Gunze Sustainable Letter vol.12



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In May 2022, Gunze announced its medium-term management plan, "VISION 2030 Stage 1," declaring that it will contribute to society and achieve sustainable growth for Gunze through sustainable management that balances "Social value" and "Economic value".

This newsletter provides information on our sustainable management initiatives. In this 12th issue, we present our response to climate change and the reduction of CO2 emissions, which is one of our key sustainable management initiatives.

Environmental management practices, CO2 reduction approaches

In response to striving to conserve energy, generate energy, and use renewable energy with the goal of reducing total Scope 1 and Scope 2 CO2 emissions by at least 35% (compared to the 2013 benchmark) by 2030. In addition, in terms of energy innovation, the company is promoting environmentally responsible business operations by advancing the application of new technologies in the area of effective energy use. In terms of Scope 3 emissions reduction, as part of our efforts to realize a resource recycling society, we will first advance efforts to recycle waste into resources at all domestic business sites, led by the Moriyama Circular Factory, to reduce waste throughout the Group. The company is also strengthening the horizontal application of these efforts to the Apparel Company, for which the weight of Scope 3 emissions is high. Finally, from a sustainable procurement perspective, we will promote the use of recycled, biomass and other environmentally friendly raw materials. These efforts will serve to reduce number of raw materials required in our production processes, thereby reducing CO2 emissions through the use of fewer raw materials. Through these resource recycling and sustainable sourcing initiatives, we will reduce Scope 3 emissions.

In terms of reducing Scope 1 and 2 emissions, Gunze is going beyond promoting the conventional approach of energy conservation, energy generation, and renewable energy to address the skyrocketing energy costs of recent years. For example, we will test and introduce new technologies that can effectively utilize thermal energy, including designing more efficient heating systems and recovering heat. In addition, the company is investigating and preparing for the use of next-generation energy sources that are expected to replace fossil fuels in the near future. From the perspective of Scope 3 emissions reduction, in addition to the efforts being made by the Plastic Film Company to recycle plastic resources, we will work to create a system for effective waste utilization throughout the Group in three stages. In addition, the company is focusing its energies on creating products that contribute to improving the environment, including developing products that leverage the strengths of Gunze's greening business.



Feb. 26, 2025 Gunze Limited



First office building in Japan to be certified as a ZEB using a gas heat pump

Gunze Konan Plant (Konan City, Aichi Prefecture) has started full operation of its ZEB(Zero Energy Building)*1-certified office building, which is awarded to buildings that have reduced energy consumption by 100% or more by 2023. This new office combines energy conservation through high-efficiency air conditioning, insulation, and LED lighting fixtures with solar power generation to achieve a 102% reduction in primary energy consumption compared to conventional buildings, earning the highest rating of 5 stars from the Building Energy Performance Labeling System (BELS)*2. And it's the first ZEB-certified office in Japan to use gas heat pumps*3. The office reflects Gunze's historical building design with windows and white frames, while the use of all-glass walls expresses Gunze's historical legacy through a fusion of old and new design elements, such as flexible ideas for business growth. The office is also employee-friendly, with a cafeteria that doubles as a refreshment area for casual meetings, gender-neutral restrooms, and other amenities. *1. About "ZEB"

Net Zero Energy Buildings (ZEB) aim for a comfortable indoor environment while reducing annual primary energy consumption to zero. They achieve this by cutting energy use by over 50% (excluding energy produced) and offsetting 100% (including energy produced) through conservation and generation. (Source: Ministry of Environment ZEB PORTAL)

*2. About "BELS"

BELS is a third-party energy efficiency certification system by the Japan Housing Performance Evaluation Association. The Konan Plant Office Building received the highest five-star rating. (Source: Japan Housing Performance Evaluation and Indication Association) *3. The first ZEB-certified office in Japan using gas heat pumps

Certified by The Japan Gas Association.



Konan ZEB-certified office building

Construction of ZEB-certified office building

The office building has achieved both a high level of design and ZEB certification. At the design stage, we thought it would be impossible to reduce energy consumption by more than 100%, but by using gas heat pumps, we were able to achieve ZEB certification, and I am grateful for the ingenuity and efforts of everyone involved.

Through this ZEB office, we hope to raise awareness of carbon neutrality among our employees, as well as communicate Gunze's commitment to the environment to our customers and the local community.

In addition, with the goal of creating a workplace that respects diversity and where employees can work comfortably, we hope to use the establishment of the office building as an opportunity to increase employee motivation, appeal to customers, and lead to the sustainable growth of Gunze.



Mr. Nishiura, Konan Plant manager



Reduce CO2 Emissions through the Use of Renewable Energy

In addition to reducing the environmental impact of its operations, Gunze is vigorously working to reduce CO2 emissions by expanding the use of renewable energy. The renewable energy currently being used is solar power generation. At our sites in Motomiya City, Fukushima, Konan City, Aichi, and Shimotsuke City, Tochigi, the company has installed solar power generation systems that use the FIT% to generate "environmental value" = non-fossil certificates with tracking%, which we then buy back and use to decarbonize our own operations. In addition, at the Circular Factory in Moriyama City, Shiga Prefecture, scheduled for completion in 2023, solar panels have been installed on the entire roof of the building, and the electricity generated will be used as part of the plant's power supply. As a result of these facilities and other measures, the current percentage of renewable energy used by our company is approximately 5% in terms of domestic Scope 1 and 2.

In addition, to further improve this weight, the company plans to introduce solar power generation equipment at the new plant under construction in Konan City, Aichi, and the new plant in Ayabe City, Kyoto. We will also continue to consider introducing new technologies for solar panels (such as making them lighter) at other sites where it is difficult to install them.

FIT: The acronym for Feed-in Tariff for Renewable Energy. Under this system, electricity companies purchase electricity generated from renewable energy sources (solar, wind, hydro, geothermal, biomass, etc.) at a fixed price set by the government for a certain period of time.

Non-fossil certificates with tracking: The value of electricity produced from renewable energy sources is securitized. The certificates are given a unique number that allows them to be tracked as they are traded and used, preventing double counting.



Fukushima Solar Power Station

Aiming for carbon neutrality

In addition, we are focusing on energy innovation initiatives to achieve decarbonization in the future, and we are gathering information on cutting-edge technologies such as methanization to harness new energy sources such as hydrogen.

At present, the technology in this area is not yet mature, so we are promoting thorough energy conservation in preparation for

future energy innovations.

As one of these initiatives, we are also focusing on improving production efficiency from a "reduce" perspective, as reducing the amount of resources used in production also leads

to a reduction in energy consumption.

We aim to achieve carbon neutrality by maximizing our own efforts where possible, and seeking outside help where we lack it.



Mr. Ishi (left) and Mr. Benitani, Technology & Development Department

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