# Mid & Long term Environment Plan

Daeshin

16, Haean-ro 397beon-gil, Danwon-gu, Ansan-si, Gyeonggi-do, Republic of Korea

# CONTENT.

Facility Information	03	
Environment strategy	06	
Implementation Plan	80	

This report is the data for the facility's mid & long-term environmental management strategy. The contents to be conveyed through the report consist of general information of the factory, strategies for managing the environmental impact that occurs in the factory, and action plans for reducing and managing the environmental impact.

이 보고서는 공장의 중장기 환경경영전략을 위해 작성된 자료입니다. 보고서를 통해 전달하고자 하는 내용은 공장의 일반정보, 공장에서 발생하는 환경영향을 관리하기 위한 전략, 환경영향의 저감 및 관리를 위한 실천 계획으로 이루어져 있습니다.

## Facility Information



**Daeshin** is a dyeing factory that mainly processes dyeing and finishing.

With about 100 workers, we produce a variety of dyed & finished knitted fabrics to meet the needs of Korean and overseas companies.

The factory is located in an industrial complex, and all energy and water are supplied from the industrial complex. Waste is handled by a third-party company licensed in accordance with national laws, and most of the waste is disposed of in a way that reduces the environmental impact through recycling and reuse processes. All energy, water and chemicals in use are traceable, and through accumulated data, we operate our facility in the direction of lowering energy use, reducing water use and reducing waste generation.

Higg Index FEM and ZDHC are being introduced into facility, and through this, we are participating in environmental management and hazardous substance management that are required globally.



#### Applied Energy

Items	Availability
Coal	
Steam	ν
Electricity	V
Biomass	
Solar Photovoltaic	
Natual Gas (LNG/LPG)	V
Diesel	V
Petrol	V
Fuel Oil	
Wind	
Geothemal	
Hydro	
Chilled Water	
Micro-Hydro	

### Applied Air emissions

Items	Availability
Boiler	ν
Generator	
Engines	
Ovens	
Heating & Ventilation	
Refrigerant device	
Air Conditioning	ν
Yarn spinning or synthetic fiber manufacturing	
Finishes	ν
Solvents	
Adhesives/cementing	
Printing	
Dyeing	ν
Tenter frames or other heating processes	ν
Spot cleaners	
Sprayed chemicals or paints	
Other sources of ozone depleting substances (ODSs)	

#### Applied Wastes

Items	Availability
Materials (Yarn & Fabric)	V
Metal	
Plastic	V
Paper	
Cans	
Food	
Glass	
Cartons	V
Others	
General or unspecified waste	V
Empty chemical drums and containers	
Film and Printing Frame	
Wastewater treatment sludge (industrial/domestic)	
Expired/unused/used chemicals (waste oil, solvents, reactants, etc.)	
Compressed Gas Cylinders (refrigerants, etc.)	
Contaminated materials	V
Batteries	
Fluorescent light bulb	
Ink cartridges	
Waste oil and grease (from cooking)	
Empty containers (cleaning, sanitizing, pesticides, etc.)	
Electronic waste	
Coal combustion residuals (fly ash and bottom ash/coal slag)	

### Applied Waters

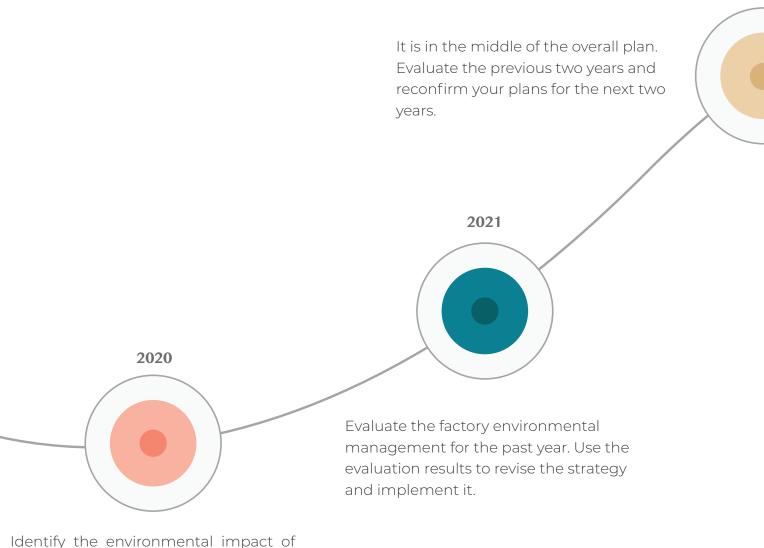
Items	Availability
Fresh Surface Water	
Rainwater	
Ground Water	
Produced/Process Water	
Municipal Water	V
Wastewater from another organization	
Blackish surface water / Seawater	
Total Freshwater (All sources combined)	

## Facility Environment Strategy

Our environmental management strategy is carried out **over a five-year period from 2020 to 2024.** 

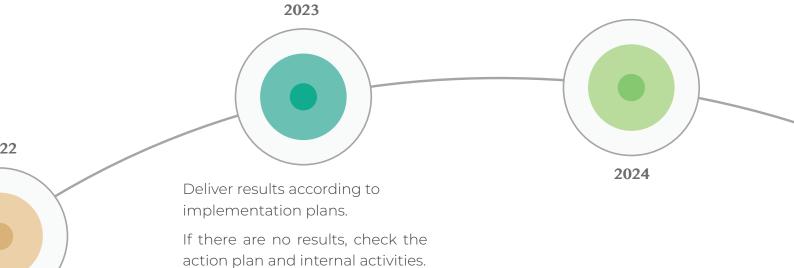
We have reduction targets and action plans for each of the seven areas: **energy use / greenhouse gas emission / water use / wastewater management / air emission source management / waste management / chemical substance management.** 

20



Identify the environmental impact of the factory and establish a mid- to longterm management strategy through this. Operate and manage the plant according to the strategy.

Evaluates the environmental management strategy of the past 4 years and establishes a mid & longterm plan again. Get a clear picture of what the factory does and doesn't do.



Envrionment Impact Baseline Year Period Reduction % Type of measure Target Year Natural Gas(LPG/LNG) 2020 2024 5 -2 Normalized Diesel 2020 5 -2 Absolute 2024 Petrol 5 Absolute 2020 2024 -2 5 -2 Normalized Electricity 2020 2024 2020 5 Normalized Steam 2024 -2 Normalized Municipal Water 2020 2024 5 -2 Normalized 2024 5 -2 Waste 2020

## Facility Implementation Plan

We intend to implement this by establishing a mid & long-term action plan according to the environmental impact of the factory.

All action plans have been created taking into account the cost of the investment and the period to receive it back. Some management-related plans need to be upgraded and made with partners. Therefore, we would like to share the plan below not only with us, but also with our stakeholders who are helping us with our business.



EMS

System update through regular environmental management system review

Collecting information for evaluating the personal ability of the person in charge of the environment

Production chain management by monitoring the progress of the Higg Index by stakeholders



Analysis of the process of using surplus energy through energy diagnosis Reduction of total energy use through dyeing and tenter machine replacement Electric energy reduction through utility improvement Collection of GHG generation data through calculation of GHG emissions

ENERGY



Reduction of water use by adjusting the proportion of water used during dyeing

Introduction of air emission management system with less water usage

Reduction of water use during fabric processing through chemical improvement

WATER



WASTEWATER

Reduction of overall pollution of wastewater by reducing the use of chemicals Hazardous substance management through regular ZDHC wastewater analysis



Air pollutant management through expansion of modern air purification facilities

Work environment management through expansion of air emission purification facilities for each workplace

#### **AIR EMISSION**



WASTE

Increasing the proportion of reuse and recycling through discussions with waste collection companies

Reduction of general waste generation by reducing the use of disposable products in the factory

Reduce the amount of plastic containers generated by requesting changes to chemical packaging



Chemical substance management system upgrade through chemical substance management system update

Reduction of material consumption through collaboration with currently used chemical production companies

MRSL & RSL management by expanding the use of ZDHC certified chemicals

CHEMICALS

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