

Business Briefing Functional Products business

Ryoji Ono
General Manager of
Functional Products Division

November 17 / 24, 2020

FURUKAWA ELECTRIC CO., LTD.

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.
- 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.

Copyrights

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

FURUKAWA ELECTRIC CO., LTD.

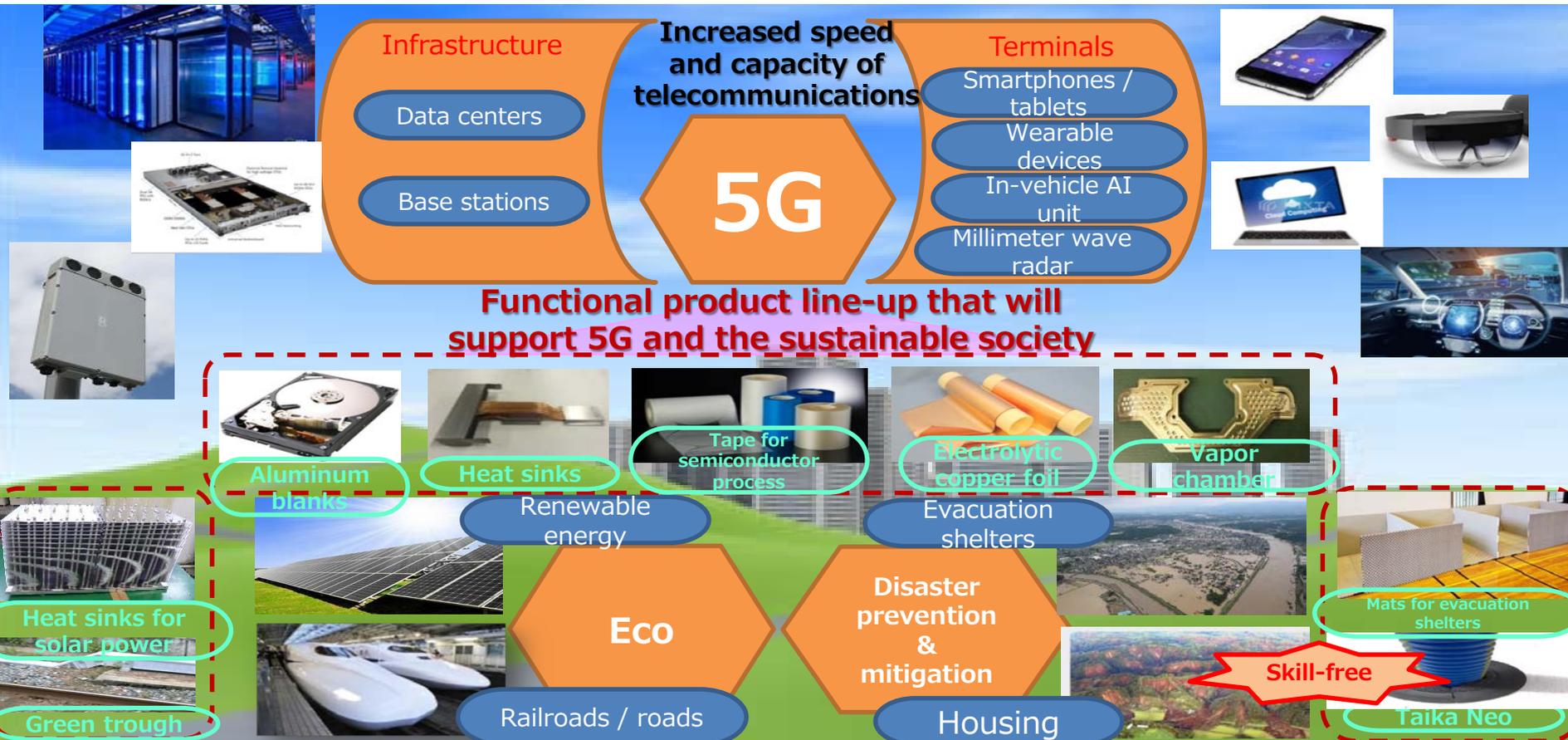
- 1. Mid-term Management Plan basic policy and strengths**
- 2. FY2020 results and full-year forecast**
- 3. Future strategy**

1. Mid-term Management Plan basic policy and strengths

Furukawa G Plan 2020 Basic policy

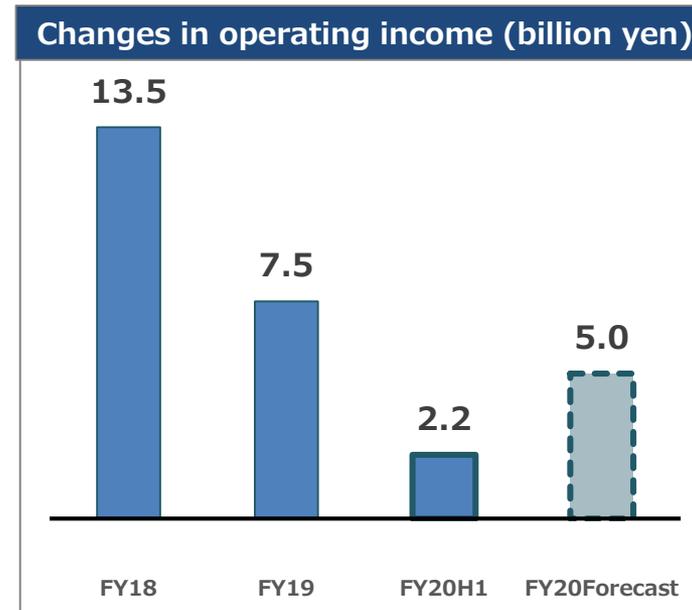
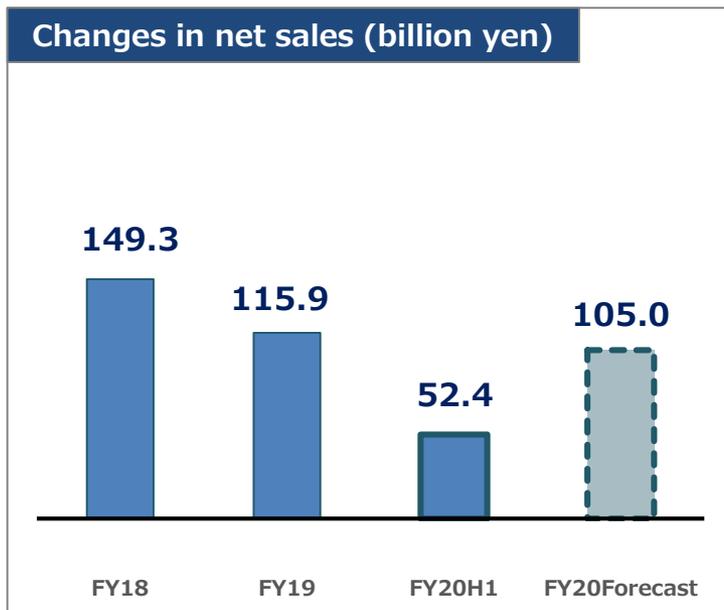
Aim for co-creation with the customer, and continue to provide solutions

Utilizing the ability to propose and develop new products that meet customer needs and that support 5G and the sustainable society



2. FY2020 results and full-year forecast

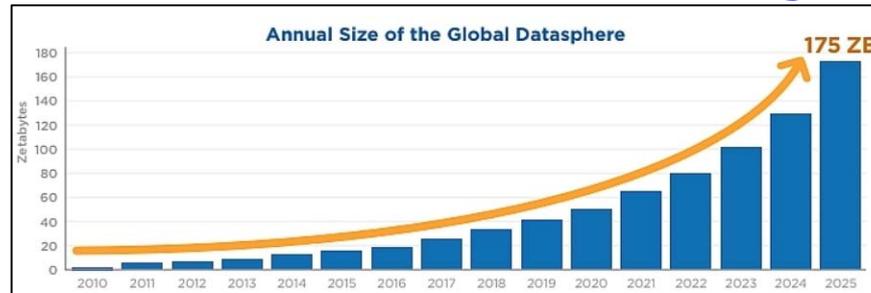
- Following the recovery in the data center market, earnings are expected to improve in the thermal products and memory disk businesses
- Functional plastics will continue to face a challenging market environment due to delays in civil construction projects in Japan and lower automotive demand overseas caused by COVID-19
- Earnings are expected to deteriorate in tape for semiconductor process due to the impact of weak smartphone demand and customer inventory adjustments
- In the copper foil business, lower automotive demand and decreased production capacity of copper foil for circuits due to the fire at the Taiwan plant last year will be the main negative earnings factors



3. Future strategy (1)

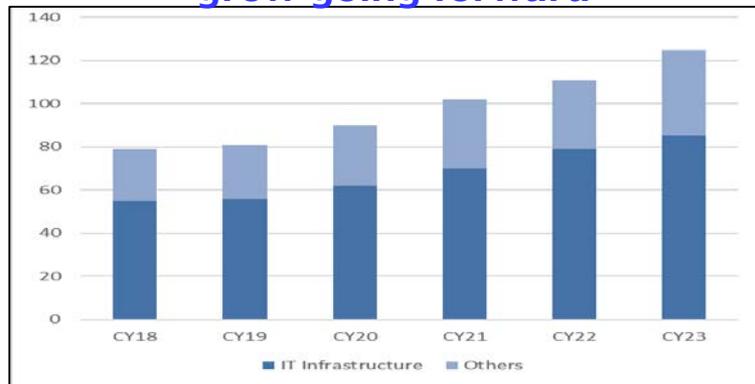
Businesses related to 5G and data centers = Focus on the “development of next generation products” that respond to the growing data demand

Exponential increase in the volume of data generated globally



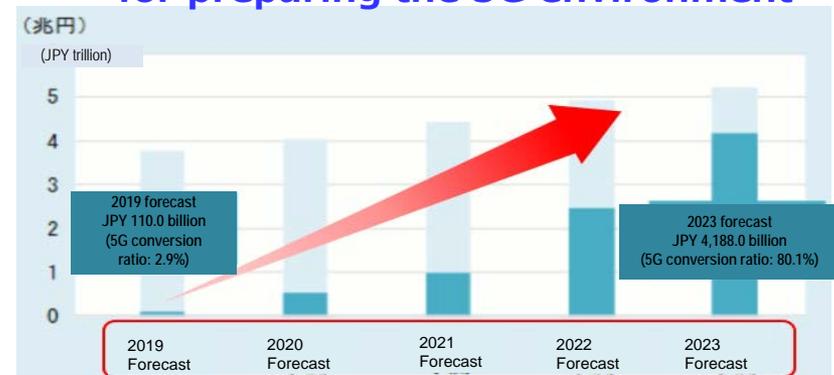
(Source: IDC)

Data center investments will also grow going forward



(Source: Omdia)

Growth of the base station market for preparing the 5G environment



<Thermal Management Solution & Products>

Resolve the heat-related issues from higher data volumes

<Memory Disk> Thinner substrates to realize increased HDD capacity

<Copper Foil> Develop high performance copper foil for wiring boards

3. Future strategy (2)

<AT Products>

- Ongoing response to the evolution of the manufacturing process following the advances in semiconductor performance (Response to thinner semiconductor chips, response to faster responsiveness of camera modules)
- Cultivate new markets and propose new applications

<Functional Plastics>

- Strengthen sales of “skill-free products” as an effective response to the lack of skilled construction workers even during COVID-19
- Develop mats for evacuation shelters using cross-linked polyethylene foam, and promote initiatives for disaster prevention and mitigation together with municipalities

Skill-free products



Square EFLEX



Green trough -
Trough bridge that can
be used on slopes



Fire-proof and
waterproof
products for wall
penetrations

Disaster products

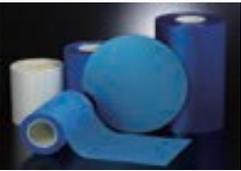


Mats for evacuation shelters

Thank you very much
for your attention.



Appendix Product overview

	AT & Functional Plastics		Thermal Management Solution & Products	Memory Disk	Copper Foil	
						
Products	<ul style="list-style-type: none"> •Tape for semiconductor process 	<ul style="list-style-type: none"> •Cable protective pipes •Troughs made from recycled materials •Insulation materials 	<ul style="list-style-type: none"> •Copper, etc. including heat sinks and heat pipes 	<ul style="list-style-type: none"> •Aluminum blanks for HDD 	<ul style="list-style-type: none"> •Electrolytic copper foil for printed wiring boards 	<ul style="list-style-type: none"> •Electrolytic copper foil for batteries
Applications	<ul style="list-style-type: none"> •Surface protection, immobilizing, etc. during semiconductor wafer processing •Semiconductor chip stacking in flash memory 	<ul style="list-style-type: none"> •Protective pipes for underground cable •Troughs for holding cables •Insulation for air conditioning ducts 	<ul style="list-style-type: none"> • Heat dissipation and cooling of CPUs and power semiconductors, electronics components, high output LED lighting, etc. 	<ul style="list-style-type: none"> •HDD for data centers, desktop computers, surveillance cameras, etc. 	<ul style="list-style-type: none"> •Wiring boards for communications devices and electronic devices 	<ul style="list-style-type: none"> •Cathode material in lithium ion batteries for electric vehicles, smartphones, power tools, etc.
Customers	<ul style="list-style-type: none"> •Semiconductor manufacturer •Foundry manufacturers 	<ul style="list-style-type: none"> •General construction companies and subcontractors •Railroads •Highway public corporations and road subcontractors •Air conditioning duct manufactures 	<ul style="list-style-type: none"> •Data center operators; telecommunications base station operators; •Smartphone, PC manufacturers •Manufacturers of power conditioners for railroads and solar power •Lighting equipment manufacturers, etc. 	<ul style="list-style-type: none"> •HDD substrate manufacturers 	<ul style="list-style-type: none"> •Wiring board material manufacturers •Lithium ion battery manufacturers 	

Appendix – Consideration of the priority SDGs topics: Thermal products

<Maximize the positive impact>

Through thermal products with high performance heat dissipation and cooling structure, realize reduced power consumption by data centers, which is one of the main applications of these products and is receiving more attention worldwide given the amount of power consumed, as well as realize lower running costs and contribute to the increased speed and volume of data communication.



<Minimize the negative impact>

Regarding energy consumption during manufacturing, promote energy conservation and increase the use of renewable energy at the manufacturing subsidiaries.

