

**Furukawa Electric Group Medium-Term
Management Plan for 2013-15**

*Furukawa **G** Plan 2015*
*Group **G**lobal **G**rowth*

April 11, 2013

Mitsuyoshi Shibata, President

- I. Concept for Medium-Term Management Plan 2015
- II. Review of Medium-Term Management Plan 2012
- III. Overview of Medium-Term Management Plan 2015

I. Concept for Medium-Term Management Plan 2015

- Focus on
**infrastructure and
automotive markets**
that are expected to grow globally and
where Furukawa Electric Group's
experience can be used effectively
- Building the basis for sustainable growth

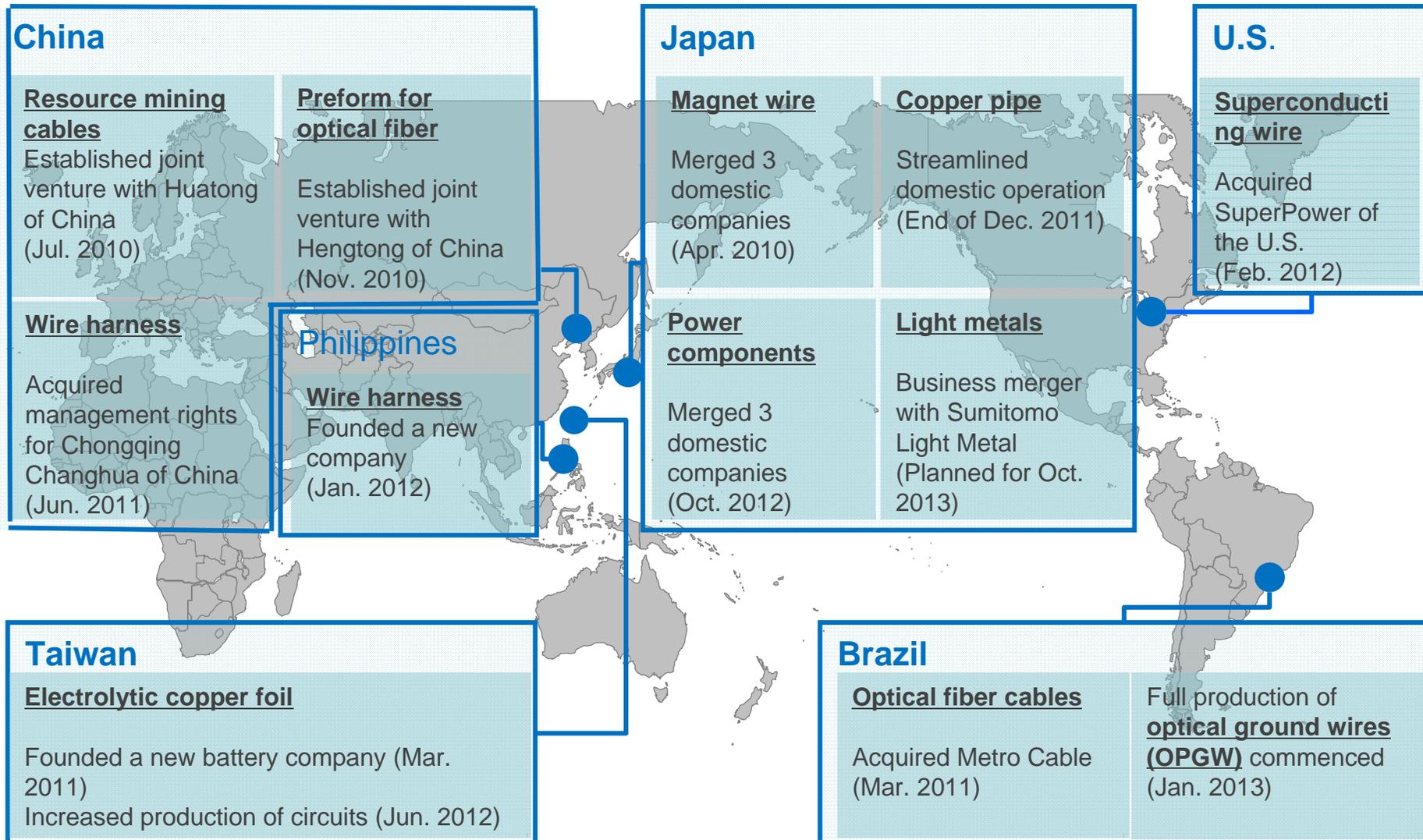
Income statement for three years later: ensure final profit

		a	b	b-a
(¥ billion)	2012 forecast	2012 forecast (application of equity method to light metals)	2015 medium term	Change
Net sales	950	760	900	+140
Operating Income	20	14	38	+24
Profitability	2.1%	1.8%	4.2%	+2.4%
Ordinary Income	17.5	13.6	40.0	+26.4
Profitability	1.8%	1.8%	4.4%	+2.6%
Net Income	2.0	2.0	20.0	+18.0
	2012 forecast		2015 medium term	Change
D/E ratio	2.0		1.3	-0.7
ROA(Ordinary)	2.1%		5.7%	+3.6%

II. Review of Medium-Term Management Plan 2012

Review of Medium-Term Management Plan 2012

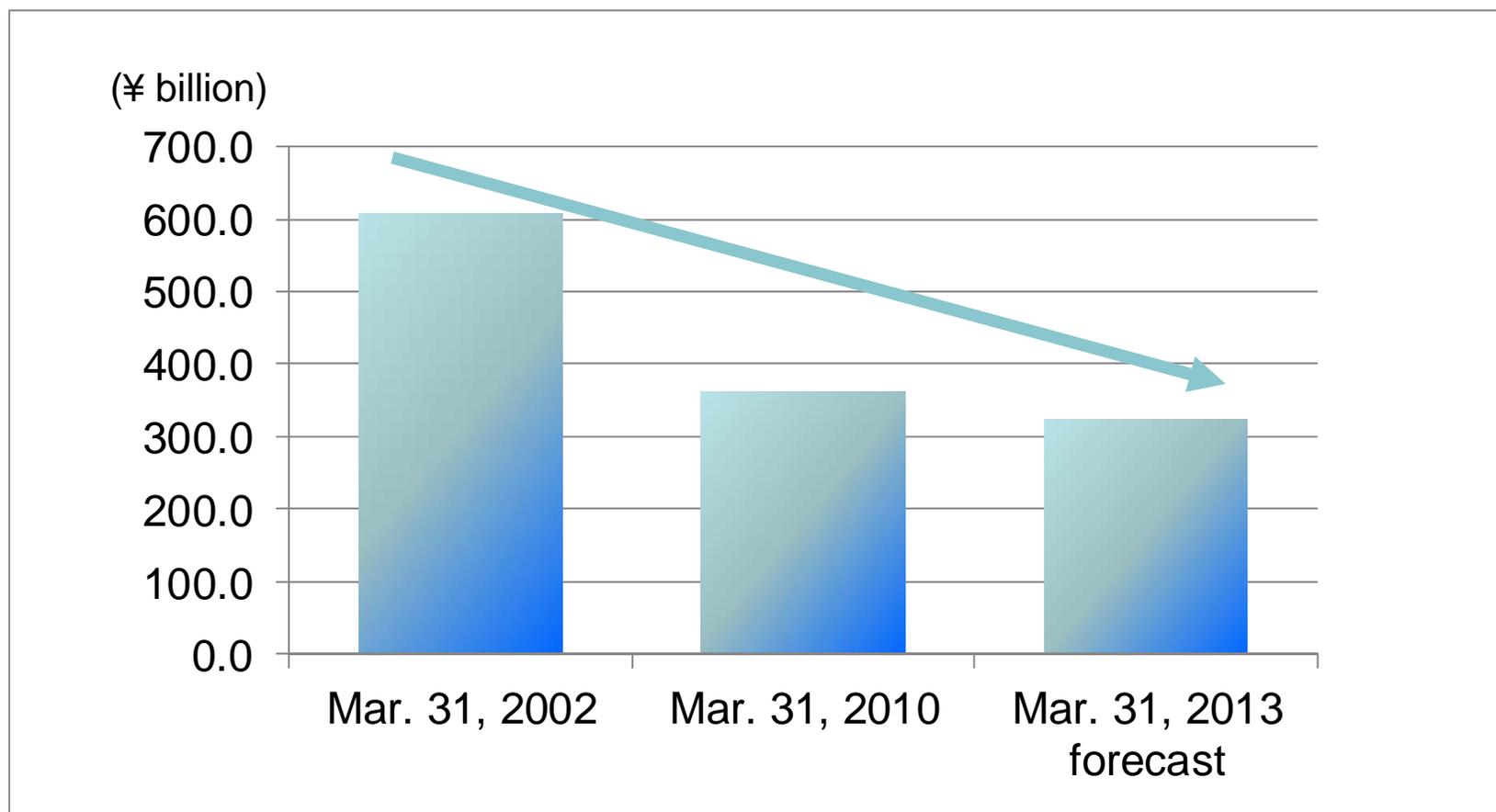
Achievements: Expanded global locations and restructured domestic businesses



Review of Medium-Term Management Plan 2012

Achievements: Increased asset efficiency and continuously reduced interest-bearing debts

From ¥609 bn. on March 31, 2002 to a forecast of ¥325 bn. on March 31, 2013 (a reduction of ¥284 bn.)



Issue: Unfulfilled plans for new growth businesses

- Glass substrate material for hard discs (closed business)
- MC-PET for LED liquid crystal TVs (reduced production)
- Electrodeposited copper foils for EV lithium ion batteries (delayed)
 - ⇒ Need to improve marketing capabilities, adaptability to market changes, and technical skills in mass production

Issue: Fall in profitability of existing domestic businesses

- Implementing the business structural reform announced in November
 - ⇒ Need a system of reviewing business strategies corresponding to changes in the environment

III. Overview of Medium-Term Management Plan 2015

Infrastructure and automobiles

Market trend: Expected to keep growing

- Lack of natural resource supply
- Greater demand for energy ⇒ **Need to use energy more efficiently**
- Increased communication traffic ⇒ **Potentially a long-term, stable-growth market**
- Increased car ownership in emerging countries

Strengths of Furukawa

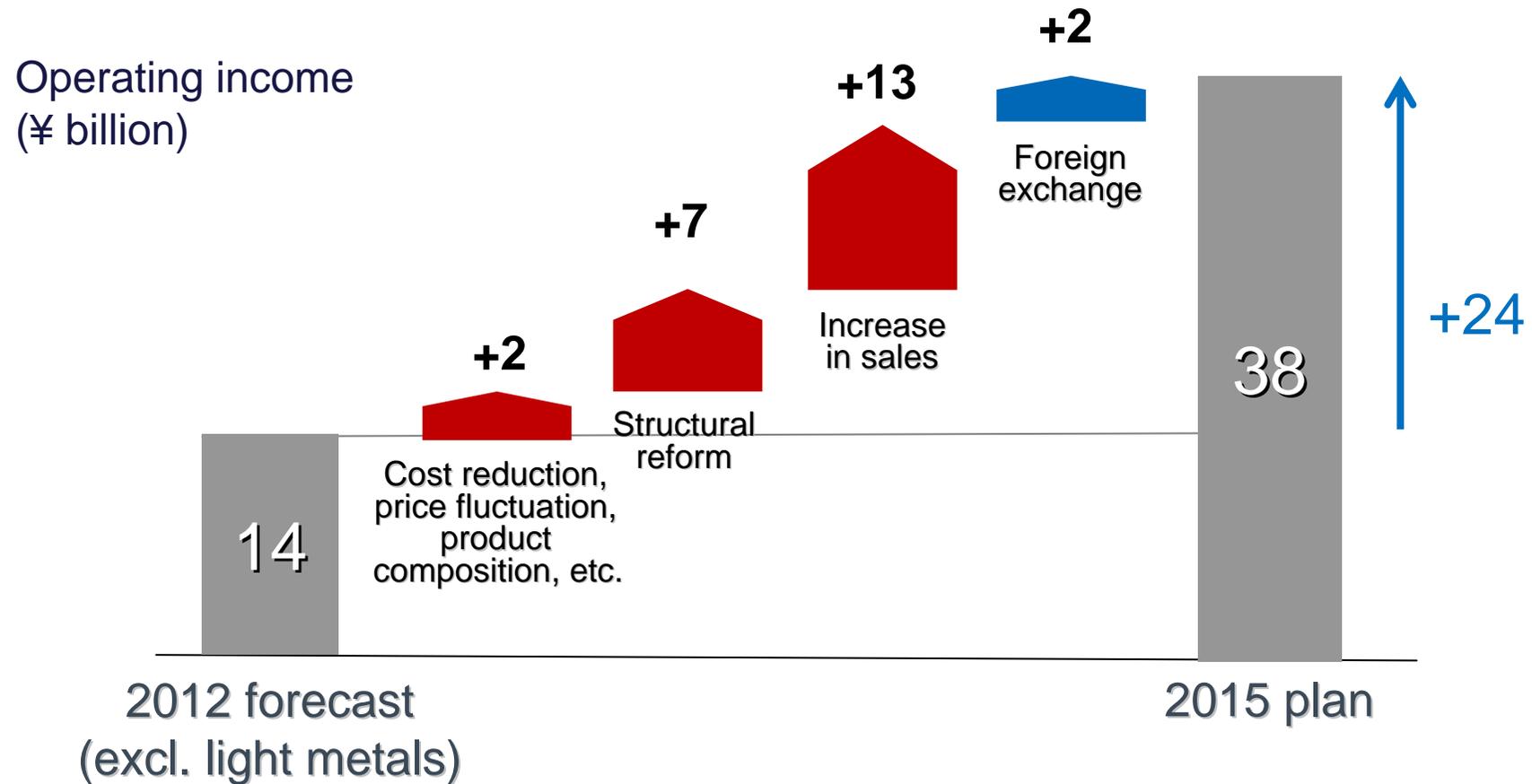
- Advantageous product lines that contribute to efficient energy use
- Product and technical development skills based on a wide range of materials
- Extensive experience, users, sales networks, production bases, and human resources



**Focus on infrastructure
and automotive markets**

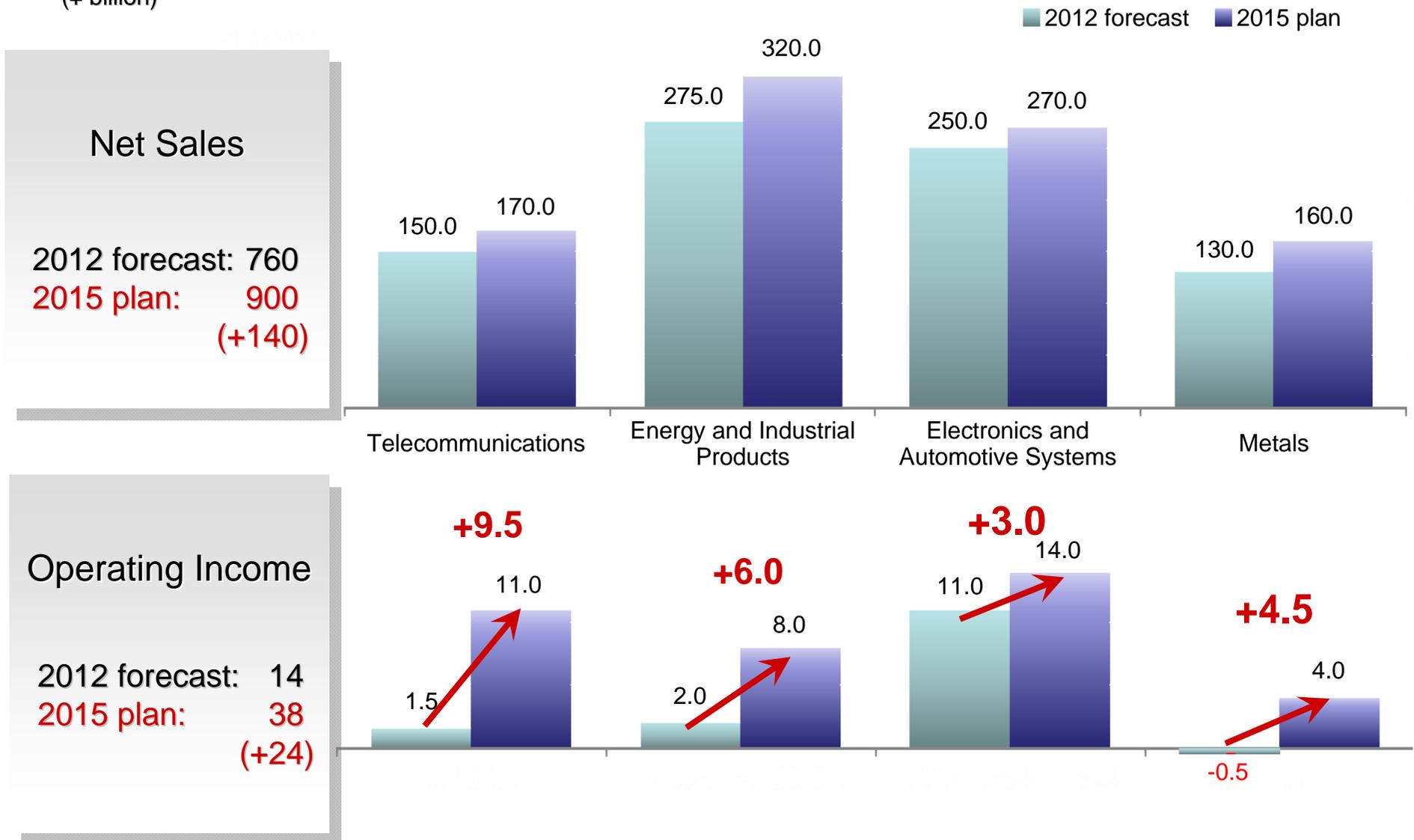
1. Growth strategy in infrastructure and automotive markets
2. Build the basis of sustainable growth
 - (1) Implement structural reform
 - (2) Develop new, next-generation businesses
 - (3) Strengthen the Group's global management
3. Improve the financial structure

Profit up ¥24 bn. by FY2015



Sales and Operating Income by Segment

(¥ billion)



* Both the 2012 sales and operating income forecasts exclude light metals.

1. Growth Strategy in Infrastructure and Automotive Markets

Implementing Growth Strategy

<1> Communication Infrastructure Business

Optical fiber cables

Market environment

- ✓ Communication traffic increases continuously
- ✓ Demand for fibers and optical cables increases, particularly in emerging countries

Our strategy

- ✓ Respond to market growth efficiently under centralized management using our global locations

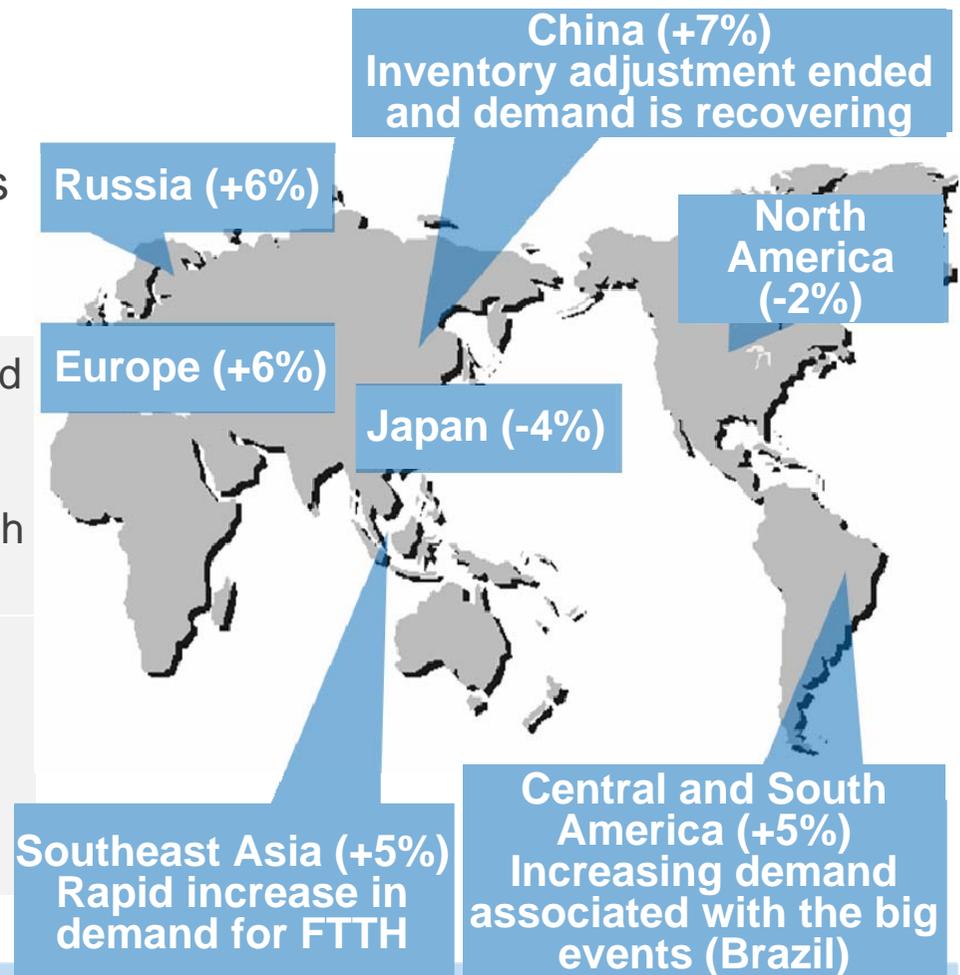
Measures

Overseas

- ✓ Globally optimize our fiber production and supply systems
- ✓ Increase optical cable bases (Brazil, Russia, etc.) and increase sales in growth markets

Domestic

- ✓ Promote fiber cost reduction as one of the Group bases
- ✓ Concentrate optical cable operations in Mie and establish a supply system corresponding to domestic demand



Implementing Growth Strategy

<1> Communication Infrastructure Business

Photonics Network

Market environment

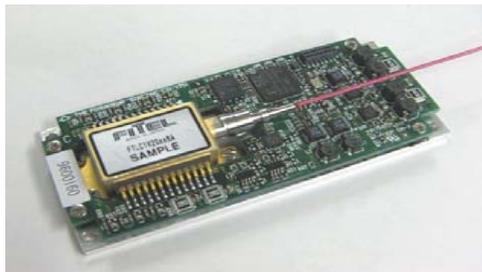
- ✓ Accelerated investment in digital coherent communication
- ✓ Expansion of overseas broadband market
- ✓ Emergence of the field of technological applications

Our strategy

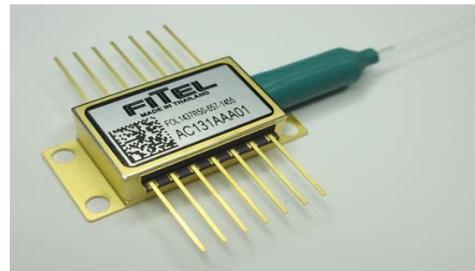
- ✓ Aim to be the top vendor in the field of digital coherent communication
- ✓ Enter the overseas broadband market
- ✓ Expand advantageous technologies into related fields

Measures

- ✓ Provide high-output, energy-saving, integrated new products for digital coherent communication
- ✓ Win contracts for broadband projects in South America and Southeast Asia
- ✓ Applications of Photonics technology: Fiber lasers, optical interconnections
- ✓ Develop network technologies for the smart grid market



High-output, narrow-width full-band tunable laser module (ITLA)



Pump source lasers for the Raman amplifier



Raman amplifier with automatic gain control function

Implementing Growth Strategy

<2> Power Infrastructure Business

Market environment

- ✓ Increasing demand for infrastructure, particularly in Asia, due to high-growth emerging economies
- ✓ Strong demand for underwater cables in the ultra-high voltage market
- ✓ Emergence of new businesses related to energy efficiency (smart grid, etc.)

Our strategy

- ✓ Using the technical advantage developed in the Japanese market and global manufacturing and sales bases, we will grow in the Asian and South American markets where our Group has customer bases.
- ✓ Exert the collective strength of our Group companies in new business areas such as power transmission and distribution and electricity storage.

Measures

Ultra-high voltage

- ✓ Double the capacity of submarine transmission cables (VISCAS)
- ✓ Expand the Out-Out business in Shenyang, China
- ✓ OPGW business accelerates global development using the communication business base in Brazil

Power supply/distribution

- ✓ Strengthen overseas development using links with local partners and technical advantage
- ✓ Respond to demand for new energies (wind power, solar power, etc.)

Power storage systems

- ✓ Increase sales of industrial power storage systems
- ✓ Develop power storage systems for smart grids

Implementing Growth Strategy

<3> Automobile-Related Markets

Market environment

- ✓ Continuous growth of automotive market, particularly in emerging countries
- ✓ Further decline in price
- ✓ Trend in product weight reduction and shift to EV/HEV and PHEV for environmental conservation (energy saving)

Our strategy

- ✓ Strengthen the local sales, design, and procurement functions overseas and expand our trade area in overseas markets, particularly in emerging countries
- ✓ Globally optimize production allocation and management resources
- ✓ Propose new products that contribute to energy conservation by making effective use of our strengths in the wide range of material technologies we deal in

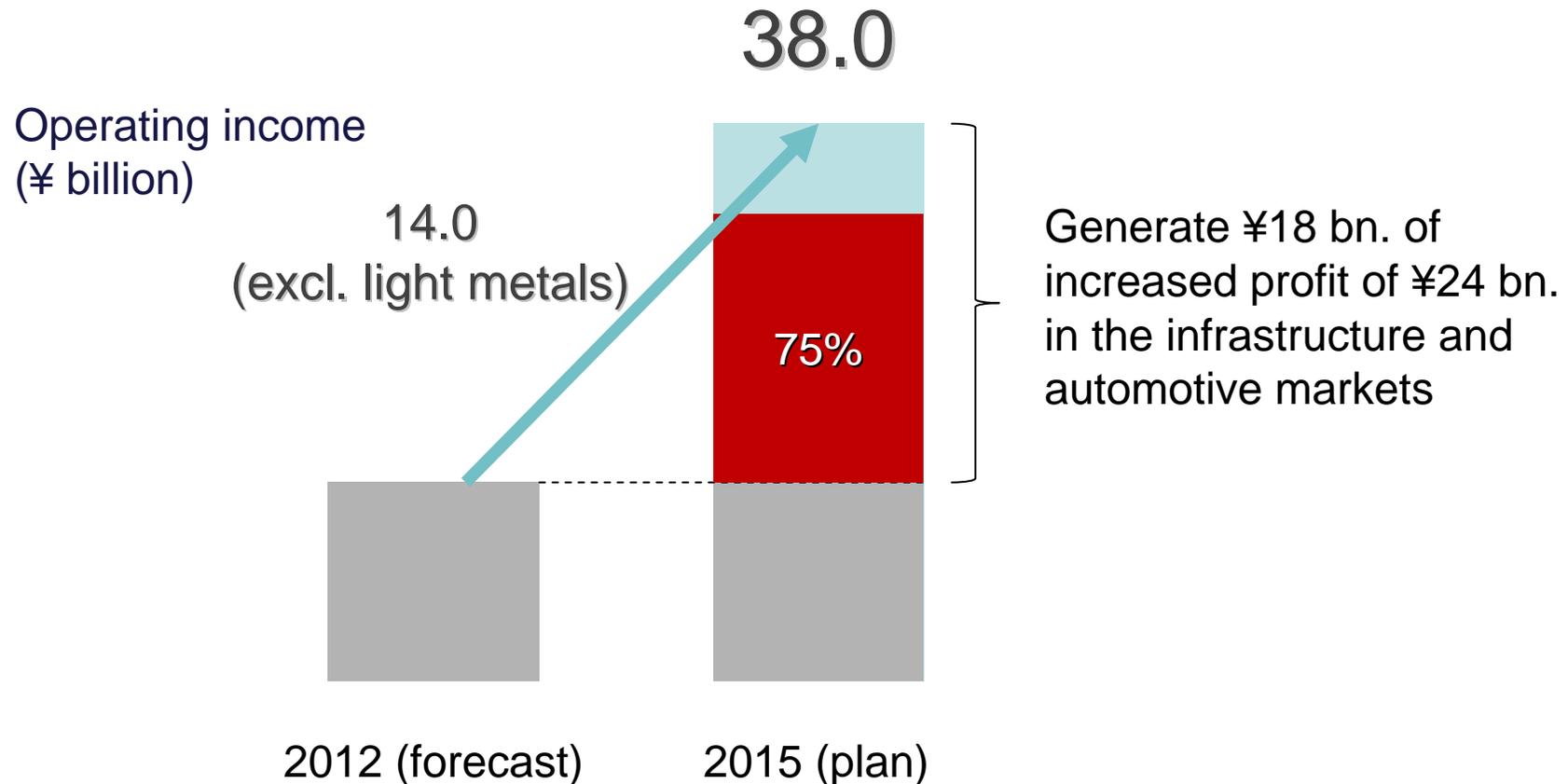
Implementing Growth Strategy

<3> Automobile-Related Markets

Measures

- ✓ Establish regional headquarters (in China, Thailand, and Mexico) to be in charge of sales, design, and procurement
- ✓ Increase production bases, particularly in Southeast Asia and Central and South America
- ✓ Wire harness business to target Japan-based global automakers and local automakers in emerging countries
- ✓ SRC business to target all automakers and aim to maintain and increase our top global share
- ✓ Implement the comprehensive reduction of material, processing, fixed, and other costs
- ✓ Seize opportunities for material conversion and propose new products to meet customer needs
 - Promote aluminum harnesses
 - Increase the sales of UltraBattery lead-acid batteries for idle reduction
 - Increase the sales of high-performance magnet wires for motors
 - Promote power collectors (copper foils) for lithium ion batteries in the HEV/PHEV market

Generate 3/4 of Increased Profit in Infrastructure and Automotive Markets



2. Build the Basis of Sustainable Growth

(1) Implement Structural Reform

Status of Structural Reforms of Major Businesses

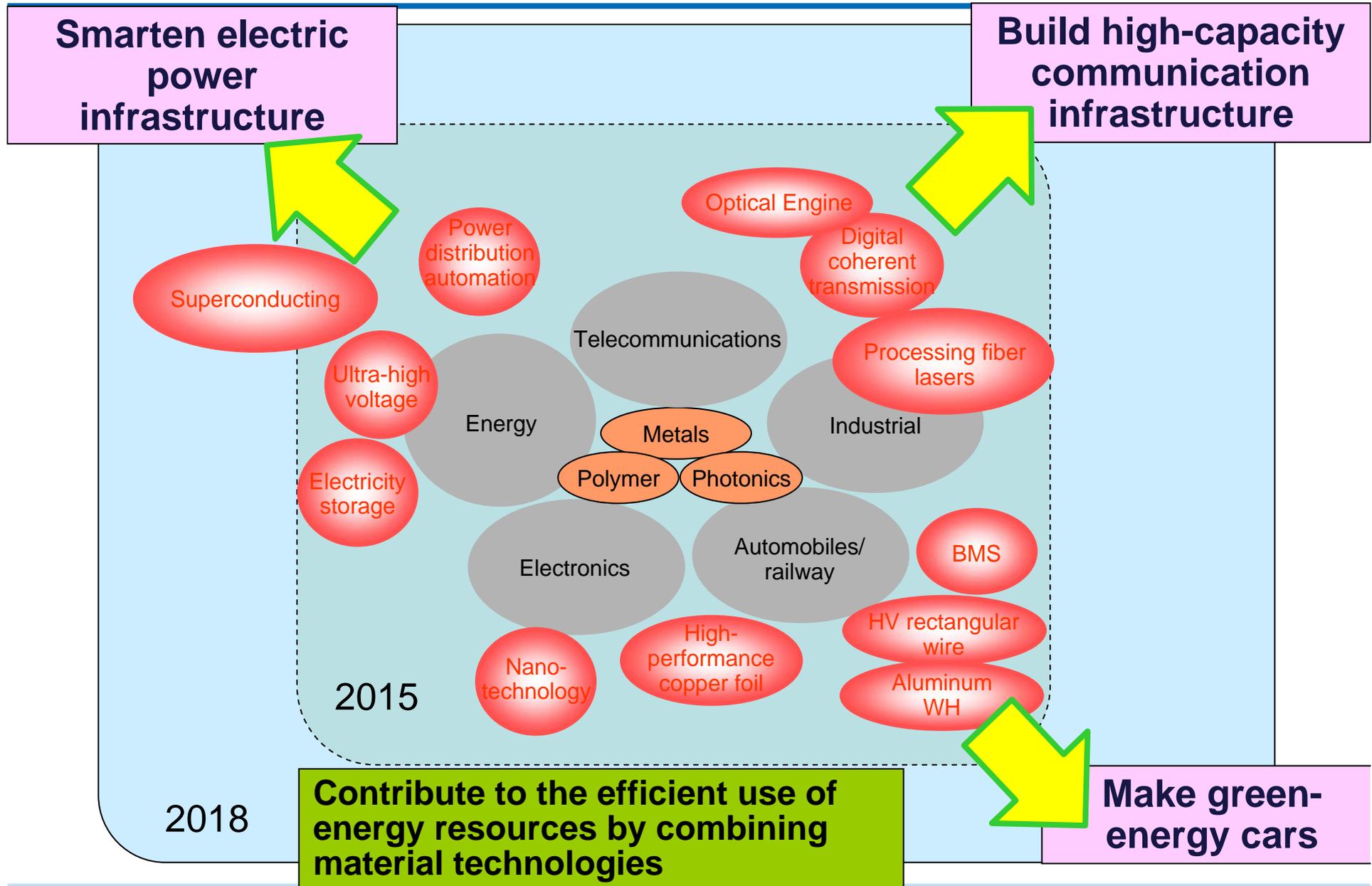
Project	Completed in	Status	
Power components: Business merger (Asahi Electric Works, Inoue Manufacturing, and Furukawa PC => merged company)	Oct. 2012		
Industrial electric wires: Overseas OEM (overseas OEM of low profitability products)	Dec. 2012		
Magnet wires: Overseas production (TEX: Furukawa Mie => Southeast Asian affiliate)	Dec. 2012 ← Mar. 2013		
Size reduction (personnel cuts due to downsizing associated with business division)	Mar. 2013		
Totoku Electric: Business merger (merged company/Furukawa power components div. => merged company)	Apr. 2013		
Sales of electric wires: functional integration (Shin Manden => Furukawa Elecom)	Apr. 2013		
Optical cables: production merger (Mie + Chiba => Mie)	Jun. 2013		○
Copper foils: overseas production (part of Furukawa Imaichi => Taiwan affiliate)	Sep. 2013		○
Electrical conducting materials: production merger (Furukawa Mie + Chiba => Mie)	Dec. 2013 ← Mar. 2014		◎
Head office divisions: streamlining (reduce 20% of existing functions => strengthen Group management)	Dec. 2013		○
Close magnet wires and unprofitable product businesses (general-use enameled wires: partially close)	Mar. 2014	○	

Making steady progress, with some even moving forward in terms of maximizing the impact of domestic business concentration to become ¥7 bn. more efficient in FY2015 (than in FY2012)

2. Build the Basis of Sustainable Growth

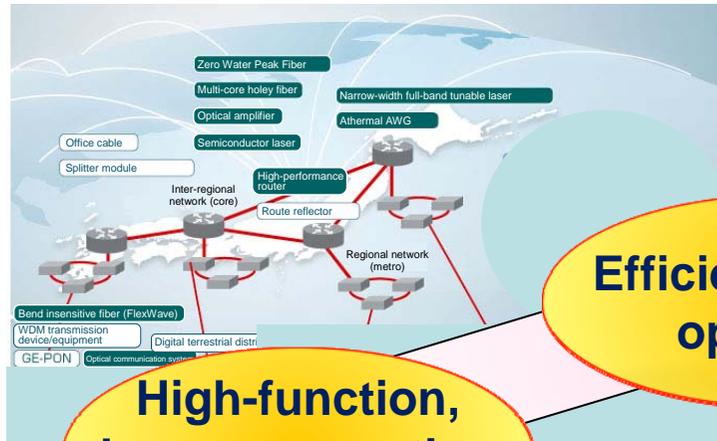
(2) Develop New, Next-Generation Businesses

Areas Targeted for Next-Generation Businesses



Build High-capacity Communication Infrastructure

Contribute to high-capacity communication infrastructure using high-function parts, equipment, and systems based on the most advanced Photonics technology

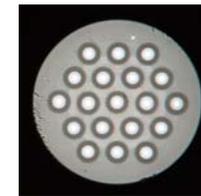


High-function, low-consumption power

Efficient network operation

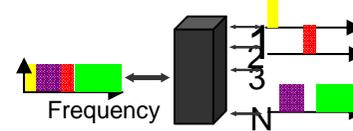
Ultra high capacity

Spatial multiplexing



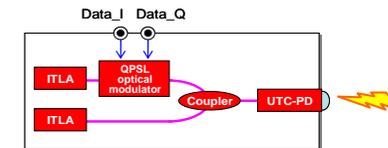
Multi-core fibers

Optical communication using high-efficiency frequency



Band changeable optical components/devices

Ultra high speed wireless communication



Terahertz oscillator

Digital coherent communication

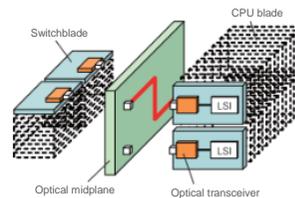
Integrated signal light source



Conventional (above) and small ITLA

High-density optical wiring

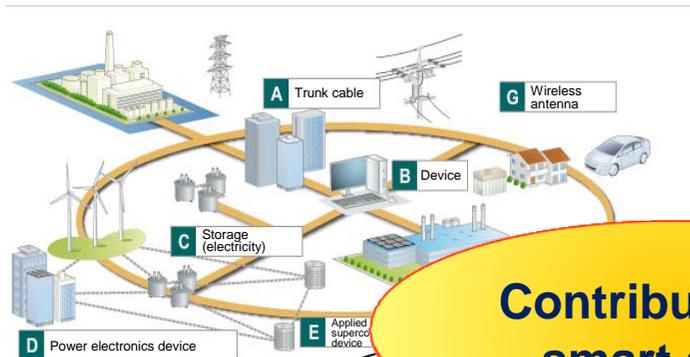
Optical Engine



Optical wiring inside computer

Smarten Electric Power Infrastructure

Contribute to building an Earth-friendly, smart-energy environment by combining the technologies we developed in the power cable business and high-function components/devices



Contribution to smart grids

Ultimate low-loss transmission

High-temperature superconducting cables

High-temperature superconducting devices

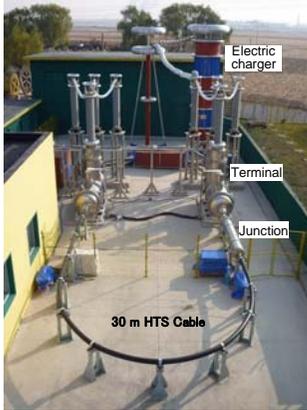
Stable supply of natural energies

Power distribution system

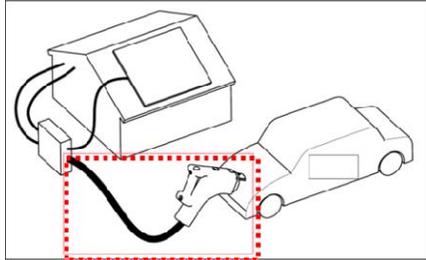
Power cable

Connection terminal parts

V2H/V2G system



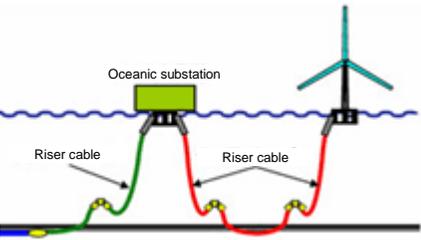
30m 275kV superconducting cables Verification test (Shenyang)



Charger connector cables



Packaged battery energy storage system



Oceanic wind power generation

Make Green-Energy Cars

Improve the environmental performance of automobiles by reducing product weight, improving energy efficiency, etc. with our material technologies



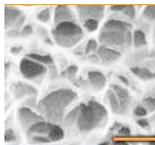
Weight reduction

Higher efficiency, smaller size

Energy solutions

High-strength foam components

High-strength aluminum alloys



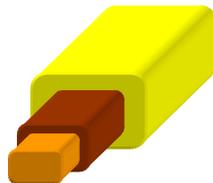
Microfoaming



Aluminum wire harnesses

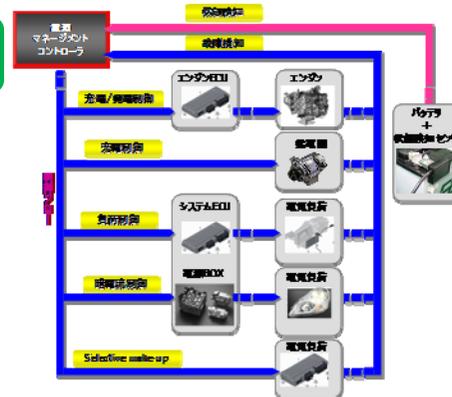
Thin-film enameled wire

Thin-film rectangular wire



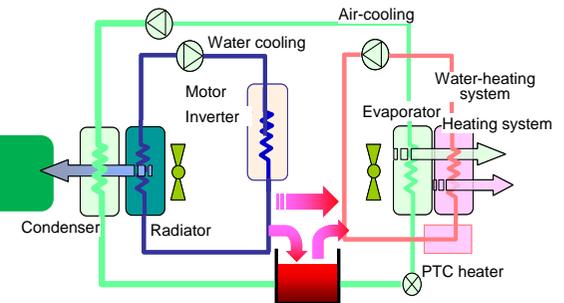
Rectangular wire for motors

Energy management



Power supply management system

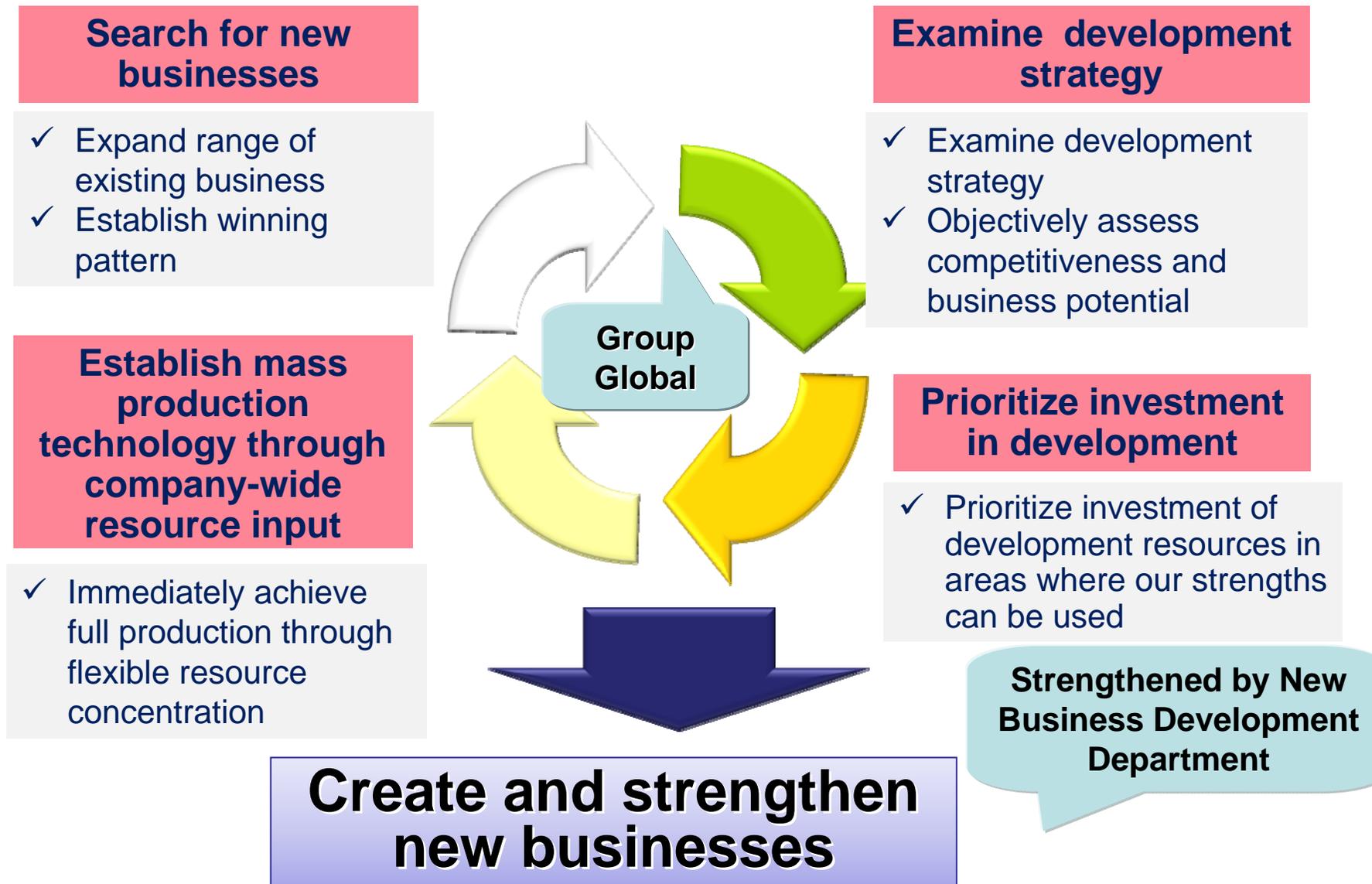
Thermal energy control



Thermal storage/heat radiation

Thermal energy reuse module

Mechanism for Creating and Developing New Businesses



2. Build the Basis of Sustainable Growth

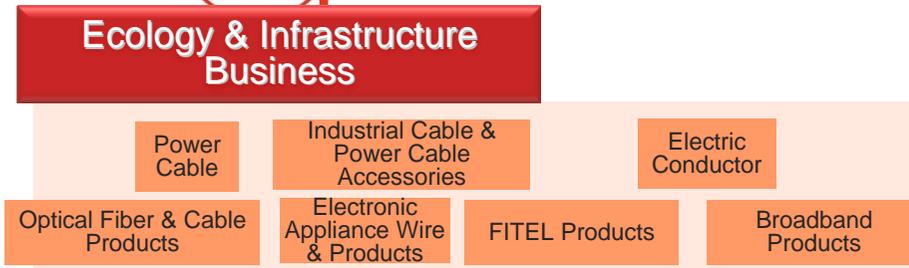
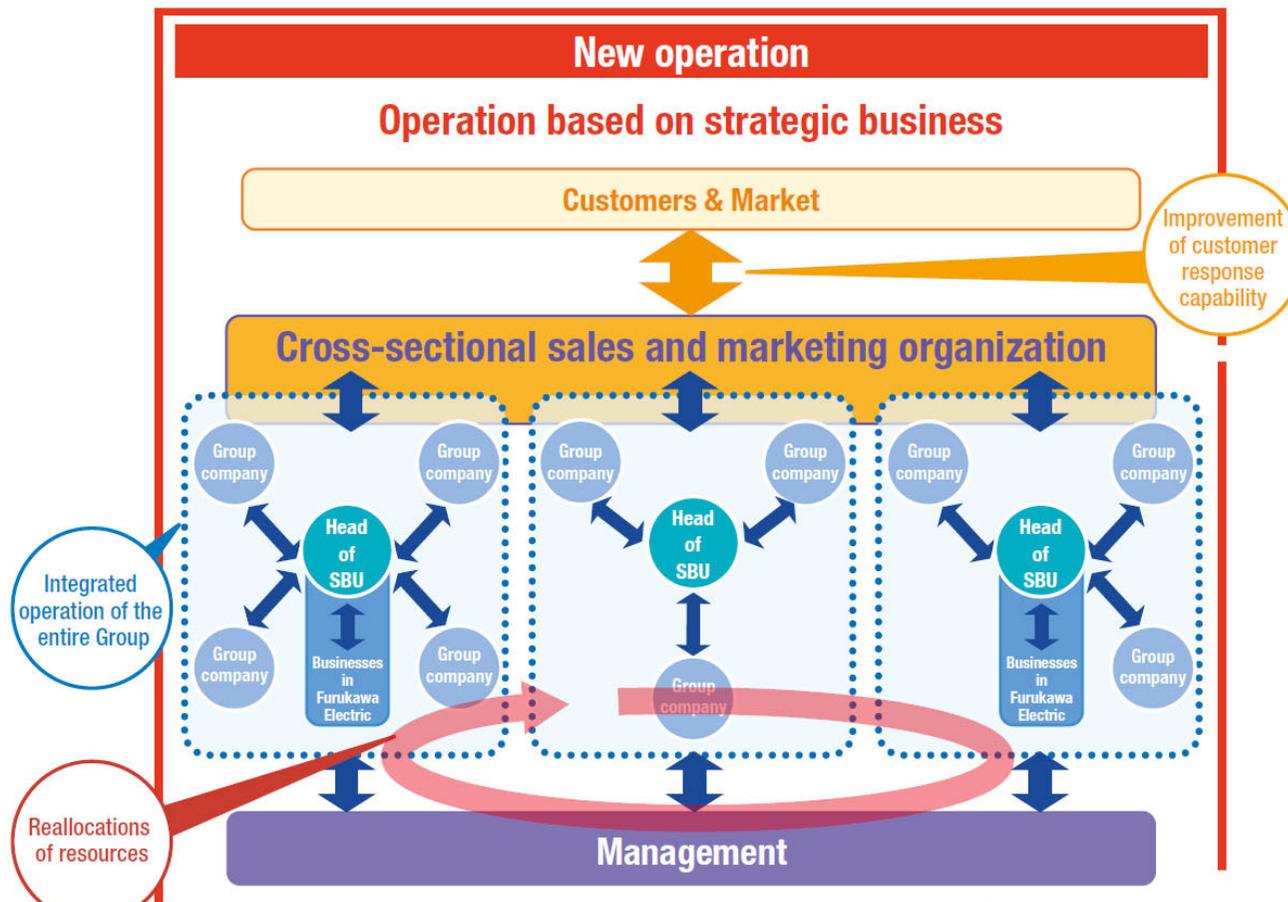
(3) Strengthen the
Group's global
management

Introduce Business Unit System (for each strategic business)

- ✓ Change the company system and group the businesses that share strategies (incl. affiliates) to strengthen responsibilities and actions
- ✓ Improve the quality and effectiveness of strategies through strategic dialogues and accelerate responses to environmental changes

- Promote Group unification with 15 business units (based on strategic businesses)
- With regard to conflicts between management and action, strengthen and assess follow-ups using KPI
- Assess strategies in each business unit and optimize the Group's resource allocation

Accelerate Group Management through Changes in the Organizational System



Implement group-wide sales/marketing functions to strengthen responses to markets/customers

Focus on proposals for solutions

- ✓ Propose solutions across business units demanded by customers

Strengthen marketing

- ✓ Search for Group business opportunities (infrastructure, next-generation automobiles, etc.)
- ✓ Cooperate with research depts., New Business Development Dept., etc. regarding business development

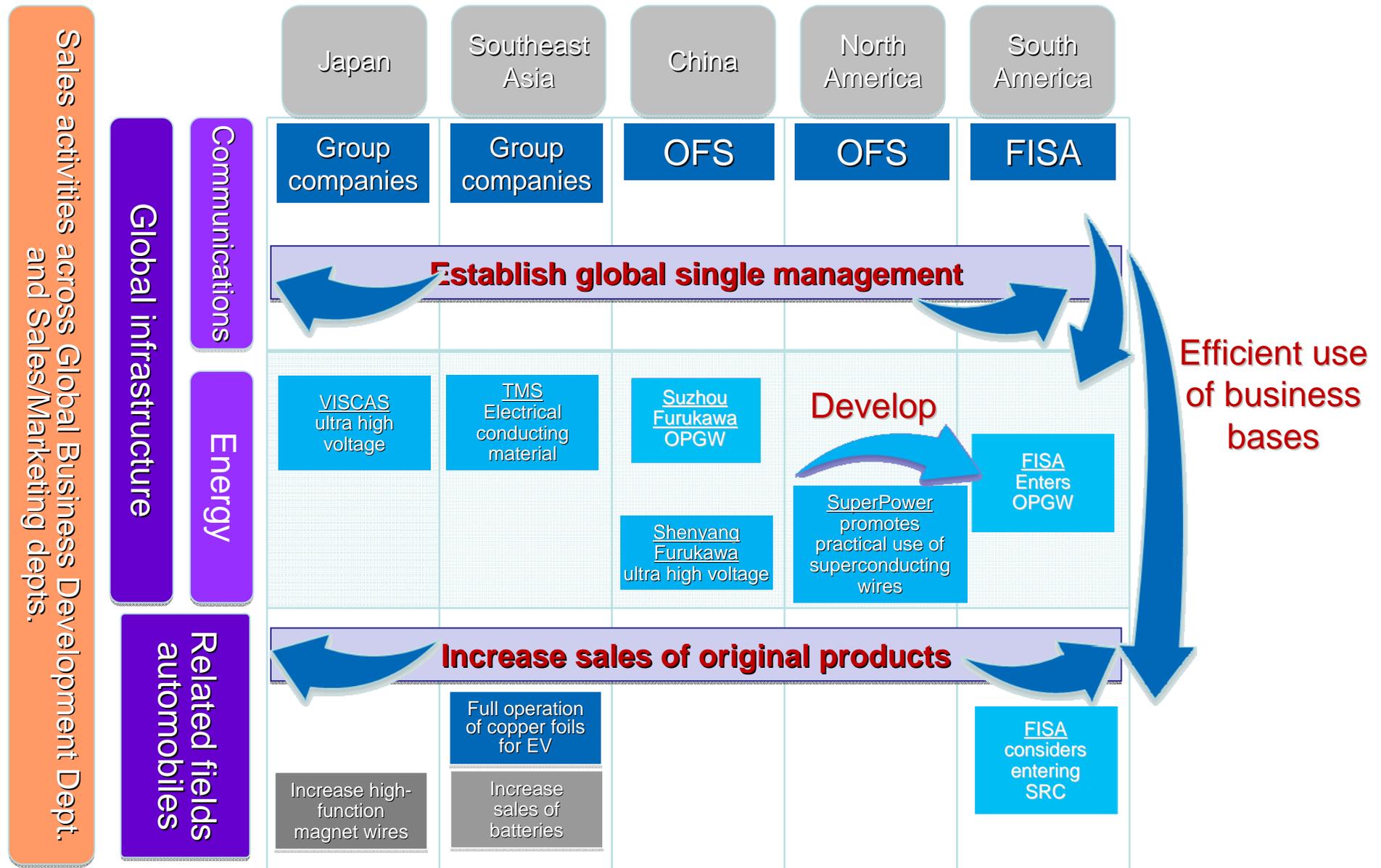
Streamline sales system

- ✓ Streamline the sales system, including sales companies, dealers, and agents

Promote global development

- ✓ Strengthen Group ties to increase overseas sales activities
- ✓ Promote sales across overseas offices

Exert the Group's Collective Strength



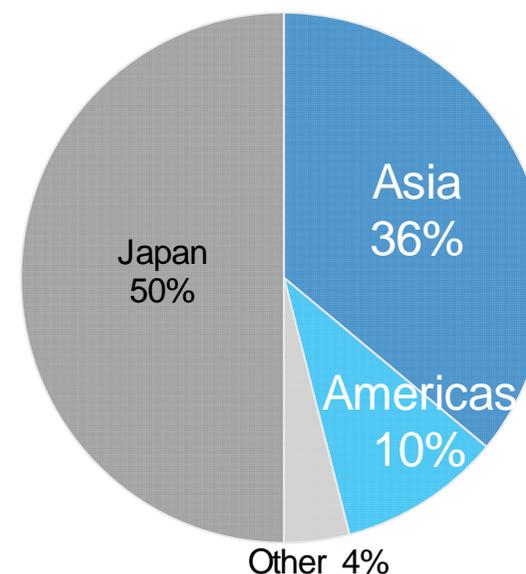
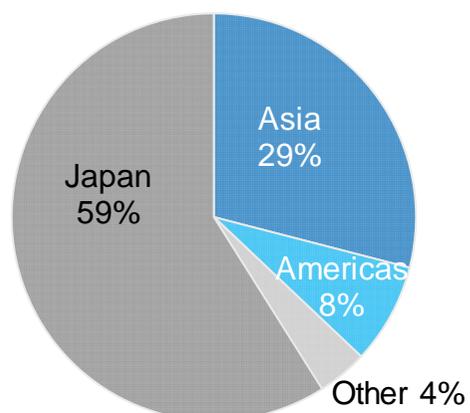
High Ratio of Overseas Sales

Increase primarily in Asia to raise the overseas sales ratio to 50%

2012 forecast
Overseas ¥312 bn. / All ¥760 bn.
= 41%

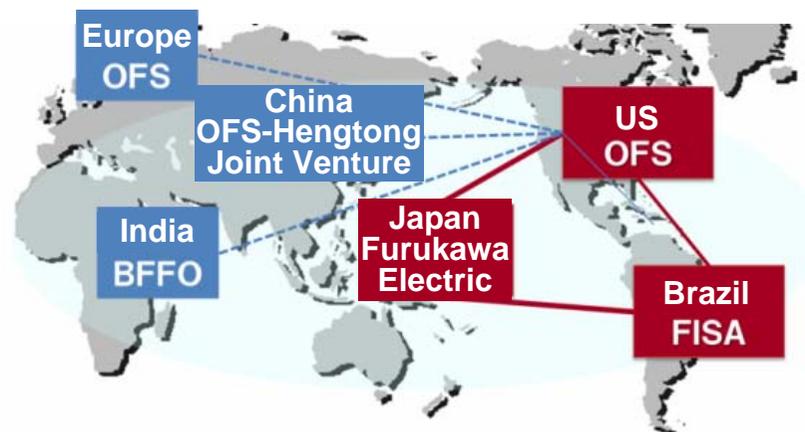
2015 plan
Overseas ¥450 bn. / All ¥900 bn.
= 50%

(excl. light metals)



Corporate Vice President System with a Focus on Global Competitiveness

Two non-Japanese Corporate Vice Presidents were hired for the first time. Aside from the business areas of the affiliates managed by each of them, they will make specific proposals for the broad overseas development of our Group, the establishment of the Group's global system, and trade area expansion, and will exchange opinions with the other directors.



Foad Shaikhzadeh

President, FISA, Brazil
Graduated from the Escola Politécnica
University (electricity) in 1978

Timothy Murray

President, OFS Fitel, LLC., USA
Earned a doctorate in metal organic
compounds from Princeton
University in 1978

3. Improve Financial Structure

Income statement for three years later: ensure final profit

		a	b	b-a
(¥ billion)	2012 forecast	2012 forecast (application of equity method to light metals)	2015 <u>medium term</u>	Change
Net sales	950	760	900	+140
Operating Income	20	14	38	+24
Profitability	2.1%	1.8%	4.2%	+2.4%
Ordinary Income	17.5	13.6	40.0	+26.4
Profitability	1.8%	1.8%	4.4%	+2.6%
Net Income	2.0	2.0	20.0	+18.0
Specs		2012	2015 <u>medium term</u>	
Foreign exchange (dollar to yen)		80	90	
Copper (yen/kg)		631	800	
Crude oil (Dubai, dollars/barrel)		115	108	

Balance sheet for three years later: system responsive to changes

(¥ billion)	2012 year-end forecast	2015 medium term	Change
Total assets	826.5	700	-126.5
Equity capital	164.3	184	+19.7
Equity ratio	19.9%	26.3%	+6.4%
Interest-bearing debts	325	240	-85

	2012 medium term	2015 medium term	Change
Investment, etc. (for 3 yrs.)*	92.5	90	-2.5
R&D (for 3 yrs.)*	48.6	52	+3.4

* Excludes light metals

Three-year cash flow (¥ billion)

Operating CF 120; Investing CF -90;
Financing CF -30

Target after three years: Improve asset efficiency

	2012 year-end forecast	2015 medium term	Change
D/E ratio	2.0	1.3	-0.7
ROA (ordinary)	2.1%	5.7%	+3.6%
Total asset turnover	1.1	1.3	+0.2

Dividend policy

We have had a basic policy of paying stable dividends, taking into account the trends of future earnings and our future business development. We will continue our dividend payment based on this policy for the period of the Medium-Term Management Plan 2015.



To coincide with the establishment of a new groupwide global management framework, we have chosen to use our “*Yamaichi*” logo*, which the Furukawa Group’s founder *Ichibei Furukawa* first registered as a trademark in 1877, to portray a traditional, Japanese image to the rest of the world. We have also changed the font of the Group name to a new one to express our commitment to society to flexibly meeting modern needs.

* The logo was created by *Ichibei Furukawa* when he decided to focus on the mining industry.

Thank you for your attention.

Bound to  ***Innovate***

Forward-Looking Statements

Projections of future sales and earnings in these materials are 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 incorporate known and unknown risks as well as other uncertainties that include, but are not limited to, the following items.

- 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 of 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 at foreign countries
- Changes in the market value of securities held by the Furukawa Electric Group

Due to the above factors, actual sales, earnings, and other operating results may differ significantly from the figures in the plans contained in these materials. In addition, following the release of these materials, Furukawa Electric Group assumes no obligation to publicly announce any revisions to forward-looking statements in these materials.

Copyrights

Furukawa Electric Co., Ltd. retains copyrights and other rights involving these materials. Copying and otherwise reusing these materials in any way without prior consent is prohibited.

古河電気工業株式会社
Furukawa Electric Co., Ltd.