2021 Environmental Sustainability Implementation Report

Environmental Policy

In order to meet the requirements of environmental management and recognize that environmental management is an indispensable factor for the sustainable operation of enterprises, the Company will be committed to improving education and training, enhancing employees' knowledge and awareness of environmental management, and establishing an environmental management system to provide clarity and comfort, safe working environment. Our environmental stewardship declaration is:

『Fulfilling obligations, High quality and environmental protection, Continuous improvement, and Customer satisfaction』

In order to meet the requirements of environmental management, we are committed to:

1. Understand the impact of sales and maintenance services on the environment, and formulate environmental goals and plans to continuously improve environmental performance.
2. Comply with the requirements of environmental protection laws and regulations, and formulate independent standards when technically and economically feasible.
3. Implement waste classification and recycling, and improve resource recycling and reuse.
4. Publicly promote our environmental management system, measures and performance to gain the trust of our employees, customers, owners, social groups, government agencies and stakeholders.

Water Resource Management

Continue to promote the saving of domestic water to employees, and vigorously promote the recycling and reuse of water resources and cooling water in production units. In the management of discharge water quality, in addition to reducing the water consumption during aircraft maintenance and reducing the domestic water consumption of employees, each plant has set up a waste water treatment plant, and qualified full-time personnel are responsible for the operation and maintenance of waste and sewage treatment equipment, and entrust the testing approved by the Environmental Protection Administration. The organization uses raw wastewater and discharge water for testing, effectively supervises the control of discharge water discharge, and makes the treatment equipment operate normally. Wastewater treatment plants in each plant area have obtained discharge permits from local competent authorities to meet regulatory requirements.

Air Pollution Control

Reduce the use of organic solvents, chemical substances and dust pollution in aircraft maintenance procedures, set up air pollution control equipment, achieve effective control of environmental pollution factors, reduce pollutant emissions, and set up air pollution control personnel responsible for air pollution management.

Waste Management

In line with the entrepreneurial spirit of “cherishing natural resources”, combining the core business of environmental protection with the trust of customers, jointly creating the concepts of “sustainable operation” and “giving back to the society”, continuing to implement waste reduction work, and allocate qualified waste professionals carry out waste management work, and consider factors such as the interaction between industry characteristics and the environment of the entire company. In the spirit of “cradle to grave”, in the process of aircraft maintenance, from the procurement of raw materials to the final aircraft delivery, business waste is eliminated. All can improve the management, removal, treatment and reuse, and effectively prevent the negative impact on the environment.

Climate Change Assessment and Response Measures and Financial Impact Analysis

The Company has been evaluating the potential risks and opportunities that climate change could bring to the Company and had considered such factors when making our operation strategies and relevant decisions. We have established climate change risk management procedure and mechanism by incorporating overall risk management policies and actively promoting eco-friendly and energy-conserving measures. We are devoted to reducing greenhouse gas emission and promoting eco-friendly services to mitigate the impact that climate change had on our operation. We keep ourselves informed with international policies related to climate change to improve our eco-friendly practices. We have been disclosing information related climate change and improving relevant strategies and management measures in response to changes in the surroundings. The core of our reactive measures to climate change is to figure out risk management strategies according to our analysis on the current situation and to evaluate the cost of management and its impact on our finance accordingly. With the above mentioned information, we could effectively improve our governance measures related to climate change and systematically evaluate our finance to reduce risk and enhance business: Our measures are as below:

Aspect	Type of risk	Type of opportunity	Response measures
Legal aspect	EPA has enacted “Greenhouse Gas Reduction and Management Act”; companies are required to conduct measures to reduce greenhouse emission following a designated schedule. In the future, companies have to pay for the emission they caused to fulfill the environmental justice principle. We will make plans for reducing greenhouse gas emission	To practice environmental justice by charging greenhouse gas emitters	The Company has established a “legal regulation detection system” to reduce the risks of violating the laws. We have conducted inspection on and the reduction of greenhouse emission before relevant laws was enacted.
Practical aspect	Heavy rainfall has caused the factory to be flooded, which caused financial losses and inability to operate normally	We follow the government’s policies and apply for subsidies of replacing old equipment	Each of our factories is equipped with an emergency generator to lower the impact of power outage on our productivity.
	The cost of maintenance for energy efficient measures	To develop or introduce more energy efficient techniques and relevant products	To devote in energy efficient maintenance techniques and low carbon emission materials.
Social economic aspect	Social economic aspect	The increase in energy consumption caused the cost and carbon emission to increase	To adopt new low-carbon and energy efficient equipment

Greenhouse Gas Management

In order to meet the requirements of customers and clients and respond to government laws and regulations as soon as possible, the Company has introduced a greenhouse gas inventory system. In order to obtain the recognition of the expected users, all inventory standards are implemented in accordance with international standards. The greenhouse gas inventory time has been from Jan. 1, 2021 to Dec. 31, 2021.

According to the statistics of the inventory and calculation results, the total greenhouse gas emissions in 2020 are 2,397.93 metric tons of carbon dioxide equivalents (CO2e). In terms of the contribution ratio of emission sources, as shown in Figure 1, purchased electricity is the main source of contribution, accounting for 98% of the total emissions. In 2021, the total amount of greenhouse gas emissions was 2,353.33 metric tons of carbon dioxide equivalents (CO2e), and purchased electricity was the main source of contribution, accounting for 97% of the total emissions. The contribution ratio of emission sources is shown in Figure 2. Therefore, implementing energy saving and improving equipment efficiency are the main directions for the Company to achieve the goal of reducing greenhouse gas emissions, and at the same time, it can also reduce long-term operating costs.

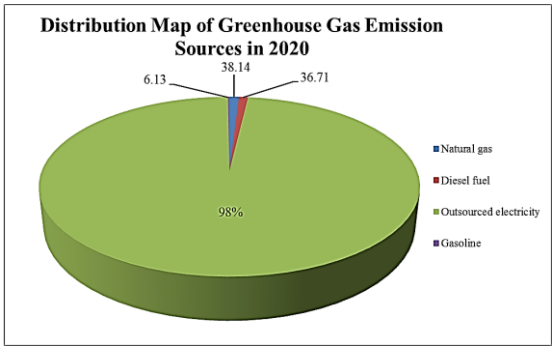

Figure 1. Distribution of greenhouse gas emission sources in 2020

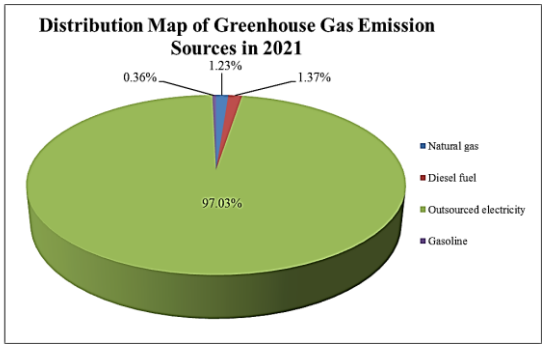

Figure 2. Distribution of greenhouse gas emission sources in 2021

Energy Saving and Carbon Reduction Measures

In order to mitigate the environmental impact caused by greenhouse gas emissions from the Company's operations, the Company continues to promote energy conservation and carbon reduction strategies to effectively reduce greenhouse gas emissions. The energy conservation and carbon reduction measures are summarized as follows:

1. Post a "Please turn off the light when you leave" sign.
2. The security guards patrol the factory at any time and turn off unnecessary lights.
3. Replace T5 energy saving lamps with T8 lamps in each factory area.
4. Replacement of LED lamps in the office area.
5. Reduce boiler natural gas usage.
6. Dosing the cooling water system.
7. Replacement of cooling material of air conditioning water tower.
8. The factory street lights adjust the switching time according to seasonal changes.
9. The ice water host adjusts the number of operating units according to seasonal changes.
10. The temperature setting of the ice water main unit is increased by 2℃.
11. The air conditioner in the public area of the factory is set to the energy saving mode.
12. Regularly clean the water tank of the air-conditioning water tower.
13. The air conditioner in the office area is turned on from 0700 to 1800, and it is closed at other times and holidays.

14. Year by year, the old air conditioners are replaced with energy saving models.

15. Set up solar green power generation equipment.

Display of results

The use of energy not only consumes the earth's resources, but also produces carbon dioxide and causes the greenhouse effect. In order to effectively reduce the environmental impact of the greenhouse effect, reducing energy consumption is the key issue of the company's sustainable operation. At present, energy conservation is mainly aimed at the reduction of electricity, water, waste and natural gas. The implementation results of the past years are shown in Table 1, and the promotion and implementation of energy conservation management plans in offices, public areas and maintenance lines, supplemented by publicity activities and education and training to improve colleagues' concepts and habits in energy saving and greenhouse gas reduction. Although the Company's business volume has grown significantly in recent years, the electricity consumption, water consumption and waste generation are still showing a stable trend (as shown in Figure 3 and Figure 4). The Company will continue to promote energy conservation and carbon reduction measures.

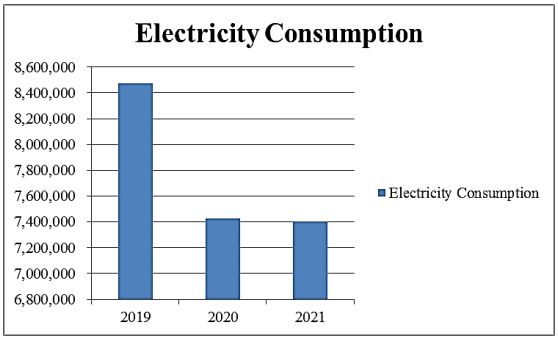

Figure 3. Distribution of electricity consumption over the years

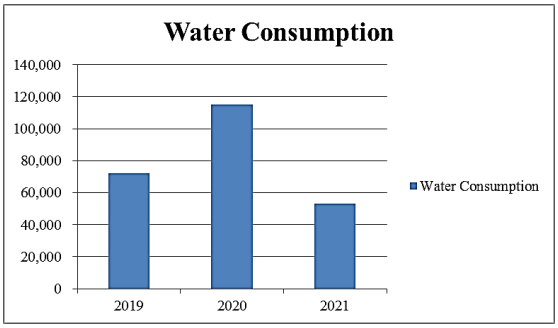

Figure 4. Distribution of water consumption over the years

Table 1. Greenhouse gas emissions

Year / Items	2019 actual (metric tons)	2020 actual (metric tons)	2021 actual (metric tons)	2022 goals (metric tons)
Greenhouse Gas Emissions	4,515.78	2,397.93	2,353.33	2,300.00
Water consumption	72,258	115,272	53,252	50,000
Total weight of waste	115.30	110.27	116.27	100.00

In recent years, climate change and extreme climate phenomena caused by man-made greenhouse gases have become more and more prominent, making the issue of climate change management more and more attention from all walks of life. The impact of climate change brings many risks and challenges to business operations. The Company is optimistic about the development of renewable energy, and in line with the government's green energy policy, actively invests in solar power generation to implement green energy and environmental protection policies. The Company has built solar power generation systems on the hangar roofs of the Aircraft Maintenance Division and Engine & Component Shops Division to reduce pollution and reduce carbon emissions. In 2020, the power generation amounted to 534,457 kilowatt-hours, saving 275,003 kilograms of carbon emissions. In 2021, the power generation amounted to 552,142 kilowatt-hours, saving 277,175 kilograms of carbon emissions. Please refer to Table 2 and Figure 5 for the benefits of the solar power system.

Table 2. Solar power generation

Year / Items	2019	2020	2021
Power generation (kwh)	1,354	534,457	552,142
Energy saving and carbon reduction (kg)	762	275,003	277,175

Figure 5. Building solar panels