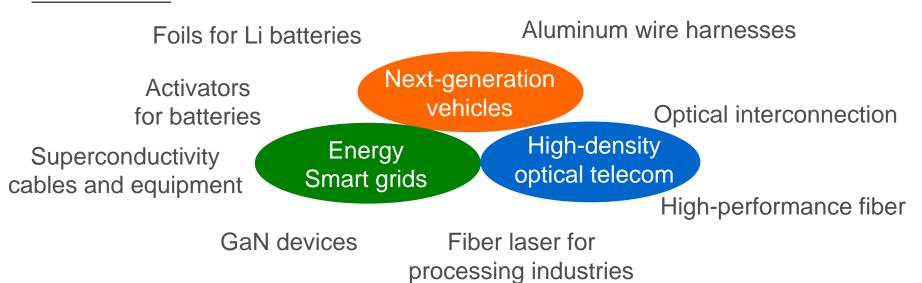


## Increase of R&D expenses

## 18 billion yen in 2009

## +20% from 2009 to annual average of 21.5 billion yen over 2010-12

## Focal areas



## Launching the New Frontier Fund

We will launch an internal, 20-billion-yen fund, funded by asset sales and business profits, to accelerate growth in new frontiers

## Half of the 20 billion yen for R&D, the rest for M&A and mobility

Use of funds (tentative overview)

Japan	Asia	Other areas
Mainly for R&D		Use mainly in emerging economies

1. Transformation of business portfolio and development of new business

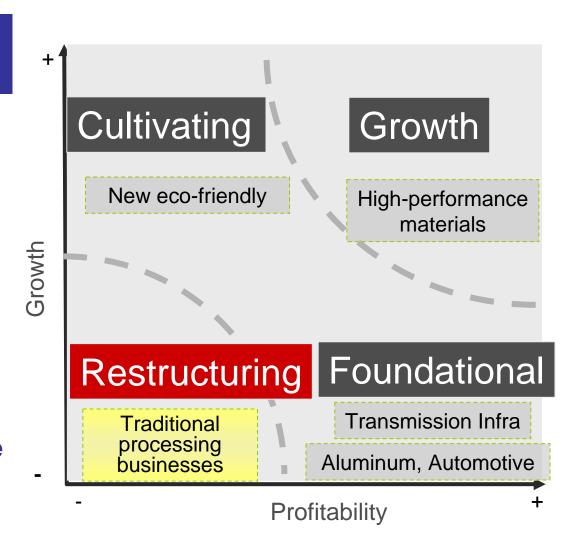
## 4) Tightening of our traditional businesses

## 4) Tightening of our traditional processing businesses

## Launching business evaluation committee

Dividing businesses into four categories, Cultivating, Growth, Foundational, and Restructuring, the committee will spearhead improvement of our low-profitability businesses categorized as Restructuring.

The committee will improve our business portfolio, initially targeting our traditional processing businesses that handle copper, aluminum, wire, and plastics.



2. Reform of organizational climate

CSR

Reinforce compliance Step up social contribution activities

Environment

Reduce CO<sub>2</sub> by 15% vs. FY2000 by end-FY2012 Our emissions in FY2000 were around the same as in FY1990

Personnel

Cultivate globally competent employees
Group employment
Enhance global production sites

Group

Reinforce group unity

3. Improvement of financial strength

(yen in billions)

## Boost operating income to 50 billion through more rigorous management

FY	09 forecast	FY12 plan	<i>Improvement</i>
Net sales	807.0	1,000.0	+24%
Op. income	15.0	<i>50.0</i>	+35.0
Net profit	4.0	<b>25.0</b>	+21.0

Basis	FY09 H2	FY12 plan	Change
FX rate (JPY/USD)	90	90	<b>±</b> 0
Copper (yen/kg)	600	640	+40
Aluminum (yen/kg)	210	220	+10
Crude oil (Dubai, USD/B	bl) 72	79	+7

(yen in billions)

We will build shareholders' capital and payoff debt with generated profits while keeping assets' increase under control.

	End-Mar. 2010	End-Mar. 2013	Change
Total assets	880.0	900.0	+2%
Capital	180.0	210.0	+17%
Debt	380.0	<i>320.0</i>	-16%
D/E ratio	2.1	1.5	-0.6
ROA (based on operating in	1.7% scome)	5.6%	+3.9p
Turnover	0.9	1.1	+0.2

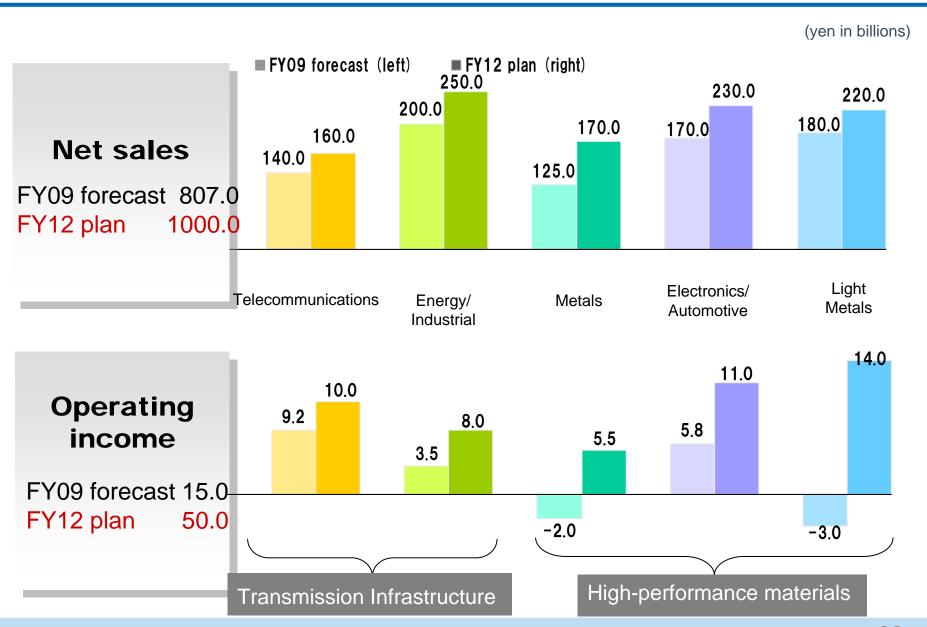
(yen in billions)

## Decrease by 15% compared with previous medium-term plan

	FY06-09 avg.	FY10-12 avg.	Change
Capex	38.6	33.0	-5.6
Depreciation	42.6	40.0	-2.6

Capex focus: Copper foil, Automotive parts, Fiber, etc.

## Plans by Business Segment





## Optical Fiber / Cable

Expand presence in growing BRICs area Cut costs to ensure profitability in the mature Japanese market Expand LAN cable business in Brazil

## Photonics / Networks

### **Photonics:**

High-power tunable lasers, multi-channel AWG, and optical switches; explore 40G and 100G technologies

Cut costs to expand share for commoditized 10G products such as pump lasers, optical amplifiers, fusion splicers

Grow the optical interconnection and fiber laser businesses

### **Networks:**

Use synergies between optical / CATV / wireless technologies to develop solution-based business in South America



## Energy

## **Ultra-high-voltage cable:**

Use technical advantages over local players to boost competitiveness in growing areas such as China, ASEAN, Middle East

## Low-voltage cable:

Tap into new demand in the new energy field

## Copper wire:

Consolidate domestic production and expand high-performance products to drive up profitability

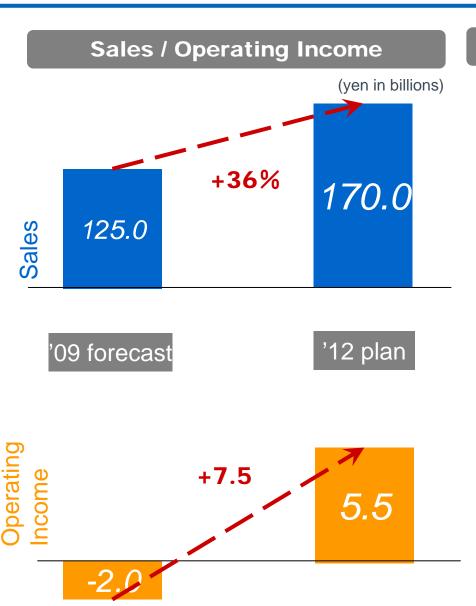
## **Industrial Products**

Advanced tape: Develop new products

Conduit: Develop eco products

**Foam:** Develop new applications for micro cell PET foam sheets; develop Asian and Russian

markets



## Copper foils

Expand Li battery business
Aiming to keep global top share of 55%
and to de facto standardize in the automotive field

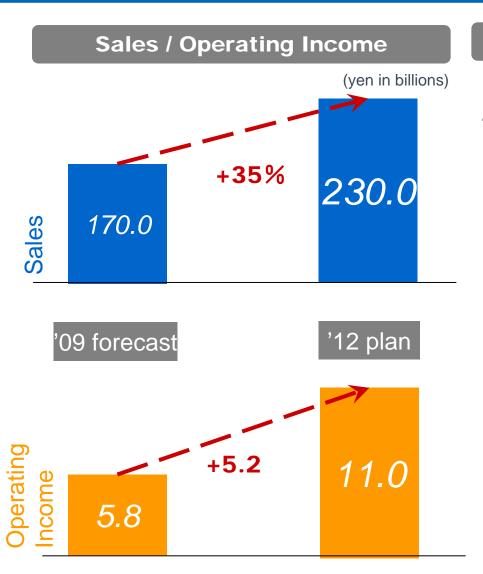
## Copper strips, pipes

Strips:

Restructure production portfolio Expand global sales

Pipes:

Reform domestic business Reinforce overseas business



## **Automotive Systems**

### Wire harnesses:

Build global system for design, production, and sales to expand global share to 5% in 2015

## **Electronics**

### Thermal products:

Develop new products

### Aluminum blanks:

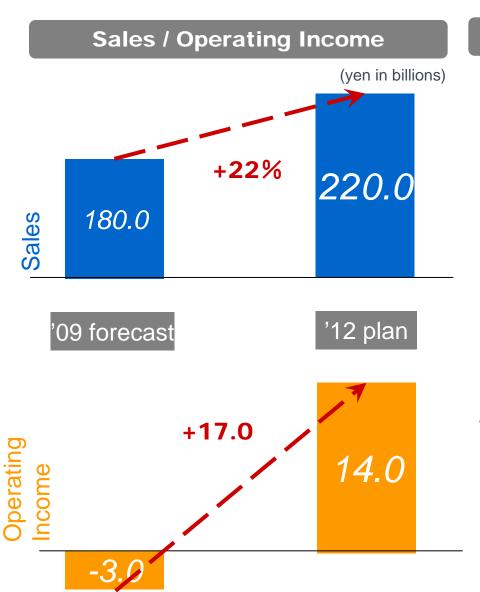
Expand sales share

### Glass blanks:

Aim to achieve stable mass production

### Magnet wire:

Consolidate into new company to boost operating income



## Rolled aluminum products

Accelerate reform of domestic business and expansion of overseas business

## Extruded aluminum products

Reinforce highly functional, highly profitable business by generating new products

## Forged aluminum and Casting

Aiming at global #1 in niche products

## Aluminum foil

Tap into synergies with foil subsidiary

Thank you for your attention.

We will now take **questions**.



### Forward-Looking Statements

Projections of future sales and earnings in these materials constitute forward-looking statements. Management offers these projections in good faith and on the basis of information presently available. Information in these statements reflects assumptions about such variables as economic trends and currency exchange rates.

Forward-looking statements are subject to known and unknown risks as well as other uncertainties that include, but are not limited to, the following.

- Economic trends in the U.S., Europe, Japan and elsewhere in Asia, particularly with regard to consumer spending and corporate capital expenditures.
- Changes in exchange rates for the U.S. dollar, euro, and Asian currencies.
- The Furukawa Electric Group's ability to respond to rapid advances in technology.
- Changes in assumptions involving financial and managerial matters and the operating environment.
- Current and future trade restrictions and related matters in foreign countries.
- Changes in the market value of securities held by the Furukawa Electric Group.

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