

# 12<sup>th</sup> Energy Management Action Network Workshop (EMAK #12)

**RICOH**  
imagine. change.



## Ricoh commitment to Zero-carbon society and Circular Economy

- M. Robert Wuest
- Reuse and Recycle Business General Manager

December 2023 13<sup>th</sup> • Version 1.5 • 14h30 - 14h55  
EMAK workshop #12 • Hotel Hilton Opéra 108 rue Saint-Lazare 75008 Paris (FR)  
Ricoh Industrie France • 144 route de Rouffach 68920 Wettolsheim (FR)



# Ricoh Industrie France

Presentation by M. Robert Wuest

Reuse and Recycle Business General Manager



SUSTAINABLE DEVELOPMENT GOALS

# A.

## Sustainability management at Ricoh Group

SUSTAINABLE DEVELOPMENT GOALS



# Overview of Ricoh Group

Tackling the challenge of transforming from a hardware company to a digital services company



Number of Group Employees

**81,017**

Japan : 31,800

Americas : 19,277

Europe, Middle East, Africa : 16,234

Asia Pacific : 13,756

(March 31, 2023)



Overseas sales ratio

**62.3%**

(FY ended March 2023)



Global Market Share\*

**No.1 for 20** consecutive years

(2002~2021, A3 color  
MFP and Copiers Shipped)



Consolidated net sales

**2,134.1 billion yen**  
(approx. **13Md€**)

(FY ended March 2023)



Number of affiliated companies

**240 companies**

(March 31, 2023)



Number of countries and regions  
in which we operate

**198** countries and regions  
(including vicarious countries)

\* Source  
IDC's WW Quarterly HCP Tracker, 2022Q2,  
Color Laser MFP/SF DC, A3Only,  
Speed Range A4:excl 91+ppm  
Shares by Company  
Year: 2002-2021

# Business domains

## RICOH Digital Services

**Office Services and Office Printing  
(sales)**

Value provided

Solutions for people working in **offices and remotely**  
Solutions for **frontline workers**

## RICOH Digital Products

**Office Printing  
(development, production and OEM)**

Value provided

**Edge devices** connecting workers  
**Manufacturing** that supports digital services

## RICOH Graphic Communications

**Commercial Printing and Industrial Printing**

Value provided

Solutions for **printing site** workers

## RICOH Industrial Solutions

**Thermal Media and Industrial Products**

Value provided

Solutions for **manufacturing, logistics,  
and industry** workers

## RICOH Futures

**Smart Vision, healthcare, and environment  
(new materials and energy harvesting) New businesses**

Value provided

Creating **new businesses** to resolve social issues



Telecommuting package that makes it easy  
to deploy a teleworking environment



RICOH IM C3010  
color laser MFP



RICOH MH5320/5340  
industrial inkjet printhead



Thermal transfer ribbon  
used in apparel care label



360° Camera  
「RICOH THETA X」

**Contribute to improving global sustainability while also achieving sustainable growth for our own company**



**President & CEO: Akira Oyama**



**Establish a management system  
and making it a personal matter for each and every employee**

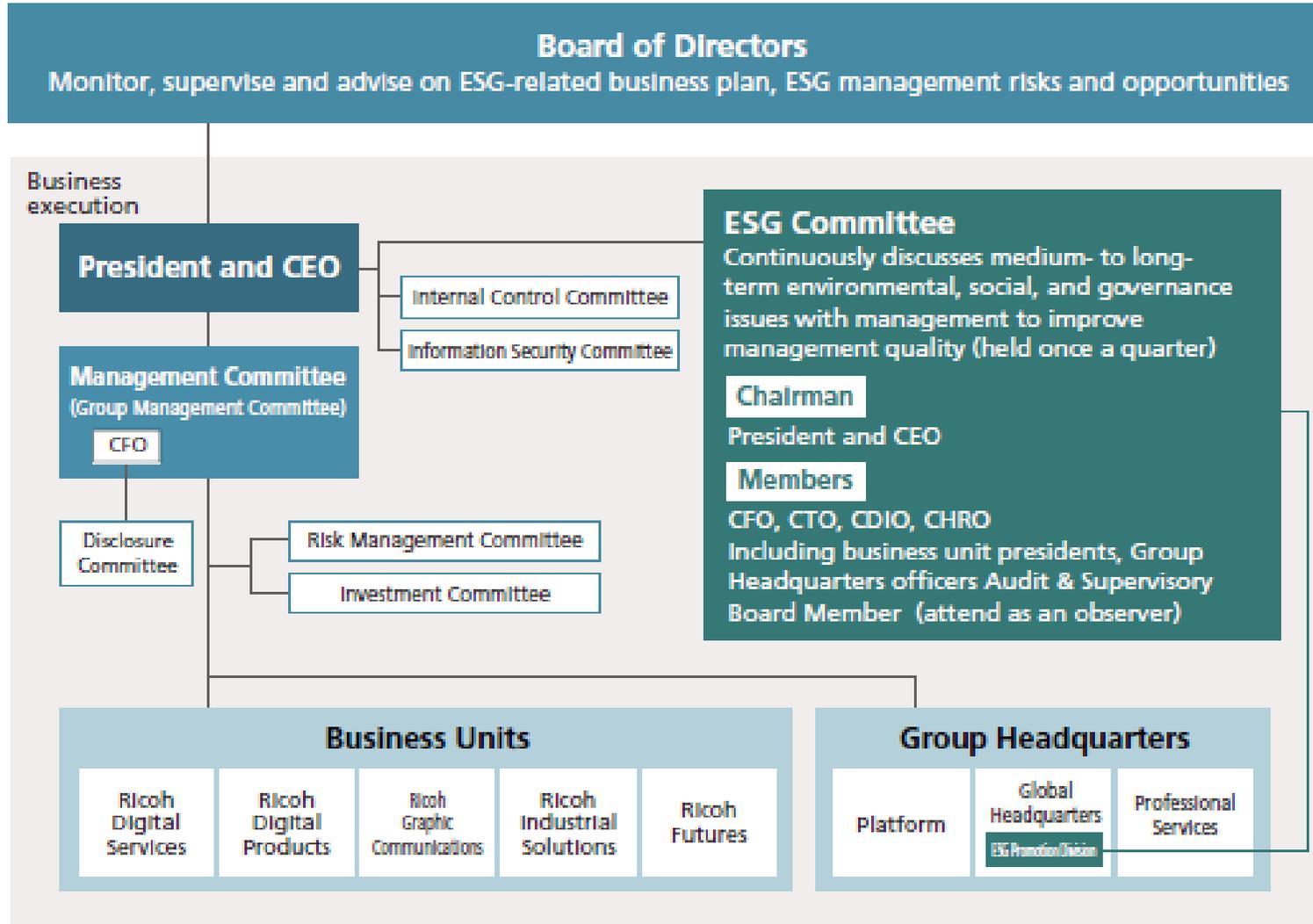


**Positioning ESG as a Future Finance from 2020 and setting financial targets and company-wide targets in the Mid-Term Management Strategy.**

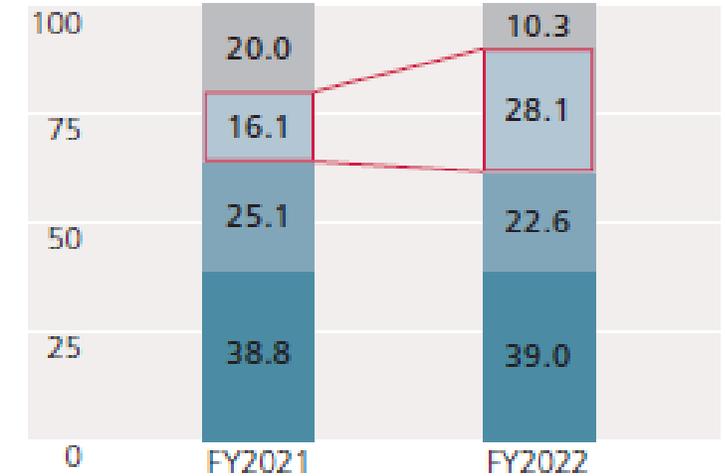
**Future Finance = Activities that will have a positive impact on finance in 3~5 years by working on it now**

# Commitment and Recognition: ESG evaluation

## Sustainability promotion structure



## Time allocation by agenda item at the Board of Directors (%)

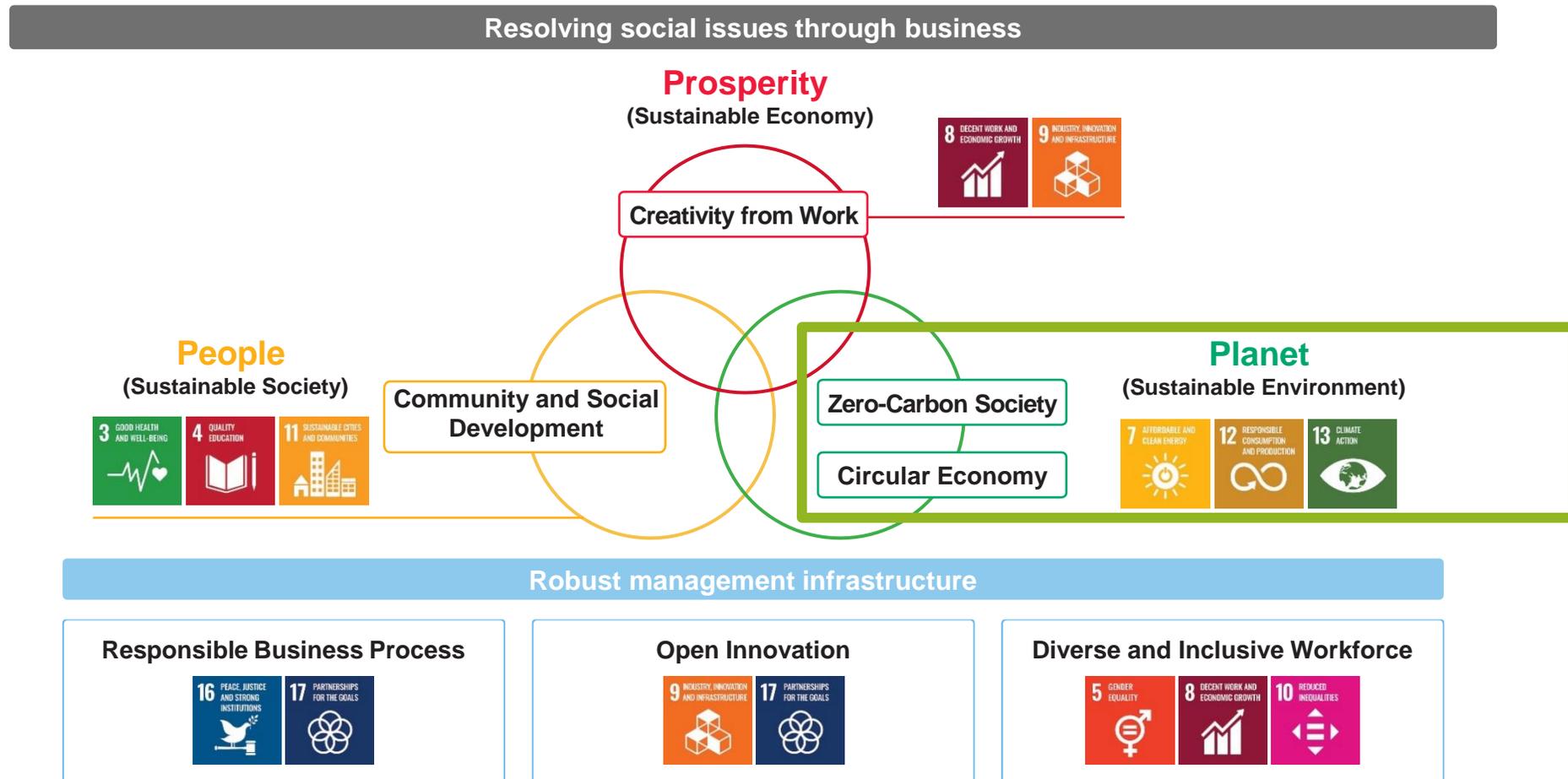


- Medium-to long-term items
- Financial results reports (including crisis response)
- ESG
- Other\*

\*Resolutions in accordance with the provisions of the Companies Act, personnel matters, other individual proposals, etc.

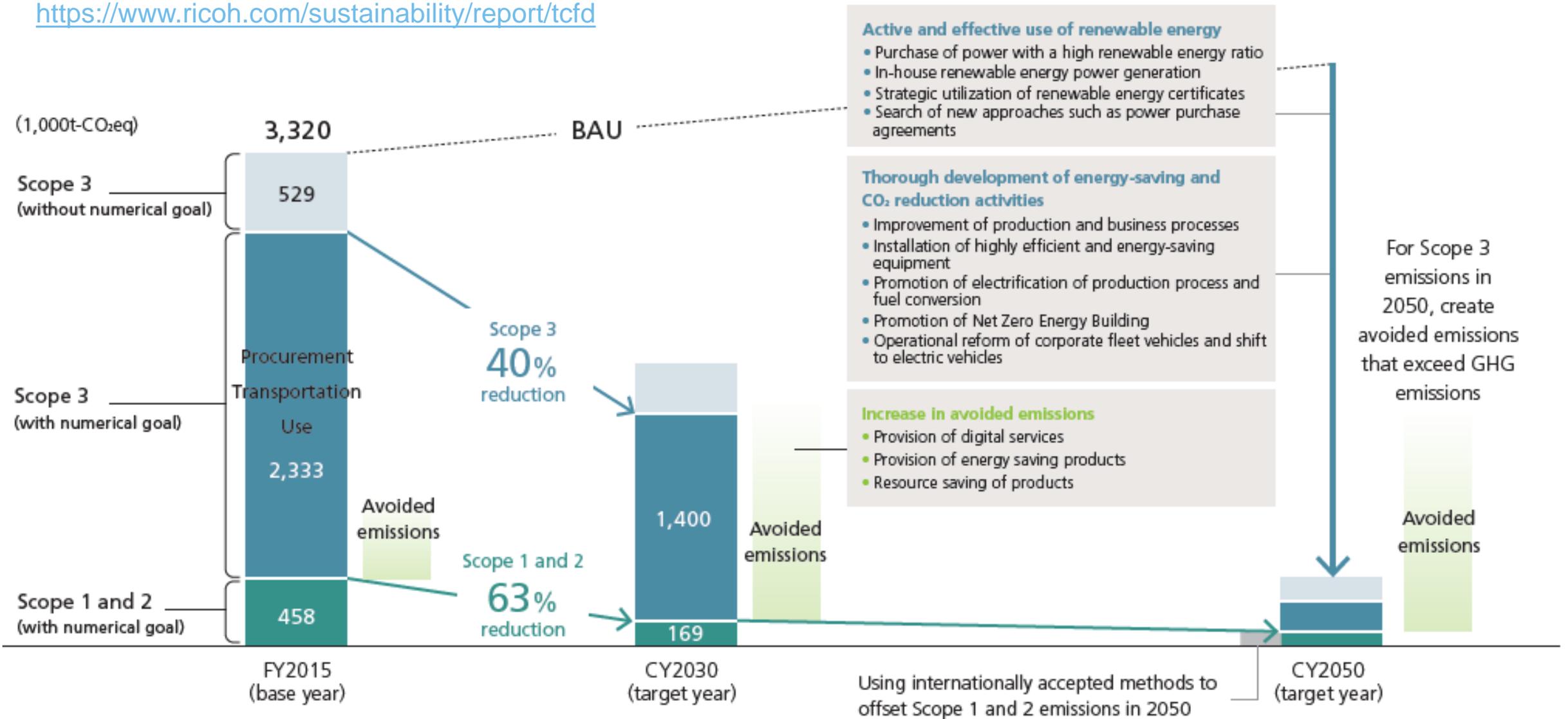
# Seven Material Issues (important social issues)

In the two areas of “Resolving social issues through business” and “Robust management infrastructure”, we identified seven material issues (important issues) and set ESG goals linked to each materiality.



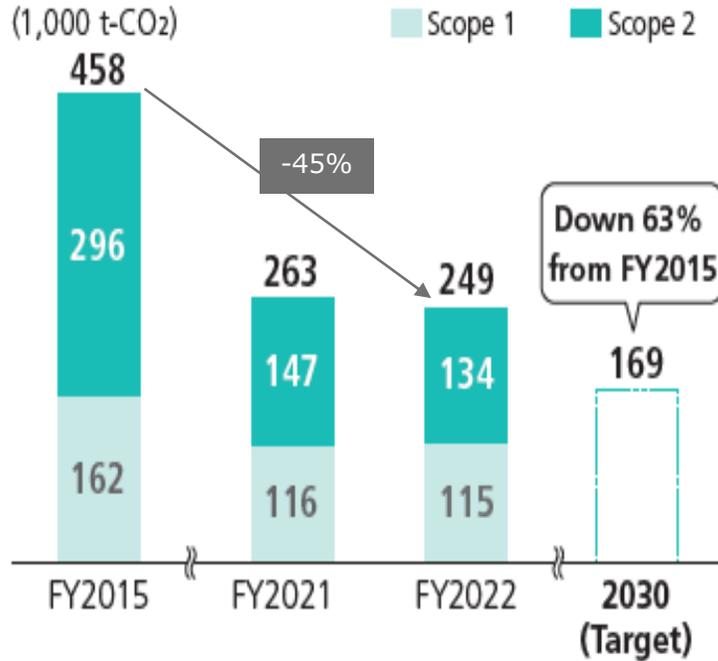
# RICOH Decarbonization Target

<https://www.ricoh.com/sustainability/report/tcfd>



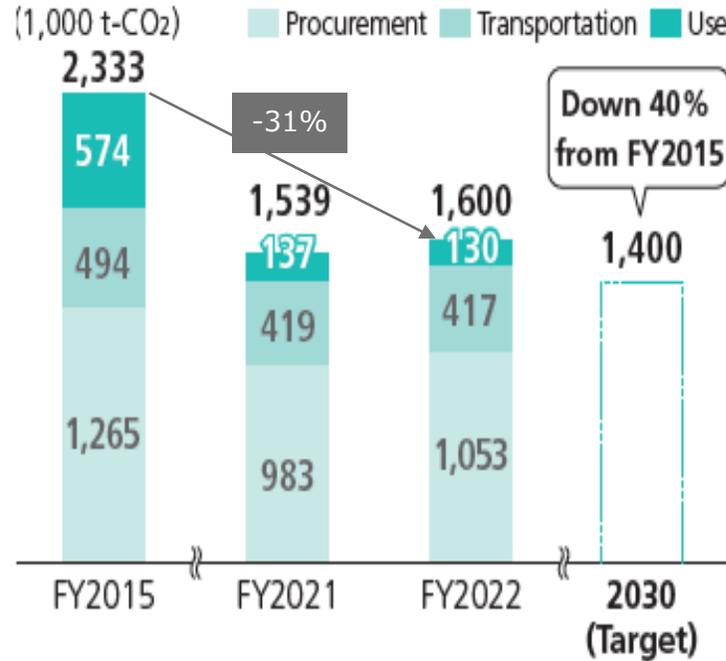
# FY2022 results (ending march 2023)

## GHG emissions (Scope 1 and 2)



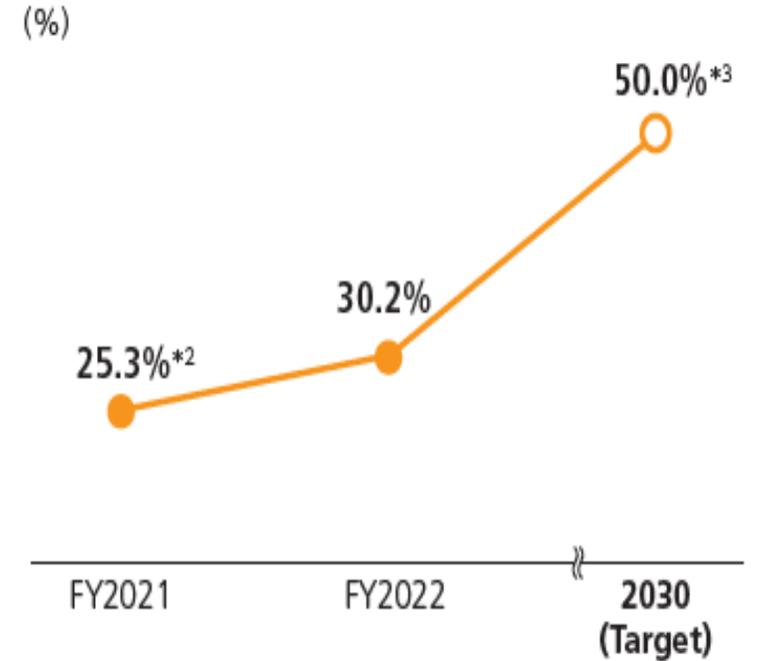
Note: Updated figures for fiscal 2015, fiscal 2021, and for 2030 reflect impacts of acquisitions and revisions of some regional data

## GHG emissions (Scope 3)\*1



\*1 Procurement, transportation, and use category  
Note: Updated figures for fiscal 2015, 2021, and 2030 reflect impacts of acquisitions and revised emissions intensities

## Renewable energy usage ratio



\*2 Updated figures for fiscal 2021 reflect impacts of acquisitions and revisions of some regional data  
\*3 Additional renewable energy accounting for at least 35%

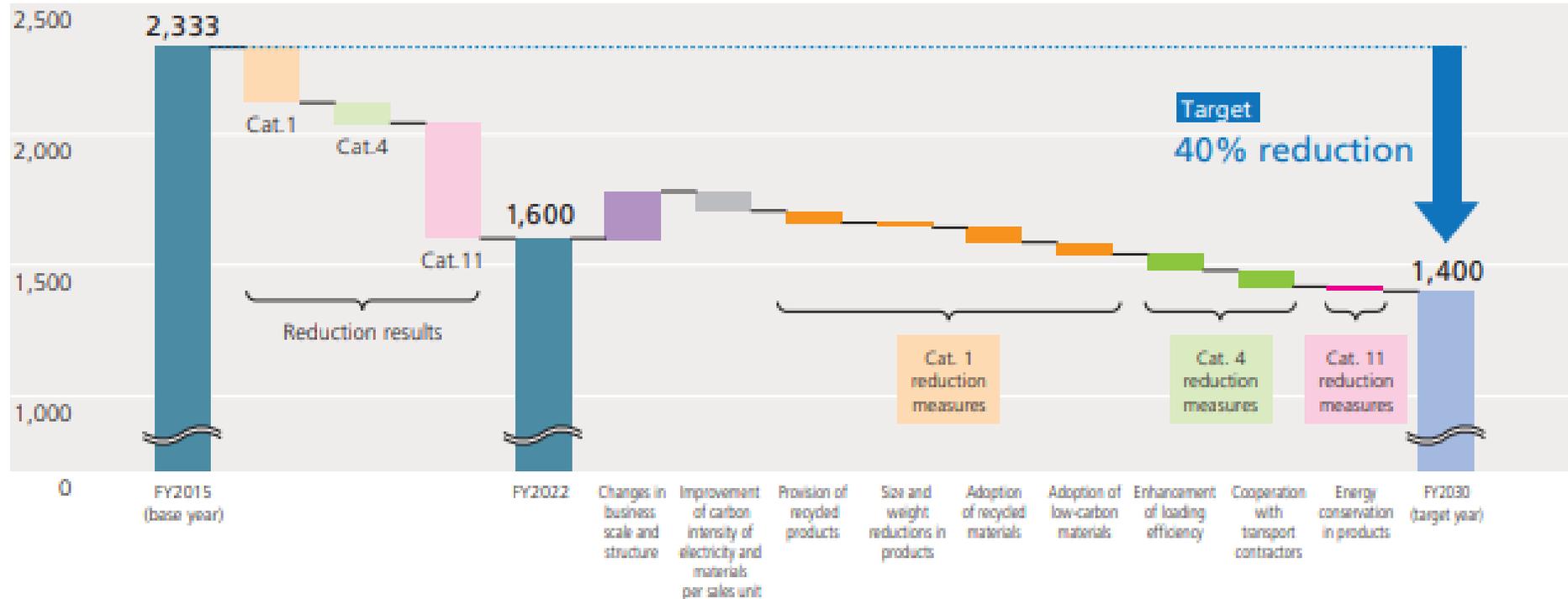
**For renewable electricity we adapt several methods including PPA, Green Electricity Menu, Self Generation and EAC to achieve our target.**

PPA=Power Purchase Agreement  
EAC= Energy Attribute Certificates

# Scope 3 emissions

Measures and plans aimed at 40% reduction in the three major categories of Scope 3 in 2030

Scope 3 major categories (categories 1, 4, and 11) (1,000t-CO<sub>2</sub>eq)



**Cat1**=Reuse products/Products Ecodesign size and weight reduction/  
Recycle material/Low carbon material  
**Cat4**=Transport loading efficiency/Cooperation with transport contractors  
**Cat11**=Energy conservation in products

- Energy conservation, size and weight reductions of our multifunctional printers
- Sale of Remanufactured machines and the use of recycled materials
- Adoption of low-carbon materials
- Transportation efficiency



## Ecodesign

### Ricoh Intelligent Devices



#### Recycle

Plastic parts made of 50% post-consumer recycled plastics.



#### Reduce

54% reduction in single-use plastic in packaging.



#### Energy savings

New low-melt toner and reduced energy consumption.

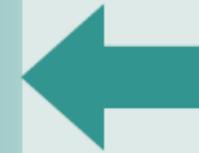


#### CO2 reduction

Lowest-tier TEC values relative to current competition.

## Reduce your carbon footprint

RICOH IM C6010 910kg-CO<sub>2</sub>



**27%**

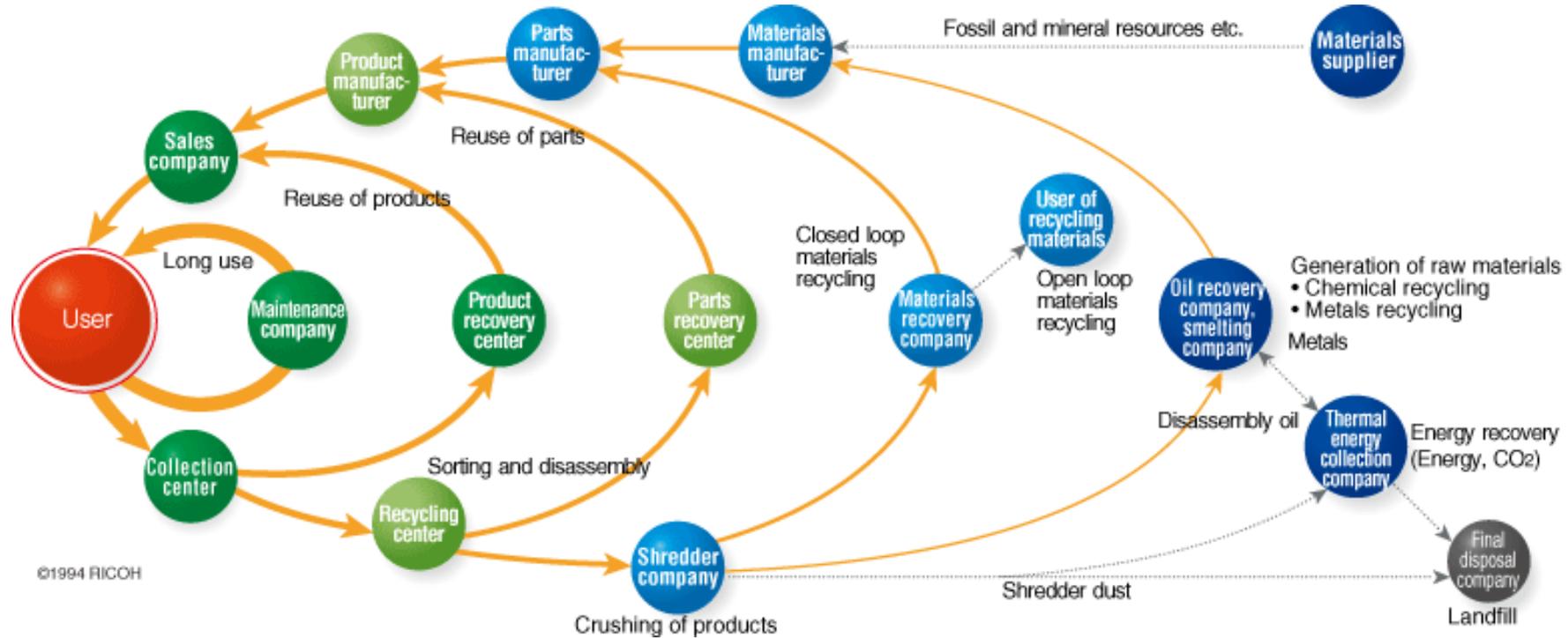
less than previous products



# The Comet Circle™

## Concept for Realizing a Circular Economy

In 1994, Ricoh established the Comet Circle as the basis to realize change towards the creation of a Circular Economy.



Four Action Guidelines Based on Comet Circle Concept (Revised as of March 3, 2022)

1. Identify and Reduce Environmental Impact from Lifecycle Perspectives

2. Deploy Reuse and Recycle Practices with Lower Environmental Impacts

3. Establish a Circular Business Model

4. Partner with Stakeholders

# Goals and Approach for resource conservation

## Ricoh Group environmental goals (resource conservation)

### Goals for 2030

- Virgin material usage ratio for products : **60% or less**

### Goals for 2050

- Virgin material usage ratio for products: **12% or less**

\*1 Virgin material usage rate is the usage rate of new resource inputs to total resource inputs of products.

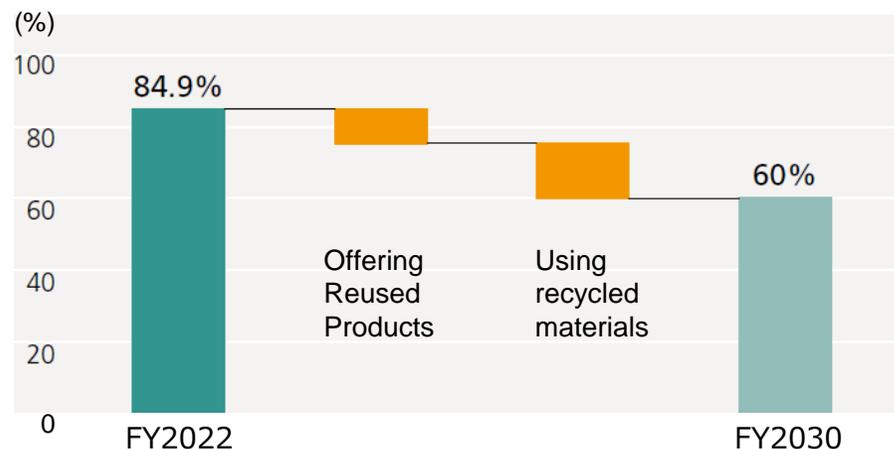
\*2 Quoted from the National Institute for Materials Science (NIMS) publication

The resource conservation target is set based on the idea that "In order to use sustainable resources, it is necessary to reduce the total amount of resources used to 1/8 compared to 2000 level".

## Specific targets and goals for plastic

- Use of post-consumer recycled plastics for imaging products Goals for 2030: Post-consumer recycled plastic content rate of 50% or more
- Reduction in packaging materials for virgin plastic derived from fossil resources Goals for 2030: 50% or more reduction compared to 2020 level.
- Display resin identification code and single material use Goals for 2025: Clearly indicated on all parts and all packaging materials

## Approach to the 2030 goal (Virgin material usage ratio for products)



- Reduce and Long-Term Usage
- Reuse (Products and Parts)
- Material Recycle (Plastic and Metal)

**B.**

Ricoh Industrie France contribution to Ricoh's plan to realize a Zero-carbon society and Circular Economy

SUSTAINABLE DEVELOPMENT GOALS



# Ricoh Industrie France: the European factory

General introduction

Built in 1987, the Ricoh Industrie France production site is now emblematic of the way in which the Ricoh Group applies the concept of sustainable development combining the sustainability of the company with active and responsible protection of the environment.

**182 M€**  
TO FY22

**21 ha**  
surface

**5x8**  
24/7

**>600**  
employees





## Two main activities in 2023

### THERMAL MEDIA

- Thermal Paper
- Thermal transfer ribbons



### CIRCULAR ECONOMY

- Renewed Parts and Supplies
- Remanufacturing of Multi-Function Printers
- Material Recovery
- Repairing as a service



## Cutting greenhouse gas emissions from our business

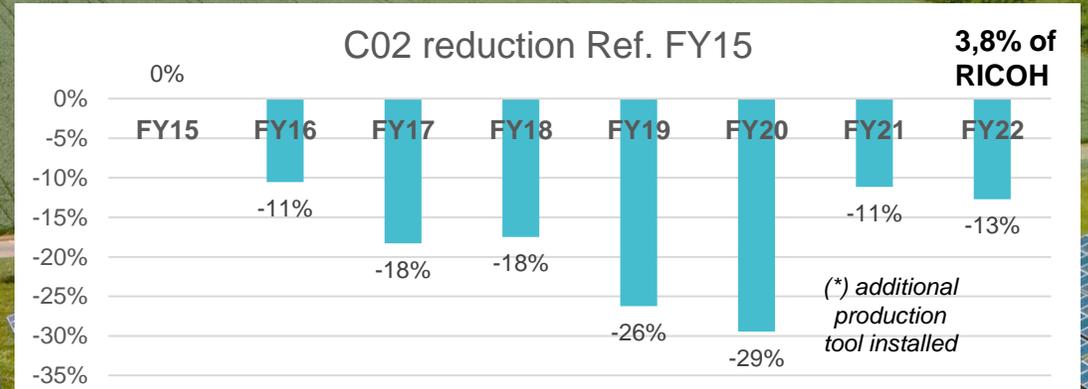
Ricoh is actively pursuing a strategy to reach net zero emissions by 2050

Shorter-term target of 63% reduction in direct emissions by 2030

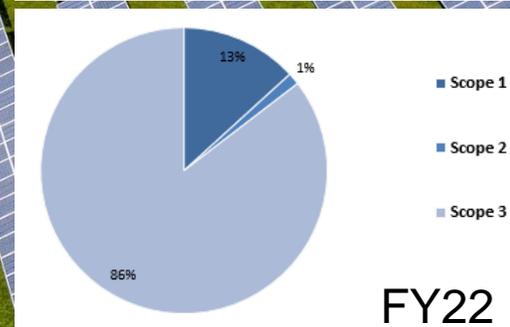
Also targeting 40% reduction in indirect emissions by 2030



## RICOH INDUSTRIE FRANCE'S ENERGY SAVINGS RESULTS



- Implementation in our production processes of low energy consumption equipments or devices allowing the processes to run with more energy efficiency
- Through R&D optimize our products to permit to produce them consuming less energy

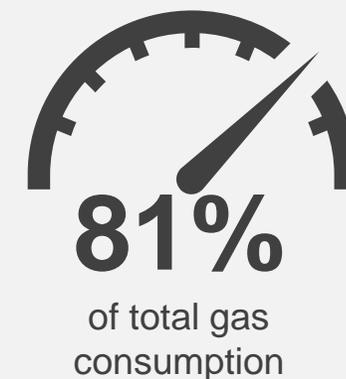
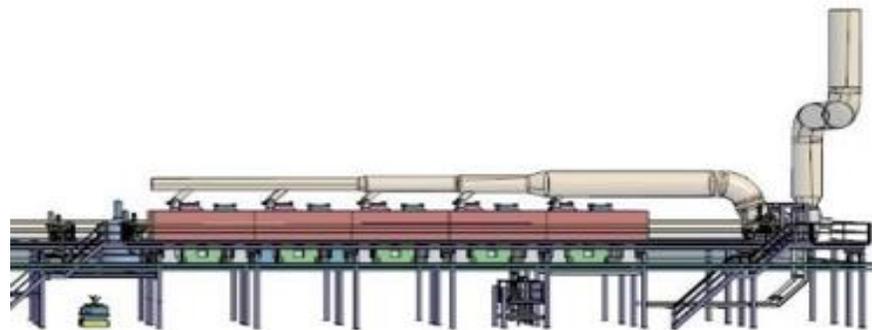




# Energy saving business case

Example of the Thermal Media activities

## Coating equipment heat recovery



 **The Challenge**

The objective of this project was to reduce the consumption of gas used to dry thermal paper after coating operations. This is the most energy-intensive process on our production site.

 **The Solution**

A project has been defined to invest in a heat recovery installation for one drying area in order to reinject heat into the process.

**Expected savings:**  **223kW**

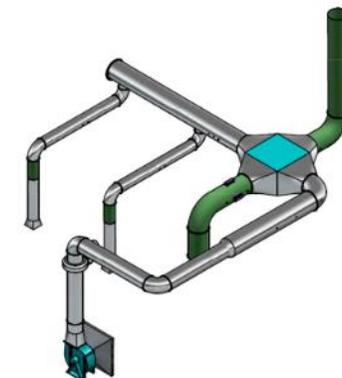


 **The Impact**

Results after investment:

 **280kW** recovered       **61Tons** in 2022

Project to extend the solution to a second dryer.



## Improving our environmental footprint by addressing electricity consumption

Ricoh has a global commitment to ensure 50% of all electricity comes from renewable sources by 2030

Targeting 100% renewable electricity at all major sites by FY2030

Our global switch to renewable energy is modelled to result in a CO2 reduction of 2,000 tonnes per year

Proud members of the RE100



## RICOH INDUSTRIE FRANCE's CONTRIBUTION



20%  
Green  
electricity  
purchased  
in 2023



## CLIMAT Carbon footprint

Carbon footprint modelling:

- For thermal paper  
done in November 2023
- For GreenLine reuse  
printers  
in progress

## Photo Voltaic project Renewable energy production

Project to cover 50% of our  
car park areas with solar  
panels.

Quotation in progress

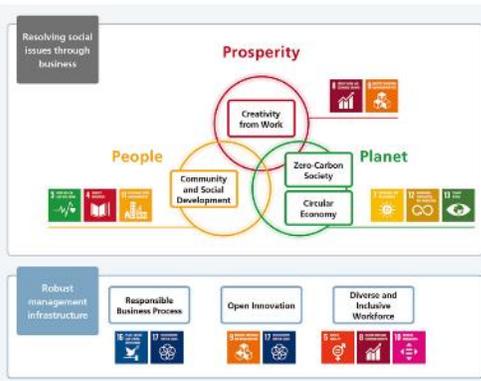


## SCOPE 3 Activités 4R

Scope 3 periodic evaluation  
and reporting.

Action plan definition to  
reduce our scope 3 impacts:  
Transport management, raw material  
production, waste reduction, packagings  
optimization...

## Ricoh Industrie France contributes to the achievement of the Ricoh Group environmental goals



Resolving social issues through business				
Materiality	Strategic Intent	2030 Targets	Focus Domains	21st MTS ESG Targets (End of FY2025)
<b>Creativity from Work</b>	To provide digital services that transform the way customers work, and help them improve productivity improvement and value creation	Contribute to "Creativity from Work" of all customers to whom we deliver value	<ul style="list-style-type: none"> <li>Office Services</li> <li>Digital services for printing industry</li> <li>Thermal media</li> <li>Industrial Products</li> <li>Smart Vision</li> </ul>	① Customer survey scores*1: 29% ② Number of people to whom we have contributed by improving social infrastructure: 15~20 million people
<b>Community and Social Development</b>	To contribute to the maintenance, development, and efficiency of community and social systems. We leverage our technical expertise and customer connections to expand the areas where we provide value.	Contribute to the enhancement of social infrastructure for 30 million people	<ul style="list-style-type: none"> <li>GEMBA</li> <li>Biomedical</li> <li>Municipal digitalization solutions</li> <li>Educational ICT solutions</li> </ul>	③ GHG scope 1, 2 reduction rate (vs. FY2015): 50% ④ GHG scope 3 reduction rate (vs. FY2015): 35% ⑤ Renewable energy utilization ratio: 40% ⑥ Avoided emissions: 1.4 million metric tons ⑦ Virgin material usage ratio: 80% or less
<b>Zero-Carbon Society</b>	To decarbonize the entire value chain and create business opportunities by contributing to carbon neutrality	Reduce GHG emissions by 63% for scope 1 and 2, and 40% for scope 3 Switch to 50% renewable electricity	<ul style="list-style-type: none"> <li>Eco solutions</li> <li>Eco-friendly MFPs</li> <li>Commercial and industrial printing</li> <li>Label-free printing</li> <li>PLAIR</li> </ul>	
<b>Circular Economy</b>	To create business opportunities by building a circular economy business model for ourselves and our customers	Ensure efficient use of resources throughout the entire value chain and achieve 60% or less of virgin material usage ratio		

\*1 : Percentage of customers who rated Ricoh as a digital services company.

Robust management infrastructure			
Materiality	Strategic Intent	21st MTS ESG Targets (End of FY2025)	
<b>Responsible Business Process</b>	To earn stakeholder trust by taking a holistic view of our supply chain and minimizing ESG risks in our business processes	⑧ CHRB score*2 ⑨ Compliant with NIST SP800-171 Coverage of Company's Core Business Environment ⑩ Low-compliance risk group companies	ICT sector top 80% or more 80% or more
<b>Open Innovation</b>	To shift from a self-sufficient approach to a new value creation process that creates businesses to quickly resolve social issues	⑪ Contracted Joint R&D ratio ⑫ Digital service patent application ratio*3	25% 60%
<b>Diverse and Inclusive Workforce</b>	To foster a corporate culture where diverse employees can demonstrate their potential and transform themselves and the company into one that is resilient to change	⑬ Ricoh Digital Skills Level 2 or above rated employees (Japan) ⑭ Process DX Silver Stage certified employee ratio*4 ⑮ Engagement score*5 ⑯ Female-held managerial position ratio	4,000 people 40% Global: 3.91 Japan: 3.69 North America: 4.18 Latin America: 4.14 EMEA: 4.01 APAC: 4.15 Global: 20% (Japan: 10%)

\*2 : Corporate Human Rights Benchmark :The International Human Rights initiative that established by institutional investors and NGOs, selects and evaluates approximately 250 global companies from five sectors (agricultural products, apparel, extractives, ICT, and automotive). If not included in the assessment, the score will be calculated through a self-assessment including a third-party review by an external organization.

\*3 : Ratio of patent applications related to digital service contribution business to the total number of patent applications.

\*4 : Percentage of personnel trained with a track record based on Process DX template (Parameter is the total number of personnel in the organization to be trained in each business unit)

\*5 : Based on Gallup Q12 Mean™

# Ricoh Industrie France: the European factory

Since 1996 committed to the achievement of the Ricoh' environmental goals



## Ricoh Industrie France: more than 25 years of circular economy-oriented activities for the benefit of the EMEA region

1996



Start repairing of PCB



1999



Start renewed PCU



2012



Launching remanufactured GreenLine MFP



2018



Start of material recovery program



2020



Launching 1st Ricoh automatized production line for cartridge

2021



Start Non-Ricoh Product European 3R centre



2022



GPP\* toner bottles



2023



Reconditioning of commercial industrial printer



## Ricoh GreenLine™: our certified and labeled Multi-Functional Printer remanufactured solution



94,4% of parts by weight are reused

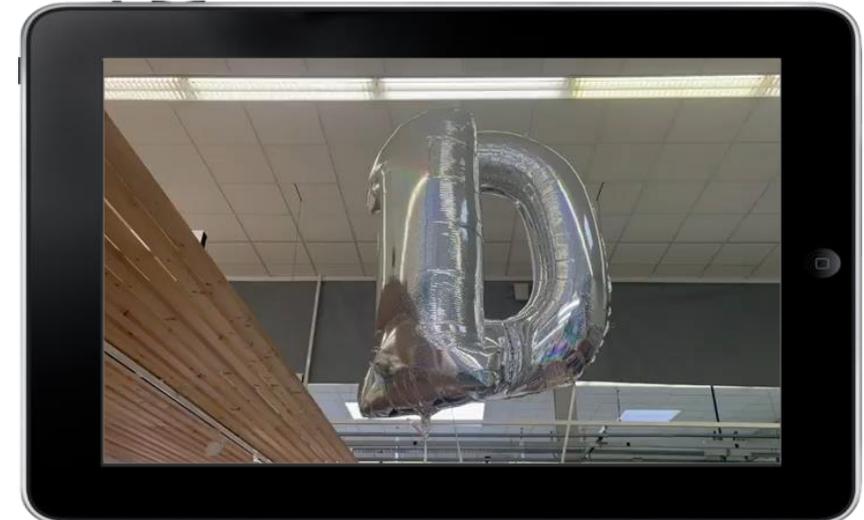


Local solution certified as “SERVICE FRANCE GARANTI”



Clean & profitable solution labeled by the “SOLAR IMPULSE FOUNDATION”

Model as reference: IM C3000 (Metis MF3a – edp code 418297)	GHG emissions <sup>1</sup> (kg CO <sub>2</sub> -eq.)	
	Mainstream alternative Equivalent new device*	Solution GreenLine**
Raw Material	385	77
Production	84	84
Distribution	93	93
Use Lifetime	378	378
Disposal end of life	25	25
<b>CUMUL</b>	<b>965</b>	<b>657</b>



Source: <https://solarimpulse.com/solutions-explorer/greenline-printing-solution>

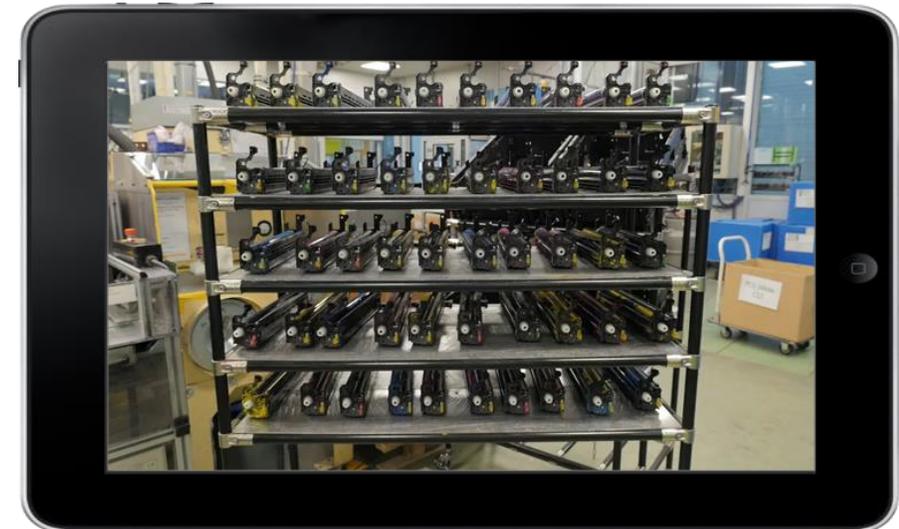
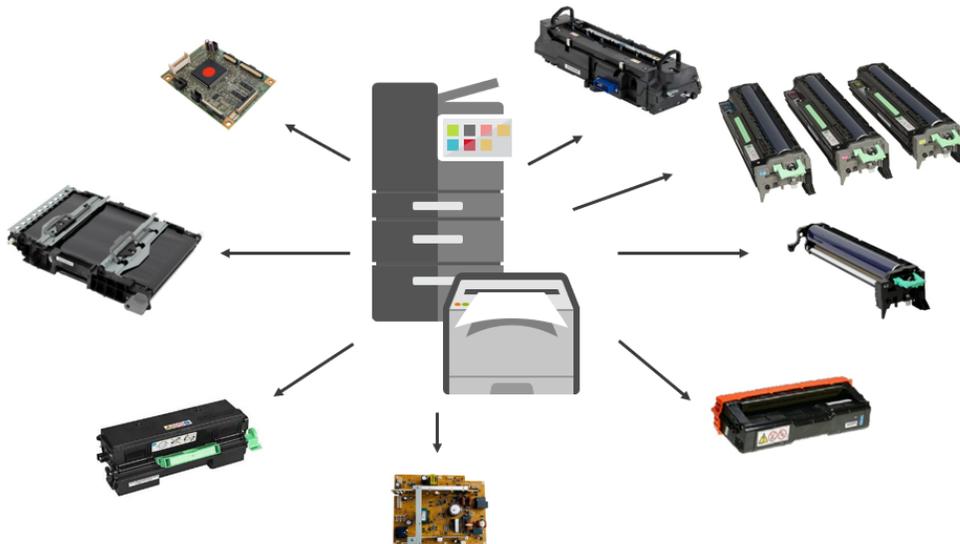
## Renewed Parts & Supplies: above 500 references collected across EMEA



Up to 95 % of raw material reused by weight



Collection network via the Ricoh Operational Companies or Ricoh's partners



Thank you for your attention  
Feel free to contact me !



 Robert Wuest

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