# 6.3 Sustainable Operating Environment

GRI: 302-1, 302-3, 305-1, 305-2, 305-3, 305-4

2007	2011	2012	2013	2014	2015
<ul> <li>Issued "E.Sun Environmental Protection and Energy Saving White Paper"</li> </ul>	Established the Environmental Sustainability Group under the Corporate Social Responsibility Committee	<ul> <li>Formulated the "Human Rights and Environmental Sustainability Commitment," encouraging business partners to jointly respond and sign</li> </ul>	<ul> <li>Introduced ISO</li> <li>14001 Environmental</li> <li>Management System</li> </ul>	<ul> <li>Implemented ISO Energy Managem System and ISO 1 Greenhouse Gas</li> </ul>	entOrganizational Water4064Footprint Assessment
			First in Taiwan's financial holding industry	First in Taiw financial inde	
2016	2017	2018	2019		2020
• Established and announced "E.Sun Financial Holding's Guidelines for Supplier CSR Implementation" and "Supplier CSR Self-Assessment Form"	<ul> <li>Taiwan business locations achiev 100% certification rate in ISO 14001 and ISO 50001 audits</li> <li>First in Taiwan's financial industry</li> <li>All Taiwan and overseas busine locations achieved 100% certification rate in ISO 14064 and ISO 14046 audits</li> <li>First in Taiwan's financial industry</li> </ul>	Hope Building data centers obt. LEED Gold International Certific for green buildings First green data center in Taiwan's financial industri	ained Development Center Gold International Co Building First green trai Taiwan's finar • E.Sun Bank receives first National Corpora Awards for Non-Man	achieves LEED ertification for Green ining center in incial industry Gold Award in the ate Environmental infacturing Category	<ul> <li>E.Sun Bank wins the second National Corporate Environmental Awards for Non-Manufacturing Category, Honor Environmental Enterprise Award, and Green Action Award</li> <li>Only in the financial industry</li> <li>E.Sun Bank receives the National Sustainable Development Award</li> <li>Implements ISO 20400 Sustainable Procurement Standard</li> </ul>
2021	2022		2023		
<ul> <li>E.Sun Bank wins the third Natic Environmental Awards for Non- Category - Titan Award</li> <li>Establishes E.Sun's first zero-c</li> <li>Implemented ISO 46001 Water Efficiency Management System</li> <li>Completed transfer the first ren</li> </ul>	-Manufacturing arbon branch Resource Officially became First financ	ence-based targets n, Second in Asia, and Third lobal financial institutions a an RE100 member ial institution in Taiwan to be s a "low power consumption enterprise"	· Creating a comprehensive z	onmental Awards in the ilding has obtained thre Platinum for Operation Zero Energy, and LEED titution in North Asia ifications simultaneou	e Non- ee green hs and ) Zero Carbon to achieve usly ee

# 6.3.1 Sustainable Operating Environment

Disasters caused by climate change are sweeping the world, and how to control warming has become an important international issue. E.Sun has established specific goals, practices and plans for environmental protection and energy conservation, and regularly reports to high-level officials. Supervise reports and inspections, and actively promote energy-saving and carbon-reduction plans to reduce greenhouse gas emissions caused by energy use. Internally, we mainly promote environmental protection and energy-saving policies, promote environmental education, establish an environmental protection and energy-saving culture, and implement environmental protection and energy-saving measures. Externally, we cooperate with the annual DJSI, CDP and other international projects set carbon reduction, water reduction and waste reduction targets, and review the compliance status through annual third-party verification.

# Sustainable Operating Environment Targets

Based on the 2020 baseline, E.SUN aims to reduce its total carbon emissions by 42% by the year 2030

Based on the 2020 baseline. E.SUN aims to achieve 100% utilization of renewable energy for domestic locations by the year 2030

Based on the 2016 baseline, E.SUN aims to reduce its water usage for revenue generation by 30% by the year 2030

Based on the 2016 baseline, E.SUN aims to reduce its waste generation for revenue generation by 78% by the year 2030

## Carbon Reduction Measures

#### GRI: 302-1, 302-3, 305-1, 305-2, 305-3, 305-4

#### **Outstanding Achievement 1: Zero Carbon Zero Energy Green Building** - Headquarters Building

After more than 30 years of use, the E.SUN headquarters building underwent a major renovation in 2022. During the renovation, over 90% of green building materials were used, along with efficient electrical appliances and low-water consumption fixtures. The project also focused on indoor air quality, creating a well-lit and spacious environment. In addition, the building promoted clean energy by installing solar power equipment on the roof and utilizing renewable energy throughout the entire building. Charging stations were also installed in the underground parking lot, combining green electricity with green transportation. In 2023, the building achieved three green building certifications: the American LEED Platinum, Zero Energy, and Zero Carbon, making it the first financial institution in the world to receive these certifications for an existing building. By the end of 2023, 21 branches had obtained green building certifications, including 8 LEED Platinum, 6 LEED Gold, 3 EEWH Gold, and 7 EEWH Qualified. The Nanzih and Linyuan branches obtained LEED Platinum certification for their exceptional energy-saving achievements and were hailed as models of low-energy buildings worldwide. This case study was also featured in the 80th edition of the 2023 Journal of Building Engineering.

#### **Outstanding Achievement 2: Zero Carbon ATM Services**

In 2023, E.SUN launched its digital e-card and zero carbon credit card, and invested a significant amount of resources into the life cycle of ATMs. Through rigorous carbon footprint calculations and carbon offsetting, approximately 24 million customer transactions made via ATMs throughout the year were made zero-carbon. This makes E.SUN the first financial institution in Taiwan to create a comprehensive zero carbon ATM service, showcasing its strength and determination in the field of sustainable finance. This milestone not only opens a new era for the Taiwanese financial industry but also sets a new benchmark for the global banking sector.

#### **Outstanding Achievement 3: Bank-wide LED Lighting Replacement Project**

Through data analysis, E.SUN discovered that a significant number of repair cases were related to damaged light fixtures, with the number reaching thousands per year. As a result, we launched the "LED Lighting Replacement Project for All Branches by 2025" in the fourth guarter of 2023. It is estimated that this project will save 30,000 kWh of electricity per year, equivalent to 6% of the bank's annual electricity consumption.

Reduce total amount of carbon emissions by 12.6% The domestic branches have achieved a renewable energy utilization rate of 20%

2023 Outcome Reduce total amount of carbon

emissions by 18.5% The domestic branches have achieved a renewable energy utilization rate of 28%

Reduce total amount of carbon emissions by 42% The domestic branches have achieved a renewable energy utilization rate of 100%

2024 Target Reduce total amount of carbon emissions by 16.8% The domestic branches have achieved a renewable energy utilization rate of 30%

Note: In 2020, the carbon emissions for Scope 1& 2 amounted to 24,698 metric tons, serving as the baseline.



Building Resilience

#### **Carbon Reduction in 2023**

13,835,990 kWh=6,848.8 metric tons of CO<sub>2</sub>e

Used renewable energy -86.9%

#### 2020-2023 GHG Emissions

	2020	2021	2022	2023
Scope 1 (t-CO <sub>2</sub> e)	2,399	1,857	1,844	2,161
Scope 2 (t-CO <sub>2</sub> e)	22,299	22,105	20,294	17,959
Total emissions (t-CO <sub>2</sub> e)	24,698	23,962	22,138	20,120
Carbon emissions / revenue (t-CO <sub>2</sub> e/ NT\$M)	0.4390	0.4139	0.4039	0.3017

#### 2020-2023 Energy Consumption

	2020	2021	2022	2023
Power consumption (MWh)	43,507	44,767	41,383	49,074
Other energy usage (GJ)	27,124	17,290	25,323	13,068
Total energy usage (GJ)	183,749	178,451	174,302	189,739
Energy/revenue (GJ / million NTD)	3.27	3.08	3.18	2.84

Note: The energy types are mainly purchased electricity (non-renewable energy) for operational activities, with petroleum, diesel, liquefied natural gas and gas as other energy sources.

### Internal Carbon Pricing

To align with Taiwan's goal of achieving net-zero emissions by 2050, E.SUN is accelerating its efforts to promote energy conservation and carbon reduction. Starting in 2023, we are planning and implementing an internal carbon pricing mechanism within Scope 1 and Scope 2 emissions. The first step is to establish a carbon price, incorporating the concept of carbon cost into the cost-benefit analysis of energy conservation. Through greenhouse gas inventory analysis, we will assess the carbon emissions and carbon cost information of each department.

In 2024, we will implement internal carbon pricing in all domestic locations, integrating carbon emissions costs into daily operations. This aims to raise awareness among all departments about the need to consider carbon emissions as a cost, thereby guiding them to establish carbon management practices.

- The carbon price will be determined based on market trends, taking into consideration pricing mechanisms in the European Union, international average prices, Taiwan's projected prices and penalty pricing, as well as pricing models used by representative industries. Combining this with our carbon reduction cost per unit, the carbon price is set at USD 100 per ton of CO<sub>2</sub>e.
- We are continuously improving our infrastructure to establish a systematic carbon emissions database. This includes deploying a data collection pipeline for power information in buildings, as well as creating a consistent environment for electricity usage. These efforts aim to enhance our ability to monitor and manage carbon emissions effectively.
- By incorporating the carbon pricing concept and reevaluating the cost-benefit analysis
  of energy conservation and carbon reduction, we are able to reassess the payback
  period and enhance the replacement benefits. This allows us to shorten the time it takes
  to recover the initial investment, resulting in improved cost-effectiveness of our energysaving and carbon reduction initiatives.
- To cultivate a carbon cost management mindset in each department, we will implement carbon cost transparency through the use of "shadow price." Departments will be made aware of their estimated annual carbon costs through a billing system that reflects the carbon charges. This serves as a reminder for departments to budget for carbon costs in the following year.
- We will disclose the carbon reduction achievements of each department, highlighting that lower carbon emissions result in lower costs. This incentivizes each department to take action to reduce carbon costs and, subsequently, encourages behavior change among our staff. By emphasizing the relationship between carbon emissions and costs, we aim to foster a culture of proactive carbon footprint reduction throughout the organization.
- In the future, we will continuously adjust the carbon cost structure based on actual carbon reduction expenditures, domestic and international carbon pricing trends, and relevant carbon reduction regulations. By implementing a carbon cost management mechanism, we aim to accelerate our progress towards achieving net-zero emissions. This dynamic approach allows us to adapt our carbon pricing strategy in response to changing circumstances and optimize our carbon reduction efforts for maximum effectiveness.

### Water Usage Reduction

#### GRI:303-1,303-3

# Outstanding Achievement 1: Expanding the Implementation Scope of ISO 46001 Certification

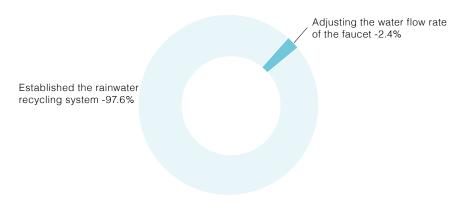
In 2021, E.SUN introduced the ISO 46001 Water Efficiency Management System and conducted a thorough review of water improvement measures across our branches. By 2022, we had increased the adoption rate to 25%. Moving forward, we will continue to expand the scope of our management and implement various measures to reduce water usage and wastewater. Additionally, we are committed to promoting correct water usage concepts, establishing good habits among our colleagues, and reducing unnecessary waste. Monthly analyses of water consumption will be conducted, along with self-checks and tracking of abnormal usage. We also encourage each branch to provide innovative ideas and showcase their achievements in water conservation.

# Outstanding Achievement 2: Implementation of Rainwater Harvesting System

E.SUN has installed rainwater harvesting systems at our main office buildings the Hope Garden Campus, the Dengfeng Building, and the 2nd Headquarters Building. These systems collect rainwater and surface runoff through a network of collection pipes. The harvested rainwater undergoes sedimentation and filtration before being utilized for landscape irrigation. By 2023, this initiative will result in a reduction of 9.286 megaliters of water usage. Additionally, we are replacing old water equipment and utilizing water-efficient appliances labeled with water-saving indicators.

#### **2023 Water Reduction Benefit**

### 9.514 million liters



#### **Outstanding Achievement 3: Introduction of Micro-Hydropower Turbine**

E.SUN conducts an annual ISO14046 water footprint assessment, which includes all relevant entities, to understand our water usage situation. In accordance with the ISO46001 Water Resources Management Policy, we take concrete measures to reduce water consumption and utilize water-saving equipment. In 2023, we introduced the "Micro-Hydropower Turbine" with a water-saving label. By harnessing the potential energy of water and converting it into electricity stored in batteries, we aim to save both water and electricity. Additionally, by adjusting the water flow rate of the faucets in our headquarters building, we estimate a water saving of 228 tons per year in 2023, achieving a water-saving rate of 36%.



Note: In 2020, water usage per unit revenue was 4.7097 metric tons/NT\$ million, and this is used as the baseline.

#### 2020-2023 Water usage

	2020	2021	2022	2023
Water (Tons)	264,917	238,715	248,326	242,972
Usage of water/revenue (Tons / NT\$M)	4.7097	4.1231	4.5310	3.6430

### Waste Reduction

#### GRI: 306-3

#### **Outstanding Achievement 1: Eco-friendly Envelope Plastic Film**

In 2021, E.SUN Bank made a significant change by replacing the non-recyclable BOPS (biaxially oriented polystyrene) window film on commonly used envelopes with PLA (polylactic acid) bioplastic. This transition earned official certification from the U.S. Department of Agriculture's Biobased program (USDA Biobased). The PLA used in these bioplastic films is derived from non-edible yam starch, and its production process significantly reduces carbon emissions. Using PLA does not result in significant greenhouse gas emissions, and it does not produce toxic substances when incinerated.

Currently in the trial phase, these environmentally friendly envelope films are estimated to reduce carbon emissions by 13.1 metric tons annually with E.SUN's monthly usage of approximately 1.563 million envelopes (equivalent to about 416.8 kilograms). E.SUN Bank actively selects eco-friendly materials, aiming to minimize environmental impact. Through the common item of envelopes, they hope to promote environmental awareness throughout society. With their corporate influence, they strive to contribute to a sustainable future with the spirit of "One love leads to more love," making every effort to create a more sustainable future.

#### **Outstanding Achievement 2: Cancel personal seat trash can**

At the headquarters of E.SUN Bank, personal trash bins have been eliminated as part of an effort to encourage colleagues to practice waste separation. Each day, the amount of waste is weighed and recorded. On a monthly basis, during environmental awareness days, the bank promotes the reduction of plastic usage and waste, as well as the adoption of a green lifestyle and green office practices. The bank encourages the avoidance of single-use products and aims to minimize waste, working towards a vision of an environmentally friendly environment.

#### **Outstanding Achievement 3: Creating an Eco-friendly Employee Cafeteria**

As a pioneer in the national financial industry, E.SUN FHC actively responds to the Taipei City Government's policy of "banning single-use and Styrofoam utensils." Starting from 2020, the entire company has implemented plastic reduction measures, and electronic posters have been placed at the entrances of our buildings and employee restaurants to promote the reduction of plastic bag usage. Additionally, reusable mugs replaced disposable cups at all events.

In response to the Green Living Initiative by the Environmental Protection Administration, E.SUN's headquarters and the 2nd headquarters building have established green employee restaurants. By replacing 10,000 disposable meal boxes and utensils with eco-friendly alternatives, the initiative has led to the reduction of approximately 600,000 paper containers, amounting to a total weight reduction of 16,320 kilograms. This practice not only protects the health of our employees but also demonstrates our commitment to waste reduction and environmental protection while creating a culture of healthy and environmentally-friendly dining.



Note: In 2016, waste per unit revenue was 13.39 kg/NT\$ million, and this is used as the baseline.

#### 2020-2023 Waste generation

	2020	2021	2022	2023
Waste disposed (tons)	370	488	489	518
Recycled / reused (tons)	224	210	203	174
Total waste (tons)	595	698	692	692
Waste / revenue (kg / NT\$ Million)	6.58	8.43	8.93	7.77

Note: The opening of the Kaohsiung flagship building in 2023 will lead to an increase in the overall waste volume.