

Target Audience

Vet Trainers

Goal (50-60 words)

The main goal of this lesson plan is to analyse the current methods of production, distribution, and disposal of cosmetics and cleaning products, as well as assess their environmental impact. Participants will generate and propose their own innovative ideas of reducing the negative environmental impact of these processes for more sustainable solutions.

Objectives (1-3 Objectives)

- Analysis of current methods of production, distribution and disposal of cosmetic and cleaning products.
- Assessment of the environmental impact of practices, including raw material consumption, emissions and waste generation.
- Generating more sustainable ideas and solutions.

Optional

Theoretical Background (200-400 words)

Implementation of the European Green Deal and increasing environmental awareness are also impacting the industry, including the cosmetics and cleaning products industry. We are increasingly aware of our environmental impact and the need to make changes. One element of environmental footprint awareness is product labels. They allow us to make informed purchasing decisions.

PIF (Product Information File) - this is a mandatory document, required for every cosmetic product placed on the EU market, according to the EU Cosmetics Regulation 1223/2009. Its purpose is to ensure product compliance and safety for users.

The PIF should include a series of information about the product, such as::

- a description of the product with its name and usage
- information on the ingredients used and their composition
- what production methods have been used to manufacture the cosmetic/product
- the stability of the cosmetic and how this has been verified
- what the packaging is made of
- the risk assessment and risk analysis
- claims, including efficacy claims
- labelling information and a copy of the label for reference.

There is liability for missing, outdated or incorrect information in the PIF for the manufacturer and other responsible persons/entities. This could be financial liability (fine), product recall or court case.

EU Ecolabel (EU Ecolabel): This is the official environmental label developed by the European Commission in 1992 . It is awarded to products that meet high environmental standards throughout the product's life cycle. To obtain this label, products must comply with certain environmental criteria, which are regularly updated. Guidelines include, among others, the reduction of dangerous substances, energy efficiency and the minimisation of packaging.

COSMOS (short for COSMetic Organic and Natural Standard): International standard for the certification of natural and organic cosmetics. It defines criteria for the composition, production, packaging and labelling of cosmetic products. It enables consumers to make more conscious decisions about the products they choose. Two types of label can be identified: NATURAL and ORGANIC.

RSPO (Roundtable on Sustainable Palm Oil): This is a certification awarded to products containing palm oil from sustainably grown crops. The certification requires that the palm oil is sourced from sustainable farming - minimising deforestation, protecting biodiversity and respecting human rights.

REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) is a European Union regulation (EC No 1907/2006). It regulates the use of chemical substances in various products including cosmetics and cleaning products. It requires all chemicals used in products to be assessed for safety to human health and the environment. Companies must provide detailed information about chemicals, such as toxicity, biodegradability and potential environmental impact. Prohibits the use of harmful substances that may accumulate in the environment or cause groundwater contamination. Supports the development of more environmentally friendly substitutes.

The MSDS (Material Safety Data Sheet) is Annex II of the REACH regulation. It contains information on the properties of chemicals used in products. It contains data on safety, storage, transport and potential effects on health and the environment.

Lesson Plan Details	
Lesson Plan title	Cosmetic & Cleaning products industry – Practical Implementation and Activities
21st Century Skills	Critical Thinking Problem-solving Creativity Collaboration
Duration	<i>Activity 1: 45 minutes</i> <i>Activity 2: 90 minutes</i> <i>Activity 3: 45 minutes</i>
Classroom setting	The class needs to be organised for the lesson in groups.

Required material/resources	<p><i>Activity 1:</i></p> <ul style="list-style-type: none"> ● <i>Smartphones or other devices with Internet connection</i> ● <i>Paper (A4/A3)</i> ● <i>Pens/markers/paints</i> <p><i>Activity 2:</i></p> <ul style="list-style-type: none"> ● <i>Paper (A4/A3)</i> ● <i>Pens/markers/paints</i> ● <i>Smartphones or other devices with Internet connection</i> <p><i>Activity 3:</i></p> <ul style="list-style-type: none"> ● <i>Paper (A4/A3)</i> ● <i>Pens/markers/paints</i> ● <i>Raws</i> ● <i>Recipes of homemade cosmetics (if needed)</i>
Prerequisites	<i>Knowledge of labelling</i>
Final Assessment (if applicable)	
Additional resources	<p>https://www.unilever.com/investors/annual-report-and-accounts/ https://www.oecd.org/ https://www.loreal.com/en/commitments-and-responsibilities/for-the-planet/ https://www.ellenmacarthurfoundation.org/ https://www.epa.gov/ https://cosmeticseurope.eu/ https://www.sciencedirect.com/journal/journal-of-cleaner-production</p>
References	<p>Insert all the research resources you used in APA style (you can use this guide to help you cite your references, such as books, online resources, online journals and more).</p>

Lesson Plan for Activities & Scenarios #1 (include 1-3 activities & 1-2 scenarios)

Activity 1: New labelling

In this exercise, students take on the role of designers and creators of a new eco-label. Their task is to develop a new logo and guidelines for a label to be awarded to cosmetics and cleaning products that meet specific, innovative environmental criteria.

Make a brief introduction about current eco-labels, showing examples of actual certifications. Explain what they mean, how they work and how they influence consumer decisions. You can also carry out this part of the lesson as individual student work.

Divide students into smaller teams. Each has the task of designing a new eco-label for cosmetic and cleaning products. The work of each team should include:

- Conceptualising a catchy and suggestive name.
- Designing a simple but meaningful graphic symbol that is immediately associated with the theme.
- Developing the criteria that the product must meet to achieve their designation.

Each team presents their label and presents their label, explaining the components. To do this, students can create a mini-presentation or poster showing their idea. All students can discuss the labels presented. Summarise the lesson.

Activity 2: "Eco-Startup" – Create a Sustainable Cosmetics Company

The students' task is to establish a new cosmetics company with the mission of minimising its environmental impact. Of course, they are only supposed to set it up in the classroom. They need to design a company that operates in line with sustainable development principles and to create a strategy for producing eco-friendly cosmetics or cleaning products.

1. Division into Teams: If it is possible divide the students into small teams (3-4 people). Each team will create their own cosmetics company that produces eco-friendly products.
2. Each team must make key decisions regarding their company, including:
 - Company name: Each team should come up with a name that emphasises the company's commitment to sustainability.
 - Product: Decide what eco-friendly cosmetic or cleaning product or products your company will produce (e.g., shampoo, moisturising cream, soap, plastic-free dishwashing liquid, dishwash).
 - Ingredients: Teams should formulate the ingredients of their product.
 - Packaging: Design eco-friendly packaging.
 - Production: Choice of production technology taking into account environmental impact.
3. Creating a Sustainability Strategy - teams must develop a strategy showing how their company plans to:
 - Reduce the consumption of resources (water, energy, materials).
 - Minimise waste, for example, through recycling packaging and eliminating plastic.
 - Use renewable energy sources in production.
 - Support ethical sourcing of raw materials (e.g., RSPO-certified palm oil).
 - Ensure transparency in the supply chain.
4. Creating a Marketing Plan, which will include:
 - How they will promote their products as eco-friendly.
 - How they will educate consumers about the benefits of choosing sustainable products.
 - What unique features of their brand will set it apart from other companies.
5. Each group is tasked with presenting their ideas to the class. Students will present:
 - Their company name, product, ingredients, and packaging.
 - Their sustainability strategy.
 - The marketing plan to attract customers.
 - Why their company will be better for the environment than traditional competitors.
6. Evaluation - the company presentations will be evaluated by fellow students and the teacher based on criteria:
 - Creativity of the idea.
 - Ecological effectiveness of the proposed solutions.
 - A convincing and innovative marketing plan.

Activity 3: Creating homemade cosmetics and cleaning products

In the old days, when there was no industry, people made and used cosmetics and cleaning products. They knew many raw materials and their uses and made what they needed themselves. Maybe you remember your mothers' and grandmothers' 'golden tips' for various cases? How to wash a stain out of clothes? Or what to use to clean difficult dirt at home?

Divide the students into teams. Each team is given a task: find inspiration and create one product - a cosmetic or cleaning product - from raw materials available at home.

You can spend one of the lessons dividing the teams and browsing the Internet, books or other sources to find recipes for homemade products. The outcome of their work in this lesson will be the selection of a product which they will make in the next lesson. You can also organise this stage as a homework assignment.

During the next lesson, plan time for production and presentations of the products made. Each team explains during the presentation: What raw materials did they use? What are the attributes of their product? What advantages does the product have over industrial products? You can vary the presentation with a demonstration of how their product works (e.g. application of a scrub on the hand).

You can treat the exercise as an assessment - in this case, plan time for discussion and feedback from other teams and yourself.