

Initiatives to Reduce Environmental Impact

The Nichirei Group formulated the Nichirei Group Environmental Policy with a focus on three priority issues: prevention of global warming, promotion of sustainable recycling, and living in harmony with nature.

Since the Group’s activities span the entire supply chain—food factories, logistics centers, and other worksites—it must play a part in the environmental initiatives and activities of both customers and business partners.

The Group is aware of the substantial impact that climate change is having on its business, as its support of food-related infrastructure depends on natural ecosystems for raw materials. Accordingly, the Group and its business partners undertake the following:

- Use energy efficiently in the production of food products
- Reduce greenhouse gas emissions by using more efficient temperature-controlled storage and transportation
- Reduce climate load throughout the supply chain by promoting the use of renewable energy

Nichirei Group Environmental Policy and Nichirei Group Bio-diversity Policy

<https://www.nichirei.co.jp/english/csr/environment/concept.html>

Environmental management system

<https://www.nichirei.co.jp/english/csr/environment/system.html>

Long-term Environmental Goals and Low-carbon Policies

Nichirei Group Materiality ▶ Pages 12–13 | Addressing Climate Change (TCFD) ▶ Pages 58–61

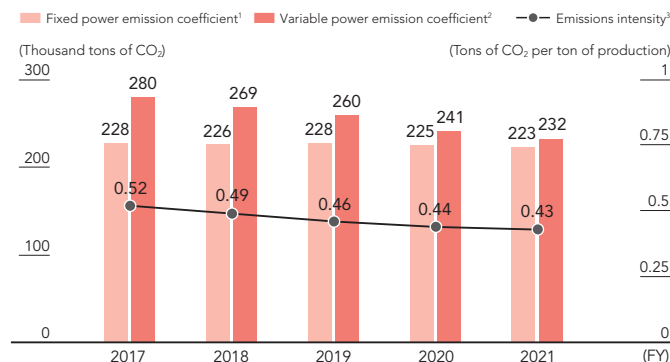
We will implement low-carbon policies in response to one of our material matters and in pursuit of our long-term environmental goals. We will actively implement the following three measures during the 10 years from 2021 through 2030.

Having endorsed the TCFD recommendations, the Nichirei Group is promoting the following low-carbon policies:

Pillar of low-carbon policy	Overview	Target scope
1 The establishment of long-term CO ₂ reduction goals	• 50%* reduction in CO ₂ emissions (compared with FY2016) in Japan, Scope 1 and 2 in 2030	Japan Scope 1 and 2
2 The promotion of CO ₂ reduction countermeasures overseas	• Initiate data collection and other efforts at overseas worksites • Review and promote CO ₂ reduction countermeasures at overseas worksites	Overseas Scope 1 and 2
3 The promotion of CO ₂ reduction countermeasures within Scope 3	• Promote data collection and other efforts within Scope 3 • Review and promote CO ₂ reduction countermeasures within Scope 3	Scope 3

* In June 2021, the target was revised upward from 30% to 50%.

Nichirei Group CO₂ Emissions



Notes:

1. Fixed power emission coefficient: The CO₂ emission intensity unit of 0.412 [t-CO₂/MWh] announced by the Federation of Electric Power Companies of Japan in FY2010, used nationwide.
2. Variable power emission coefficient: Power conversion coefficient used by power companies in each fiscal year utilized at each worksite.
3. Scope of power emission intensity: Nichirei Foods (Nichirei Foods-operated factories and affiliated factories in Japan) and Nichirei Fresh (affiliated factories in Japan).
Excluding the following factories: Nichirei Foods: Nichirei Ice Inc.; Nichirei Fresh: Nichirei Fresh Farm Inc., Fresh Chicken Karumai Inc., FRESH MEAT SAKUDAIRA Inc.

Renewable Energy

■Purchase of Green Energy

Since 2007, the Nichirei Group has been purchasing and stockpiling Renewable Energy Certificates (RECs)* every year for the purpose of promoting the use of renewable energy. As a result, in FY2021, the head office building (Nichirei Higashi Ginza Bldg.; tenants that are part of the Nichirei Group) shifted to renewable energy, making use of RECs, for all of its power usage.

In addition, since March 2020, Nichirei Foods has purchased 10 GWh worth of RECs per year to cover all electricity used in production lines for *Honkaku-Itame Cha-Han* (fried rice). It is also making the shift to renewable energy.

* Green power is power generated from renewable energy sources, such as biomass, solar and wind. The CO₂ emission reductions achieved through the use of power generated from renewable energy are traded in the form of RECs.



■Utilizing Electricity Generated from Solar Power

The Nichirei Group is working to reduce CO₂ emissions by installing solar power generation equipment on the premises of food factories and on the rooftops of refrigerated logistics warehouses.



Solar Power Generation and CO₂ Reduction

	Power generation	CO ₂ reduction
FY2019	1,444 MWh	765 t
FY2020	2,068 MWh	1,003 t
FY2021	2,149 MWh	986 t

Chlorofluorocarbon (CFC) Initiatives

Nichirei Group Materiality ▶ Pages 12-13

■Switching to Natural Refrigerants

The Nichirei Group is adopting natural refrigerants at newly constructed or expanded food factories and refrigerated warehouses. We are also systematically replacing equipment that uses CFC refrigerants with equipment that uses natural refrigerants.

By 2030, we will have switched to natural refrigerants for 75% of equipment used by Nichirei Logistics Group (based on tons of equipment excluding leased equipment), including overseas facilities, and 100% of the freezers used at Nichirei Foods' domestic food factories and investee factories.



■Initiatives to Prevent Refrigerant Leaks

In 2013, Nichirei Logistics Group introduced highly sensitive detectors (with more than 10 times the accuracy of previous devices) capable of 24-hour measurement at all domestic facilities in order to reduce refrigerant leakage from existing refrigerators.

Regular inspections also lead to further leakage reductions.

In September 2019, we received the Special Review Committee Award at the 22nd Protect the Ozone Layer, Prevent Global Warming Awards organized by Nikkan Kogyo Shimbun, Ltd. (THE DAILY INDUSTRIAL NEWS). The award was in recognition of our total support service for reducing CO₂ emissions utilizing our proprietary refrigerant leak prediction and diagnostic system.



Change of Fuel Used in Manufacturing Equipment

■Switching Boiler Fuels

Manufacturing at the food factories of Nichirei Foods entails a variety of processes, including frying and baking. We are systematically switching from kerosene and heavy oil to city gas and propane gas, which produce fewer CO₂ emissions, in the boilers that create the heat energy used in manufacturing.

