

Exceed Your Vision

# **Sustainability at Epson**

December 14, 2021  
Seiko Epson Corporation

## Management Philosophy

Epson aspires to be an indispensable company,  
trusted throughout the world for our commitment to openness,  
customer satisfaction and sustainability.

We respect individuality while promoting teamwork,  
and are committed to delivering unique value  
through innovative and creative solutions.

Co-creating sustainability and enriching  
communities to connect people, things, and  
information by leveraging our efficient,  
compact, and precision technologies and  
digital technologies

### EXCEED YOUR VISION

As Epson employees,  
we always strive to exceed our own vision,  
and to produce results that bring surprise and delight  
to our customers.



**In 1992, Epson eliminated CFCs from its domestic operations**  
**In 1993, Epson eliminated CFCs globally**



A poster to raise awareness internally about the CFC elimination initiative



Epson received the Stratospheric Ozone Layer Protection Award from the U.S. Environmental Protection Agency

# Commitment to sustainability

## *Omiwatari*<sup>1</sup>

Frequency 1926-1989: 76%  
1990-2018: 29% 2019-present: 0%

<sup>1</sup> A pressure ridge that forms on Lake Suwa (Japan) when it completely freezes over

Photo provided by Suwa City, Nagano Prefecture

	Revenue	Business profit <sup>1</sup>	Profit for the year attributable to owners of the parent company
<b>FY2020 Results</b>	¥995.9 billion	¥61.6 billion	¥30.9 billion
<b>FY2021 Outlook</b>	¥1,130.0 billion	¥80.0 billion	¥52.0 billion

**FY2020 revenue breakdown<sup>2</sup>**  
(billion yen)



<sup>1</sup> Calculated by deducting the cost of sales and SGA expenses from revenue. (Business profit is very similar to operating income under Japanese accounting standards.) <sup>2</sup> Revenue amounts for the businesses include intercompany transactions.



## **Achieving sustainability and enriching communities**



These are the five societal issues that Epson will help to address



**Reducing  
environmental  
impacts**



**Improving  
work  
environments**



**Connecting a  
decentralized  
society**



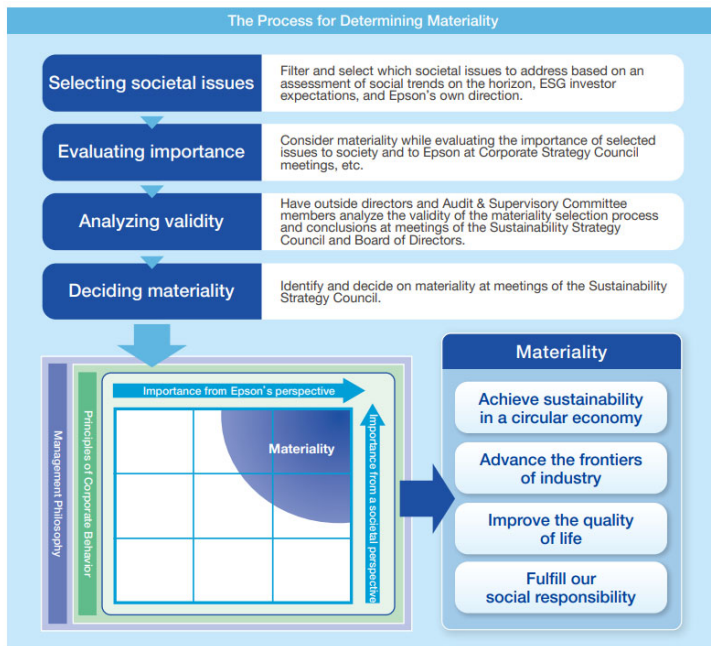
**Improving  
the quality of  
infrastructure,  
education, and  
services**



**Lifestyle  
diversification**

## Identifying Materiality

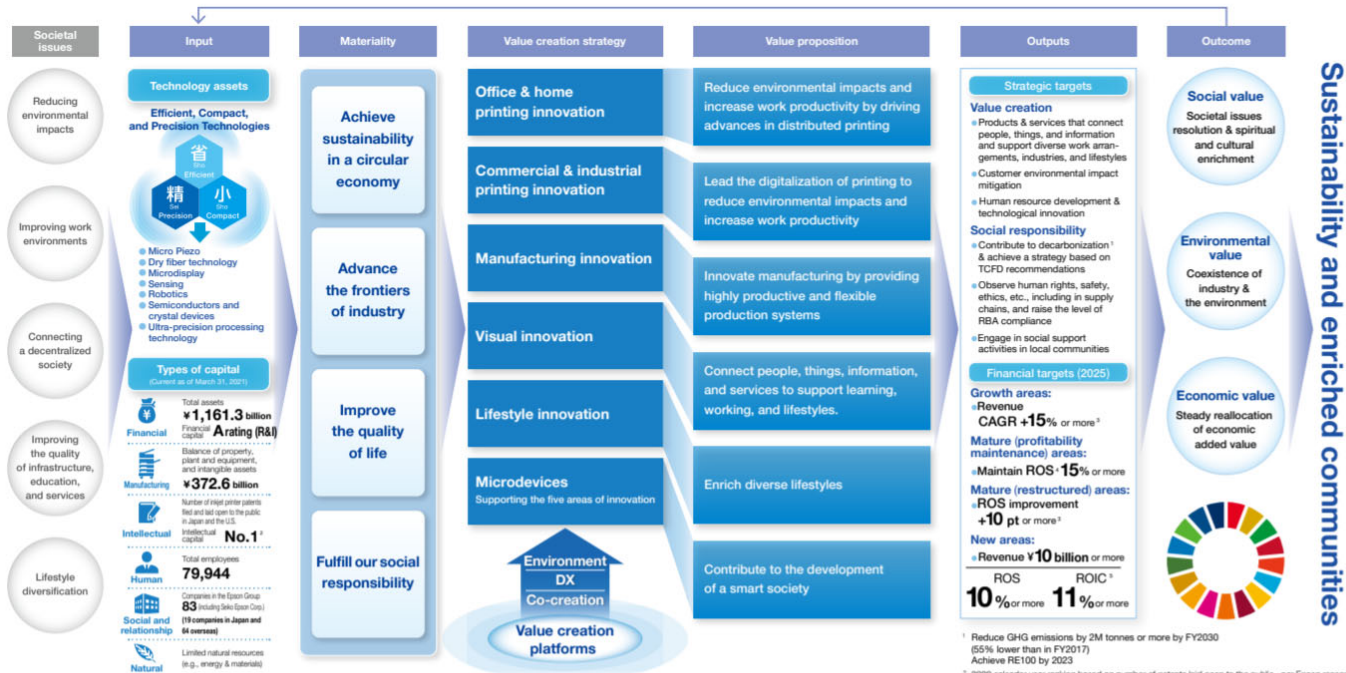
When establishing the Epson 25 Renewed corporate vision in 2021, Epson referenced the societal issues and megatrends described in ISO 26000 and other sources, evaluated them from both a company perspective and a social perspective, and identified the high-priority issues (materialities) that Epson should address.





# Value Creation Story for Realizing our Aspirational Goal

Epson examined societal issues and identified materialities that it can impact. We will achieve sustainability and enrich communities by using our unique core technologies to drive innovation that enables us to **create social, environmental, and economic value in the form of solutions to societal issues.**



<sup>1</sup> Reduce GHG emissions by 2M tonnes or more by FY2030 (55% lower than in FY2017). Achieve RE100 by 2023.  
<sup>2</sup> 2020 calendar year ranking based on number of patents laid open to the public, per Epson research.  
<sup>3</sup> YoY comparison.  
<sup>4</sup> Business profit / revenue.  
<sup>5</sup> Return on invested capital.

# Key Sustainability Topics

# Key Sustainability Topics & SDGs

We set 12 key sustainability topics pertaining to **ESG (environment, society, and governance)** and mapped them to the materialities. We will contribute to the SDGs by planning and executing actions over the mid-term to address these topics.

Materiality	Key Sustainability Topics	World	Relevance to SDGs																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Achieve sustainability in a circular economy	Decarbonization initiatives	Environment	●	●					●	●	●			●	●	●			●
	Closed resource loop initiatives			●				●	●	●	●		●	●	●	●	●		●
	Reducing the environmental impact of customers				●				●	●	●			●	●	●	●		●
	Environmental technology development			●	●				●	●	●			●	●	●	●		●
Advance the frontiers of industry	Improving productivity through digitization and automation	Society							●	●	●								●
	Improving the work and education environments						●			●									●
Improve the quality of life	Enriching diverse lifestyles	Governance			●	●					●								●
	Realizing lives that are rich, dynamic, and interesting				●														●
Fulfill our social responsibility	Increasing stakeholder engagement	Governance	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Realizing responsible supply chains		●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Respecting human rights and promoting diversity		●			●	●			●		●		●					
	Strengthening governance																		●
Epson confirmed that its initiatives are relevant to all 17 SDGs.			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

● The figures in the table below indicate which of the 169 targets (1.1 to 17.19) under the SDGs Epson is addressing with its initiatives (August 2021)



# **Environmental**

## Epson will become carbon negative and underground resource<sup>1</sup> free by 2050 to achieve sustainability and enrich communities

<sup>1</sup> Non-renewable resources such as oil and metals



### Goals

- 2030: Reduce total emissions in line with the 1.5°C scenario<sup>2</sup>
- 2050: Carbon negative and underground resource<sup>1</sup> free

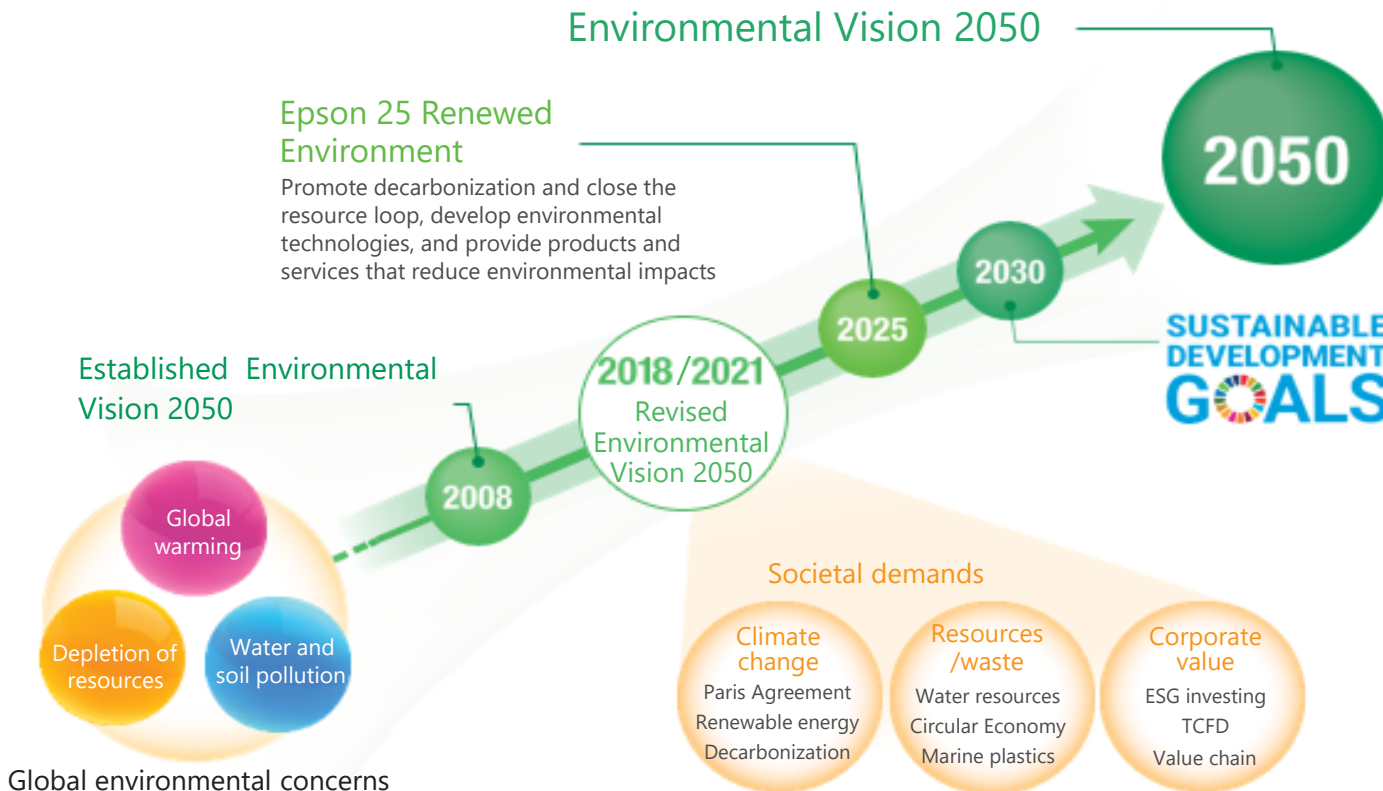
### Actions

- Reduce the environmental impacts of products and services and in supply chains
- Achieve sustainability in a circular economy and advance the frontiers of industry through creative, open innovation
- Contribute to international environmental initiatives

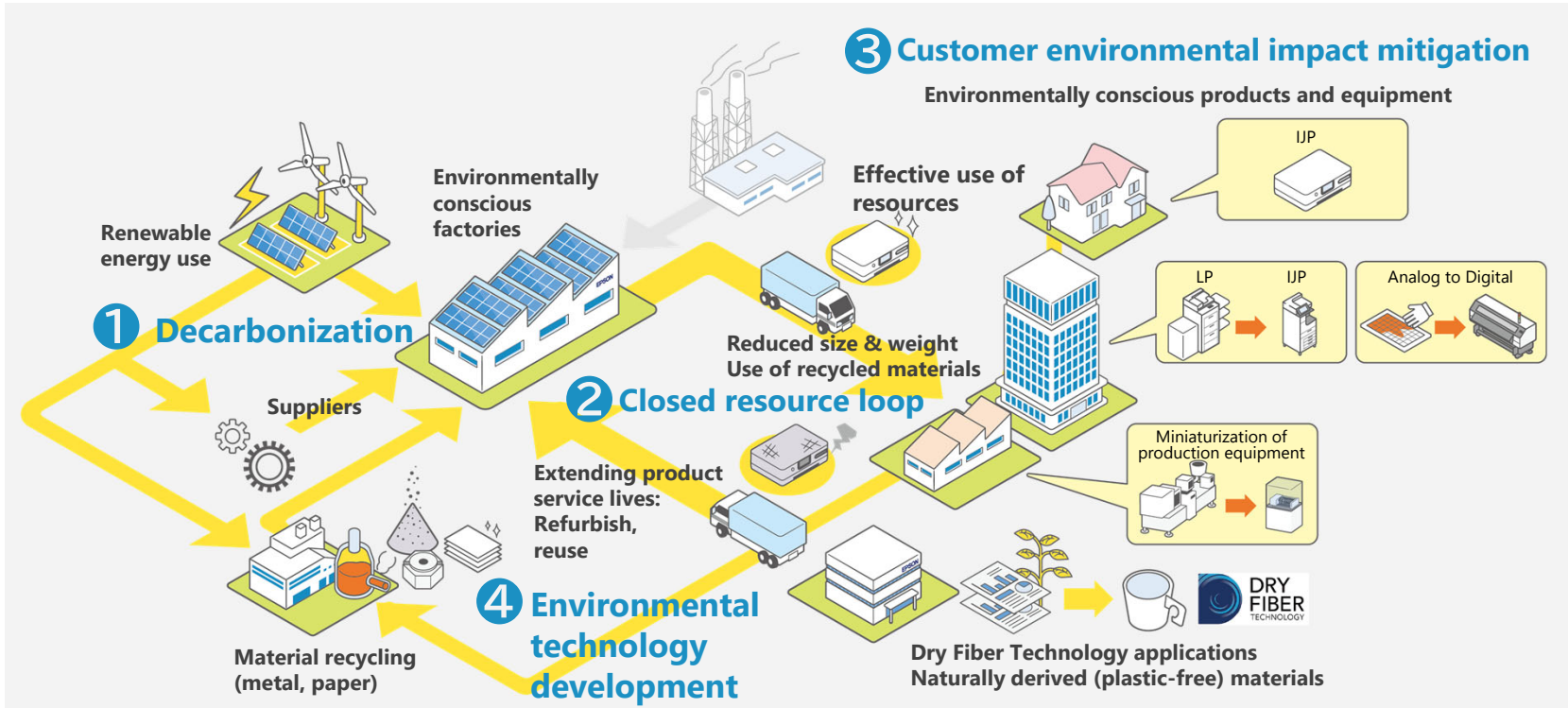
<sup>1</sup> Non-renewable resources such as oil and metals

<sup>2</sup> Target for reducing greenhouse gas emissions aligned with the criteria under the Science Based Targets initiative (SBTi)

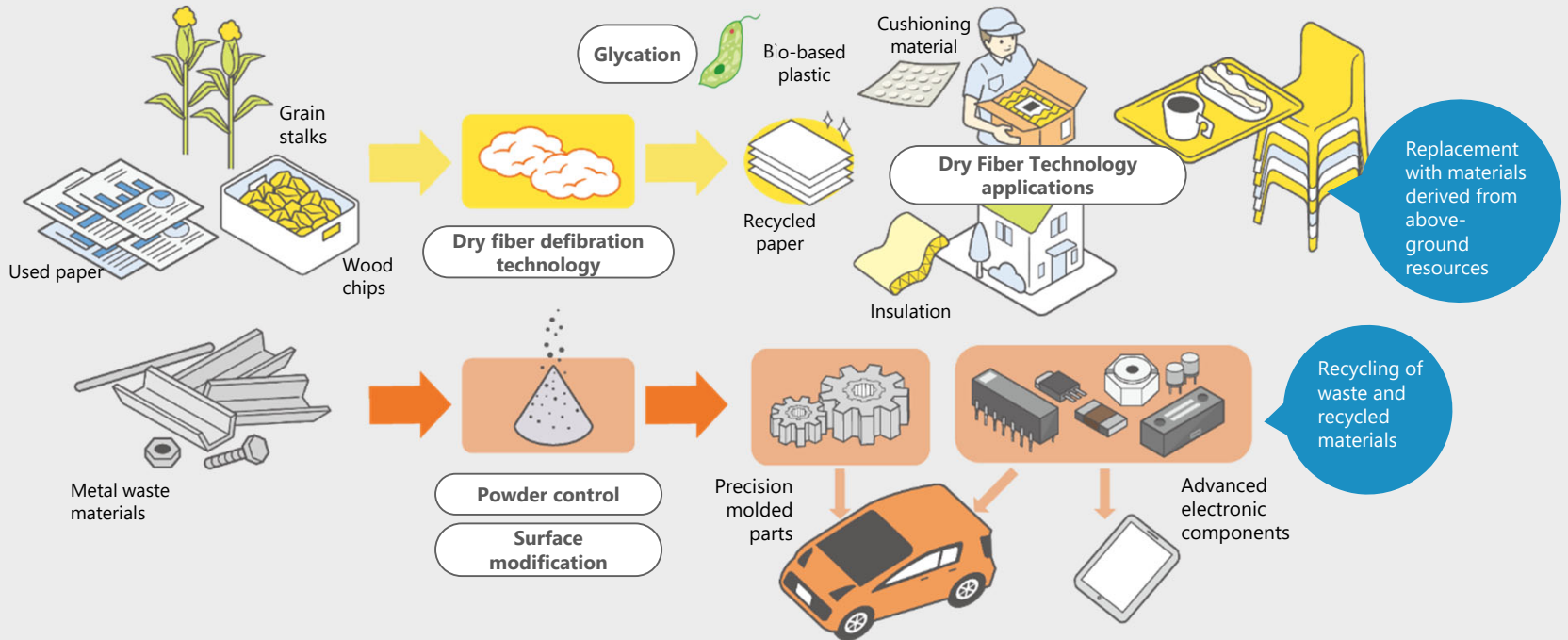




Promote decarbonization and close the resource loop, develop environmental technologies, and provide products and services that reduce environmental impacts



Develop new environmental solutions that integrate materials technologies, and contribute to decarbonization and closing the resource loop



1

## Decarbonization

- Renewable energy use
- Energy-saving facilities
- Greenhouse gas removal
- Supplier engagement
- Carbon-free logistics

2

## Closed resource loop

- Effective use of resources
  - Reduce size and weight, use recycled materials
- Minimize production losses
- Extend product service lives
  - Refurbish and reuse

3

## Customer environmental impact mitigation

- Lower power consumption
- Longer product life
- Fewer consumables and limited lifetime parts
- Digitization of printing
- Miniaturization of production machines

4

## Environmental technology development

- Dry fiber technology applications
- Naturally derived (plastic-free) materials
- Material recycling (metal, paper)
- CO<sub>2</sub> absorption technology

### Environmental investment and spending

- **Spend ¥100 billion over the 10 years to 2030** 124
  - Reduce GHG emissions<sup>1</sup> in the supply chain by more than 2 million tonnes
  - Use renewable energy to meet 100% of the electricity needs of the entire Epson Group by 2023 (achieved in Europe sales offices in April 2020 and achieved in Japan in November 2021)<sup>2</sup>
- **Concentrate management resources on the development of products and services that reduce environmental impacts** 3

1 GHG scope1, 2, 3 emissions

2 Excludes leased properties for sales offices, etc. where the amount of electricity consumed cannot be determined

### **Joined the RE100 – Switch to 100% renewable electricity in 2023 –**

Epson joined the international initiative RE100<sup>1</sup>, which seeks to encourage leading corporations to commit to the use of 100% renewable electricity for their business activities. In March 2021, Epson announced that it would switch to 100% renewable electricity to meet the needs at all Epson Group sites<sup>2</sup> around the world by 2023.



<sup>1</sup> The RE100 is led by an international non-profit the Climate Group and in partnership with CDP. It is made up of businesses committed to 100% renewable electricity.

<sup>2</sup> Excludes some sales sites and other leased properties

November 2021

**Epson became the manufacturing industry's first<sup>1</sup> to switch to 100% renewable electricity at all sites in Japan<sup>2</sup>**

<sup>1</sup> Among Japanese companies that have joined the RE100 per Epson research as of October 27.

<sup>2</sup> Excludes some sales sites and other leased properties



### ③ Customer Environmental Impact Mitigation



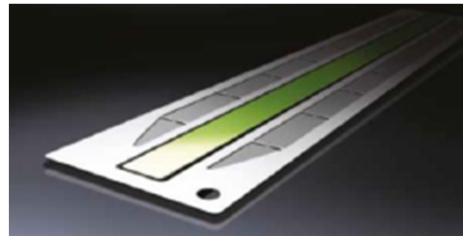
## Innovating the production process with digital technology



Faithfully reproduce a wide range of vivid and delicate designs with high productivity and low environmental impact

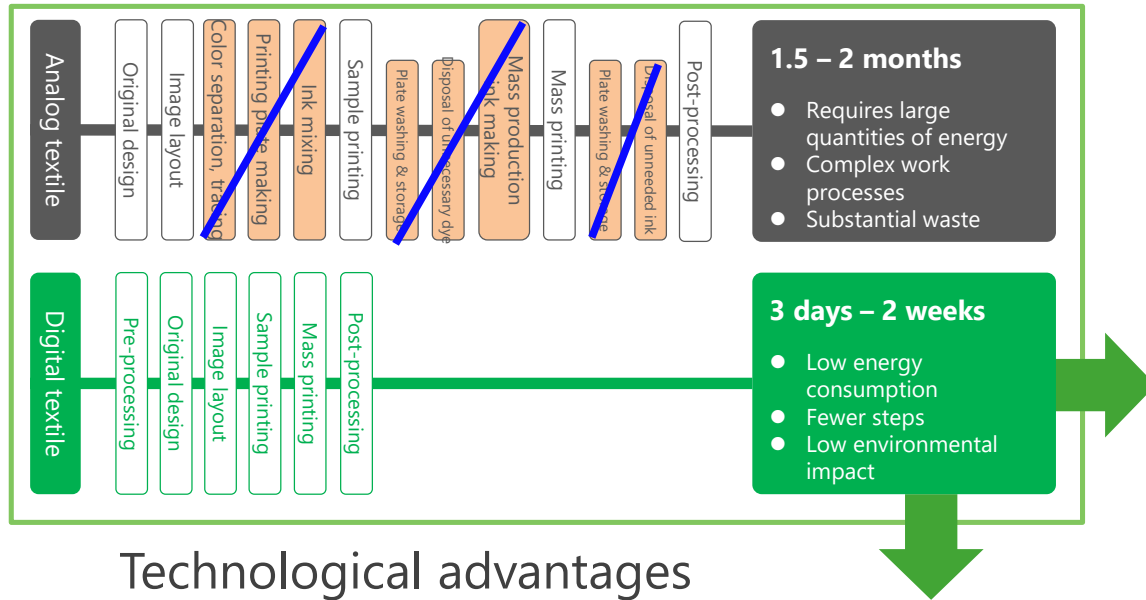


Inkjet digital textile printer  
Monna Lisa Evo Tre



Direct to Fabric  
Eject ink from printheads  
directly onto fabrics  
instead of using printing  
plates

## Comparison of analog and digital textile printing processes



## Process advantages

- **Fast turnaround**
- **Short-run production**
- **Save resources**

## Technological advantages

- **Low environmental impact**
- **Improved work environment**
- **Fewer materials and management man-hours**

## FY2019

- Declared support for the TCFD recommendations
- Studied risks of natural disasters caused by climate change (2°C scenario and 4°C scenario)

## FY2020

- Qualitatively disclosed the financial impact based on the disclosure recommendations of the TCFD framework (2°C scenario)
- Studied risks of natural disasters caused by climate change (1.5°C scenario)

## FY2021

- Revised Environmental Vision 2050 and set clear objectives, including becoming carbon negative
- Quantitatively disclosed the financial impact based on the disclosure recommendations of the TCFD framework (1.5°C scenario)

## TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES Climate-Related Risks and Opportunities in a 1.5°C Scenario

Category		Evaluated risks & opportunities	Actualization		Business impacts	Financial impact	
Transition risks	Market changes Policy & laws and regulations	• Paper demand	Short-term	Impact	<ul style="list-style-type: none"> <li>• We were unable to detect a strong relationship between climate change and the change in paper demand, but demand for printing and communication paper is assumed to be on a declining trend. Even if that shift to paperless advances further due to changes in trends due to COVID-19 (such as the contraction of office printing because of decentralization), we expect that the financial impact from the strengthening of products and services based on inkjet technology and paper recycling technology (reduction of printing costs, reduction of environmental impacts, increase of ease of printing, appeal using usefulness of paper information) will be limited.</li> </ul>	Small	
		(Initiatives in Environmental Vision 2050) • Decarbonization • Closed resource loop • Environmental technology development	Short-term	Impact	<ul style="list-style-type: none"> <li>• "Decarbonization" of products and services as well as the supply chain and advanced initiatives in "resource recycling" are needed to respond to "climate change" and "resource depletion," which are social issues shared globally.</li> <li>• Scientific and specific solutions are necessary to develop environmental technologies linked with the rapid decrease of environmental impacts.</li> </ul>	Response to risks <ul style="list-style-type: none"> <li>• Decarbonization</li> <li>• Renewable energy use</li> <li>• Supplier engagement</li> <li>• Closed resource loop</li> <li>• Effective use of resources</li> <li>• Extend product service lives</li> <li>• Environmental technology development</li> <li>• Dry fiber technology applications</li> <li>• Material recycling (metal, paper)</li> <li>• Energy-saving facilities</li> <li>• Carbon-free logistics</li> <li>• Minimize production losses</li> <li>• Naturally derived (plastic-free) materials</li> <li>• CO<sub>2</sub> absorption technology</li> </ul>	Invest a total of approximately ¥100.0 billion by 2030
Physical risks	Acute	• Damage to business sites due to floods, etc.	Long-term	Impact	<ul style="list-style-type: none"> <li>• Based on the results of the latest FY2021 risk assessment for 36 sites (17 sites in Japan and 19 sites overseas), the changes in future operational risks due to flooding (rivers overflowing) and high tides are limited.</li> <li>• Short-term climate change risks to the supply chain will be addressed in line with our business continuity plans.</li> </ul>	Small	
	Chronic	• Damage to business sites due to rising sea levels					
Opportunities	Products and services	(Initiatives in "Environment Vision 2050") • Customer environmental impact mitigation	Short-term	Assumed scenarios	<ul style="list-style-type: none"> <li>• The need for environmentally friendly products and services will increase due to the introduction of a carbon tax, soaring electricity prices, rising waste disposal costs, sustainable production amounts, and reduced resource use.</li> </ul>	Business opportunities <ul style="list-style-type: none"> <li>• For the growth areas of "Epson 25 Renewed," a CAGR (compound annual growth rate) of 15% is expected for revenue growth by providing 1) office printing, commercial &amp; industrial printing and pinhead sales utilizing inkjet technology to achieve a reduction of environmental impacts, increased work productivity and reduction of printing costs and 2) production systems with expanded use of new production devices to achieve a reduction of environmental impacts.</li> </ul>	Large CAGR of 15% is expected in growth areas until 2025
		• Environmental business	Short-term	Assumed scenarios	<ul style="list-style-type: none"> <li>• Market growth is expected in the field of combatting global warming and the field of waste treatment and effective utilization of resources.</li> <li>• Due to the shift to a circular economy, market growth is expected for recycled plastics, high-performance Bio-based plastic, Bio-based plastic and metal recycling.</li> </ul>	Business opportunities <ul style="list-style-type: none"> <li>• As effective solutions for combatting global warming and responding to the shift to a circular economy, generate revenue by upcycling (enhancing functionality), eliminating plastics (packing and molding materials), creating new high-value-added materials and carrying out other measures through the establishment of technologies, such as applications of dry fiber technology, including paper recycling, development of naturally derived materials (elimination of plastics) and recycling of raw materials (metal and paper recycling).</li> </ul>	Medium

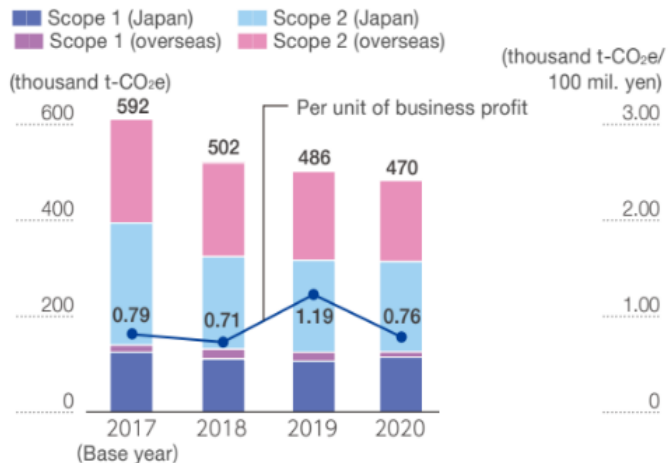
**Actualization** Short term: ≤ 10 years Medium term: 10-50 years Long term: > 50 years  
**Financial Impact** Small: ≤ 1 billion yen Medium: 1-10 billion yen Large: > 10 billion yen

GHG Reduction Targets (reduction targets in line with "SBT 1.5°C Scenario")

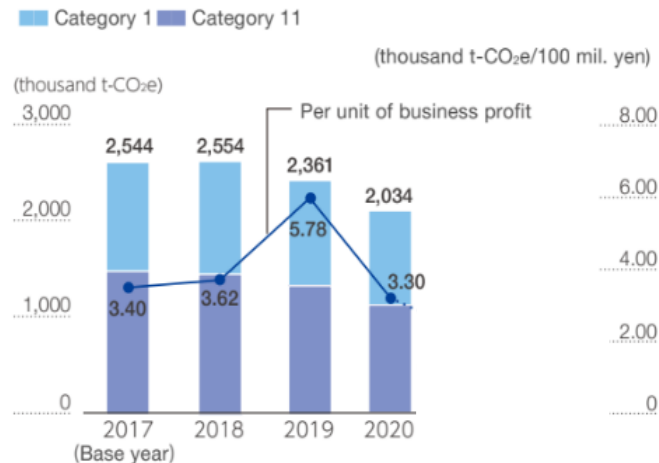
## Scope 1, 2, 3

Reduce GHG emissions by 55% compared to FY2017 by FY2030.

**GHG Emissions (Scopes 1 & 2)<sup>3</sup>**



**GHG Emission (Scope 3: Categories 1 & 11)**



<sup>3</sup> CO<sub>2</sub> conversion factor of greenhouse gas emissions

- Electric power: In Japan, we use the adjusted emissions factors for the load serving entities (i.e., utilities) from which our sites purchase electricity, pursuant to Load Serving Entity Emission Factors announced by the Ministry of Environment and the Ministry of Economy, Trade and Industry. Overseas, we use the country emission factors listed in IEA (International Energy Agency) or from the load serving entities from which our sites purchase electricity.
- Fuel: The factors announced by the IPCC in 2006 were used for both domestic and overseas data.
- GHGs other than CO<sub>2</sub>: Equivalent values were calculated based on 100-year GWP values in the Fifth Assessment Report of the IPCC.





**Social**

We contribute to society by focusing on the priority areas of the environment, education and culture, and life and community in line with the following three basic principles:



- **Contributing to the SDGs**
- **Achieving sustainability and enriching communities**
- **Developing programs rooted in local communities around the world**

In 2019, Epson became a regular member of the Responsible Business Alliance (RBA), an international coalition that promotes CSR in global supply chains. We have adopted the RBA's code of conduct and methodologies into our management practices.



## Responsible Business Alliance

Formerly the Electronic Industry Citizenship Coalition

Advancing Sustainability Globally

Three of Epson's main manufacturing sites currently hold Platinum-level recognition.

**Platinum-  
recognized  
sites**

\*As of Oct/2021

PT. Indonesia Epson Industry

Epson Precision (Thailand) Ltd.

Epson Engineering (Shenzhen) Ltd.

Supply chains are managed using a self-assessment questionnaire (SAQ) that is based on the RBA's Validated Assessment Program (VAP) criteria.

	FY2018	FY2019	FY2020
Suppliers surveyed (SAQ)	312	222	293
Low risk ( $\geq 85$ pts.)	58%	84%	91%
Medium risk (66-85 pts.)	37%	16%	9%
High risk ( $\leq 65$ pts.)	5%	0%	0%

Joined the Responsible Minerals Initiative (RMI), an alliance for the responsible sourcing of minerals

### **3TG (gold, tantalum, tin, tungsten) conflict-free smelter survey (using the CMRT)**

	FY2018	FY2019	FY2020
No. of identified smelters	314	344	340
No. of CFS-certified smelters	256	268	242
CMRT return rate	92%	91%	97%

Seminar: Held a diversity management seminar at a diversity fair

Discussions: Fostered awareness of diversity and the advancement of women in the workplace

## Seminar

### Diversity Management Seminar



Conceptual image

## Discussions

### Diversity Cafe



Conceptual image



We must understand and meet the needs of a diverse workforce if we are to enrich lives. To deliver results that surprise and delight our customers, Epson will facilitate the advancement of women in the workplace, employ people of various nationalities, and foster a corporate climate in which everyone can make the most of their abilities.

## Promotion of Diversity



### Workforce composition

As of Mar. 2021

Seiko Epson Corp.

Global

**Female management position**

**26 person / 3.2%**      **16.1%**

**Female employees** <sup>1</sup>

**16.6%**      **44.5%**

**Length of employment**

Female **20.4y**      Male **18.9y**

<sup>1</sup> Regular employees & Full-time workers

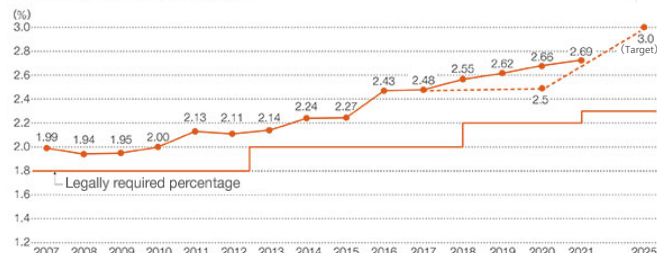


### Employees with Disabilities

As of June 1, 2020 Seiko Epson Corp and Group companies in Japan

**317 employees / 2.66%**

Employees with Disabilities (Japan)



\* Figures for each fiscal year were as of June 1 of that year.



# **Governance**

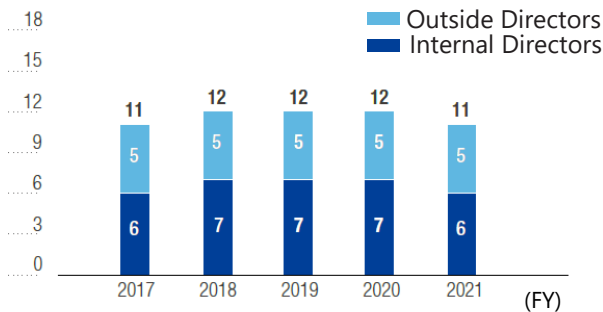
Epson chose to become a company with an audit and supervisory committee to strengthen corporate governance

- Separate the functions of management oversight and management execution
- Reinforce the management oversight function

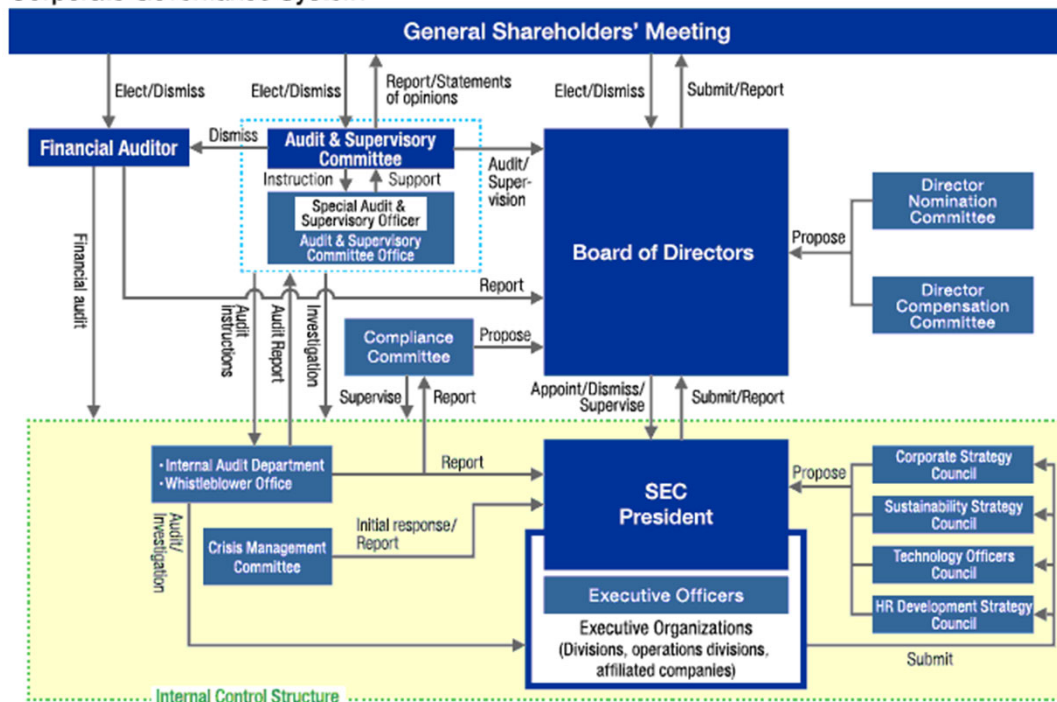


**Ensure quick decision-making in management execution**

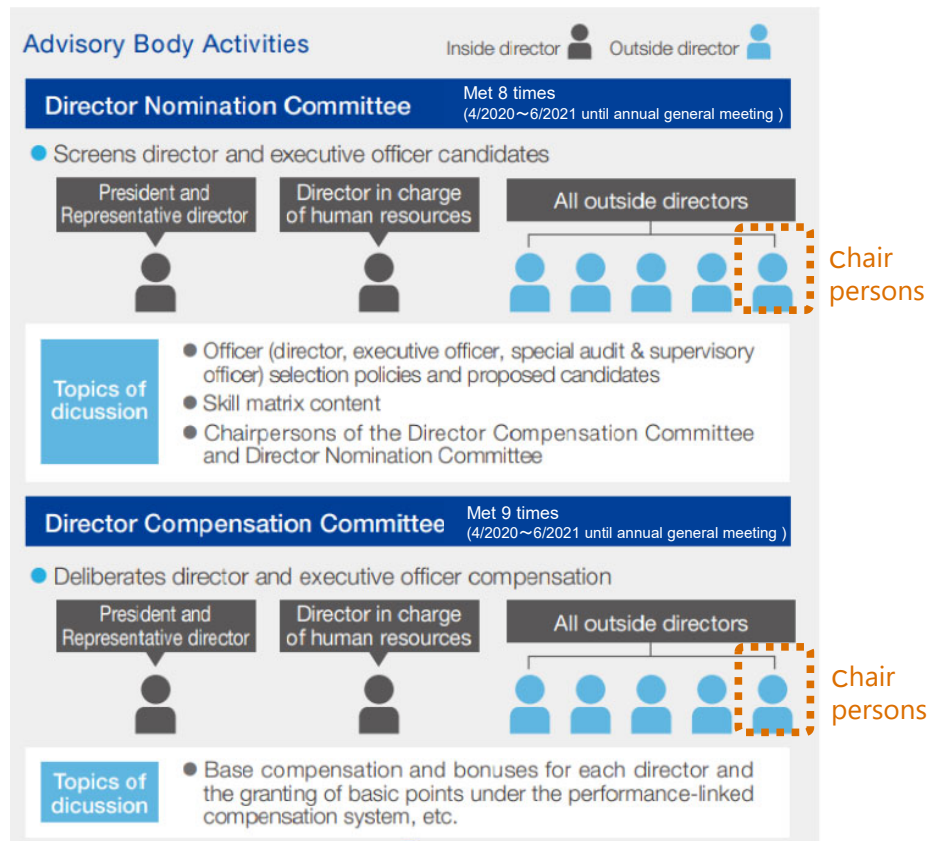
**Number of outside directors**



**Corporate Governance System**



The board of directors resolved at its meeting in June 2021 that the chairpersons of both committees are to be elected from among the outside directors.



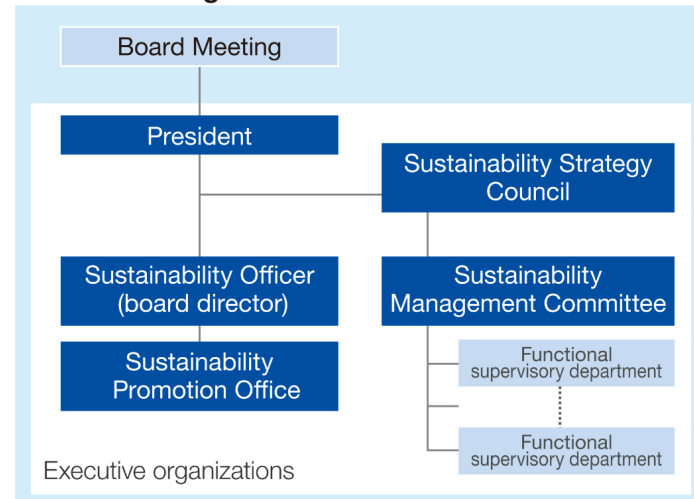
## Sustainability Strategy Council

- As an advisory body to the president, this council identifies sustainability-related opportunities and risks from a long-term perspective and specifies actions for effectively incorporating them in management.
- The council has a subordinate organization called the Sustainability Management Committee. Composed of the heads of various departments, this committee discusses and investigates matters that require specialized knowledge.

## Matters discussed

- (1) Social trends based on global research
- (2) Sustainability-related initiatives and actions  
(Review of TCFD/ESG stakeholder discussions)
- (3) The state of sustainability activities  
(External recognition & review of key sustainability topics)

## Promotion Organization



## Matrix of Directors' Expertise

Title	Name	Areas of expertise and skills particularly expected by the Company							
		Corporate management	Development Technology	Design Production	Sales Marketing	IT Digital	Finance Accounting	Legal affairs Compliance	Global (Internationality)
Chairman and Director	Minoru Usui	●	●		●				
President and Representative Director	Yasunori Ogawa	●	●			●			
Representative Director Senior Managing Executive Officer	Koichi Kubota	●			●				●
Director Managing Executive Officer	Tatsuaki Seki					●	●	●	
Director Executive Officer	Taro Shigemoto						●	●	●
Outside Director	Hideaki Omiya	●	●			●			
Outside Director	Mari Matsunaga				●	●			
Director Full-Time Audit & Supervisory Committee Member	Masayuki Kawana						●	●	
Outside Director Audit & Supervisory Committee Member	Yoshio Shirai	●	●						●
Outside Director Audit & Supervisory Committee Member	Susumu Murakoshi						●	●	
Outside Director Audit & Supervisory Committee Member	Michiko Ohtsuka						●	●	

\* Up to three areas of expertise particularly expected are stated.



# External Recognition

## Seiko Epson wins the Environmental Value Award

Seiko Epson won the **Environmental Value Award**, its first, at the 3rd Annual Nikkei SDGs Management Grand Prix, in recognition of its efforts to reduce GHGs, including those of business partners, its support for the TCFD recommendations and disclosure of emissions information in securities reports, and its ambitious targets for introducing renewable electricity.

### Environmental Value Award

This award is granted to companies that earn a high overall score for initiatives relating to climate change, resources, and biodiversity. Companies are evaluated on things such as policies regarding the analysis of risks and opportunities and environmental audits; GHG emissions, the scope of emissions measured, and actual GHG quantities; quantitative measurement and long-term targets for wastes, power consumption, and water resources; climate change adaptation measures and environmental solutions; and activities to protect ecosystems.



Seiko Epson President Yasunori Ogawa (seated left) at the 3rd Annual Nikkei SDGs Management Grand Prix Ceremony

**EPSON**  
EXCEED YOUR VISION