

Carbon Reduction Plan

Supplier name:Nipro Diagnostics UK Ltd.....

Publication date: ...November 2024.....

Commitment to achieving Net Zero

Nipro Medical Group Limited is committed to achieving Net Zero emissions by **2045**.

Sustainability of Nipro

Basic attitude
The Nipro Group is working to promote sustainability management to resolve various social issues through business.



Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2021

Additional Details relating to the Baseline Emissions calculations.

Emissions are calculated as CO₂ (except for HFCs, which are calculated as CO₂eq).

Baseline year emissions:

EMISSIONS	TOTAL (tCO₂e)
Scope 1	161,887 t-CO₂
Scope 2	377,519 t-CO₂
Scope 3 (Included Sources)	3,448,347 t-CO₂
Total Emissions	3,987,753 t-CO₂

Current Emissions Reporting

Reporting Year: 2022	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	173,753 t-CO ₂
Scope 2	344,594 t-CO ₂
Scope 3 (Included Sources)	3,594,604 t-CO ₂
Total Emissions	4,112,951 t-CO₂

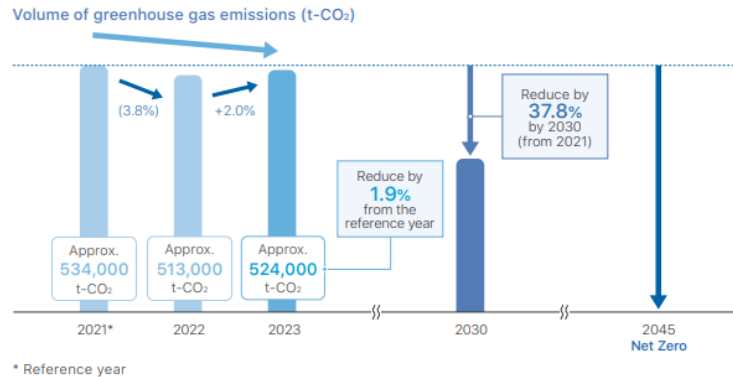
Emissions are calculated as CO₂ (except for HFCs, which are calculated as CO₂eq).

Current Emissions Reporting

Reporting Year: 2023	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	189,940 t-CO ₂
Scope 2	399,969 t-CO ₂
Scope 3 (Included Sources)	3,667,964 t-CO ₂
Non-fossil Certificate	-65,100 t-CO ₂
Total Emissions	4,192,773 t-CO₂

Emissions are calculated as CO₂ (except for HFCs, which are calculated as CO₂eq).

Due to the start of the operation of new facilities and increased production total emissions in 2023 were 4,192,773 t-CO₂ which increased 2.0% from the previous year. We aim to reduce more by purchasing more renewable energy and the application of a Non-Fossil Certificate next year.



Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

As an interim target toward the 2045 net-zero goal, the project aims for a 42% reduction in Scope 1 and Scope 2 emissions, and a 25% reduction in Scope 3 from the 2025 level by 2035. Based on the SBTi definition of "reduction of 4.2% or more per year" and the Nipro Group's annual greenhouse gas reductions after 2021, the base year, the company aims to achieve net zero emissions by 2045.

Scope 2 accounts for 11% of the Nipro Group's total GHG emissions, and we will reduce GHG emissions from Scope 2 (electricity-derived).

Carbon Reduction Projects

For Scope 1, we will introduce environmentally friendly equipment when replacing manufacturing facilities at factories and switch to a total oxygen combustion method for glass container manufacturing, which emits less GHG. Other initiatives include the installation of photovoltaic panels and the use of solar power generation systems. Other initiatives include the installation of solar panels and the use of biomass boilers to generate steam.

Task: certificates equivalent to 4.2% of annual greenhouse gas emissions (relative to FY2021).

Projection based on current electricity demand

Target year of implementation: Implement every year as long as non-fossil certificate purchases are possible.

Scope of coverage : Reduction of Scope 2 (electricity derived) GHG emissions

We also aim to lower our Scope 3 emissions by working with our suppliers, partners and supply chain providers, to ensure we reach net zero by 2045.

Cases of sustainability-related initiatives

Case 1 CO₂-free electricity at Kondo Plant



At the Kondo Plant belonging to Nipro Medical Industries Ltd. (Japan), private power generation has been in operation using solar panels since FY2016. Furthermore, all electricity used in the plant has been renewable energy-based since April 2021. This is the first plant where 100% renewable energy-based electricity generation was achieved among all business offices and production bases of the Nipro Group.

▶ GHG emission reduction effect:
Down **4,068** t-CO₂
(As of end-March, 2022)



Kondo Plant

Case 2**Introduction of biomass boiler through public-private collaboration**

At the Odate Plant belonging to Nipro Pharma (Japan), a biomass boiler has been in operation since FY2011. Accordingly, power is generated by a turbine using biomass instead of fossil fuels. The steam produced by the biomass boiler is distributed to the plant 24 hours a day and 80% of it is used for air-conditioning in the plant (using steam to heat the air cooled for humidity adjustment). It is also used to produce water for sterilization of products and manufacturing processes, leading to the reduction of GHG emissions. This project is a public-private collaboration between Nipro Pharma and Odate

City for processing and distributing wood biomass using waste wood. Nipro Pharma thus contributes to building a sustainable and communal society by participating in the project.

▶ GHG emission reduction effect:

Down **8,324** t-CO₂

(LNG conversion from the result as of
end- March, 2022)



Biomass boiler at Odate Plant

Case 3

Opening of dialysis centers in emerging countries



We have opened dialysis clinics in suburban areas for patients who live far from the city, particularly in South and Central America and emerging countries, so that dialysis therapy is conveniently provided to everyone. We have also opened dialysis centers in cities in Southeast Asia and Africa to provide high-quality treatment. We aim to keep introducing our dialysis centers in emerging countries, providing high-quality products and treatment environments, thus contributing to community medicine.



Dialysis center opened in Thailand

Nipro Shangai and Nipro Thailand Sustainability Initiatives and Environmental Measures

2024 Corporate Environment Performance Objectives and GHG Emissions by Plant enclosed below.

2024 Corporate Environmental Process Performance Objectives and Indicators Table

Number: SHA EMS05-243

Environmental Objective	Assigned Department/Person	Decomposed Objective	Completion Date	Specific Measures
1. Zero Fire Accidents 2. Compliant Emissions of Exhaust Gas and 3. Compliant Discharge of Industrial and Domestic Wastewater 4. Compliant Noise Control, daytime noise limit at the factory boundary is < 60dB, nighttime <50dB; 5. 100% Recycling Rate of Hazardous Solid Waste, 6. Energy Conservation and Consumption Reduction	Quality Assurance Department	1. Achieve 100% Centralized Collection and Transfer of Hazardous Solid Waste to Storage Warehouse	Yearly	1. Transfer hazardous waste to the General Affairs Department on a monthly basis; 2. Conduct monthly inspections and oversight of hazardous waste transfers.
		2. Continuously Identify Environmental Factors	Yearly	1. Promptly identify environmental factors of new equipment upon commissioning.
		3. Implement Fire Safety Measures to Ensure Fire Safety	Yearly	1. Participate in at least 1 fire drill organized by the company annually, if circumstances permit, 2. Monthly inspect fire safety facilities within the department to ensure they are in good working condition.
		4. Maintain 100% Document Control Rate	Yearly	1. Obtain review and approval of documents prior to issuance. 2. Promptly retrieve outdated documents to prevent concurrent use of old and new versions.
	General Affairs Department	1. Timely Collection of National Compliance Obligations	Yearly	1. The General Affairs Department shall promptly liaise with Environmental Protection Authorities to gather compliance obligations.
		2. Prompt Validation of Newly Collected National Compliance Obligations	Yearly	1. The General Affairs Department shall promptly validate newly issued or revised compliance obligations, promptly incorporate those applicable to the company into the "Compliance Obligations Register", and promptly disseminate and implement them.
		3. No complaints of environmental pollution in the community	Yearly	1. The General Affairs Department shall maintain regular contact with the Community Affairs Office to gather feedback on the company's environmental impact within the community, and promptly communicate and address any environmental concerns that arise.
		4. Continuously Identify Environmental Factors	Yearly	1. When introducing newly acquired production equipment into operation, the environmental aspects associated with the new equipment shall be promptly identified.
		5. Implement Fire Safety Measures to Ensure Fire Safety	Yearly	1. Organize at least one fire drill annually for the company, 2. Conduct monthly inspections to ensure the integrity and functionality of fire safety equipment.
		6. Centralized Collection of Hazardous Solid Waste to Ensure 100% Recycling	Yearly	1. Receive, store, register, and transfer hazardous waste generated by the company; 2. Conduct monthly inspections and supervise the storage conditions of hazardous waste.
		7. 100% Completion Rate of Environmental Protection Education and Training Programs	Yearly	1. Prior preparation should be undertaken for organizing planned environmental protection training programs. 2. For temporarily added training programs (such as new employee orientation), environmental protection training materials should be prepared to ensure the effectiveness of environmental training.
8. Ensure Smooth Communication with External and Internal Stakeholders		Yearly	1. The General Affairs Department frequently communicates with Environmental Protection Bureaus, Environmental Monitoring Team, Community Affairs Office, and Subdistrict Office. 2. Internal communication is conducted via the internet and email to ensure that employees are kept informed of environmental situations in a timely manner.	
9. Conduct Regular Inspections of Fire Safety Equipment in the Company		Yearly	1. The General Affairs Department conducts monthly inspections to ensure the integrity and functionality of fire safety equipment. 2. Participates in the company's annual fire drills.	
10. Monitor Compliance of Industrial and Domestic Wastewater Discharge with Standards		Yearly	1. The General Affairs Department oversees and controls domestic sewage, conducting daily routine inspections of wastewater treatment facilities. 2. Monitor all departments to ensure that no production sewage or waste liquids are discharged into sewage pipelines.	
Production Management Department	11. Ensure 100% Controlled Management of Hazardous Solid Waste Storage Facilities	Yearly	1. The General Affairs Department manages and inspects the operation of the hazardous waste warehouse. 2. Conducts monthly quantification of hazardous waste.	
	1. Achieve 100% Centralized Collection and Transfer of Hazardous Solid Waste to Storage Warehouse	Yearly	1. Transfer hazardous waste to the General Affairs Department on a monthly basis; 2. Conduct monthly inspections and oversight of hazardous waste transfers.	
	2. Continuously Identify Environmental Factors	Yearly	1. When introducing new equipment for use within the department, it is necessary to promptly identify the environmental factors associated with the new equipment.	
	3. Implement Fire Safety Measures to Ensure Fire Safety	Yearly	1. Participate in at least 1 fire drill organized by the company annually, if circumstances permit, 2. Monthly inspect fire safety facilities within the department to ensure they are in good working condition.	
Manufacturing Department	4. Ensure 100% influence, communication, and coordination with environmental stakeholders	Yearly	1. The Procurement Department promptly communicates the company's environmental policy, objectives, and goals to new suppliers, and enters into environmental agreements with them.	
	1. Achieve 100% Centralized Collection and Transfer of Hazardous Solid Waste to Storage Warehouse	Yearly	1. Hand over waste generated during production processes to the General Affairs Department, and prior to transfer, ensure hazardous waste is properly stored and registered; 2. Conduct monthly inspections and supervision of hazardous waste transfers.	
	2. Continuously Identify Environmental Factors	Yearly	1. When introducing new products or equipment for use, it is necessary to promptly identify the environmental factors associated with the new products and equipment.	
	3. Implement Fire Safety Measures to Ensure Fire Safety	Yearly	1. Participate in the fire drill organized by the company annually, 2. Monthly inspect fire safety facilities within the department to ensure they are in good working condition.	
	4. Control production noise emissions to meet the standards, daytime noise limit at the factory boundary is < 60dB, nighttime < 50dB;	Yearly	1. Conduct routine inspections and keep records of the operation of noise control equipment.	
	5. Energy Consumption Objective: Electricity: < 650 kWh per RMB 10,000 of production value;	Yearly	1. Enhance control over energy consumption by implementing rational scheduling of work activities. 2. Ensure that lights and non-essential equipment are turned off during breaks and lunch hours (where applicable).	
	6. Environmental protection equipment availability rate of > 98%	Yearly	1. Maintain environmental protection equipment through daily routine inspections and keep records. 2. Timely replace the filter materials used in environmental protection equipment and maintain records of these replacements.	
	7. 100% control over exhaust gas emission devices	Yearly	1. Conduct daily inspections of VOC (Volatile Organic Compound) emission devices to ensure their proper functioning. 2. Perform regular patrol inspections of VOC devices and maintain detailed records of these inspections.	
8. Compliant Emissions of Exhaust Gas and Dust	Yearly	1. Promptly initiate production suspension in response to abnormal exhaust gas or dust emissions; 2. Regularly inspect the operational status of production equipment and ensure that any identified abnormalities are promptly repaired.		

Nipro Shanghai Plant – GHG emissions in 2023: 17,474t-CO2.

Nipro Thailand Plant – GHG emissions in 2023 and 2024:

2023	2024	Unit
1,137.28	1,119.97	t/m

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard⁴ and uses the appropriate [Government emission conversion factors for greenhouse gas company reporting](#)⁵.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard⁶.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:

.....Matthew Thornton.....

Date:14/11//24.....