Environmental management data

● Environmental management system

ISO14001:2015 Scope of certification: The manufacturing and research & development of milks, dairy products, ice creams, beverages, and other foods

● Head Office and Research/Information Center	
Head Office (Morinaga Plaza Building)	Shiba 5-33-1, Minato-ku, Tokyo 108-8384
Head Office (Meguro Building)	Meguro 4-4-22, Meguro-ku, Tokyo 153-8657
Head Office (Shibaura DF Building)	Shibaura 3-13-8, Minato-ku, Tokyo 108-0023
Research/Information Center	Higashihara 5-1-83, Zama City, Kanagawa 252-8583
● Saroma Plant	Nishitomi 123, Saroma-cho-aza, Tokoro-gun, Hokkaido 093-0504
● Betsukai Plant	Nishishunbetsukiyokawa-cho 18, Betsukai-cho, Notsuke-gun, Hokkaido 088-2572
● Morioka Plant	Aoyama 2-3-14, Morioka City, Iwate 020-0133
● Fukushima Plant	Shimizuuchi 5, Fushiogami-aza, Fukushima City, Fukushima 960-8154
● Tone Plant	Uchimoriya-machi 4013-1, Joso City, Ibaraki 303-0043
● Tokyo Plant	Okudo 1-29-1, Katsushika-ku, Tokyo 124-8577
● Tama Site	
Tokyo Tama Plant	Tateno 4-515, Higashiyamato City, Tokyo 207-0021
Yamato Plant	Tateno 4-601, Higashiyamato City, Tokyo 207-0021
Chilled Products Coordination Center – East Japan	Tateno 4-540, Higashiyamato City, Tokyo 207-0021
Engineering Research Center	Tateno 4-515, Higashiyamato City, Tokyo 207-0021
● Matsumoto Plant	Kamada 2-1-4, Matsumoto City, Nagano 390-0837
● Fuji Plant	Nakazatohigashi-cho 639, Fujinomiya City, Shizuoka 418-0046
● Chukyo Plant	Nakanara-cho Hitotsume 1, Konan City, Aichi 483-8256
● Kinki Plant	Tsutoiden-cho 2-95, Nishinomiya City, Hyogo 663-8242
● Kobe Site	
Kobe Plant	Mayafuto No.3, Nada-ku, Kobe City, Hyogo 657-0854
Chilled Products Coordination Center – West Japan	Mayafuto No.3, Nada-ku, Kobe City, Hyogo 657-0854
● Yokohama Milk Industry CO., Ltd.	Yoshiokahigashi 3-6-1, Ayase City, Kanagawa 252-1125
● MK CHEESE CO., LTD.	Ochiaikita 1-1-1, Ayase City, Kanagawa 252-1116
● FUJI MORINAGA MILK INDUSTRY CO., LTD.*	Nameri 18, Nagaizumi-cho, Sunto-gun, Shizuoka 411-0933
● KUMAMOTO MORINAGA MILK INDUSTRY CO., LTD.*	Kakizemachi 431-1, Higashi-ku, Kumamoto City, Kumamoto 861-8011
● NIHON SEINYU	Takanoichi 694-1, Nukanome-aza, Takahata-machi-oaza, Higashiokita-ma-gun, Yamagata 999-2176
● TOYONYUGYO	Miiri 1-19-7, Asakita-ku, Hiroshima City, Hiroshima 731-0211
● OKINAWA MORINAGA MILK. CO., Ltd.	Agarizaki 4-15, Nishihara-cho-aza, Nakagami-gun, Okinawa 903-0105
● TOKACHI URAHORO MORINAGA MILK INDUSTRY CO., LTD.*	Zaimoku-cho 1, Urahoro-cho-aza, Tokachi-gun, Hokkaido 089-5607
● HOKKAIDO HOSHO MILK PLANT CO., Ltd.	Katsuraoka-cho 3-8, Otaru City, Hokkaido 047-0264
● TOYO FERMENTEDMILK CO., LTD.	Okehazama-shinmei 1518, Midori-ku, Nagoya City, Aichi 458-0919
● TOHOKU MORINAGA MILK CO., LTD., Sendai Plant	Minato 1-1-9, Miyagino-ku, Sendai City, Miyagi 983-0001
● TOHOKU MORINAGA MILK CO., LTD., Akita Plant	Kamikaruishino 38-1, Iwase-aza, Odate City, Akita 018-3596
● Morinaga-Hokuriku Milk Industry CO., Ltd., Toyama Plant	Mukaishinjo-machi 8-3-45, Toyama City, Toyama 930-0916
● Morinaga-Hokuriku Milk Industry CO., Ltd., Fukui Plant	Takagi 2-601, Fukui City, Fukui 910-0805
● FURIJIPORT CO., LTD., Kumamoto Plant	Morikita-nitahata 1812-24, Kikuchi City, Kumamoto 861-1312
● Chez Foret CO., Ltd.	Kamikoya 1355-31, Yachiyo City, Chiba 276-0022

*October 1, 2018: Company names have been changed.
ISO14001:2015 certification is registered as former company name (as of Octorber.2018).

● Environmental accounting

(Period: April 1, 2017 - March 31, 2018)
Target area: Direct 13 plants, consolidated 16 plants, head office, Research/Information Center, branch offices, regional offices, centers

Environmental protection cost

Item		Unit	FY 2017	
Classification	Breakdown		Investment amount	Cost amount
Within business area				
1 Pollution prevention cost	Typical 7 pollution prevention cost	000-yen	500,610	1,019,859
2 Cost of global environment conservation	Costs for the prevention of CO_2 emission, HCFC, HFC, leakage, etc.	000-yen	482,280	484,336
3 Resource circulation cost	Costs for recycling waste and other resources	000-yen	219,551	332,311
Area total		000-yen	1,202,441	1,836,506
Outside business area				
4 Upstream/downstream cost	Costs for raw materials, distribution, and post-disposal	000-yen	0	541,140
5 Environmental management cost	Costs for environmental management, preparing lectures, etc.	000-yen	0	256,907
6 Social activity cost	Costs for greening, clean-up activity promotion, and river cleaning	000-yen	0	20,511
7 Cost for handling environmental damage	Costs for handling contamination loads	000-yen	0	18,981
Area total		000-yen	0	837,538

Environmental conservation effect

Classification		Effect	Unit	FY 2016	FY 2017
1 Effect on pollution Prevention costs	Air pollution prevention	Reduction of SOx emissions	Ton-SOx	–50	1
		Reduction of NOx emissions	Ton-SOx	12	49
2 Effect on cost of global environment conservation	Prevention of global warming	Reduction of CO_2 emissions from production	Tons	11,750	5,041
		Reduction of CO_2 emissions from office work	Tons	472	1,077
		Reduction of CO_2 emissions from transport	Tons	1,238	3,176
3 Effect on resource circulation cost	Effective resource utilization	Reduction of water consumption	000-tons	713	539
		Reduction of waste discharge	Tons	1,748	5,638
4 Effect on cost of upstream/ downstream cost-reduction	Reduction of environmental burden related to containers and packages	Reduction of the amount of paper containers and packages	Tons	778	–547
		Reduction of the amount of plastic containers and packages	Tons	906	–195

*The effect is indicated by the difference between the relevant year and the previous year (a positive number indicates a decrease; a negative number, an increase).

Environmental economic effect

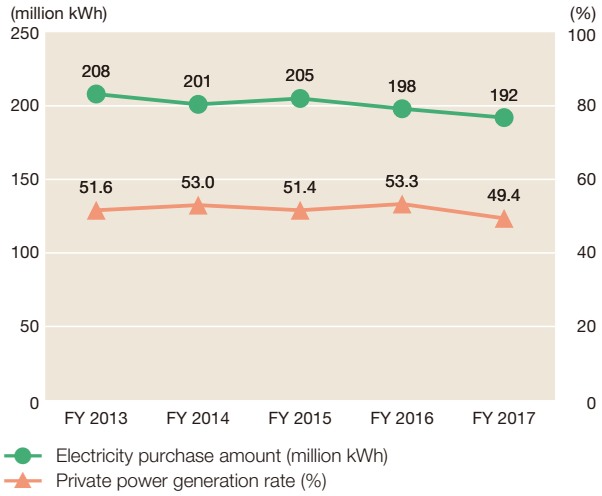
Classification	Effect	Unit	FY 2016	FY 2017
2 Effect on cost of global environment conservation	Cost reduction through energy saving	000-yen	256,860	193,704
3 Effect on resource circulation cost	Revenue of resource recycling	000-yen	68,640	54,440
	Reduction of waste disposal cost	000-yen	24,806	62,700
4 Effect on upstream/downstream cost	Cost reduction through logistics reduction	000-yen	26,300	9,000

*Each serial number identifying an environmental economic effect corresponds to an environmental conservation cost (table above).

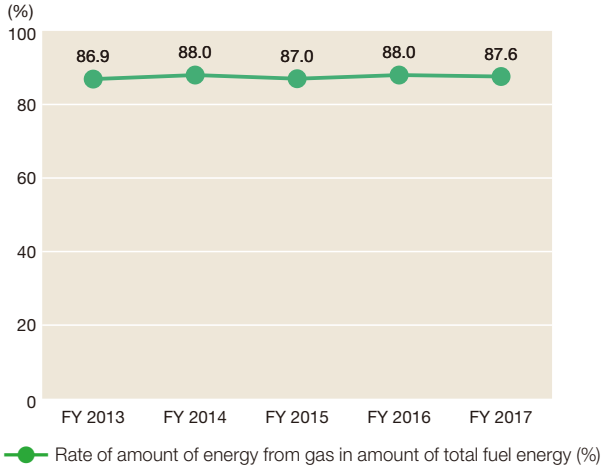
Environmental performance data

● Energy and CO_2

Electricity purchase amount and private power generation rate



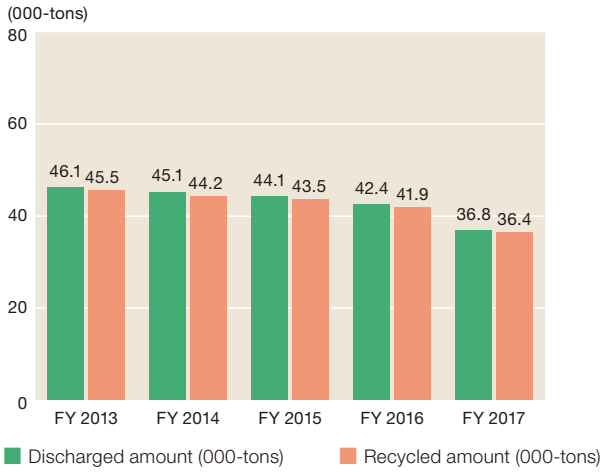
Rate of amount of energy from gas in amount of total fuel energy



Replacement from oil to gas:
The plants of the Morinaga Milk Group are actively switching from oil to city gas as fuel, as the former generates more CO_2 when combusted than the latter.

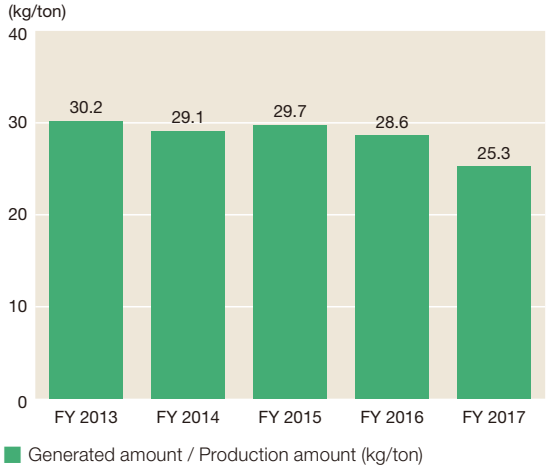
● Resource circulation

Amount of discharged industrial waste / Amount of recycled industrial waste



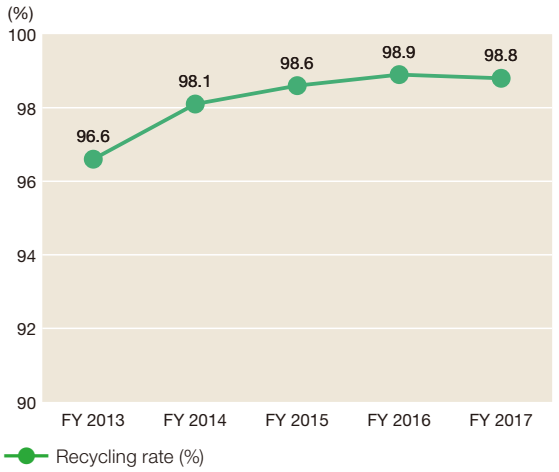
Amount of discharged industrial waste:
The amount of discharged waste processed by contractors out of the amount of industrial waste generated during business activities, including waste processed for value

Basic unit of discharged industrial waste

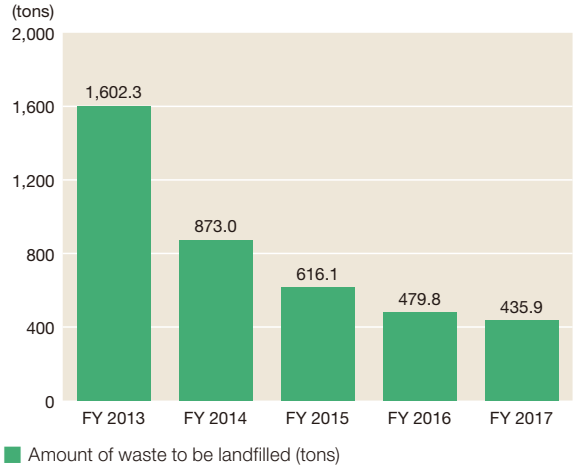


Basic unit of discharged industrial waste:
Numerical value calculated by dividing the weight (kg) of industrial waste generated annually by the annual production amount (tons) than the latter.

Recycling rate



Amount of waste to be landfilled

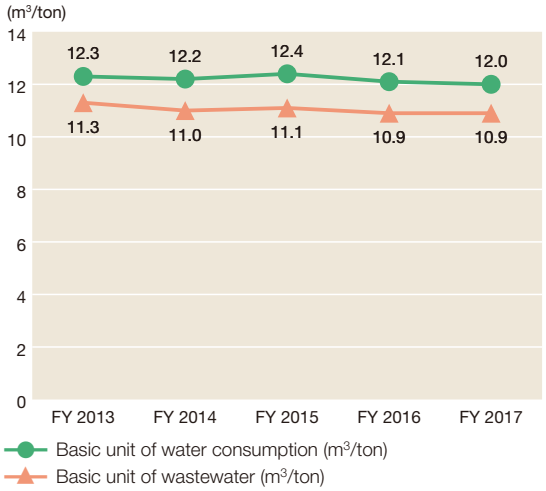


Amount of waste to be landfilled:
Weight of waste to be landfilled

Environmental performance data

● Conservation of water resources

Basic unit of water consumption / Basic unit of wastewater



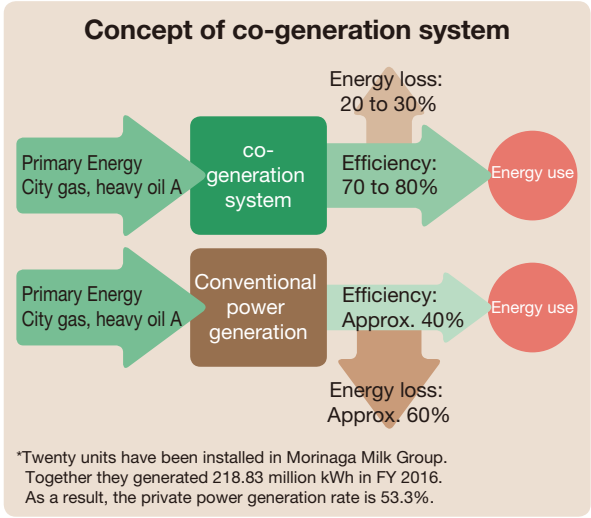
Basic unit of water consumption:
Numeric value calculated by dividing the amount of water (m³) such as tap water, well water, etc. used at the plants by the annual production volume (tons)

Basic unit of wastewater:
Numeric value calculated by dividing the amount of wastewater (m³) flowing into the plants' wastewater treatment facilities and drain, or discharged from the wastewater treatment facilities, by the annual production volume (tons)

● Energy-saving strategy

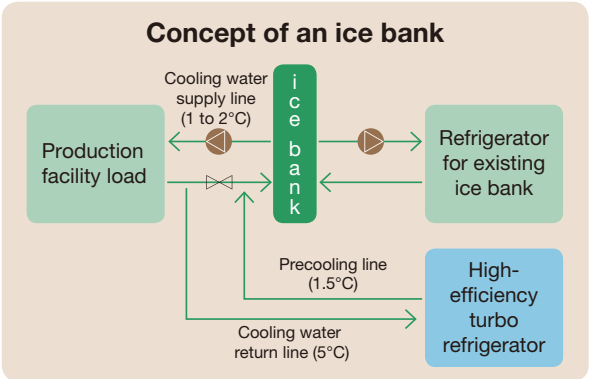
Morinaga Milk has installed co-generation systems and ice banks at the plants to improve energy- efficiency. At the Tokyo Tama plant, we have also installed photovoltaic panels and use the generated electricity for production activities.

Co-generation system



*Twenty units have been installed in Morinaga Milk Group. Together they generated 218.83 million kWh in FY 2016. As a result, the private power generation rate is 53.3%.

Ice bank



Actual amount of photovoltaic power generated by the Tokyo Tama Plant

(kWh)

FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
32,043	31,131	32,619	29,507	29,828