

IR Business Briefing

Energy infrastructure business

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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 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 in 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 Looking Statements in these materials. In addition, following the release of these materials, Furukawa Electric Group assumes no obligation to announce any revisions to forward-looking statement in these materials

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Furukawa Electric Co., Ltd

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- 2. Overview of Medium-term strategies**
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- 6. “Selection and Concentration” in Industrial cable business**

1. Business description, Key products and Usage

Energy Infrastructure Division

Power cable Dept.

⇒ Ultra high voltage
underground power cables and
submarine cables

Industrial cable & Power
cable accessories Dept.

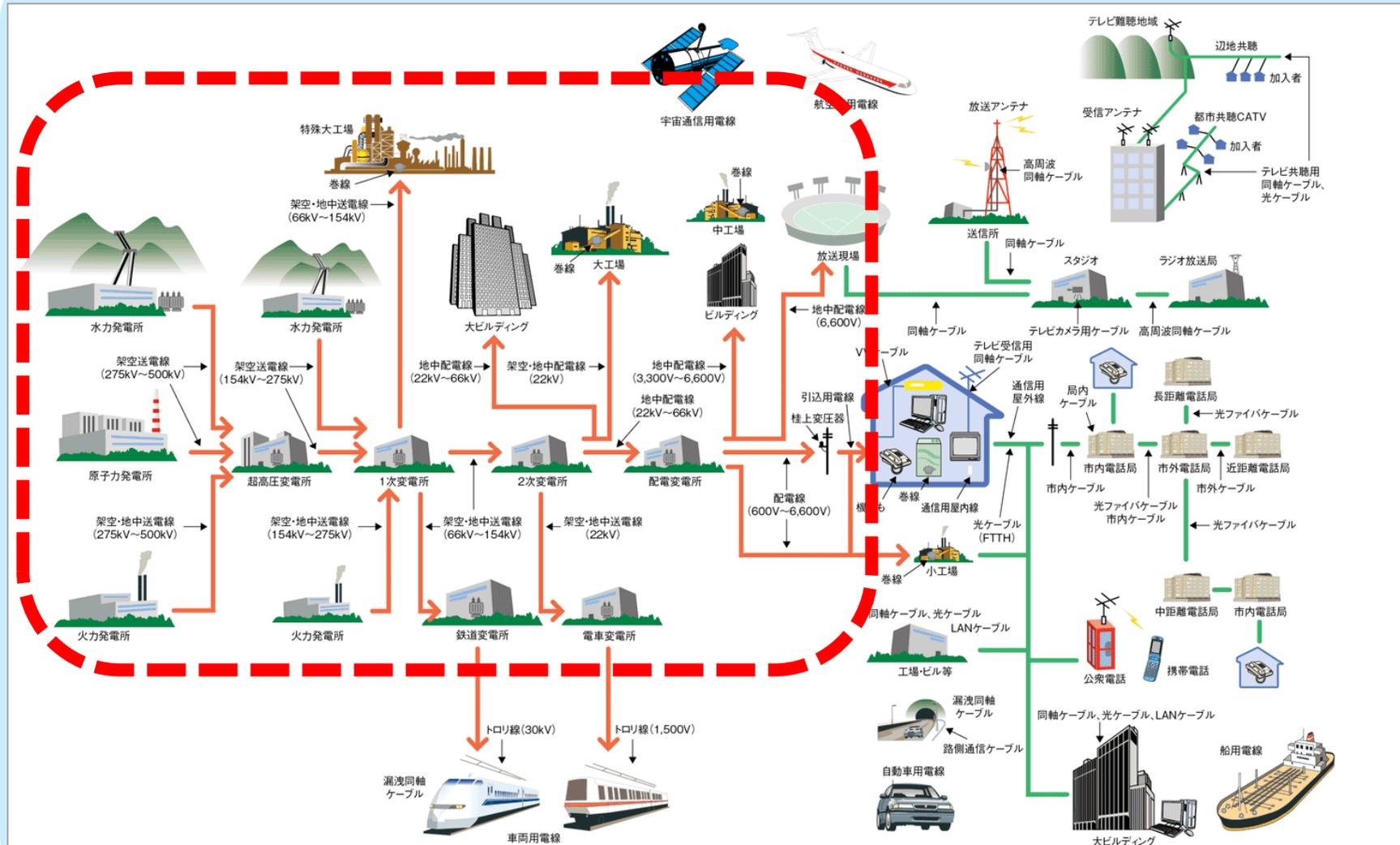
⇒ Industrial power cables
and Power cable accessories

Energy Infrastructure Division

Business	Customer	Main Usage
Power cable Underground power cables for over 66KV, Submarine power cables, cable accessories and installation	Power companies, IPP, Large plants, etc.	<ul style="list-style-type: none"> • Underground power lines between power stations, substations, large plants, etc. • Offshore wind farms, island interconnection*
Industrial cable & Power cable accessories Power cables for 33 kV or under	General factories/Building owners, Railroad companies, etc.	<ul style="list-style-type: none"> • Indoor wiring in general buildings and facilities • Control circuits in factory facilities and equipment • For railroads (Supplying power to trains)
Power distribution accessories for 33 kV or under, overhead power transmission accessories	General factories/Building owners, Railroad companies, Power companies, etc.	<ul style="list-style-type: none"> • Wiring for switchboards, control panels, etc. • Electrical facility materials for power distribution lines

*Interconnection for supplying power to remote islands, or supplying power from power stations in remote islands.

1. Business description, Key products and Usage



Source: Japanese Electric Wire & Cable Makers' Association

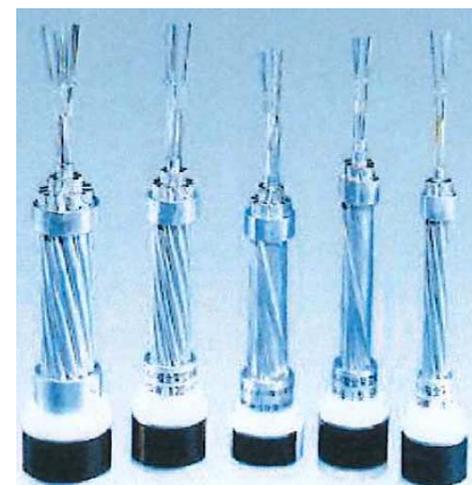
Key products & Usages

(Power cables, Submarine cables, OPGW)

**FURUKAWA
ELECTRIC**



Various types of power cables



Optical ground wire (OPGW)



Submarine cable



Submarine water pipe

Key products & Usages (Ultra high voltage cable installation)



Ultra high voltage cable installation example (Inside the cable tunnel)

Key products & Usages

(Submarine cable & Water pipe)

**FURUKAWA
ELECTRIC**



Loading submarine cables



Laying submarine cables



Laying submarine water pipes



Laying submarine water pipes

Key products & Usages

(Industrial power cables & New products)

Low-voltage power cables that contribute to labor saving of electric equipment-related work

Hybrid cable series

Lightweight

Achieved 30 to 50% lighter compared to conventional products

Soft

Improved softness by 1.5 times compared to conventional products

Stable

Prices that are not linked to the copper metal market prices i.e., almost fixed pricing

Safe

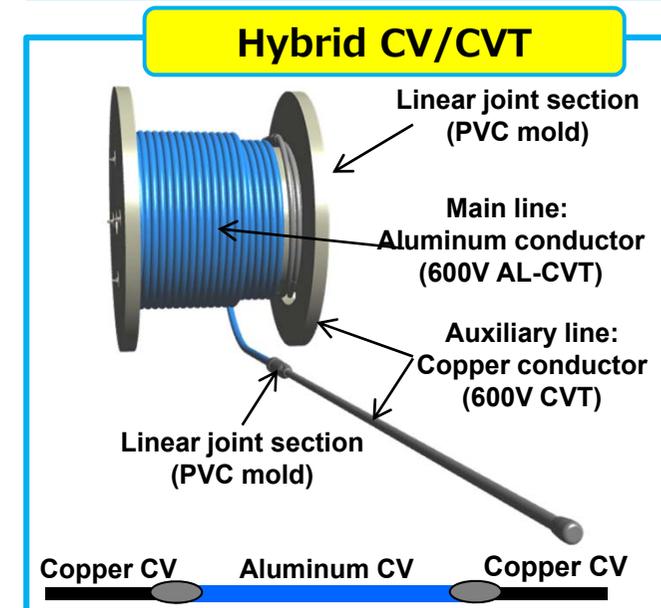
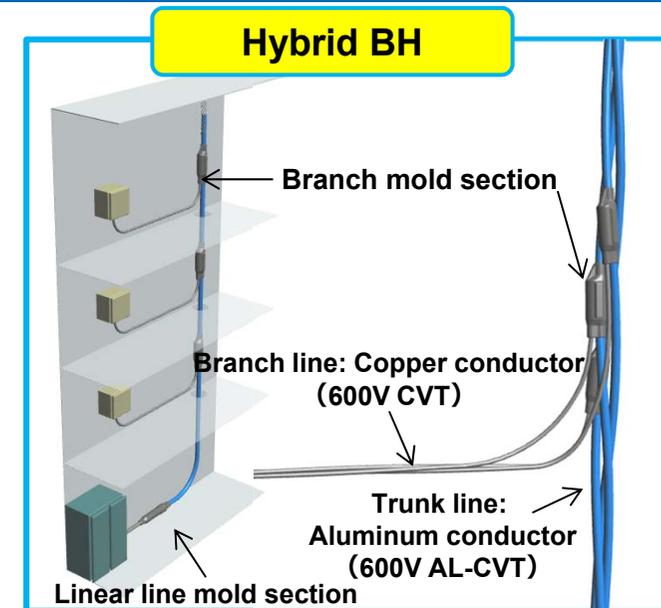
Contribute to industrial accident prevention, such as accidents during transport and lower back pain

Secure

Reduced risk of theft since copper is not used

Easy to distinguish

Blue surface makes it easy to distinguish from conventional products



2. Overview of Medium-term strategies

FURUKAWA ELECTRIC

Implemented Energy infrastructure development by integration of management resources

Enhancement of ability to make proposals to customers

Response to diversification of power producers

Engineering capability enhancement

Integrated operation of domestic/overseas engineering

Domestic construction

FEES

FEEI

Taho Engineering

Production capability enhancement

Technical, procurement & manufacturing capabilities

Ichihara Cable Plant

Shenyang Furukawa Cable

Furukawa Electric Industrial Cable

Hiratsuka Cable Accessories Plant

Furukawa Electric Power Systems

2. Overview of Medium-term strategies (Measures) **FURUKAWA ELECTRIC**

Enhancement of ability to make proposals to customers

- In response to the diversification of power producers as electricity deregulation proceeds, offer products and services that meet the needs of customers through the integrated operation of sales and technology divisions

Engineering capability enhancement

- Further improve our capability to handle onshore and offshore projects through the integrated operation of domestic and overseas work

Production capability enhancement

- Comprehensively demonstrate Furukawa Electric's capabilities of material procurement and manufacturing
- Strengthen synergy with Shenyang Furukawa Cable through personnel exchange and shared production

3. Review of FY2016 (Overview)

Financial results overview

- Promoted “Selection and Concentration” in the industrial cables segment which contributed to profit as well
- Regarding Power cables business, results of latter half of the year includes results from VISCAS because of the integration of the power cable business
- Domestic water pipes, Large deals of domestic ultra high voltage cables, and OPGW exports contributed to the results
- Due to the stagnancy of the Chinese subsidiary (Shenyang), consolidated operating income increased only 0.1 billion yen

(JPY billion)

	FY2015	FY2016
Net sales	93.5	95.3
Operating income	▲0.3	0.1
Operating margin	▲0.3%	0.2%

3. Review of FY2016 (Measures)

Enhancement of ability to make proposals to customers

- Obtained orders for 400kV deals in Singapore and Qatar

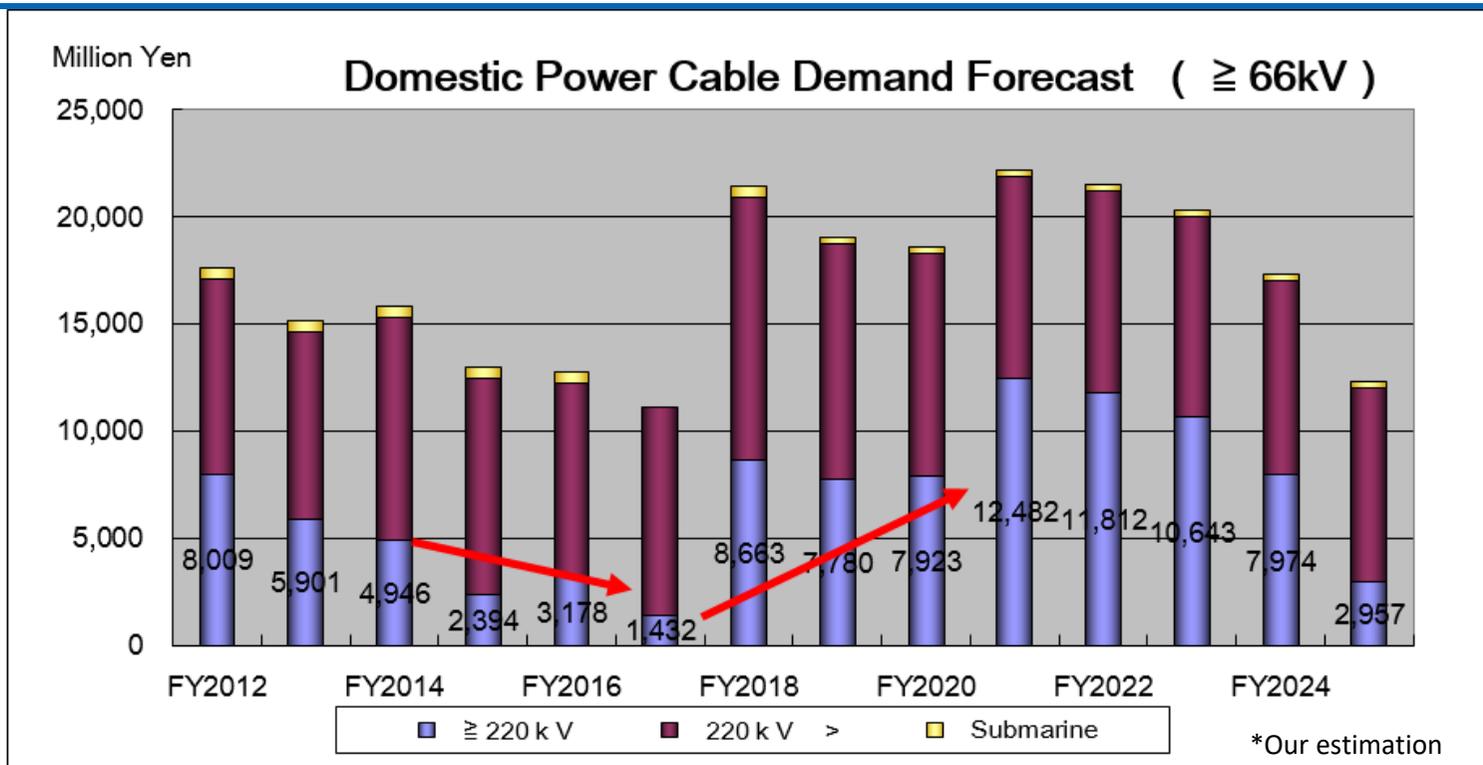
Engineering capability enhancement

- Prompt response to replace aging facilities of a domestic power company recovering from the fire incident
- Reinforcement of engineering personnel (staff, engineering workers)

Production capability enhancement

- Enhancement of production facilities , Initiated study on large-scale upgrade

3. Review of FY2016 (Changes)



Clarified long term replacement plan up to 2040 in consequence of submission of replacement plan for aging OF cables

Recovery of demand from 2018

- Power companies will increase investments for replacing aging facilities
- Enhancement of coordination between fundamental systems of the domestic principal power station and branches of renewable energy power stations

4. FY2017 Forecast (Overview)

Financial forecasts

(Incorporate full-year results of the power cable business of former VISCAS)

- In the power cable business, position FY2017 as a year of improving system
- Anticipate demand for replacing aging facilities in Japan to become apparent from FY2018 onward
→ Accelerate to build a system which enables to respond future demand of social infrastructure
- Fixed cost will be incurred in advance for future investment in the field of Production, Construction and Development
- In the Industrial cable field, continue “Selection and Concentration” of business

(JPY billion)

	FY2016	FY2017 forecasts
Net sales	95.3	110
Operating income	0.1	▲1.3
Operating margin	0.2%	▲1.2%

4. FY2017 Forecast (Measures)

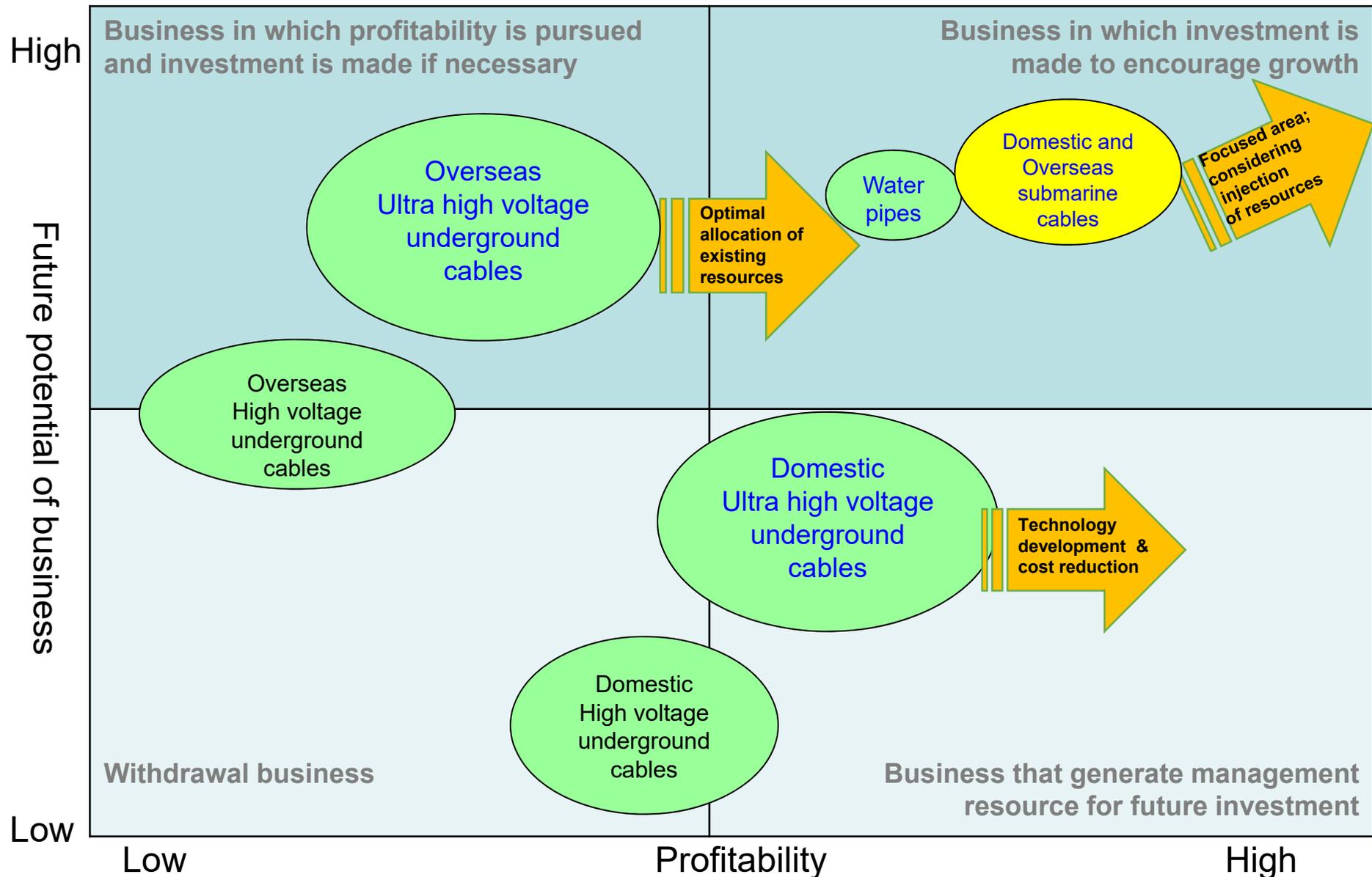
- Build robust system by enhancing capabilities of manufacturing and installation

Take the following actions in FY2017 under the new organizational structure to be formed as a result of business restructuring

- Enhance capability to respond to demand from domestic power companies as they work to replace aging facilities
 - Capital investments: Upgrade cable manufacturing equipment and boost production capacity
 - Hiring more people: Secure personnel for installation work
- Generate profits by following through on orders received overseas
- Develop technologies with an eye to the future

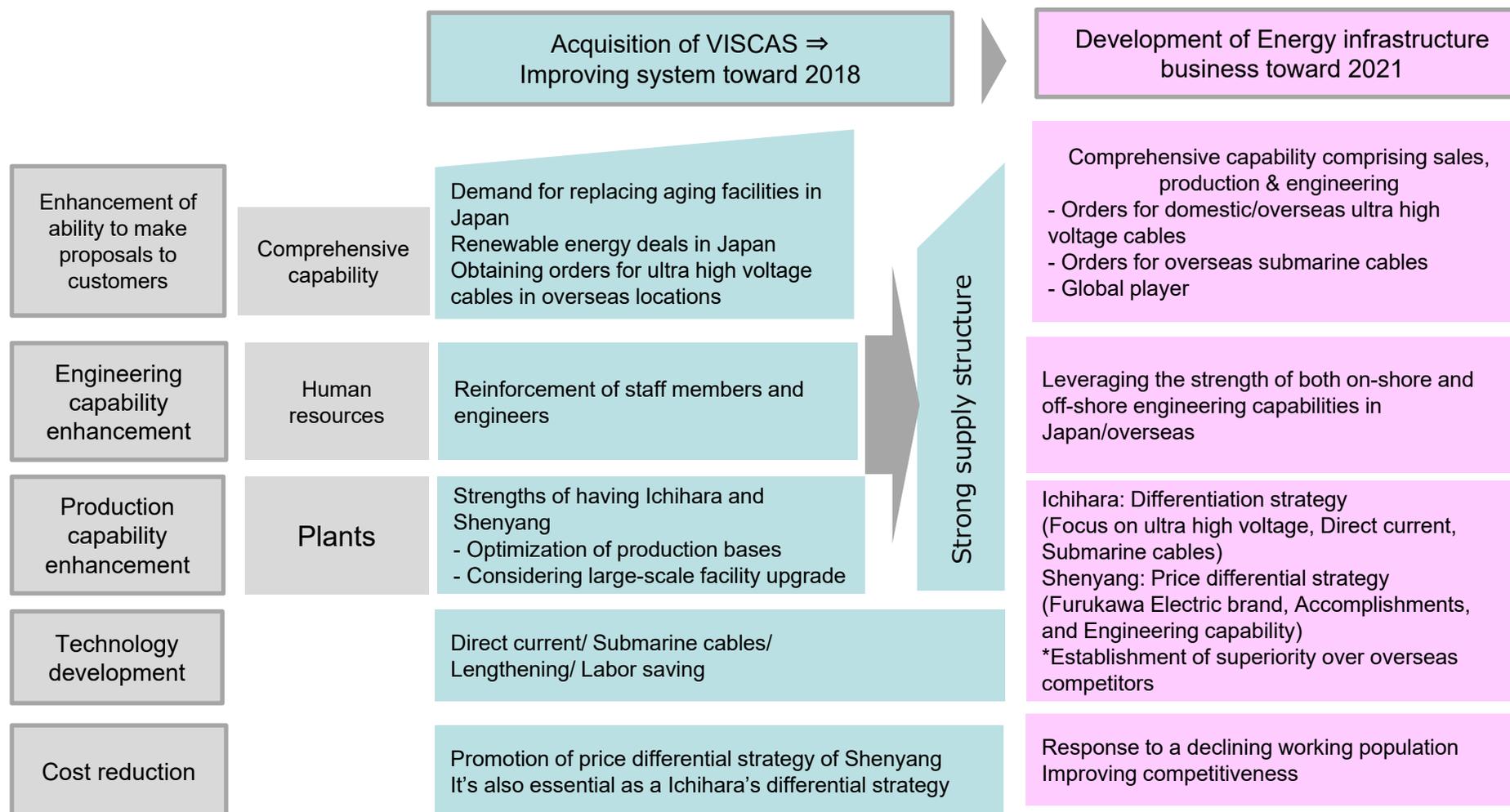
		Roadmap aimed at generating surplus in FY2018			● Scheduled delivery of orders received
		2016	2017	2018-	2021-
J a p a n	Major power companies			Capture demand for replacing aging facilities	
	New players	Enhance actions for taking orders of cables for renewable energy			Deliver cables for renewable energy
		※Fukushima floating offshore wind farm demonstration PJ ※Fixed offshore wind farm, mega solar PJ			
Overseas	Build track record of underground cables in Middle East and SE Asia regions				
	● Qatar 400kV ● Bahrain 400kV	● Singapore 400kV			
	Enhance actions of taking orders of submarine cables in SE Asia			Deliver submarine cables in SE Asia	

5. Business environment and Direction (Power cable business portfolio)



5. Business environment and Direction (Overview of Power cable business)

Implemented Energy infrastructure development
by integration of management resources



5. Business environment and Direction (Focused fields in Power Cable Business)

Coverage / Region		Production bases	Focused fields	Attitude	Competitors	Selling point
Japan	Japanese power companies	Ichihara	Ultra high voltage	Improve	Japanese power cable makers	Service (Engineering), Price
	New power (Private demand)		Off-shore/ Submarine cables	Develop	Japanese power cable makers	Price, service
	Water pipes		Water pipes	Improve	Except power cable makers	Price
	Out-In	Shenyang	High voltage	Develop	Japanese power cable makers	Furukawa Electric Brand and Price
Asia	Power companies etc./ Public infrastructure investment	Ichihara	Ultra high voltage/ Submarine cables	Improve	Japanese, Korean and European power cable makers	Past achievements and Brand
		Shenyang	High voltage	Develop	Korean and Chinese power cable makers	Furukawa Electric Brand and Price
Middle East	Power companies etc./ Public infrastructure investment	Ichihara	Ultra high voltage/ Submarine cables	Improve	Japanese, Korean and European power cable makers	Past achievements and Brand
		Shenyang	High voltage	Develop	Korean and Chinese power cable makers	Furukawa Electric Brand and Price
China	-	Ichihara	-	-	-	-
	Power companies under government management	Shenyang	Ultra high voltage/ High voltage	Improve (ultrahigh-voltage)	Chinese power cable makers	Domestic production including ultrahigh-voltage cables

5. Business environment and Direction (Optimization of Production Sites)

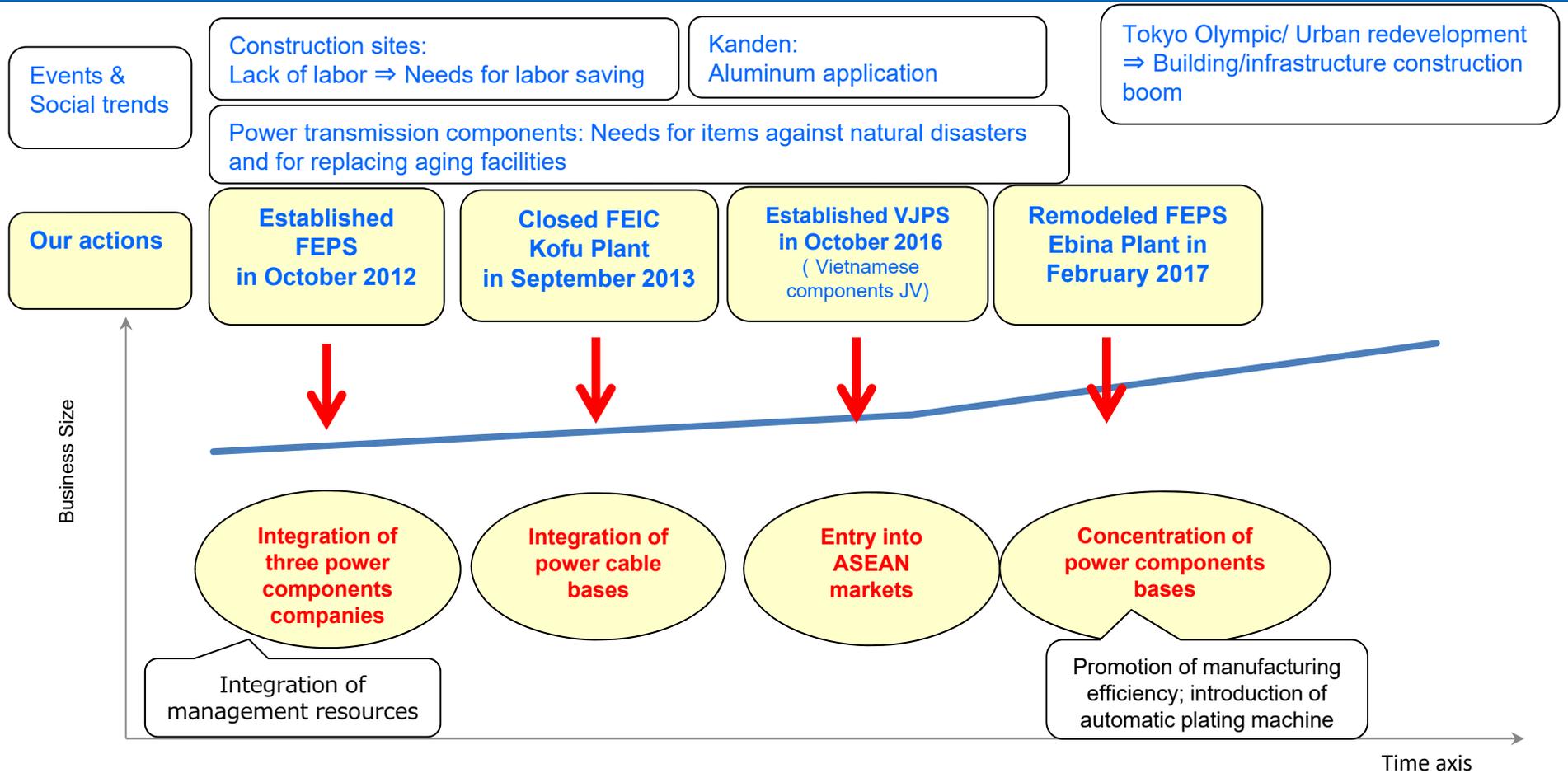
	[Underground cable] Ultra high voltage (over 230 kV)	[Underground cables] High voltage (66 kV ~ 230 kV)	[Submarine cables]		[Underground cable] Ultra high voltage (over 230 kV)	[Underground cables] High voltage (66 kV ~ 230 kV)	[Submarine cables]
Japan	Ichihara	Ichihara	Ichihara		Japan	Ichihara	Ichihara
Asia		Ichihara/ Shenyang			Asia	Shenyang/ Ichihara	
Middle East		Ichihara			Middle East	Shenyang/ Ichihara	
China	Shenyang	China			Shenyang		
Other	Ichihara	Other			Shenyang/ Ichihara		

Current status : Two bases (Ichihara & Shenyang) = Product differentiation / individual optimization

⇒ Ichihara = Promote product differentiation

⇒ Shenyang = Promote price differentiation (Furukawa Electric brand, Achievements, Engineering

6. “Selection and Concentration” in Industrial cable business



Focused fields

- *Products against natural disasters (anti-galloping, polymer insulator)
- *Expansion of rubber covering products
- *Products for aluminum application of Kanden
- *Expansion of “Raku Raku (Easy going) products “ (Hybrid cables)

Thank you very much
for your attention.

