

EPSON COMPLETES THE TRANSITION TO RENEWABLE ELECTRICITY AT ALL GLOBAL SITES¹

– Goal achieved through early up-front investment in society and future generations –

In December 2023, Epson became the first Japanese manufacturer² to switch to renewables for 100% of its electricity needs (approximately 876 GWh³ per year in FY2022) at all its sites worldwide.¹ By September, the transition was about 90% complete. Since then, two sites in Malaysia have switched, completing the transition at all production sites. Heading into the end of the year, the remaining sales office and other sites in Taiwan, where sourcing renewable electricity is difficult, completed the switch, enabling us to achieve the goal of 100% renewable electricity before the end of 2023.

Epson considers this to be a strategic, up-front investment for creating social value and an investment in society and future generations. The company was therefore willing to bear higher costs in the short term to attain the goal. This is a reflection of our strong commitment to contributing financially to the expansion of the renewable energy market and to stimulating renewable energy market development. By completing the switch to renewable electricity, we estimate that we will eliminate approximately 400,000 tons of CO₂ from electricity generation annually.

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According to the Sixth Assessment Report (2021) of the United Nations Intergovernmental Panel on Climate Change (IPCC), the global average temperature rose 1.09°C from 2011 to 2020 compared to pre-industrial times (1850-1900). If no effective action is taken, it is estimated that the average temperature could rise between 3.3°C and 5.7°C by the end of the century, a level that could cause an irreparable collapse of nature and ecosystems. The report therefore concludes that humankind must somehow limit the rise to 1.5°C or less. A Consensus Agreement adopted at COP 28 on December 13 noted that the temperature has already risen by 1.1°C and that there is little time remaining before the temperature rises to the 1.5°C limit.

With the world in crisis, Epson, which has operations around the world, is committing to fulfilling its responsibility to society by announcing, in Environmental Vision 2050, that it would reduce its total emissions in line with a 1.5°C scenario by 2030 and become carbon negative by 2050. Epson's main actions will be geared toward

- (1) decarbonization,
- (2) closing the resource loop,
- (3) customer environmental impact mitigation,
- (4) environmental technology development.

Epson will spend 100 billion over the 10 years to 2030 on initiatives in (1), (2) and (4). For (3), Epson will concentrate its management resources on the development of products and services that reduce environmental impacts. This is a declaration that all products produced by Epson will contribute to environmental impact mitigation. And we will invest approximately 1 trillion yen over 10 years in the development of these products.

Epson aims to become carbon negative and underground resource free by 2050.

The path toward 100% renewable electricity globally

In March 2021, Epson revised Environmental Vision 2050, a statement of the company's environmental goals for 2050 and for achieving sustainability and enriching communities. Epson aims to become carbon negative and underground resource free by 2050. One of the things we did to get us closer to these goals was to announce in March 2021 that we would switch to 100% renewable electricity to meet the electricity needs at all Epson Group sites¹ around the world by 2023.

Date	Epson Sites and Their Renewable Electricity Initiatives
By March 2021	European sites & Epson Precision (Philippines) Inc. achieved 100% renewable
March 2021	Declared commitment to achieving 100% renewable electricity globally
April 2021	Sites in Nagano Prefecture, Japan
April 2021	Joined RE100
May 2021	Began the Shinshu Green Electricity Project in Nagano
October 2021	Sites in the Tohoku area of Japan achieved 100% renewable
November 2021	All sites in Japan achieved 100% renewable
April 2022	Epson Precision (Thailand) Ltd. achieved 100% renewable
July 2022	PT. Indonesia Epson Industry achieved 100% renewable
January 2023	China/Hong Kong area sites achieved 100% renewable
September 2023	Singapore Epson Industrial Pte. Ltd. achieved 100% renewable
December 2023	All Global Sites

Epson Sites and Their Renewable Electricity Initiatives

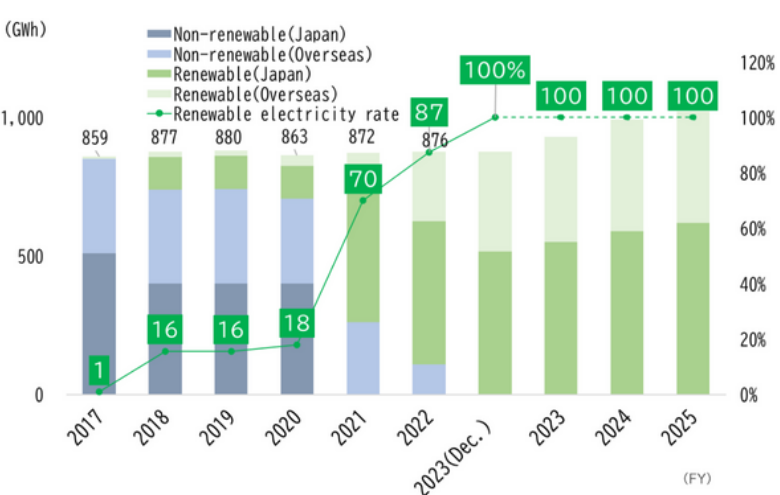


We achieved our global renewable electricity goal just 2 years and 10 months after the announcement by selecting the best renewable electricity available in each region, often hydroelectric and geothermal power, and by aggressively investing in on-site power generation.

Commitment to contributing to the growth and development of the renewable energy market

In regions like Japan, Taiwan, and Singapore, where the supply of renewable energy is limited and the cost is far higher than for conventional power, businesses face a financial burden if they continue to purchase renewables long term. Epson envisions achieving sustainability and enriching communities and is willing to bear the higher short-term costs associated with an up-front investment in renewable energy. We see this as an investment in society and future generations and a means to create social value. Our willingness to invest reflects our commitment to contributing financially and otherwise to the growth and development of the renewable energy market.

For many manufacturers, the indirect GHG emissions that occur in the value chain (scope 3 emissions) far exceed their own indirect GHG emissions from electricity use (scope 2 emissions). Given this, we believe that the manufacturers who reduce their scope 2 emissions by using renewable electricity can influence the entire value chain and thus have an impact that will go well beyond just the achievement of their own goals.

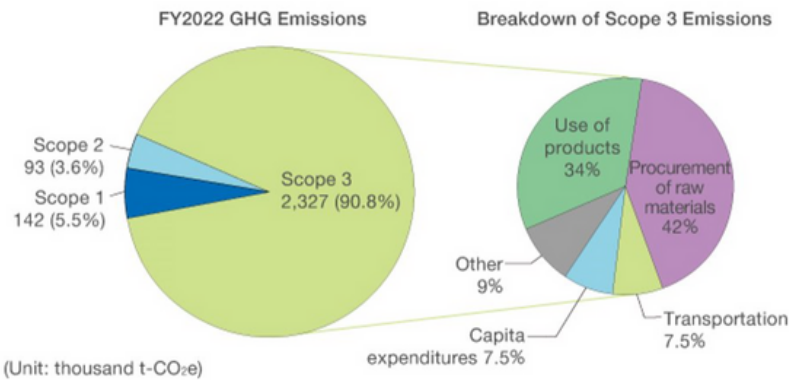


Reasons for switching early to renewable electricity

Since its founding, Epson has maintained an uncompromising commitment to preserving the environment and existing in harmony with the communities where we operate. “Environmental Vision 2050” describes Epson’s vision of an ideal world and sets forth ambitious environmental goals. Modern manufacturing, which uses vast amounts of resources and fossil energy to produce new goods, is unsustainable. On top of this, we saw a lack of action on climate change as a corporate risk that we needed to mitigate and thus set a goal of transitioning early to renewable electricity at all our sites by 2023. Not only did we set a goal, we wanted to set an example for others to follow.

The fact that manufacturers and suppliers are urged to switch to renewable electricity supports this assertion. We believe that setting targets at an early stage and demonstrating our willingness to work toward solutions to climate change will effectively benefit both us and our suppliers as we advance toward social sustainability. It has engaged its entire global supply chain in leading to the expansion of renewable electricity capacity.

Greenhouse Gas Emissions from Value Chain



An Epson manufacturing site in the Philippines switched to a mix of geothermal and hydroelectric power in January 2021. It also generates its own power from a mega solar power plant on the roof of the facility.

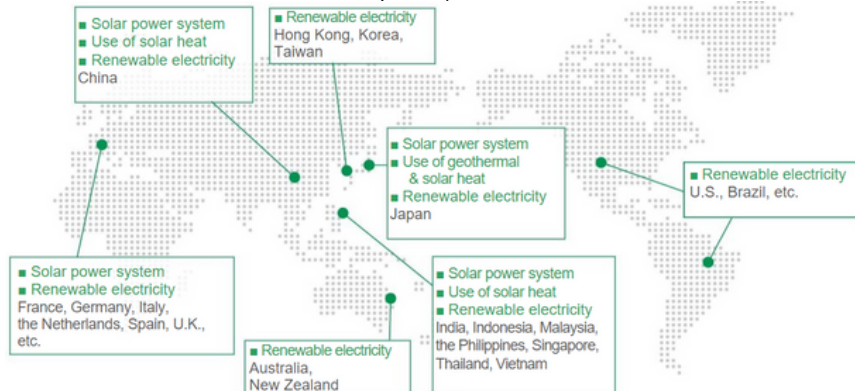
Epson's factory in Bekasi, Indonesia, started using biomass power in July 2022. This site is a good example of how we are taking advantage of different sources of energy in different regions. In Bekasi, we use sustainable biomass power generated using woodchips and fair-trade palm kernel shells (PKS), byproducts of the palm oil production process.

Epson's Head Office and key R&D sites in Nagano Prefecture, Japan, purchase hydroelectric power generated by taking advantage of the abundant local water resources and mountainous topography.

Commitment to local energy

We are committed to using locally generated energy whenever possible. Rather than using energy generated in distant parts of the world, we believe that utilizing the abundant local renewable electricity sources—hydroelectric, wind, geothermal, and biomass—will have numerous benefits and contribute to local communities, including by raising energy self-sufficiency and creating jobs. Local energy use is also a requirement of the RE100, an international initiative that aims to make all electricity used by businesses sourced from renewables by 2050.

Use of renewable electricity at Epson sites worldwide



*Onsite equipment, power purchase agreement, and/or certificate purchasing

Working to increase the use of renewable electricity


In addition to achieving our own environmental goals, we hope to spread understanding and appreciation of renewables and to foster a social environment that facilitates a broader adoption of renewable electricity.

For society as a whole to transition to renewable electricity, the amount of renewable electricity available must first be increased. Epson is emphasizing the "additionality" of this renewable electricity. In addition to increasing our on-site power generation by installing solar panels on the roofs of our factories and office buildings, we have also joined the Shinshu Green Electricity Project in Nagano Prefecture, where most of our domestic operations are located. Under this scheme, money used to purchase locally generated carbon-free electricity is invested in the development of new, additional renewable power generation sources. This project is a collaborative effort among electric utilities, a power retailer, and power users in the electricity value chain. It directly supports the development, renovation, and expansion of certain hydroelectric power plants by ensuring stable funding, resulting in the expanded use of local energy in the region.

The following power plants are supported by the Shinshu Green Electricity Project.

Power plant	Amount of power generated	Operation start
Kurokawadaira Hydroelectric Power Station	170 kW, estimated annual power generation: 1.01 million kWh	July 2021
Seinaiji Hydroelectric Power Station	5,600 kW, estimated annual power generation: 29 million kWh	October 2023
Futamata Hydroelectric Power Station	Repowering from 5,200 kW to 6,900 kW	December 2023
Kosumonoshizuku Power Plant	1,500 kW, (estimated annual power generation: 5.5 million kWh)	Scheduled for FY2025
Yunoseitoshiki Power Plant	860 kW, (estimated annual power generation: 3 million kWh)	Scheduled for FY2025

Epson also seeks to lead the way to decarbonization throughout its global supply chain.



Epson also seeks to lead the way to decarbonization throughout its global supply chain, including by setting supplier decarbonization targets and determining their renewable electricity use.

To expand renewable electricity, we believe that following policy recommendations is an important step toward resolving issues involving things such as supply volume, supply area, and cost. Accordingly, we have expressed our support for renewable electricity recommendations made by the Japan Climate Change Initiative (JCI), the Japan Renewable Energy Institute, CDP Worldwide-Japan (CDP Japan), and the World Wide Fund for Nature Japan (WWF Japan).

Changes in RE100 requirements and Epson's initiatives

In March 2021, Epson made a public commitment to secure 100% of its global electricity from renewable sources. In April of the same year, Epson joined the international initiative RE100, which aims to drive a transition on the part of corporations to the use of 100% renewable electricity.

On October 24, 2022, "RE100 Technical Criteria," which defines what counts as renewable electricity for participation in the RE100 program, was revised. Member companies are required to comply with the new criteria for the electricity they source, effective from January 2024.

Most important are the changes stipulating that electricity must be procured from new power generation facilities such as PPAs or, alternatively, that electricity or certificates must be purchased from facilities in operation for 15 years or less.

At Epson, we recognize the value and significance of renewable electricity, including hydropower, and emphasize the use of locally sourced energy. However, we also recognize that an immediate switch to electricity that meets the new requirements is not currently realistic. Therefore, while leveraging the advantages of having got off to an early start, we are looking to secure sources that align with the new criteria, including by entering into long-term agreements with electricity providers by the end of this year. For requirements that are challenging to meet, especially in places like Singapore, we will make recommendations to the RE100 and will otherwise continue to accelerate our efforts, including the development of new energy sources, to keep pace with the trends and contribute to local and global decarbonization.



On September 1, 2023, Epson participated in a strategy conference for the expansion of renewable electricity in Japan in the 2023 fiscal year. The conference was organized by the U.K. office of the Climate Group, which leads the RE100 program. Attended by representatives from RE100 member companies in Japan, the conference served as a venue to discuss strategies for promoting the use of renewable electricity.

Attending companies: 61 out of 82 member companies in Japan and four overseas companies, for a total of 65 companies

Topics of discussion: Factors and challenges contributing to Japan's low rate of renewable electricity use, and actions that the RE100 can take moving forward

Shared challenge: Soaring prices for renewable electricity in addition to skyrocketing fuel adjustment costs

During a discussion about a universally acknowledged need for stronger collaboration among the RE100 members, Epson made recommendations involving the following:

1

The need for renewable electricity purchasing incentives

- Lobby electric power companies to reduce fuel adjustment costs levied on users

2


The need to develop renewable electricity sources

- Facilitate power source development through collaboration among RE100 member companies in Japan, where the renewable electricity supply is low.
- Develop hydroelectric power generation by releasing undeveloped water rights held by electric power companies

3

Revision of current RE100 standards

- RE100 certification that accurately reflects the reality that renewable electricity development takes time

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- 1 Excludes some sales sites occupying leased properties where the amount of electricity consumed cannot be determined.
- 2 The first Japanese manufacturer in the RE100. As of October 27, 2021, per Epson research.
- 3 Includes co-generation system (CGS) electricity and privately generated electricity.

■ For details about Environmental Vision 2050, please visit the website below.
<https://corporate.epson/en/sustainability/environment/vision/>

■ For more information about Epson's decarbonization initiatives, please see the website below.
<https://corporate.epson/en/sustainability/environment/decarbonization/>

■ For more information about Epson's renewable electricity initiatives, please see the news releases below.

Epson Group sets its sights on meeting its 100% renewable electricity goal in 2023 (March 16, 2021)
<https://corporate.epson/en/news/2021/210316.html>

Epson Becomes the Manufacturing Industry's First to Switch to 100% Renewable Electricity at All Sites in Japan (October 27, 2021)
<https://corporate.epson/en/news/2021/211027.html>

Epson Becomes the Manufacturing Industry's First to Switch to 100% Renewable Electricity at All Global Sites (January 9, 2024)
<https://corporate.epson/en/news/2024/240109.html>

■ For more information on the Shinshu Green Electricity Project, please click here.

Shinshu Green Electricity Project launched by government and two private sector companies to accelerate the development of renewable electricity sources in Nagano Prefecture
https://www.epson.jp/osirase/2021/210527_2.htm

*Japanese only

Nagano Prefecture and seven local companies to expand renewable electricity in Nagano Prefecture
<https://corporate.epson/ja/news/2023/231120.html>

*Japanese only