

THE ENVIRONMENT

Report on
Activities for
FY2018

Global environmental conservation is the most important issue for our survival. Moreover, our business relies on the gifts provided by the earth's environment. As such, we believe that contributing to a sustainable global environment is one of our most important duties and are continuously working to lessen the environmental impact of our business activities.

Policy on Environment

Revised on April 18, 2018
Established on May 10, 2000

We recognize global environmental conservation to be the most important issue for our survival, constantly work to improve our environmental performance as citizens of the earth, and envision to be trusted by our customers.

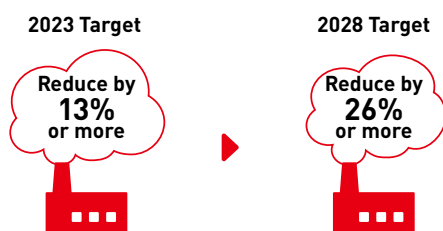
1. We continue to conduct energy saving and waste reducing activities to promote efficient use of natural resources.
2. We conduct environmental conservation so that future generations can use limited natural resources.
3. We appropriately control and reduce substances produced from our business operations that may contaminate living things, water, or air.
4. We reduce the emission of greenhouse gases to contribute to the countermeasures against global warming.
5. We comply with applicable laws and regulations as well as our own management standards.
6. We continuously conduct educational activities to accomplish the efforts mentioned above which are required for realization of a sustainable society.

Reducing CO₂ Emissions

Medium-Term Targets

We aim to reduce Scope 1 and 2* energy-related CO₂ emissions, our primary producer of greenhouse gases, by 13% or more per unit of sales by FY2023 compared to levels in FY2013, and by 26% or more by FY2028.

* Scope of calculations based on GHG Protocol
Scope 1: Direct emissions from the Company
Scope 2: Indirect emissions through the use of purchased electricity, heat, and steam
Scope 3: Indirect emissions in the supply chain (excluding Scope 1 and 2)

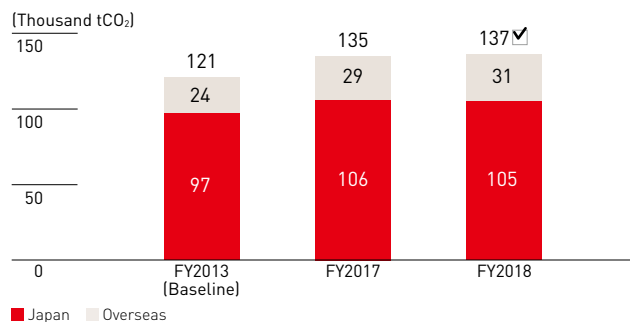


Note: CO₂ emissions intensity comparison to FY2013

CO₂ Emissions

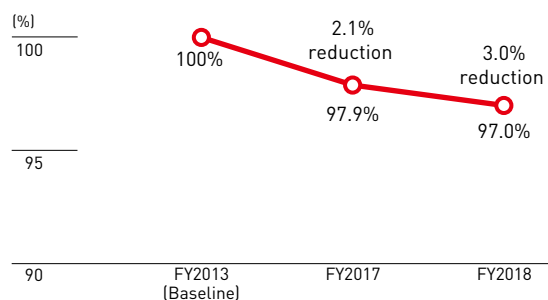
Scope 1 and 2 energy-related CO₂ emissions per unit of sales for FY2018 were reduced by 3.0% compared to FY2013 and 0.9 points compared to FY2017. Higher efficiency from consolidation and integration of production sites combined with energy-saving activities were factors in this reduction.

Energy-Related CO₂ Emissions



Data indicated with ✓ have received the independent practitioner's assurance by Deloitte Tohmatsu Sustainability Co., Ltd. (Please see page 52)

Baseline Comparison of Energy-related CO₂ Emissions Intensity*



* CO₂ emissions intensity: Volume of CO₂ / Net sales

Scope of Tabulation

Japan: Fixed emissions sources operated by LOTTE CO., LTD. and domestic subsidiaries (Mary Chocolate Co., Ltd. and CHIBA LOTTE MARINES CO., LTD.)

Overseas: Fixed emissions sources operated by major overseas subsidiaries (THAI LOTTE CO., LTD., LOTTE VIETNAM CO., LTD., PT LOTTE TRADE AND DISTRIBUTION, PT. LOTTE INDONESIA, and LOTTE Wedel sp. z o.o.)

Calculation Methods

Scope 1: Volume of emissions = $\sum (\text{Fuel consumption} \times \text{CO}_2 \text{ emission factor})$
Scope 2: Volume of emissions = $\sum (\text{Volume of purchased electricity, etc} \times \text{CO}_2 \text{ emission factor})$

CO₂ Emission Factor

Japan: The emission factor for Scope 1 emissions is based on the Act on Promotion of Global Warming Countermeasures, while the emission factor for Scope 2 emissions has been separately determined by power companies based on the same Act.

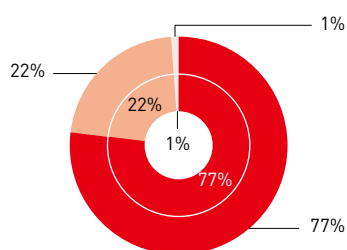
Overseas: The emission factor for Scope 1 emissions has been determined according to the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, while the emission factor for Scope 2 emissions has been determined according to the International Energy Agency (IEA)'s CO₂ Emissions from Fuel Combustion. In instances where these emission factors are difficult to obtain, an emission factor based on the Act on Promotion of Global Warming Countermeasures is used.

Energy Input

Volume of Energy Input

FY2017	2,685 TJ
FY2018	2,773 TJ

Energy Conversion Ratio (Converted to Thermal Units) (Inner: FY2017, Outer: FY2018)



■ Purchased electricity ■ Gas and related ■ Other

Companies included in totals: Same as CO₂ emissions

Utilizing Renewable Energy

The head office of LOTTE CO., LTD., located in the Shinjuku ward of Tokyo, adopted the Aqua Premium program, which uses 100% hydroelectric power. Aqua Premium is one of the programs offered by the TEPCO Group and is notable for utilizing renewable hydroelectric power and producing zero CO₂ emissions when generating electricity. Moving forward, we will continue to constrain our greenhouse gas emissions by utilizing renewable energy, thereby contributing to the prevention of global warming.



LOTTE CO., LTD. head office

Logistics Initiatives

LOTTE CO., LTD. is working to reduce the environmental impact associated with logistics. In addition to our efforts to improve loading efficiency through packaging, we are also working to reduce CO₂ emissions by promoting cooperative distribution*¹ and modal shifts*².

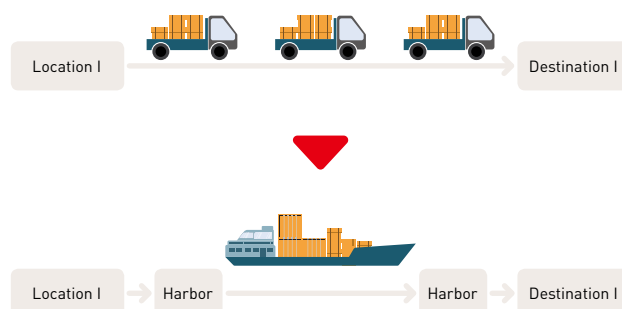
*1 Cooperative distribution

We are engaged in joint product delivery in cooperation with other companies in the same industry as well as carriers and warehouses. This serves to lower the number of trucks necessary for deliveries, which in turn reduces CO₂ emissions.



*2 Modal shift

Modal shift refers to a shift away from trucks toward sea and rail delivery, which have a lower environmental impact and support higher-volume delivery. LOTTE CO., LTD. is promoting marine transport as part of this shift, and is currently working to reduce CO₂ emissions by utilizing marine transport from Kyushu to Osaka and from Tokyo to Hokkaido.



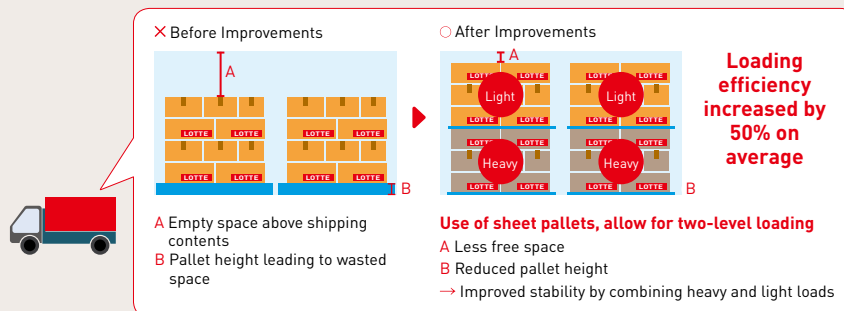
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Efforts to Optimize Shipping (LOTTE CO., LTD. Sayama Factory)



Logistics in Japan is currently rife with issues, including a shortage of labor, rising logistics costs, and a push to reduce greenhouse gases and make other environmental considerations.

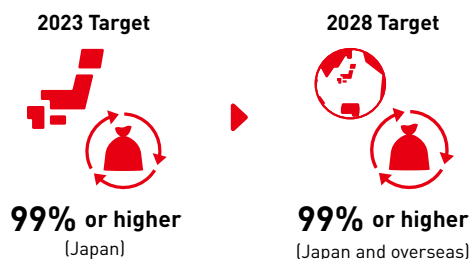
With this in mind, we have taken a three-pronged approach to optimizing shipping practices at our Sayama Factory, incorporating sheet pallets to facilitate two-level shipping; introducing tablets to optimize shipping; and utilizing Advanced Service Support Information System Technology (ASSIST). As a result, we have increased load efficiency, which in turn has reduced our number of shipping trucks by 25%. In addition, automation of shipping processes has reduced the amount of time and employees required for operations. These efforts have helped resolve social issues related to logistics by mitigating labor shortages, reducing greenhouse gases, and providing other benefits while also reducing company costs. The Sayama Factory has received high praise for these efforts, including an ESG Award at LOTTE Awards 2018. We will continue to promote automation in the future, with the goal of sustainable logistics through reduced labor needs and optimization.



Waste Reduction and Recycling

Medium-Term Targets

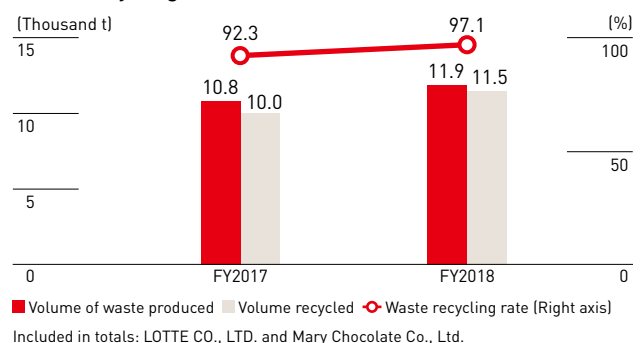
For waste generated by production processes at domestic factories, the company's goal is to realize a waste recycling rate of 99% or higher by FY2023. Our target is to extend this recycling rate to include overseas factories by FY2028.



Waste Production and Waste Recycling Rate

In FY2018, 12.3 thousand tons of waste was produced at major domestic bases. Of that total, 97.1%, or 11.9 thousand tons of waste generated by production processes was recycled, a year-on-year improvement of 4.8 percentage points. Going forward, we will make efforts throughout the value chain to restrict waste production and promote proper recycling to achieve a waste recycling rate of 99% or higher.

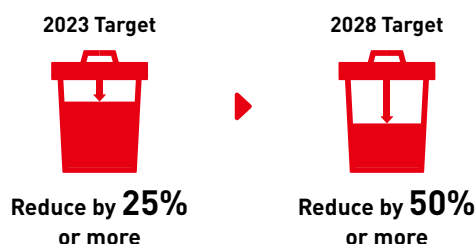
Volume of Waste Generated by Production Processes and Waste Recycling Rate



Food Loss and Waste Reduction

Medium-Term Targets

Our food loss and waste reduction rate target (from collection of raw materials to product delivery) is 25% or more by FY2023 and 50% or more by FY2028, using FY2017 as our baseline point of comparison.



Note: Collection of raw materials to product delivery comparison to FY2017

Food Loss and Waste Reduction

In FY2018, the company produced a total of 1,553 tons of food loss and waste from collection of raw materials to product delivery, a 1.6% increase compared to the previous fiscal year. Going forward, we will work across the entire value chain to improve the accuracy of supply and demand forecasts, extend and properly display expiration dates, reduce losses in the production process, and use food banks to limit food waste.

Volume of Food Loss and Waste Produced (From Collection of Raw Materials to Product Delivery)

FY2017	1,529 t
FY2018	1,553 t

Included in total: LOTTE CO., LTD., subsidiaries in Japan, and major overseas subsidiaries
Totals have been made with reference to the Food Loss and Waste (FLW) Protocol

Food Banks

We are working with food banks that provide free food to welfare facilities and those who may not have full access to food. In solidarity with food bank activities, we donate our products with the cooperation of non-profit organizations (NPOs). We believe that these efforts not only help spread deliciousness and joy of food but also serve as a meaningful way to use food effectively. As such, we will continue to cooperate with food banks in the future.

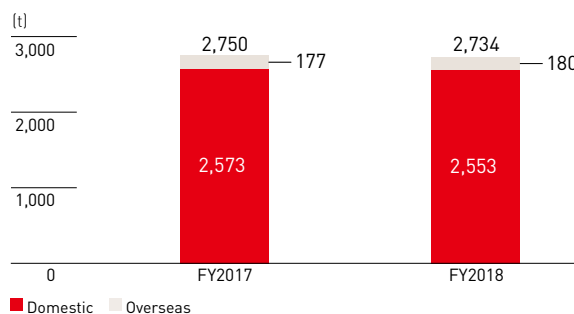


Food bank

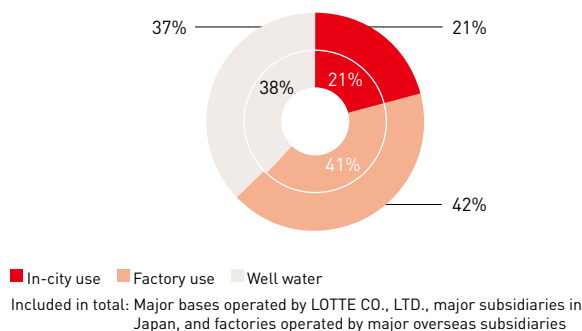
Water Resources

Water Consumption

Volume of Water Used



Water Usage Ratio (Inner: FY2017, Outer: FY2018)



Water Risks

We utilize the World Resources Institute (WRI)'s AQUEDUCT Water Risk Atlas to evaluate water risks at our factories in Japan and overseas. We are constantly evaluating factories that are assessed to be high risk through such means as collecting local information and monitoring water consumption, and are looking into measures to mitigate related risks.

Ingredients

Ingredients Procurement Volume

Procurement Volume of Product Ingredients

(Thousand t)	FY2017	FY2018
Total Ingredients	271.1	276.2
Raw materials	201.2	203.5
Packaging materials	69.9	72.7
Paper	50.2	51.8
Plastic	14.7	15.6
Other	5.1	5.4

Included in total: LOTTE CO., LTD., Mary Chocolate Co., Ltd., and major overseas subsidiaries

Environment-Friendly Packaging Materials

Reducing the amount of packaging materials used in products not only saves resources but also reduces the amount of garbage generated when customers eat our products. We conduct various quality tests on packaging materials to ensure they can fulfill their most important role, which is protecting product quality, but also to reduce the amount and weight of materials used.

Examples of Initiatives

● Slim Trays

By reducing tray thickness, we are able to reduce plastic usage. (Product name: Toppo bags)

Tray thickness
0.30 mm → 0.28 mm

Plastic weight
Reduced by **6.6%**



● Miniaturized Paper Boxes

After reviewing product designs, we reduced the weight of our paper boxes to lower the amount of paper used per unit. (Product name: Ghana Excellent)

Dimension width
Reduced by 12 mm

Plastic weight
Reduced by **5.5%**



Column

Environment-Friendly Product Packaging (LOTTE CO., LTD. Packaging Group)

When designing product packaging, we work to conserve resources by minimizing the amount of materials used as much as possible while still ensuring that the packaging can fulfill its original function of preserving quality. We also endeavor to increase the barrier capabilities of our packaging in order to extend expiration dates and therefore help prevent food waste. Moreover, we are also developing environment-friendly packaging from the perspective of more efficient product loading and therefore fewer greenhouse gas emissions from transport. From a Universal Design (UD) perspective, we are also trying to design easy-to-use product packages that are easy for everyone to open and hold.



Environmental Management

Environmental Activities Promotion System

To promote Groupwide environmental activities, the company established the CSR Promotion Department as secretariat of the Corporate Strategy Division. Furthermore, the Executive Committee looks into important environment-related policies and medium-term targets and monitors the progress toward targets that are already in place.

ISO14001

Urawa Factory, Sayama Factory, Kyushu Factory, and Shiga Factory, operated by LOTTE CO., LTD., have acquired ISO14001 certification, the International Organization for Standardization's standard for environmental management systems.

Environmental Audits

Urawa Factory, Sayama Factory, Kyushu Factory, and Shiga Factory, operated by LOTTE CO., LTD., receive annual internal audits pertaining to environmental matters. Internal audits are conducted by in-house certified lead auditors and auditors using a checklist based on ISO14001. Each factory works to make continuous improvements based on improvement points highlighted in the audits.

Number of Improvement Points Identified

FY2017	102 points
FY2018	98 points

Included in total: Urawa Factory, Sayama Factory, Kyushu Factory, and Shiga Factory (LOTTE CO., LTD.)

Environmental Education

To properly address environmental issues, each LOTTE CO., LTD. factory offers environmental education to all employees. In addition, an environmental education grading system has been introduced to increase the effectiveness of the environmental education program and the effectiveness of environmental activities. In addition, the environmental manager, the ISO14001 secretariat, and the Quality Assurance Department meet regularly to share information regarding the environment and improve the company's response.

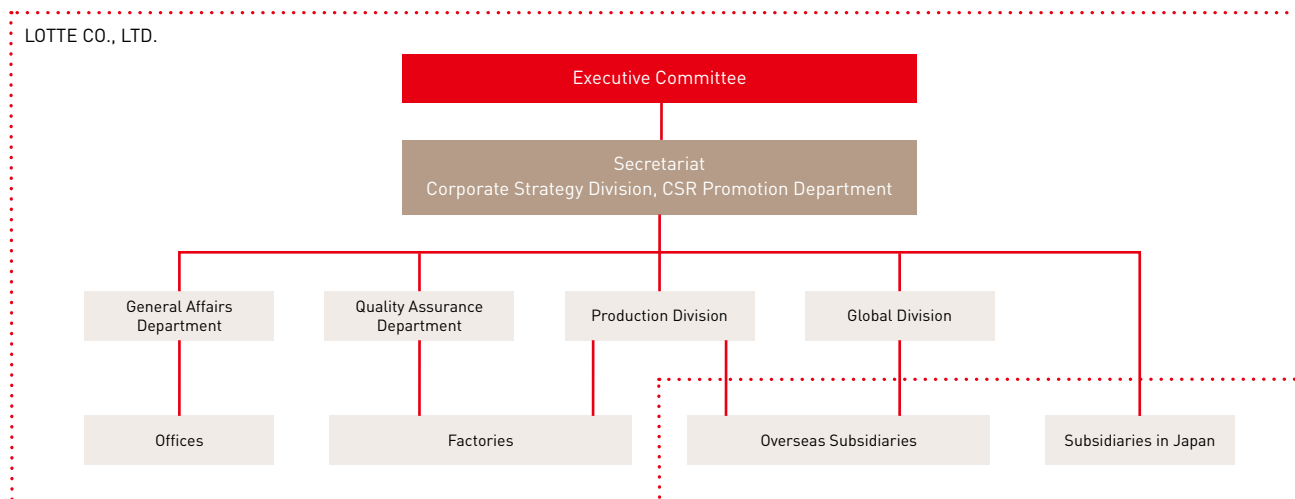


Environmental education

Environmental Accidents and Compliance Violations

In case of an environmental accident or a compliance violation, we have a system in place for promptly responding in cooperation with relevant departments and government bodies. In FY2018, there were no serious environmental accidents or compliance violations.

Environmental Activities Promotion System



Independent Practitioner's Assurance of CO₂ Emissions

Energy-related CO₂ emissions for FY2018 (data indicated with ✓), on page 30 in the Japanese version of the report, have received the independent practitioner's assurance by Deloitte Tohmatsu Sustainability Co., Ltd.

Deloitte.

デロイト トーマツ

(TRANSLATION)

Independent Practitioner's Assurance Report

August 23, 2019

Mr. Eiichi Gochou,
President / Representative Director,
LOTTE CO., LTD.

Masahiko Sugiyama
Representative Director
Deloitte Tohmatsu Sustainability Co., Ltd.
3-2-3, Marunouchi, Chiyoda-ku, Tokyo

We have undertaken a limited assurance engagement of the energy-related CO₂ emissions (Scope 1 and Scope 2) indicated with ✓ for the year ended March 31, 2019 (the "CO₂ Information") included in the "LOTTE CO., LTD. SUSTAINABILITY REPORT 2019" (the "Report") of LOTTE CO., LTD. (the "Company").

The Company's Responsibility

The Company is responsible for the preparation of the CO₂ Information in accordance with the calculation and reporting standard adopted by the Company (indicated with the CO₂ Information included in the Report). The CO₂ Information quantification is subject to inherent uncertainty for reasons such as incomplete scientific knowledge used to determine emissions factors and numerical data.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. We apply International Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance and Related Services Engagements*, and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the CO₂ Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board ("IAASB"), ISAE 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the IAASB and the *Practical Guideline for the Assurance of Sustainability Information*, issued by the Japanese Association of Assurance Organizations for Sustainability Information.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. These procedures also included the following:

- Evaluating whether the Company's methods for estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or reperforming the estimates.
- Undertaking site visits to assess the completeness of the data, data collection methods, source data and relevant assumptions applicable to the sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the CO₂ Information is not prepared, in all material respects, in accordance with the calculation and reporting standard adopted by the Company.

The above represents a translation, for convenience only, of the original Independent Practitioner's Assurance report issued in the Japanese language.

Member of
Deloitte Touche Tohmatsu Limited