

Introducing Ricoh's Journey towards Net Zero



Energy Conservation Workshop under ASEAN–Japan Energy Efficiency Partnership [ECAP 28]

October 25, 2022

Yasunori Naito
ESG Strategy Division
Ricoh Co., Ltd.

Ricoh Group Outline

RICOH
imagine. change.

Ricoh Company, Ltd.

Founded	February 6, 1936
Capital	135.3 billion yen <small>*as of March 31, 2022</small>
President and CEO	Yoshinori “Jake” Yamashita
Group Headquarters	3-6, Nakamagome 1-chome, Ohta-ku, Tokyo, Japan

Ricoh Group Consolidated

Number of Companies	224
Number of Employees	78,360 <small>*as of March 31, 2022</small>
Sales	1,758.5 billion yen <small>*Year ended March 31, 2022</small>



Yoshinori "Jake" Yamashita

President and CEO
Ricoh Company, Ltd.

Fulfillment through Work

Fulfillment is a sense of satisfaction, achievement, and self-realization gained through work.
The Ricoh Group will continue to be a company that helps people attain fulfillment.

Founding Principles

The Spirit of Three Loves by Kiyoshi Ichimura, Founder

“Love your neighbor”

“Love your country”

“Love your work”



Kiyoshi Ichimura
Founder

2022/10/19

Mission

**We are committed to providing
excellence**

Vision

**drive sustainability.
To be the most trusted global company.**

Values

CUSTOMER-CENTRIC

Act from the customer's perspective

PASSION

Approach everything positively and purposefully

GEMBA

Learn and improve from the facts

INNOVATION

Break with the status quo to create value without limits

TEAMWORK

Respect all stakeholders and co-create value

WINNING SPIRIT

Succeed by embracing challenges through courage and agility

ETHICS AND INTEGRITY

Act with honesty and accountability

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 C6000
color laser MFP



RICOH MH5320/5340
industrial inkjet printhead

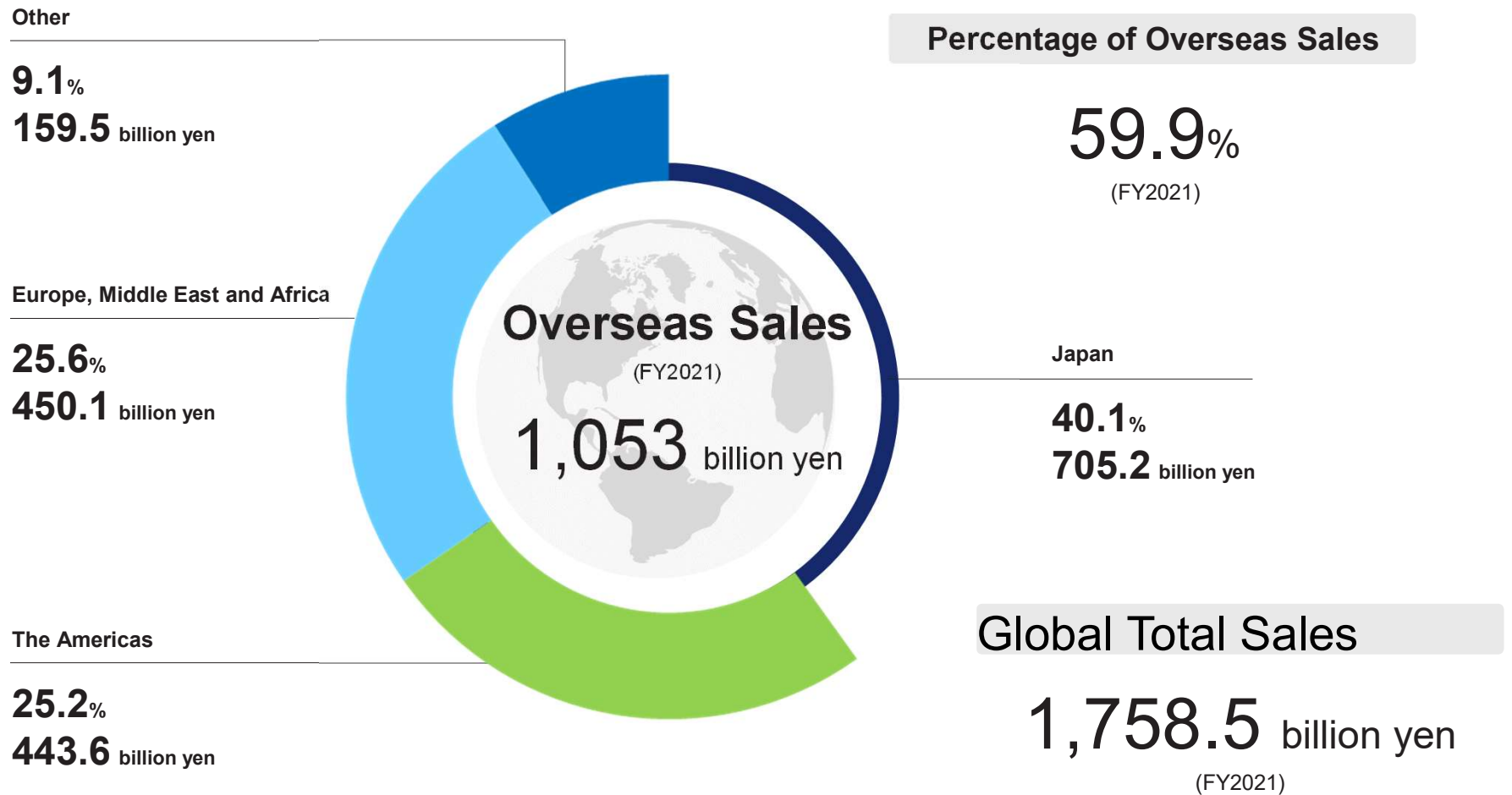


Thermal transfer ribbon
used in apparel care label

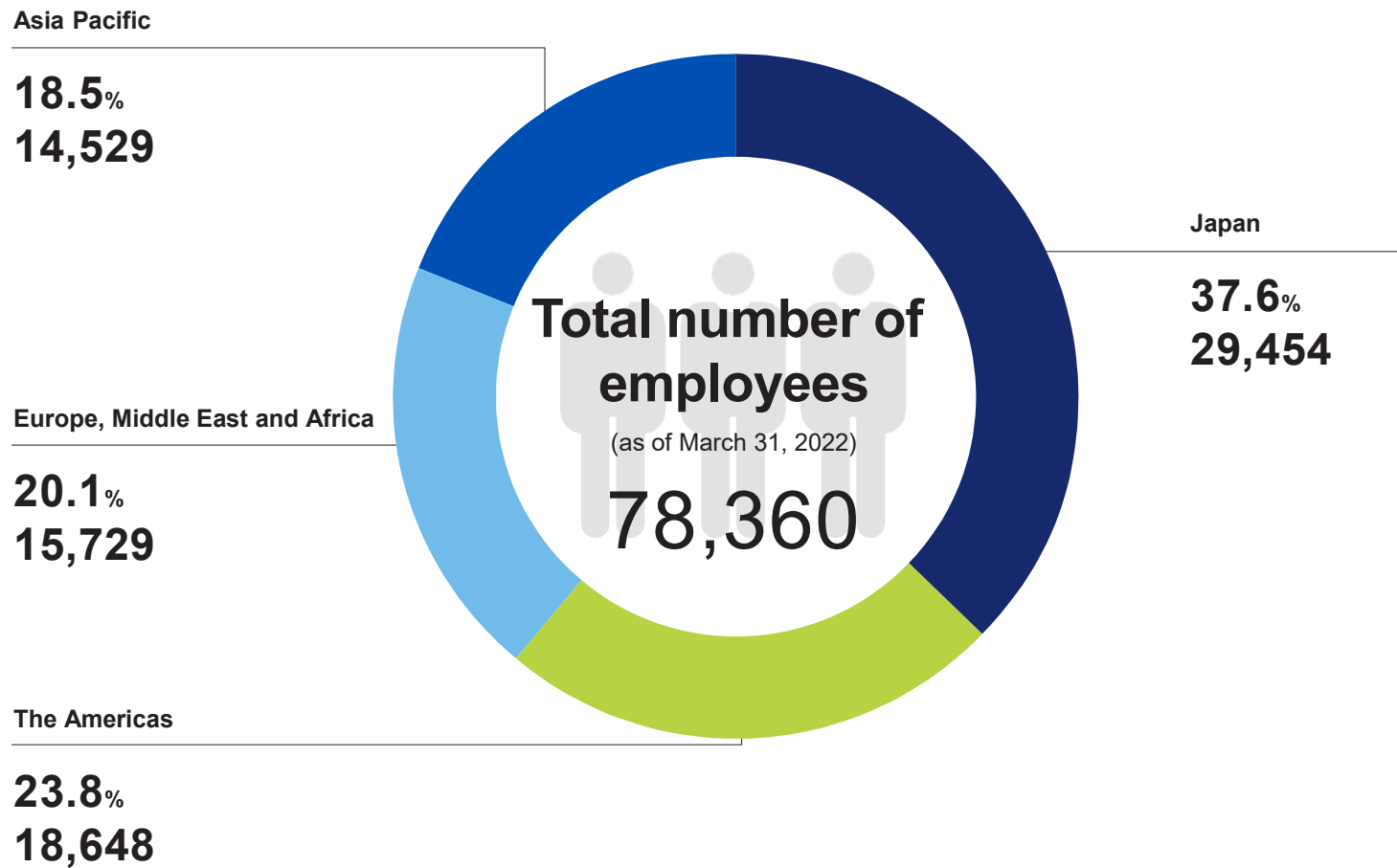


RICOH THETA SC2
360° camera

Sales (by region)



Total number of employees



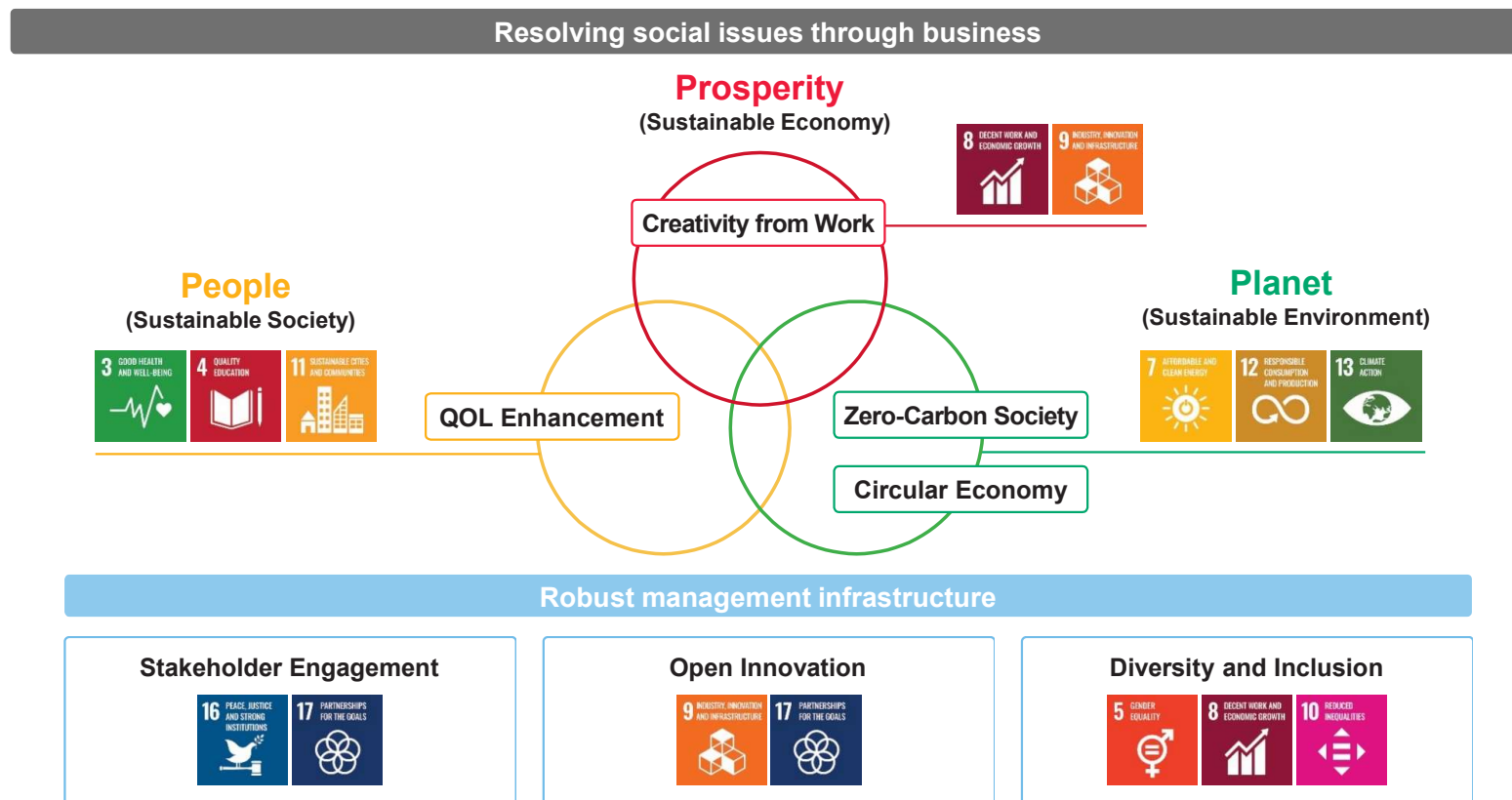
Sustainability Initiatives

Leveraging the power of business with the following three approaches to materialize social sustainability.



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 17 ESG goals linked to each materiality.



Basic Approach to Sustainability

Based on the Founding Principles of “Love your neighbor”, “Love your country”, “Love your work” (The Spirit of Three Loves), the Ricoh Group’s mission is “We are committed to providing excellence to improve the quality of living and to drive sustainability.”

The Ricoh Group pursues such sustainability through the Three Ps Balance: Prosperity (economic activities), People (society), and Planet (environment). We will endeavor to resolve social issues through business, reinforce our operational underpinnings, and contribute to society, and will help to reach Sustainable Development Goals (SDGs) agreed to by the global community.



Three Ps Balance

Ricoh Group environmental goals (Zero-Carbon)

Goals for 2050

- Aim for zero GHG emissions across the entire value chain
- Switch 100% of electricity used in business operations to renewable energy

Goals for 2030

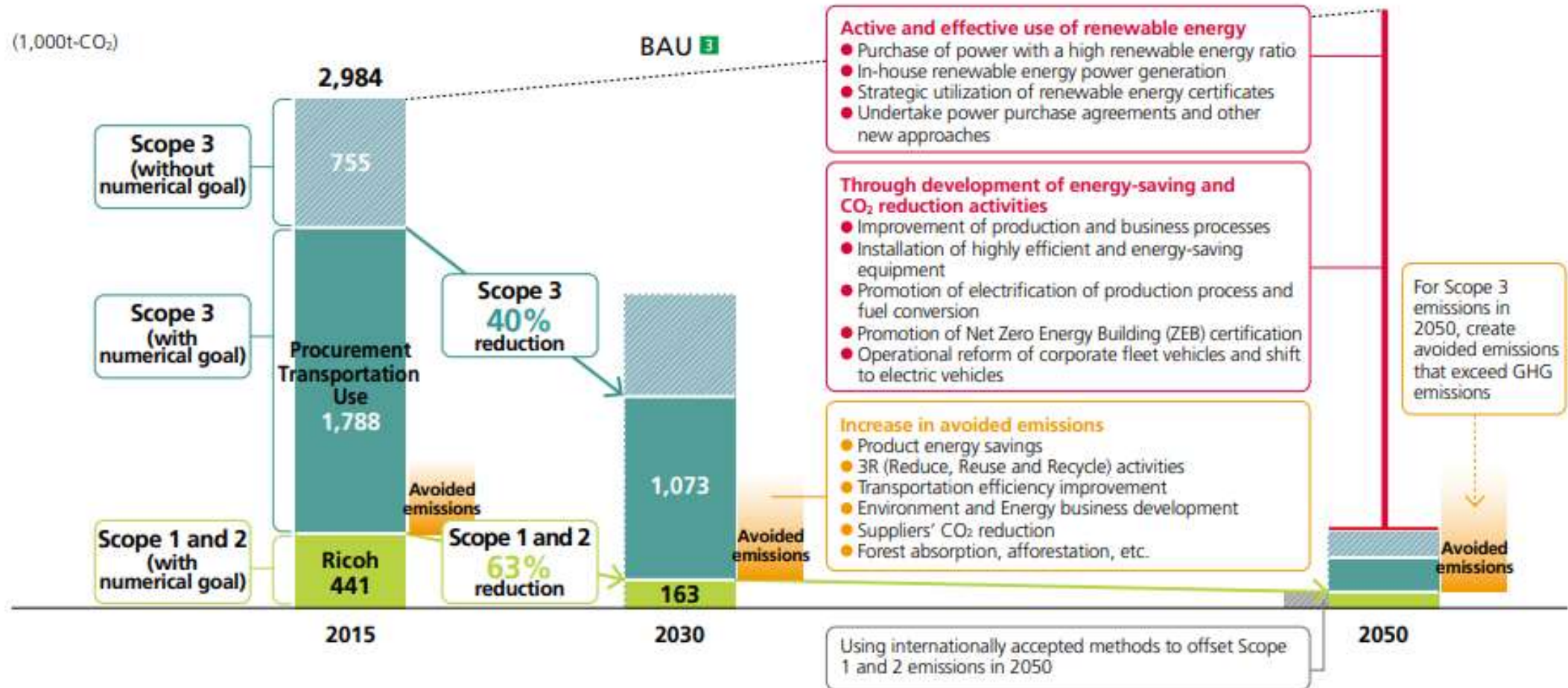
- GHG Scope 1*¹ and 2*²: 63% reduction compared to 2015 level
- GHG Scope 3*³: 40% reduction compared to 2015 level
- Switch 50% of electricity used in business operations to renewable energy

*1 GHG Scope 1: All direct GHG emissions from our manufacturing plants, offices, vehicles, etc.

*2 GHG Scope 2: Indirect GHG emissions from the consumption of electricity and heat that we purchase

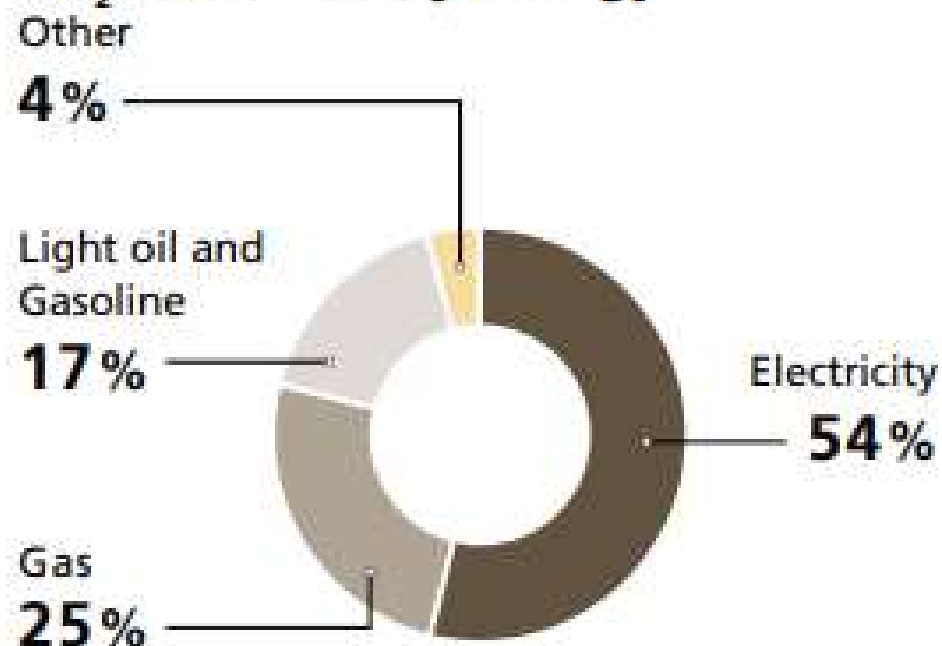
*3 GHG Scope 3: Emissions in the supply chain from business activities (procurement, transportation and use categories)

SBT1.5 Degrees–Aligned Target

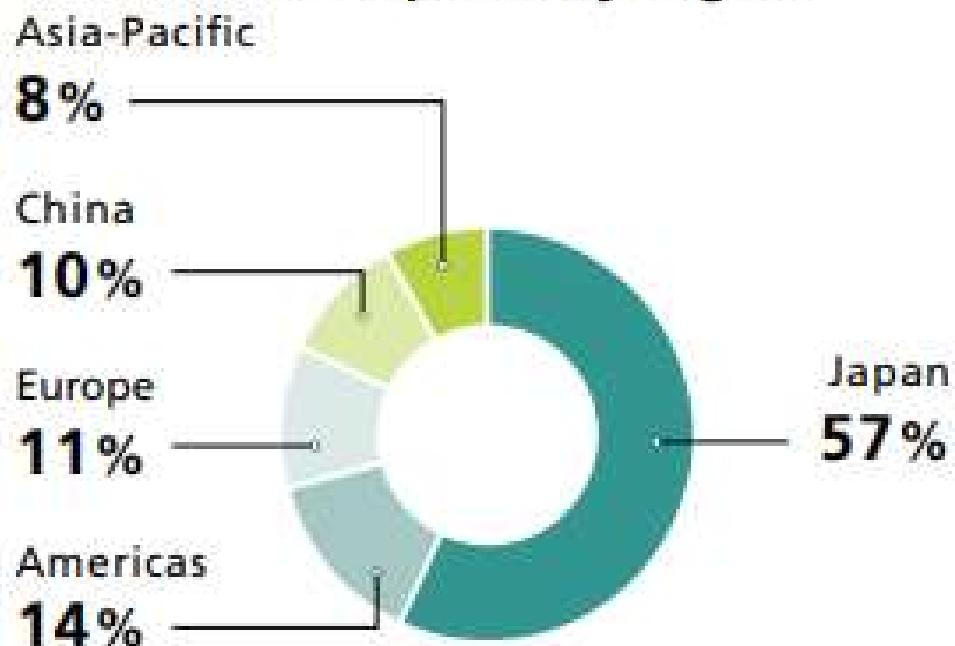


Our Situation in FY21

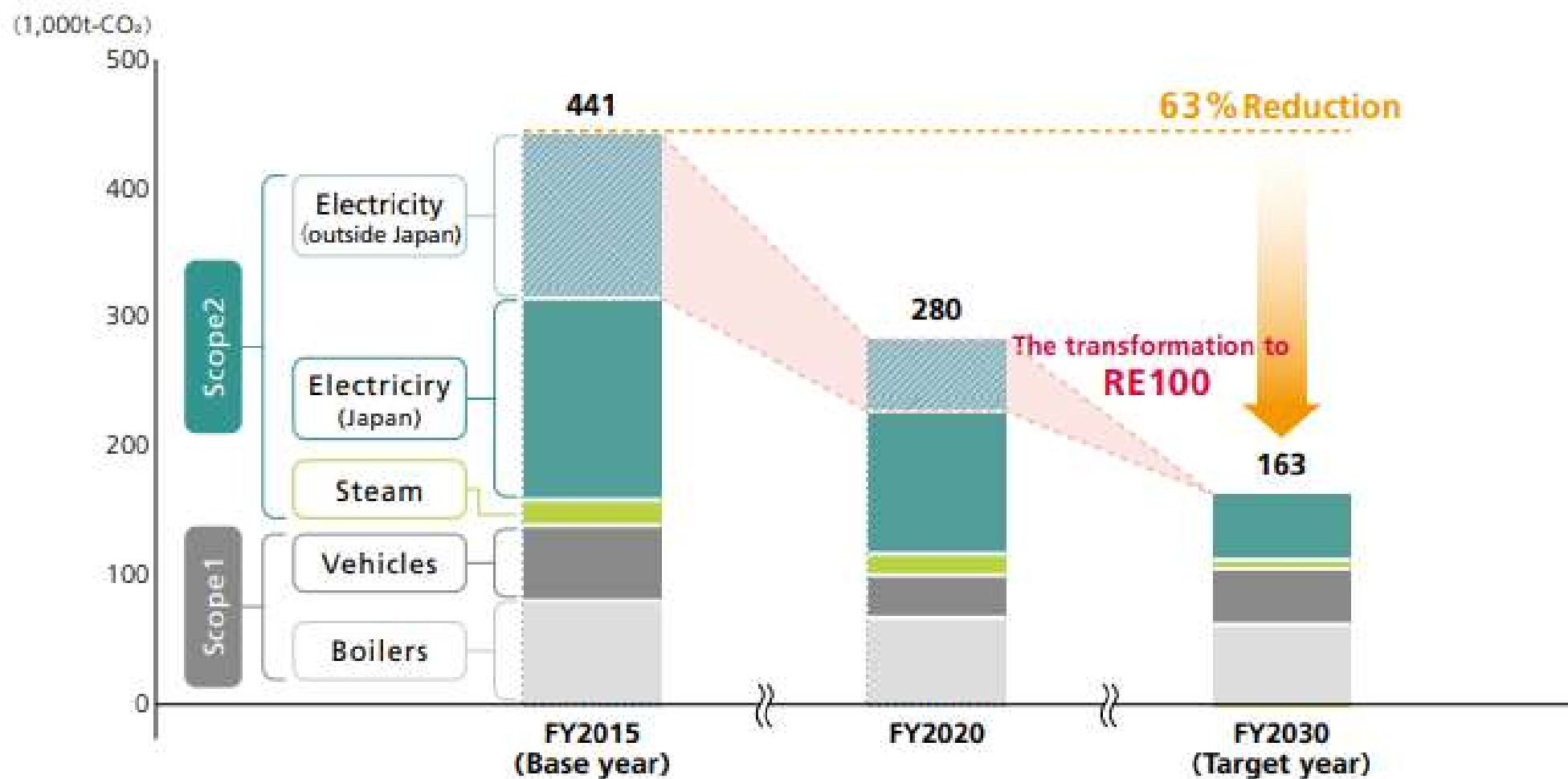
CO₂ emissions by energy



Power consumption by region

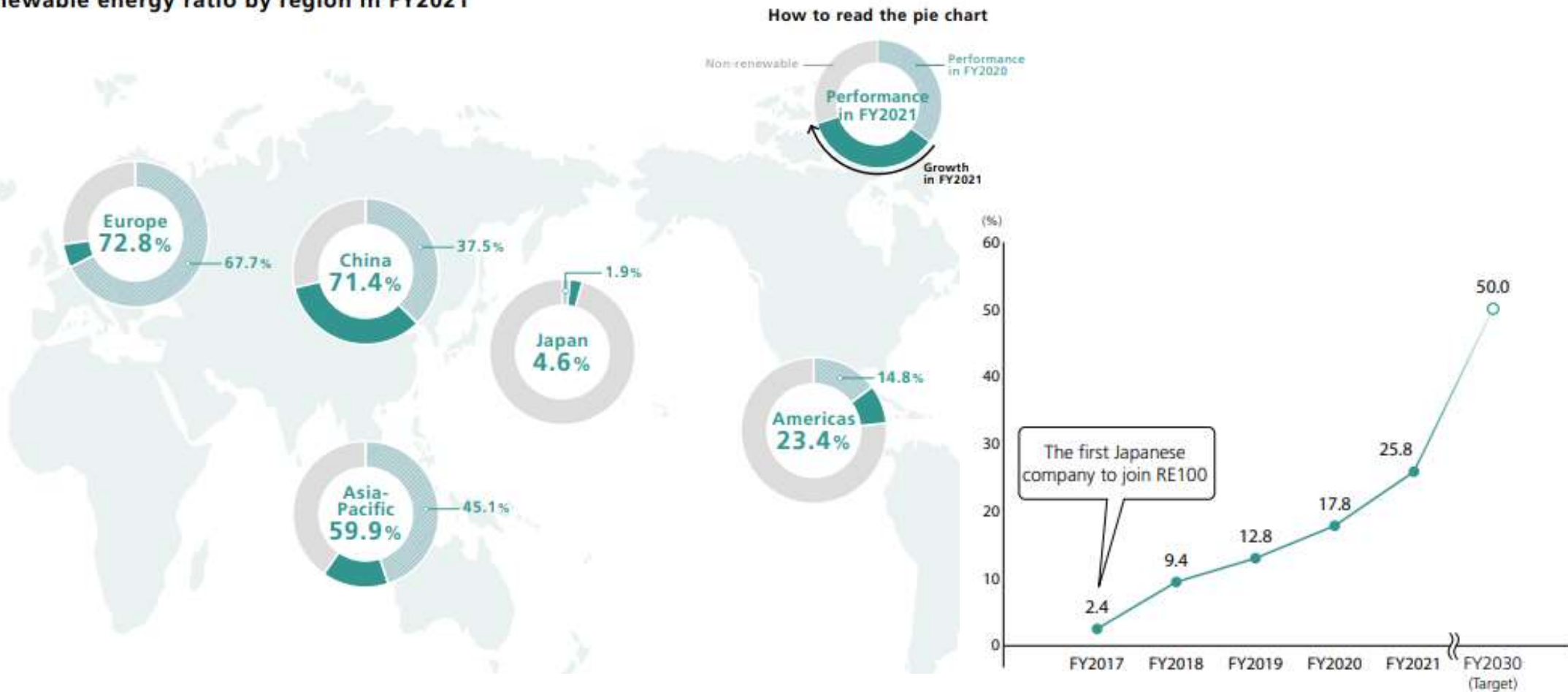


Scope 1 and 2 Reduction Scenario



Reduce Scope2 CO2 with Renewable Electricity

Renewable energy ratio by region in FY2021



Initiative 1: Installation of Waste Heat Recovery Heat Pumps at Production Sites

Contribution to Scope1

- In February 2022, waste heat recovery heat pumps were installed at the South Plant of the Numazu Plant.
- The waste heat being released into the atmosphere from the chiller/refrigerator cooling tower on the rooftop of Plant No. 8 in Numazu Plant will be used to generate hot water at 65°C, which is used in the dissolving process. By reducing the amount of steam consumption by approximately 60% (estimated value), both cost and CO₂ emissions reduction (up to 540 tons/year) can be achieved. The ROI is approximately 5 years
- While promoting Scope 2 reductions by switching to renewable electricity, we are also tackling Scope 1 issues such as the use of steam, on which reductions are difficult to achieve



Initiative 2: Introduction of New On-Site PPA* Model at Four Locations Globally (In and Outside of Japan)

Contribution to Scope2

- In FY2021, on-site PPA was introduced at Ricoh (Thailand) Ltd., Ricoh Manufacturing (Thailand) Ltd., Ricoh (Thailand) Ltd., Ricoh Manufacturing (Thailand) Ltd., Ricoh Elemex Corporation, and Ricoh Industries, Ltd.
- The total amount of electricity generated by these six sites, including those already installed, was 5.88 GWh/year (CO₂ reduction effect: approx. 3,235 tons/year), which is equivalent to approx. 1.3% of the total electricity consumption of the entire Group.
- The cost reduction effect of Ricoh Manufacturing (Thailand) Ltd. was approximately 180 million yen over 12 years.
- RICOH ELEMEX, which started its operation in October 2021, is the first on-site PPA facility in Japan for the Ricoh Group.

* Abbreviation for Power Purchase Agreement: The on-site PPA model is a form of contract in which a power generation company installs power generation units on the site or roof of their customers, and the customer purchases the renewable electricity without purchasing the units.



Roof of Ricoh Manufacturing (Thailand) Ltd. plant



Roof of Ricoh Elemex Corporation plant

Initiative 3: Expansion of ZEB Office Buildings and Application to Business Proposals for Customers

Contribution to Scope2

- Since 2021, Ricoh Japan Miyazaki Office and Obihiro Office were certified as "ZEB" and Tsukuba Office was certified as "Nearly ZEB". In addition, Ueda Office, Odate Office, and Ricoh Environmental Business Development Center were certified as "ZEB Ready". As of April 2022, the total of 11 sites have been certified as "ZEB Ready" or higher.
- Ricoh Japan intends to have all new office buildings*1 be at least "ZEB Ready". Each building will be a showcase for customers, introducing visitors to the company's decarbonization practices.

*1: Owned by the company/Rented a whole building

Definition of ZEB status and installation examples in Ricoh Japan (Operation start date)

ZEB	Buildings that have reduced primary energy consumption by 100% or more through energyconservation (50% or more) + energy generation <ul style="list-style-type: none"> ● Wakayama Office (April 2020) ● Obihiro Office(December 2021) ● Miyazaki Office (January 2022)
Nearly ZEB	Buildings that have reduced primary energy consumption by 75% or more through energyconservation (50% or more) + energy generation <ul style="list-style-type: none"> ● Gifu Office (March 2019) ● Kumamoto Office (March 2022) ● Tsukuba Office (March 2022)
ZEB Ready	Buildings that have reduced primary energy consumption by 75% or more through energyconservation (50% or more) + energy generation <ul style="list-style-type: none"> ● Akashi Office (May 2020) ● Kakegawa Office (August 2020) ● Odate Office (April 2021) ● Ueda Office (October 2021)

ZEB Office Buildings



Miyazaki Office (new)



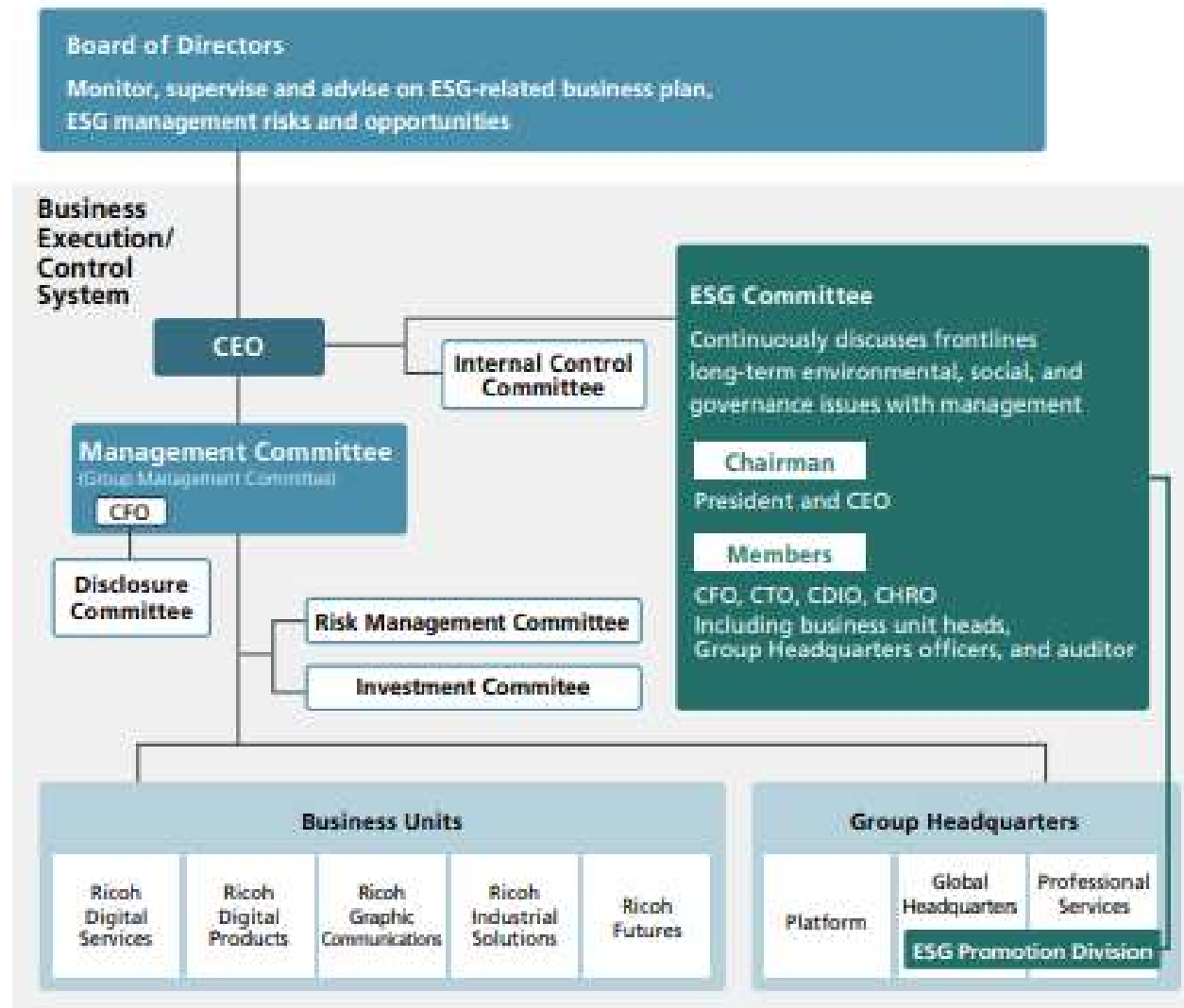
Obihiro Office (new)

Nearly ZEB Office Buildings



Tsukuba Office (new)

Governance





Integrated Report

Overviewing the Ricoh Group's value creation endeavors



ESG Data Book

Presenting key environmental, social, and governance figures



TCFD Report

Disclosing climate change-related risks and opportunities in line with TCFD framework



Circular Economy Report

Disclosing policies and initiatives to materialize a circular economy



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