



Trends Barometer:

Focus On

Sustainability

An exclusive report by

in-cosmetics[®]
global

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Foreword - Roziani Zulkifli, Exhibitions Director, in-cosmetics Global

“Over the last decade, trends such as conscious consumerism, clean and green beauty combined with consumer calls to eliminate microplastics, for example, have put an increased focus on the industry’s impact on our planet. The pandemic has further drawn a focus on the importance of sustainability, driving awareness, and the need to take action.

More than ever, consumers are looking to make purchasing decisions that have a minimal environmental, social, and economic impact. Sustainability has gone from a “nice-to-have” trend to a global imperative. In the cosmetics and personal care industry, it is impacting every stage of the product development process from concept and ingredient sourcing to formulations as well as packaging, distribution, and a product’s end-of-life properties.

In addition, today’s personal care and cosmetics brands are not only having to meet consumer expectations, but adapt to the understanding that natural, or green, doesn’t always mean sustainable. It is also under increasing pressure to adopt tangible and transparent sustainability initiatives – and on a global scale. Beyond the formulation of the product itself, the cosmetics and personal care industry has historically been recognised for

its heavy use of plastics in packaging materials, while consumers mindlessly used products without being aware of the ingredients and their impact on the environment.

We’ve now moved into a chapter where this is no longer the case. As well as a heightened awareness of the impact of their purchasing decisions, consumers pay greater attention to every element of a product – from the ingredients used, and the reusability of its packaging, to its end-of-life properties and impact on the planet.

The **in-cosmetics Global Trends Barometer** puts the spotlight on the future of sustainability in the cosmetics and personal care industry, bringing together insights from experts leading this exciting new chapter. Their insights and advice provide an overview of the challenges facing the industry, and why taking the next step to embrace a circular and sustainable future is paramount.”

Rozani Zulkifli Exhibitions Director at in-cosmetics Global.



Partner Introduction - Amarjit Sahota, Founder And President · Ecovia Intelligence

“When we think about the biggest sustainability issues the beauty industry is facing, first and foremost, the number one is climate change, and that’s the same for suppliers, manufacturers, brands, and consumers. The second challenge would be addressing biodiversity loss, and finally the third is moving away from single-use plastics.

When we think about the challenges companies are facing when they are addressing sustainability, this is a different matter. For one, many companies don’t know how to allocate their resources and what areas to focus on because sustainability is such a big topic. It doesn’t involve just climate change, it doesn’t involve just biodiversity, it involves sourcing of raw materials, energy and water usage, energy management, as well as social and economic issues. As a result, there is a risk of companies getting lost within this field, because they don’t know what to focus on – this is one of the biggest issues the beauty industry is currently up against.

To really embrace sustainability, we need to move away from just ‘sustaining’ and instead, focus on having a positive impact and embracing the regenerative approach. This requires the industry to reduce its carbon emissions and make a positive contribution to our planet and society. By moving from simply a focus on ‘being sustainable’ to ensuring every

decision has a positive impact, we can ensure we are all contributing to a brighter future.”

**Amarjit Sahota, Founder and President ·
Ecovia Intelligence**



Partner Introduction – AAK & Farmforce

“We all carry a responsibility for the planet we leave for future generations. And one of the biggest challenges will be for the industry to prioritize its efforts to lower its carbon footprint in a meaningful way for those communities at the beginning of the supply chain, often in the world’s poorest regions most impacted by climate change. Many of the sustainability challenges we face are complex and require broad mobilization at a regional and landscape level. At AAK, we map the risks in our supply chains and prioritize our initiatives to deliver the most relevant and significant impact. And we collaborate with industry and other stakeholder partners. It’s only together that we can drive change and make a positive difference.”

Lisette Townsend, Global Business Development and Marketing Director, AAK Personal Care, Farmforce

“Without accurate data and traceability, there cannot be sustainability. At Farmforce, we focus on the agri-commodities first mile, helping smallholder farmers focus on traceability as well as brands on compliance and sustainability. That’s been in our DNA since we were founded in 2012. Without collecting data from the first mile, it is impossible to prove that a product is fully traceable from earth to skin. It is a way for farmers, suppliers, and brands to provide evidence on their claims while ensuring certifiable, sustainable sourcing of ingredients. That is why we are proud to sponsor the new Sustainability Zone at in-cosmetics Global 2023”

Arnaud Dupuis, Head of Marketing, Farmforce





The State Of The Industry Today

The cosmetics and personal care industry has long had a bad reputation when it comes to sustainability; from its use of 120 billion units of plastic packaging per year¹ to the detrimental impact of its carbon emissions, water pollution and marine life endangerment. If you're a beauty or personal care brand, it may be difficult to understand where to start when looking to drive tangible change.

There is no denying that over the past few years, sustainability within the cosmetics and personal care industry has gained significant interest from consumers, the industry as well as academics. From concerns about cosmetics safety to the environmental impact of its manufacturing practices – the focus has intensified, helping to drive progress. Across the board, brands are waking up to the action required. **A representative from a leading British consumer packaged goods (CPG) brand**, agreed, stating: "We're all starting to think about it more and more and making some clear steps forward, especially with things like the EcoBeautyScore Consortium.

But if we look at other sectors like food and fashion, they've definitely been working and collaborating on this agenda for longer."

They added, "In beauty, we're dealing with small and very complex products. The data isn't as good as other industries so we don't have the ability yet to know what products we should be moving customers towards."

Meanwhile, **Anna Crovetto, Community Lead, The Upcycled Beauty Company** suggested that the pace of change was also causing a significant challenge for brands. "Personal care companies are faced with an escalating pressure to improve their environmental footprints, as quickly as possible, while still maintaining financial profits" , " explained **Crovetto**. "Doing what is right based on science, rather than what looks good in a short amount of time, is one of the greatest hurdles that we face."

Thankfully, notable green shoots are being recognised, as **Amarjit Sahota, Founder and President of Ecovia Intelligence**, explains: "The beauty and cosmetics industry is doing a fairly good job, and has taken the lead, driving forward new initiatives. Natura in Brazil reached carbon neutrality in 2007, while Neal's Yard Remedies in the UK was the first high-street

retailer to become carbon neutral in 2008. Obviously, we can do a lot more, but when you hear examples of companies like these, and more recently big players like Unilever, Estee Lauder, and Coty, all making pledges to reduce their carbon footprint, it is an encouraging sign that we're making progress."

All the experts interviewed agreed that there was much more work to be done. **Konstantinos Gardikis, Research And Development Director, APIVITA Natural Cosmetics**, said: "In my opinion, we're not doing enough but we have to consider the efforts of the cosmetic industry, which are substantial, compared to other industrial sectors."

He continued, "It's not very easy to make, let's say, radical changes in a very short time. The cosmetic industry is pretty good, but this is not enough. To meet the requirements of many companies or indeed country targets, we, as an industry, have a long way to go to be carbon neutral. And I don't believe that with the actions taken so far, we can reach these very optimistic targets."

Jo Chidley, Founder, Beauty Kitchen, echoed this sentiment, adding: "We know from current data that no industry is meeting its net zero targets, in fact many industries are creating more emissions.

"I don't see how any industry can say that they're doing enough. We're still highly reliant on the fossil fuel industry, and if we look at our industry in particular, fossil fuels drive ingredients as well as packaging, logistics, and the wider supply chain. There are green shoots as we transition to renewable energy and deglobalize our supply chains however this is a slow process. At the end of the day,





anything that's related to sustainability, circular economy and future-proofing your business is about regenerative resources. Last year, Earth Overshoot Day fell on 28 July, the day when our demand for ecological resources exceeded what the planet can regenerate, this year it will be on the 27 July which indicates we are still using resources faster than we can replenish them. This demonstrates the challenge - it's straight mathematics. You don't need to be a scientist to know you've got a certain amount of resources and if you're using too many of them and not replacing them, the bank will soon be empty."

She adds, "We are now having to think about how you either retrofit or disrupt every aspect of an industry. It's not just about the ingredients, or packaging and logistics. If you are only thinking about making your business profitable, then your business, your family life, the community you live in isn't future proofed. Ultimately, profit will drive behaviours within your business to make things as cheap as possible. Cheap is not regenerative."

Lisa Payne, Head of Beauty, Stylus, agreed: "In general, no industry should assume that it is doing enough to tackle climate change. There is always more work that can be done across the consumer goods spectrum. As beauty is a huge contributor to plastic waste packaging and landfill, it's something that all businesses need to put front and centre for the future of all NPD."

Jayn Sterland, Managing Director, Weleda UK, suggests that without collaboration, progress could be slower. She explained: "There are some green shoots, but they're coming from different areas of the industry. Unfortunately, we're not used to working together and partly that's because of the competitive nature of the industry. Through initiatives like the British Beauty Council's Sustainable Beauty Coalition, we've seen that people genuinely want to work together and share. If people stand on each other's shoulders, we will get there faster."

Opportunities For Change: Analysing The Product Lifecycle

While there are significant challenges facing the industry, these challenges also present ingredient suppliers and brands with an opportunity for change. Breaking down each step of the product lifecycle, industry experts offer their insights into the challenges, and how we can transform the product journey.

Concept / Marketing Brief

As the starting point for any new product, the marketing brief or concept takes a deep dive into the category it sits within as well as its colour, fragrance, texture, and packaging requirements. Here, a clear, and well-constructed brief establishes every minor detail of the intended product. Here, keeping sustainability in mind will help all involved stakeholders do their job – from product specifications, information for compliance specialists, as well as the spec for packaging designers and marketing professionals.

When it comes to new product launches, according to Harvard Business School, over 30,000 new products are launched every year, out of which approximately 80% fail to meet their objectives. Addressing the importance of understanding the market and the reasons for launching new products, **Jayn Sterland**, explains: “When we start the concept and marketing brief, the most important question

to ask is ‘Why? What has triggered this initiative? Is it because you have done a gap analysis?’ If the only way you can grow your brand is by launching a new product, then it’s about money. Driving the growth of your business is driving profitability. Unfortunately, this is the case for at least nine out of ten products and sadly, it’s probably more than that. This approach is a heart-breaking use of resources, just to get a very short-term result.”

With an increasingly saturated market, beauty and personal care brands must look beyond simply expanding product lines to stand out and meet consumer expectations with a product they will want to buy and repeatedly use. **Jayn** explained, “The beauty market in the western world is pretty much saturated. Brands have to address whether they are trying to fix a problem, trying to make money, or increase or maintain market share. There is still a need for new products. For example, baby care. There are some great products coming onto the market, which are microbiome friendly and respond to increasingly chronic conditions that are brought about by our lifestyle and the environment we live in. It demonstrates the importance of asking, ‘Why are you making a product?’ The world doesn’t need another new moisturiser or lipstick, but there are some products that we do need.”





Lisa Payne agrees and argues that sustainability needs to be at the forefront of every product development. “Whether it’s the product itself, or the packaging, brands need to have a conversation with the consumer, be honest about what they’re doing, what can be done and how they’re trying to be better. They need to address what they can do to make their products more sustainable. It could be working with waste ingredients instead of new ones or not relying on big ingredient crops to create the product, and instead looking at ways to synthesize natural and organic ingredients in the lab, through to the types of packaging used. For example, plastic packaging isn’t necessarily always the enemy.”

Formulation and Ingredient Sourcing

Over the last few years, there has been a growing fascination among consumers for natural and clean formulations, which promise benefits for the skin, but also the planet. However, consumers will not compromise on functionality, efficacy, or sensory appeal, all of which can pose challenges for formulators to meet expectations.

“As a business, the beauty industry uses a lot of natural resources,” explained **Lisa Payne**. “It is absolutely an area that we need to explore and

consider in a much more nuanced way. For example, we need to start looking more seriously at ingredient sourcing waste materials, how we can better use the resources that we currently have, and where a focus on bio-design and lab-based ingredients can be implemented.”

With new formulation techniques such as waterless formulas, upcycling and carbon neutrality, there is a growing call for responsible beauty. This requires brands to not only formulate with natural or naturally-derived raw materials but assess their manufacturing processes, supply chain and carbon footprint.

As **Jo Chidley** earlier identified, the beauty industry is still highly reliant on the fossil fuel industry. **Jayn Sterland** agreed, highlighting that “the cosmetics and personal care industry is a really fantastic, highly lucrative market for the fossil fuel industry. And, as a result, one thing we all have to work on is zero fossil fuels in our products.”

Putting this into context, the World Bio Market Insights, reveals a typical cosmetic product contains 10-20 ingredients. Using at least five cosmetic products a day means putting around 75-100 chemicals on your skin – the overwhelming majority being petroleum

derivatives. In fact, petro-based ingredients are widely used in beauty because they act as occlusive agents, meaning they lock moisture in the skin, and provide a protective barrier. They can be used as fillers, and texture enhancers, and are highly desirable thanks to their clear colour and long shelf-life.

While there are opportunities at every phase of the cosmetic product life cycle, one of the biggest areas for review is the selection of raw materials used. Speaking about the environmental impact of cosmetics products, **Amarjit Sahota** identified raw materials as one of the top two areas that companies are currently focusing on, and that offers the most potential for positive change. He explained: "The impact of cosmetic ingredients comes down to the raw materials and the formulation used. There has been lots of work done in terms of raw materials, where brands are moving from petroleum-based to green materials, using sustainable feedstock, ethically sourcing materials or turning to plant-based or agricultural alternatives.

"There is some great work being done by ingredient suppliers," explained **Jayn Sterland**. Among the examples cited, **Jayn** highlighted the work of ForestWise – a cosmetics products manufacturer that is dedicated to creating value from wild-harvested rainforest ingredients to sustain the rainforests of Borneo, conserve wildlife, generate employment and income for local inhabitants, and safeguard fresh water, fresh air and fertile soils.

Jayn continued, "Now, the owners are working with indigenous communities, collecting rainforest ingredients, and locally processing them in a responsible way."



Anna added, "We need investment in research to be able to create 100% zero-waste beauty with focus on large-scale deployment of sustainable production, investing in cleaner, low-carbon and material-efficient technologies, while curbing virgin material demands and drastically reducing material consumption."

Formulating with alternative ingredients, that are considered more sustainable, presents unique challenges. Particularly where the ingredients have not been thoroughly tested to understand performance, instability, or where they present aesthetic limitations.

Offering a unique perspective as a formulator, **Barbara Oliosio, a green chemist and Chief Executive Officer, The Green Chemist Consultancy**, spoke about some of the challenges here. "For me, as a formulator, the main challenge really is the data and the metrics related to raw materials," she explained. "From CO₂ emissions, water consumption or biodegradability. The latter of which is a tricky one before the testing protocols were developed for surfactants. Now, we have a range of cosmetic ingredients and new protocols that need to be developed to consider the different types of ingredients."

She added, "Unfortunately, there is also a higher price tag associated with these green ingredients, which tend to be bio-based. They take time to develop and pass through regulatory compliance. I think the majority look to make products cheaper and turn to other means such as cold processing to save electricity. Here, we really need to rethink the business model. Why is it that a product always has to be made cheaper?"

Konstantinos Gardikis highlights the logistical challenges of obtaining ingredients from around the world which often means that 90% of the cosmetic industries are importing raw materials. While suppliers may be based close to the manufacturing site, many of the source raw materials come from another continent. He explained, "There are huge quantities of raw materials being sent around the world to the cosmetic industry where they are used to manufacture cosmetic products before being sent once more to locations around the world to be sold to consumers. This is not a sustainable system. Of course, there is no easy solution."

The good news, according to research by Ecovia Intelligence, is that ethical sourcing has become the norm for natural ingredients in the cosmetic industry. Given the controversy around its sourcing and use, palm oil – a highly versatile crop used in many cosmetic products – has gained significant media coverage. However, sustainable farming of palm oil is the focus of many brands, including Unilever and L'Oréal, who have both committed to buying only sustainably sourced and deforestation-free palm oil.

These efforts are mirrored across the industry, with almost 30 operators joining the Action for Sustainable Derivatives, an industry-led collaboration that encourages responsible production and sourcing of palm oil derivatives. Its members, which include the likes of **Clariant, Croda, Evonik Industries, Gattefossé, Natura, Nikko Chemicals and Solvay**, work together to collectively tackle supply chain issues around palm oil and palm kernel oil derivatives, expanding into other derivative commodities.



Whether it's an emulsifier, preservative, moisturiser, or fragrance, taking responsibility and achieving full insight and visibility in the supply chain is paramount. As **Jayn Sterland**, explains: "Unfortunately, many brands are extremely good at conceptualising, creating and marketing a product, but know absolutely nothing about the formulation, and they rely on third-party manufacturing. When you question a brand about why they have used a particular type of glycerin or foaming agent, they can't answer because they don't actually make the product. This is incredibly dangerous. Brands need to take a great interest and responsibility in what's going into a formulation."

She continued, "Here, I can speak about Neal's Yard, Lush or Natura where we are deliberately using naturally based, 100% naturally sourced ingredients, be that organic, biodynamic, wild, cultivated. We know that we have a direct impact on soil regeneration and carbon capture of the soil. If you take the palm oil example, and the impact on deforestation and orangutans, it's absolutely right. But you can also get responsibly sourced palm oil. Another great example is Lavender Oil – you can't have synthetic Lavender Oil, but if you manage it organically and dynamically, it's doing good for the wildlife, bee populations and its locking carbon back in the soil.

"When you take in these examples, which one, as a consumer of that product, would you want? You know exactly which one you'd choose. The only reason you would choose a synthetically derived lavender oil is because of the price. It goes back to the very first point about why you're making a product. I don't understand why the beauty industry can't source raw materials and ingredients through regenerative agriculture, through fair

trade partnerships with small cooperatives of farmers. If Lush, Neal's Yard and Natura can do it, then there is no excuse."

Packaging

According to the British Beauty Council, 95% of all cosmetic packaging is thrown away, making it one of the biggest sustainability challenges facing the beauty industryⁱⁱⁱ. As the first point of contact with a brand, shelf appeal is an important feature for companies looking to stand out from the competition. However, excessive volumes of packaging are increasingly a turn-off for consumers who are looking to reduce their use of single-use plastics.

Further British Beauty Council research highlights that only 14% of packaging makes it to a recycling plant, only 9% is recycled and the rest is sent directly to landfill^{iv}. Unfortunately, the cosmetics industry clearly has a packaging problem, but many brands are already making the commitment to change. Take Estee Lauder, for example, it continues to "innovate its plastic packaging, incorporating more sustainable concepts into its designs in an effort to reduce the potential environmental impacts of its packaging across its lifecycle". It has set a goal that by 2025, 75-100% of its packaging will be recyclable, refillable, reusable, recycled or recoverable^v.

Speaking about the packaging problem, **Amarjit Sahota** explained: "Not enough has been done in terms of packaging, so it would be good to see more positive change in this area, specifically, moving away from single-use plastics. It offers the most opportunity because companies are all grappling with the same issue. How do they move away from single-use plastics? How can we use greener materials? How can we move towards recyclables, refillables, etc? I believe the most potential for future change sits within



the packaging sector and specifically the end-of-life properties of cosmetic and personal care products.”

Touching upon the ‘Refill Revolution,’ **Lisa Payne** added: “There are challenges surrounding refills. Sanitisation, for example, or loyalty, because consumers love to try lots of different products and it only works if your consumer is dedicated to buying your cream, or whatever product it is to refill. I believe in the next 5-10 years; we’re going to see refills as an option for almost every single beauty product that is offered on the market. Brands need to give the consumer the ability to refill a product or do something with the packaging that isn’t just a simple case of chucking it in the bin. There is still more to be done to see how refills are a commercial win for the brand, the consumer and the environment.”

Meanwhile, many brands are switching to using recycled materials within their brand packaging, avoiding virgin materials. **Anna Crovetto**, The Upcycled Beauty Company explains: “Many personal care brands now claim that their packaging is made from recycled materials and/or can be recycled. However, a recent investigation made by Greenpeace highlighted only 5 to 6% of plastics in the USA were recycled in 2021^{vi}. Packaging is an area where change is most visible within the industry, and developments focused on using fewer materials (thinner walls, smaller caps/lids, larger packs that last longer, etc.), or offering refillable solutions, or the use of bio-contributing materials, may be key to reducing the industry’s waste footprint. This can be considered for the packaging of finished goods as well as raw materials, analytical equipment, etc. Glass, aluminium and paper materials also have issues when considering their Life Cycle Analysis, so a less-is-more approach is needed throughout the supply chain.”



She continues, “Consumer education is also a hurdle that the industry must overcome. Consumers can be confused when it comes to separating and sorting cosmetic packaging for recycling or they may not have access to recycling facilities.”

Jo Chidley, adds, “As humans, we will always need packaging. It doesn’t matter if you are the most zero-waste person, you will still need packaging. So, it’s not about eliminating it, but how we achieve a balance through managing resources more efficiently, this is about reuse & repair and saying no to single use.”

She references the fragrance industry as an example, where extravagant packaging is often used to elicit luxury and indulgence and evokes the feeling of a particular season or colour to enhance perception and association. However, what about its end of life? Increasingly, refillable packaging options are flourishing in the luxury perfume and cosmetics market – where a focus on functionality, practicality, safety, and aesthetics are converging.

Thankfully, this progress is not just being seen in the fragrance sector. Hermes, Dior, Chanel, and Lancôme all offer refillable lipsticks; Myro Refillables, Dove, Secret and Degree produce refillable deodorants; while a search for ‘refillable’ products on the popular e-commerce site, Cult Beauty, offers 250 products spanning skincare, make-up, hair care, fragrance, body,

and wellbeing from brands such as Charlotte Tilbury, Christian Louboutin, Elemis, L’Occitane, Shiseido, and more.

Commenting on the innovations in reusable packaging, **Jayn Sterland** said: “There is a really lovely skincare brand called Subtract that is coming out of the UK. They are making solid products in beautiful bamboo boxes that can be refilled. There are also some exciting innovations in deodorants. Dove began with a beautiful stainless steel casing for its deodorant. Thinking about the circular economy, it made me realise you can have beauty in the product you use every day, and you don’t throw it away.”

As brands and designers look to reimagine packaging for the new conscious-consumer age, Sustainable Packaging Guidelines^{vii}, like those published by Credo will help brands by creating an industry standard for all to follow. The clean beauty retailer requires its 130+ brand partners to meet specific standards to reduce the use of single-use items, virgin plastic and non-recyclable materials. It provides brands with best practice examples – everything from packaging design to end-of-life management while connecting them with preferred packaging suppliers to reduce barriers to implementation and spur innovation. The next step? Inspiring better materials, ensuring petroleum-derived packaging must contain at least 50% recycled

content, or be replaced by a more sustainable material. And, with innovations in packaging materials, such as mycelium – a high performing, cost competitive and insulating protective packaging medium, brands have a multitude of options to choose from.

While there are a multitude of choices available, **Jayn Sterland** suggests that here, standardisation is also key. She explained, “We have to have a global solution. If there is a really fantastic solution for plastic packaging – P&G, Unilever, L’Oréal – everybody has to use it. We can’t cope with another 200 different solutions because it’s why we’re in this mess in the first place.”

She continued, “We also need a balance in the rules of engagement – the Plastics Tax in the UK is a good example of that. But, we also need businesses to take more responsibility. Some companies are genuinely very responsible and are looking very hard for solutions. There are others that are looking because they have to, but they are not looking very hard and there is still a huge amount of greenwashing. Thankfully, we have seen some green shoots.”

Product Validation and Testing

While the sustainability movement has had widespread effects on the cosmetics and personal care industry, there is still some uncertainty among consumers and the validity of product claims. As **Anna Crovetto**, The Upcycled Beauty Company explains: “A recent report from Provenance has shown that 79% of beauty shoppers have doubts about the trustworthiness of sustainability claims^{viii}, highlighting the issues of greenwashing. Greenwashing makes it near impossible for beauty consumers to identify authentic sustainability actions.”

She continues, “As there are little to no legal definitions of sustainability within the personal care industry, this is an area where vague statements and claims can be made with minimal to no legal or reputational consequence^{ix}.”

By creating standards within the personal care and cosmetics industry, she believes that “legal definitions and standards within personal care for terms like natural, sustainable, biodegradable, compostable, etc. would help to hold companies accountable and eliminate greenwashing claims.”

This is an area where all the experts interviewed agreed. Product validation and certification schemes, such as Upcycled Certified, are helping consumers navigate sustainable claims, and growing the demand for goods that have less impact on the planet.

Jayn Sterland added: “It is no longer good enough to say, yes we’re vegan, or we’re cruelty-free. We have to be independently certified. However, one of the big drawbacks with that is if you’re an international brand, that means you need a certification for Australia, America, Asia, etc. There is no true internationally recognised certification, but independent certification is utterly essential.”

Barbara Oliosio suggests collaboration is the solution: “Partnerships and collaboration are key to validate end-of-life data. How can we prove biodegradability or the true environmental impact of UV filters and other cosmetic ingredients in the sea?”

She continues, “Transparency here is key. How can we be transparent about these eco and carbon claims? The EcoBeautyScore Consortium is an example of how we can take that next

step. They are creating quite a complex system where you enter metrics for raw materials, and manufacturing and all the products can go through the same EcoBeautyScore software to be measured in the same way.”

Industry accreditation schemes, such as COSMOS or the EcoBeautyScore Consortium, provide a means for suppliers to prove that their products are sustainable and meet certain product claims. For example, the COSMOS APPROVED signature defines the criteria that companies must meet to ensure consumers that their products are genuine organic or natural cosmetic produced to the highest feasible sustainability practices.

Meanwhile, the EcoBeautyScore Consortium aims to develop a common environmental impact scoring system for cosmetic products, thus enabling consumers to make more informed purchasing decisions. More than 60 cosmetic industry stakeholders have joined the consortium to date, including Estee Lauder, Kering, Personal Care Products Council, Coty, Sisley, Hermes, Natura, L’Oréal, Henkel, International Fragrance Association, Clarins, Oriflame, Johnson & Johnson, and Boots^x. The EcoBeautyScore footprinting and scoring prototype is targeted for the end of 2023 and will be verified by independent parties.

Speaking about the EcoBeautyScore, **Lisa Payne** said the consortium was a brilliant idea. She elaborated: “The consortium has already got lots of brands on boards and the reality is that the industry needs to be regulated by

something. There’s still no clear regulation around what ‘clean’ is. At the moment, it is up to the brand to decide what clean is, and what it’s not. Then it’s down to whether the consumer agrees with it or not. If there is a way for brands to get together and create a standardised idea of what this is, it would make it so much easier for people to shop clean.”

She continued, “Even if you’re going to have brands that aren’t signed up, are using different terms or marketing themselves in whatever way they want, the more consumers understand the parameters that are created and developed by the EcoBeautyScore Consortium, the more they’ll be able to identify where other brands are not adhering to those parameters. It will be easier to understand the full spectrum of sustainability around a beauty product, not just the packaging and not just the biodegradability of it.”

Standardisation in testing is one of the measures that all the experts interviewed agreed was required in order to create consistency. As **Barbara** adds: “The EcoBeautyScore is a very interesting initiative where all the products are evaluated in the same way, enabling them to be compared more easily. I wonder if those brands that are claiming carbon negative, once put through the same system, what would they end up with? It is very easy for brands to massage the data, and the use of greenwashing is what we need to remove. Consumers want brands to be more transparent, they want honesty and legitimate products that answer those challenges.”





Barbara concludes: "I can only imagine how confusing it is for consumers – standardisation here is key. The collaboration between brands, manufacturers and suppliers, bringing them together to harmonize their approach and agree on a common system for environmental impact assessment will help provide clarity for all stakeholders."

Manufacturing

Once a product brief has been approved, a formulation agreed and raw materials selected, a critical step in any product journey is its manufacturing.

Analysis highlights that one-fifth of the world's carbon emissions come from the manufacturing and production sectors – consuming 54% of the world's energy sources^{xii}. As a result, there is an urgent need for manufacturing – in any sector – to address the challenges of decarbonisation. Cosmetic manufacturers are striving to embrace green manufacturing processes and reduce resources and waste. It is widely recognised that cutting carbon emissions, specifically in manufacturing, will be essential to meet climate goals.

Opening the dialogue throughout the supply chain is also critical for finding new ways to embrace sustainable practices, as **Jayn Sterland** explains: "Until we have the manufacturers at the table, we can't begin to have productive conversations about change. A lot of manufacturing is offshore, in China or further afield. Very, very little beauty manufacturing is in the UK. If it's being manufactured in China, for example, there will be issues around animal testing, ingredients used, etc. This also creates further complications for shipping and transport."

The term greenwashing is widely accepted as false claims of progress in the fight against global warming and climate change. It was recently condemned by the United Nations Secretary-General, **Antonio Guterres**, who stressed that there would be zero tolerance for greenwashing, warning that the world cannot afford any more "fake movers or late movers". He noted that commitments to net zero were 'worth zero' without the plans, policies, and actions to back it up.

The comments follow the release of a UN report, published during the COP27 climate in Egypt which aims to draw a "red line around greenwashing". It calls on CEOs, businesses, and world leaders to commit to net zero, ensuring that pledges are not a 'toxic cover-up' while offering detailed and concrete plans with accountable and transparent promises^{xi}.

In the recently published The Upcycled Beauty Company's Zero Waste Beauty Report, it was revealed that over one-third of consumers rank skincare, haircare and make-up manufacturers as 'most responsible' for protecting the environment^{xii}. It highlights how energy, water and waste are three key elements to consider when it comes to greener manufacturing while offering recommendations on how manufacturers can reduce carbon emissions in their operations. This spans everything from switching to renewable forms of energy such as solar or wind; implementing energy conservation measures; to embracing waterless beauty; and researching the value in by-products and reusing waste materials.

"Manufacturing processes that don't use a lot of water to create a product are really intriguing," claims **Lisa Payne**. "Waterless processing is a really interesting concept that we've seen growing over the last five years. It started as something that was quite a niche, but now, there's a lot of sophistication around formulas and brands are celebrating the fact that they're not using water in the creation of their product."

To achieve a more sustainable manufacturing process, manufacturers are required to review their current practices, identify risks, and keep abreast of state-of-the-art technologies to enhance manufacturing processes. New techniques embraced by manufacturers include cold emulsification, which reduces both the energy demand and manufacturing time required. With conventional methods for processing accounting for over 90% of the total energy cost – this presents a significant opportunity to formulate creams or lotions that contain both oil-miscible and water-soluble components without the high energy cost.

Far from a new technique, cold processing is soaring in popularity as brands seek new ways to be more sustainable. Cosmetic ingredient suppliers, such as Mibelle Biochemistry are increasingly demonstrating how their ingredients can be processed using these methods. For example, its NovoRetin™ plant-based retinol alternative can be cold processed very well, with no influence on the stability of the encapsulation.

Elsewhere, brands are digitalising manufacturing to track energy consumption, while the increased use of solar panels and water recycling is all increasing in a bid to become more sustainable. These efforts come as an increasing number of companies strive to reach their sustainability targets. Among the examples of best practice is P&G Beauty's manufacturing site in Taicang, close to Shanghai, China. It manufactures a range of its haircare brands including Head & Shoulders, Pantene, and Vidal Sassoon. When it was opened in 2010, it was the first P&G site to utilise 100% renewable wind electricity, achieve the lowest water discharge within the P&G Beauty Care Business and be the first site in China to qualify as sending zero manufacturing waste to landfill^{xiv}.

Recognising efforts across the industry, organisations like the non-profit Climate Neutral or B Corp are working with brands to measure and certify sustainability activities like carbon neutrality. The latter recognises brands that balance profits with purpose, meeting the highest standards of verified social and environmental performance. This includes Beauty Kitchen, the first beauty brand in the UK to be a certified B corporation and Rituals, which joins the likes of The Body Shop, Aesop, Aromatherapy Associations and Typology which have all been granted B-Corp status.

Speaking about the success of these brands, **Jayn Sterland**, added: "The work Beauty Kitchen is doing through B Corp is really fantastic. They have the highest B Corp score for all beauty companies globally and that's because the work they do is exemplary. They want to help our industry change. Likewise, Lush was incredibly brave with their no-packaging ranges, and no-pack stores, but they did it. And they've continued to get better and better and better. The thing these companies have in common is that they didn't need to it, but they did it anyway for all the right reasons."

While big brands like P&G, Unilever, and Estee Lauder have the capital to plan and invest in technologies, like solar panels, to help make these transformations, there are opportunities for independent brands to embrace green manufacturing. Many indie brands have been recognised for using carbon offset schemes to help reabsorb greenhouse gases. For example, as of March 2021, Ethique officially became climate-positive, and carbon negative, offsetting 120% of its carbon emissions. Its carbon footprint is measured every year, which enables the company to work with various organisations, such as Ecologi, to offset its footprint^{xv}.

Meanwhile, natural skincare specialist, Loopeco, assesses its entire supply chain and the life cycle of a single product – from raw material production to manufacturing and shipment to ensure it is carbon neutral and sustainable. Among the benefits it has reaped through this process, it has saved 50,360 litres of water, 0.44 tonnes of plastic waste, 19.51 GJ of energy, resulting in 3.04 tonnes of CO2 equivalent saved per year.

Committing to carbon neutrality, embracing carbon offsetting initiatives and driving outreach programmes to support local communities is helping to transform the industry's performance and perception among consumers.

Shipping/Transportation

Cosmetic companies face some unique challenges when it comes to the shipping and transportation of their products. There are a number of product offerings – colours, shades, liquids, and solids as well as sensitive ingredients that must be stored and transported with particular care to avoid adverse effects from temperatures, humidity and light.

The popularity of cosmetic brands around the world mean global distribution channels are required, while many products contain exclusive ingredients found only in certain regions of the world – adding an additional layer of complexity to the shipping and transportation required. How do brands create an efficient supply chain that also reduces the carbon footprint of transporting ingredients and finished goods?

For one, redesigning their products to make them lighter, smaller, and less expensive to transport is just one way to reduce emissions. Taking up less space requires fewer vehicles while investment in greener fuels and energy sources for transport vehicles helps further reduce this impact. Companies like GoodShipping – the world's first carbon insetting service – is working with brands to facilitate zero-carbon shipments. The sustainable cargo initiative recently partnered with 18 companies, including Lush to promote the use of marine biofuel on a number of transits between set locations in Europe – an initiative that is set to achieve a reduction of 4,000 tonnes of CO2.



Meanwhile, other brands are turning to initiatives like Cloverly to offer customers a carbon-neutral shipping alternative. However, this comes at a cost to the customer who will be presented with an option to pay a fraction more to offset the carbon emissions from shipping. It requires companies like Cloverly to use the 'green energy credit purchases' to balance out the negative environmental impact through the investment in positive offset projects.

For brands that have the capabilities, localised manufacturing is also becoming more popular, meaning products and ingredients are sourced and manufactured in proximity providing a means to reduce the carbon footprint associated with ingredient and product distribution.

The need for an efficient supply chain not only provides brands with a competitive advantage but the ability to manage the increasing challenges inherent to supply and demand. More than ever, consumers want full transparency of the journey of their product – and therefore the ingredients used to manufacture it. Here, the ability to track and trace ingredients and finished products not only provides the full transparency of a

product's origins, but in a rapidly evolving landscape of tougher regulations, supply chain uncertainty and increased consumer expectations, it is fundamental for success.

End of Life

As brands strive to improve the lifecycle environmental footprint of their products, one of the most critical stages for consideration is what happens once a product is used, and how it interacts with the environment when it is rinsed off or discarded.

"Not contributing to landfill waste is one of the biggest challenges facing the industry", explained **Lisa Payne**. "Whether it's better using our waste resources, or creating less waste, that's the biggest challenge. There is also an increasing focus on what happens when the product goes down the drain. Is it biodegradable? Is it harming marine ecosystems? It is important because the narrative of the product story currently ends after someone's used the product and washed it out. They don't necessarily consider what's going on and the impact of putting lots of synthetics down the drain."

Formulators need to consider the end of life of the product itself – is it safe to be disposed of or does it pose a risk to marine ecosystems and the world’s oceans? Rinse-off toxins that are released into the aquatic environment, are a significant concern especially when shampoos, shower gels and face washes can be found in every household. As consumers step into the shower, the products used are washed down the drain. Wastewater treatments do not break down all the ingredients in beauty products, meaning some of them will make their way to marine environments.

Furthermore, when it comes to reducing waste in product packaging, there are two different approaches rising in popularity among brands – design for recycling and design for reuse. These approaches work concurrently or separately but deliver distinctly different options for consumers, whilst requiring different considerations in the design stage.

Designing for recycling requires brands to consider the materials they use and their recyclability. How will they be disposed of, and how can they be reprocessed and used elsewhere? The critical element here is reducing the amount of waste sent to landfill. It cuts down waste and ensures useful resources can be converted into new products. Meanwhile, designing for reuse is about repurposing items, and products for extended use. Both approaches offer a valid alternative to straightforward disposal.

Thankfully, greater awareness is enabling brands – and consumers – to make an informed choice on the products they purchase and consume.



What Does Sustainability

Mean To You?

“Sustainability for a cosmetic brand means creating products and services that really deliver the triple bottom line, great value for money, lower impact on the environment and positive impact on society.”

Spokesperson from a leading British CPG

“Sustainability is the sum of what the actions by humanity do, and what we need to do to hand over the planet and societal systems to future generations without compromising their future. We are at the most critical ever point because we must face the depletion of the planet’s resources due to overconsumption – the depletion of energy and raw materials – in combination with the radical increase of the human population. It’s actually the one and only time in history where sustainability has real meaning and where our generations will be judged by future generations.”

Konstantinos Gardikis, Research and Development Director, APIVITA Natural Cosmetics

“I think sustainability has to be an honest answer to the question: ‘What’s your impact on the planet?’ For me, it has to be about doing more good than harm and really thinking about being honest about every single part of the journey and being transparent. Being responsible is just being honest.”

Jayn Sterland, Managing Director, Weleda UK

“We need to move away from just sustaining but to have a positive impact, because if we’re just sustaining the current status quo, then we’re just going to have more problems like climate change, single use plastics, etc. The way forward is to have a regenerative approach or an approach whereby the industry is having a positive impact by reducing more carbon emissions from the air, by having a better social impact in terms of communities and ethical sourcing of raw materials. The way forward that I would like to see is fewer reducing impacts and a regenerative approach whereby you have a positive contribution to the planet and to societies. That’s how I would like the cosmetics industry to move forward.”

Amarjit Sahota, Founder and President · Ecovia Intelligence

“Sustainability is wellbeing for people and wellbeing for the planet. In a nutshell, that’s what it is.”

Barbara Oliosio, a green chemist and Chief Executive Officer, The Green Chemist Consultancy





in-cosmetics Global:

Introducing The New Sustainability Zone

Designed to support attendees' efforts to be more sustainable, in-cosmetics Global will showcase truly sustainable products, services, and initiatives.

Since 2017, the **Sustainability Corner** area at the event has grown in popularity, with an increasing number of attendees looking for suitable solutions. But it's not just eco-friendly ingredients and ethical sourcing that make a company or product sustainable.

That's why the new **Sustainability Zone** has been introduced to expand the show's sustainability offering, providing more information and opportunities to attendees on how to become more sustainable. The Zone will consist of the existing sustainability display and theatre (sponsored by AAK) and the new sustainability pavilion (sponsored by Farmforce). in-cosmeticsGlobal's sustainability area development is supported by **The Green Chemist Consultancy** and presented in partnership with **Ecovia Intelligence**.

Find out more about the exhibitors joining this year's Sustainability Zone and discover the next steps to transforming your business at this year's in-cosmetics Global 2023.

Farmforce – Q103

Farmforce is at the forefront of developing pioneering software solutions for those in the production and supply of ingredients, seeds, oils, and other agri-commodities. Farmforce provides simple and robust solutions to digitally trace and manage complex multi-country supply chains for the personal care, beauty, and cosmetic industry. With Farmforce, smallholder farmers and MNCs alike can manage first mile production data, agricultural inputs, farmer data (including living wage), and more, thus ensuring first mile product traceability, visibility, and measurement of impact to the farmer producers. As consumer pressure builds for brands to acknowledge every step of their supply chain, compliance and sustainability begin with the first mile.

www.farmforce.com

AAK – C50

AAK is recognised as one of the world's leading suppliers of sustainably sourced, technologically advanced plant-based ingredients for the beauty and personal care industry. Distinct from synthetic, animal or fossil-based raw materials, its plant-based ingredients are primarily used for skin care, but are also suitable for hair care, colour cosmetics, personal care products and specialist ranges, such as baby care. It is committed to delivering on sustainability and enabling the development of high-performance beauty products. It serves all customer categories, from local niche start-ups to multinational brand leaders.

www.aakpersonalcare.com

Faca Packaging – P96

Faca Packaging, with a history of over 50 years, is the worldwide leader in the design and production of high-end cosmetic packaging and exclusive designs for cosmetic products. The key to its success is a big investment in research and development with over 300 active patents.

www.facapackaging.com

Ecovia Intelligence – Q91

Established in 2001, our mission is to encourage sustainable development in the food, cosmetic & related industries. Our services portfolio includes market research, business & technical consulting, seminars & workshops, and sustainability summits. Sectors that we cover in the cosmetics industry include natural ingredients, green raw materials, natural & organic personal care products, sustainable deodorants, eco-labelled products, etc.

www.ecoviaint.com

Molpack S.L – Q93

Molpack specialises in the creation, development, and customised production of standard and custom packaging for the skin care, make up and perfumery sectors. Founded in 1997 by Andreu Monné, with more than 40 years of experience in Packaging, MOLPACK has established itself as a leading and innovative company, with a professional team capable of developing any container, adapting to the needs of its customers.

www.molpack.com/en/

Istituto di Certificazione Etica e Ambientale (ICEA) – Q105

ICEA is a non-profit consortium formed of bodies, associations, companies, and civil society organizations. For more than 20 years, it has contributed to the dialogue and generated the thrust and development of organic agriculture in the Italian territory even before it was regulated.

ICEA controls and certifies several thousand companies that carry out their business with respect for people and the environment, protecting the dignity of workers and the rights of consumers.

www.icea.bio/en/certifications/

Summary

While all the experts interviewed acknowledge the green shoots appearing, helping propel the industry in a new chapter of sustainable and responsible beauty, all agree there is more work to be done.

Speaking about the need to challenge and shift mindset, **Jayn Sterland**, said: "One of the biggest hurdles facing the industry is a mindset change. We have to completely shift our way of thinking to put the biodiversity of life in the centre of the decision-making process."

Anna Crovetto, adds: "The personal care industry needs to do more to help stop the harmful effects of climate change at every point in the supply chain. This includes ingredient sourcing, green production methods, reducing water use, reducing or

eliminating packaging, and considering the effects of chemicals and materials on the environment after their foreseeable life in use. "Each stage of the lifecycle can be significantly improved by focusing on reducing the consumption of new resources; identifying waste as a valuable resource; and supporting the transition from a linear take-make-dispose economy to a circular one^{xvi}. By identifying and reducing waste across all areas of the beauty supply chain – either through internal audits or with the help of blockchain technologies - we can ultimately reduce our carbon footprint and preserve our precious resources."

Amarjit Sahota added: "Interestingly, when companies look at the lifestyle stages, they don't tend to look at one stage in isolation. While the lifecycle stages offer a very logical



sequence, what we've seen in the last couple of years is innovation where companies are redesigning their products for their economy. And, when they do that, they are not just looking at the raw materials, production or the processes used – they are looking at the whole creation of the product. For example, take sustainable deodorants.”

Amarjit goes on to highlight the brands that “were embracing sustainability initiatives long before they become fashionable.” He names brands such as Weleda and Neals Yard Remedies as examples of brands that have been pioneering sustainability initiatives. While there are many examples of best practice in brands that are putting sustainability at the heart of their businesses, there are also significant strides being made through collaboration.

As **Jo Chidley**, explains: “Whether it’s the Sustainability Beauty Coalition, the BCorp Beauty Coalition or the EcoBeautyScore Consortium, the industry is gathering to try and solve some of these big problems, but it’s very much in its infancy. Here, third-party certifications can play a much stronger role. There are definite strides by bringing voices together to question, how can we tackle plastic waste, how do we ensure packaging security, etc.”

Barbara Oliosio agreed: “Putting collaboration and partnerships at the top of the agenda to act more strategically as an industry will work to reduce waste and improve testing. Now, it’s still competitive, not collaborative, and that means we’re not as we’re not doing as much as we could.”



Links

- i. <https://www.forbes.com/sites/lucysherriff/2019/09/17/the-minimalist-beauty-company-tackling-the-industrys-waste-problem/?sh=177abedd4326>
- ii. https://therecursive.com/how-to-avoid-greenwashing-business-owners-communicators/?utm_content=229199949&utm_medium=social&utm_source=linkedin&hss_channel=lcp-71195805
- iii. <https://britishbeautycouncil.com/ppbg/packaging/>
- iv. <https://britishbeautycouncil.com/ppbg/packaging/>
- v. <https://www.elcompanies.com/en/our-commitments/viewpoints/plastics>
- vi. <https://www.greenpeace.org/usa/reports/circular-claims-fall-flat-again/>
- vii. <https://credobeauty.com/pages/packaging>
- viii. <https://info.provenance.org/skin-deep-beauty>
- ix. https://therecursive.com/how-to-avoid-greenwashing-business-owners-communicators/?utm_content=229199949&utm_medium=social&utm_source=linkedin&hss_channel=lcp-71195805
- x. <https://www.ecobeautyscore.com/>
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- xiv. <https://www.wbcds.org/Programs/Food-and-Nature/Water/Resources/Case-studies/Water-reduction-and-reuse-in-a-P-G-Beauty-Care-manufacturing-facility>
- xv. <https://ethique.co.uk/pages/climate-positive>
- xvi. <https://www.upcycledbeauty.com/zero-waste-beauty-report>