With the Earth

Our corporate name is derived from a passage in the Yi Jing, a Chinese classic text, which reads, "Praise the virtues of the Earth, which nurtures new life and brings forth significant values." Shiseido has been doing business for over 140 years while praising the blessings of the Earth. Today, however, this bounty is being lost at a rapid pace, casting into doubt our ability to pass it down to future generations.
In order to remain a company always trusted and needed by society and consumers all over the world for the next 100 years, we devote continuous effort to preserve the global environment through initiatives including sustainable utilization of natural resources and endeavors to minimize climate change impacts.

Our Stance on Environmental Issues/Our Goals, Achievements and Key Initiatives

Shiseido's Stance on Environmental Issues/Our Goals and Achievements

Shiseido's stance on environmental issues and our goals/ achievements

Environmental Management

Shiseido Group's environmental activity promotion system and addressing risks related to the environment

Efforts toward Recycling of Resources

Shiseido's initiatives on the reuse, recycle and other sustainable ways of using resources

Other Environmental Initiatives

Product Initiatives

Environmentally-friendly product initiatives

Initiatives in Production and Distribution

Shiseido's environment-friendly initiatives in production and distribution

Intiatives to Conserve Biodiversity

Shiseido's activities related to conserving the blessings of the Earth

Environmental Communication

Shiseido's communication activities on the environment

Shiseido’s Stance on Environmental Issues/Our Goals and Achievements

Shiseido’s Stance on Environmental Issues

Since 1992, when Shiseido Eco Policy, a set of the company’s principles on environmental considerations, was formulated, we have worked to preserve the global environment. Today, the inherited passion appears in “Our Way – With Society and the Earth,”one of the Shiseido Group Standards of Business Conduct and Ethics. Following this spirit, we praise and try to preserve the blessings of the Earth, and conduct business with a sincere commitment to people’s desire to “live beautifully.” That is, we believe, our purpose.

We believe that conservation of biodiversity and sustainable use of water resources are important for “the preservation of the bounty of the Earth.” Regarding the former issue, we organized “the concept of Shiseido’s biodiversity” in 2010 as follows.

Biodiversity at Shiseido

Shiseido is grateful for the benefits of the Earth, the source of new values. Recognizing that the resources of the Earth are limited, we will use them wisely and fairly for the sake of future generations. Moreover, we will work proactively for the conservation of biodiversity to realize a sustainable society.

Meanwhile, we have consolidated our thoughts regarding "fresh water resources" as following, in 2013.

We will aim for sustainable water use with respect for the healthy water circulation and the water-related culture practices of the local community. First, we will create an understanding of the actual situation of our water use through the value chain of our business activities. Then, based on it, we will work towards minimizing the impacts on the water circulation and the local water-related culture.

Environmental Targets and Results

Shiseido commits to pursue "environmental friendliness throughout the product life cycle" and "global initiatives to reduce CO_2" as two pillars in its environmental program up until 2020.

- Environmental Policies and Targets until Year 2020
- Environmental Accounting
- Environmental Impact Results in Fiscal 2017

Environmental Policies and Targets until Year 2020

Minimizing the Environmental Load throughout the Product Life Cycle

Minimizing the environmental load throughout the product life cycle consists of lowering environmental impacts throughout the life cycle in accordance with "the Production Eco Standards", Shiseido's unique set of environmental standards addressing research and development, product planning, procurement, production, distribution, sale, use, disposal, and recycling.

We began using sugarcane-derived polyethylene for containers in order to save a finite petroleum resource and reduce CO_2 emissions during disposal and incineration from fiscal 2011. In addition, we are actively working to increase the environmental friendliness of our products, for example by using recycled/non-wood paper or third-party certified (FSC-certified) paper and beginning to use more sustainable palm oil for our products.

We are also moving to conserve water resources by reducing the amount of water required to manufacture and use our products.

Environmental Friendliness Product Targets

Item	Objective
Utilization of Sustainable Plastic	In addition to switching to plant-derived polyethylene since 2011, we began to deploy mechanically recycled plastic. We plan to switch all packaging from resin to sustainable plastic by 2030 (drawn up in 2017).
Use of Sustainable Paper	Since 2012, for the new/updated products for which paper is used in the cosmetics business in Japan, we have promoted the switch to environmentally-considerate paper, such as recycled/non-wood paper and third-party certified (FSC-certified) paper.
Sustainable Palm Oil	For all palm-derived raw materials used for Shiseido products, we will achieve the procurement of raw materials considering environmental conservation for the place of origin (procurement of RSPO-certified materials) by 2020. For more information, see the Shiseido Group Sustainable Raw Materials Procurement Guidelines (drawn up in 2018).

Global Initiatives to Reduce CO_2 Emissions

To reduce CO_2 emissions worldwide, we endeavor to manage and reduce CO_2 emissions at all facilities (head offices, research centers, production facilities, sales companies, and affiliates), including those located overseas.

CO_2 Emission Reduction Targets

Scope		Base year	Fiscal 2017 target	Fiscal 2020 target	Criteria
Japan	Production facilities	Fiscal 2009	18% reduction	20% reduction	Absolute amount
	Non-Production facilities		10% reduction	14% reduction	
Overseas	Production facilities		22% reduction	23% reduction	Compared with BAU *1
	Non-Production facilities		8% reduction	11% reduction	Absolute amount *2

*1 BAU ratio : A comparison of the CO_2 emissions that would be expected if particular reduction measures were not implemented ("business as usual," or BAU) and the CO_2 emissions that would be expected if reduction measures are implemented.

*2 Excludes facilities from which data has not yet been acquired.

Usually, greenhouse gases (GHG) include seven gases (CO_2, CH4, N2O, HFC, PFC, SF6, and NF3); however, on this website, these are expressed cumulatively as CO_2 unless otherwise noted.

Environmental Impact Results in Fiscal 2017

Environmental Targets and Results in Fiscal 2017

During the fiscal year of 2017, Shiseido achieved our targeted reduction of CO_2 emissions in all sections.
Our corporate efforts at our facilities in Japan included the consolidation and closure of offices and energy-saving activities, resulting in the successful reduction of CO_2 emissions that compensated for the CO_2 emissions generated by the electricity purchased.
Targets were achieved at our production facilities outside of Japan through the utilization of renewable energy, such as solar energy generated by power facilities in the U.S.
We continuously promote the use of Aqua Premium, a hydroelectric generation system provided by TEPCO Energy Partner, Incorporated, at our factories in Japan, while encouraging the use of renewable energy at sites outside Japan as we aim to meet our 2020 target.

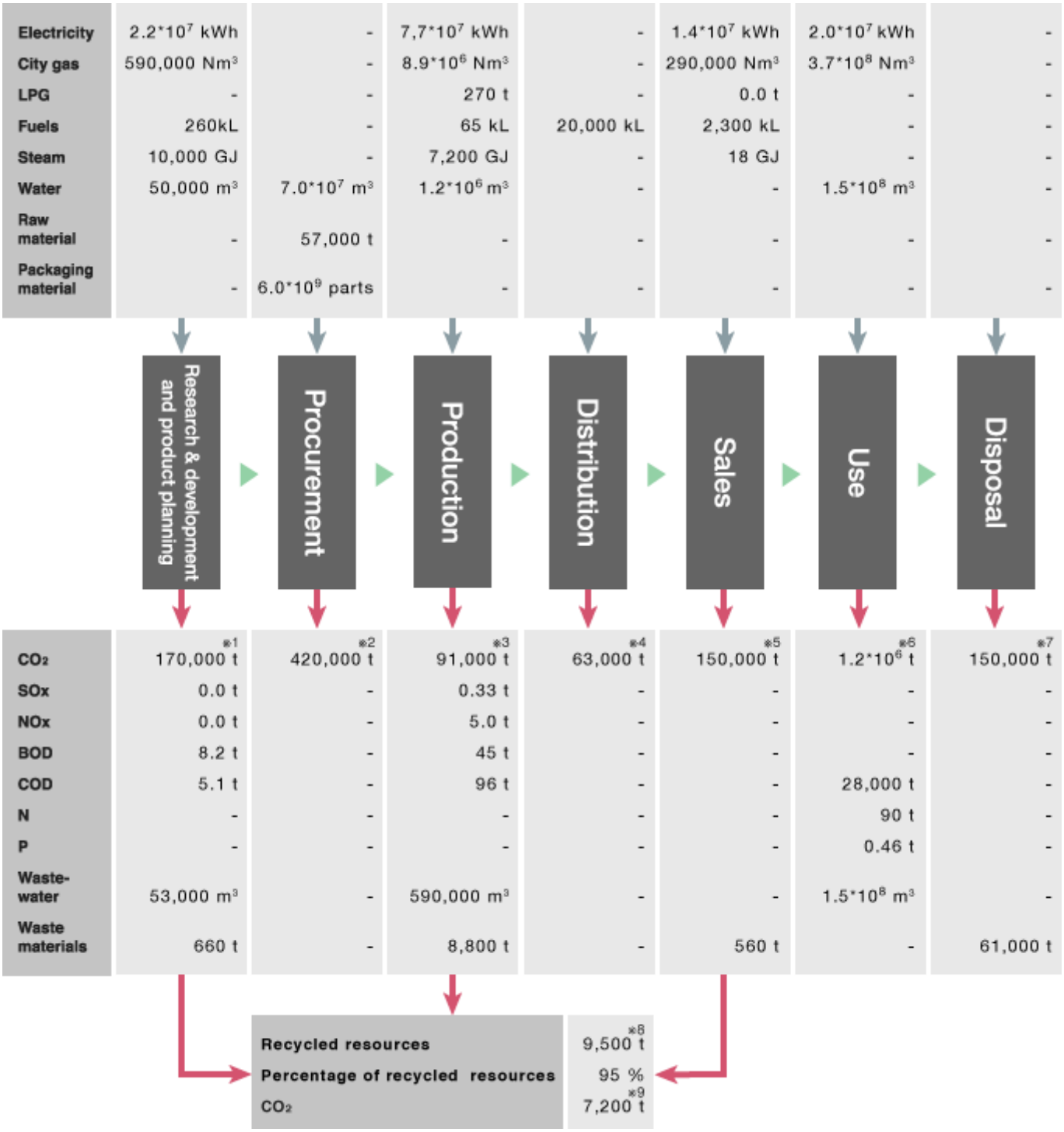
CO_2 Emission Reduction Targets in Fiscal 2017

Scope		Fiscal 2017 Target	Fiscal 2017 Results
Japan	Production facilities	18% reduction compared to Fiscal 2009 (Absolute amount)	Reduced CO_2 by 19% (Achieved)
	Non-Production facilities	10% reduction compared to Fiscal 2009 (Absolute amount)	Reduced CO_2 by 28% (Achieved)
Overseas	Production facilities	22% reduction compared to BAU *1	Reduced CO_2 by 39% (Achieved)
	Non-Production facilities	8% reduction compared to Fiscal 2009 (Absolute amount) *2	Reduced CO_2 by 14% (Achieved)

*1 BAU ratio: A comparison of the CO_2 emissions that would be expected if particular reduction measures were not implemented ("business as usual," or BAU) and the CO_2 emissions that would be expected if reduction measures are implemented.
*2 Excludes facilities from which data has not yet been acquired.
Usually, greenhouse gases (GHG) include seven gases (CO_2, CH_4, N_2O, HFC, PFC, SF_6, and NF_3); however, on this website, these are expressed cumulatively as CO_2 unless otherwise noted.

Environmental Impacts Throughout the Value Chain in Fiscal 2017

In order to effectively reduce CO_2, Shiseido measured the environmental impact throughout the value chain and reduced CO_2 emissions throughout the value chain based on the "GHG Protocol Scope 3 Standard".


Electricity
City gas
LPG
Fuels
Steam
Water
Raw material
Packaging material
2.2*10^7 kWh
590,000 Nm³
-
260kL
10,000 GJ
50,000 m³
-
-
-
-
7.0*10^7 m³
57,000 t
6.0*10^9 parts
7,7*10^7 kWh
8.9*10^6 Nm³
270 t
65 kL
7,200 GJ
1.2*10^6 m³
-
-
-
-
20,000 kL
-
-
-
-
1.4*10^7 kWh
290,000 Nm³
0.0 t
2,300 kL
18 GJ
-
-
-
-
2.0*10^7 kWh
3.7*10^8 Nm³
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1.5*10^8 m³
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Research & development and product planning
Procurement
Production
Distribution
Sales
Use
Disposal
CO2
SOx
NOx
BOD
COD
N
P
Waste-water
Waste materials
※1 170,000 t
0.0 t
0.0 t
8.2 t
5.1 t
-
-
53,000 m³
660 t
※2 420,000 t
-
-
-
-
-
-
-
-
※3 91,000 t
0.33 t
5.0 t
45 t
96 t
-
-
590,000 m³
8,800 t
※4 63,000 t
-
-
-
-
-
-
-
-
※5 150,000 t
-
-
-
-
-
-
-
560 t
※6 1.2*10^6 t
-
-
-
-
28,000 t
90 t
0.46 t
1.5*10^8 m³
-
※7 150,000 t
-
-
-
-
-
-
-
61,000 t
Recycled resources
Percentage of recycled resources
CO2
※8 9,500 t
95 %
※9 7,200 t

In terms of the emission reduction effect through refill product lineup and other initiatives in 2017, we were able to reduce a total of approximately 44,000 tons of CO_2 emissions, including approximately 6,400 tons in raw material procurement, approximately 33,000 tons in product usage and approximately 4,500 tons in the product disposal phase.

Target Period: From January 1 to December 31, 2017
Target Facilities: Total of 35 organizations, including Shiseido Group Headquarters, sales offices, research and development centers, production facilities, and major subsidiaries

Calculation conditions : PDF Shiseido's Guidance for Product and Organizational Environmental Footprint Assessment

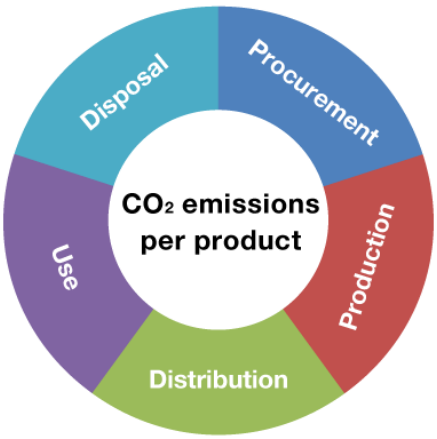
*1 Includes CO_2 emissions from electricity and fuel consumption at the Headquarters and Shiseido Research Center (Global Innovation Center) (classified as Scope 1 and 2), CO_2 emissions from business trips (Category 6) and commute (Category 7).
*2 Includes CO_2 emissions from the production of raw materials (Category 1), CO_2 emissions from procurement logistics (Category 4), and CO_2 emissions from the production of fuel consumed at our facilities (Category 3).
*3 Includes CO_2 emissions from electricity and fuel consumption at our production facilities (Scope 1 and 2).
*4 Includes CO_2 emissions from shipping logistics (Category 4).
*5 Includes CO_2 emissions from electricity and fuel consumption at our sales offices (Scope 1 and 2) and advertisements (Category 1).
*6 Includes CO_2 emissions from clean water and fuel consumption when our products are used and wastewater treatment associated with the use of the products (Category 11).
*7 Includes CO_2 emissions from the sold products and disposal treatment of them (Category 12).
*8 The following production facilities have achieved zero-emissions with a 100% waste recycling rate.
Japan: Shiseido Osaka Factory, Shiseido Kakegawa Factory, Shiseido Kuki Factory
Overseas: Shiseido International France S.A.S. Unité du Val de Loire and Unité de Gien, Shanghai Zotos Citic Cosmetics Co., Ltd., Shiseido Vietnam Inc.
*9 Includes CO_2 emissions from the waste generated in operations and disposal treatment of them (Category 5).

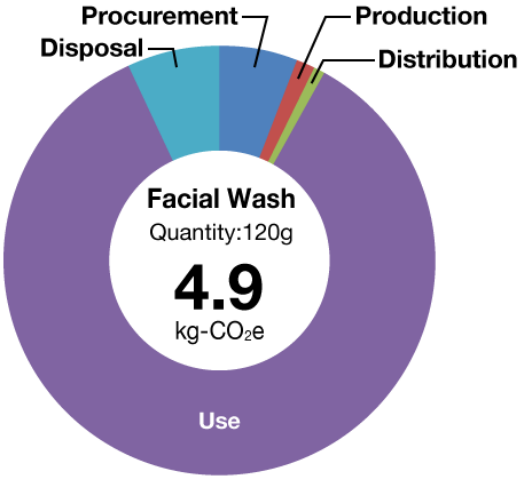
Third-Party Certification

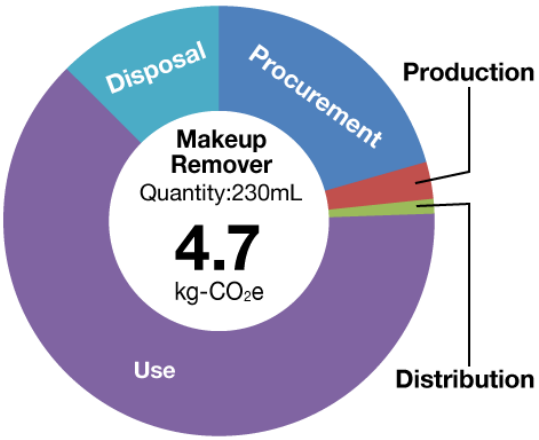
Among the CO_2 emission categories of Scope 3, Shiseido is certified by SGS Japan Inc., a third-party certification provider, for the most impactful categories 1, 4, 5, 11, and 12 to secure the transparency and adequacy of our evaluation. We will disclose the 2017 result as soon as the verification is completed, by posting a copy of our SGS Verification Statement on this website.

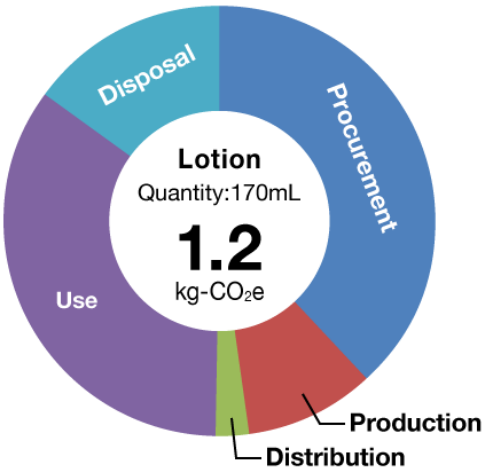
CO_2 Emissions Related to Cosmetics and Personal Care Products

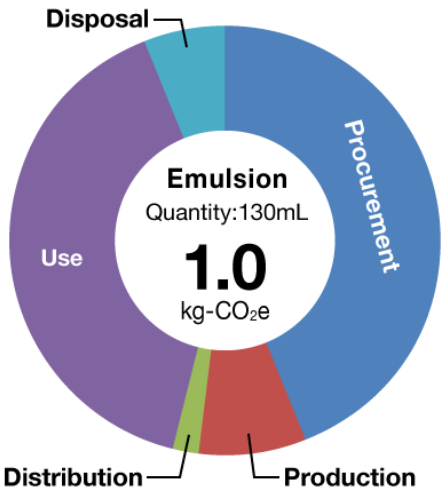
We also evaluate the environmental footprint of Shiseido's cosmetics and personal care products, including CO_2 emissions, according to "Shiseido's Environmental Footprint Evaluation Guidance."

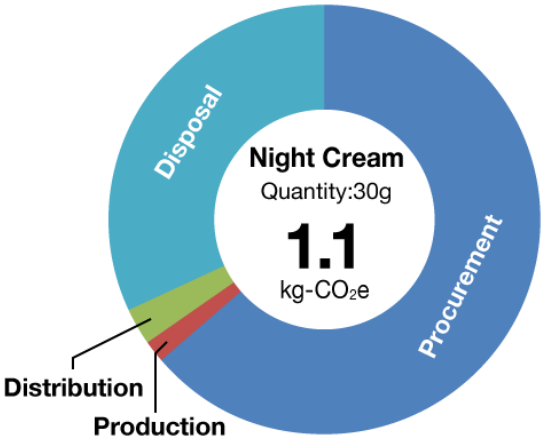


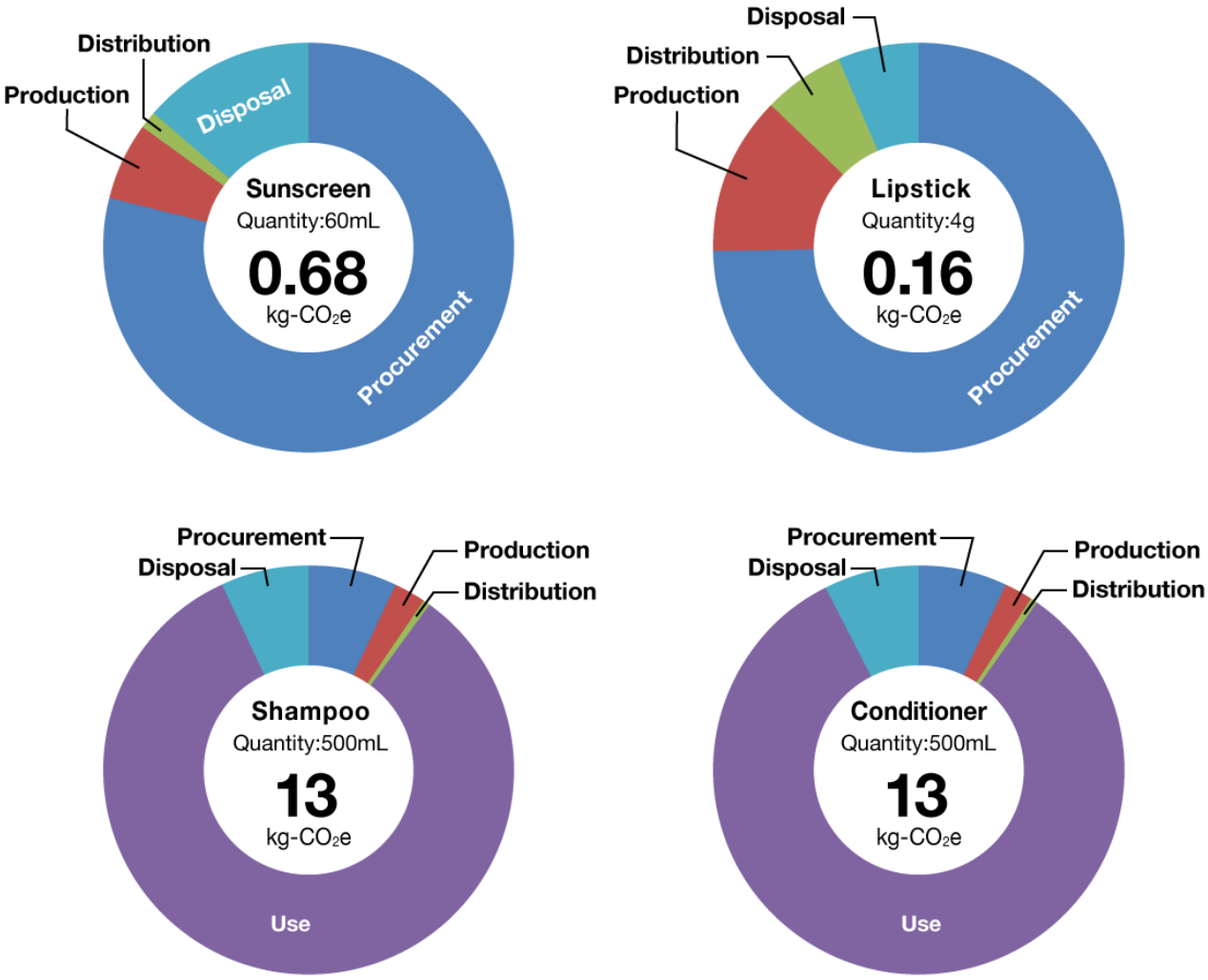












* Evaluation done under below condition

Product category	Conditions
Facial Wash	Rinse off with 4.11L of warm water (40 ℃)
Makeup Remover	Rinse off with 4.5 L of warm water (40 ℃)
Lotion and Emulsion	Apply to the face with a cotton pad
Shampoo and Conditioner	Rinse off with 15 L of warm water (40℃)

Evaluation of each life cycle stage by product types, and CO_2 emissions per product

Shiseido's Guidance for Product and Organizational Environmental Footprint Assessment (ver. **1.02**)

29th, June, **2018**

This guide provides principles, requirements and guidelines related to the environmental footprint (EF) of products and organizational activities, as defined by the life cycle assessment (LCA) outlined in ISO 140401[1)], 140442 [2)] and "Corporate Value Chain (Scope 3) Standard [3)]" of GHG protocol.
The objective of this guide is to promote eco design and minimize environmental impact by providing appropriate methodology to evaluate our efforts on product development or economic activities from a life cycle perspective while preventing greenwash due to the overestimation of avoided effect. If necessary, when evaluating the tradeoff or synergistic effect, system boundaries and impact categories should be expanded. In interpreting and communicating the results of EF evaluation, uncertainties due to the limits of LCA shall be carefully considered, including data quality among secondary databases or differences in the available range of primary data collection between suppliers,.

1.Terms and Definitions

1-1 Greenhouse gas (GHG):

The gas in the atmosphere that can absorb and release infrared radiation emitted from the surface of the earth, atmosphere and clouds. In this guide, GHG includes CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

1-2 Product:

Consumer goods provided by Shiseido. Unless otherwise noted,product shall fall under the definition of cosmetics or quasi-drugs provided by the Japanese Pharmaceuticals and Medical Devices Law.

1-3 Raw material:

Ingredients or packaging material used in or for the product.

1-4 Packaging material:

Material in whole or in part constituting the bottle, cap, pump, accessory, etc. of a product

1-5 Auxiliary material:

What is consumed only at a specific stage and does not constitute part of the product or accessories. For example, lubricants used at the production stage,

transportation materials used at the distribution stages, etc.

1-6 Preparation stage for recycling:
A process to prepare for recycling after a thing has been divided into its separate parts.

1-7 Equipment to be used repeatedly:
Tools designed for repeated use, such as pallets and plastic containers.

1-8 Primary data:
The data that is collected directly, such as electricity consumption on a production site.

1-9 Secondary data:
The data that is compiled from static data such as national economic input / output database, agricultural statistics, industrial statistics, etc.

2.Scope

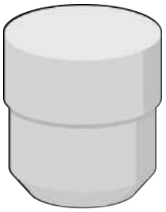
2-1 Component to be targeted by this guide
(1) Contents and ingredients
(2) Packaging materials
- Containers (e.g. bottle, stopper, pump, pouch, etc.)
- Secondary packaging (e.g. carton, blister case, etc.)

(3) Accessories (e.g. manual, brush, etc.)

2-2 Non-target component
(1) Promotional materials attached for a limited time
(2) Equipment to be used repeatedly

2-3 Functional unit
In principle, EFis evaluated based on sales units.
In cases in which the product has a corresponding refill, the weighted EF average between these products, calculated using the content weight and the sales quantity or the planned sales quantity, may be adopted as the product's EF value

<Example>

Product	Regular product	Refill product	Weighte-daverage
			EF=(10*40*100+ 2*40*300)/(40* 100 +40*300) = 4
Weight of content	40 g	40 g	
Sales quantity	100 p	300 p	
EF	10	2	**4**

2-4 Life cycle perspective

The EF of a product considers all stages of the product life cycle as follows:

· Raw material procurement stage

· Manufacturing stage

· Distribution stage

· Use & maintenance stage

· End-of-life stage

The recycling and selling process are excluded from the system boundary.

2-5 Inventory analysis and database

Environmental inventory analysis shall be carried out based on primary data and some appropriate secondary data. The following databases are recommended for EF inventory analysis.

- IDEA [4)]
- Ecoinvent [5)]
- Japanese public database for the CFP program[6)]
- The basic unit database for the evaluation of organizational greenhouse gas emissions throughout the value chain[7)]
- WaterStat [8)]
- Water Footprint Inventory Database [9)]
- Electric power consumption rate,provided by power companies

2-6 Environmental impact categories and models on impact assessment

The table below shows default impact categories with respective indicators and impact assessment models.

Impact category	Indicators	LCIA model
Climate change	kg-CO_2 equivalent	Bern model – Global Warming Potentials (GWP) over a 100 yeartime horizon[10]
Water resource-consumption	m^3-H_2O equivalent	(1)AWARE [11] (2)Water Unavailability Factor[12]
Water pollution (Aquatic eutrophication)	ThOD (≈COD) Fresh water: kg-P equiva-lentMarine: kg-N equivalent	

3. Methodological framework

3-1 Common application to all stages

3-1-1 Data collection

- Primary data shall be collected on unit processes that have a large effect on the whole product life cycle.
- Secondary data is permitted for unit processes with less influence.
- The activities of indirect departments such as the headquarters and research departments are not included in the evaluation. If it is difficult to extract the activities of indirect departments from the whole, indirect departments may be included.
- Capital goods such as facilities for producing products are not subject to evalua tion.
- Items that are used repeatedly are not subject to evaluation.
- Regional differences should be take ninto consideration based on primary data on each area.

3-1-2 Period of data collection

- The actual measurement data should be the average value of one year.
- The influence of seasonal fluctuations is eliminated by collecting annual data.
- When the annual average value is not adopted, the data validity and the reliability of the evaluation shall be verified and accounted for.

- In cases in which data has large annual variations such as the amount of agricultural harvesting, average values over several years should be used in accordance with the objective.

3-1-3 Allocation

- If it is difficult to collect data for each product or unit process respectively, the data collected or the calculation result based on that data may be allocated according to the physical quantity such as weight ratio, volume ratio and number ratio.
- In case another approach is taken for allocation, the validity of this approach shall be explained.

3-1-4 Transportation

- All inter-site transport (one way transport) shall be accounted for.
- Primary data should be collected as much as possible and should be calculated based on the following method:
  - ✓ Fuel consumption method
  - ✓ Fuel efficiency method
  - ✓ Ton-kilometer method
- The details of each method can be found in Annex B.

3-1-5 Evaluation on waste treatment

- For waste discharged at each stage, the EF associated with waste treatment and transportation from the source to the final disposal site shall be calculated at each stage.
- The waste shall be treated according to the scenario detailed in Annex E, based on material type.
- In case the evaluation is based on climate change, CO_2 emissions released from the carbon in material molecules shall be included. However, CO_2 generated from biomass-derived materials should not be considered (=carbon neutral).
- For waste materials to be recycled, the EF related to transportation to the treatment site and the preparation process for recycling shall be calculated.
- The reduction effect on EF due to recycling shall not be included in the End-of-life stage.
- If waste is sold as a valuable material, it is excluded from evaluation.

3-1-6 Cut-off

- In principle, cut-off shall not be permitted for each process of the manufacturing stage and the use & maintenance stage.
- The EF of materials and processes which contribute less to the entire EF can be cut off* with specification.
- The total cut off EF shall be less than 5% of the total EF.
- The calculated EF shall be rebated by the ratio to the entire EF.

3-2 Raw material procurement stage

3-2-1 Scope

The manufacturing stage covers processes included in the following items:

- Resource mining, cultivation, and breeding processes related to raw material production
- Procurement transportation to the manufacturing stage
- Treatment of waste and wastewater generated from the raw material procurement stage
- If there are processes other than the above, the process should be also included in the data collection scope.

3-2-2 Data collection

In the raw material procurement stage, data items to be collected are shown in the table below.

Items	Primary data	Either will do	Secondary data
1. Procurement volume such as weight, quantity, and cost of raw materials for each supplier input to product manufacturing	*✓	*✓	
2. EF related to the production of ingredients		✓	
3. EF related to the production of packaging materials		✓	
4. EF related to the production of accessories (manuals, utensils, etc.)		✓	

5. EF related to fuel consumption in procurement transportation to the production site		✓	
6. EF related to consumption of transportation materials in procurement transportation to the production site		✓	
7. EF related to waste generation in procurement transportation to the production site		✓	
8. EF related to waste treatment in procurement transportation to the production site		✓	
9. Amount of agricultural products and other biomass-derived materials put into products		✓	
10. Amount of fresh water resource to be used for cultivation		✓	
11. Water consumption for cultivating agricultural products and biomass-derived materials used for product from each water source		✓	
12. EF related to the fuel and energy supply which is procured through a public service			✓
13. EF related to the fuel and energy supply which is generated on-site or is not prepared in 2-6 databases (e.g.green power,etc.)		✓	

3-2-3 Method and conditions of primary data collection

- When procuring recycled materials or reused materials, EF associated with the process after the preparation stage of recycling or reuse shall be included.
- In cases where the same raw materials are procured by multiple suppliers, it is desirable to collect primary data for all suppliers. If it is impossible to collect data from all suppliers, primary data shall be collected for the top 50% of the total procurement amount.

- For procurement sources that cannot collect data, the weighted average value based on the procurement amount of the supplier which provided information may be used as secondary data.
- In cases where the suppliers are different for each production site, the primary data on the production site producing the target product shall be collected.
- The primary data measurement method for the raw material manufacturing process should be selected from the following four methods.

  (A) Method of totalizing the input/output amount of items for each operation unit (unit operating time, one lot, etc.) of facilities required for executing the process

  e.g.(Equipment operation time)*(Power consumption rate of equipment)= (Power consumption)

  (B)Method of allocating actual values for a certain period of time at production sites among products

  e.g. Total fuel input per year allocated among products

  (C)Combined use of (A) and (B)
- Procurement volume may be substituted for input quantity.
- On the evaluation of GHG emissions, if it is difficult to obtain primary data and to find appropriate secondary data, a value of 5.0kg-CO2e/kg shall be applied in order to avoid underestimation due to missing data.
- The EF related to packaging material (EFpm) in the procurement stage should be calculated based on the weight preferentially with the following equation:

  $EF_{pm} = \Sigma (W * (Gm + Gp + Gt * Dt * 10^{-3}))$

  W: Weight of the parts [kg]

  G_m: Unit EF corresponding to the material of the parts

  G_p: Unit EF corresponding to the process such as molding, printing, etc.

  G_t: Unit EF corresponding to the transportation method

  D_t: Transportation distance [km]
- In case of product EF evaluation, primary data related to the procurement volume shall be used. In the evaluation of organizational EF, if it is difficult to identify the weight of packaging materials, the average value of the same kind of packaging materials may be adopted.
- In the evaluation of auxiliary materials, the calculation based on the payment amount may be adopted.

3-2-4 Scenario on procurement transportation

- For transportation and transportation materials used in the transportation process, it is desirable to collect primary data.
- If it is difficult to collect primary data, the scenario inAnnex C may be used.

3-2-5 Classification on evaluation of Scope 3 GHG emissions

- GHG emissions related to cradle-to-gate such as sourcing, material production,
  cultivation, purification, etc. shall be classified as category 1.
- GHG emissions related to procurement logistics shall be classified as category 4.

3-3 Manufacturing stage

3-3-1 Scope

The manufacturing stage covers the processes included in the following items:

- Product manufacturing
- Production and transportation of auxiliary materials to be put into the manufacturing stage
- Treatment of waste and wastewater generated from the manufacturing stage
- If there are processes other than the above, the process should be also included in the data collection scope.

3-3-2 Data collection

In the manufacturing stage, the data items to be collected are shown in the table below.

Items	Primary data	Either will do	Secondary data
1. Input of water *Water which is part of the content shall be treated as an ingredient in the raw material production stage.	✓		
2. Input of fuel and electric power	✓		
3. Input of auxiliary materials	✓		
4. The volume or amount of production	✓		
5. Waste and wastewater generation	✓		
6. Intermediate transport between sites	✓		

7. EF related to water supply		✓	
8. EF related to the production of auxiliary materials		✓	
9. EF related to the process of waste and wastewater treatment from the manufacturing stage		✓	
14. EF related to the fuel and energy supply which is procured by a public service		✓	
15. EF related to the fuel and energy supply which is generated on-site or is not prepared in 2-6 databases (e.g. green power,etc.)			✓

3-3-3 Method and condition of primary data collection

- For products produced at multiple sites, primary data shall be collected for all sites,and a weighted average according to the quantity at each site shall be applied.
- The primary data measurement method for the manufacturing process should be selected from the following four methods:
  (A) Method of totalizing the input/output amount of items for each operation unit (unit operating time, one lot, etc.) of facilities required for executing the process
  e.g. (Equipment operation time)* (Power consumption rate of equipment) = (Power consumption)
  (B) Method of allocating actual value for a certain period of time at production site among products
  e.g.Total fuel input per year allocated among products
  (C) Combined use of (A)and (B)
- When measurement method (A) is adopted, the EF shall be appropriately allocated according to the method of (3-1-3).
- When measurement method (C) is adopted, missing records or double accounting shall be prevented in the evaluation of each process.
- The primary data on GHG emissions related to waste from the manufacturing stage shall be evaluated according to the following two methods:
  (A) GHG emissions are calculated from the stoichiometric relationship, assuming that all carbon atoms constituting the components are

discharged as CO_2 by incineration or wastewater treatment.

(B) Evaluate GHG emissions of products by measuring CO_2 emissions with a burning test for each raw material.

- When the molecule contains biomass-derived carbon, CO_2 generated from the biomass carbon should not be counted (carbon neutral).
- For evaluations on waste treatment or wastewater treatment from the manufacturing stage, EF related to the operation of waste treatment or wastewater treatment shall be included in the manufacturing stage.

3-3-4 Scenario on intermediate transportation

- For transportation and transportation materials used in the intermediate transportation process, it is desirable to collect primary data.
- If it is difficult to collect primary data, the scenario in Annex C may be used.

3-3-5 Classification on evaluation of Scope 3 GHG emissions

- GHG emissions associated with the combustion of fuel consumed in the site should be classified as Scope 1.
- GHG emissions related to the production of electric power consumed in the site, supplied by others, shall be classified as Scope 2.
- GHG emissions related to the production of fuel consumed in the site shall be classified as category 3.
- GHG emissions related to the offsite treatment of waste and wastewater discharged from the manufacturing stage shall be classified as category 5.

3-4 Distribution stage

3-4-1 Scope

The distribution stage covers the processes included in the following items:

- Shipping logistics
- Production and transportation of auxiliary materials to be put into the distribution stage
- Treatment of waste and wastewater generated from the distribution stage
- If there are processes other than the above, the process should be also included in the data collection scope.

3-4-2 Data collection

In the distribution stage, the data items to be collected are shown in the table below.

Items	Primary data	Either will do	Secondary data
1. Product weight	✓		
2. Transportation quantity of products		✓	
3. Transport distance		✓	
4. Usage of transport materials		✓	
5. EF on production and transportation of transportation materials		✓	
6. Amount of waste generated in the distribution stage		✓	
7. EF related to the fuel and energy supply which is procured by a public service		✓	
8. EF related to the fuel and energy supply which is generated on-site or is not prepared in 2-6 databases. (e.g. green power,etc.)			✓
Fuel consumption method			
9. Fuel consumption	✓		
10. EF for each fuel type			✓
Fuel efficiency method			
11. Fuel efficiency	✓		
12. EF for each fuel type			✓
Ton-kilometer method			
13. Transportation method		✓	
14. Loading rate		✓	
15. EF related to loading rate and transportation means			✓

3-4-3 Method and condition of primary data collection

- The data collection method is not specified.

3-4-4 Scenario on procurement transportation

- If it is difficult to collect primary data, the scenario in Annex C may be used.

3-4-5 Classification on evaluation of scope 3GHG emissions

- GHG emissions related to the distribution shall be classified as category 4.

3-5 Use & maintenance stage

3-5-1 Scope

The use & maintenance stage covers all processes associated with use or maintenance of the product by the consumer. The concrete processes are as follows:

- Water supply for product use
- Energy or fuel consumption for product use
- Manufacturing of expendables for product use
- Treatment of waste, except for the product contents, generated from the use & maintenance stage
- Treatment of wastewater generated from the use & maintenance stage
- GHG emissions from the use of aerosol products
- If there are processes other than the above, the process should be also included in the data collection scope.

3-5-2 Data collection

In the use & maintenance stage, the data items to be collected are shown in the table below.

Items	Primary data	Either will do	Secondary data
1. Content volume, weight, amount	✓		
2. Content usage per 1 use		✓	
3. Power consumption per 1 use		✓	
4. Fuel consumption per 1 use		✓	
5. Water consumption per 1 use		✓	
6. Expendable consumption per 1 use		✓	
7. Amount of waste, except for the materials the product consists of, generated in the use & maintenance stage		✓	

8. Amount of wastewater generated in the use & maintenance stage (= water consumption in the use & maintenancestage)		✓	
9. Amount of propellant released from the use of a aerosol product	✓		
10. Gas composition of a propellant		✓	
11. EF related to the production of expendables		✓	
12. EF related to the water supply for product use			✓
13. EF related to wastewater treatment from the use & maintenance stage		✓	
14. EF related to the fuel and energy supply which is procured by a public service			✓
15. Indirect global warming potential of LPG			✓10)

3-5-3 Method and condition of primary data collection

- EF of products that do not involve any consumption of power, fuel, water and expendables shall be evaluated as no impact.
- Usage times should be calculated according to the following formula:
  (Usage times) =(Product content weight) /(Usage weight per 1 use)
- Primary data shall be collected based on the scenario in AnnexD.
- For aerosol products that emit GHG as a propellant, GWP shall be included in the scope.
- For aerosol products that emit LPG as a propellant, indirect GWP of LPG[10)] shall be included in the scope.
- The processes on treatment of waste containers and waste accessories, consisting the product, are excluded from the data collection items at the use & maintenance stage so as to be grasped at the end-of-life stage.

3-5-4 Scenario on product use

- Usage scenarios for each product category are listed in Annex D.

3-5-5 Classification on evaluation of scope 3 GHG emissions

- GHG emissions related to the production of consumables, electric power, fuel, and tap water consumed with product use shall be classified as category 11.
- GHG emissions related to the combustion of fuel consumed with product use shall be classified as category 11.
- GHG emissions related to the treatment process of wastes and waste water, which do not constitute the product,generated from the use stage shall be classified as category 11.

3-6 End-of-life stage

3-6-1 Scope

The End-of-life stage covers the processes included in the following items:

- Degradation of content
- Collection and transport of waste derived from product packaging and acces sories
- Incineration and landfill treatment of waste derived from product packaging and acces sories
- Pre-recycling process (up to the preparation stage for recycling)
- If there are processes other than the above, the process is also included in the calculation scope.

3-6-2 Data collection

In the end-of-life stage, the data items to be collected are shown in the table below.

Items	Primary data	Either will do	Secondary data
1. GHG emissions due to degradation of content, packaging, accessories	✓		
2. Amount of ThOD due to degradation of content	✓		
3. Amount of N due to degradation of content	✓		
4. Amount of P due to degradation of content	✓		
5. Amount of waste packaging, waste accessories, waste transport materials	✓		

6. Transportation method to treatment			✓
7. Transport distance to treatment facility			✓
8. EF related to transportation to treatment facilities			✓
9. Amount of waste to be incinerated			✓
10. Amount of waste to be landfilled			✓
11. EF related to waste treatment			✓
12. EF related to recycling pretreatment (e.g.washing, making bale, etc.)			✓

3-6-3 Method and condition of primary data collection

- The primary data on GHG emissions related to degradation of content shall be evaluated according to the following two methods:
  (A) GHG emissions are calculated from the stoichiometric relationship, assuming that all carbon atoms of the components are discharged as CO_2 by incineration or wastewater treatment.
  (B) GHG emissions of products are evaluated by measuring CO_2 emissions from burnings tests for each raw material.
- When the molecule contains biomass-derived carbon, carbon derived from the biomass should not be counted (carbon neutral).

3-6-4 Scenario on transportation and waste treatment

- For transportation to treatment facilities, the scenario in Annex C shall be applied uniformly.
- For waste treatment at treatment facilities, the scenario in Annex F shall be applied uniformly.
- The released amount of ThOD, N and P may be calculated with the following equation:
  (Released amount) = (Actual amount) * (1 –(Penetration rate of the sewage treatment plant in the area where the product is used))

3-6-5 Classification on the evaluation of scope 3 GHG emissions

- GHG emissions related to the treatment process of waste from the product shall be classified as category 11.
- GHG emissions such as CO_2 and CH_4 emitted from the carbon molecules of the

product's materials by microbial degradation or combustion shall be classified as category 12.

3-7 Other activities

3-7-1 Scope

Evaluation of other activities is for organizational LCA or the evaluation of scope 3 GHG emissions. Other activities cover the processes included in the following items:

- Investment for capital goods
- Business travel
- Commuting

3-7-2Data collection

In the end-of-life stage, the data items to be collected are shown in the table below.

Items	Primary data	Either will do	Secondary data
Scope 3, Category 2:Investment for capital goods			
1. Capital investment in innovation centers and production sites	✓		
2. Types and amount of materials used for the construction of buildings	✓		
3. If it is difficult to obtain data for 2., the results will be gotten from CASBEE.	✓		
4. Total floor area and useful lifetime.	✓		
5. EF related to the production of capital goods such as productive facilities and buildings		✓	
Scope 3, Category 6:Business travel			
6. Expenditure on business travel	✓		
7. Destinations of business trips	✓		
8. Number of business trips for each destination	✓		
9. Means of transportation on business	✓		

10. EF related to transportation		✓	
Scope 3, Category 7:Commuting			
11. Expenditure on commuting	✓		
12. Means of transportation for commuting	✓		
13. EF related to transportation		✓	

3-7-3 Classification on evaluation of scope 3 GHG emissions

- GHG emissions related to investment for capital goods shall be classified as category 2.
- GHG emissions related to business travel shall be classified as category 6.
- GHG emissions related to commuting shall be classified as category 7.

4. References

1) ISO 14040 (2006) Environmental Management - Lifecycle Assessment - Principles and Framework
2) ISO 14044 (2006) Environmental Management - Lifecycle Assessment - Requirements and Guidelines
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4) Inventory Database for Environmental Analysis(IDEA): http://idea-lca.com/
5) Ecoinvent: http://www.ecoinvent.org/
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7) Ministry of the Environment, government of Japan, The basic unit database for evaluation of organizational greenhouse gas emissions throughout value chain: http://www.env.go.jp/earth/ondanka/supply_chain/gvc/files/tools/DB_v2.3_r.pdf
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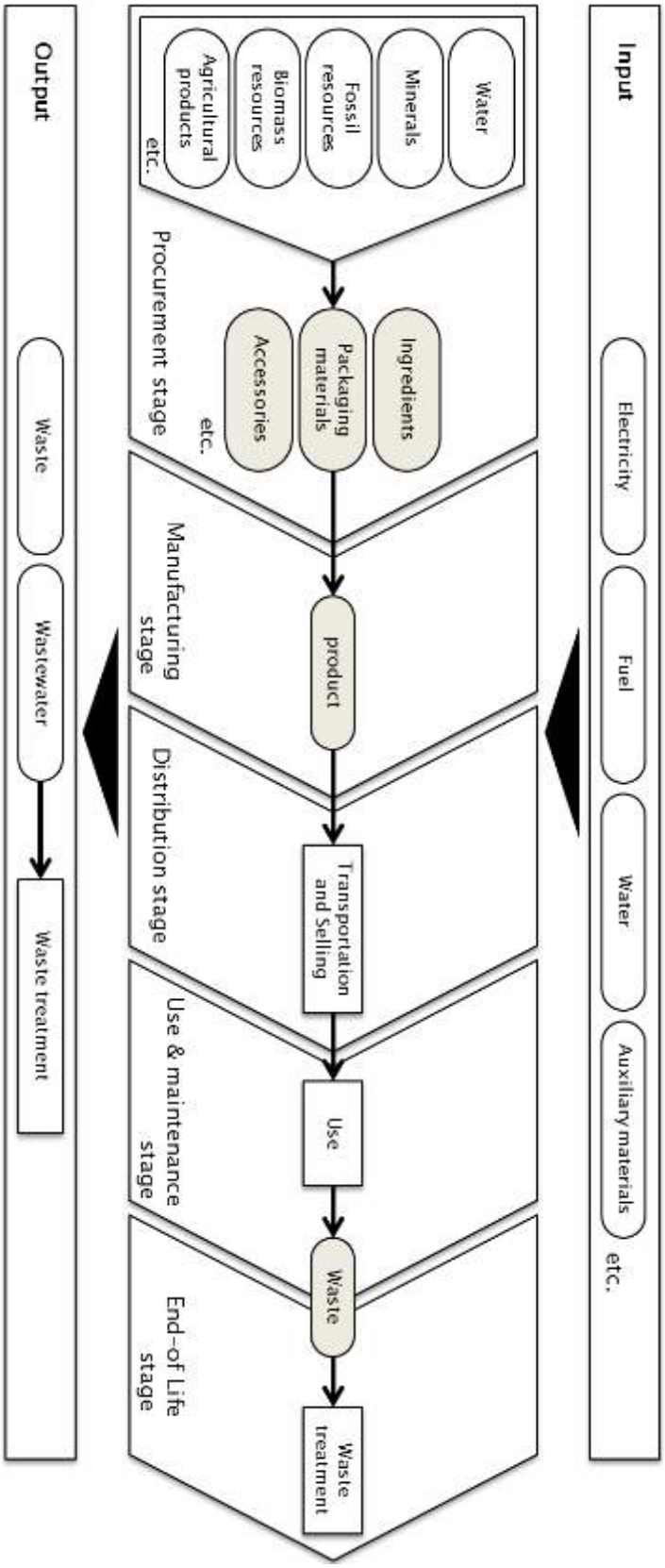
11) Boulay, A.-M., J. Bare, L. Benini, M. Berger, M. J. Lathuillière, A. Manzardo, M. Margni, M. Motoshita, M. Núñez, A. V. Pastor, B. Ridoutt, T. Oki, S. Worbe and S. Pfister (2017)The WULCA consensus characterization model for water scarcity footprints: assessing impacts of water consumption based on available water remaining (AWARE),The International Journal of Life Cycle Assessment: 1-11.
12) S.Yano, N.Hanasaki, N.Itsubo and T.Oki(2015)Water Scarcity Footprints by Considering the Differences in Water Sources, Sustainability:7(8), 9753-9772
13) Product category rules of carbon footprint communication program for glass containers(PA-BE-03): https://www.cfp-japan.jp/common/pdf_authorize/000184/PA-BE-03.pdf
14) Product category rulesof carbon footprint communication program for plastic containers(PA-BC-02): https://www.cfp-japan.jp/common/pdf_authorize/000058/PA-BC-02.pdf
15) Ministry of the Environment, Japan (2006)Survey on actual waste disposal business in Japan: http://www.env.go.jp/recycle/waste_tech/ippan/index.html
16) Product category rules of carbon footprint communication program for papercontainers(PA-BB-01): https://www.cfp-japan.jp/common/pdf_authorize/000028/PA-BB-01.pdf

Annex A: Life cycle flow diagram



Annex B: Method of evaluating EF due to fuel consumption during transportation

B-1 Fuel consumption method

(1)Collect the amount of fuel used for each transportation means.

(2)EF is calculated by multiplying the amount of fuel and the EF factor related to supply and use of the fuel (secondary data).

B-2 Fuel efficiency method

(1) Calculate the average fuel efficiency by fuel consumption and transport distance within the specified period.

(2) EF is calculated by multiplying the fuel efficiency, the transport distance related to product distribution and the EF factor related to supply and use of the fuel (secondary data).

B-3 Ton-kilometer method

(1) Collect the loading rate [%] for each means of transportation and the transport load (transport ton-kilometer) [t · km].

(2) EF is calculated by multiplying product weight, transport distance and the EF factor according to the transport load of each transport means (secondary data).

Annex C: Scenario for transportation

Transport scenarios for each stage in cases where primary data can not be collected are shown below. They apply to each transportation process for the raw material procurement stage, the manufacturing stage, the distribution stage and the end-of-life stage.

C-1 Transport distance

This guide uses a longer transport distance than average in order to raise the incentive for primary data collection.

<Examples>

(1)Transportation within the prefecture: 100 km

(2)Inter-prefecture transportation: 1.5 times of the actual inter prefecture distance

(3)Transportation of procurement (from supplier to production site) : 500 km

(4)Shipment logistics for domestic market in U.S. and China: 2,000 km

(5)Shipment logistics for domestic market, when the consumption area is not limited to a specific area: 1,000 km

(6)International transportation:

(7-1) Land transportation

- If the departure country and arrival country are connected by land, the land transport distance is shorter than the distance by ship,and the land transport distance is 2000 km or less, land transportation will be selected.-Transportation in departure country: 1,000 km
- Transportation in arrival country: refer to(1) -(5)

(7-2) Marine transportation

- Transportation from the production site to the port of the producing country: 10 km
- Transportation from the port of the producing country to the port of arrival country (= consuming country): refer to the "Inter-country/Region Distance Database"
- Transportation in arrival country: refer to(1) -(5)

(7)Transportation of waste collection: 100 km (one way transport)

C-2 Transport method

In principle, truck transport is adopted as the basic transport method in order to raise the incentive for primary data collection and reduction of CO_2 emissions by modal shift.

<Examples>

(1) Transportation by logistics operator: 10 ton trucks
(2) Transportation by other businesses (producers,etc.): 2 ton trucks
(3) International shipment: Container ships(less than 4000 TEU)
(4) Transportation of waste collection: 2 ton trucks

C-3 Loading factor

A scenario with a lower loading rate than average was adopted in order to raise the incentive for primary data collection.

<Example>

50 %

C-4 Transport materials

A scenario with more transportation materials than average was adopted in order to raise the incentive for primary data collection.

<Example>

(1) Transportation for raw material procurement: 71.3 g/kg of tinplate and 33.5 g/kg of cardboard
(2) Transportation for packaging material procurement: 0.5 g/g of cardboard and 0.01 g/gof polyethylene sheets
(3) Intermediate transportation in the manufacturing stage: 71.3 g/kg of tinplate and 33.5 g/kg of cardboard
(4) Transportation for shipping: Using cardboard with weight of 50% of product weight

Annex D: Scenario for use conditions

Use conditions per 1 use of product which requires the consumption of energy, fuel, water and expendables are described below:

(1) Skincare lotion

Scenario	Use 1 sheet of cotton (=0.74 g) per 1 use.		
Content usage	2.0 mL	Room temperature	- ℃
Expendables	Cotton sheet	Amount of exp.	0.72 g

(2) Skincare emulsion

Scenario	Use 1 sheet of cotton (=0.74 g) per 1 use.		
Content usage	1.5 mL	Room temperature	- ℃
Expendables	Cotton sheet	Amount of exp.	0.72 g

(3) Makeup cleansing oil

Scenario	After use, rinse off with 4.5 L of water or hot water. In calculating the EF related to water consumption, the temperature is set at 33.1 ℃ according to the results of an internet survey on consumer behaviors*.		
Content usage	3.0 mL	Room temperature	17 ℃
Water consumption	4.5 L	Water temperature	33.1℃
Electricity	0.00030 kWh	City gas	0.0067Nm^3

*The survey results showed that the respondents rinsed7 times with hot water and 3 times with lukewarm water.

(4) Face wash

Scenario	After use, rinse off with 4.5 L of water or hot water. In calculating the EF related to water consumption, the temperature is set at 33.1 C according to the results of an internet survey on consumer behaviors.		
Content usage	1g	Room temperature	17 ℃
Water consumption	4.5 L	Water temperature	33.1 ℃
Electricity	0.00030 kWh	City gas	0.0067 Nm^3

(5) Face wash (Foaming type)

Scenario	After use, rinse off with 4.5 L of water or hot water. In calculating the EF related to water consumption, the temperature is set at 33.1 ℃ according to the results of an internet survey on consumer's behavior.		
Content usage	2.5 mL	Room temperature	17℃
Water consumption	4.5 L	Water temperature	33.1℃
Electricity	0.00030 kWh	City gas	0.0067 Nm^3

(6) Face wash (Easy rinse-off type)

Scenario	After use, rinse off with 4.5 L of water or hot water. In calculating the EF related to water consumption, the temperature is set at 33.1 ℃ according to the results of an internet survey on consumer's behavior.		
Content usage	2.5 mL	Room temperature	17℃
Water consumption	2.7 L	Water temperature	33.1℃
Electricity	0.00030 kWh	City gas	0.0067 Nm^3

(7) Soap

Scenario	This scenario assumes hand washing. 10 L of tap water is consumed for rinsing off per 1 use(30 seconds).		
Content usage	0.7 g	Room temperature	17 ℃
Water consumption	10 L	Water temperature	17 ℃
Electricity	- kWh	City gas	- Nm^3

(8) Soap as a hotel amenity

Scenario	It is assumed that 10 % of the contents are used for washing the hands and body, and 90 % remains. The remaining soap is discarded (Shiseido survey). 100 L of 40 ℃ water is consumed for washing on an overnight stay.		
Content usage	Whole amount	Room temperature	17 ℃
Water consumption	100L	Water temperature	40 ℃
Electricity	0.13 kWh	City gas	0.30 Nm^3

(9)Eco-soap as a hotel amenity

Scenario	It is assumed that 10 % of the contents are used for washing the hands and body, and 90 % remains. The remaining soap is discarded (Shiseido survey). 100 L of 40 ℃ water is consumed for washing on an overnight stay.		
Content usage	Whole amount	Room temperature	17 ℃
Water consumption	100 L	Water temperature	40 ℃
Electricity	0.13 kWh	City gas	0.30Nm^3

(10) Shampoo, Hair conditioner and Body shampoo

Scenario	After use, rinse off with 15L of 40 ℃ water.		
Content usage	6.0 mL	Room temperature	17 ℃
Water consumption	15 L	Water temperature	40 ℃
Electricity	0.0020 kWh	City gas	0.44Nm^3

(11) Bathwater additive

Scenario	Add specified amount to hot water in bathtub.		
Content usage	25 mL	Room temperature	17 ℃
Water consumption	200	Water temperature	40 ℃
Electricity	0.027kWh	City gas	0.59Nm^3

Annex E: Scenario for waste treatment

The following scenario should be adopted for the method of waste treatment (waste containers, waste accessories, waste transport materials, etc.) sent to the processing facility, depending on the type of waste materials. In the case where it is difficult to specify the type and composition ratio of waste materials, the scenario "E.6 Other Waste" may be adopted.

E-1 Glass

The glass waste treatment scenario, taken fromPCR(PA-BE-03)[13] of the carbon footprint program for glass container packaging in Japan, is shown below.

- 53.1% is recycled as cullet.
- 13.4% is recycled as a raw material for other uses.
- 15.3% undergoes intermediate treatment and is landfilled.
- 18.2% is directly landfilled.

E-2 Plastic

The plastic waste treatment scenario, taken from PCR(PA-BC-02)[14] of the carbon footprint program for plastic container packaging in Japan, is shown below.

- 62% is incinerated.
- 16% is landfilled directly.
- 22% is recycled.

*GHG emissions from the plastics of sold products and disposal treatment of them were calculated under the following scenario until FY2017, on Scope 3 evaluation.

- 92% is incinerated.
- 3% is landfilled directly.-5% is recycled.

E-3 Paper

The paper waste treatment scenario, taken from PCR(PA-BB-01)[16] of the carbon footprint program for paper container packaging in Japan, is shown below.

- 96% is incinerated.
- 4% is recycled.

CO_2 from the release of carbon-constituting paper molecules is not counted, because paper is considered to be a 100% biomass-derived material(carbon neutral).

E-4 Cardboard

The cardboard waste treatment scenario, taken from PCR (PA-BB-01)[16] of the carbon footprint program for paper container packaging in Japan, is shown below.

-4% is incinerated.

- 96% is recycled.E-5 Metal
- 100% is landfilled.

E-6 Other waste

The other waste treatment scenario, taken from the report "Survey on actual waste disposal business in Japan (2006, Ministry of the Environment, Japan)[*15] , is shown below.

- 92% is incinerated.
- 3% is landfilled directly.
- 5% is recycled.

Verification Statement

6 June 2018

Mr. Masahiko UOTANI,
President and Group CEO
Shiseido Company, Limited.

Objective

SGS Japan Inc. (hereinafter referred to as "SGS") was commissioned by Shiseido Company, Limited. (hereinafter referred to as "the Organization") to conduct independent verification based on Criteria of Verification (ISO 14064-3: 2006 and the SGS verification protocol) regarding the data prepared by the Organization (hereinafter referred to as "the GHG assertion"). The objective of this verification is to confirm that the GHG assertion in the Organization's applicable scope has been correctly calculated and reported in the GHG assertion in conformance with the criteria, and to express our views as a third party.

Scope

The scope of verification is limited to the GHG assertion at the head office, major facilities, factories, laboratories and major subsidiaries in Japan and overseas (totally 35 organizations, including 21 overseas), which have been defined by the Organization.

GHG emissions included in the GHG assertion are Scope 3 (Category 1, 4, 5, 11 and 12).

The period subject to report is from January 1, 2017 to December 31, 2017.

Procedure of Verification

The GHG assertion was verified in accordance with Criteria of Verification, and the following processes were implemented at a limited of assurance:

- Verification of the calculation system: Interviews on the measurement, tabulation, calculation and reporting methods employed by the Organization as well as review of related documents and records
- Verification of the GHG assertion: On-site verification, and review of calculation systems and match of evidences at the Shiodome Main Office, and performance of analytical procedures and interviews for the other sites in the scope of verification

The criteria for this review are based on the following documents:

- Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, Ver. 2.2 and the Database of emissions unit values on the same Accounting Ver. 2.4
- Basic Database of the Carbon Footprint of Products (CFP) Communication Program Ver. 1.01 and the Applicable Data (Domestic) of the same Program Ver. 1.01
- Protocol specified by the Organization

Conclusion

Within the scope of the verification activities employing the methodologies mentioned above, nothing has come to our attention that caused us to believe that the Organization's GHG assertion (Scope 3: 2,008,311 t-CO2) was not calculated and reported in conformance with the criteria.

SGS Japan Inc. affirms our independence from the organization, being free from bias and conflicts of interest with the organization.

For and on behalf of SGS Japan Inc
Senior Executive & Business Manager
Certification and Business Enhancement

Yuji Takeuchi

Signed:

Environmental Accounting

Basis for Environmental Accounting Calculations

Target Period : January 1, 2017 - December 31, 2017
Scope of Target : Head office, Shiseido research center (Global Innovation Center), and Production facilities (Japan and Overseas)
Unit : Millions of yen

1. Environmental Conservation Costs

Category		Main Initiatives	Investment	Expenses
(1) Costs breakdown by operation			94	288
Breakdown	(1)- 1 Pollution prevention costs	Water contamination, atmospheric pollution, etc.	10	81
	(1)- 2 Global environmental conservation costs	Promotion of energy conservation, measures to protect the ozone layer, etc.	84	2
	(1)- 3 Resources recycling costs	Waste processing, recycling, wastewater re-use, reducing materials, etc.	-	205
(2)Upstream/downstream costs		Costs associated with Recycling of Containers and Packaging Recycling Law, green procurement, product recycling, etc.	-	202
(3)Administrative costs		Personnel expenses (excluding R&D), environmental management costs	-	284

(4)Research and Development costs	R&D for environmentally friendly products, etc. (including personnel expenses)	-	13
(5)Social contribution costs	Support of environmental groups, disclosure of environmental information, environmental advertising, etc.	-	42
(7)Other costs	Environmental remediation costs, etc.	-	8
(7)Other costs		-	9
Total		94	846

2. Environmental Conservation Outcomes

Outcomes		Economic effect
Earnings	Revenue from the recycling of waste generated in main business activities and the recycling of used products, etc.	49
Cost savings	From energy conservation	62
	Waste-related	27
	From resource conservation	48
	Other	1
Total		186

Environmental Management

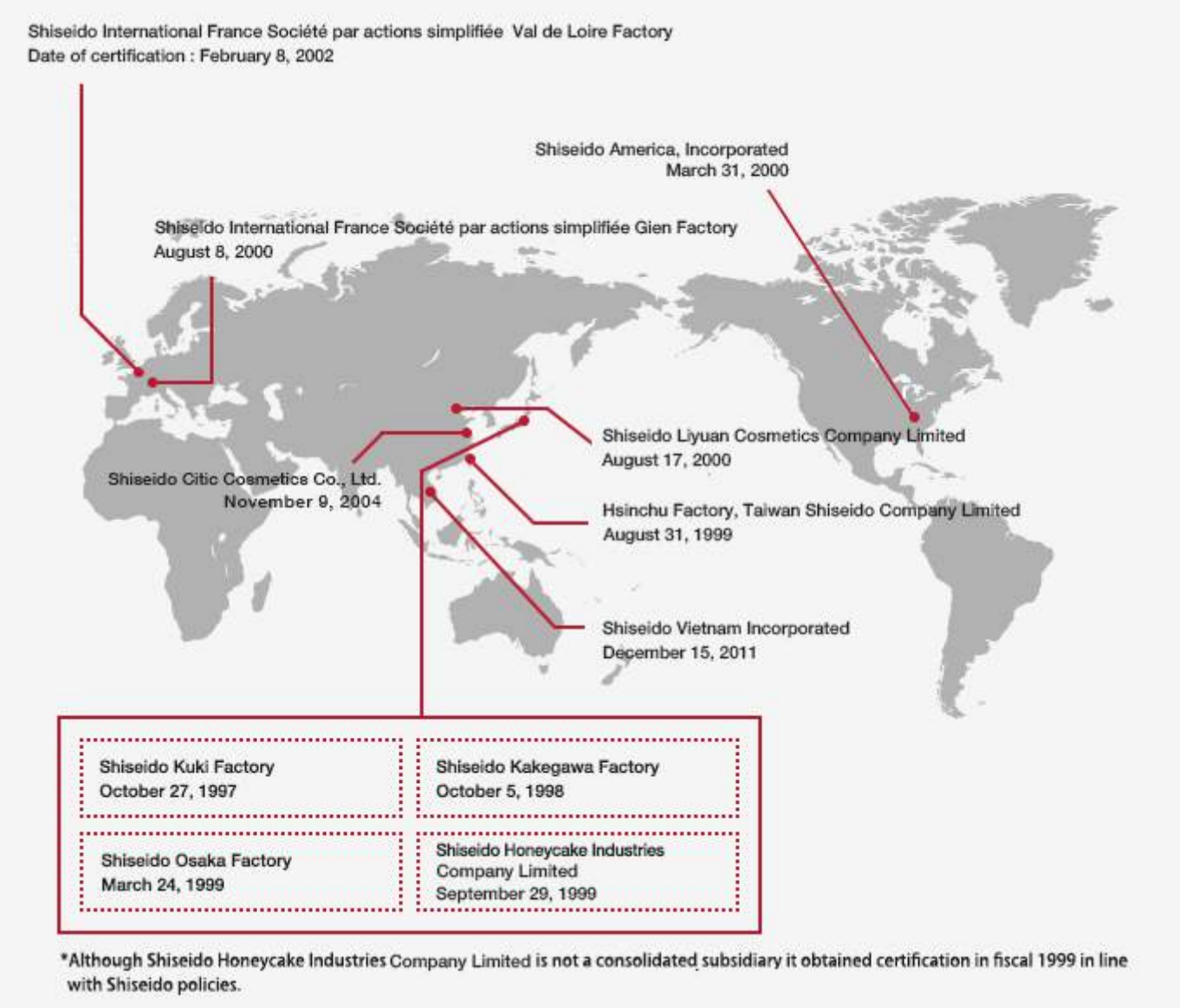
Management Structures

Shiseido considers and consults on a variety of environmental issues at the “Executive Committee,” which makes decisions for the execution of operation.

Environmental Management According to ISO14001 Certification

ISO14001 is an international standard governing environmental management that was established in 1996. It presupposes ongoing inspections by an outside organization after initial certification. Production factories of Shiseido use a management system based on ISO14001, and they strive to improve management structures and reduce environmental impacts through the repeated use of the PDCA cycle ("Plan," "Do," "Check," "Act").

Status of ISO14001 Certification



*Although Shiseido Honeycake Industries Company Limited is not a consolidated subsidiary it obtained certification in fiscal 1999 in line with Shiseido policies.

Responding to Environmental Risks

There is a broad array of risks related to the environment, and laws related to this issue are growing stricter every year in respective countries worldwide. Based on these circumstances, Shiseido's Head Office takes the lead in gathering information about new laws, and social trends regarding the environment, analyzing their provisions, disseminating information to the relevant departments and accommodating social needs. Observance of environmental laws and regulations is evaluated in production departments based on ISO14001 standards to ensure thorough compliance. Investigations of domestic and overseas affiliates revealed no major violations of environmental laws or regulations during fiscal 2017. Going forward, Shiseido is committed to managing its operations in an appropriate manner.

Shiseido’s Response to Microplastic Beads in its Products

Shiseido Company, Limited has completed the replacement of microplastic beads* in its products such as cleansing form, etc. with alternative ingredients as of August 2018.

* Microplastic beads: Water insoluble solid plastic particles with a size of less than 5mm, intentionally added to exfoliate or cleanse in rinse-off personal care products.

Thorough Management of Industrial Waste

While waste producers are being held accountable with regard to the illegal disposal of industrial waste, Shiseido is promoting the following initiatives in the field of industrial waste management.
Personnel in charge of waste management undergo regular training which is not limited to basic content but comprises also information on recent changes in relevant laws and regulations as well as compliance with them, in an effort to enhance our initiatives on the managerial level.
We also hold training regarding the guidelines for “field validation of intermediate treatment dealers”, which is internally mandated once a year, with the cooperation of intermediate treatment dealers of industrial waste in order to enhance the response capabilities toward the Waste Management and Public Cleansing Act.


Industrial waste management training in progress

Management of Chemical Substances

Shiseido not only satisfies the legal reporting requirements set out in the Pollutant Release and Transfer Register (PRTR) Law and Promotion of Chemical Management but also proactively conducts voluntary management of the use and disposal of chemical substances such as ingredients and reagents in factories and laboratories.
From the standpoint of workplace safety, we ensure that Safety Data Sheets (SDS) are issued to business partners, for example by systemizing the issue of SDS for semi-finished products when supplying chemical substances containing ingredients specified by laws such as the PRTR Law and the Industrial Safety and Health Act to consumers.

Correspondence to the PRTR Law

PRTR Target Substance Emissions and Transfers

Fiscal 2017 (unit: tons)

Legal No.	Substance Name (legal designation)	Amounts of Emissions			Amounts of Transfers	
		Atmospheric	Public water	Soil	Sewage	Waste
13	Acetonitrile	-	-	-	-	3
56	Ethylene oxide	0	-	-	-	-
207	2,6-di-tertiary-Butyl-4-cresol	-	-	-	-	0
275	Sodium dodecyl sulfate	-	-	-	-	4
300	Toluene	-	-	-	-	2
334	Methyl 4-hydroxybenzoate	-	-	-	0	0
389	Hexadecyltrimethylammonium chloride	-	-	-	-	0
405	Boron and its compounds	-	-	-	0	0
409	Sodium poly (oxyethylene) dodecyl ether sulfate	-	-	-	0	19

The above chemicals are PRTR Specified Class I Chemical Substances and are reported when a single facility annually handles one ton or more. (Specified Class I Designated Chemical Substances are reported when 0.5 tons or more are handled.)

Scope of Data: Shiseido Company, Limited (Kakegawa, Osaka, Kuki Factories and Research Center[Global Innovation Center])
Target Period: January 1, 2017-December 31, 2017

Eco Standards

In fiscal 2010, we adopted and began implementing the Production Eco Standards and the Sales Promotion Tools Eco Standards comprising rules for the environmental compliance of products and promotional materials from a life cycle perspective based on changes in the circumstances surrounding environmental issues. We also compiled and began implementing the Office Eco Standards outlining environmental compliance in offices.

In regards to the two Eco Standards that concern manufacturing, we have established the following evaluation items and are taking environmental measures for our products and promotional materials.

The Production Eco Standards

Key Point	Evaluation Criteria
Design (Outer Packaging)	(1) Select outer packaging and materials that have low environmental impacts
	(2) Reduce weight and volume
Design (Contents)	(1) Formulation that does not harm environment
	(2) Formulation that takes packaging into consideration
Purchasing	(1) Purchasing of raw materials and ingredients
Production	(1) Reduce environmental impacts in the process of production
Logistics	(1) Reduce environmental impacts during the course of distribution and transport
Use	(1) Conserve energy and resources during consumer use
	(2) Reduction of emissions that have less environmental impacts at the use stage
	(3) Promotion of long-term use for packaging
Disposal	(1) Make recycling easier
	(2) Make disposal easier

Sales Promotion Tools Eco Standards

Key Point	Evaluation Criteria
Planning and Design	(1) Design that is more easily utilized in stores 1. Design easy to resize 2. Design that can be applied and developed for multiple purposes
	(2) Selecting materials with minimal environmental burden 1. Materials for sales promotion tools 2. Certified materials 3. Specific parts materials
	(3) Lightweight and simple design
	(4) Design based on standard size
	(5) Mold application
	(6) Suitable design for shipping
	(7) Design that is easy to dispose of 1. Design that is easy to separate 2. Design with noticeable eco-labels
Proof and Print	(1) Less waste printing process
	(2) Environmentally friendly ink
Packaging and Shipping	(1) Simplification of packaging
	(2) Elimination of double packaging

Efforts toward Recycling of Resources

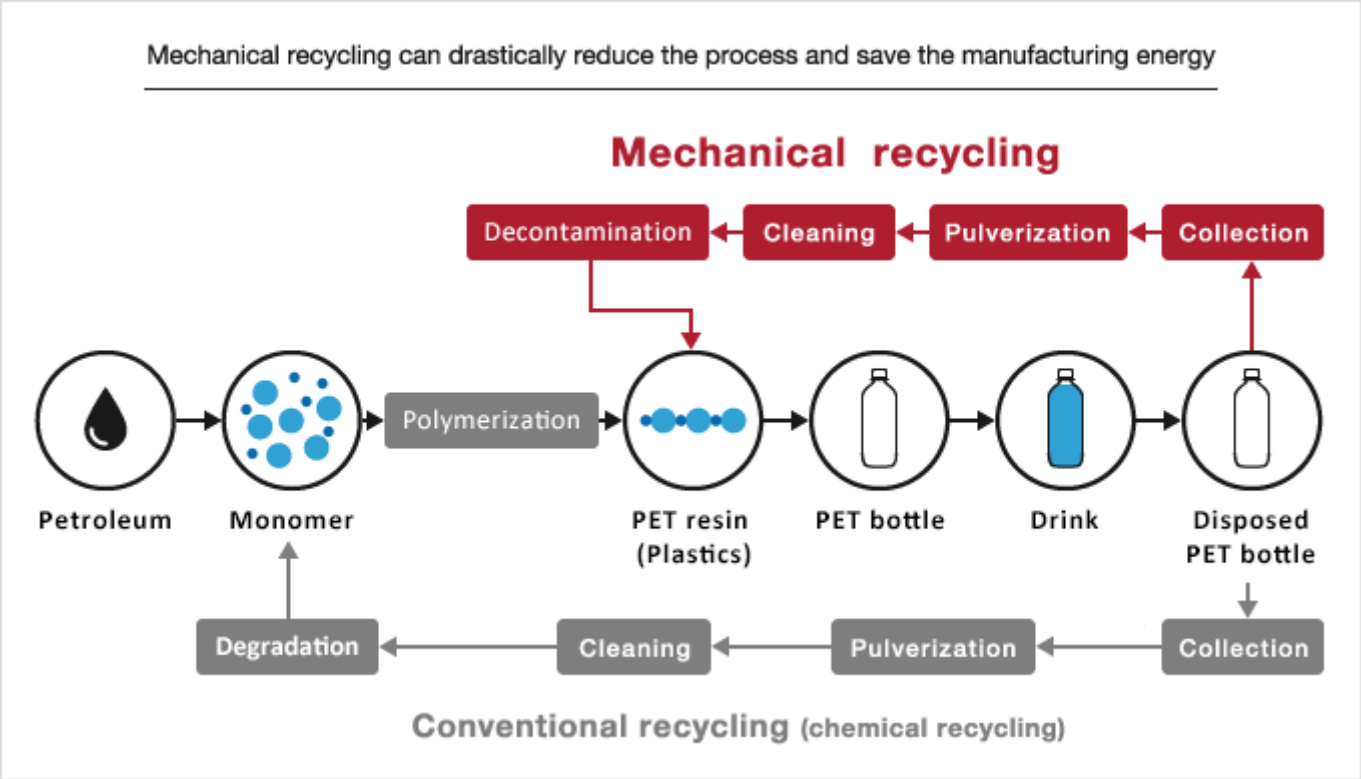
To continuously use the limited blessings of the Earth, we need to shift from the conventional style of economic activities based on one-way flow of things being “procured, manufactured, used and thrown out” to recycling-based activities promoting the recycle or reuse of resources.
Shiseido works on the following initiatives to create a powerful combination of various recycling circles ranging from a small circulation (Reuse) to a large circulation (Carbon cycle) expecting to effectively use resources and to create more attractive products.

Initiatives for Reuse

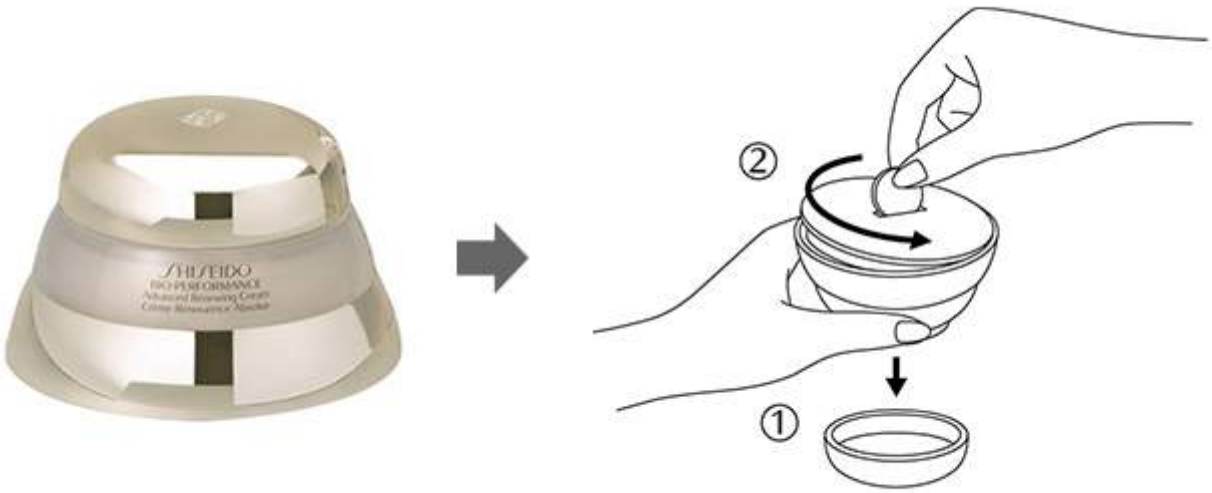
In Japan, Shiseido sells over 700 items of refillable products, the containers of which can be re-used. We provide refillable items in various categories from personal care products such as shampoo and conditioner to beauty products including essence, cream, lotion, emulsion and foundation to conserve resources used to produce containers.

Initiatives for Recycle

Since September 2015, Shiseido has been using PET resin, obtained through mechanical recycling of PET bottles, for the containers of Sea Breeze Body Shampoo. Mechanical recycling is the technology of efficiently producing high-quality PET resin from PET beverage bottles. This technology has been used broadly for drink bottles. Using recycled PET resin, approximately 22 tons of CO_2 emissions can be reduced every year compared to using petroleum-derived PET resin.
SEA BREEZE



Shiseido's product containers made of different materials, such as a combination of plastic and metal, are designed to be easily separated after use for recycling. In addition to utilizing recycled materials, we actively work to improve used containers' suitability for recycling.



Examples of containers designed to be easily separated.

Utilization of Biomass Resources

Shiseido was the first cosmetics/personal care products company in Japan to introduce sugarcane-derived polyethylene containers in September 2011 for its haircare brand, “SUPER MiLD.” Effective utilization of biomass resources, as typified by sugarcane, is a benefit from the global carbon cycle. Incineration of sugarcane-derived polyethylene releases over 70% less CO_2 than petroleum-derived polyethylene in their life cycles.
This initiative received the 1st Achievement Award for Promotion of Biomass Products from Japan Society of Biomass Industries in 2011.

Product containers made of plant-derived plastic bear the above-shown mark.

Product Initiatives

Shiseido adopted the Production Eco Standards, a series of environmental standards governing the product design process, in fiscal 2010. To ensure that these standards are observed in all relevant operations, we are holding workshops and other programs for product planning departments. We aim to grow our business with minimal environmental load in the value chain not simply by incorporating environmental considerations into product planning, but rather by adding compelling value to products so that consumers' hearts will be moved.

Products Containing Raw Materials Grown in Our Internal Plant Factory

In recent years, consumers' needs toward safety/security, such as traceability, have been growing due to not only the expansion of the natural/organic cosmetics market but also numerous food fraud issues, etc.


Our internal plant factory

In December of 2012, Shiseido established a plant factory, which can efficiently cultivate plants used as raw materials of cosmetics, inside of the Kakegawa Factory (Kakegawa City, Shizuoka Prefecture). In this factory, we have promoted developing safe and secure plant raw materials with "clear background". In the plant factory, we efficiently grow seedlings while maintaining the optimal environment for various conditions, which are required for plants to grow (such as temperature, watering condition, lighting strength, light exposure duration, and CO_2 concentration). Chamomile and rosemary seedlings, which were grown in this plant factory, were then grown in an external commissioned farm. We released products containing the plant extract derived from these plants from a group company Ettusais in June of 2014.

Through these initiatives that allow us to control the harvested amount of raw materials, we can not only avoid supply risks of plant raw materials used in Shiseido but also prevent depletion of raw material plants and reduce the impact on the ecosystem in the production site.

Environmental Initiatives Associated with the Redesign of Clé de Peau Beauté Skincare Products

In order to satisfy consumers seeking total "authenticity," Shiseido Group's luxury brand, *Clé de Peau Beauté*, aims to be "luxurious" in all aspects, naturally in terms of product quality as well.

By utilizing the skincare renewal in January of 2011 as a good opportunity, we conducted initiatives such as follows:

1. Formulated all skincare items with sandalwood fragrance procured from fair trade *1 sources.
2. Introduced a refill product for *LA CRÈME* (cream) for the first time.
3. Adopted bagasse paper*2 for exterior packages and package inserts (instructions) of products.

Since then, we have been continuing our sustainable initiatives, such as incorporating a fair-trade raw material (premium argan oil) into part of the products such as *"Enriched lip luminizer (Lipsticks)", "Luminizing face enhancer (Highlighters)"*, and using FSC-certified paper*3 for printed inserts, etc.
Clé de Peau Beauté will continue placing importance on connections with nature and society and delivering products that take into account the environment as well as product quality.

*1 An initiative aimed at improving living standards and promoting the independence of producers and workers in developing countries by continuously purchasing raw materials or goods at optimal prices. It also contributes to environmental preservation by preventing such aspects as the overexploitation of resources in order to realize sustainable use.
*2 Non-wood paper made from fiber after extracting the sugar content from sugarcane
*3 Paper that has been certified as a "product that has been produced from a well-managed forest"

Clé de Peau Beauté
LA CRÈME n <cream>

LA CRÈME n <refill>

Left: *Enriched lip luminizer* <lip stick>
Right: A refill must be set in the proper holder before use.

Luminizing face enhancer <Highlighters>

3D Pouch for *Clé de Peau Beauté concentré illuminateur lotion and essence*

We have begun adopting 3D pouch packs for the containers of the lotion and essence (1 use each) for *"Clé de Peau Beauté concentré illuminateur"*, which are used as a set with facial mask, when the product underwent the renewal release in March of 2014.
Compared to the former product, which used small glass containers, the container weight is 1/10, and it has also led to the reduction of waste.
Such environmental considerations and our innovations with the multifaceted design, which embodies *Clé de Peau Beauté* concept of "skin that emanates radiance from within", as well as the easy opening of the pouch pack were evaluated, and "*Clé de Peau Beauté concentré illuminateur*" received the "Japan Package Design Association Award", which is one of the top "Japan Star Award", in the "Japan Packaging Contest 2014".

Clé de Peau Beauté concentré illuminateur

Pouch packs for the containers of the lotion and essence

Reducing Plastic Use by Making HAKU Refills Available in Japan

Shiseido launched a "replaceable refill product" in line with the renewal of its *HAKU* melanofocus CR skin brightening serum in February 2011 in Japan.

The amount of plastics used to make this refill container is reduced by approximately 60% compared with the amount used for the original product container. Adopting a refill item for this product reduced roughly 19 tons of plastics per year versus manufacturing the original product container only.

In addition to the environmental consideration of saving resources, another main objective of introducing this refill product is closely tied to Shiseido's desire to respond to consumers' feedback, including: "It's such a waste to throw out a wonderful package" or "Please make a container so that you can check how much product remains." Additionally, we have put a lot of ingenuity into the development of a refill container that consumers can replace as easily as possible.

Moreover, another environmental measure was taken by replacing the exterior plastic packaging with packaging made from bagasse paper (non-wood paper made from fiber after extracting the sugar content from sugarcane), and in turn, curbing the use of petroleum, which is an exhaustible resource, and changing to a sustainable plant-based raw material.

HAKU melanofocus V (released in March 2018) continuously adopts these environmentally-friendly containers and packaging.

Left: *HAKU melanofocus V*
Right: Refill

Reduction of Water Usage by Developing Rinse-aid Facial Wash

Shiseido incorporates "environmental considerations into product planning in the entire life-cycle". However, products for washing the face and body such as facial wash and shampoo, etc., require the use of water to rinse off, therefore we realize that they also have the biggest environmental load when "using" them in the entire product life-cycle from raw material procurement to use and disposal. In order to reduce water usage at the time of using the products, we developed a new rinse-aid technology and adopted it for the foam facial wash *"Senka Speedy Perfect Whip Airy Touch"* which was launched in March 2016 as a renewal.
It enabled approximately 35% water usage reduction for rinsing compared to the existing cream-type (tube) facial wash, which means saving water equivalent to approximately 540 two-liter plastic bottles per year (data by Shiseido).

Senka Speedy Perfect Whip Airy Touch

Reducing the Glass Bottle Weight and Employing Labels That are Easy to Peel Off for *Pure White W and The Collagen* beauty drinks

In 2012, Shiseido reduced the weight of the glass bottles for *Pure White W and The Collagen* products (50 ml each) by about 10 percent because consumers had indicated that they throw out several empty bottles at a time and wanted them to be as light as possible.
Through this initiative, we reduced CO_2 emissions by about 427 tons in the year after the release (Shiseido's estimate).
Consumers also indicated that they did not want others to know what they were drinking and that they wanted to remove the labels before disposing of the bottles, but the labels were difficult to peel off.
We responded to this feedback by switching to easily removable labels.

Pure White W and The Collagen

Shiseido adopts Cartocan eco-friendly paper containers for *Kirei no Susume*

Kirei no Susume, which was launched by Shiseido in July 2010 in Japan, is packaged in Cartocan, an environmentally friendly paper beverage container. In addition, we also changed the package of *Chou-mei-sou* from aluminum can to Cartocan in 2013. Cartocan offers the following features:

(1) Promotion of forestland conservation by using wood from thinning operations
Thinning, a process by which weak trees are cut from crowded forests, is a critical part of developing healthy forests. Cartocan makes extensive use of thinned lumber. In addition, by using over 30% domestic materials, the material promotes the conservation and healthy development of domestic forests. Since those forests absorb CO_2 when they grow healthily, the material also helps reduce CO_2.
(2) Contribution to the Midori no Bokin (Green Fund)
A portion of sales is donated to the Midori no Bokin (Green Fund) and put to use in the development of forests in Japan.
(3) 100% recyclability
Cartocan can be recycled in the same manner as milk cartons.

Although initially it was difficult to provide Shiseido's desired shelf life with Cartocan, we decided to use the container after our business partners were able to extend its shelf life.

Kirei no Susume

Chou-mei-sou

Awafuru Eco Soap for Hotels that is Gentle on the Environment and Skin

In October 2010, Shiseido launched 10g and 18g sizes of Awafuru Eco Soap, a hotel-use soap that is gentle on the environment and skin. Shiseido Amenity Goods Co., Ltd. distributes the soap and handles hotel guestroom amenities and other facilities as well as professional-use cosmetics.

Until now, hotels have had difficulty dealing with soap. Minimal amounts of soap are used in guestrooms at hotels and other facilities during guests' stays and the soap remains are disposed of as industrial waste.

Awafuru Eco Soap contains micro air bubbles that cause it to form lather and dissolve quickly for easier consumption. As a result, soap remains are reduced, making it possible to reduce waste significantly. From its practical usage testing, the Shiseido Research Center learned that the volume of remains for disposal of the new type of soap compared with Shiseido conventional soap was about 90% less for the 10g soap bars and about 67% less for the 18g soap bars. According to Shiseido's estimate, the product reduced the disposal soap by a total of 12.4 tons for one year. Also, the inclusion of air bubbles helps to reduce not only waste but also the amount of raw materials used by approximately 30% without reducing soap size.

Moreover, *Awafuru Eco Soap* adopts the "wakuneri" manufacturing method used for premium facial soap rather than the "kikaineri" (machine mixing) manufacturing method generally used for hotel-use soaps. For this reason, while common soaps used at hotels contain no or small amounts of moisturizing ingredients, the new product is formulated so that approximately 30% is comprised of moisturizing ingredients. With rich lather containing plenty of these ingredients, Awafuru Eco Soap provides a luxurious feel that other hotel-use soaps cannot match for washing the face and other parts of the body. (Patent pending for respective technological processes and formula)

Awafuru Eco Soap has both considerable eco appeal and beauty appeal for its gentleness on the environment as well as skin. As a result, Shiseido is already receiving requests from many hotels for introduction of the product.

Awafuru Eco Soap

Contains micro air bubbles

Differences between remaining volumes before and after use, comparing Awafuru Eco Soap and Shiseido's conventional products.

Initiatives in Production and Distribution

Shiseido America, Inc. Introduced Solar Power System

East Windsor, New Jersey-headquartered Shiseido America, Inc. (hereinafter, "SAI") completed Phase 1 of a fixed-tilt solar power system installation in May 2007. In August 2010, the company completed Phase 2 of the project by installing a solar tracking system that changes the angle of panels in step with the position of the sun during the day. With this installation, the system is expected to cover more than 70% of electricity consumed annually at SAI using solar power generation. The system is ranked high among the largest installations in the state. In 2010, SAI received the New Jersey Governor's Environmental Excellence Award.

Date operational	May 2007 (phase 1) and August 2010 (phase 2)
Annual capacity	Approx. 2,300 MWh
CO_2 emissions reduction	Approx. 1,200 tons / year

Phase 1 installation (fixed-tilt system)

Phase 2 installation (solar tracking system)

Furthermore, East Windsor Factory has also been working on recycling Styrofoam, which is used to protect materials during delivery, since July of 2012. Although we used to dispose of Styrofoam as a landfill waste, we now process it internally and sell it as valuable goods. Through this initiative, we can reduce the waste by approximately 7.5 tons per year and approximately 0.8 tons in CO_2 emissions.

Utilization of Renewable Energy at Shiseido Group's Factories in Japan

Our factories in Japan partially switched their electrical energy source to Aqua Premium, a hydroelectric generation system provided by TEPCO Energy Partner, Incorporated, in April 2018 as one of contributions to the reduction of CO_2 emissions.

Approximately 40% of the electricity used at Shiseido's domestic factories (Kakegawa, Kuki and Osaka) comes from hydroelectric power stations.

Delivery Using 10-Sided Cardboard Boxes

Shiseido has introduced machinery for making 10-sided cardboard boxes for product shipments as well as for putting products into these boxes at the Kuki Factory. These boxes are currently adopted for *TSUBAKI, SUPER MiLD, AQUAIR* and *SEA BREEZE* brands, among others.


10-sided cardboard box (Exterior)

10-sided cardboard box (Interior)

The 10-sided cardboard box developed by Shiseido is configured with the four corners removed from a conventional six-sided box (octagon-shaped when viewed from the top) and since its strength is increased due to a higher number of support columns, can be made thinner than conventional paper cardboard boxes. At the same time, the box enables many products to be packed inside without leaving extra spaces, thereby making delivery more efficient.

The reduction in the amount of cardboard materials used and greater delivery efficiency have enabled Shiseido to save resources and reduce CO_2 emissions by more than 800 tons annually. In this way, Shiseido promotes comprehensive environmental activities encompassing all processes from manufacturing to shipping and delivery.

Initiatives to Conserve Biodiversity

All Shiseido products derive from the bounty of the Earth. It is critical that we conserve this bounty in the form of biodiversity so that we can continue to make use of it in the future. We must be aware that we are benefiting from the bounty of the Earth when we create products, and we must strive to conserve it in all its forms throughout the product life cycle. Shiseido places the conservation of the Earth's bounty at the core of its environmental activities, and we have put forth a statement of this policy entitled "Biodiversity at Shiseido."

Camellia Planting and Conservation Volunteer Activities in the Goto Islands, Nagasaki Prefecture

The Outline and Objective of the Activities

Shiseido promotes camellia planting and conservation activities at the abandoned farmlands of the Goto Islands in Nagasaki Prefecture, the production site of raw material for the hair care brand "TSUBAKI." Due to the aging of the population in this area, abandoned farmlands are becoming a social issue. As Shiseido aims at sustainable and socially responsible raw material procurement, we achieve this through protecting and growing camellias in collaboration with the local residents. In September 2017, 40 employee volunteers and their families, mostly from the Kyushu area, planted 80 young trees of Camellia japonica L. on a plot of land of 0.07 ha. Also, this year we picked camellia’s fruit for the first time. A total of 310 employee volunteers have participated in this activity from its start in 2011 till 2017, having planted approximately 580 trees up to date.
Through cooperation with the local community we are able not only to produce high-quality camellia oil but also to deepen the employees’ understanding of sustainability.

Period

April 2017 through March 2020 (third term)

Location

Shin-kamigoto town, Minamimatsura-gun, Nagasaki prefecture

Organizers

Shiseido Company, Limited; Shin-kamigoto town

After the adoption of sustainable development goals (SDGs) by the United Nations General Assembly in 2015, various companies, organizations, and other entities are centering their activities on sustainable development. Shiseido aims to realize one of the SDGs, “Sustainably manage forests,” and supports sustainable procurement of camellia oil through the protection of forests, in the hope to achieve a balance of sustainable agriculture and business growth.

SDGs Targeted by the Present Activity

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests

Results as of 2017

Area of abandoned farmland cultivated into a camellia forest: 0.07 ha

Group photo


Planting the trees

Environmental Conservation Activity Support on Yonaguni Island, the Production Site of the Raw Ingredient for *Chou-mei-sou*

All of the chou-mei-sou used in the *"Shiseido Chou-mei-sou"* brand products (drink, tablet, and powder) is the raw material produced on Yonaguni Island in Okinawa prefecture. Shiseido has been supporting the environmental conservation activities on Yonaguni Island since fiscal 2013 and contributes part of the sales to the environmental conservation activities to protect nature-rich Yonaguni Island.
There are a number of valuable animals and plants on Yonaguni Island, including endangered and endemic species. However, their numbers are declining. Therefore, we have begun the activities to learn/protect/communicate the rich natural environment and valuable ecosystem of Yonaguni Island in cooperation with the Yonaguni Itonami Network* and the Yonaguni Board of Education. We began with preparing "Yonakama Zukan", which is the first publication to contain the 137 types of animals and plants on the island, with the aim of creating a driver to learn about the valuable animals and plants. We distributed the book to each child of the island and the total of 800 households.

We are also removing the alien plant *Eichhornia crassipes*, which is overgrown along Tabaru River, the major river on the island. It was originally introduced to purify water, but it is overgrown now so much that it covers the water surface, presenting a risk to native animals and plants. Therefore, we removed approximately 50 two-ton trucks of Eichhornia crassipes in May of 2014 with the aim of gaining back the original environment. Thanks to this work, light now shines through the water, and algae grow on the riverbed. The work has led to environmental improvement, as seen in the example of a number of aquatic organisms being observed. Shiseido will continue promoting the activities to protect the rich natural environment for the future along with the people of the Yonaguni Island.

* Yonaguni Itonami Network
Organization established mainly by the Yonaguni town office with the aim of capturing various activities rooted in the island, such as the nature, history, culture of the Yonaguni Island and promoting the activities to hand them down to the next generation.
of Yonaguni Island and promoting activities to hand them down to the next generation.

Yonakama Zukan


Removing Eichhornia crassipes along Tabaru River

Shiseido Held the 10th Tree-Planting Activity in Gansu, China

In 2008, Shiseido launched a 10-year tree planting program in the city of Lanzhou in China's Gansu Province.

On Thursday, April 13, 2017, the last year of this project, a total of 118 persons including volunteer employees and staff from the Shiseido Group and business partners participated in the 10th tree-planting activity and planted young trees of oriental arborvitae.

There were some employees who have participated in this project 3 times or more, and even those participating for 10 consecutive years. They shared their opinions, such as "When I came to Lanzhou City for the first time in 2009, there were no trees but brown, bare mountain surface and I was shocked by the scenery. I'm so glad to see our trees growing and the mountain becoming green now" and "I'm very proud that we are planting not only young trees but also the hope and expectation for the future."

The total number of young trees planted by the Shiseido Group since 2008 has now exceeded 100,000, and their establishment rate has reached about 88%.

The Shiseido Group will contribute to Chinese society's development also in the future, by actively participating in activities for environmental conservation and the realization of a sustainable society in China.

Location	Lanzhou City, Gansu Province, China
Planting area	Approx. 56 ha
Number of trees	Approx. 120,000 (April 2008 to April 2017)
Program duration	Approx. 10 years


Tree-planting activity


Planting each tree with care


Smiles watching the planted young trees

Volunteers Plant Mangrove Trees in Thailand

Shiseido Thailand Co., Ltd. has been continuing with its mangrove planting activity throughout Thailand since fiscal 2008.

On November 24 of 2017, the 9th year of the activity, 41 local employees planted approximately 500 trees in a mangrove forest of the Nature Education Center, the Quartermaster Department Royal Thai Army (QMRTA) in Samutprakarn Province near Bangkok. After tree planting, we also collected the garbage on the beachside nearby.

Participants shared their voices, such as “We planted the saplings with care today. With good heart of everyone, hand by hand, we can make our environment more beautiful. We would like to continue these activities every year.“

Shiseido Thailand Co., Ltd. will continue with its environmental conservation activity with the hopes of handing down the beautiful natural environment to the future generations.

Commemorative photo of all the participants

Planting each tree carefully

Environmental Responsiveness of Shiseido Ginza Building

As the headquarters on the Namiki Dori Street (Ginza, Tokyo) were reconstructed in the fall of 2013, Shiseido conducted biological investigation to study animals (including birds and insects) living in the greens in the areas near the Ginza district, in order to design a building in harmony with the local ecosystem by providing green space on the rooftop and thus contribute to the community of Ginza.

This investigation was conducted in cooperation with Takenaka Corporation and Regional Environmental Planning Inc.
The investigation results showed that the Ginza district had a small animal population with a small number of types of animals. On the other hand, it was confirmed that in the neighboring large greens such as Hibiya Park and Hamarikyu, there was a large animal population and they are breeding and foraging. From these results, we found that if we had green space on the rooftop of the new headquarters building, that could be a stopping point for birds and insects, thus we could contribute to the biodiversity-friendly community development.

Trees within the premises of the building have been selected based on the investigation results. We have also established a zone in "Shisei Garden" on the rooftop in which plants used as cosmetics raw materials are grown, and we utilize the area for employees to truly feel and learn the importance of the bounty of the Earth.

Shisei Garden

Research on KODA

Shiseido has discovered through conducting joint research*1 with Sumitomo Forestry Co., Ltd. that KODA (α-Ketol-OctadecaDienoic Acid), which is a new type of natural plant fatty acid with the stimulatory effect of activating flower initiation (process of flower formation), has a stimulatory effect on rhizogenesis (root formation) of cuttage. Application of this effect has significantly increased the propagation rate of Somei-yoshino cherry trees through cuttage, for which root formation was previously considered unstable.

Subsequently, together with Sumitomo Forestry, Shiseido has succeeded in the propagation of successor saplings originating from camellia trees that are over 300 years old at Reikan Temple in Kyoto as well as 350 years old Camellia Sasanqua trees at Ankokuron Temple in Kamakura city that were in danger of dying due to decay. The stimulatory effect of KODA on rhizogenesis has contributed to preventing the loss of a "diversity of species" from a biodiversity perspective.

Research on KODA started with developing cosmetic ingredients through plant tissue cultures. We are now researching in the joint project*2 on the development of flower initiation control technology of fruit trees. In addition, various research into KODA is currently underway in such areas as agriculture in which yields are declining due to global warming. The technology is expected to contribute to the improvement of the situation.

Stimulatory effect of KODA on rhizogenesis of cuttage of Somei-yoshino

The partners won the 18th Chemical and Bio Technology Prize for their discovery of KODA.

*1Joint research project ("Enhancement of CO_2 sinks by improvement of afforestation technology in tropical forests") funded by the Environment Research & Technology Development Fund administered by the Ministry of the Environment

*2Joint research project ("Development of flower initiation control technology of fruit trees using KODA") supported by a grant-in-aid from the Research and Development Program for New Bio-industry Initiatives

Environmental Communication

Awards

Clé de Peau Beauté LA CRÉME n Wins Award at "Japan Packaging Contest 2016"

In August 2016, *Clé de Peau Beauté LA CRÉME n* received the "Accessible Design Packaging Award"[*1] at the "Japan Packaging Contest 2016" [*2].

Refills for *LA CRÉME n, a Clé* de Peau Beauté cream, were first released in January 2011. In February 2016 the refill package was redesigned using a new refill mechanism developed to make it even easier to refill containers. With the new refill replacement method, the product container's cap is removed and the container is placed on top of the new refill container. Pushing down causes the used refill to pop up so that it can be removed. The new refill container is then lined up and pushed down into the product container, completing the process.

See this video for the details.

In addition to developing and introducing this new refill mechanism that enables anyone to easily refill containers, its launch also reduced the amount of plastic used by roughly 73% compared with the original product container. Vapor deposition used on the interior of the product container together with the container's polyhedral shape reflect the concept of *LA CRÉME* n: skin radiant from within. Features such as these led to the selection of *LA CRÉME* n as the award winner.

Clé de Peau Beauté LA CRÉME n original container (left) and refill (right)

"Accessible Design Packaging Award" plaque

*1 Award presented for package designs featuring universal design, accessible to the elderly and those with disabilities, and which also improve usability for able-bodied users.

*2 "The Japan Packaging Contest" (held by the Japan Packaging Institute) is Japan's largest contest for superior packaging designs and packaging technologies. It presents awards in three categories: the Japan Star awards (12 awards), the Packaging Technology awards (6 awards), and the Packaging Department awards (13 awards). The "Accessible Design Packaging Award" is one of the Packaging Technology awards, and is the second highest award, surpassed only by the Japan Star awards.

Awards Received

Month/Year	Award	Organizer	Reason for award
April 2000	Minister for Environment Award of the 9th Grand Prize for the Global Environment Awards	The Fuji Sankei Group	Continuous environment improvement activities based on “Shiseido Global Eco Standard”
April 2002	Minister of Education, Culture, Sports, Science and Technology Award of the 11th Grand Prize for the Global Environment Awards	The Fuji Sankei Group	Establishment of a recycling system for used glass bottles for cosmetic products
February 2004	Encouragement Award for Environmental Reporting of the 8th Environmental Communication Awards	Ministry of Environment and the Global Environmental Forum	The contents of the CSR Reports
June 2009	Logistics Award of the Japan Packaging Contest 2009	The Japan Packaging Institute	Resource-saving packaging with 10-sided cardboard boxes
May 2010	The 18th Chemical/Biotechnology Prize	The Chemical/Bio Tsukuba Foundation	Research on the “Discovery and Development of the Physiological Effects of KODA (α-Ketol-Octadeca-Dienoic Acid)”
June 2010	Cosmetics Packaging Award of the Japan Packaging Contest 2010	The Japan Packaging Institute	Use of polylactic acid containers for *URARA hair cleansing* products.
June 2010	Cosmetics Packaging Award of the Japan Packaging Contest 2010	The Japan Packaging Institute	Reduction of CO_2 emissions by introducing *Soka Mocka* compressed cotton balls to improve the volumetric efficiency during transportation and storage
December 2010	"The 2010 New Jersey Governor's Environmental Excellence Awards" Clean Air Section	The state of New Jersey (USA)	Introduction of a photovoltaic power system at Shiseido America, Inc.
June 2011	Cosmetics Packaging Award of the Japan Packaging Contest 2011	The Japan Packaging Institute	Reduction of plastic use by adopting refill containers for *ELIXIR WHITE Reset Brightenist Cream*
June 2011	Appropriate Packaging Award of the Japan Packaging Contest 2011	The Japan Packaging Institute	Reduction of plastic use by adopting refill containers for *HAKU Melano Focus W*
September 2011	1st Biomass Product Popularization and Promotion Achievement Award	Japan Society of Biomass Industries	Adoption of cosmetic containers made from sugarcane-derived polyethylene
October 2011	Good Design Award 2011	The Japan Institute of Design Promotion	Environmentally friendly container designs of Clé de Peau Beauté and *HAKU Melano Focus W* products

February 2012	2nd Kanagawa Global Warming Prevention Award (Greenhouse Gas Reduction Technology Development Category)	Kanagawa Prefecture	Development of low-energy emulsion manufacturing process
February 2012	Award of Excellence (Environmental TV Commercial Category) of the 15th Environmental Communication Awards	Ministry of the Environment and the Earth, Human and Environment Forum	Corporate commercial, "Finger Energy version"
April 2012	The Japan Federation of Printing Industries Chairman's Award of Japan Packaging Competition 2012 (JPC Exhibition)	The Japan Federation of Printing Industries	Adoption of containers made from sugarcane-derived polyethylene for its *SUPER MiLD* products
April 2012	Japan Business Federation Chairman Award of the 21st Grand Prize for the Global Environment Awards	The Fuji Sankei Group	Use of camellia oil produced in the Goto Islands in its products and planting and conservation of Japanese camellia trees, whose seeds are used to make the oil
June 2012	President of Japan Marketing Association Award of the Japan Packaging Contest 2012	The Japan Packaging Institute	Adoption of containers made from sugarcane-derived polyethylene for its *SUPER MiLD* products
December 2012	2012 Environment Minister's Award for Global Warming Prevention Activity	Ministry of the Environment	Development of low-energy emulsion manufacturing process
February 2013	Award of excellence (Industrial Use Category) of the 2012 Cogeneration Grand Prix	The Advanced Cogeneration and Energy Utilization Center Japan	Energy-saving activity through the introduction of a highly-efficient warm water utilization system at Kuki factory
August 2013	Transport Packaging Award of the Japan Packaging Contest 2013	Japan Packaging Institute	Development of shipping boxes for "watashi+" online shop
August 2013	Toiletry Packaging Award of the Japan Packaging Contest 2013	Japan Packaging Institute	Adoption of refill containers made from sugarcane-derived polyethylene for *ELIXIR SUPERIEUR, ELIXIR WHITE* products
August 2013	Toiletry Packaging Award of the Japan Packaging Contest 2013	Japan Packaging Institute	Adoption of refill containers made from sugarcane-derived polyethylene for *Shiseido Medicated Hand soap*
November 2013	CDP "Climate Disclosure Leadership Index"	CDP	Selected as an excellent company in the study regarding information disclosure on climate change conducted with 500 Japanese companies

August 2014	Japan Package Design Association Award of the Japan Packaging Contest 2014	Japan Packaging Institute	Environmentally friendly container designs of *Clé de Peau Beauté concentré illuminateur*
October 2014	CDP "Climate Performance Leadership Index"	CDP	Selected as an excellent company for its activities to reduce GHG emissions and mitigate climate change risks based on CDP's survey on climate change response conducted with 500 Japanese companies
December 2014	"LCA Society of Japan Encouragement Award" of 11th LCA Society of Japan	LCA Society of Japan	Sales activities of *"Awafuru Eco Soap"*, which is an amenity for hotels with considerations for the environment.
August 2015	Cosmetics Packaging Award of the Japan Packaging Contest 2015	Japan Packaging Institute	Reduction of plastic use by adopting refill containers for two *Clé de Peau Beauté SYNACTIF* serums for daytime use
August 2016	Accessible Design Packaging Award of the Japan Packaging Contest 2016	Japan Packaging Institute	Development of new refill replacement mechanism for *Clé de Peau Beauté LA CRÉME n*
August 2017	Technical Packaging Award of The Japan Packaging Contest 2017	Japan Packaging Institute	Using mechanically recycled PET:*SEA BREEZE* Body Shampoo A Cool & Deodorant, *SEA BREEZE Super Cool Body Shampoo S*

Commitment to Society

In November 2008, Shiseido announced its participation in Caring for Climate, a climate change initiative also being spearheaded by the Global Compact, and declared to the world its commitment to pursuing environmental activities in business activities while also supporting and actively taking part in global initiatives related to climate change.

In Japan, Shiseido became the first company in the cosmetics industry to be certified as an "Eco-First Company" in March 2009 and made a declaration of its activities to be carried out in accordance with the Eco-First Commitment. And in response to the revision of the terms issued (in September 2010) by the Ministry of the Environment, Shiseido declared the new environmental conservation effort target as the "Eco-First Commitment" in May 2012 and was re-certified. In addition to reporting on the progress of future initiatives to the Minister of the Environment, we will make relevant information available regularly on our website and by other means.

About the Eco-First Program

The Eco-First Program was created by the Ministry of the Environment in April 2008 to "encourage leading companies in each industry to redouble their environmental protection activities by having them make a commitment to the Minister of the Environment concerning their environmental protection initiatives such as measures geared to combat global warming, reduce waste, and spur recycling." Certified companies are permitted to use the Eco-First Mark in publications and advertising.

Eco-First Mark

Shiseido's Eco-First Commitment

1. We will proactively promote environment responsiveness of our products by also focusing on the 3 Rs (reduce, reuse, recycle) of containers and packaging.
2. We will proactively work on the conservation of the blessings of the Earth which are the sources of value making.
3. We will engage actively in providing environmental education to our employees to foster human resources that may contribute to the conservation of the blessings of the Earth.
4. We will proactively promote efforts to prevent global warming.

Other Activities

Environmental Education in Collaboration with the Local Community

Environmental Study Session Held in Shiseido Ginza Building's Roof Garden

On Wednesday, October 5, and Monday, October 24, 2016, 25 nursery school students and four second graders from nearby schools were invited to take part in environmental study sessions in the "Shisei Garden*" on the roof of the Shiseido Ginza Building.

The nursery school students observed the plants, walked around the garden, plucked leaves that they liked, and observed differences between them, such as their colors, shapes, and smells. The elementary school students, who visited as part of a field trip, enjoyed various new experiences, such as taking seeds from a cotton tree, cutting a piece of sugar cane with scissors and tasting it, and crushing camellia seeds with a hammer, placing them in an oil mill and extracting their own camellia seed oil.

The nursery school students were surprised at the existence of a roof garden in Ginza, saying that they thought it was really interesting having a place with so many plants in the middle of the city, and that they wanted to see even more leaves. The elementary school students said they enjoyed the feel of the cotton from the cotton tree, which they touched for the first time, and that they were surprised that oil could be extracted from seeds. The event served as an excellent opportunity for them to learn about biodiversity and the relationship between nature and their day-to-day lives.

Shiseido is planning to continue environmental education in close collaboration with the community.

* The zone was made available on the roof of the Shiseido Ginza Building in Chuo-ku, Tokyo (completed in the fall of 2013) for cultivating plants used as the raw materials for cosmetics, and is utilized as a place of study where Shiseido employees can feel the importance of the earth's blessings. (The place is not open to the public.)

Walking around the garden

Plucking leaves

Observing cotton

Extracting oil

Environmental Study Session Held at Kakegawa Factory

Shiseido’s Kakegawa Factory in Kakegawa City, Shizuoka Prefecture, offers every year a hands-on environmental study session for elementary school students in cooperation with Kakegawa City. Twelve children attended the 6th session held on Tuesday, August 8, 2017.

In the session, the children learned about Shiseido’s refillable containers and development of new materials, and its activities including planting and conservation of trees, as examples of the company’s environmental initiatives. Efforts for energy saving and waste reduction made by Kakegawa Factory were also presented. Then, to understand the wastewater treatment system, the children tried an experiment of checking water quality using a testing kit and saw the water purification process in which the factory’s wastewater is clarified through methods such as microorganism treatment.

Also, to learn about UV rays, they enjoyed making a UV Bead Strap, an ornamental strap decorated with beads, the color of which changes when exposed to UV light.

The children said, “In the water purification experiment, seeing the water color changing to pink and purple, I understood that the system purifies dirty water,” “I enjoyed observing the production process of cosmetics,” and “ I am glad I found a lot of Shiseido’s good points.”

Shiseido Kakegawa Factory will continue to provide environmental education in collaboration with local communities.

Experiment of checking water quality using a testing kit

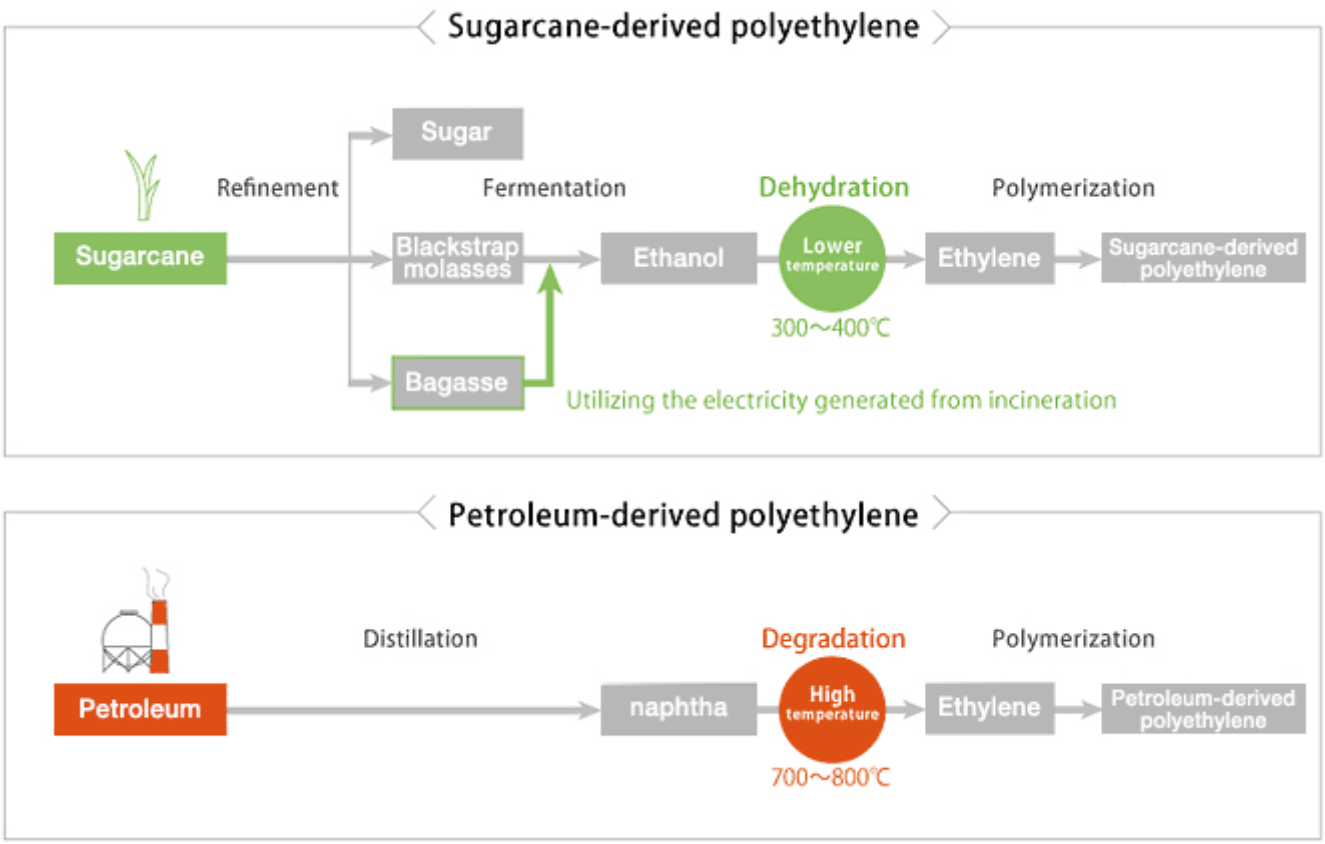
Children enjoyed making UV Bead Straps

Sugarcane-derived Polyethylene

The CO_2 generated when petroleum-derived polyethylene, which is also the main material in cosmetics containers, is disposed of/incinerated increases the CO_2 level in the atmosphere and becomes one of the factors of global warming.
On the other hand, the CO_2 generated when sugarcane-derived polyethylene is incinerated is the CO_2 that had been absorbed by the sugarcane in the course of their growth. Therefore, we can say that there is zero increase/decrease in CO_2 when it's incinerated.

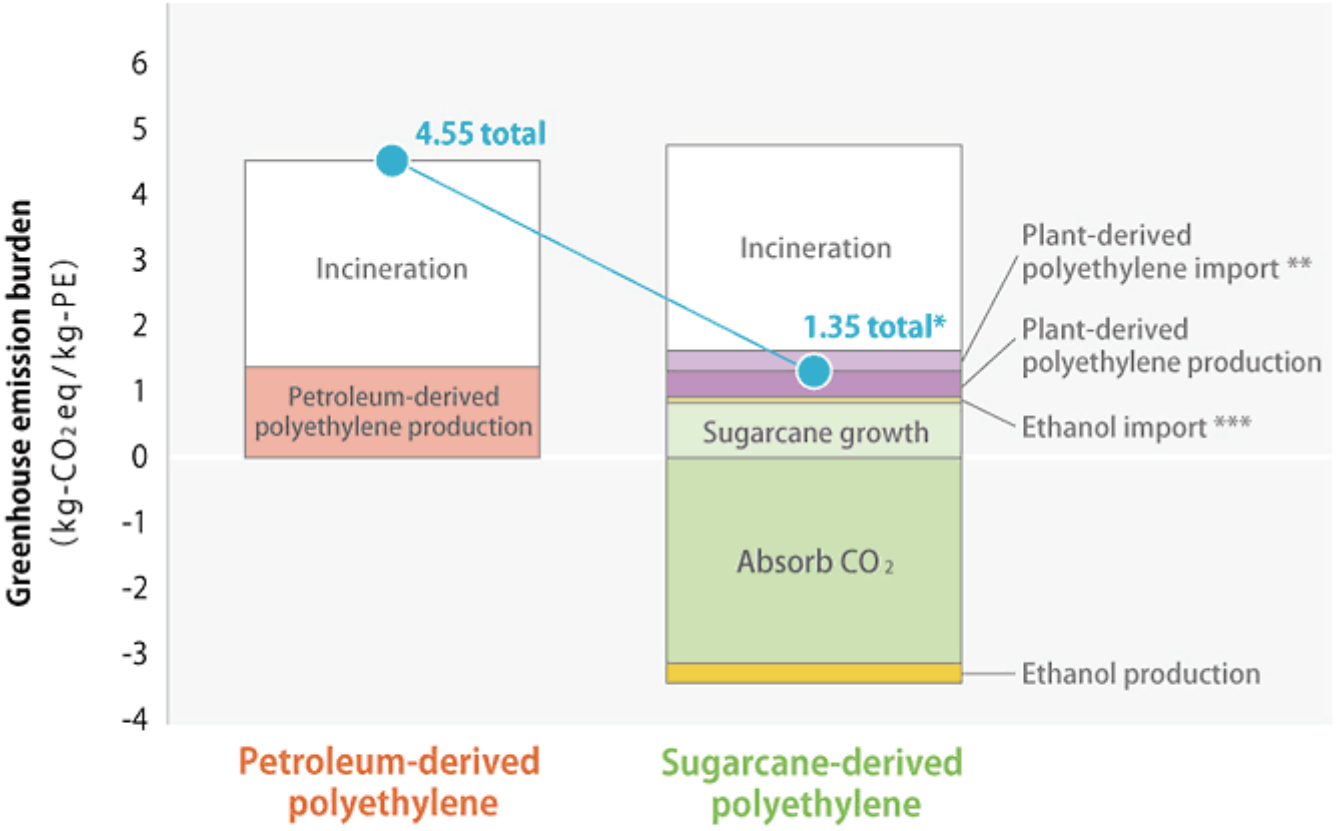
In addition, sugarcane-derived polyethylene is also effective in CO_2 emission reduction in the manufacturing process. In addition to the advantage that the energy consumption is less than petroleum-derived polyethylene due to the fact that the heating temperature in the manufacturing process is lower, it utilizes the electricity generated from incinerating "bagasse," which is the residual material after refining sugar from sugarcane.
Due to this, we can significantly reduce the CO_2 emission compared to before.
(Refer to Diagram 1)

Diagram 1: Polyethylene Manufacturing Process



Furthermore, bioethanol, which is a raw material for sugarcane-derived polyethylene, is mainly produced by fermenting the residual liquid (Blackstrap molasses) after refining sugar from the juice of sugarcane, etc. Because of this, it's advantageous in the fact that competition is less likely to occur with food source compared to soybean or corn.
Considering these facts, we can calculate that the CO_2 emission in the overall sugarcane-derived polyethylene lifecycle, which we have been utilizing since September of 2011, is smaller compared to petroleum-derived polyethylene by over 70%.
(Refer to Diagram 2)

Diagram 2: CO_2 Emission Volume Reduction Effect



* On the premise that no additive/comonomer is included.
** Country of polyethylene production (Brazil) – Japan (port of Yokohama).
*** Ethanol plant – Polyethylene plant

[Kikuchi, Hirao, et al. (Source: The 6th Meeting of the Institute of Life Cycle Assessment, Japan)]