

## Environment

---

Shiseido conserves the global environment that supports our business and people's life, and is striving for sustainable manufacturing. We aim to grow our business with minimal environmental load in the value chain not simply by executing environmental policies, but rather by adding compelling value to products so that consumers' hearts will be moved.

## Environmental policy

---

### **Shiseido Eco Policy**

Since 1992, when the Company adopted the Shiseido Eco Policy, a set of guidelines detailing how environmental considerations should weigh on management decisions, environmental protection has been a key effort in all of Shiseido's business activities.

#### **Shiseido Eco Policy**

In order to undertake efforts to preserve the global environment in all of Shiseido's business activities:

1. Consider the environment and use natural resources and energy with great care
2. Promote the development and application of new technologies that do not place a burden on the environment
3. Aim to raise the level of employee awareness toward environmental protection
4. Endeavor to work closely with local communities and society

## For "The Preservation of the bounty of the Earth"

Our corporate name is derived from a passage in the Yi Jing, a Chinese classic text, which reads, "至哉坤元 万物資生" (Praise the virtues of the Earth, which nurtures new life and brings forth significant values).

As this passage suggests, respecting and valuing the global environment is the basis of Shiseido's existence.

To praise the virtues of the Earth, discover new values, and serve society are the missions of Shiseido, which receives blessings from the Earth. Today, this bounty is being lost at a rapid pace, casting into doubt our ability to pass it down to future generations. Shiseido has returned to its roots and reaffirmed the importance of conducting its business while acting as good steward of the Earth's bounty. We have embraced a "new Policy on Biodiversity" that places "the preservation of the bounty of the Earth" at the core of our environmental activities. This policy complements the first principle of the Shiseido Eco Policy ("Consider the environment and use natural resources and energy with great care"). Shiseido is pursuing the three principles of "conserving biodiversity (i.e., preserving the bounty of the Earth)," "reducing CO<sub>2</sub> emissions," and "reducing use of resources." We aim to achieve a sustainable society through these principles.

### ■ 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. Working proactively for their conservation, we will strive 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 respecting 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 management

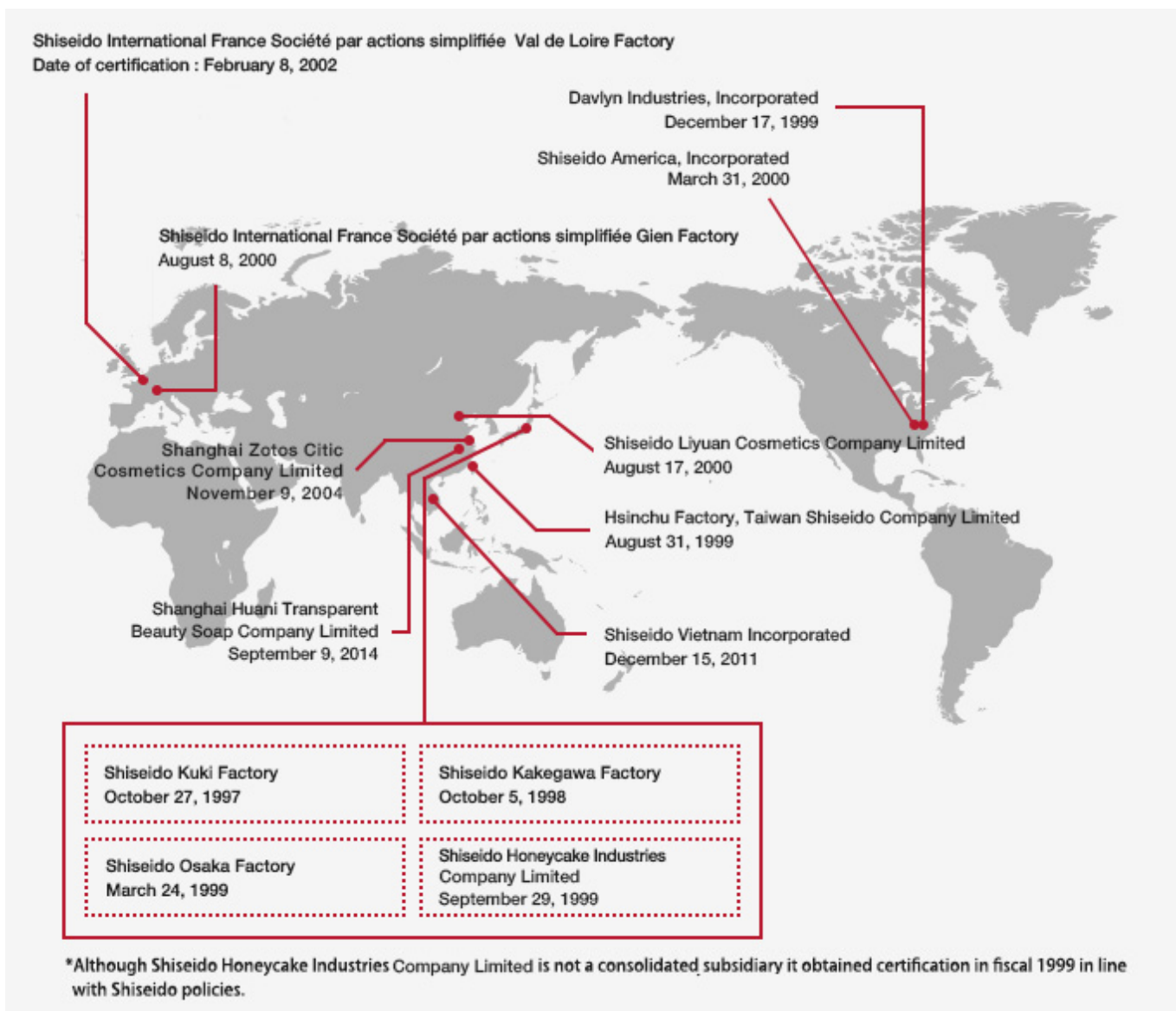
### Structures

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. Since initial certification, the plant has been subject to an ongoing certification process to verify that its environmental management system is maintained and improved through annual inspections and a renewal investigation every three years, both conducted by an outside organization. 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



## 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 2016. Going forward, Shiseido is committed to managing its operations in an appropriate manner.

### Our position on microbeads

Microbeads are tiny plastic particles used in cleansing or exfoliating. The microbeads used in Shiseido products are extremely safe for humans.

Yet, considering some consumers' environmental concerns about microbeads contained in such products as cleansers, our new cleansing products developed since April 2014 no longer include microbeads.

In the United States, we will completely replace the ingredients complying with the federal law (production: by June 30, 2017; sales at retailers: by June 30, 2018.)

Regarding the existing cleansers in other regions, we will finish the replacement no later than 2018 depending on the characteristics of the products.

We will be replacing ingredients with alternatives promptly in the future regardless of the presence or absence of laws and regulations, should we recognize the need due to environmental risks and such.

### Thorough Management of Industrial Waste

While waste producers are being held accountable with regard to the illegal disposal of industrial waste, Shiseido is promoting optimal management to address this issue centering on industrial waste, which is a position created at all domestic worksites.

Additionally, initiatives are being undertaken to practice thorough compliance by carrying out evaluations including environmental laws and regulations in production departments.

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 customers.

## Correspondence to the PRTR Law

### PRTR target substance emissions and transfers

Fiscal 2016 (unit: tons)

Legal No.	Substance Name (legal designation)	Amounts of Emissions			Amounts of Transfers	
		Atmospheric	Public water	Soil	Sewage	Waste
56	Ethylene oxide (20%)	0.0	0.0	0.0	0.0	0.0
71	Ferric chloride	0.0	0.0	0.0	0.0	0.0
127	Chloroform	0.0	0.0	0.0	0.0	1.2
207	2,6-di-tert-butyl-4-cresol	0.0	0.0	0.0	0.0	0.0
275	Sodium dodecyl sulfate	0.0	0.0	0.0	0.0	4.2
334	Methyl 4-hydroxybenzoate	0.0	0.0	0.0	0.0	0.1
389	Hexadecyltrimethylammonium chloride	0.0	0.0	0.0	0.0	0.3
405	Boron and boron compounds	0.0	0.0	0.0	0.1	0.0
409	Sodium poly (oxyethylene) dodecyl ether sulfate	0.0	0.0	0.0	0.0	18.4

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: 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.)

Target Period : January, 2016-December, 2016

## 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 does take 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-store 1. Design to easy resize 2. Design that can be applied and developed for multiple purposes
	(2) Select materials with minimal environmental burden 1. Select materials for sales promotion tools 2. Select certified materials 3. Select 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 separation, and has noticeable eco-labels
Proof and Print	(1) Less waste printing process
	(2) Environmentally friendly Ink
Packaging and Shipping	(1) Simplification of packaging
	(2) Eliminate double packaging



## Environmental targets and results

---

Shiseido commits to pursue "environmental friendliness throughout the product life cycle" and "global initiatives to reduce CO<sub>2</sub>" as two pillars in its environmental program up until 2020.

Environmental targets and results

## 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<sub>2</sub> 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 increasing availability of refill products and using paper manufactured from bagasse, environmentally-considerate paper products, such as bagasse paper\*/FSC-certified paper, etc.

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

\* Non-wood paper made from bagasse, the residue left after extracting sugar from sugarcane

### Environmental friendliness product targets

Item	Objective
Utilization of plant-derived containers	We will switch over 70% of the polyethylene used in the domestic cosmetics business from petroleum-derived polyethylene to plant-derived polyethylene by 2020.
Acceleration of the shift to refills	We will make refills available for 100% of foundation (compact type)/face powder/jumbo sized shampoo and conditioner in the domestic cosmetics business by 2020. We will make refills available for over 70% of lotion/emulsion (dispenser type).
Proactive utilization of environmentally-considerate paper, such as bagasse paper, etc.	We will promote the switch to environmentally-considerate paper, such as bagasse paper/FSC-certified paper, etc.

## Global initiatives to reduce CO<sub>2</sub> emissions

To reduce CO<sub>2</sub> emissions worldwide, we endeavor to manage and reduce CO<sub>2</sub> emissions at all facilities, including those located overseas (head offices, research centers [Global Innovation Center], production facilities, sales companies, and affiliates), starting in fiscal 2011.

### CO<sub>2</sub> emission reduction targets

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

\*1: BAU ratio : A comparison of the CO<sub>2</sub> emissions that would be expected if particular reduction measures were not implemented ("business as usual," or BAU) and the CO<sub>2</sub> emissions that would be expected if reduction measures are implemented.

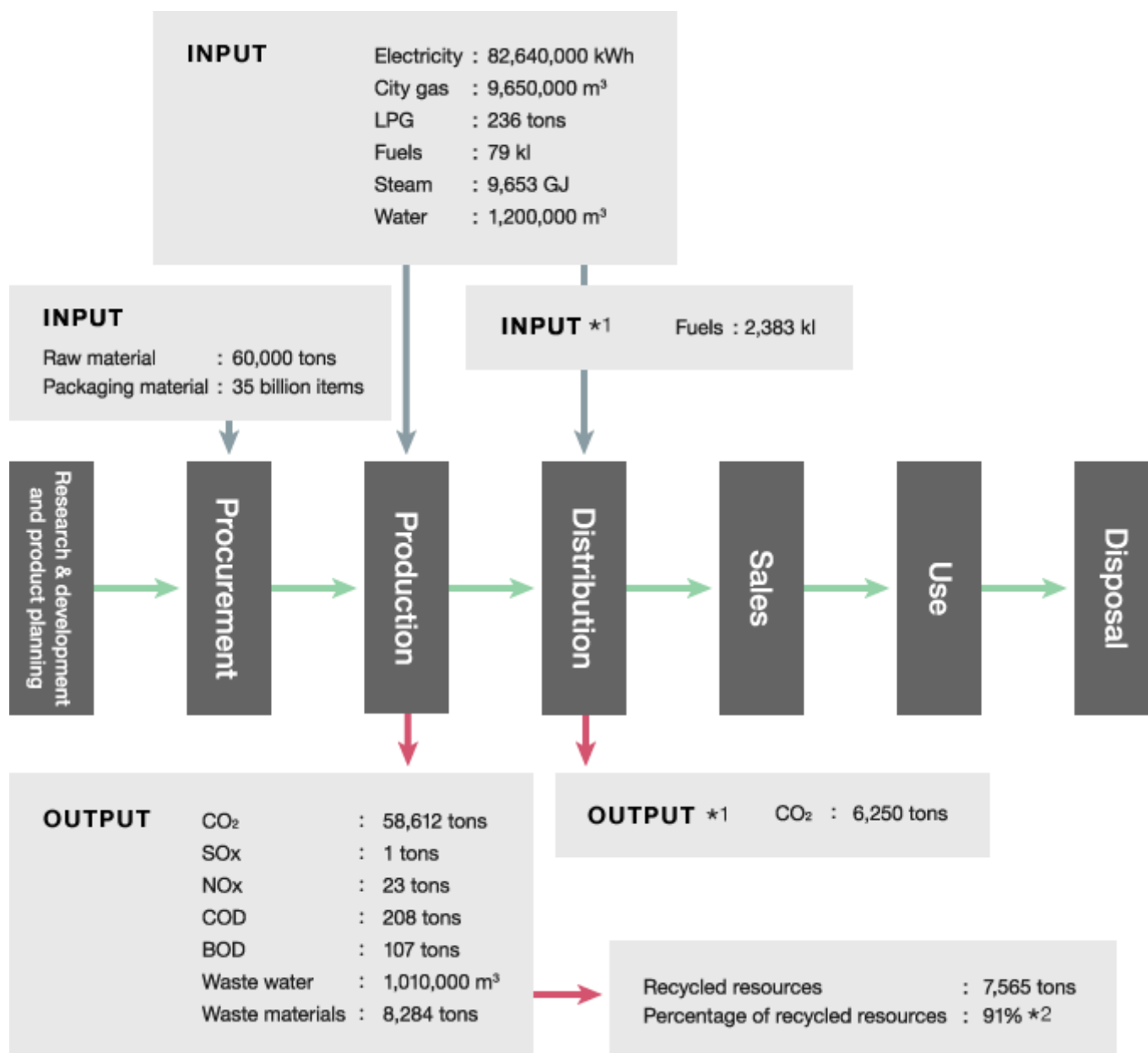
\*2: Excludes facilities from which data has not yet been acquired.

Usually, greenhouse gases (GHG) includes seven gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>, and NF<sub>3</sub>); however, on this website, these are expressed cumulatively as CO<sub>2</sub> unless otherwise noted.

Environmental targets and results

**FY2016 environmental impact results**

The following are the environmental impact results for Shiseido's fiscal 2016 business activities.

**Target Period:** January-December, 2016 (Domestic , Overseas)**Target range**

\*1: Shiseido Company, Limited. Shiseido Japan Company, Limited.

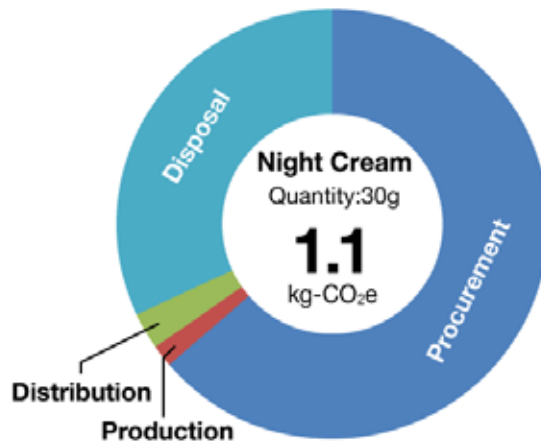
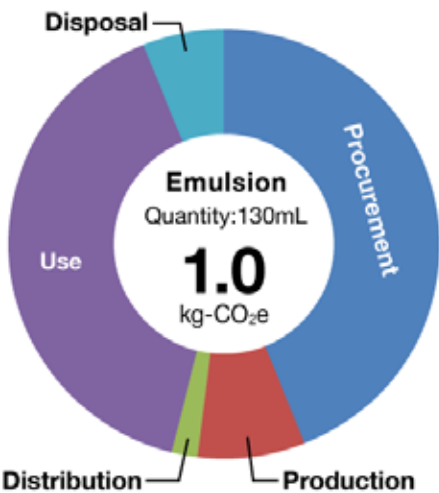
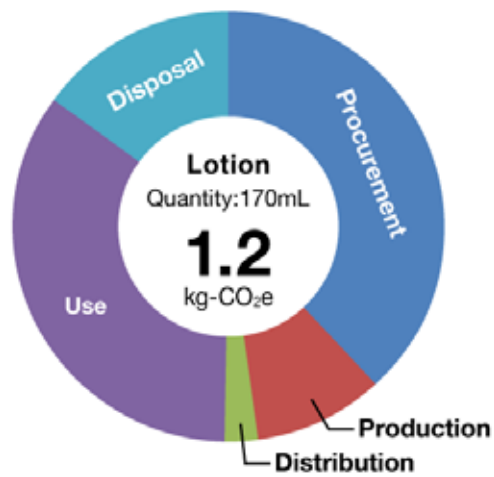
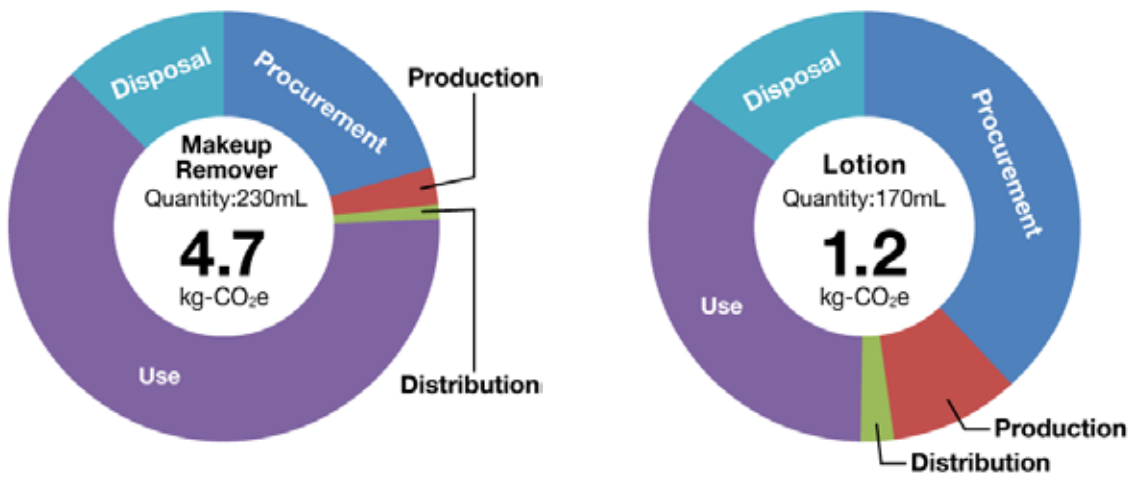
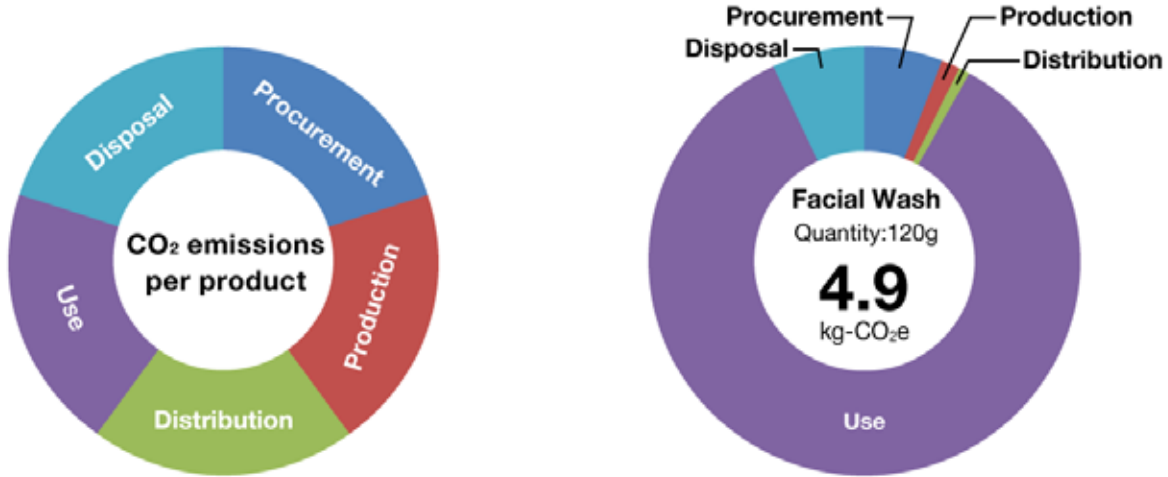
\*2: The following production facilities have achieved zero-emissions with a 100% waste recycling rate.

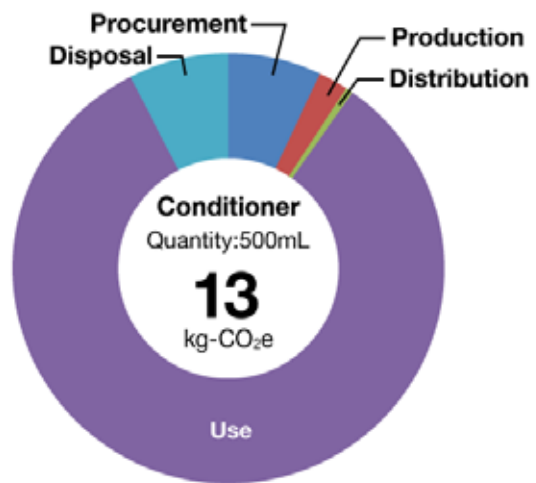
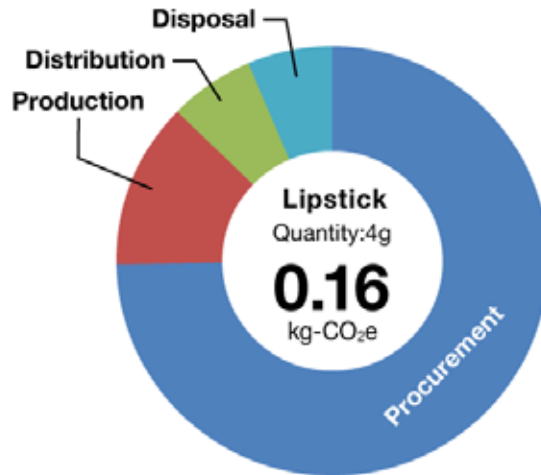
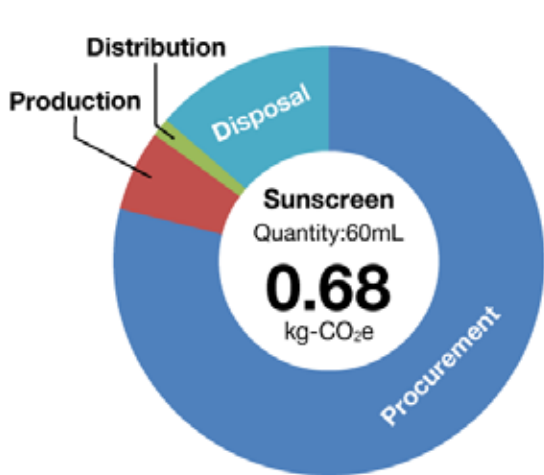
Domestic: Osaka Factory, Kakegawa Factory, Kuki Factory

Overseas: Shiseido International France Société par actions simplifiée Val de Loire Factory, Shanghai Zotos Clitic Cosmetics Company Limited

## Effect of CO<sub>2</sub> reduction throughout the value chain in FY2016

In order to effectively reduce CO<sub>2</sub>, Shiseido measured the environmental impact throughout the value chain and reduced CO<sub>2</sub> emissions throughout the value chain based on the "GHG Protocol Scope 3 Standard."





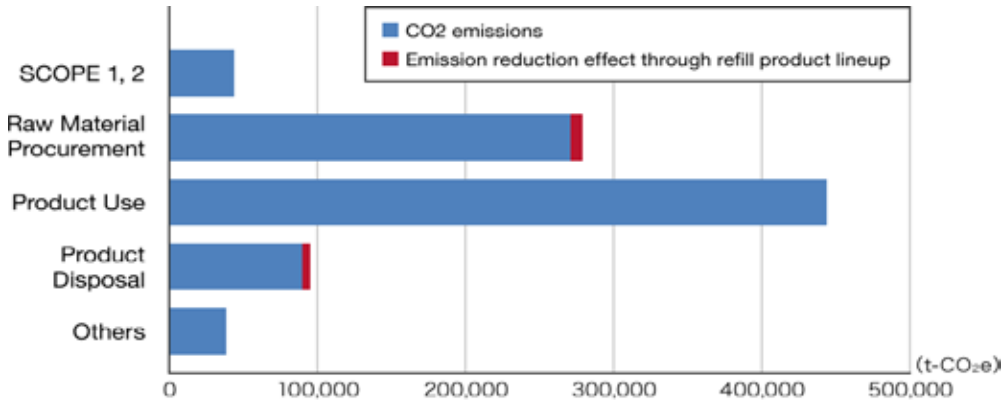
**Evaluation of each life cycle stage by product types, and CO<sub>2</sub> emissions per product**

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

\* Evaluation done under below condition

### CO<sub>2</sub> emissions throughout the value chain and the effect of reduction

In terms of the emission reduction effect through refill product lineup and other initiatives in FY2016, we were able to reduce a total of approximately 13,700 tons of CO<sub>2</sub> emissions, including approximately 8,400 tons in raw material procurement and approximately 5,300 tons in the product disposal phase.



Target Period: January 1, 2016 - December 31, 2016

Target Facilities: Domestic facilities only

SCOPE 1: Direct emissions from facilities

SCOPE 2: Indirect emissions due to production (power generation, etc.) of purchased energy

SCOPE 3: Indirect emissions from the value chain other than Scope 2 Includes emissions resulting from use of products, raw materials procurement, disposal of products, upstream transportation and delivery.

Environmental targets and results

## Environmental accounting

### Basis for environmental accounting calculations

Target Period : January 1, 2016 - December 31, 2016 (domestic, overseas)

Scope of Target : Domestic production facilities, overseas production facilities, research centers (Global Innovation Center) in Japan, and Head Office.

Unit : Millions of yen.

#### 1. Environmental Conservation Costs

Category		Main Initiatives	Investment	Expenses
(1) Costs breakdown by operation			87	286
Breakdown	(1)- 1 Pollution prevention costs	Water contamination, atmospheric pollution, etc.	9	63
	(1)- 2 Global environmental conservation costs	Promotion of energy conservation, measures to protect the ozone layer, etc.	78	53
	(1)- 3 Resources recycling costs	Waste Processing, recycling, wastewater re-use, reducing materials, etc.	0	170
(2)Upstream/downstream costs		Costs associated with Recycling of Containers and Packaging Recycling Law, green procurement product recycling, etc.	0	164
(3)Administrative costs		Personnel expenses (excluding R&D) for environmental management	0	471



(4) Research and Development costs	R&D for environmentally friendly products, etc. (including personnel expenses)	0	13
(5) Social contribution costs	Support of environmental groups, disclosure of environmental information, environmental advertising, etc.	0	61
(6) Environmental remediation costs	Environmental remediation costs, etc.	0	0
(7) Other costs		0	4
<b>Total</b>		<b>87</b>	<b>1,000</b>

## 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.	60
Cost savings	From energy conservation	79
	Waste-related	27
	From Resource conservation	18
	Other	0
<b>Total</b>		<b>185</b>

## 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 customers' hearts will be moved.

### Using mechanically recycled PET for product containers

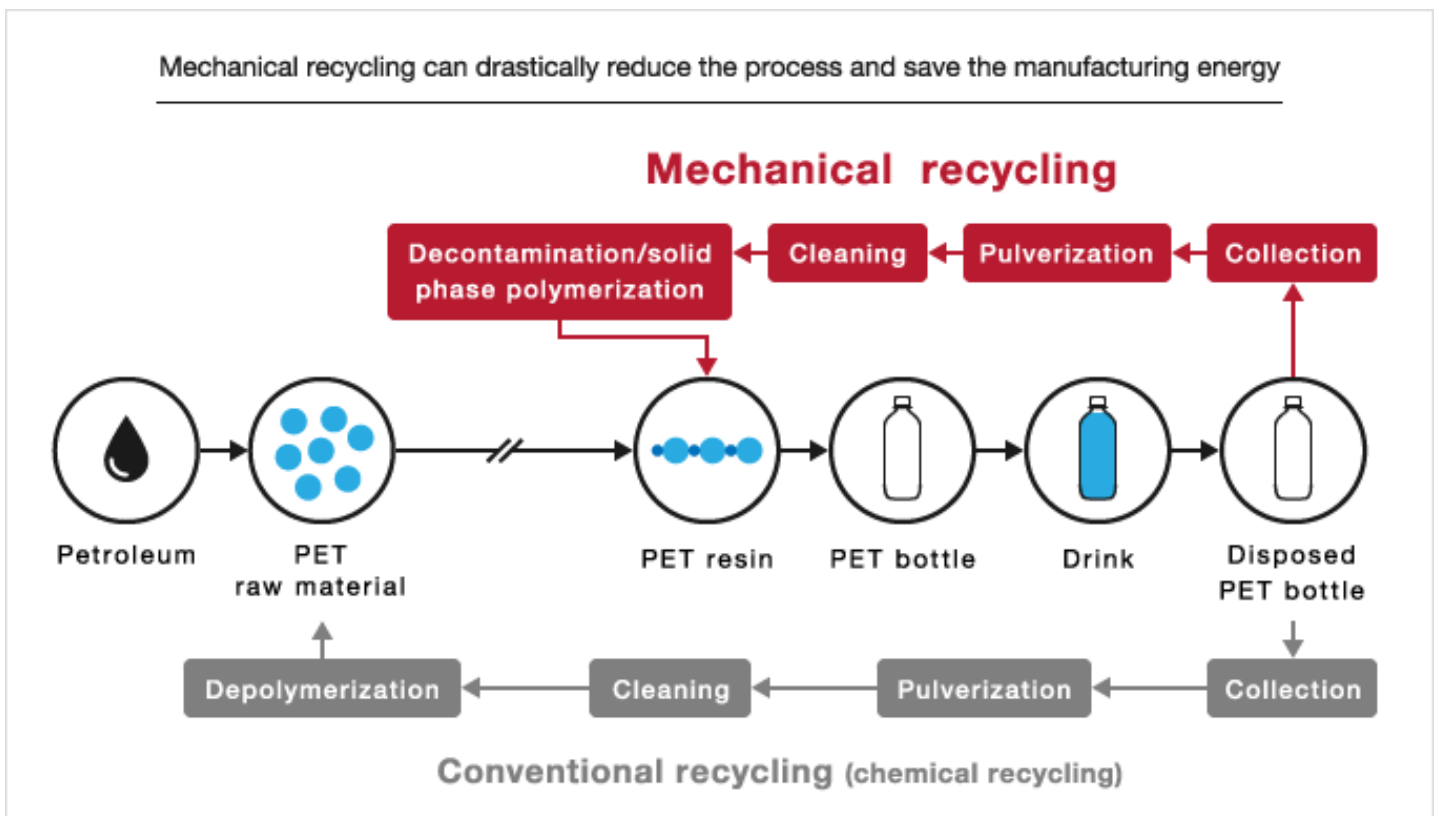
In September of 2015, Shiseido started using the PET resin, which was mechanically recycled from collected PET bottles, for containers of *SEA BREEZE*.

Mechanical recycling has better recycling efficiency compared to the conventional chemical method of recycling PET resin from PET bottles, meaning that this recycling method has less burden on the environment(\*). It is already being used for PET bottles for drinks, etc. due to its high quality. We have been successfully able to produce environmentally-friendly containers by resolving the issue that is unique to cosmetics containers, which are complex and thick. Through this initiative, we can reduce not only our petroleum use, which is an exhaustible resource, but also the CO<sub>2</sub> emissions by approximately 22 tons per year compared to using virgin PET.



SEA BREEZE that began using mechanically recycled PET

#### \*Example of the mechanical recycling process



## Released products containing raw materials with “clear background”, which were grown in our internal plant factory

In recent years, customers' 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.

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<sub>2</sub> 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, which was 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.



Our internal plant factory

## 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", which is 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)", etc., and using FSC-certified paper (\*3) for printed inserts, etc.

*clé de peau BEAUTÉ* places importance on connections with nature and society and delivers 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

## Shiseido Reduces Plastic Use by Adopting Paper Exterior Packaging Boxes for the *ELIXIR* Skincare Series

Shiseido is working to improve the environmental friendliness of its core lines *ELIXIR* Skincare Series.

As the first initiative, we changed the plastic product outer box to a paper outer box for "*ELIXIR SUPERIEUR RETINO VITAL*," which was released in September of 2009 as highly functional special care, and "*ELIXIR WHITE*," which was released in February of 2010. Since then, we have also switched to a paper outer box for "*ELIXIR SUPERIEUR*" since September of 2010. Through these initiatives, we were able to reduce a total of approximately 90 tons in plastic usage within 1 year of each product's release.

Since switching to paper outer boxes increased the space to print product information, we have been aiming to enhance the information, such as ingredients, method of use, etc., which consumers themselves can use for reference when choosing products.

We also released refills for lotion and emulsion from "*ELIXIR SUPERIEUR*" and "*ELIXIR WHITE*" product lines in September of 2012 as the second initiative.

When consumers use them to refill the product containers, we can reduce approximately 85% (weight ratio) of disposed plastic.

Additionally, *ELIXIR WHITE*, which was renewed in March of 2016, also continues to use paper exterior package and offer refill products.



*ELIXIR SUPERIEUR*



*ELIXIR WHITE*

## Reducing plastic use by making *HAKU* refills available

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

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 3D (released in February 2016) continuously adopts these environmentally-friendly containers and packaging.



Left: HAKU melanofocus 3D  
Right: Refill



## Using polyethylene produced from sugarcane for *SUPER MiLD* containers

In September 2011, Shiseido adopted containers made from sugarcane-derived polyethylene for its *SUPER MiLD* hair care brand. This is the first time this material was used for cosmetics and daily basic goods in Japan.

Incineration of sugarcane-derived polyethylene involves the release of carbon dioxide (CO<sub>2</sub>), which sugarcane absorbs as they grow, so it can be said that there is no difference in the level of CO<sub>2</sub> in the atmosphere when this material is incinerated. Because of this and other reasons, it is said that incineration of sugarcane-derived polyethylene releases over 70% less CO<sub>2</sub> than petroleum-derived polyethylene in their life cycles.

Now approximately 96% of the materials used for the *SUPER MiLD* bottles (both regular and jumbo sizes) and approximately 34% for refill packs, are sugarcane-derived polyethylene and thus CO<sub>2</sub> emissions were successfully reduced by approximately 188 tons in the first year after this change was introduced (according to Shiseido's estimate).

There is another benefit of using sugarcane-derived polyethylene for containers—because this polyethylene is made mostly from residual liquid after refining sugar from the juice of sugarcane, so it can prevent competition between food usage and plastic usage.



*SUPER MiLD*



The mark indicates products that use plant-derived plastic, such as sugarcane-derived polyethylene.

## 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*



## Development of *Fullmake Washable Base*

"*Fullmake Washable Base*," which was released in advance via the Shiseido website "*watashi+*" online shop in December of 2012 and was released via counters in February of 2013, is the world's first (\*1) makeup base that enables users to easily remove the makeup, which is applied over the base, only with warm water. Shiseido developed its original technology "Veil Action Polymer," which doesn't blend with cold water but responds only to warm water of 40 above degrees Celsius, and incorporated it into this product for the first time.

Due to the fact that users don't require cleansing agent when using this product, Shiseido calculated the environmental impact reduction rate throughout makeup routine from makeup base to cleanser. Specifically, we tried to calculate the water consumption amount throughout the product's life cycle by using the water footprint (\*2) method by comparing the traditional makeup routine and makeup routine (\*3) using this product. As a result, we can reduce approximately 1.6L (\*4) in water consumption amount per makeup routine. When you convert this to one bottle (35g) of this product, the calculation shows that we can reduce approximately 90L of water.

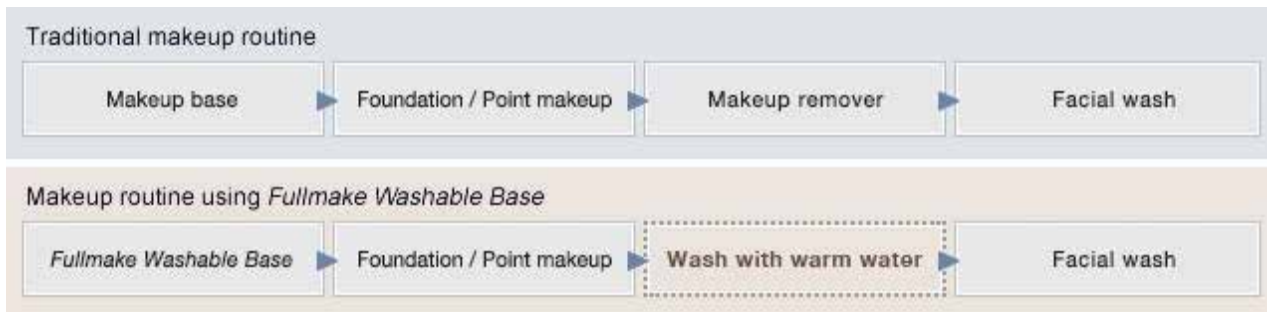


*Fullmake Washable Base*

\*1: From the database of Mintel Japan, Inc. (Researched by Shiseido)

\*2: Method that evaluates the water consumption throughout a product's life cycle from raw material procurement to production, usage, disposal, and recycling as well as the environmental/social impact due to it in a quantitative manner. This method targets all water used directly as well as indirectly, including cultivation of plants for raw materials, water used in the course of the product's production process, etc.

\*3: Traditional makeup routine and makeup routine using "*Fullmake Washable Base*"



\*4: This calculation result has undergone a third-party evaluation by Professor Norihiro Itsubo of the Environmental Studies, Tokyo City University. This value was not derived from comparing the water usage in households of consumers.

## Reducing the glass bottle weight and employing labels that are easy to peel off for Pure White W and The Collagen beauty drinks

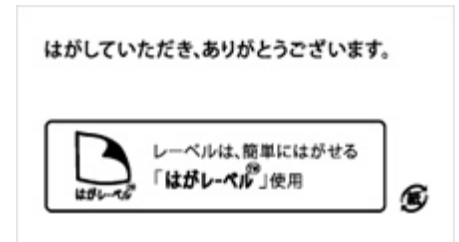
In 2012, Shiseido reduced the weight of the glass bottles for Pure White W and The Collagen products by about 10 percent because consumers had indicated that they throw out several empty bottles at a time and wanted them to be as light as possible.

We reduced CO<sub>2</sub> emissions by about 427 tons for one year (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



An easily removable label

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

Kirei no Susume, which was launched by Shiseido on July 21, 2010, 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<sub>2</sub> when they grow healthily, the material also helps reduce CO<sub>2</sub>.

### 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* (hereinafter, "*the product*") 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 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, the product 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, *the product* 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)

*The product* 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.

## **Zotos International, Inc. Recycling of Plastics Used for Hair Care Product Bottles**

Zotos International, Inc. (Connecticut State, U.S.A.), which manufactures professional products for hair salons for the Shiseido Group, has reduced the amount of virgin resin usage while maintaining quality, safety and also the look of the bottle.

With the introduction of plastic bottle molding equipment, bottle production, which was previously outsourced, has been shifted in-house. After that, the development of molding technology featuring an original four-layered structure, which is innovated by sandwiching two layers that contain recycled plastic with outer and inner layers comprised of thin, virgin plastic, has enabled a maximum of 70% of recycled plastic per container to be used. This is expected to reduce the usage amount of new plastics by nearly 75 tons per year in addition to curbing CO<sub>2</sub> emissions by approximately 360 tons annually.



*JOICO*

## Production initiatives

The production departments aggressively practice the PDCA cycle with specific action plans in order to achieve reduction targets. We will also investigate the possibility of utilizing renewable energy at production facilities and achieving zero emissions at all production facilities over the long term.

### Environmental responsiveness in Shiseido America, Inc. East Windsor Factory

East Windsor, New Jersey-headquartered Shiseido America, Inc. (hereinafter, "SAI") completed the phase 1 of a fixed-tilt solar power system in May 2007. In August 2010, the company completed the 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, together with the system that was initially installed, the system is expected to generate approximately 2,300 MWh of power on an annual basis. This will cover more than 70% of electricity consumed annually at SAI using solar power generation. In addition, approximately 1,200 tons of CO<sub>2</sub> emissions can be reduced annually by utilizing the solar power generation equipment, ranking the system among the largest installations in the state.

In 2010, SAI received the New Jersey Governor's Environmental Excellence Award.

In addition, Davlyn Industries, Inc. installed the solar power system in April 2012.

Date operational	May 2007 (phase 1) and August 2010 (phase 2)
Annual capacity	Approx. 2,300 MWh
CO <sub>2</sub> 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 when materials are being delivered, since July of 2012. Although we used to dispose it of as landfill waste, we 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<sub>2</sub> emissions.



## ZOTOS International, Inc. introduced the wind power electricity generation in Geneva factory

ZOTOS International, Inc. which manufactures products for hair salons, installed the 2 large-scale wind power generators in the Geneva factory (NY, USA) that began operation in December of 2011.

We expect these 2 generators to generate approximately 4 million kWh per year total. According to American Wind Energy Association (AWEA), this is one the biggest power generation facilities (within own premises) among manufacturing companies within the USA.

Operation of these wind power generators can cover approximately 30% of the annual electricity consumption at the Geneva factory.

In 2012, ZOTOS international, Inc. received "2012 Green Power Leadership Award" from U.S. Environmental Protection Agency (EPA).

Date operationa	December 2011
Annual capacity	Approx. 4 million kWh
CO <sub>2</sub> emissions reduction	Approx. 2,150 tons/year



Wind power generators at the Geneva factory



## Environmentally Responsive Vietnam Factory

Shiseido's 15th factory commenced operations from April 2010 as an "environmental model factory in Asia."

At the Vietnam Factory, we have introduced a central energy monitoring system from Japan as an energy saving measure, thereby optimally controlling energy consumption by visualizing energy use within the factory. Additionally, energy saving and ecofriendly measures are also pursued in terms of lighting and cooling and airconditioning equipment through various means such as introducing these systems from Japan and neighboring countries.

Additionally, surplus soil generated from excavation during construction was reused for landscaping the premises rather than disposal, and then achieving zero emissions at the moment.

The Vietnam factory values "sustainability," which is the most important aspect when considering the environment and all the factory workers are continuously engaged in various activities to conserve the environment such as planting trees within the factory site every year. The Vietnam factory will grow as these trees planted by the employees grow.



Vietnam Factory



The trees planted within own premises

## Introduction of Solar-Powered Lighting and LED Lamps Saves Energy in Kuki Factory

As of May 2010, the Shiseido Kuki Factory has introduced solar-powered lighting in its storage facility, making it the first building of its kind in Saitama Prefecture with a system installed that eliminates use of electricity.

Solar-powered lighting is a new kind of illumination system that uses sunlight collected from rooftops rather than electricity to provide light in buildings.

Reflection plates with specially processed curved surfaces effectively collect sunlight even in the morning or late afternoon, or when the sun is low in the sky in winter. Meanwhile, prism reflection diffuses collected light into the building, brightening up corners of the storage space that had been dimly lit under mercury lights. The solar-powered lighting thereby enhances operational efficiency and safety. Since solar-powered lighting uses solar energy, it also contributes to reducing environmental load by totally eliminating CO<sub>2</sub> emissions and does not require maintenance after installation.

Also during this same period, all external lights on the factory premises were changed from mercury lamps to LEDs that consume half as much energy.

These two initiatives are expected to help reduce CO<sub>2</sub> emissions by about 45 tons annually.



Solar-powered lighting (rooftop)



Solar-powered lighting (image)



Solar-powered lighting (inside storage facility)

## Shiseido Develops a Protective Material for Transporting Products that Offers Flexibility and Recyclability

Shiseido's Osaka Factory and Kakegawa Factory have developed a new environmentally friendly protective material for transporting products. The facilities began using the new material in April 2010.

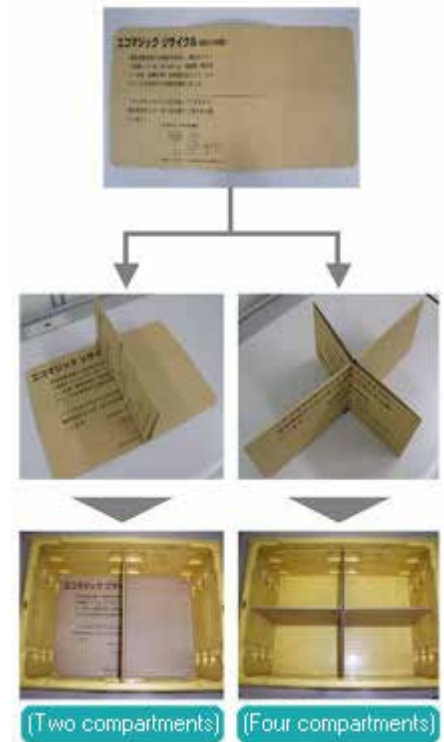
In the past, the factories' approach to shipping products involved the use of a variety of protective materials according to the shape and quantity of the product, and these materials were typically discarded after shipment due to the difficulty of reuse.

Working with Shiseido distribution partner Hitachi Collabonext Transport System Co., Ltd., the factories developed a standardized system of partitions that can be reconfigured to accommodate a variety of shapes.

These partitions can be folded to segment packaging into two or four compartments, allowing them to be flexibly reconfigured to suit the purpose at hand.

Best of all, they can be folded up into a compact size and shipped back to the factory, allowing their reuse.

Shiseido expects to cut its annual transportation-related CO<sub>2</sub> emissions by about 43 tons thanks to a reduction of some 53 tons in annual cardboard use and increases in shipping efficiency made possible by the ability to reuse the partitions.



A cardboard insert can be flexibly altered



## Initiatives in research, procurement, distribution, and sales

In addition to developing environmental technologies to reduce CO<sub>2</sub> emissions, Shiseido strives to create new value through its research and development operations by conducting research into new technologies for implementing value for consumers in an environmentally friendly manner and pursuing software development.

In procurement, we strive to use raw materials that do not increase atmospheric concentrations of CO<sub>2</sub> at the time of disposal or incineration, for example through joint research into sugarcane-derived polyethylene, and we work closely with our business partners to develop environmentally friendly technologies. In March 2006, we began verifying suppliers' agreement with an adherence to the Shiseido Group Supplier Code of Conduct (which was revised in December 2011). Going forward, we will continue to work with suppliers to take biodiversity into account and contribute to a sustainable society.

In distribution, we are working to reduce CO<sub>2</sub> emissions through such means as reassessing the viability of high-frequency, small-volume shipments and conducting joint distribution operations with other companies in the same industry (that is, sharing distribution facilities).

In sales initiatives, we strive for transitioning to LED lighting at stores and developing environmentally friendly promotional tools for use in stores. We have been promoting a sales vehicle-sharing system since fiscal 2009.

### Environmental responsiveness in carton for "watashi+" online shop

Shiseido website "watashi+" online shop, which was launched in April of 2012, carries approximately 2,600 products that are sold via counters. In order to deliver products, which are sold via counters, in the form of mail order, we needed strong outer packaging and many cushioning materials. However, in order to respond to the customer feedback "There are too many cushioning materials per product" regarding mail order in general, we worked on developing shipping boxes with considerations to business partners and the environment.

We developed 5 sizes of the transport box lineup according to the size of products to be delivered. Furthermore, we newly developed a paper divider that freely expands and contracts to change the shape according to the product's size and form. One sheet of this divider can respond to all products, and we can now reduce the vibrations and friction during transportation to deliver them without damaging them.

In addition to the environmental contribution effects of CO<sub>2</sub> emission reduction and resource conservation, another advantage is that we can easily open the boxes, which are sealed without using packing tape, by lifting the tab on the box lid.

This initiative won the "2013 Japan Packaging Contest Transport Packaging Award (hosted by the Japan Packaging Institute)."



Transport boxes with the fun design that is unique to cosmetics



Paper divider inspired by cake box dividers

### Switch to Plant-Based Fermented Alcohol

At Shiseido, all synthetic alcohol used by our four domestic factories and research centers has been switched to carbon-neutral, plant-based (sugarcane-based) fermented alcohol. In order to avoid competing with food sources as much as possible, we select alcohol that uses sugarcane as a raw material and is produced by individually managed processes from procurement to shipping. With this switch, we are able to reduce several thousands tons of CO<sub>2</sub>.

## Eco Processing of Beauty Consultant Uniforms

In regard to the disposal of Beauty Consultants' uniforms for which the issue period for use has ended, from 2009 Shiseido shifted from thermal recycling, which reuses heat generated during incineration, to chemical recycling, which uses coke ovens to produce chemical raw materials. The new recycling method enables complete recycling of fibers into materials such as chemical raw materials with no residues (ash) after processing. Additionally, there are almost no CO<sub>2</sub> emissions, thereby enabling a significant reduction compared with conventional incineration processing.



## 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 hair care brands, etc.

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<sub>2</sub> emissions by more than 800 tons annually. In this way, Shiseido promotes comprehensive environmental activities encompassing all processes from manufacturing to shipping and delivery.



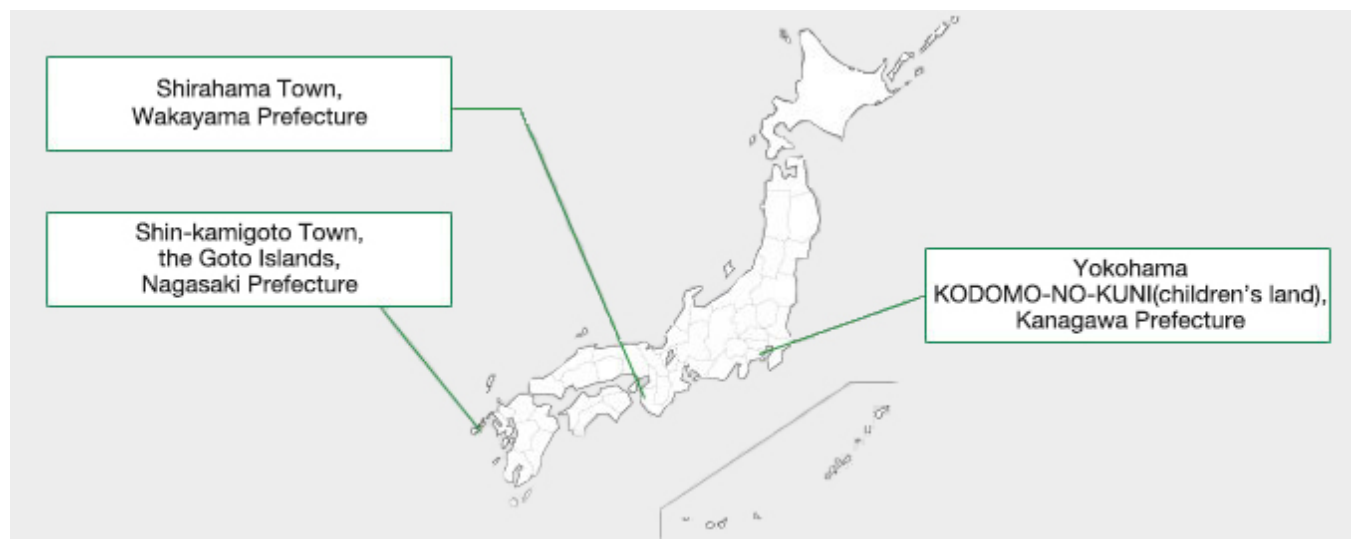
## Initiatives to conserve biodiversity

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 order to provide an opportunity to gain a better understanding of the importance of conservation of bounty of the Earth, Shiseido has held events where its employees and their families volunteer to plant and conserve camellia trees every year in Wakayama Prefecture since 2009 and in the Goto Island in Nagasaki Prefecture and Yokohama KODOMO-NO-KUNI (children's land) in Kanagawa Prefecture since 2011.

#### The place of camellia planting and conservation volunteer activities



### 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 FY2017

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



Group photo



Planting the trees



## "Shiseido Tsubaki Forest", a tree-planting and conservation project

Shiseido is engaged in a 10-year-long forest conservation project in Tsubaki, Shirahama-cho, Nishimuro County, Wakayama Prefecture. The project is called "Shiseido Tsubaki Forest" and started in 2009. Approximately 4,420 Japanese camellia (*Camellia japonica* L.) trees have been planted by 2017.

In May 2017, 14 employee volunteers participated in the 8th forest conservation project. On the day of the activity, we planted young trees of camellia with the help from the local forest union, Shirahama town office and Wakayama prefectural government office.

The employees who participated shared their experience and said, "I am glad I was able to help with forest regeneration." and "It took a few years to improve the hard mountain soil, but I am excited to see the trees growing bigger."



Planting the trees



Planting the trees



Group photo

## Environmental conservation activity support on Yonaguni Island, which is 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 rich nature Yonaguni Island, including endangered species, endemic species, etc. 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, which is a major river on the island. It was originally introduced to purify water, but it is overgrown now so much that it covers to the water surface, presenting a risk that it would make it difficult for the native animals and plants to live. Therefore, we removed approximately 50 two-ton trucks worth 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 to lead to the future along with the people of 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 Yonaguni Island and promoting activities to hand them down to the next generation.



Yonakama Zukan



Removing work of "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%.

This is the last year of this tree-planting project in Gansu, but 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 September 13, 2016, 52 local employees planted approximately 500 trees in a mangrove forest of the Quartermaster Department Royal Thai Army (QMRTA) in Samutprakarn Province near Bangkok. The event was held under the support of the Foundation for Environmental Education for Sustainable Development (FEED), a nonprofit organization registered in Thailand, and an organization affiliated with the World Wide Fund for Nature, Thailand (WWF Thailand).

We also learned at the Environmental Study Center on Natural Resource Preservation how important it is to protect natural resources and how to effectively utilize sustainable energy. It turned out to be a day of great learnings.

Participants shared their voices, such as, "We realized that to raise even one tree takes strong commitment to create and preserve the beautiful nature of Thailand and its future."

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.



Taking a commemorative photo of all the participants



Planting each tree carefully



## Initiatives for the issue of palm oil

The demand for palm oil, which is a raw material for food and cosmetics, has been drastically increasing in recent years. Tropical rainforests of *elaeis guineensis*, which is the raw material, have been illegally logged for major plantation developments, and endangered wildlife and effect for global warming from reduced forests have become issues. Shiseido has been participating in the "RSPO: Roundtable on Sustainable Palm Oil," which was established with the aim of conserving the environment and promoting and operating sustainable palm oil industry, since 2010. Based on the RSPO conference in March, 2012, we have declared to switch all of palm oil and palm kernel oil used by the Shiseido Group with palm oil certified by the RSPO by 2013 and completed the switch. Certification requires employing the Book & Claim system\* as determined by the RSPO. Shiseido's declaration has been posted on the RSPO website.

\* A system for trading the output of palm oil and palm kernel oil produced at RSPO-certified plantations as certified credits. The system has the same structure as green electricity, which means that the purchase of certificates is recognized as the purchase of RSPO-certified oil.



The wild orangutan that inhabit the rainforest



The employee listening to the description of the oil palm

## Environmental responsiveness of Shiseido Ginza Building

As the headquarters on the Namiki Dori Street are being reconstructed (completion in 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 to make contributions 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 ( $\alpha$ -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 cutting 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 the agricultural products in which yields are declining due to global warming. Such technology is expected to contribute to the impact on agricultural products caused by climate change, which is induced by global warming.



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.

\*1 Joint research project ("Enhancement of CO<sub>2</sub> sinks by improvement of afforestation technology in tropical forests") funded by the Environment Research & Technology Development Fund administered by the Ministry of the Environment

\*2 Joint 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 crème n* wins award at “Japan Packaging Contest 2016”

In August 2016, *Clé de Peau Beauté la crème n* received the “Accessible Design Packaging Award”<sup>\*1</sup> at the “Japan Packaging Contest 2016”<sup>\*2</sup>.

Refills for *la crème 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.

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 crème n*: skin radiant from within. Features such as these led to the selection of *la crème n* as the award winner.

\*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.



*Clé de Peau Beauté la crème n* original container (left) and refill (right)



“Accessible Design Packaging Award” plaque

### 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 ( $\alpha$ -Ketol-OctadecaDienoic Acid)"
June 2010	Cosmetics Packaging Award of the Japan Packaging Contest 2010	The Japan Packaging Institute	Use of polylactic acid containers for <i>URARA</i> hair cleansing products.
June 2010	Cosmetics Packaging Award of the Japan Packaging Contest 2010	The Japan Packaging Institute	Reduction of CO <sub>2</sub> emissions by introducing <i>Soka Mocka</i> 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 <i>ELIXIR WHITE Reset Brightenist Cream</i>
June 2011	Appropriate Packaging Award of the Japan Packaging Contest 2011	The Japan Packaging Institute	Reduction of plastic use by adopting refill containers for <i>HAKU Melano Focus W</i>
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 <i>clé de peau BEAUTÉ</i> and <i>HAKU Melano Focus W</i> 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 <i>SUPER MILD</i> 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 <i>SUPER MILD</i> products
September 2012	2012 Green Power Leadership Award	United States Environmental Protection Agency	Introduction of two large wind turbine generator systems at ZOTOS International, Inc.
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	Appropriate Packaging Award of the Japan Packaging Contest 2013	Japan Packaging Institute	Adoption of refill containers made from sugarcane-derived polyethylene for <i>ELIXIR SUPERIEUR</i> , <i>ELIXIR WHITE</i> 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 <i>Shiseido Medicated Hand soap</i>
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 <i>clé de peau BEAUTÉ concentré illuminateur</i>
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 " <i>Awafuru Eco Soap</i> ", 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 <i>clé de peau BEAUTÉ SYNACTIF</i> 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 <i>clé de peau BEAUTÉ la crème n</i>

## 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

### Cooperation with Stakeholders

Shiseido joined the "Japan Business Initiative for Biodiversity (JBIB)" in 2011 and has been promoting initiatives to resolve issues involving biodiversity with other participating companies by holding lectures in symposiums held by the JBIB, etc.

We have also joined the "Keidanren Nature Conservation Fund", and we observed mangrove plantations and forests with other member companies in fiscal 2014 with the aim of understanding the reality of the natural environment in Thailand and Cambodia. In fiscal 2016, we participated in Earthwatch Institute Japan's "East Japan Post Tsunami Monitoring Project", a research on tidelands, to assess the impact of the Great East Japan Earthquake and tsunami on ecosystems. In order to materialize our aim of a sustainable society, we will continue to promote our initiatives in cooperation with a broad range of stakeholders.



Lecture in a seminar



Observing a mangrove plantation in Thailand



Earthwatch Institute Japan's Tideland Research

## 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

Every year, the Shiseido Kakegawa Factory in Kakegawa City, Shizuoka Prefecture offers elementary students a hands-on environmental class in alliance with Kakegawa City. On Wednesday, August 3, 2016, which marked the fifth anniversary of the event, 11 elementary students in grades 3 to 5 and 2 guardians attended the class.

In this environmental class, after being introduced to the environmental initiatives of Shiseido and the Kakegawa Factory, they learned about ultraviolet rays, made ultraviolet sensor gel, and used the gel to perform experiments. Ultraviolet sensor gel consists of a liquid which changes color when exposed to ultraviolet light combined with gel manufactured at the Kakegawa Factory. Participants confirmed that when irradiated with an ultraviolet light generator the gel's color changed.

The participating children said that they enjoyed making the ultraviolet sensor gel, liked touring the factory, and learned that the factory was involved in thorough recycling activities.

The Shiseido Kakegawa Factory will continue to provide environmental education in collaboration with the local community.



Students are introduced to Shiseido's environmental initiatives



Making ultraviolet sensor gel