Tampere University of Applied Sciences

Circular Branding in Cosmetics

A Case Study of Korres', Lumene's and Weleda's Sustainability Strategy

Georgia Giannopoulou

MASTER'S THESIS
March 2026

Risk Management and Circular Economy

ABSTRACT

Tampereen ammattikorkeakoulu
Tampere University of Applied Sciences
Risk Management and Circular Economy

GEORGIA GIANNOPOULOU:
Circular Branding in Cosmetics
A Case Study of Korres', Lumene's and Weleda's Sustainability Strategy

Master's thesis 51 pages
March 2026

Cosmetics is a big market globally and natural cosmetics a growing niche market. The markets' importance in the society is not only financial but societal as well because of their growing role supporting consumers' well-being both physically and mentally.

The research questions for this study are: Which circular economy principles and metrics are explicitly or implicitly communicated? How does certification status affect the nature, specificity, and credibility of sustainability communication?

The research method is a combination of qualitative methods including a targeted literature review of circular economy principles, theory, sustainable branding, definitions, circularity, EU circularity regulations on cosmetics/ natural cosmetics together with an exploratory, comparative multiple case study.

The data was analysed using a framework-based analysis of CE principles, metrics and greenwashing indicators.

Findings show that while circularity plays a big role in companies' strategy and marketing, challenges are still present regarding circularity measurements, transparency and avoiding greenwashing.

Key words: natural cosmetics, circularity, green washing, sustainable branding, circularity metrics, clean beauty, certification, green claims

USE OF AI IN THESIS

I have used AI tools in my thesis:

☐ No

☒ Yes

The AI tools used in my thesis and the purpose of their use has been described below:

Names of the tools and versions: Microsoft Copilot.

Purpose of the use: To help with citation and reference list and drawing of the diagrams.

Parts in which AI was used: Diagrams and figures at 2.2 research design, 2.3 Data Collection, 3.1 global cosmetics market, 3.2 circular economy definition, 3.2.1 circular economy principles, 4.1.1 Korres and Circularity, 4.2.1 Lumene and circularity, 4.3.1 Weleda and circularity, REFERENCES.

I am aware that I am totally responsible for the entire content of the thesis, including the parts generated by AI, and accept the responsibility for any violations of the ethical standards of publications.

CONTENTS

ABBREVIATIONS AND TERMS

CE	Circular Economy
CSRD	Corporate Sustainability Directive
CTI	Circular Transition Indicators
EU	European Union
MCI	Material Circularity Indicator
SDG	Sustainability Development Goals
SMEs	Small and Medium-Sized Enterprises
TLR	Targeted Literature Review
UN	United Nations

1 INTRODUCTION

The cosmetics industry is one of the industries with a big, estimated growth in the near future (Mondello, Salomone, & Mondello, 2024) and the natural cosmetics market size is estimated to be doubled by 2035 (Future Market Insights, 2025).

The cosmetics industry is important globally and within Europe not only for financial reasons which will be explored in chapters 3.1 and 3.2 but also because of their growing role supporting consumers' well-being both physically (Hussain, 2025) and mentally (Laureny Loves, 2024). This thesis will explore how circularity and sustainability are being communicated throughout the brand of natural cosmetics brands: Korres, Lumene and Weleda for all of which the use of natural ingredients is a big part of the branding (Korres, 2025a; Korres, 2025b), (Lumene Group, 2025a; Lumene Group, 2025d), (Weleda UK, 2025).

The thesis will be structured as following: Methodology, Research Context: a quick review of the global cosmetics market, a quick review of the global natural cosmetics market, a review of the circular economy definition and principles, circular economy metrics, cosmetics regulations, natural cosmetics regulations, circularity in cosmetics, sustainable branding, green washing. Finally, presentation of the selected case studies, review of their circularity and how it appears in their branding, case study comparison, discussion, limitations and suggestions for future. The objectives of the research are to identify how each brand practices and communicates circularity through its branding. To identify if certification affects the nature, specificity and credibility of sustainable communication.

The motivation for the research is both personal and academic in cosmetics especially Korres' a brand from Greece my home country I have used for years and how it compares to a Finnish brand I have also used for years Lumene. I was first introduced to natural cosmetics through Weleda's maternity care products and was inspired how circularity is communicated through certified and non-certified natural cosmetics brands.

The thesis is significant because it provides insights on how circularity is communicated in the cosmetics and natural cosmetics sector via the comparative case study analysis. It will offer insights on how certification can be utilised and leveraged in brand differentiation and as competitive advantage. Additionally, it can offer understanding on possible opportunities and risks of EU circularity

regulations. The findings can be used from enterprises and marketeers operating in the cosmetics and natural cosmetics industries.

2 METHODOLOGY

This chapter offers an outline of the methodology approach used in this study. It outlines the design of the research, the research context and describes the data collection process. The research method is a combination of qualitative methods including a targeted literature review of circular economy principles, theory, sustainable branding, definitions, circularity, EU circularity regulations on cosmetics/ natural cosmetics and an exploratory, comparative multiple case study.

2.1 Research questions

The research questions for this study are:

How does Korres, Lumene, and Weleda communicate sustainability and circular economy principles through their branding?

Which circular economy principles and metrics are explicitly or implicitly communicated? How does certification status affect the nature, specificity, and credibility of sustainability communication?

2.2 Research design

This thesis was conducted using publicly available digital tools and academic resources such as Science direct and Sciibd, theseus, brand websites, TAMK library, business magazines, articles, newspapers and databases and personal communications with the brands for clarification.

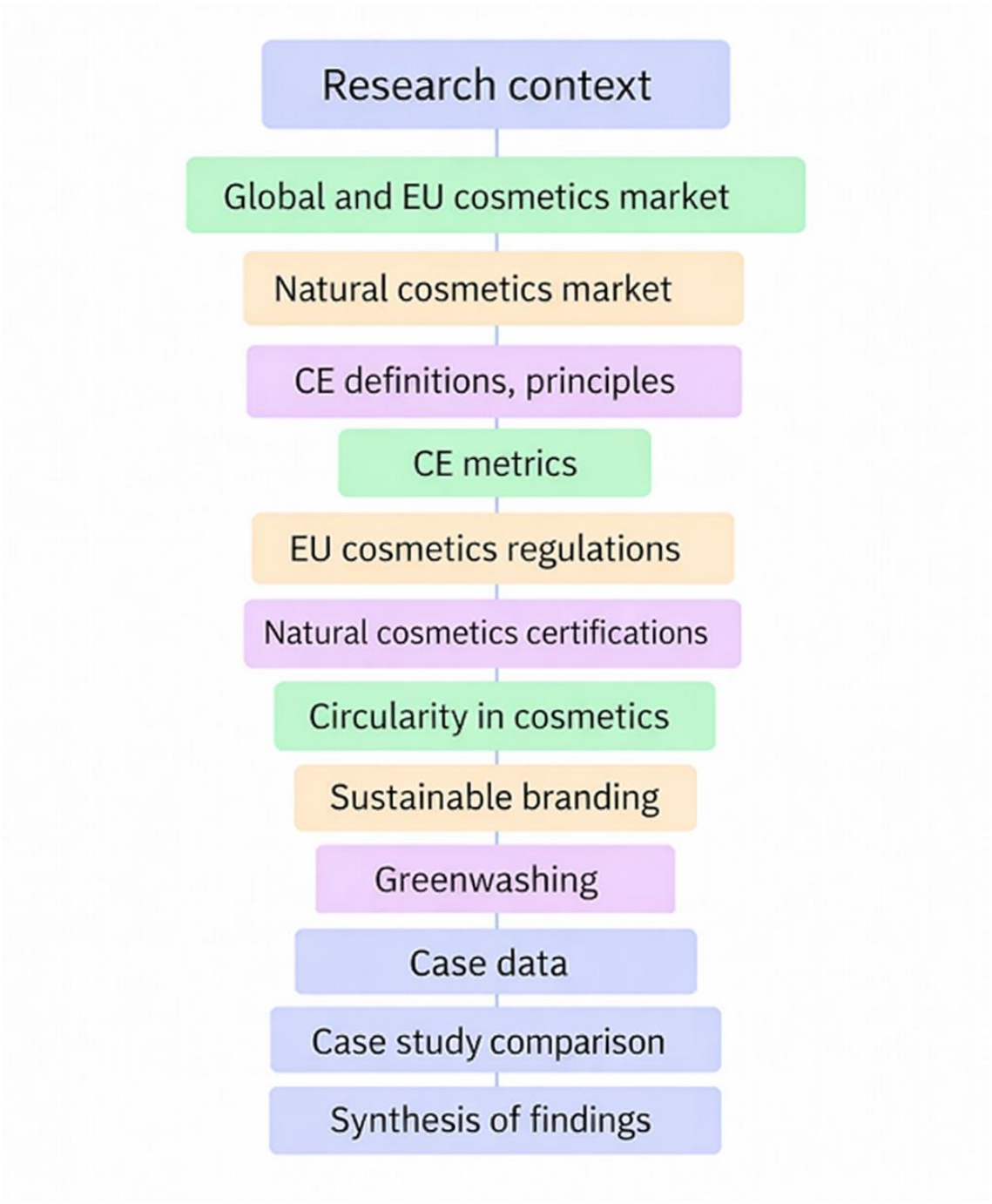

Figure 1. Analytical framework showing research context components leading to case data, comparison and synthesis of findings.

A Targeted Literature Review (TLR) concentrates on material directly related to a specific concept and aims to deepen the understanding and knowledge from the examined data (Hoda, 2023). While TLR can lead to research bias, it is particularly useful in qualitative research where the goal is to improve understanding of specific essential ideas (Hoda, 2023)

The empirical component of the study employed a comparative multiple case study which allows the systematic examination of similarities and differences

across the 3 brands (Bartlett & Vavrus, 2017). The study is exploratory in nature. Circularity in the cosmetics branding and particularly in natural cosmetics branding has not been studied in depth (Mondello, Salomone & Mondello, 2024) and the identification emerging patterns is required (Stebbins, 2001).

The selection of the case study was based on an identified research gap: naturality and circularity is strongly present on both Korres' and Lumene's branding, however neither of them is a certified natural cosmetics producer (Live By, 2025), (Lumene Group, 2025a) while the third case study Weleda is a certified natural cosmetics producer. The literature review is focused on the European market because that is the main market of the brands and because the regulation of the cosmetics sector and green washing is stricter (Capital.gr, 2025), (Lumene Group, 2025f), (Global Cosmetics News, 2022), (Cosmetic Science, 2024), (European Parliament, 2024). Prior familiarity with the brands supported contextual understanding.

2.3 Data collection

Figure 2. data sources used on the research

The data for the case study comparison was collected from the case study companies' official websites and their official social media channels to first gather information and background information about each company and then to identify CE principles and metrics and then CE implementation. Targeted Google searches and searches using the TAMK library tool as well as personal communication were used to gather further information to examine the validity of sustainability and naturality claims and percentages. Further targeted searches were conducted on sustainability certifications (specifically B-Corp), natural cosmetics certifications and additional ones to examine their validity because one of the case studies is a certified natural cosmetics (Weleda) provider and 2 (Weleda, Lumene) hold a B-Corp certification.

Table 1 below offers a comprehensive view of all the data used for the case study part. The quantities listed on the table are approximate as data collection was continuing during the research of the case studies and often additional searches were conducted to verify claims. All sources used in this study are fully cited.

Table 1. data sources information

Data type	**Source**	**Quantity**	**Purpose**
Case study company website	official company website	~ 30 pages per brand	to gather general information about each brand, to identify circularity principles and sustainability claims and metrics, naturality percentages
Social media posts	official Instagram, Facebook, TikTok channels of each brand	~3 per brand	to review how sustainabilty is communicated
Sustainability certification: B Corp	B corporation official site	~ 10 pages	to gather information on how it works
External search on B Corp	Google search	~5 read,1 used	to clarify validity
Company Background information: company size, growth, financial numbers and market position	Google search	~7 per brand	to gather missing information about each brand and verify claims
Natural Cosmetics Certifications	Google search	~10	to understand certification criteria

Natural Cosmetics Certifications official websites	official Websites for Ecocert, NATRUE, ISO 16128 standardization	~10	to understand certification criteria
Academic searches	TAMK library search	~5 per brand	to gather additional information and verify claims on sustainability
sustainability reports	official company websites	3 for Lumene, 2 for Weleda, Korres does not publish them	to gather data about sustainability strategy and metrics
sustainability report search for Korres	TAMK library search, google search	2	to gather data about sustainability strategy and metrics

2.4 Data analysis

The data was analysed using a qualitative content analysis to evaluate how circularity and sustainability is communicated through the branding of the selected case studies. The data was coded using an inductive thematic analysis. Thematic analysis is used to recognize emerging concepts from qualitative data (Braun & Clarke, 2006) and the inductive approach is used when the researcher creates coding based on emerging patterns via repeated reading from the data without a previously established coding framework (Braun & Clarke, 2006).

Circularity and sustainability were not used as predefined codes but as sensitizing concepts. Sensitizing concepts offer a guiding framework that assists the researcher to identify, categorize and comprehend data in a flexible way (Bowen, 2006). The sensitizing concepts used in this study were the CE principles, the circularity in cosmetics and the green washing indicators identified through the research context. The sensitizing concepts directed the analysis towards elements relevant to the research questions.

3 RESEARCH CONTEXT

3.1 Global cosmetics market

The industry of cosmetics is profitable and growing very fast. The market was worth 443.59 USD globally in 2024 and it is estimated to be worth about 770 USD billion by 2033 (Global Cosmetics Market, Market Data Forecast, 2025). The market grew 10% from 2022 to 2023 (McKinsey & Company, 2024) and an expected annual growth of 6,32% till 2033 (Global Cosmetics Market, Market Data Forecast, 2025). There are 5 main cosmetics' product categories: haircare, skincare, makeup, perfume and toiletries (Statista, 2025). Skincare has the biggest market share taking 26% of the market while makeup and hair care products are expected to grow 8% (Global Cosmetics Market, Market Data Forecast, 2025) and 7% annually (Beyond Market Insights, 2024). While the market is still dominated by women consumers at 70%, the number of male consumers is growing as well (Beyond Market Insights, 2024)

One of the biggest reasons for the ongoing growth of the industry is the consumers' shift towards well- being and self-care (Beyond Market Insights, 2024). Another big growth contributor is the widespread use of social media and the available content about skincare created by a big number of influencers (Global Cosmetics Market, Market Data Forecast, 2025). Furthermore, the growth is assisted by the widespread use of ecommerce that allows for easy and fast ordering of the desired products (Global Cosmetics Market, Market Data Forecast, 2025) however, physical shops are still the biggest revenue generators generating almost 70% of the sales (Beyond Market Insights, 2024), however the male market is rising as well providing further growth opportunities (Global Cosmetics Market, Market Data Forecast, 2025). Further opportunities for growth arise from a shift towards natural cosmetics, (Fortune Business Insights, 2025) and the evolving technology and AI application that offer tailor made and personalized products specifically made to each customer's needs (Sahu, 2024). While the market is growing, it is dominated by big corporations such as L'oreal Groupe, Coty Inc, Estee lauder Companies Inc., Revlon Consumer Products LLC and others (Beyond Market Insights, 2024) who have established strong brand awareness and loyalty and have strong distribution networks and the market is highly competitive (Sahu, 2024) and saturated (McKinsey & Company, 2025). Furthermore, cosmetics customers are very price conscious, and the market is dependent to certain raw materials the availability of which fluctuates affecting

both the cost of production and profit margins (Sahu, 2024). According to the European Union Intellectual Office (2024), the sales of counterfeit products cost the cosmetics market 3 billion € in sales through EU countries. For a 104€ billion market (Cosmetics Europe, 2024) this number is significant.

Finally, the increase of counterfeit cosmetics is threatening the consumers health as the fake products often contain dangerous even toxic ingredients for humans, the consumer's trust to the industry and products as well as lost sales for the producers and taxes for the governments (Doolan, 2024).

Geographically the biggest markets are North Asia and North America with 30% each and Europe with 24% (Statista, 2025). Since the case study companies are based in Europe, the European cosmetics market will be reviewed next.

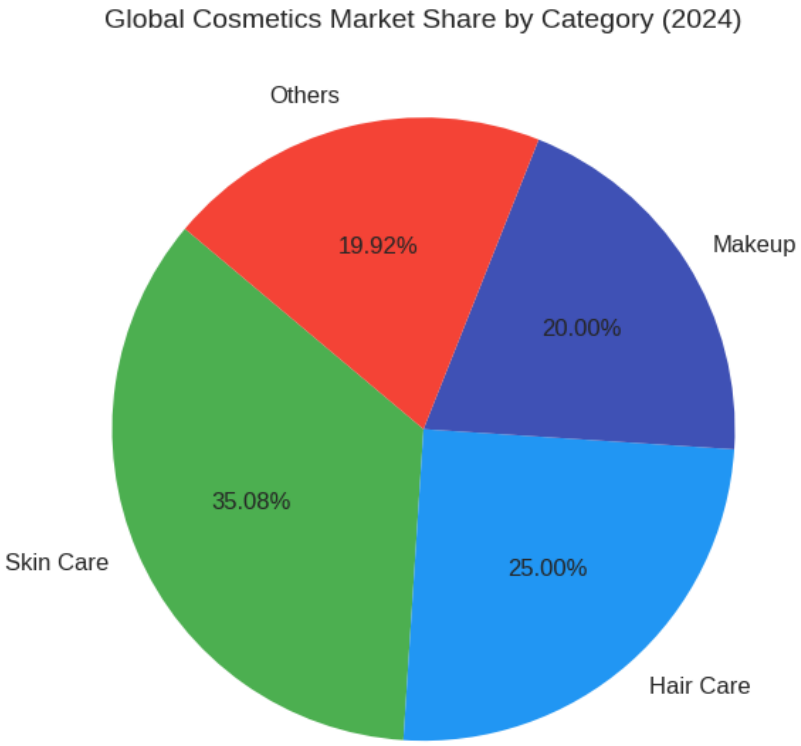

Figure 3. global cosmetics market share by category (Fortune Business Insights, 2025).

3.1.1 European market

Europe has a big share in the global cosmetics market (Cosmetics Europe, 2025). In 2024 the sales were 104€ billion (Cosmetics Europe, 2025) roughly one fourth

of the market % (Statista, 2025). The markets' contribution to the EU economy is significant in multiple ways:

- job contribution with about 3.5 million people employed directly or indirectly in the industry (Martins, Silva, & Marto, 2025).
- cosmetics industry is a big contributor to the EU exports contributing 29.4€ billion in 2024 (Cosmetics Europe, 2025) which is roughly 1% of the total EU exports (Trading Economics,2025).
- contributing to innovation as the industry is known to invest on R&D (Martins, Silva, & Marto, 2025).

The importance of the industry is not only financial but societal as well, as over 70% of customers in Europe have replied that cosmetics and personal hygiene products are essential to their lives contributing to their well-being (Martins, Silva, & Marto, 2025). The biggest markets are Germany and France each contributing 16,9€ and 14,2€ billion to the industry (Cosmetics Europe, 2025).

Similarly to the global market analysed earlier, the biggest product market in the EU is skincare accounting for almost one third of the market at 30,1€ billion, followed by personal hygiene products at 24,7€ billion, hair care goods at 18,1€ billion, perfuming products at 17,1€ billion and embellishing products at 13,9€ billion (Cosmetics Europe, 2025). So, the product segmentation is similar within the EU and globally.

3.1.2 Natural cosmetics market

The term natural cosmetics refers to cosmetic products that are produced from natural ingredients such as plants, minerals (Global Market Insights, 2023). The natural cosmetics market was worth 38 billion USD in 2023 and is expected to reach 59 billion USD by 2032 (Global Market Insights, 2023).

In addition to the growth factors mentioned above on the cosmetics section, the natural cosmetics market growth is assisted by the rising cases of skin problems attributed to ingredients in the non-natural cosmetic products and therefore the shift towards products made natural ingredients (Global Market Insights, 2023). Another growth contributor is the consumers' rising awareness of the need of sustainability (Expert Market Research, 2025). Additionally, the ongoing innovation advantages and the personalization trends mentioned on the cosmetics market provide growth opportunities to the natural cosmetics market as well.

Despite the growth opportunities mentioned above, the natural cosmetics have lower shelf life and are more expensive since the raw material is rarer and the consumers are price conscious (Business Research Insights, 2025). The presence of counterfeit products mentioned previously, and its consequences is also affecting the market (Doolan, 2024). Further contributor to the customers' scepticism from counterfeit products is the greenwashing in the cosmetics marketing: the promotion of non-natural or circular products as natural and sustainable highlighting the need for further regulations in the industry (Shapypro, 2024). The current regulations of the industry will be examined in chapter 3.

3.2 Circular economy definition

There are several definitions of Circular Economy (Velenturf & Purnell, 2021). According to Ellen MacArthur foundation CE is defined a framework of activities where ingredients are never wasted, and the environment is renewed (Ellen MacArthur Foundation, n.d.).

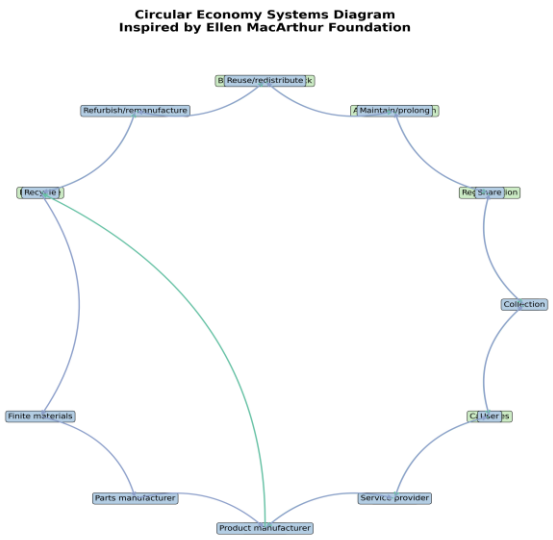

Figure 4. the circular economy systems inspired by Ellen MacArthur foundation (Ellen MacArthur Foundation, 2019).

3.2.1 Circular economy principles

According to Potting et al. (2017), there are 10 principles in circular economy:

1. declining consumption of products that are damaging to the environment and can cause additional and unnecessary waste
2. reconsidering the way products are designed considering how the product is used, can be reused, shared and what different uses it could have in the future.

3. minimizing the use of resources and wastefulness during the production process
4. reutilizing products as much as possible
5. restoration of products
6. re-equipping of products to their prior good condition with minimal effort
7. rebuilding of products
8. reusing of the products or parts of the products to a different use than originally intended
9. recycling of materials and
10. reclaiming

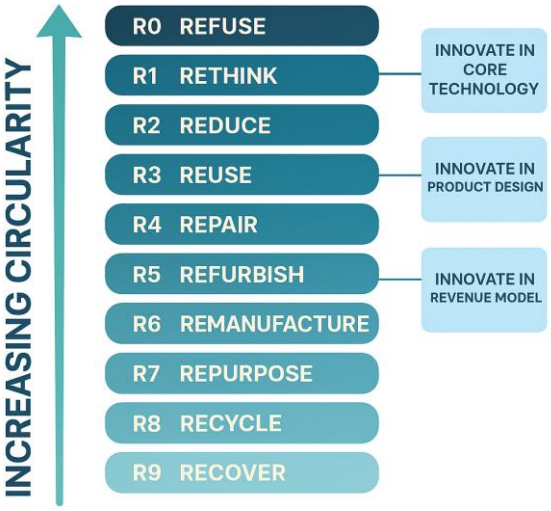

Figure 5. visual interpretation of the principles of CE often referred as the 10 Rs, (Potting, Hekkert, Worrell, & Hanemaaijer, 2017)

Valencia et. al (2023) add that there are social proportions on CE as well and propose societal and economic Rs. Starting by rethinking the current framework of linear economy where raw materials are taken to create products and then get disposed to rethinking of the policies on CE both within the EU and globally (Valencia et. al , 2023).

Additionally, we need to rethink of the value chains such as supply chains and re-evaluate them to make sure CE values are followed (Valencia et. al , 2023).

They also argue that revitalizing and reusing of current or older legacies such as older not in use industrial buildings or machinery is needed as well as rethinking of management strategies to implement CE strategies (Valencia et. al , 2023).

Not only that but rethinking and creation of business models to comply with CE combined with rethinking of Corporate Social Responsibility practices to comply with its strategies (Valencia et. al, 2023). Furthermore, they argue that reorganizing the 9 Rs of CE to include socioeconomical aspects is needed as well as rethinking of how it is used and communicated from different stakeholders while rethinking consumption and production processes and how they comply and add to CE as well (Valencia et. al, 2023).

Additionally , they believe that rethinking of education regarding both of how CE is viewed and the importance of additional training of CE combined with rethinking of ownership especially regarding waste management which mostly fall into municipalities, creating ways for waste to be used as a new resource for new products while rethinking of how products are repaired and maintained to ensure continued usability and support circularity (Valencia et. al, 2023). Finally, they underline the need to remember the importance of previous practices and include them to support CE (Valencia et. al, 2023).

Kumar et al. (2022) identify four main stakeholders in the social aspect of circular economy:

- employees where the social aspect includes employee rights, working conditions, access to education and training and equal opportunities
- consumers where the social aspect includes health and safety of the product/ services, transparency and honesty of the CE practices and the products, encouraging consumers to participate to the company's and other companies' CE practices
- local community where the social aspect includes employment opportunities locally, encouragement to participate to CE projects, equal employment opportunities within the local community and educating on the CE practices which leads to higher adoption of CE practices
- society where the social aspects include public health and safety, governmental involvement in CE regulations and incentives, education on CE practices and encouraging active participation.

  Cooperation between the above stakeholders is crucial in CE (Kumar et al.,2022).

3.3 Circular economy metrics

Measuring how successful a company is on applying circularity principles is quite new, however there are already a few different tools to do so (Ellen MacArthur

Foundation, 2019; World Business Council for Sustainable Development, 2023) and it is crucial in order for companies to achieve circularity consistently (The GreenBlueprint Team, 2025). Not only that, but measurability of circularity allows companies to put resources towards it and hierarchize especially when the available assets are scarce (Edge Impact, 2023). Metrics are crucial as they provide evidence of progress and allow evaluation of what is working and what is not (Edge Impact, 2023). Circularity metrics also provide important data that assist companies with governance and compliance with laws (Circularity, n.d.)
Therefore, standardization and honest disclosing is needed (Ellen MacArthur Foundation, 2023). An examination of the most used ones will follow.

3.3.1 Circular transition indicator (CTI)

One of the main frameworks is the Circular Transition Indicator (CTI) created by the World Business Council for Sustainable Development (Lehtinen, Leppänen, & Hughes, 2020). It uses 5 main indicators to measure circularity: circular inflow, circular outflow, overall circularity score, utility factors and impact metrics (World Business Council for Sustainable Development, 2023). The circular inflow indicator measures the ratio between the amount of new raw material to the recycled or reused material utilised in the production of a company (World Business Council for Sustainable Development, 2023).
The circular outflow indicator measures how much of the company output: products, byproducts, waste can be repaired or reused (World Business Council for Sustainable Development, 2023). The overall circularity indicator measures the overall ratio between the circular inflow and circular outflow of a company (World Business Council for Sustainable Development, 2023). The utility factors examine a product's lifetime, its average usage time and how it compares to the industry average (World Business Council for Sustainable Development, 2023). The impact metrics measure how much a company's greenhouse gas emissions could be lowered if the company used greener / not new raw material in the production World Business Council for Sustainable Development, 2023). They also examine how a company affects nature: by using land, the shape of land after it has been used and how important is the land for the biodiversity (World Business Council for Sustainable Development, 2023).

3.3.2 Circular economy metrics: Circulytics

Circulytics is a circularity framework developed by the Ellen MacArthur Foundation (Lehtinen, Leppänen, & Hughes, 2020).

The framework was created as a platform in 2020 by the Ellen MacArthur Foundation that encouraged and enabled companies to input information to the foundation and receive personalized feedback regarding their circularity and consisted of 2 main categories enablers and outcomes (Ellen MacArthur Foundation 2021).The enablers included corporate strategy, innovation, human capital, organizational operations and external partnerships (Ellen MacArthur Foundation 2021). The outcomes included product and material management, services, physical assets (property and equipment), water consumption, energy sources and financial measurements (Ellen MacArthur Foundation 2021).

The foundation does no longer accept submissions to provide feedback, but the framework resources are still available (Ellen MacArthur Foundation 2021).

3.3.3 Material circularity indicator (MCI)

MCI was developed by the Ellen MacArthur foundation, and it measures how circular is a company or a supply network based on 3 factors: raw material contribution, utility and post-use phase (Institute of Sustainability Studies, 2025). Raw material contribution refers to how much of the material used in the production is new (Institute of Sustainability Studies, 2025). Utility refers to how durable is a product, its lifecycle and its level of usage (Institute of Sustainability Studies, 2025). The post-use phase referring to what happens to the product after it can no longer be used for example is it recycled, upcycled or goes to waste(Institute of Sustainability Studies, 2025). At this phase it is also calculated how much of the product's remnants can be recycled or reused (Institute of Sustainability Studies, 2025).

Linear flow referring to the amount of the material that ends to the landfill at any point of the product or at the post-use phase is also included in the calculation (Institute of Sustainability Studies, 2025).

3.3.4 Circular economy metrics: ISO circular economy standards

The International Organization for Standardization (ISO) has created 3 protocols for measuring circularity which will assist with measurement and implementation of CE (Acaroglu, 2024). The ISO 59004 provides definitions, main principles and assistance including a list of actions to implement circular economy (Acaroglu, 2024). The ISO 59010 aids companies transitioning towards circularity by providing structured guidance from placing circularity targets to collaborating with stakeholders within their network to achieve their desired targets (Acaroglu, 2024). The ISO 59020 provides a framework for evaluation and reporting of

circularity including monitoring of progress achieving the company's CE goals, reviewing input, output and circularity impacts: social, environmental and financial (Acaroglu, 2024).

3.3.5 Circular economy metrics: UNI/TS 11820:2022

UNI/TS 11820:2022 assesses 71 different circularity indicators organized into six main categories: material inputs and components, energy and water consumption, waste generation and emissions, logistics processes, final product or services and human capital, finances and sustainability procedures (Amicarelli et al., 2023).Material and resources category focuses on the type and circularity of raw material, energy and water evaluate how energy and water are used during production, waste generation, emissions and recovery practices (Amicarelli et al., 2023). Logistics assesses logistics and distribution systems evaluating environmental impact while the final product or service indicators evaluate the circularity of the final product (Amicarelli et al., 2023). Human capital and policies examine organizational practices about human resources, environment, governance and circularity (Amicarelli et al., 2023).

3.4 B Corp certification

B Corp certification is that companies can acquire after completing (self) evaluations that include governance, employees, environmental policies and customers. (B Lab Global, n.d.). To receive the certification a company needs to register to the platform, use a legal requirement tool to review how stakeholder interests are embedding the organizational structure, fill a risk review assessment, then complete an impact assessment (B Lab Global, n.d.). If the company receives a score of 80 or more they can apply to receive a certification which will be received after an evaluation of all the above by a B Corp analyst (B Lab Global, n.d.). Once a company is certified, their scores and impact reports will be published to the B Corp directory, and the data is publicly available (B Lab Global, n.d.). Certified companies need to repeat the impact assessments every three years (B Lab Global, n.d.). The certification is becoming popular among companies with circular profile (Willows, 2024) and in cosmetics as well (B Lab Europe, 2025). In Europe 100 (B Corp) certified cosmetics brands have formed a coalition aiming to collaborate to promote circularity, ethical sourcing, packaging and against greenwashing (B Lab Europe, 2025).

B Corp certification has been criticized for enabling greenwashing since the certification is mostly based on evaluations companies complete themselves and are thus not reliable (Willows, 2024).

3.5 Regulations

There are different regulations regarding how the cosmetics is regulated internationally (Cosmetic Science, 2024) however, since all the selected case study companies are EU based, only EU regulations will be reviewed as part of this thesis. EU regulations are stricter that other regulations globally (Cosmetic Science, 2024).

3.5.1 Cosmetics regulations in the EU

There are different regulations regarding how the cosmetics is regulated internationally (Cosmetic Science, 2024) however, since both selected case study companies are EU based, only EU regulations will be reviewed as part of this thesis.EU regulations are stricter that other regulations globally (Cosmetic Science, 2024). All cosmetics available in the EU should comply with Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetics products European Parliament & Council of the European Union, 2009) to make sure customers are protected (Cosmetic Science, 2024) against fake cosmetic products that can be dangerous to people's well-being (European Parliament & Council of the European Union, 2009). The regulation consists of 40 articles (European Parliament & Council of the European Union, 2009).

According to the Article 2 of the above regulation, a product is considered cosmetic if it's used on people's hair, skin, lips, outer genitalia, teeth or mouth to clean, eliminate or fix physical odours, alter their appearance and their smell, assist on maintaining their shape or aromatizing them (European Parliament & Council of the European Union, 2009). The rest of the articles provide a framework for what any company offering any cosmetic product obtainable within the EU is allowed or not allowed to do and according to which, each company is responsible to comply with (European Parliament & Council of the European Union, 2009).

The framework includes safety, labelling and product claims, appointment for a responsible person legal or physical within the EU and their responsibilities, the responsibilities of the cosmetics distributions, safety assessments, a product information file and its contents, sampling of each product, notifying EU

Commission of the product and its ingredients, a list of restricted ingredients and prohibition of animal testing (European Parliament & Council of the European Union, 2009). Another important related regulation within the EU is EC No1907/2006 regarding the Registration, Evaluation, Authorisation and Restriction of Chemicals within the EU which aims to protect people's health and the environment (Centre for the Promotion of Imports from developing countries (CBI), 2024).

3.5.2 Natural cosmetics regulations in the EU

There are currently no regulations in the EU regarding natural cosmetics (CBI, 2026). The industry is regulated under the Regulation (EC) No 1223/2009 cosmetic products regulation analysed on the previous chapter.

There are, however, certifications such as Ecocert (natural and Organic) and Cosmos (Cosmos Natural and Cosmos Organic, NATRUE and AIAB (Kaeltia Consulting, 2024). For a company to obtain one these certifications their cosmetics need to be produced from 75 to 99% natural ingredients depending on the certification (Kaeltia Consulting, 2024).

ISO 16128 is a standardization tool that provides guidance on how companies can calculate the amount of natural ingredients of their products (Coptis ,2025). Unlike the above-mentioned certifications, ISO 16128 is a tool for the producers to calculate the natural ingredients of their products with no third party audits which can lead to self-declared statements and green washing which will be examined later (Coptis, 2025).

3.6 Natural cosmetics certifications

There are, however, certifications such as Ecocert (natural and Organic) and Cosmos (Cosmos Natural and Cosmos Organic, NATRUE and AIAB (Kaeltia Consulting, 2024). For a company to obtain one these certifications their cosmetics need to be produced from 75 to 99% natural ingredients depending on the certification (Kaeltia Consulting, 2024). ISO 16128 is a standardization tool that provides guidance on how companies can calculate the amount of natural ingredients of their products (Coptis ,2025). Unlike the above-mentioned certifications, ISO 16128 is a tool for the producers to calculate the natural ingredients of their products with no third-party audits which can lead to self-declared statements and green washing which will be examined later (Coptis, 2025).

3.7 Circularity in cosmetics

Research has shown that circularity plays a significant role in buying decisions with 68% of customers considering it a big part of their buying decisions and 66% prepared to pay more for an ecofriendly product and the trend is more growing within younger generations (Martins, Silva, & Marto, 2025). This movement is pushing the cosmetics industry to adapt circularity as well (Martins, Silva, & Marto, 2025). In cosmetics circularity can be achieved through eco-friendly sourcing of raw material, reducing the environmental impact of the production, the circular use of packaging (Mondello, Salomone, & Mondello, 2024) and utilizing the waste by-products (Martins, Silva, & Marto, 2025). Martins et. al (2025) argue that it should also include ethical, societal and financial accountability.

They argue that circularity in cosmetics is formed by actions and choices made throughout a product's life cycle but particularly during the product designing phase (Martins, Silva, & Marto, 2025). According to research product designing and raw material choices affect 30% of how circular a product is in total (Martins, Silva, & Marto, 2025). The advancing of the technology of the cosmetics industry offers many opportunities of both sustainable raw material sourcing and upcycling of discards of other industries like the coffee, olive oil and fruit industries (Martins, Silva, & Marto, 2025) as plant by-products have been known for their benefits to the skin since the ancient times (González-Minero & Bravo-Díaz, 2018). Food and beverage waste byproducts is especially used to create new products such as chemicals and emulsifiers (Utroske, 2023)

During the production circularity can be achieved by minimizing energy wasting via the use of new energy efficient machinery (Martins, Silva, & Marto, 2025).

Water management and water waste reduce is crucially to the circularity of the cosmetics industry as for many products, water is not only the main ingredient but is used in various stages of the production as well (Martins, Silva, & Marto, 2025). So, through innovation cosmetics producers have created products in solid form like powders, stick and balms instead of liquid (Goodman, 2025).

Innovation and technology advancement is offering water waste management opportunities such as water reusage, rainwater harvesting water infiltration (Martins, Silva, & Marto, 2025).

3.8 Sustainable branding

With the term branding we are referring to a distinctive mix of features both physical and perceived which customers identify as something that adds further benefits, extraordinary competences and a conveyed promise (Grubor & Milovanov, 2016). Sustainable branding is different from traditional branding because it incorporates ecological, societal and financial issues into its business transactions (They Make Design, 2024). The shift towards circular branding is not only due to the demand of customers for more sustainable products but also due to more and stricter policies and initiatives (They Make Design, 2024) for example the European Green Deal within the EU like the Regulation (EC) No 1223/2009 mentioned on the cosmetics regulations chapter or The European Green Deal which aims to achieve climate neutrality by 2050 (European Commission, 2024). It has been recognized that the enforcement of sustainable acts is beneficial for companies in multiple ways such as creation of new products, offering a competitive advantage making the products more attractive to the consumers (Kumar & Christodoulopoulou, 2014).

3.9 Green washing

Green washing refers to the practice of overemphasizing or promoting deceptive claims of circular economy practices (Persakis, Nikolopoulos, Negkakis, & Pavlopoulos, 2025). Stakeholders such as: customers, shareholders, the public are misled by those claims and that impacts both their trust to sustainability practices and to their environment due to the consumption of not fully sustainable products and services (United Nations, 2024).

A study by the European Commission that examined 150 ecological claims discovered that over 50% of them were deceptive, ambiguous or groundless (Krantz, 2023).

The main greenwashing indicators are:

- vague claims without explanation or certifications
- general sustainability or circularity claims without proof
- misleading imagery: green visuals, visuals of nature to give the impression of ecofriendly products even in cases where the products are not in fact sustainable
- irrelevant claims: Promoting an ecofriendly characteristics to divert attention from other not ecofriendly practices and
- own made certifications (Sustainability Directory, 2026)

To reduce the impact of greenwashing, EU has proposed the Green Claims directive (Finan, 2023) which aims to forbid general sustainability implications on products without evidence, claims of circularity on labelling that are unverified by 3rd party certificates or public authorities within 30 days (Devera,2024), or neutrality claims that are the product of emission offsetting (European Parliament, 2024). Enterprises must conduct thorough evaluation on their claims themselves using credible tools (Devera,2024). The evaluations must include product's entire lifecycle and prepare documentation both in paper and digital which must be updated every 5 years (Devera,2024).

Emission offsetting is the practice of evening out a company's emissions by initiating practices that eliminate or halting the same amount of emissions such as afforestation, forest preservation and renewable sources of energy (Coffset, 2025). The Green Claims Directive has been approved by the EU members of the parliament in January 2024 and the country members received 24 months' time to integrate it to the national laws (European Parliament, 2024). Failure to comply could lead to fines out to 4% EU turnover (Devera, 2024), forfeiture of income attained via deceptive claims, disclosure of the non-compliance to the public and restrictions of the company operations – even banning (Devera, 2024). The Directive requires compliance from all the companies marketing their products in the EU no matter where they are based (Devera, 2024).

Small and medium Sized Enterprises can be given 12 months more to comply with the Directive (Devera, 2024). The Green Claims Directive was supposed to be enforced in 2026 however, European Commission withdrew it in June 2025 viewing its requirements as too wide and difficult to comply to by the companies in the EU region (European Economic and Social Committee, 2025).

4 CASE STUDIES

This chapter presents the 3 companies selected for the comparative case study: Korres, Lumene and Weleda. Each case includes a short overview of each company: history, distribution channels and product lines followed by a review of each company's circularity practices and how circularity and sustainability are communicated through their marketing and branding. The 3 companies were selected because they are based in Europe where the regulation of cosmetics is strict. Both Korres and Lumene highlight circularity and sustainability in their production, products and branding without being certified natural cosmetics providers. Weleda in contrast is a certified natural cosmetics provider. The certification or lack of it provides an opportunity for a comparison to examine how that affects practice of circular economy principles as well as credibility of sustainability claims. The presence of green washing indicators is examined as well. The following subsections present each company individually before moving to the cross-case comparison and the synthesis of findings.

4.1 Korres

Korres S.A produces cosmetics based on plant and herbal ingredients (Korres, n.d.-b) so they are operating in the natural cosmetics market.

It was founded in 1996 in Athens Greece (Weissman, 2023) by pharmacist George Korres who started experimenting with natural and herbal ingredients to produce cosmetics while working homeopathic pharmacy (Irish Independent, 2008)). In 2017 the majority of the company was sold to Morgan Stanley (TNT Staff, 2017). The company employs 390 employees (RocketReach, n.d.).

The company currently produces, distributes and sells cosmetics that include skin, hair-care, make-up, perfumes, toiletries (Market Publishers, 2025) and has presence in 52 countries with biggest markets being Greece, USA, Germany, France and Norway and in 2024 the revenue was 75,5€ million (Capital.gr, 2025).

The main distribution channels are the own e-commerce (Korres, n.d-b), international retail partners such as Avon in Brazil (Bellos, 2017), pharmacies and brick and mortar stores (Weissman, 2023).

4.1.1 Korres and circularity

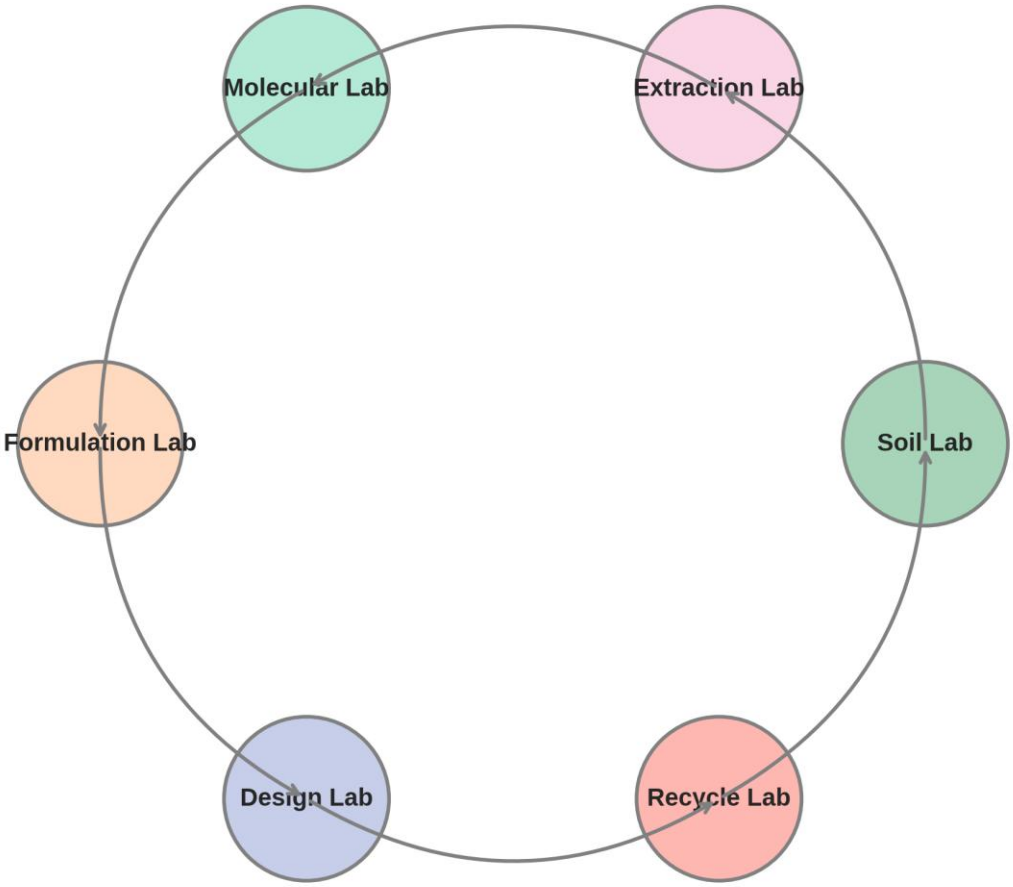

Figure 6. based on the 6-point sustainability labs of Korres, (Korres. 2025c)

As it has earlier been reviewed on the circularity in cosmetics chapter, some of the most important factors on how circular a product is are linked to the product designing along with sourcing, packaging, producing: especially water consumption during production (Martins, Silva, & Marto, 2025).

In their production plant Korres has created a water purifying system that combines reverse osmosis and deionization to purify the water used in the products resulting to zero waste (Korres, n.d.-g) this contributes to the company's circularity and reducing the environmental footprint. Water in cosmetics is used both in production to wash raw materials and as a raw material (Martins, Silva, & Marto, 2025) so the purifying system contributes to the circularity of the production.

Regarding the raw material sourcing Korres has created a network of 30 organic farmers and 5 agricultural cooperatives to source the herbs and plants used in the production (Newsroom, 2021). Upcycling of waste by products was also identified as contributing to the circular economy in cosmetics (Martins, Silva, & Marto, 2025) and Korres is upcycling grape marc from Asyrtiko grapes used in wine making to produce cosmetics (Korres, n.d. -g) Another factor that contributes to the circularity of a product is the packaging and the reduce of the waste during the production (Martins, Silva, & Marto, 2025), Korres has a recycling line that includes cosmetics' containers collected from the customers via an initiative called ''Return your empties'' which encourages customers to return their empty containers that are recycled to create new packaging material (Korres, 2025d). Cartons from packaging are also recycled and used as in packaging and promotional material (Korres, 2025d).

Another thing identified from the theory earlier is that cosmetics companies are highly innovative (Martins, Silva, & Marto, 2025) and Korres is too having discovered and introduced 7 new ingredients on the International Nomenclature of Cosmetic Ingredient through the extraction laboratory they have created in collaboration with the Department of Pharmacy of the National & Kapodistrian University of Athens (Korres, n.d.-g).

Despite all the above, Korres's sustainability cannot be measured as the company does not publish emission reports nor is it audited by a third party organization (Live By, 2025).

4.1.2 Circularity in Korres' marketing

Korres' products are marketed through their own ecommerce channel (Korres, n.d- b), on shopify (Internet Research Unit, n.d.), in brick and mortar stores in Greece and internationally (Weissman, 2023), social media: YouTube (KORRES, n.d. b), LinkedIn (KORRES, n.d. a) Instagram (Flufi, n.d) , TikTok (Korres, nd.-e), Twitter/ X (Kochava Media Index, 2025) and Facebook (Korres Athens, n.d.) .

Circularity and sustainability are immediately visible when someone enters Korres' site. The sustainability circle is 4rth on the navigation tab on the website (Korres, n.d.-b) and when clicking on it the sustainability circle of picture 3 above comes forward (Korres, 2025d).

The second tab when entering the website is Giorgos& Lena (the founders of the company) (Korres, n.d.-c) and when clicking on it there are 3 circles visible: Giorgos, Lena and Following our conscience (Korres, n.d.-a).

On Facebook the company is ‘’*Inspired by tradition, powered by nature, perfected by science Sustainable • Farm To Lab • Woman Made Made in Greece με αγάπηGR*’’ (KORRES USA, n.d.) and the same is for TikTok Korres. (Korres, n.d. e) and Instagram Korres. (n.d.-d).

Additionally on the product description of the cosmetics products there is a percentage showing how much of the raw material is of natural content for example on the Black Pine primus Wrinkle Defying Day cream however there is no source verifying that or providing more information on how it is calculated (Korres, n.d.-f) and neither the company is a 3rd party certified natural cosmetics provider (Live By, 2025). The author has asked clarification the calculation from Korres Finland via email and the reply was that the percentage calculates how much of the product’s raw materials are naturally derived. The amount is calculated and reported by the manufacturer and cannot be calculated by the consumer (Sini Pettinen, personal communication, 16 December 2025).

So, circularity is a very important part of Korres’ brand overall the brand has created many initiatives toward a greener future. However, some of the company claims such as percentage of natural ingredients and the lack of circularity metrics could be considered greenwashing.

4.2 Lumene

Lumene was founded in 1970 by a pharmaceutical company Orion yhtymä Oy (Lumene Group, 2025c). At first it was producing skincare and since 1971 hair products too: Cutrin (Lumene Group, 2025c). In 2021 Lumene was sold to Verdane (Lumene Group, 2025c). Currently the company employs about 314 employees (Suomen Asiakastieto Oy, 2025) is based in Espoo, Finland (Lumene Oy, 2025) and is sold in 23 countries (LeadIQ, 2025a). In 2024 revenue was €103 million (Lumene Group, 2025d).

The main distribution channels are through retail (brick and mortar shops) and the company e-commerce (Lumene Group, 2025d).

4.2.1 Lumene and circularity

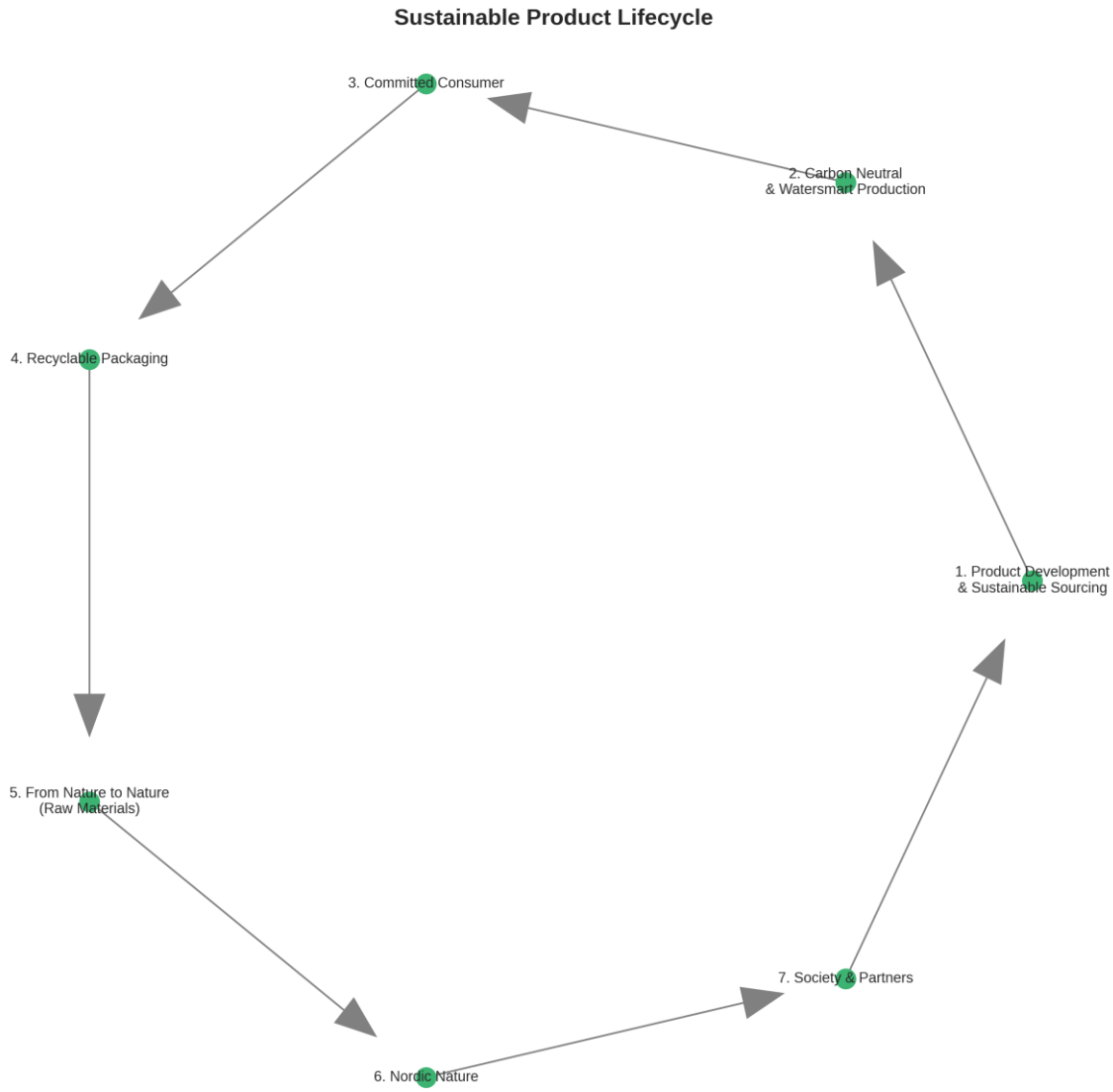

Figure 7. based on the Circle of Beauty of Lumene, (Lumene Group, 2025e)

Circularity is prominent Lumene and part of their corporate strategy (Lumene Group, n.d. b). Lumene has been publishing sustainability and governance reports since 2021 (Lumene Group, n.d.-c)

They measure circularity using the CTI tool mentioned on the theory and according to that the company is 55% circular (Lumene Group, 2025e). Additionally, Lumene has a dedicated sustainability and packaging director (Lumene Group, 2025e).

Lumene is also B Corp certified (Lumene Group, 2025f).

One way Lumene applies circularity is by upcycling cloudberry seed oil and other waste byproducts (Lumene Group, 2025b) and which agrees with circularity in cosmetics by utilizing waste byproducts and by implementing it throughout the designing and decision process (Martins, Silva, & Marto, 2025).

Another way of circularity in action in Lumene is through innovation and packaging. Lumene collaborated with Sulapac to create compostable cosmetics jars (Packaging MEA, 2022) and with UPM to create cosmetics jars made from wood based materials from pulp byproducts (UPM, 2025).

Additionally, Lumene offers the refill option for some of their products (Sokos, n.d). Furthermore, Lumene was able to reduce the carbon footprint of the production by 90% by switching from fossil fuel oil to generate steam for their machinery to an oil produced 100% and residues (Neste, 2021/2024).

Lumene's implementations of circularity corresponds to the theory and circularity on cosmetics.

4.2.2 Circularity in Lumene's marketing

Lumene markets their products through their own ecommerce (Lumene Group, 2025a), social media platforms: Instagram, TikTok and influencer marketing (The Social Shepherd, n.d.), (Lumene Group, n.d. a), Facebook, YouTube, Pinterest, and brick and mortar shops in 23 countries (Verdane, 2025) in Europe and worldwide (Lumene, 2025h). Circularity is central to Lumene's marketing. Circularity, sustainability and Circular beauty is used, and circularity is defined (Lumene Group, 2025e). Additionally, on the about us segment of the company's UK page Lumene positions themselves us sustainability pioneers whilst a rotating foot banner highlights the key sustainability elements : ‘*'Recycled & Recyclable Packaging, Upcycled Ingredients, Vegan, and Wild Crafted Ingredients''* (Lumene, 2023)

Lumene uses verified tools to measure their circularity like CTI and published them (Lumene Group, 2025b). Furthermore, sustainability, circularity and consumer engagements are part of the company's strategic focus for 2023-2028 (Lumene Group, n.d.-b). Lumene states that its skincare contains up to 99%natural ingredients and 94% natural ingredients for all their products (Lumene Group, 2025 g), however Lumene is not a certified natural cosmetics provider.

Moreover, on many products there is an asterisk next to the percentage of natural ingredients, however the footnote that explains the asterisk is missing like for example on the soothing cleansing milk (Lumene, 2025). The author has asked clarification about that from Lumene via email but as of the moment of this publication haven't received an answer.

So, circularity is a very important part of Lumene's brand overall and the brand is measuring circularity and publishes the measurements. At the same time there are some inconsistencies such as percentage of natural ingredients that could be considered greenwashing.

4.3 Weleda

Weleda was founded in 1921 in Switzerland by Rudolf Steiner, Ita Wegman and Oskar Schmiedel (Rawes, 2016) creating at first pharmaceutical products and later cosmetics as well. The company has presence in over 50 countries with (Rawes, 2016) and more than 28 international subsidiaries (LeadIQ, 2025b).

At the end of 2023 Weleda employed about 1900 employees worldwide with a total sales of € 421 million (Weleda AG, 2023). The sales are the combined number of the company's two main divisions: natural cosmetics and pharmaceuticals, however the natural cosmetics division accounts for 4/5 of the group's sales (Weleda AG, 2023). Part of the used raw material come from Weleda's own gardens in seven countries Weleda, 2025d).

Weleda more than 10 product lines based on main ingredients (Arnica, Calendula, Pomegranate, Citrus, Lavender, Birch, skin food) and customer needs (baby care, oral care, skin care, mother care, wellness oils) (Weleda, 2025a).

Weleda is a certified natural cosmetics producer and holds the NATRUE certification and B Corp certifies as well (Grokipedia, 2025). The company's main distribution channels are pharmacies, health food stores, e-commerce providers, retails stores (Grokipedia, 2025), grocery stores and its own e-commerce platform (Weleda AG, 2025).

4.3.1 Weleda and circularity

Figure 8. inspired by Weleda's regenerative value chain, (Weleda, 2024)

Sustainability and circularity are a big part of Weleda's identity. The diagram above illustrates the 6 main stages of circularity in Weleda (Weleda, 2024).
The company has been publishing annual and sustainability reports since 2018 (Weleda Group, 2018) it is B-Corp certified (Weleda, n.d.-a) and is certified by NATRUE as a natural cosmetics producer (Weleda, 2025c).
Weleda applies circularity on each stage of the production and uses several metrics to measure and report them (Weleda, 2024). The main one is Life Cycle Assessment (Weleda, 2024) to measure the impact of the production from raw material extract to disposal (Life Cycle Assessment (LCA) – Everything you need to know, 2024).

Furthermore, 65% of the packaging materials are recycled and for the Baby care line the packaging is 100% recycled resulting to environmental emissions by 250 tonnes per year (Weleda, 2024). Despite that, Weleda has been criticized for still using a big amount of virgin plastic on its packaging (Commons.Earth, 2025). Thi 82% of the raw materials are organic (Weleda, 2024) and 95% for the natural cosmetics products which can be verified by their NATRUE certification (Weleda, 2025 c).

However, as it was seen in the circularity in cosmetics chapter, water consumption is a big issue for the industry (Martins, Silva, & Marto, 2025) and Weleda does not yet have concentrated products or refill systems to reduce water consumption (Commons.Earth, 2025). Despite that the company is reducing emissions during production by using electricity deriving from 96% renewable sources especially in the German plant (Weleda, 2024).

Additionally in an effort to reduce logistics related emissions, Weleda has built a new warehouse in Germany (Weleda, 2024) which is carbon neutral by utilising solar and geothermal energy systems (DETAIL, 2025). Furthermore, Weleda has also been using United Nation's Sustainable Development Goals (SDGs) as a reference and evaluation of their sustainability practices (Weleda, 2024).

UN' SDGs are a framework of 17 goals adopted by the UN members since 2015 with the aim to end poverty, protect the environment and make ensure peace, prosperity and wellbeing for everyone by 2030 (UnitedNationsDevelopmentProgramme,2025). The UN SDGs are : poverty and hunger elimination, promotion of health and wellbeing for everyone, inclusive education opportunities, gender equality, equal access to clean water and proper sanitation, affordable sustainable energy for everyone, employment rights and growth opportunities, quality infrastructure innovation and industrial development UnitedNationsDevelopmentProgramme,2025). Additionally, elimination of socioeconomic disparities, development of circular cities/ communities, encouragement of circularity in consumption and production, actions to combat climate change, protection of marine and terrestrial ecosystems and biodiversity, support of peace and justice organizations and cooperation to achieve the above goals UnitedNationsDevelopmentProgramme,2025).

Overall Weleda seems to incorporate the circularity throughout the production line, however circularity metrics are not published (Weleda, 2024). Life Cycle Assessment is used by them however (Weleda, 2024)

4.3.2 Circularity in Weleda's marketing

Weleda markets their products through their own e-commerce, grocery stores (Weleda AG, 2025) as well as drugstores, other retail stores, health food stores (Grokipedia, 2025). Additionally, Weleda has on YouTube, Facebook, Instagram (Socialinsider, n.d.), Twitter/ X (Weleda USA, 2025). According to the company's CEO Tina Müller, the most important channels are Instagram and TikTok where they plan to invest more as they believe it to be the most important channel for cosmetics (PwC, 2024). Circularity is prominent in Weleda's marketing. It is stated on their sustainability report that the one of the core brand's and corporate values is sustainability and their foundational principle: *'' Growth with Responsibility''* (Weleda, 2024) On several skincare products the title before the description read: '' *Take care of yourself, take care of the environment*'' (Weleda, 2025b).

In 2025 they introduced a new brand identity positioning Weleda as ''Natural Science '' to reflect the company's natural ingredients, sustainability and scientific experience (Weleda, 2024).

4.4 Case study comparison

Circularity is important and part of the communications and corporate strategy for all 3 off companies and all use similar circles in their visuals to showcase their operations.One notable difference between Korre's responsibility circle and Lumene's and Weleda's is that consumer is not part of the circle whilst it is for Lumene and Weleda. Lumene and Weleda both incorporate sustainability on their annual reports. One notable difference however is that Weleda does not publish circularity metrics (Weleda, 2024) while Lumene does using the CTI framework. Korres does not publish information on circularity metrics.

Table 2 below presents the comparison between the 3 cases in regard of circular economy principles, metrics and greenwashing indicators.

	Korres	**Lumene**	**Weleda**
CE Principle: circularity throught the product starting form the design	observed	observed	observed

CE Principle: packaging circularity	partial	observed	partial
CE Principle: renewable energy sourcing	some evidence	some evidence	observed
CE Principle: refill systems	observed	observed	not observed
CE Principle: circular raw material sourcing	partial	observed	obeserved
CE Principle: upcycling	observed	observed	observed
CE principle: reduce of waste	partial	observed	observed
Circularity metric: CTI	no published data	observed	no published data
Green washing indicator: vague claims	vague percentages on the packaging regarding the amount of natural ingedients in the products without explanation on how they are calculated	vague percentages on the packaging regarding the amount of natural ingedients in the products without explanation on how they are calculated	not present

Green washing indicator: overemphasizing of the clanness/ pureness of the products on communications and branding without being certified as a natural cosmetics provider	phrases like powered by nature, following our conscience, sustainability tab on the website with no way to verify the claims	phrases like beauty, beauty that comes natural	not present/ certified natural cosmetics provider
Green washing indicator: lack of circularity metrics	no sustainability reports, no circularity metrics public	not present	observed
Misleading imagery (green visuals, nature cues)	Strong use of nature-based visuals and “farm to lab” storytelling that imply sustainability	Heavy use of Nordic nature imagery and purity cues	Present but supported by certification; not misleading in context
Irrelevant claims (highlighting minor eco-features while ignoring major impacts)	Focus on naturality while lacking circularity metrics or emissions data	Highlights packaging innovations but omits verification of naturality percentages	Highlights regenerative sourcing but still uses virgin plastic and lacks refill system

Own-made certifications or self-declared claims	Self-declared naturality percentages; no third-party verification	Self-declared naturality percentages; no third-party verification	Not present — uses NATRUE and B Corp certifications

Table 2. case study comparison. CE principles, metrics, greenwashing indicators derived from the literature review chapter. Company data extracted from sustainability reports and publicly available sources.

The comparison above highlights the similarities and differences between the brands. The following chapter provides a synthesis of the findings.

4.5 Introduction to the synthesis of findings

The comparison criteria used in the findings section are based on the data analysis described in chapter 2.4. An inductive thematic analysis was used to identify codes as they emerged from the data collection and the repeated reading of the data. Circular Economy, Circular Economy principles and green washing indicators were not used as predetermined codes. Instead, they were used as sensitizing concepts to recognize, classify and understand the data aiming to answer the research questions.

4.5.1 Synthesis of findings

Circularity and sustainability appear to be a core value across all 3 brands and that is reflected both in their strategy and their overall branding.

All 3 companies are aware of CE principles and practices and the importance of them particularly the idea that circularity starts from the design of the product, waste reduction, recycling. Each brand also uses a similar circular visual to demonstrate their operations and to highlight how sustainability is integrated through it. A notable difference between the brands however is that Lumene and Weleda incorporate customers in the visual while Korres does not.

Upcycling is another practice shared by all 3 brands consistent both with the CE principles and with the circularity in cosmetics. Each company incorporates by-products into to their formulations.

Packaging is also enhancing circularity in cosmetics as well. Korres operates a recycling line initiative that includes cosmetics' containers collected from the customers via an initiative called ''Return your empties'' which encourages customers to return their empty containers that are then recycled to

create new packaging material. Lumene has collaborated with Sulapac to create compostable jars and with UPM to create made from wood-based jars materials from pulp byproducts and a refill option for some products. Weleda on the contrast doesn't have similar initiative.

The brands differ more clearly in how they measure and verify their circularity practices. Lumene seems to be the most consistent among the 3 publishing sustainability reports and using a credible CE measuring tool: CTI. Weleda publishes annual sustainability reports as well and uses Life Cycle Assessment tools, however, doesn't publish circularity metrics. Korres in contrast does not publish sustainability reports or circularity metrics making CE performance less transparent. Lack of or partial transparency is an important finding that could may indicate green washing practices.

Reducing environmental emissions and using renewable sources of energy are also big contributors of circularity. All 3 companies are using renewable sources of energy to minimize their emissions. However, only Lumene uses verifiable tools το support the claims. Certification is another point of differentiation that influences branding. Weleda and Lumene are both B Corp certified while Korres on the contrast holds no certification. Weleda is additionally certified by NATRUE as a natural cosmetics producer.

The certifications add credibility and verify circularity and naturality claims. The absence of certification of Korres' and Lumene's naturality claims combined with the lack of explanation regarding how the naturality percentages of the products are calculated reduces credibility and increases the risk of greenwashing.

Additionally, looking at the brands through the lens of sustainable branding, it is prominent that for all 3 companies, circularity is clearly integrated into both their business and marketing identities. Sustainability, naturality, and eco-friendliness is prominent in their communications. For Korres and Lumene some of the claims cannot be verified. Especially the claims regarding naturality percentages.

5 DISCUSSION

5.1 Limitations and suggestions for future research

The first limitation is researcher's bias. According to Grossoehme (2014), the researcher is an active participant during their study, and their principles can affect it. Malterud (2001) argues that researchers should be aware of their biases and assumptions and pin point them instead of hiding them. Additionally, researchers conducting Targeted Literature review as this study are prone to bias as well due to the limited scope of the targeted literature (Hoda, 2023).

Additionally, this was qualitative research with only 3 case studies which is a small amount which can produce complex data with limited generalizability (Eisenhardt, 1989) based only on secondary material and limited personal communication with one of the companies. Research on a bigger scale with the collaboration of industry companies and interviews as well as research conducted over a longer period of time could be beneficial.

Furthermore, it will be useful to research how circular branding changes once/ if EU introduces new legislation against green washing since the Green Claims direct has been withdrawn and if/ when the natural cosmetics sector is more regulated and an in-depth review and analysis of the marketing content and strategy of each company would be of value to reveal how circularity is communication evolves overtime. A comparative study examining these same brands before and after any future regulation changes would be informative. This need is enforced by the fact that all 3 case studies present greenwashing indicators. Furthermore, 2 of the cases present unverified claims regarding the naturality consistence on their products while one also using sustainability as a core strategic without any proof of that.

Finally, although the natural cosmetics sector remains mostly unregulated, there is a need for research to access whether there is a need for further regulatory measures to improve transparency in the sector.

REFERENCES

Acaroglu, L. (2024, September 19). Quick guide to the new ISO circular economy standards. Disruptive Design | Medium. https://medium.com/disruptive-design/quick-guide-to-the-new-iso-circular-economy-standards-5206a79dd2a0

Amicarelli, V., Primiceri, M., Misino, E., & Bux, C. (2023). An application of the UNI/TS 11820:2022 on the measurement of circularity in an electrical equipment manufacturing organization in Italy. Journal of Cleaner Production, 420, 138439. https://www.sciencedirect.com/science/article/pii/S095965262300063X

Bartlett, L., & Vavrus, F. (2017). Comparative Case Studies: An Innovative Approach. https://www.researchgate.net/publication/313364998_Comparative_Case_Studies_An_Innovative_Approach

B Lab Europe. (2025, June 27). The B Corp Beauty Coalition: Leading the way for an ethical future in the beauty industry. B Lab Europe. https://www.bcorporation.net/en-us/certification/

B Lab Global. (n.d.). About B Corp certification. B Lab. Retrieved December 1, 2025, from https://www.bcorporation.net/en-us/certification/

Bellos, I. (2017, December 23). Korres: A Greek pioneer in natural cosmetics. eKathimerini. https://www.ekathimerini.com/economy/224396/korres-a-greek-pioneer-in-natural-cosmetics/

Beyond Market Insights. (2024, October). Cosmetics market size, share, growth & trends analysis report by product, end-user, distribution channel, and region – segment forecasts, 2024–2032. https://beyondmarketinsights.com/report/cosmetics-market/

Bowen, G. A. (2006). Grounded theory and sensitizing concepts. International Journal of Qualitative Methods, 5(3), 12–23. https://doi.org/10.1177/160940690600500304

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3 (2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Business Research Insights. (2025, October 6). Natural and organic cosmetics market size, share, growth, and industry analysis, by type (natural cosmetics and organic cosmetics), by application (man and woman), regional insights and forecast from 2025 to 2035. https://www.businessresearchinsights.com/market-reports/natural-and-organic-cosmetics-market-107884

Capital.gr.(2025, June 2). KORRES: Αύξηση τζίρου 11,9% στα €75,5 εκατ. το 2024. https://www.capital.gr/epixeiriseis/3922033/korres-auxisi-tzirou-119-sta-755-ekat-to-2024

CBI. (2026). What requirements must natural ingredients for cosmetics comply with to be allowed on the European market? https://www.cbi.eu/market-information/natural-ingredients-cosmetics/buyer-requirements

Centre for the Promotion of Imports from developing countries (CBI). (2024, May 7). What requirements must natural ingredients for cosmetics comply with to be allowed on the European market? https://www.cbi.eu/market-information/natural-ingredients-cosmetics/buyer-requirements

Circularity. (n.d.). Circularity assessment. Circularity. https://circularity.com/en/assessment-tools/circularity-assessment

Circular transition indicators v4.0: Metrics for business, by business. Circular Economy EU Platform. Circular Transition Indicators | European Circular Economy Stakeholder Platform

Coffset. (2025). What is carbon offsetting? How it works, benefits, and best practices. https://coffset.org/what-is-carbon-offsetting/

Commons Earth. (2025, May). How sustainable is Weleda? The Commons. https://brands.thecommons.earth/brand-rating/230/weleda

Cosmetic Science. (2024, May 4). EU cosmetic regulation: How are cosmetics regulated in the EU? https://cosmeticscience.net/how-are-cosmetics-regulated-in-the-eu/

Cosmetics Europe. (2024). Our industry: Economic value of the cosmetics and personal care industry. https://cosmeticseurope.eu/our-industry/

Daniel H. Grossoehme (2014) Overview of Qualitative Research, Journal of Health Care Chaplaincy, 20:3, 109-122, https://doi.org/10.1080/08854726.2014.925660

DETAIL. (2025, January 8). Weleda Cradle Campus in Schwäbisch Gmünd. DETAIL – Magazine for Architecture & Construction. https://www.detail.de/de_en/weleda-cradle-campus-in-schwabisch-gmund

Devera. (2024). EU green claims penalties explained. https://www.devera.ai/resources/eu-green-claims-penalties-explained

Doolan, K. (2024, September 25). The war on counterfeit cosmetics special: Part I. CosmeticsDesign-Europe. https://www.cosmeticsdesign-europe.com/Article/2024/09/25/The-war-on-counterfeit-cosmetics-special-part-I

Edge Impact. (2023, October 25). How to measure and improve circularity in your organisation. https://www.edgeimpact.global/insights/circular-economy-how-to-measure-circularity

Eisenhardt, K. M. (1989). Building theories from case study research. Academy of Management Review, 14(4), 532–550. https://www.jstor.org/stable/258557

Ellen MacArthur Foundation. (2019). Circularity indicators: An approach to measuring circularity (Methodology). https://content.ellenmacarthurfoundation.org/m/77e62bc9924c20d0/original/Circularity-Indicators-Methodology.pdf

Ellen MacArthur Foundation. (2021, February 12). The butterfly diagram: Visualising the circular economy. https://www.ellenmacarthurfoundation.org/circular-economy-diagram

Ellen MacArthur Foundation. (2021, June 3). Circulytics: Measuring circular economy performance. https://www.ellenmacarthurfoundation.org/resources/circulytics/resources

Ellen MacArthur Foundation. (2023, July 13). Mapping circular economy indicators to EU reporting requirements. https://www.ellenmacarthurfoundation.org/circulytics-esrs

Ellen MacArthur Foundation. (n.d.). The circular economy: Definition & model explained. https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview

European Economic and Social Committee. (2025, September 17). Current affairs: Withdrawal of Green Claims Directive. https://www.eesc.europa.eu/en/news-media/articles/current-affairs-withdrawal-green-claims-directive

European Commission. (n.d.). SME definition. Internal Market, Industry, Entrepreneurship and SMEs. https://single-market-economy.ec.europa.eu/smes/sme-fundamentals/sme-definition_en

Finan, S. (2023, April 3). Greenwashing: EU unveils ambitious proposal on green claims. Inside Energy & Environment. https://www.insideenergyandenvironment.com/2023/04/greenwashing-eu-unveils-ambitious-proposal-on-green-claims

Flufi. (n.d.). @korres Instagram profile. https://flufi.me/profile/korres

Fortune Business Insights. (2025, October 6). Cosmetics market size, share, growth, & industry report, 2032. https://www.fortunebusinessinsights.com/cosmetics-market-102614

Future Market Insights. (2025). Natural cosmetics market size, share, and forecast 2025–2035. https://www.futuremarketinsights.com/reports/natural-cosmetics-market

Global Cosmetics News. (2022). Weleda – Company profile. https://www.globalcosmeticsnews.com/weleda-company-profile/

Global Market Insights. (2023, December). Natural cosmetics market size, share, growth & trends analysis report by product type, packaging, price range, consumer group, and distribution channel – global forecast 2024–2032. Natural Cosmetics Market Size & Forecast, 2026–2035

González-Minero, F. J., & Bravo-Díaz, L. (2018). The use of plants in skin-care products, cosmetics and fragrances: Past and present. Cosmetics, 5(3), 50. https://doi.org/10.3390/cosmetics5030050

Goodman, K. (2025, May 14). Reducing water in beauty: Rethinking routines, formulation & sourcing for a more sustainable future. THG Labs. https://www.thglabs.com/resources/blog/reducing-water-in-beauty

Grokipedia. (2025). Weleda. https://grokipedia.com/page/Weleda

Grubor, A., & Milovanov, O. (2016, September). Sustainable branding. Paper presented at ENTRENOVA 2016 – Conference on Economic Development and Entrepreneurship, Rovinj, Croatia. https://www.researchgate.net/publication/315860190

Hoda, R. (2023). Literature reviews. In Qualitative research with socio-technical grounded theory (pp. 113–137). Springer. https://doi.org/10.1007/978-3-031-60533-8_6

Hussain, F. (2025, March 13). Wellness and skincare: Ingredients bridging the gap. in-cosmetics Connect. https://connect.in-cosmetics.com/ingredients-formulation/wellness-and-skincare-ingredients-bridging-the-gap

Institute of Sustainability Studies. (2025, January 18). Material Circularity Indicator (MCI): A key metric for measuring circularity. https://instituteofsustainabilitystudies.com/insights/lexicon/material-circularity-indicator-mci-a-key-metric-for-measuring-circularity

Internet Research Unit. (n.d.). Korres Global: Revenue, products & eCommerce insights | Brand profile. https://internetresearchunit.com/brands/korres-global

Kaeltia Consulting. (2024, April 8). Certification of cosmetic products in the EU: Natural cosmetics and organic cosmetics? https://kaeltia.com/en/certification-cosmetic-products-eu

Kochava Media Index. (2025). Korres competitors, reviews, marketing contacts, traffic, & advertising data. https://media-index.kochava.com/buyers/korres

Korres. (2025a). About us. https://global.korres.com/pages/about-us

Korres. (2025b). Full Circle Formulation Lab. https://global.korres.com/pages/full-circle-formulation-lab

Korres. (2025c). The 6 Labs Sustainability Circle. https://global.korres.com/pages/the-6-labs-sustainability-circle

Korres. (2025d). Full Circle Recycle Lab. https://global.korres.com/pages/full-circle-recycle-lab

Korres. (n.d.-a). Following our conscience. https://global.korres.com/pages/following-our-conscience

Korres. (n.d.-b). Korres Global. https://global.korres.com/

Korres. (n.d.-c). Giorgos and Lena. https://global.korres.com/pages/giorgos-and-lena

Korres. (n.d.-d). @korres Instagram profile. Instagram. https://www.instagram.com/korres.athens

Korres. (n.d.-e). Korres [TikTok profile]. TikTok. https://www.tiktok.com/@korres

Korres. (n.d.-f). Black Pine Primus Wrinkle Defying Day Cream. Black Pine Primus Wrinkle Defying Day Cream – KORRES Global

Korres. (n.d.- g). Full Circle Extraction Lab. https://global.korres.com/pages/full-circle-extraction-lab

Korres Athens. (n.d.). Korres Athens [Facebook page]. Facebook. https://www.facebook.com/korres/

KORRES. (n.d. a). KORRES Natural Products [LinkedIn page]. LinkedIn. https://be.linkedin.com/company/korres-natural-products

KORRES. (n.d. b). YouTube channel. https://www.youtube.com/

Korres USA. (n.d.). Korres USA [Facebook page]. https://www.facebook.com/KorresUSA

Krantz, P. (2023, May 22). Greenwashing: How the EU is seeking to address false claims. Deutsche Welle. Greenwashing: How the EU is seeking to address false claims

Kumar, A., Luthra, S., Mangla, S. K., & Kazançoğlu, Y. (2022). Adoption of circular economy practices in manufacturing firms: An empirical study using interpretive structural modelling and fuzzy MICMAC analysis. Journal of Cleaner Production, 330, 129784. https://doi.org/10.1016/j.jclepro.2021.129784

Kumar, V., & Christodoulopoulou, A. (2014). Sustainability and branding: An integrated perspective. Industrial Marketing Management, 43(1), 6–15. https://doi.org/10.1016/j.indmarman.2013.06.008

Laureny Loves. (2024, October 24). Beyond skin deep: The role of cosmetics in enhancing mental and emotional wellness. https://www.laurenyloves.co.uk/2024/10/role-of-cosmetics-in-mental-emotional-wellness

LeadIQ. (2025a). LUMENE Oy company overview, contact details & competitors. https://leadiq.com/c/lumene-oy/5a1d98912300005900873e2d

LeadIQ. (2025b). Weleda AG company overview, contact details & competitors. https://leadiq.com/c/weleda-ag/5a1d8ab3240000240064b4f9

Lehtinen, A., Leppänen, R., & Hughes, M. (2020, October 14). Three tools for measuring and developing a company's circular economy performance. Sitra. https://arkisto.sitra.fi/en/articles/three-tools-for-measuring-and-developing-a-companys-circular-economy-performance/

Live By. (2025, August). Is Korres really sustainable? See how it scores. https://liveby.cc/brands/korres

Lumene. (2023). About us. https://uk.lumene.com/pages/about-us?country=GB

Lumene Group. (2025a). About Lumene. https://www.lumenegroup.com/lumene/

Lumene Group. (2025b). Sustainability. https://www.lumenegroup.com/sustainability/

Lumene Group. (2025c). History & heritage. https://www.lumenegroup.com/history-heritage

Lumene Group. (2025d, April 16). Lumene Group announces record net sales and global growth in 2024. https://www.lumenegroup.com/lumene-group-announces-record-net-sales-and-global-growth-in-2024/

Lumene Group. (2025e). Circular beauty. https://www.lumenegroup.com/circular-beauty/

Lumene Group. (2025f). Lumene Group is a certified B Corporation. https://www.lumenegroup.com/b-corporation/

Lumene Group. (2025g). Lumene strengthens global presence with major retail expansion in Europe. https://www.lumenegroup.com/lumene-strengthens-global-presence-with-major-retail-expansion-in-europe/

Lumene Group. (2025h). Lumene. https://www.lumenegroup.com/lumene/

Lumene Group. (n.d.-a). Strategic focuses 2023–2028: Sustainability, circularity, and consumer engagement. https://www.lumenegroup.com/strategic-focuses/

Lumene Oy. (2025). Gale Business: Insights. Gale, part of Cengage Group. https://go-gale-com.libproxy.tuni.fi/ps/i.do?p=GBIB&u=tampere&id=GALE%7CSMRDLK542656103&v

Lumene Group. (n.d.-c). Reports. https://www.lumenegroup.com/reports/

Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. The Lancet, 358(9280), 483–488. https://doi.org/10.1016/S0140-6736(01)05627-6

Manful, M. E., Ahmed, L., & Barry-Ryan, C. (2024). Cosmetic formulations from natural sources: Safety considerations and legislative frameworks in the European Union. Cosmetics, 11(3), 72. https://doi.org/10.3390/cosmetics11030072

Market Publishers. (2025). Korres S.A. Natural Products: Fundamental company report including financial, SWOT, competitors and industry analysis. https://pdf.marketpublishers.com/bac_swot/korres

Martins, A. M., Silva, A. T., & Marto, J. M. (2025). Advancing cosmetic sustainability: Upcycling for a circular product life cycle. Sustainability, 17(13), 5738. https://doi.org/10.3390/su17135738

Mondello, A., Salomone, R., & Mondello, G. (2024). Exploring circular economy in the cosmetic industry: Insights from a literature review. Environmental Impact Assessment Review, 105, 107443. Exploring circular economy in the cosmetic industry: Insights from a literature review - ScienceDirect

Newsroom. (2021, September 23). *How KORRES redefines sustainability*. EMEA Startups. How KORRES redefines sustainability

Persakis, A., Nikolopoulos, T., Negkakis, I. C., & Pavlopoulos, A. (2025). Greenwashing in marketing: A systematic literature review and bibliometric analysis. International Review on Public and Nonprofit Marketing. Advance online publication. https://doi.org/10.1007/s12208-025-00452-x

Potting, J., Hekkert, M., Worrell, E., & Hanemaaijer, A. (2017). Circular economy: Measuring innovation in the product chain. PBL Netherlands Environmental Assessment Agency. (PDF) Circular Economy: Measuring innovation in the product chain

Tina Müller: Our aim is to be a frontrunner. PwC Switzerland. https://www.pwc.ch/en/insights/ceo/2024/tina-mueller.html

TNH Staff. (2017, December 29). Korres Cosmetics sold to Morgan Stanley, Chinese partner. The National Herald. Korres Cosmetics Sold to Morgan Stanley, Chinese Partner - The National Herald

Rawes, G. (2016, October 20). Q&A: Weleda. Ethical Consumer. https://www.ethicalconsumer.org/health-beauty/qa-weleda

RocketReach. (n.d.). Korres S.A. company profile. https://rocketreach.co/korres-profile_b5c6c0d7f42e0cce

Socialinsider. (n.d.). Weleda social media benchmarks. https://www.socialinsider.io/social-media-benchmarks/germany/beauty-cosmetics/weleda

Sokos. (n.d.). Lumene Stay Luminous Matte Powder Refill täyttöpakkaus 10g. https://www.sokos.fi/tuote/110599649/lumene-stay-luminous-matte-powder-refill-tayttopakkaus-10g-110599649

Statista. (2025, August 13). Cosmetics market in Europe – statistics & facts. https://www.statista.com/topics/7382/cosmetics-market-in-europe/

Statista Research Department. (2025, August 27). Lumene Group sales by sales channel in 2024. https://www.statista.com/statistics/1620872/lumene-group-sales-by-sales-channel/

Stebbins, R. A. (2001). Exploratory Research in the Social Sciences, archive.org/details/exploratoryresea0000steb

Suomen Asiakastieto Oy. (2025). Lumene Oy – Taloustiedot. https://www.asiakastieto.fi/yritykset/fi/lumene-oy/23779408/taloustiedot

Sustainability Directory. (2026). What are the key greenwashing indicators? https://climate.sustainability-directory.com/question/what-are-the-key-greenwashing-indicators/

The Social Shepherd. (n.d.). Lumene case study. https://thesocialshepherd.com/case-studies/lumene

The Story of a Brand. (2021, August 2). Korres – Greek beauty is clean without compromise. https://www.thestoryofabrand.com/korres-greek-beauty-is-clean-without-compromise/

Trading Economics. (2025). European Union exports by country. https://tradingeconomics.com/european-union/exports-by-country

United Nations. (2024). Greenwashing – the deceptive tactics behind environmental claims. https://www.un.org/en/climatechange/science/climate-issues/greenwashing

United Nations Development Programme. (2025). Sustainable development goals. UNDP Pacific Office. Retrieved December 16, 2025, from https://www.undp.org/pacific/sustainable-development-goals

Valencia, M., Bocken, N., Loaiza, C., & De Jaeger, S. (2023). The social contribution of the circular economy. Journal of Cleaner Production, 408, 137082. https://doi.org/10.1016/j.jclepro.2023.137082

Velenturf, A. P. M., & Purnell, P. (2021). Principles for a sustainable circular economy. Sustainable Production and Consumption, 27, 1437–1457. https://doi.org/10.1016/j.spc.2021.02.018

Weissman, C. G. (2023, October 5). Korres co-founder Lena Korres on expanding a Greek skin-care company internationally. Modern Retail. Korres co-founder Lena Korres on expanding a Greek skin-care company internationally

Weleda AG. (2023). Annual management report 2023. https://www.weleda.de/binaries/content/assets/pdf/corporate/2023_weleda_annual_management_report.pdf

Weleda. (2024). Annual and sustainability report 2024. https://www.weleda.co.uk/content/files/pdfs/sustainability/weleda-annual-sustainability-report-2024.pdf

Weleda AG. (2025). Where to buy. https://www.weleda.com/footer/company/where-to-buy

Weleda. (n.d.-a). Acting sustainably is part of the Weleda identity. https://www.weleda.com/weleda/our-responsibility/sustainability

Weleda. (2025a) Weleda | Maailman vastuullisin ihonhoitoalan yritys. Retrieved December 14, 2025, from https://www.weleda.fi/

Weleda. (2025b). Skin Food face care. Weleda Finland. Retrieved December 16, 2025, from https://www.weleda.fi/campaigns/skin-food-face-care

Weleda. (2025c) Certifications. https://www.weleda.com/content/our-story/our-standards/certifications

Weleda. (2025). Weleda gardens. https://www.weleda.com.au/content/special/weleda-gardens

Weleda Group. (2018). Annual and sustainability report 2018. https://www.weleda.fr/binaries/content/assets/pdf/fr/rapport-annuel/rapport_anuel_weleda_group_2018_en.pdf

Weleda UK. (2025). Natural and organic skin care, baby & medicinal products. https://www.weleda.co.uk/

Weleda USA. (2025). Weleda USA [X profile]. Weleda USA (@Weleda) / X

Willows, M. (2024, August 17). Is B Corp greenwashing & how reliable is their certification? Sustainable Jungle. Is B Corp Greenwashing & How Reliable Is Their Certification?

World Business Council for Sustainable Development. (2023). The World Business Council for Sustainable Development (WBCSD)