

Call for Expressions of Interest - CEI

Bio-based functional agents to reduce dependance on palm oil

BACKGROUND :

The issue of environmental impact has become a central challenge for the cosmetics sector. In 2023, the work of the “Roquelaure biodiversity group”, initiated by the public authorities, led to a shared action plan: the French cosmetics industry has made the reduction of its environmental and social footprint a development priority, collectively rethinking its sourcing models and sustainability practices.

Interest in naturally derived ingredients, and in particular bio-based functional agents, is growing strongly across the value chain. One of the missions of COSMETIC VALLEY is to support innovation on this theme, referred to as “Agricosmetics”. A working group led by COSMETIC VALLEY in Nouvelle-Aquitaine since 2018 has been focusing on the valorisation of local agri-resources.

Among the most strategic resources for the industry is palm oil and its derivatives, which are widely used in cosmetic products in the form of derivatives that provide essential functions in formulations, including **foaming power, emulsion stability, texture, and comfort on application**. These derivatives are therefore at the heart of many ingredient families, such as surfactants, emulsifiers, emollients, or texturizing agents, and constitute an essential basis of cosmetic formulation.

However, global palm oil production raises major environmental, social, and economic concerns, such as deforestation, biodiversity loss, greenhouse gas emissions, and pressure on agricultural land. These findings have led the industry to engage in a collective reflection on the search for more sustainable substitution solutions, without compromising product quality, performance, or economic viability.

To support this reflection with robust data, COSMETIC VALLEY and FEBEA conducted, with the technical support of the Institut des Corps Gras (ITERG), a functional study of palm oil and its derivatives. This first phase of work made it possible to characterise the specific functions fulfilled by these derivatives in cosmetic formulations and to identify

the main technical, sensorial, and regulatory constraints associated with their substitution. The study also highlighted the need for a reasoned approach based on life cycle analysis in order to avoid any transfer of environmental or social impacts to other resources or regions.

On the basis of these findings, FEBEA and COSMETIC VALLEY are launching a Call for Expressions of Interest (CEI) to identify and mobilise stakeholders capable of proposing viable and sustainable alternatives to palm-oil-derived ingredients.

This initiative, designed at the scale of the French cosmetics industry, aims to foster collective sector-wide innovation and, in the medium term, to secure for the solutions developed the volumes required at industry level, rather than at the scale of a single company.

OBJECTIVE OF THIS CALL FOR EXPRESSIONS OF INTEREST :

This Call for Expressions of Interest () aims to:

- Stimulate the emergence of concrete solutions that reduce the cosmetics industry's dependence on palm oil and its derivatives, while ensuring equivalent or superior functional performance.
- Bring out existing projects that can help diversify current sourcing, which today relies primarily on palm oil and its derivatives, with a clearly assessed impact on biodiversity, the environment, and social issues.
- Define, together with the industry, the technologies to be prioritised in order to develop viable solutions for the collective.

More specifically, this CEI aims to:

- Diversify the sources of supply in functional agents (surfactants, emulsifying surfactants, emollients, thickeners), in order to limit dependence on a single, vulnerable and insufficiently sustainable resource.

- Encourage the development of bio-based and sustainable alternatives whose environmental and societal footprint is lower than that of palm oil, using a life-cycle-based approach (biodiversity, carbon footprint, water, soil, traceability).
- Promote collaboration between stakeholders (companies, academic laboratories, start-ups, cooperatives, etc.) to accelerate the development and adoption of innovative solutions.
- Support projects throughout their maturation, from proof of concept through to industrial development phases.

This CEI does not aim to substitute all uses of palm oil, but rather to propose alternatives for the industry where this is relevant and feasible.

TARGETED FUNCTIONALITIES

The CEI is open to any project aiming to propose alternatives to the use of palm oil and its derivatives in cosmetic formulations. The solutions sought must address one or more of the following critical functionalities:

- ❖ Anionic foaming surfactants of sulfate type and non-palm origin
 - Issue: Sodium Laureth Sulfate (SLES) and Sodium Lauryl Sulfate (SLS), widely used for their cleansing and foaming properties, are mainly derived from palm (or palm kernel) oil and also have significant environmental impacts.
 - Examples of alternatives already explored: alkyl polyglucosides (APG), betaines or cocoglucoside, which have an interesting toxicological profile but sometimes deliver limited foaming performance in complex formulations.
 - Expected within the AMI: identification and development of solutions that maintain (or improve) sensorial profile and foaming performance while reducing the environmental footprint.
- ❖ Anionic emulsifying surfactants / emulsifiers
 - Palm-oil-derived ingredients are widely used in emulsifying agents, which are essential for the stability of cosmetic products.

- Few current equivalents offer the same combination of stability, compatibility, and cost.
- Expected within the AMI: exploration of new sources (bio-based / crop-derived, biotechnological, “upcycled”) to develop high-performance, durable emulsifiers.

❖ Emollient and moisturizing agents

- Caprylic / capric triglycerides, widely used for their sensorial feel and stability, are frequently sourced from palm-derived materials.
- Expected within the AMI: exploration of new sources (bio-based / crop-derived, biotechnological, “upcycled”) to develop high-performance, durable emulsifiers.

❖ Thickeners and texture agents

- Certain texture agents are also indirectly derived from palm oil. They provide specific and highly sought-after sensoriality to products.
- Expected within the AMI: exploration of substitutes from sustainable sourcing capable of reproducing these properties (viscosity, structure, stability).

EVALUATION CRITERIA

The AMI is open to projects at different levels of maturity:

- Idea / proof of concept (exploratory research, TRL 2–3)
- Ongoing development (prototypes or pilot tests, TRL 4–6)
- Solutions close to market (technology validated under industrial conditions, TRL 7–8–9)

Beyond the targeted functionalities, projects submitted under this AMI will be evaluated according to a set of criteria designed to ensure their technical relevance, sustainability, and future development potential within the cosmetics industry.

Projects must focus on raw materials that meet the following criteria:

a. Technical and functional criteria

The proposed alternatives must demonstrate their ability to tend towards meeting the following requirements:

- Ensure performance comparable to current palm-oil-derived ingredients, particularly in terms of foaming power, detergency, emulsion stability, texture, and sensoriality.
- Process compatibility: broad compatibility with conventional cosmetic ingredients (salts, ethanol, etc.) over a standard pH range of 4 to 9.

- Standards and specific requirements :
 - CLP classification limited at most to H318, H315, H412.
 - Compliance with ISO 16218 (natural origin).
 - No added preservatives.
 - Organoleptic characteristics equivalent to current solutions: colour, odour, ability to build viscosity with salt (for foaming surfactants only).
 - If possible, availability in concentrated versions in the long term (e.g. SLES 70%).
 - In the case of ethoxylation: guaranteed very low levels of 1,4-dioxane, in line with US Proposition 65 (California) and forthcoming European restrictions.
 - Raw material authorised in China (NMPA registration number or Annex 14).

b. Environmental and social criteria

The alternatives must contribute to an improved environmental footprint compared with palm oil and its derivatives. Projects will be assessed based on:

- Integration of a comparative life cycle assessment (LCA) to measure the environmental impacts of the alternatives.
- Impact on biodiversity, water consumption, carbon emissions, and land use when the raw material is of agricultural origin.
- Traceability and transparency of supply chains (geographical origin, certification, farming practices).
- Ability to avoid impact transfer, i.e. replacing one problem with another (e.g. increased use of chemical inputs or overconsumption of water).

c. Economic criteria and industrialisation prospects

Projects must demonstrate their potential for scale-up and economic consistency, even if full industrial feasibility will be tested later. The following criteria will be examined:

- Consistency between the level of technological maturity (TRL) and the envisaged trajectory towards industrial validation.
- Identification of the main technical, regulatory, or economic barriers to be overcome to reach large-scale development.
- Reproducibility and potential for future integration into cosmetic manufacturing processes.

d. Collaboration criteria

The ability of a project to be part of a collective approach will be positively valued. Evaluation will focus in particular on:

- Clarity of the project (role of the lead partner clearly defined).
- Potential for broad applicability across the cosmetics industry, beyond a single brand or company.
- Willingness to share relevant data within the framework of an organised, sector-wide collaboration.

ELIGIBLE APPLICANTS

This AMI is open to a wide range of stakeholders to encourage the emergence of solutions from both industry and research. The following may apply:

- Companies: start-ups, SMEs, mid-caps (ETI), large groups.
- Academic and research structures: public or private laboratories, technical centres, specialised institutes.
- Collective organisations: consortia of companies, cooperatives, associations, clusters.
- Hybrid partnerships: combinations of industrial, academic, and institutional players (collaborative projects).

Applications may therefore be submitted individually or jointly. Each project will be assessed on its relevance and intrinsic quality, regardless of its governance or partnership structure.

BENEFITS FOR SELECTED PROJECTS

This CEI is not linked to a pre-allocated dedicated funding envelope. If a project is selected, a suitable financial scheme will be explored to support an experiment with the industry (public funding such as Bpifrance, Regional authorities, ADEME, European programmes, or private funding).

Selected projects will receive support from COSMETIC VALLEY and FEBEA, including:

- Awareness-raising on the expectations of the cosmetics industry.
- Identification of opportunities to develop the project (competitions, interactions with industry, etc.).
- Identification of and connection with public or private partners.
- Structuring of the different steps required to build the project.
- Advice on key topics to be considered within the project.

- Identification of suitable funding schemes and support in preparing applications.

PRACTICAL ARRANGEMENTS :

Provisional timeline:

- December 2025: official launch of the CEI
- 28 February 2026: deadline for submission of applications
- March 2026: project analysis and jury meetings
- April 2026: announcement of results
- May 2026: public communication on selected projects

Submission of applications

Applications must be submitted online via the IDCosm platform:
<https://www.idcosm.com/>

An application file will be requested, including in particular:

- A presentation of the lead applicant and, where applicable, associated partners.
- The project objective and the targeted functionalities.
- The level of technological maturity (TRL) and milestones already achieved.
- The main technical, regulatory, or economic barriers identified.
- Anticipated environmental impacts (LCA, biodiversity, carbon footprint, water).
- An estimate of the project duration and resources required for its development.

Expected format of applications :

The application file must be written in French and in English (automatic translation is possible using the online submission tool).

- Technical or scientific appendices may be attached (analyses, publications, test results, etc.).
- The organising committee reserves the right to request additional information from applicants if necessary.

JURY AND GOVERNANCE :

Project selection will be carried out by a jury of experts representing the cosmetics industry, ensuring an objective evaluation reflecting the sector's technical, industrial, and environmental challenges.

Composition of the jury :

- Industrial representatives from the cosmetics industry (large groups, ETI, SMEs, ingredient suppliers).
- Scientific and technical experts from recognised organisations (e.g. ITERG, etc.).
- Institutional and sectoral representatives, including COSMETIC VALLEY and FEBEA, ensuring alignment with industry needs.

The composition of the jury is currently being finalized. It will be communicated to the project holders prior to the review of the applications. The projects will be forwarded only to this duly identified jury. If a project holder considers that certain information in their application cannot be shared with a member of the jury, they may indicate this in advance of the review process, so that an appropriate solution can be considered.

Once constituted, the jury will deliberate independently. Its members undertake to declare any potential conflict of interest and to refrain from taking part in the evaluation of projects for which such a situation is identified. FEBEA and COSMETIC

VALLEY will ensure the impartiality, neutrality, and independence of the jury throughout the entire selection process.

Role of the jury :

The jury will evaluate each project against the criteria defined in the “Evaluation criteria” section and ensure transparency and fairness throughout the selection process.

For projects that are not selected under this AMI but nevertheless show potential interest for the industry, the jury may issue recommendations and direct project leaders towards alternative funding or support schemes.

The entire evaluation and selection process will be conducted in compliance with the applicable legal framework, in particular French and European competition law.

Governance of the AMI:

The AMI is jointly led by COSMETIC VALLEY and FEBEA, with technical and scientific support from expert partners (ITERG, etc.). This governance ensures a shared vision at the intersection of market expectations, regulatory and environmental challenges, and innovations originating from research.

This organisation ensures that the selected projects will not remain isolated initiatives but will contribute to genuine sector-wide transformation. The aim is to support the emergence of solutions capable of meeting the collective needs of the industry and, ultimately, to secure sufficient volumes for broad and lasting adoption across the sector.

The work carried out under this Call for Expressions of Interest will comply with competition law and will have neither the purpose nor the effect of limiting or restricting the commercial freedom of the stakeholders, nor of exchanging commercially sensitive information.

CONTACTS

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For any questions related to this AMI or to obtain support in preparing applications, project leaders may contact the following reference teams:

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