Mowi Emerging Feed Raw Materials Policy

Mowi aims to produce robust, sustainable, high quality salmon using the widest available spectrum of raw materials in the most efficient way. Mowi's inhouse R&D activities are strongly focused on finding and developing a diverse and effective raw material pallet that optimizes salmon health, wellbeing and quality using the most sustainable options wherever possible.

As such, the role of emerging feed raw materials plays an important role to increase raw material flexibility.

Mowi has also in place a policy on sourcing feed raw materials sustainably which can be found at https://mowi.com/sustainability/policies/

Defining Emerging Feed Raw Materials
Emerging feed raw materials are those that have the potential to become part of the feed composition but require further development before full commercialization. For example elements of the risk-assessment (such as scalability, price, climate footprint etc.) are still a challenge by comparison to existing alternatives.

Target
By 2030, Mowi aims to achieve an inclusion of 10-15% ingredients from emerging feed raw materials.

Selection of Emerging Feed Raw Materials
We continuously search for improved feed formulation through R&D. The outcomes of R&D[1] and risk assessment guide our decisions regarding all feed raw materials. Suppliers of emerging feed raw materials are expected to comply with Mowi's Code of Conduct and be assessed by Mowi's Relationship Management Tool.

Today's list of emerging feed raw materials is as follows: krill; oil, oil-rich and non-oily biomass from heterotrophic and autotrophic microalgae; macroalgae e.g. seaweeds; insect meal and oil; single cell proteins derived from bacteria and yeasts; GM vegetable oils with traits for the production of LC omega-3 e.g. those derived from canola or camelina; zooplankton e.g. Calanus; mesopelagic finfish species; pea protein concentrate and isolate; concentrates made from faba beans, sunflower seeds protein and guar seeds concentrate; barley protein concentrate; and protein enriched co-products from brewing and distilling. This list is not exhaustive and classifications of ingredients will change with time.

The following categories are used in Mowi's risk assessment based on a 5 years' timeline:

Nutritional value
Risk is assessed based on R&D and nutritional profile of emerging feed raw materials as compared to existing alternatives. A poorer nutrient profile will lead to poorer FCR, poorer fish performance, health and welfare which have a negative impact on sustainability.

[1] In 2020, Mowi Feed spent 2.8 MEUR directed towards emerging feed ingredients including insect meal, auto and heterotrophic algae, single cell proteins, krill and pea protein concentrate.

Price competitiveness

Average price (when products are commercially available) of emerging feed raw materials is compared to existing alternatives. When products are not yet commercially available, price is estimated based on dialogue with potential suppliers or other relevant stakeholders.

Certification

Linked with the likelihood of certification needs to ensure a sustainable sourcing. This risk is assessment based on dialogue with several stakeholders including scientists and potential suppliers.

Climate impact

Linked with GHG emissions of emerging feed raw materials as compared to existing alternatives. It is important that emerging feed raw materials do not lead to an increase of scope 3 emissions of Mowi's climate footprint.

Availability/Scalability

The scalability of emerging feed raw materials is assessed based on available knowledge of current production capacity

Reputation and market acceptance

Linked with market, including consumers and customers perception of emerging feed raw materials.

Our risk-assessment will be evaluated on a yearly basis.