

COSMETICS
TRENDS
TECHNOLOGY

COSSMA



BODY CARE

Possibilities of
neurocosmetics

p 36

PACKAGING

Sustainability
potential of aluminium

p 52

“UPCYCLING CARBON FOR PERFUMES”

Thierry Moliere,
SVP R&D, Coty

p 58

BEAUTY CAN DO BETTER

Sustainability | While the past year has tested the beauty industry, the push for sustainable solutions continues to drive market innovation. Sasha Calder shares how the beauty industry is bouncing back to create more sustainable products and resilient communities in the face of Covid-19.



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The beauty industry has responded to the impacts of Covid-19 by prioritising sustainability — reminding consumers and companies that moving forward to create new products, markets and systems requires purpose and science-driven approaches that place sustainability and justice at the centre of solutions.

With conversations around human health, and the future of our communities and planet front of mind, the beauty industry has had to face some ugly truths. Arising from these conversations is a sharper understanding of where the beauty industry is to supply chain risks and disruptions, human impact on product sourcing and how ingredients travel to market.

Thinking about sustainability

As a purpose and science-driven sustainable biotechnology company, Genomatica was curious to see if and how the pandemic was impacting people's perception of and purchasing behaviour around sustainability. In mid-2020, the company kicked off a **survey of 2,000 U.S. adults** to get a snapshot of how the Covid-19 pandemic was impacting their attitudes towards sustainability in their day-to-day lives. The survey results revealed that **nearly half (46%) of respondents said they were thinking more about sustainability than they were prior to the Covid-19 pandemic**¹.

In a **similar survey** conducted by BCG, featuring **more than 3,000 people across eight countries, 70% of survey participants said they were more aware now than before Covid-19**, that human activity threatens the climate and that degradation of the environment, in turn, threatens humans².

The Covid-19 pandemic has continued to expose how human health is dependent on planetary health and both the fragility and resilience of our ever-changing climates. Climate

action is increasingly critical to ensure we're working towards creating just solutions to promote a habitable future planet.

As local and international policy calls for climate action, communities are exploring how implementing resilient, sustainable projects will be critical for rebuilding our society.

Looking forward, we're keeping our eyes on **current and emerging sustainable trends** to watch in the beauty industry:

Trend 1: Closing the loop with upcycled ingredients

With most of the beauty and personal care ingredients coming from agricultural supply chains, ingredient suppliers are increasingly feeling the constraints and impacts of natural disasters, fuelled by the climate crises, impacting both the availability and quality of ingredients. In its annual Global Risks Report 2021, The World Economic Forum found that out of the five most likely risk events, four of them are climate-related³.

If businesses are to build more shock-proof models, they must think strategically about where their ingredients are coming from, who is providing them and why they are in their products. With rising demand for natural ingredients, and growing interest in sustainability and the supply chain disruptions of 2020, ingredient innovators are looking to other industries to future-proof the "naturals" category and find new ways to utilise waste.

Agricultural and food by-products, which would otherwise be thrown away, are rich sources of raw materials that can be useful in the personal care sector — from novel emulsifiers to antioxidant actives. While these by-products have a long history of being used in the development of cosmetic ingredients, they are just now gaining popularity. ▶



Sustainability and availability must also be kept in mind when choosing natural ingredients for personal care products.

For example, **lumber industry** waste has been reimagined to deliver Bio-ForeXtra’s extracts, an innovative emulsifier by Renmatix and a lumber waste derived botulin by Terlys. In the **food space**, Givaudan recently launched an argan oil alternative made from used coffee grounds, and Cargill Beauty produced pectin-based texturisers sourced from lemon peel waste.

Trend 2: Biotech is delivering products with reduced environmental impacts

With growing awareness of the role played by the fossil fuel industry in both accelerating and failing to

disclose their impact on the climate crisis, **consumers are increasingly looking to purchase products made from renewable materials** versus petroleum-derived products. Renewable feedstocks are replacing fossil-fuel feedstocks, meaning the early stages of a product’s lifecycle come from plants instead of socially and environmentally harmful fossil fuels.

Today we are more aware of the impacts of ingredients on biodiversity, land and water use, and human rights abuses in beauty ingredient value chains. **In a recent survey by Quantis, 76% of global consumers want sustainable materials made from**

renewable sources⁴. Accordingly, brands are raising the standards for supply chains and shifting trust towards science-driven performance materials and biotechnology processes.

There has been an industry effort to produce functional ingredients with reduced environmental impact via biotech. In addition to offering environmental impact reductions, now we can also be precise with innovation to produce optimised, high-performing ingredients.

Examples of this trend include Genomatica’s **natural butylene glycol**. According to the company’s independent, comprehensive LCA, this natural butylene glycol can reduce greenhouse gas emissions by about 51% compared to conventional production. With butylene glycol being such a popular ingredient, and conventionally derived from petrochemicals, Genomatica’s natural butylene glycol makes it easier for personal care companies to reach for performance-driven alternative ingredients with a lower environmental footprint.

Supply chain impacts

The beauty industry is **moving away from fossil fuel-derived ingredients** in favour of renewable alternatives. But with harvesting fluctuations and environmental impacts, natural

Upcycling food waste is a sustainable way of extracting ingredients; in such example, an argan oil alternative is derived from coffee ground.



photo: Raphale Rychetsky, Unsplash, Mike shots/Shutterstock.com

ingredient sourcing is also becoming a growing concern.

An example of ingredient innovation to address supply constraints is Geltor's **vegan collagen product**, being developed to match human collagen. Most collagen ingredients on the market today are animal-derived, with a molecule quite different from human collagen.

Popular ingredients, such as jojoba, are now facing global shortages. And in the fragrance sector, many essential oils require high levels of already strained natural resources for development. As a result, biotech companies are innovating synthetic solutions to drive performance with reduced environmental impacts.

In the fragrance space, sandalwood has faced large sustainability challenges — from overharvesting, slow regrowth and illegal smuggling. In response, Firmenich has launched its **biotech sandalwood fragrance alternative**.

Trend 3. Consumers are demanding transparency

Consumers are increasingly demanding greater transparency from the companies they purchase from, with respect to ingredients, their supply chain and corporate sustainability efforts. Based on a 2020 survey by Influenster and Bazaarvoice featuring 24,000 women worldwide, two-thirds of women say they want greater transparency when it comes to clean skincare labeling⁵.

Beyond evolving health and safety standards in the beauty industry, **brands are also getting serious about setting comprehensive and data-driven sustainability goals**. From setting targets on biodiversity and land use to reducing plastic packaging, water use and carbon emissions, brands are increasingly setting data-driven goals to ensure they're walking the talk. Data allows consumers and industry groups to substantiate, vet a brand's performance and continue to hold their brands accountable.

For example, both Croda and Symrise aim to be climate positive as of 2030^{6,7}. On the manufacturing side,



Consumers are demanding more transparency to understand where and how their beauty products are made.

L'Oréal continues to set both short and long-term sustainability goals and aims to reduce its greenhouse gas emissions by 50% per finished product by 2030⁸.

Looking forward

With growing environmental concerns and consumer demands shifting, the future of beauty is sustainable beauty. From utilising waste to adopting technologies to improve functionality (while reducing environmental footprints) — it's clear that sustainability is driving innovation in the beauty industry.

The more sustainable a brand is, the better prepared it is to respond to climate impacts and consumer demands as well as showcase its impact in a crowded market. Let's celebrate the champions and collaborators of this

transition to sustainable materials for their efforts to help secure a better future for all. □

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