

Environmental Initiatives

The Group raises life in irreplaceable nature, and delivers the blessings of life. In order to advance our businesses in harmony with nature, we work to reduce our environmental impact, and have formulated targets for mitigating climate change, conserving resources, and promoting recycling.

WEB <https://www.nipponham.co.jp/csr/environment/>

ENVIRONMENTAL TARGETS SETTINGS AND PROGRESS

In our Medium-Term Management Plan, the Group has set three-year targets for reducing environmental impact from our business activities. Under the New Medium-Term Management Plan Part 5, a three-year plan that ran from April 2015 to March 2018, we worked towards switching fuels at our factories and

improving manufacturing efficiency, but we fell short of our targets. Under the Medium-Term Management Plan 2020, which began in April 2018, we are continuing and strengthening our efforts relating to CO₂ emissions, water consumption, recycling and other issues.

RESULTS OF NEW MEDIUM-TERM MANAGEMENT PLAN PART 5

Indicators		Baseline	Targets	Final Values
		Average between fiscal 2005 and fiscal 2010	Average between fiscal 2015 and fiscal 2017	Average between fiscal 2015 and fiscal 2017
Mitigation of climate change	CO ₂ emissions* ¹	816.2kg-CO ₂ /t	665.2kg-CO ₂ /t 18.5% reduction* ³	686.2kg-CO ₂ /t 15.9% reduction
Resource saving	Energy efficiency* ¹	13.6GJ/t	11.4GJ/t 16.0% reduction* ³	11.7GJ/t 13.7% reduction
	Water consumption* ¹	17.9m ³ /t	17.2m ³ /t 4.0% reduction* ³	18.0m ³ /t 0.6% increase
	Waste* ¹⁺²	245.8kg/t	231.1kg/t 6.0% reduction* ³	240.3kg/t 2.3% reduction
Resource Recycling	Waste recycling rate	95.8%	More than 98.0%	94.6%

*1 Per unit of production *2 Excluding farms *3 Reduction from baseline

TARGETS IN MEDIUM-TERM MANAGEMENT PLAN 2020

	Baseline	Targets
	Average between fiscal 2012 and fiscal 2016	Average between fiscal 2018 and fiscal 2020
CO ₂ emissions* ¹	701.1kg-CO ₂ /t	645.1kg-CO ₂ /t 8.0% reduction* ³
Energy efficiency* ¹	12.0GJ/t	11.0GJ/t 8.0% reduction* ³
Water consumption* ¹	17.7m ³ /t	17.2m ³ /t 3.0% reduction* ³
Waste* ¹⁺²	207.5kg/t	195.1kg/t 6.0% reduction* ³
Waste recycling rate* ²	90.8%	94.0%

Waste is calculated per unit of production excluding feces and urine from farms, but starting with Medium-Term Management Plan 2020, the same unit is used for recycling rates.

REDUCING CO₂ EMISSIONS THROUGH BIOMASS UTILIZATION

The Group is reducing CO₂ emissions by utilizing biomass produced from such sources as excreta generated from raising livestock and waste from manufacturing processes.

Nippon White Farm Co., Ltd., which produces and processes chickens, combusts dried chicken excreta in its boilers, which are used as a heat source for heating chicken coops and for warm water to clean them.

Additionally, Oakey Beef Exports Pty. Ltd., which processes cattle in Australia, installed a biogas plant in 2015 to use methane gas generated from factory wastewater as a source of energy. This has eliminated around 36 million yen per year in natural gas purchases, and is leading to reducing CO₂ emissions by around 8,000 tons per year.



Biogas plant of Oakey Beef Exports Pty. Ltd.

REDUCING WATER CONSUMPTION

BPU, which operates the Group's beef business in Uruguay, has been a member of the CTAGUA* water resource research project run in collaboration with the government, industry, and academia since May 2017. The project's goals are to resolve water-related issues and promote science and technology in Uruguay, and BPU's contribution as a beef packer includes research into improving wastewater purification technologies, promoting the reuse of wastewater, and using water as a disinfectant.

* Centro Tecnológico del Agua: Water Research Center