

# **Contents**

Introduction	3
Sustainable design & life cycle assessment	4
Sourcing	6
Manufacturing	1′
Energy consumption and reducing emissions	1
Manufacturing waste	12
Water usage	13
Plastic marine litter	14
Distribution	1!
Consumer use phase	1!
Post-consumer phase	16
Building for the future	18

### Introduction

The cosmetics industry places a strong emphasis on improving the environmental sustainability of its activities and products and actively supports a wide range of voluntary and self-regulatory initiatives towards fulfilling its mission. The industry's

commitments and activities enable consumers to benefit from products with better sustainability profiles and adopt more sustainable consumption habits.



This report is only illustrative of some of the industry's commitments and aims at providing a non-exhaustive overview of the implementation of the sustainability principles by our sector. Further information on

Cosmetics Europe's individual member companies' and associations' sustainability actions can be found online at: www.cosmeticseurope.eu/how-we-take-action/driving-sustainable-development

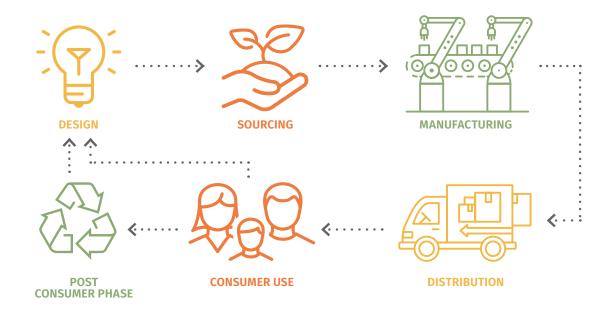
# Sustainable design & life cycle assessment

Frequently, it is noted that a significant part of the environmental impact of a product is determined at the design stage. While the exact proportion will vary according to the specific product in question, this highlights the importance of considering sustainability during the design process.

Environmental Life Cycle Assessment (LCA) is a structured, internationally standardised framework<sup>1</sup> for quantifying the environmental impacts (resource consumption and emissions) associated with a good

or service throughout its lifecycle - from raw material extraction, manufacturing, distribution and use, to final recycling and waste disposal. In the cosmetics industry, LCA and other life cycle thinking approaches (such as Environmental, Carbon- and Water-Footprinting) have been used to identify and measure environmental impacts and prioritise adaptations to products, processes and packaging to develop cosmetics with improved environmental profiles.

#### COSMETIC PRODUCT LIFE CYCLE



#### COMMUNICATING ENVIRONMENTAL PERFORMANCE

A review of the websites and sustainability reporting offered by Cosmetics Europe's membership has found that the vast majority of individual member companies regularly report on their environmental performance and have set themselves specific targets for reducing the lifecycle impacts of their products.

# USING LIFECYCLE INFORMATION TO REDUCE THE ENVIRONMENTAL FOOTPRINT OF COSMETIC PRODUCTS

Examples of how companies in the cosmetics sector work to reduce the environmental footprint:

One of Europe's largest cosmetics manufacturers has systematically determined the carbon footprint of **165,000** product formulas. The intelligent linking of databases enables the company's product developers to measure the effects that ingredients will have on the environmental footprint of new products. Using this information, the company promotes the development of formulations with a smaller carbon footprint or with a higher share of readily biodegradable raw materials.

Another of Europe's largest cosmetics manufacturers has screened the biodegradability and water footprint of more than **40,000** of its formulas covering a broad range of product categories (including shampoos, shower gels, skincare products, hair and styling colouring, sun protection products, make-up and fragrances). By the end of 2015, all values for these two indicators were made available to the company's product developers, with an eco-design tool developed to ensure that all new formulas deliver an improved environmental profile while offering the same benefits to the consumer.

One other company developed the Earthwards® framework to address the environmental and social



impacts of its products, and to engage development teams in designing innovative and more sustainable solutions across products' life cycles, from formulation to manufacturing, to product use and end-of-life. The Earthwards® approach targets improvement in seven key areas: materials, packaging, energy, waste, water, social impacts and innovation. If a product achieves at least three significant improvements across the seven impact areas, a Board of internal and external experts determines whether the product warrants Earthwards® recognition. The programme is validated by annual third party audits and NGO and academic Board members. As of spring 2017, 97 products have been awarded with Earthwards® recognition.

A recent study by Cosmetics Europe on the Product Environmental Footprint of Shampoo has identified that only **5% to 20%** of the total lifecycle environmental impact of shampoo is attributable to the raw materials, manufacture, distribution and packaging of shampoo. This means that most of the environmental impacts associated with shampoo are attributable to the use and disposal of the product. **Cosmetics Europe has developed a short video as a first step towards raising public awareness of the environmental footprint of shampoo** (Cosmetics Europe, 2017a). The video shows some of the ways in which companies and consumers can help to reduce their environmental footprint associated with shampoo.



# Sourcing

The cosmetics industry has taken steps to make the sourcing of ingredients and raw materials more sustainable and a number of Cosmetics Europe's individual member companies are actively seeking to improve the sustainability of their inputs to production.

The sustainable sourcing of ingredients

As an example, recognising the importance of sourcing ingredients sustainably, some cosmetics companies have started partnering with their suppliers to improve

the transparency and sustainability of their supply chain. The EcoVadis platform enables companies to assess the environmental and social performance of their global suppliers and several of Cosmetics Europe's members are using this tool to improve the overall sustainability performance along their supply chain.



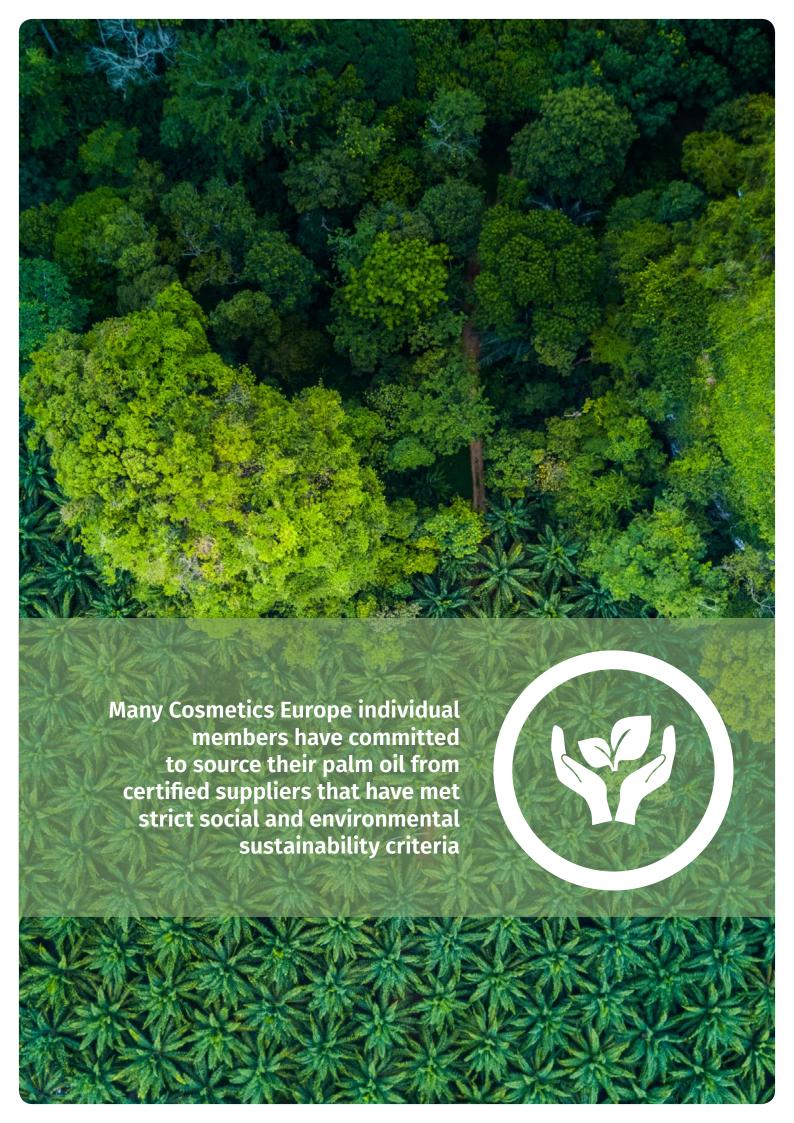
Palm tree plantations are coming under increasing scrutiny for their effects on the environment, including soil degradation, loss of carbon-sequestering forest and critical habitat for endangered species. Recognising the need to ensure that palm oil and its derivatives are farmed sustainably, without harming the environment or communities, many Cosmetics Europe individual members have **committed to source their palm oil from certified suppliers that have met strict social and environmental sustainability criteria**.

The Roundtable on Sustainable Palm Oil (RSPO) has been operating since 2004 with the aim of transforming the palm oil industry to encourage sustainability. The organisation has set strict environmental and social criteria that companies must comply with in order to claim that they use RSPO certified palm oil. Through the RSPO, cosmetics companies can

either encourage sustainability by purchasing palm oil from RSPO certified suppliers, or they can buy credits from RSPO-certified growers, crushers and independent smallholders via the "book and claim" supply chain model. The credits purchased directly support RSPO growers and farmers; in this way cosmetics companies are able to support sustainable palm oil instantly.

**Over half** the direct member companies of Cosmetics Europe are members of the RSPO.

Several of Cosmetics Europe's member associations have also taken steps to encourage their members (mostly SMEs) to source palm oil sustainably. The Belgium-Luxembourg Association for Manufacturers and Distributers of Soap, Cosmetics, Detergents, Adhesives and Sealants, Aerosols and Biocides (DETIC), for example, has signed the 2020 Belgian Alliance for Sustainable Palm Oil (BASP) and encourages its members to support the initiative (DETIC, 2003). Members of the BASP pledge to ensure that by 2020 the products they place on the Belgian market contain 100% sustainable palm oil. The alliance supports the RSPO.



### Renewable and bio-based packaging materials

In the pursuit of its sustainability mission, one strategy that has been employed by the cosmetics industry is to move to using more renewable and bio-based packaging materials. Some examples are given in the boxes below.

#### REDUCING DEFORESTATION

Tree-based products, such as wood, paper and cardboard are widely recognised as being some of the most sustainable packaging materials, as they are biodegradable, made from a renewable resource and can easily be recycled.

Cosmetics companies are working with conservation projects and NGOs (such as the Forest Stewardship Council, Programme for the Endorsement of Forest Certification) to tackle the problem of deforestation. As well as helping to preserve biodiversity where natural forest is left intact, maintaining the world's forested areas also enables carbon emissions to be mitigated, thereby reducing the industry's contribution to climate change. Cosmetics companies have introduced a broad range of measures to prevent deforestation, with a focus on protecting trees in 'High Carbon Stock' forests, areas with a 'High Conservation Value' and peatlands. This is important because as well as helping to absorb greenhouse gas emissions, High Conservation Value areas may also be of biological, ecological, social and cultural value and can possess inherent conservation values such as the presence of rare or endemic species, provision of ecosystem services, sacred sites or resources that need to be harvested for local residents.

One of Europe's largest cosmetics companies has partnered with one of its suppliers to introduce a cocropping model for growing patchouli and cinnamon plants together. Co-cropping (i.e. growing two or more crops on the same land simultaneously) helps to optimise the use of agricultural land and reduces the need for agricultural expansion and deforestation. It also contributes to diversifying farmers' incomes.

Another company launched in 2014 its Responsibility Standard for Forest Materials, as a way to further influence responsible forest management, to help prevent and ultimately eliminate deforestation.

# SUSTAINABLE BIO-PLASTICS

Plastic packaging has been developed that is sustainably sourced and made from biomass rather than fossil carbons such as oil. Although bioplastics are not necessarily biodegradable (even if they are sourced and manufactured in a sustainable way), they do reduce reliance on petroleum derivatives which is beneficial for the environment because it helps to reduce greenhouse gas emissions and resource depletion. Bio-derived polyethylene (bio-PE) can be sustainably sourced from sugarcane. It is currently being used in the packaging of some hair care products.

The Bioplastic Feedstock Alliance (BFA) is a science-based stewardship that brings together respected academics, thought leaders from NGOs and partners from the consumer product industries (including cosmetics). The forum aims to increase awareness of the environmental and social performance of potential feedstock sources for bio-based plastics in order to help encourage a more sustainable flow of materials, creating lasting value for present and future generations.

### Access to genetic resources and benefit-sharing

Biodiversity conservation is critical to the functioning of the planet and its ecosystems. It is also crucial for the cosmetics industry, as without access to a renewable supply of natural resources, such as plant extracts, the cosmetics industry simply would not exist. In recognition of this, the cosmetics industry has undertaken a range of activities to conserve biodiversity and encourage the sustainable use of biological resources.

Furthermore, Cosmetics Europe, together with three European associations representing cosmetic ingredient suppliers - EFFCI, the European Federation of Cosmetic Ingredient Suppliers, IFRA, the International Fragrance Association, and UNITIS, the European Organisation of Cosmetic Ingredients Industries and Services - has developed Best Practice for complying with the due diligence obligations under the EU Regulation 511/2014 on access to genetic resources, and the fair and equitable sharing of benefits derived from their utilisation (which implements the Nagoya Protocol on the conservation of biodiversity into EU law). Cosmetics Europe has submitted its Best Practice document to the European Commission and aims to have it recognised as core guidance for the cosmetics sector.

#### **FUNDING ECOLOGICAL SOLUTIONS TO CLIMATE CHANGE**

Europe is the world's largest producer of lavender oil for use in cosmetics and perfumery (European Parliament, 2012). However, the lavender industry is under direct threat from climate change and, in recent years, Europe's lavender plantations have been hard hit by heat waves. These heatwaves have promoted leafhopper population growth. These insects carry the stolbur phytoplasma bacterium, which devastates lavender crops. In response to this problem, one large cosmetics company has launched a fund at the CRIEPPAM research centre to finance research into bacterium resistant varieties of lavender. The company has already contributed €125,000 to the fund in the hope of finding an ecological solution to problems caused by climate change and insects.

### PROTECTING THE WORLD'S BEES

The plight of bees is of concern to the cosmetics industry. It is well known that bees are important pollinators and that they play a key role in producing much of the food we eat. However, pollination is also vital for ensuring the continued reproduction of flora, which forms the basis of many cosmetic ingredients. Other bee products, such as honey and wax, are also considered key ingredients in many cosmetic products. Initiatives have been introduced to promote and protect bee colonies, with support from companies in the cosmetics industry. These include, amongst others:

- The French National Scientific Research Centre's four-year research programme on the issue of "City Bees and Country Bees", which seeks to understand why bees are currently doing better in urban environments than in rural areas.
- The Brittany Black Bee Conservation Association which ensures the protection of the Apis mellifera

mellifera species of black bee on the island of Ouessant in France. To support this programme, a cosmetics company has set up a sustainable development philanthropy programme which helps to fund beekeepers and promote and communicate the importance of their work.

 A member company of UK's Cosmetics, Toiletries and Perfumery Association (CTPA) was founded by a beekeeper; it has a bee protection programme and has also set up The Burt's Bees Greater Good Foundation which gives grants to projects.

Bee products are widely used by small cosmetics manufacturers as the basis for their cosmetic products. As such, it is vitally important that bees are protected. To maintain bee populations, some small cosmetics companies have launched programmes to educate and encourage young beekeepers and to plant wildflower meadows.



## **Manufacturing**

Cosmetic products manufacturing is increasingly oriented towards efficient technologies which help to reduce energy and water consumption, emissions, and waste. Recyclable packaging has been developed that uses sustainably sourced material, as well as

water-based coatings and vegetable-based inks. The cosmetics industry has taken a broad range of measures to enhance the sustainability of its manufacturing. Some examples are outlined in the sections below.

### **Energy consumption and reducing emissions**



Energy consumption and greenhouse gas emissions are closely linked. By switching energy sources, a company can significantly reduce its emissions. In recent years, many cosmetics manufacturers have increased the proportion of their energy stock that comes from renewable sources, and some plants

now use solely renewable energy, either generated onsite, or procured from a utility. Cosmetics companies are investing in solar photovoltaic power, wind power, biomethanisation, biomass and hydropower, as well as reusing steam from wastewater generated during manufacturing. Some are also trying to reduce their emissions through energy efficiency and by using

cleaner low-carbon energy, e.g. generated from natural gas, as opposed to coal.

To reduce their carbon footprint, cosmetics manufacturers have implemented stringent environmental management systems, made manufacturing processes more efficient, and made adaptations to the manufacturing facilities themselves. Some manufacturing sites have achieved excellent energy-efficiency performance through using innovative design, for example, by installing highly effective ventilation systems, ventilated exterior wall cladding, using LED lighting and making the most of natural daylight by installing solar tubes. Some manufacturing facilities have also combined natural climate control systems with heat recovery.

### **RESPONSIBLE BUILDING DESIGN**

As an example, one large cosmetics company has recently completed an environmentally responsible building, on the site of a former scrap yard in France. The newly constructed research and innovation centre implements a variety of solutions to restore green spaces, limit its environmental footprint and fight climate change. For example:

- · The design of the building was adapted to take account of the results of a biodiversity assessment;
- The building is powered by geothermal energy, which is a renewable source of energy that generates a relatively small volume of greenhouse gas emissions;
- The building uses an earth-air heat exchanger. This ecological system can naturally preheat or cool ventilated air into the building;
- A green rooftop has been installed. Green roofs come with a lot of advantages, both technical (improved thermal and acoustic insulation) and environmental (CO2 absorbed by the plants, atmospheric dust retention, mitigation of heat islands and improved biodiversity);
- · Rainwater is harvested for use in the building's toilets; and
- Wastewater is sent to phytoremediation tanks. This technique enables the purification of water through plants, which is then reused for watering the green spaces and gardens of the site.









### **TOWARDS 100% RENEWABLE ENERGY BY 2050**

Another example, one large cosmetics company has set a goal to achieve a **20%** reduction of its absolute carbon emissions by 2020 and an **80%** reduction by 2050. The company is also committed to producing or procuring **35%** of its electricity from renewable sources by 2020, with the aspiration to power all of its facilities with renewable energy by 2050.

### **Manufacturing waste**

Manufacturing waste is of significant concern to the cosmetics industry, not only from a sustainability perspective, but also because it can be costly to dispose of. To reduce waste, some manufacturing plants now use refillable and reusable boxes for transporting ingredients, and some have implemented manufacturing processes that are designed to keep product losses and offcuts to a

minimum. Resource efficiency is a key element of sustainable design, and is important for achieving a more circular economy. Also, to prevent waste being sent to landfill, cosmetic manufacturers are recycling, biotreating or incinerating waste. The cosmetics industry is constantly improving its recycling rates and some plants already recycle 100% of their waste.

### **WASTE REDUCTION**

In Belgium, for instance, one manufacturing plant has installed technology to monitor waste generation. Line bins have been fitted with smart cards recognised at the four weighing stations across the production area and connected via special software. The technology compiles information on the tonnage of waste produced based on type, line, machine, team, etc. The installed system has already reduced line-waste output by almost 25%.

Another company has achieved a waste recycling rate of **88.5%** for its industrial sites, exceeding its target of **88.0%** for 2016. The company tailors its efficiency measures to the processes and materials at each facility; its waste recycling target for 2017 is **90.0%**.



88.5% waste recycling

### Water usage

Fresh, clean water is a critical resource enabling life on Earth to be sustained. It is also a vital resource for the cosmetics industry and is used in the formulation and manufacturing of virtually every type of cosmetic product. Recognising the importance of effectively managing this precious (but limited) resource, many cosmetics companies have started to map the amount of water used along the cosmetics value chain. This has enabled them to prioritise actions to reduce their water use. Rainwater harvesting and reuse of wastewater are two approaches that have been employed to reduce water consumption within the cosmetics industry. Water pollution is also a concern among cosmetics companies and steps are being taken to treat wastewater before it re-enters the environment.



#### **REDUCING WATER CONSUMPTION**

As an example, a large cosmetics company has in its Belgian facility a new water treatment system which cleans waste water for reuse in mechanical cleaning. In this way, it reduced water use by **50%** at this location.



A contract manufacturer for the cosmetics industry has employed a variety of approaches to reduce water usage, including changes to overflow controls on some of their process equipment and proactive changes to sanitation processes. The company has installed a modern reverse osmosis water plant, with added controls. These actions have contributed to a **64%** reduction in water consumption over 5 years.

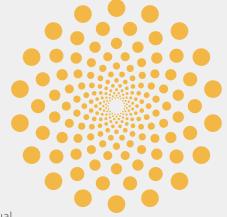
Another company is conducting a comprehensive water risk assessment at all its manufacturing and R&D locations to implement resource protection plans at certain sites. The company has already made substantial progress in reducing its water use, realising an absolute reduction of over **9%** between 2005–2010, and an additional **7.2%** between 2010 to 2015.

### Plastic marine litter

### **ACTION ON PLASTIC MICROBEADS**

In October 2015, in view of public concerns expressed over plastic litter in the marine environment and given the availability of alternative materials,

Cosmetics Europe recommended to its membership to discontinue, in wash-off cosmetic and personal care products placed on the market as of 2020: the use of synthetic, solid plastic particles used for exfoliating and cleansing (known as microbeads) that are non-biodegradable in the marine environment. The Cosmetics Europe recommendation built on voluntary initiatives already taken by individual companies. A Cosmetics Europe survey, conducted in 2016,



assessed the effectiveness of these industry voluntary actions. It found a rapid and substantial (82%) reduction in the use of plastic microbeads for exfoliating and clean sing purposes in wash-off cosmetic and personal care products between 2012 and 2015.

The strength and effectiveness of the Cosmetics Europe recommendation and the industry voluntary actions were re-confirmed in 2018. Data gathered from Cosmetics Europe members showed that between 2012 and 2017, **97.6%** of plastic microbeads used for cleansing and exfoliating in wash-off cosmetic and personal care products were phased out.

It should be noted that many sources of plastic litter in the marine environment have been identified and quantified. In fact, scientific evidence suggests that the vast majority of microplastics in the seas come from the breakdown of bigger plastic materials. In addition, it should be noted that scientific studies show that up to **99%** of microplastics are captured by waste water treatment plants.

The European cosmetics and personal care industry has taken action on this matter irrespective of the fact that the cosmetics and personal care sector is an extremely minor potential contributor to the total amount of aquatic plastic litter: one credible report estimated this to have been between **0.1%–1.5%** in 2012. Given the above survey results, any such potential minor contribution will also now have been reduced significantly.

### **Distribution**

The industry is adapting its distribution practices to reduce the emissions associated with the transport of cosmetics. Companies are shifting their transportation from road to rail and from air to sea, or introducing hybrid or electric vehicles. As an example, several companies have consolidated their distribution networks to reduce the distance between distribution centres and retailers, and some have started using mega-warehouses (i.e. large-scale distribution centres where products are stored

until the required quantities are due for delivery) to cut down on unnecessary journeys. Using larger container trucks and introducing new 'compact' products has helped to reduce the total number of journeys required. Compact products are smaller in size and volume than their conventional counterparts. Not only do they generally require less packaging, a larger number of units can be transported simultaneously, which reduces the greenhouse gas emissions associated with their distribution.

# COMPRESSED AEROSOL CUTS CARBON FOOTPRINT

One company, for instance, has developed a compressed deodorant product with a reduced carbon footprint. The new product lasts the same time and is as effective as the one it replaces, but is half the size. The newly designed cans use on average 25% less aluminium and because more cans fit onto a pallet, 35% less lorries are required for distribution (Wills, 2014). By 2020, the company aims to reduce the weight of its packaging by one third through using lighter materials, optimising structural and material design, developing more concentrated products and eliminating unnecessary packaging. The company has already cut the weight of packaging per consumer by 11% by compression, design and lightweighting.



### Consumer use phase

Cosmetic products are directly used by consumers or applied by professionals (e.g. hairdressers and beauticians). There is mounting evidence – confirmed by Cosmetics Europe's study into the environmental footprint category rules for shampoo - that a large proportion of the environmental footprint of rinse-off or wash-off cosmetic products (shower and bath products, shampoos and conditioners, etc.) occurs during this 'use' phase. For these products, the amount of water and the energy necessary for heating it can have a significant environmental impact. It has been estimated, for example, that around **90%** of the total

CO2 emissions across the product lifecycle of shampoo stem from the heating and use of tap water.

Industry is tackling this problem by innovating products and educating consumers. Innovative products are being developed that require less water during use. For example, some companies have developed concentrated shampoo formulas that only require a single lather, while others have developed 'two in one products' that remove the need to use a separate conditioner.

There are also initiatives being led by cosmetics

companies that aim to educate consumers about water conservation. Many companies' websites provide suggestions and tips for consumers on ways to reduce household water use, e.g. installing water efficient showerheads, turning off the tap while brushing your teeth, taking shorter showers, etc. The focus is not only on adults who buy cosmetic products, but also on children. For example, lessons are given in schools to educate children on how to save water. Ensuring these principles are carried forward into adulthood.

Direct communication at the point-of-sale is another initiative aiming to educate consumers about their environmental footprint.

### **SAVING WATER**

Social-media provides an opportunity for cosmetic companies to communicate directly with their customers. As an illustration of how social media can be utilised, one large cosmetics company has developed an online video to educate consumers on how to reduce their water use. The video provides practical suggestions, such as turning off the tap while cleaning your teeth and hands, and reducing the amount of time spent in the shower.

## **Post-consumer phase**

Cosmetic products having been rinsed- or washed off, go to waste water treatment plants. Packaging waste is subject to various waste management techniques which depend on infrastructure and consumer habits, investments made in modern collection, separation and processing systems, the packaging type and material(s), etc.

It is widely recognised within the cosmetics industry that the use of recycled and/or recyclable packaging can help to reduce the amount of consumer waste sent to landfill. Cosmetics companies are increasingly using recycled paper and cardboard for packaging, rather than virgin materials.



Several companies have introduced consumer incentives (e.g. free products or vouchers) for returning packaging that can be refilled and/or reused. Using refillable/reusable packaging saves on raw materials, which is environmentally advantageous, but the associated cost savings can also be transferred to the consumer. A number of companies have introduced refillable packaging in the fields of hair care, lotions/moisturisers, and soaps.

Another way that cosmetics companies have helped to combat the issue of consumer waste is to use compostable packaging (e.g. replacing petrochemical packaging with plant fibres). Cardboard has historically been used as a packaging system but some companies are also using other materials, such as bamboo, straw, or certain bioplastics.

### **BIODEGRADABLE PACKAGING**

For example, one company has developed a line of compostable makeup, based on packaging made from cardboard and bioplastics. Cardboard is used for the base and cover, while plant-derived plastic forms the internal mechanism, resulting in a 100% plant derived and biodegradable packaging.



The use of biodegradable, recyclable and reusable packaging continues to increase and packaging is designed more and more based on a life cycle thinking



Approximately one fifth of consumers would buy shower, bath and soap products with environmentally friendly packaging, with around half wishing to buy products which come in recyclable packaging.

In some cases, companies have been able to remove the packaging altogether. Inventions such as shampoo bars and using soap bars rather than liquid soap can help to eliminate the need for packaging. One of Cosmetic Europe's member associations (The Fédération des entreprises de la beauté, FEBEA) has launched a campaign to encourage consumers of cosmetic products to recycle. The association has created videos that explain what can be recycled and a website has been created for consumers to search whether different types of packaging can be recycled in their area. There is also a downloadable smartphone application version created by Eco-Embalages.

# The European Plastics Strategy

Around 25.8 million tonnes of plastic waste are generated in Europe every year¹. Less than 30% of such waste is collected for recycling. According to estimates, 95% of the value of plastic packaging material, i.e. between € 70 and 105 billion annually, is lost to the economy after a very short first-use cycle². Demand for recycled plastic today accounts for only 6% of the plastics demand in Europe. To boost the uptake of recycled plastic, the European Commission is taking action to ensure that by 2030 all plastic packaging placed on the EU market is either reusable or can be recycled in a cost-effective manner. Cosmetics Europe has started developing a 'plastics sustainability programme' with the intention to actively contribute to the European Commission's Strategy for Plastics in a Circular Economy³.

## **Building for the future**

All consumer products create environmental impacts throughout their lifecycles. Recognising the need to design products and processes that minimise their environmental footprint, companies in the cosmetics industry have implemented a broad range of strategies that contribute to improving the sector's sustainability. Clearly, environmental sustainability programmes will evolve further in the future. For example, the use of biodegradable, recyclable and reusable packaging continues to increase and packaging is designed more and more based on a life cycle thinking. Eco-design of formulas and packaging is encouraged and is more and more accompanied by education and sharing of best practices.

 Environmental and social criteria are increasingly considered when sourcing ingredients and packaging materials. Deforestation is being minimised and steps are taken to ensure that biodiversity is conserved.

- Efficient processes and technologies are progressively being used during manufacturing to reduce the consumption of energy and water and to minimise emissions, pollution and waste. Where possible, energy is derived from renewable sources.
- To reduce the emissions from transport, cosmetics companies are adapting their distribution practices.
- The findings of Cosmetics Europe's study into the environmental footprint category rules for shampoo can also be considered by companies for application to related product types (e.g. rinse-off shower and bath products).
- Given that a large share of the environmental footprint of many cosmetic products arises during use and subsequent disposal, the cosmetics industry is increasingly looking at ways to engage consumers, also via digital media.



# **Bibliography**

Bee Good (2017) About us. Available at: https://beegood.co.uk/pages/about-beegood

Bioplastic Feedstock Alliance (2017): Who we are. Webpage available at: http://bioplasticfeedstockalliance.org/who-we-are

Brittany Black Bee Conservation Association: http://www.abeillenoireouessant.fr/

Burt's Bees Greater Good Foundation: https://www.burtsbees.com/content/outreach/out-reach-asset.html#hxfYFoP3F68Y01l6.97

City Bees and Country Bees: http://www.urbanbees.eu/en/content/news

Cosmetics Business (2011): Packaging – the creativity of sustainability. Article available at: https://www.cosmeticsbusiness.com/technical/article\_page/Packaging\_\_the\_creativity\_of\_sustainability/61794

Cosmetics Europe (2016): Study into the product environmental footprint category rules for shampoo, April 2016. Report available at: https://www.cosmeticseurope.eu/how-we-take-action/driving-sustainable-development/

Cosmetics Europe (2017a): The environmental footprint of a shampoo and possible ways to reduce it. Video available at: https://www.cosmeticseurope.eu/videos/environmental-footprint-shampoo-and-possible-ways-reduce-it

Cosmetics Europe (2017b): All about plastic microbeads. Article available at: https://www.cosmeticseurope.eu/how-we-take-action/leading-voluntary-actions/all-about-plastic-microbeads

DETIC (2003): DETIC signe la charte 2020 de l'Alliance Belge pour une huile de palme durable (BASP). Webpage available at: http://www.detic.be/fr/palmoil

 ${\sf Earthwards} @: {\sf http://www.earthwards.com}\\$ 

Eco-Emballages (2017): Guide du tri. App available to download at: https://www.consignesdetri.fr/

EcoVadis (2017): Customer stories. Website available at: http://www.ecovadis.com/customer-stories

Estée Lauder Companies (2016): : https://www.elcompanies.com/~/media/Files/E/Estee-Lauder/resources-and-reports/reports/ ELC\_Citizenship\_Sustainability\_Report\_2016.pdf

European Parliament (2012): Parliamentary questions, 7 June 2012, Preserving lavender growing in the EU. Webpage available at: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+WQ+P-2012-005718+0+DOC+XML+VO//EN

Forest Stewardship Council: https://us.fsc.org/en-us

Henkel (2017): Sustainability at beauty care. Article available at: http://sustainabilityreport2015.henkel.com/beauty-care/sustainability-at-beauty-care

HCV Resource Network (2017): What is HCV? Article available at: https://www.hcvnetwork.org/about-hcvf

Johnson & Johnson's Responsibility Standard for Forest Based Materials and Products: https://jnj.brightspotcdn. com/4d/7f/9bb05cba4cf28b5fe640da28f715/jnj-responsibilitystandards-forest-materials-and-products.pdf

KAO (2016): Reducing CO2 emissions across the product lifecycle. Report available at: http://www.kao.co.jp/corp/sustainability-reports/en/pdf/pdf/sustainability2016\_e\_015.pdf

Keskistri (2017): Eco-Emballages. Videos available on YouTube: https://www.voutube.com/user/EcoEmballages

L'Occitane (2017): Celebrate the beauty of nature. Webpage available at: http://uk.loccitane.com/earth-day,83,1,67131,714272.

L'Oreal (2014): Sharing beauty with all, the L'Oreal Sustainability Commitment. Report available at: http://www.loreal-finance.com/\_docs/000000012/RALO014\_GB\_web2.pdf

L'Oreal (2015): Sharing Beauty with all, the L'Oreal Sustainability Commitment. Report available at: http://www. sharingbeautywithall.com/sites/default/files/cms/sbwa-progress-report-2015\_english.pdf

L'Oreal (2016): An innovative and responsible building. Article available at: http://www.sharingbeautywithall.com/en/producing/reducing-co2-emissions/innovative-and-responsible-building

L'Oreal (2016): Guaranteeing sustainable sourcing for our renewable raw materials. Article available at: http://www.sharingbeautywithall.com/en/innovating/respecting-biodiversity/guaranteeing-sustainable-sourcing-our-renewable-raw-materials

LVMH (2014): Guerlain protects Brittany black bees. Article available at: https://www.lvmh.com/news-documents/news/guerlain-protects-brittany-black-bees

Mintel GNPD (no date), as reported by JRC (2012): Revision of European ecolabel criteria for soaps, shampoos and hair conditioners, Market analysis. Report available at: http://susproc.jrc.ec.europa.eu/soaps\_and\_shampoos/docs/Market%20Analysis\_Draft%20Repor.pdf

Programme for the Endorsement of Forest Certification: http://pefc.org/

Responsible Mica Initiative: http://www.responsible-mica-initiative.com/

RSPO (2017): RSPO supply chains. Article available at: http://www.rspo.org/certification/supply-chains

Swallowfield (2016): Environment. Webpage available at: http://www.swallowfield.com/more/environment/

Wills J (2014): Unilever's compressed aerosols cut carbon footprint by 25% per can. Article for The Guardian, available at: https://www.theguardian.com/sustainable-business/sustainability-case-studies-unilver-compressed-aerosols





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