


# Environment

To create a world where people can live in harmony with the earth, the Group is leveraging its global strength to bring solutions to environmental issues, including climate change.

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## Basic Policy on Environmental Initiatives

In May 2021, SBG established its Environmental Policy as a set of principles for conducting corporate activities with due consideration to the global environment. The Group promote our activities in accordance with this policy, which stipulates that we comply with environment-related laws and regulations, respond to climate change, reduce environmental burden, conserve resources, and conserve biodiversity. We also set out environmental ethical standards in our Supplier Code of Conduct, including compliance with environmental laws and regulations, waste management and reduction, effective use of materials, and consideration for biodiversity, and require our suppliers to work in accordance with this code.

 [See our website for the full text of our Environmental Policy.](#)

 [See our website for the full text of our Supplier Code of Conduct.](#)

## Climate-related Information Disclosures in Accordance with the TCFD Recommendations

### Disclosure Items in Accordance with the TCFD Recommendations

Natural disasters caused by climate change are becoming more serious every year, and urgent action is required to mitigate and adapt to such events. SBG recognizes the importance of addressing climate change and is implementing a range of related initiatives. We disclose information on the following four items in accordance with the recommendations of the TCFD.

Governance	Organizational governance around climate-related risks and opportunities
Risk management	Identifying, assessing and managing climate-related risks
Strategy	Impact of climate-related risks and opportunities on our business
Metrics and targets	Metrics and targets for assessing and managing climate-related risks and opportunities


 [See our website for the full text of our climate-related information disclosures in accordance with the TCFD recommendations.](#)

### Governance

**Board of Directors:** SBG's Board of Directors makes decisions on important sustainability issues for the entire Group. The Board deliberates and decides matters, including identifying climate-related risks and opportunities, developing countermeasures, and setting Group targets for greenhouse gas emission reduction, and oversees the Group's response to climate change.

**Chief Sustainability Officer (CSusO):** The Board of Directors has appointed a CSusO who is in charge of executing operations related to sustainability. The CSusO is responsible for developing

policies, setting targets and promoting initiatives related to sustainability. As for climate-related actions, the CSusO also plays a leading role in identifying risks and opportunities, planning actions, and setting Group targets regarding greenhouse gas emission reduction.

**The Sustainability Committee:** The Sustainability Committee is chaired by the CSusO and includes three other members: a Board Director, Corporate Officer, Senior Vice President, CFO & CISO; a Corporate Officer and Senior Vice President; and a Corporate Officer, CLO and GCO. The committee continually discusses material sustainability-related issues for the Group and how to respond to them, and reports its findings to the Board of Directors. The Board oversees the committee upon receiving these reports. The committee also discusses and considers climate-related actions, including identifying climate-related risks and opportunities, planning of actions, and setting Group targets for greenhouse gas emission reduction. Please refer to page 10 – 11 for details about the Sustainability Committee.  P. 10-11

### Risk Management

SBG's Risk Management Office plays a central role in gathering information on various risks from functions within SBG and from major Group companies, identifying material risks, and considering and monitoring countermeasures. Information on climate-related risks and countermeasures is also gathered regularly as part of the Group-wide risk management process. In fiscal 2021, SBG established an internal working group (TCFD WG) to hold cross-functional discussions on climate-related risks. Based on the results of the discussions, the Sustainability Committee and the Board of Directors identified climate-related risks and deliberated and decided countermeasures. We will incorporate the identified climate-related risks and countermeasures into our Group-wide risk management and sustainability-related risk management processes and monitor them on an ongoing basis.

## ■ Strategy

### Consideration Process of Climate Change Impacts and Actions

SBG identified risks and opportunities, examined impacts, and considered countermeasures at the TCFD WG for the Investment Business of Holding Companies, SoftBank Vision Funds, and Latin America Funds\*<sup>1</sup> (the "Group's Investment Businesses"). Based on the study, the Sustainability Committee and the Board of Directors discussed the assessment of the impact of climate change on the Group,\*<sup>2</sup> and decided on countermeasures.

### Risks and Opportunities Anticipated in the Group's Investment Businesses

Classification	Opportunities	Risks
New investments	<ul style="list-style-type: none"> <li>Expected returns from new investments in companies that provide climate-related technologies and services (e.g., climate tech)</li> </ul>	<ul style="list-style-type: none"> <li>Reduced investment opportunities due to potential portfolio companies' reluctance to accept investments if the Group's climate change response is inadequate</li> </ul>
Existing investments	<ul style="list-style-type: none"> <li>Enhanced corporate value of existing portfolio companies due to their adequate response to climate change</li> </ul>	<ul style="list-style-type: none"> <li>Reduced corporate value of existing portfolio companies due to their inadequate response to climate change</li> </ul>
Financing	<ul style="list-style-type: none"> <li>Expanded financing opportunities by gaining investors' support based on the Group's steady responses to climate change</li> </ul>	<ul style="list-style-type: none"> <li>Reduced financing opportunities due to lower evaluation from investors if the Group's climate change response is inadequate</li> </ul>

### Opportunities

As the entire world works to solve the problems of climate change, demand is expected to grow further for technologies that help combat climate change. Some AI-driven companies provide technologies and services that help address climate change, such as climate tech. Our portfolio already includes such companies in a variety of sectors, including energy, transportation and agriculture. As we proactively invest in these areas, where we expect the market to keep expanding, we may be able to boost our investment returns.

In the Group's existing portfolio companies, we see opportunities to enhance corporate value by reducing greenhouse gas emissions and providing services and products that help combat climate change. We also believe that steady progress in our climate-related initiatives will help gain the support of investors who value climate action, thereby expanding financing opportunities.

### Risks

If the Group's efforts to address climate change are materially inadequate, investee candidates who value investors' actions against climate change might avoid accepting our investments, which could lead to reduced investment opportunities. This might also lead to a lower reputation from investors who value companies' climate change responses and a decline in financing opportunities. Moreover, other climate-related risks, such as natural disasters and tighter environmental regulations, could worsen the financial condition of our portfolio companies, resulting in a decline in the equity value of the holdings of SBG.

### The SoftBank Group's Recognized Impact of Risks and Opportunities

If the Group's climate change responses are significantly inadequate, there is a risk of reduced investment and financing opportunities as described above. However, we believe that such risks can be avoided if we steadily take action against climate change, including greenhouse gas emission reduction. As for climate-related risks in existing portfolio companies, many AI companies we invest in have relatively low greenhouse gas emissions and do not have large production facilities or complex supply chains. Therefore, we assume limited impacts from both transition risk and physical risk.

At the same time, the Group aims to contribute to the well-being of people by driving the deployment of AI and other disruptive technologies, guided by the corporate philosophy of Information Revolution — Happiness for everyone. As increasingly serious natural disasters and other impacts of climate change adversely affect people's lives in various ways, we believe that proactive investment in providers of technologies and services that help address climate change will enable us to realize our corporate philosophy and contribute significantly to solving the problems of climate change.

### Responses to Risks and Opportunities

The Group is taking the following measures to address the identified climate-related risks and opportunities.

Consideration of investments in climate tech, etc.	Invest in companies that provide climate-related technologies and services
Responses in the investment process	Incorporate climate-related risk / opportunity assessments into the investment process
Portfolio company engagement	Engage with portfolio companies on climate change, including through workshops
Greenhouse gas reduction	Reduce greenhouse gas emissions from our business activities

\*1 The Latin America Funds segment was integrated to the SoftBank Vision Funds segment from the first quarter of fiscal 2022.

\*2 In the "Strategy" section on this page, the "Group" refers to SBG and subsidiaries in the Group's Investment Businesses.

## ■ Metrics and Targets

### Group Target

#### Group target **Achieve Carbon Neutrality by fiscal 2030**

Seeking to further reduce greenhouse gas emissions from business activities, in June 2022, SBG set the new Group target of achieving Carbon Neutrality and reaching virtually zero greenhouse gas emissions from Group business activities\*1 by fiscal 2030.

 [See our website for more information on greenhouse gas emissions.](#)

### Targets and Progress of SBG and Major Subsidiaries

SBG has achieved Carbon Neutrality\*2 since fiscal 2020. In addition, major subsidiaries have also set their own targets regarding greenhouse gas emission reduction, undertaking various initiatives to achieve the targets.

	Targets	Progress in fiscal 2021
SoftBank Group Corp.	Achieved Carbon Neutrality*2 in fiscal 2020 and fiscal 2021	
SoftBank Corp.	<ul style="list-style-type: none"> <li>• Achieve Carbon Neutrality*2 by fiscal 2030</li> <li>• Achieve Net Zero*3 by fiscal 2050</li> </ul>	Sourced 53.5% renewable energy for electricity*4 used at base stations
Z Holdings Corporation	<ul style="list-style-type: none"> <li>• Achieve Carbon Neutrality*2 for the entire Z Holdings Corporation Group by fiscal 2030</li> </ul>	Sourced 37% renewable energy for its group's energy consumption
Yahoo Japan Corporation	<ul style="list-style-type: none"> <li>• 100% shift to renewable energy by fiscal 2023</li> </ul>	Sourced 59% renewable energy for energy consumption
Arm Limited	<ul style="list-style-type: none"> <li>• 100% shift to renewable electricity by 2023</li> <li>• Achieve Net Zero Carbon*3 by 2030</li> </ul>	Sourced 98% renewable energy for electricity used in business activities

\*1 Covers greenhouse gas emissions (Scope 1 and Scope 2) from business activities by SBG and its major subsidiaries which are, in principle, in accordance with the "Major subsidiaries" listed in the Annual Securities Report (available only in Japanese), with some exceptions due to regulatory reasons.

\*2 Covers Scope 1 and Scope 2.

\*3 Covers Scope 1, Scope 2, and Scope 3.

\*4 Effectively renewable electricity using non-fossil certificates with renewable energy designation.

## Initiatives for Climate Change Mitigation

### ■ Reducing Greenhouse Gas Emissions from Business Activities

#### Energy-saving Measures at the Head Office Building

SBG | SoftBank Corp. | Others 

SBG aims to reduce energy use in the Tokyo Portcity Takeshiba Office Tower, where our head office is located together with other companies such as SoftBank Corp. The offices employ LED lighting that uses motion sensors to automatically adjust brightness, automatically operated blinds, and other energy-saving technologies.



Tokyo Portcity Takeshiba Office Tower

#### Converting to Renewable Energy for Mobile Base Stations

SoftBank Corp. 

SoftBank Corp. purchases electricity from virtually renewable energy\*4 from SB Power Corp., a subsidiary of the company that operates an electricity retail business. As of the end of fiscal 2021, approximately 53.5% of the electricity used at mobile phone base stations is already generated from virtually renewable energy. The company plans to increase this ratio to at least 70% in fiscal 2022.



Mobile phone base station

#### Data Center Energy Efficiency and Conversion to Renewable Energy

Yahoo Japan Corporation 

At its data centers, Yahoo Japan Corporation has been installing air conditioning systems that use outside air to cool servers and actively working to reduce electricity consumption. In addition, the company has completely switched its power used in Shirakawa Data Center to RE100-compliant virtually renewable energy\*5 supplied by SB Power Corp. and SoftBank Corp. from May 2021.



Shirakawa Data Center

\*5 Electricity from virtually 100% renewable energy sources using FIT Non-fossil Fuel Energy Certificates with Tracking Information, etc.

## Promoting and Expanding the Use of Renewable Energy through Our Energy Businesses

### Renewable Energy Business

SB Energy Corp.

SB Energy Global Holdings Limited



Through our renewable energy-related businesses, we are working to promote and expand the use of renewable energy.

Meanwhile, SB Energy Corp. has strengths in the development, ownership, and operation of renewable energy power plants, which represent the upstream element in the sector. Using these strengths, it also engages in midstream and downstream businesses focusing on power utilization. SB Energy Corp. operates 50 solar photovoltaic and wind power plants in Japan and Mongolia, with a total generating capacity of around 773 MW,\*<sup>1</sup> enough to meet the annual power consumption of around 270,000 ordinary Japanese households.

In addition, SB Energy Global Holdings Limited and its subsidiaries own and operate four solar photovoltaic power plants in the U.S., with a total generating capacity of around 1,300 MW.\*<sup>1</sup>



Miyagi Osato Solar Park



Juno solar power project (Texas, USA)

### Providing Electricity Services that Reduce CO<sub>2</sub>

SB Power Corp., which operates a retail electricity business, provides the Shizen-Denki, an electric power service for households with a virtually 100% renewable energy ratio.\*<sup>2</sup> In fiscal 2021, the service enabled an annual reduction of over 19,000 tons of CO<sub>2</sub> emissions.\*<sup>3</sup>

Furthermore, the Eco-Denki App is provided free of charge to SoftBank-Denki customers. As well as functions for checking past electricity bills and predicting electricity charges for a month, this app also offers a Power Saving Challenge service that allows customers to effortlessly save electricity through the app, thereby supporting their efforts to reduce power usage. In fiscal 2021, the service reduced power consumption by a total of 5,080 MWh and CO<sub>2</sub> emissions by over 2,663 tons. There are currently about 550,000 households\*<sup>4</sup> using the service.



Screenshot of the Eco-Denki App

SB Power Corp.



## Reducing Electric Power Consumption by Developing Energy-saving Technologies

### Developing Architecture that Helps Enhance Power Efficiency

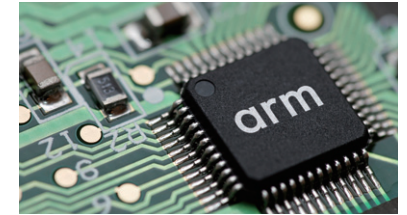
Arm



The shipment figures for semiconductors using Arm's architecture are rapidly increasing. Arm's architecture is being used in a wide range of everyday products, such as smartphones, tablets, home appliances, and automobiles. Arm therefore considers its important responsibility to develop technologies that increase energy and power efficiency; one of the important solutions required to help reduce global energy usage levels.

Arm develops and offers many technologies that combine excellent data processing performance and high energy efficiency, such as the Arm Ethos-U55, which provides up to 90% energy savings in IoT devices versus previous processor generations, and the Arm Cortex-A78, which increases performance by 20%.

In addition, Arm is also actively lowering its operational greenhouse gas emissions with the aim of achieving its 2030 net zero emission ambitions.\*<sup>5</sup>



A semiconductor built on the Arm architecture

### Next-generation Lithium-ion Battery Development

SoftBank Corp.



SoftBank Corp. established the SoftBank Next-generation Battery Lab in June 2021 as it works to develop a large capacity yet lightweight next-generation battery with a high mass-energy density. In November 2021, in collaboration with various researchers, the company announced the development of a battery material that is both highly stable and high-capacity, as well as a successful pilot test of a battery that has an even higher mass-energy density than existing models.

These successes are expected to accelerate the development of next-generation batteries that will be utilized in various IoT devices and the high-altitude platform station (HAPS).\*<sup>6</sup>



A battery jointly developed by SoftBank Corp. and Enpower Greentech Inc.

\*<sup>1</sup> As of April 30, 2022.

\*<sup>2</sup> By combining electricity supplied to customers with Non-fossil Fuel Energy Certificates with renewable energy designation, it can virtually supply electricity with a 100% renewable energy ratio and zero CO<sub>2</sub> emissions.

\*<sup>3</sup> The CO<sub>2</sub> reduction effect is calculated by multiplying the amount of electricity used by Shizen-Denki customers by the national average CO<sub>2</sub> emission factor, and adding the amount of J-credits retired through support for forest conservation organizations.

\*<sup>4</sup> As of August 2022.

\*<sup>5</sup> Covers Scope 1, Scope 2, and Scope 3.

\*<sup>6</sup> General term for a system in which an unmanned aircraft flown into the stratosphere operated as a telecommunications base station to provide communications services over a wide area.

## Mitigating Climate Change through Our Investment Business

### One Planet Private Equity Funds Membership (SBIA)

SBIA



SBIA, which manages SoftBank Vision Funds, is a founding member of the One Planet Private Equity Funds (OPPEF), a private equity fund initiative on climate change. The initiative aims to promote investment and asset management that takes climate-related risks into account in partnership and collaboration with institutional investors around the world.

### Examples of Investments in Companies that Contribute to Climate Change Mitigation

Through its investment business, the Group has made a number of investments that are actively working to reduce carbon emissions.

#### SoftBank Vision Funds

##### Electricity storage solution for renewable energy **Energy Vault**



Energy Vault has developed a system to store electricity in proprietary “blocks” stacked in tower-like structures by using gravitational potential energy and kinetic energy. This system offers a low-cost solution for energy storage and it contributes to the further dissemination of renewable energy.



##### Solar panel lease at low price for housing **Enpal**

Enpal



Enpal is a leasing company that provides residential solar systems. It contributes to the further spread of solar energy through leasing solar systems with no up-front costs. It has already provided solar systems in around 14,000 homes and aims to install them in a million homes over the next 10 years.



##### Leading decarbonization of micro-mobility industry **TIER Mobility**



TIER Mobility provides a sharing service for e-bikes, e-mopeds, and other light electric vehicles in over 20 countries and 200 cities in Europe. The first micro-mobility provider to be fully carbon-neutral, TIER Mobility is leading the decarbonization in the sector.



##### Realizing carbon-neutral commute for students **Zūm**

Zūm



Zūm is reducing CO<sub>2</sub> emissions in student transportation in the U.S. by deploying a fleet that includes electric school buses. Having achieved carbon-neutrality in 2021, Zūm has pledged that 100% of its on-road fleet will consist of electric vehicles by 2025.



#### SB Opportunity Fund

##### Capturing CO<sub>2</sub> in the air on building and factory rooftops **Noya**

Noya



Noya retrofits cooling towers on office buildings and factories so that they can capture atmospheric CO<sub>2</sub>. The company then purchases the captured CO<sub>2</sub> and uses it for industrial purposes, creating a sustainable cycle.

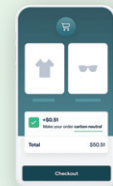


##### Making carbon offsets accessible to everyone **Cloverly**

Cloverly



Cloverly is a carbon offset app. It calculates the carbon footprint of the user's online purchases and other everyday transactions and then allows the user to purchase carbon credits to offset the emissions associated with the transactions. Through these carbon offsets, the app encourages consumers to support projects for reducing or capturing CO<sub>2</sub>.



## Promotion of a Low-Carbon Society through Initiatives

### Establishment and Operation of Renewable Energy Council and GDC Renewable Energy Council



In response to the energy crisis caused by the Great East Japan Earthquake, SBG established in July 2011 the Renewable Energy Council together with prefectures and the GDC Renewable Energy Council together with government-designated cities across Japan. The collective aim of the Councils is to promote and expand the use of renewable energy as a reliable, safe, and sustainable energy source. For the past 10 years since their establishment, SBG has been involved in the operation of both Councils from a neutral standpoint as their secretariat. Both Councils, led by municipalities from 34 prefectures and 20 government-designated cities in Japan, respectively, are working actively with companies and organizations which endorse each Council's principle towards the promotion and expansion of renewable energy.



Submission of a policy proposal

See the Renewable Energy Council's website for further details (available only in Japanese).

See the GDC Renewable Energy Council's website for further details.

## Biodiversity Conservation

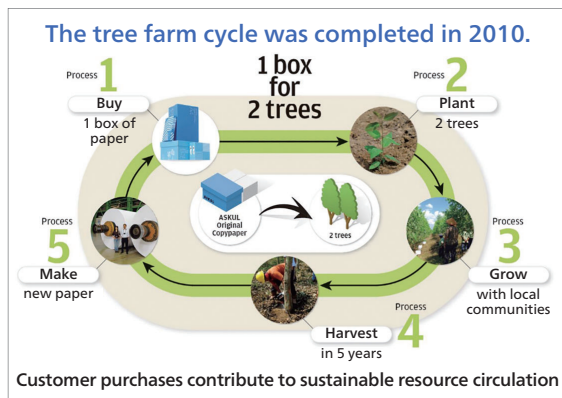
The Group is working on preventing and reducing the negative effects of business activities on ecosystems to conserve biodiversity.

### 1 Box for 2 Trees Afforestation Project

ASKUL Corporation



ASKUL Corporation, offering mail-order office supplies to businesses, is working on the 1 box for 2 trees project, which ensures that for each box of paper used, two trees—twice the number needed to make the paper—are planted. In the more than 10 years since its start in 2010, the project has planted 203.5 million trees.\*<sup>1</sup> The company has built a sustainable business model conscious of biodiversity through a cycle of manufacturing and selling copy paper made from its farmed trees and then replanting and growing replacement trees.



Overview of the 1 Box for 2 Trees Project

## Participating in Climate Change Initiatives



To solve the global issue of climate change, the Group has joined various climate change-related initiatives, recognizing the importance of collaboration in driving change.

### Membership status of SBG and major subsidiaries in climate change initiatives\*<sup>1</sup>

Support for the TCFD Recommendations and membership in the TCFD Consortium	SoftBank Corp. Z Holdings Corporation
Membership in the RE100	Z Holdings Corporation Arm Limited
Membership in the Japan Climate Initiative (JCI)	SoftBank Group Corp. SoftBank Corp. Z Holdings Corporation SB Energy Corp.

### Examples of Portfolio Companies that Contribute to Biodiversity Conservation

SBIA



Throughout its investment business, the Group has invested in many companies that contribute to biodiversity conservation.

	Production of drones that contribute to increased-agricultural productivity
	Production of versatile fungi-based proteins
	Production of cultured meat using animal cells

\*1 As of August 2022.

## Promotion of a Circular Economy

To ensure the efficient and effective use of our finite resources, the Group strives to reduce the environmental impact of our business activities by conserving resources, controlling waste generation, and promoting the reuse and recycling of products and materials. We also contribute to a circular economy through our e-commerce business, which promotes the reuse of products.

### Promotion of “3R” Initiative in Mobile Phone Services

SoftBank Corp.



In order to realize a circular economy, SoftBank Corp. is promoting the “3R” initiative (Reduce = reduce the volume of waste, Reuse = use repeatedly, Recycle = utilize once again as resources) in the mobile phone services.

- ✓ **Reduce** : Reduce paper consumption by digitizing instruction manuals and invoices, and using iPads in stores
- ✓ **Reuse** : Promote trade-in of mobile phones and tablets, some of which are for reuse in emerging countries
- ✓ **Recycle** : Collect and recycle used mobile phones handsets and battery packs

### E-commerce Services that Contribute a Circular Economy

Yahoo Japan Corporation



Yahoo Japan Corporation contributes to the realization of a circular economy by offering e-commerce services that spur the promotion of reuse of products.



#### YAHUOKU!

YAHUOKU! is one of the largest online auction and flea market services in Japan since 1999. The service promotes the reuse of unwanted items by those who need them, thereby helping to create a circular economy.



#### PayPay Flea Market

PayPay Flea Market is a service that specializes in flea market-type transactions, where individuals can easily trade goods at fixed price. In collaboration with YAHUOKU!, it aims for the further development of the business in sustainable secondary distribution.

### Business Tools Using Eco-Friendly Materials

SoftBank Corp.



SoftBank Corp. utilizes eco-friendly materials in its business tools.

**100% recyclable paper bags:** All of the paper bags used in sales and other activities are made from recyclable materials. In addition, the bags use no plastic at all, while they use the FSC®-certified paper\*1 and the vegetable printer ink that has a low environmental impact.



100% recyclable paper bags



Business cards made from kudzu

**Shopping bags made from biomass plastic:** SoftBank shops and Y!mobile shops are steadily replacing the plastic shopping bags to biomass-plastic bags, 80% of which are made from plant-derived raw materials.

**Business cards made from kudzu (Japanese arrowroot):** SoftBank Corp. distributes business cards partially made from kudzu to its employees. This reduces the amount of wood pulp used and helps reduce the impact of kudzu overgrowth on the landscape and ecosystem.

### Example of Portfolio Companies that Contribute to Promotion of a Circular Economy

SBIA



Through its investment business, the Group has invested in many companies that contribute to promotion of a circular economy.

	<p>Production of food containers made of new materials to replace plastic</p>
	<p>Development of a new material derived from microorganisms. Applications for this material span a wide range, including industrial, agricultural, and medical uses</p>
	<p>Reducing food loss by selling food that had not met certain specifications at a low cost</p>

\*1 Certification given to wood and paper products appropriately produced in line with standards established by the Forest Stewardship Council®.