

# **PANGAIA**

## **Animal Welfare Policy**



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At PANGAIA, we believe that our natural world and the animals that inhabit it should always be protected and treated humanely. Our animal health and welfare principles apply to all animal life touching our value chain. We have an expectation that our suppliers will adhere to our animal welfare requirements, material certification expectations and data disclosure for any and all materials that are animal derived.

This policy aims to highlight our commitment to animal welfare and enacts the minimum standard that applies to our business and all PANGAIA partners - vendors, suppliers, agents, distributors, factories, mills, processing facilities, field-level partners, farms and any associated subcontractors, subsidiaries and other suppliers who contribute to PANGAIA's products (henceforth referred to in this policy as 'Suppliers'). All Suppliers shall uphold this policy and are responsible for disseminating the policy to their suppliers and any approved subcontractors to ensure that these principles are adhered to.

### ANIMAL WELFARE REQUIREMENTS

#### Our Commitment

PANGAIA is committed to promoting the humane and responsible treatment of animals for all animal derived materials and products as well as any animals used for farming practices, or in any marketing campaigns. We are committed to not sourcing any material that is derived from the death of an animal, this includes by-products and co-products of animal slaughter.

PANGAIA's commitment to restoring biodiversity and our promotion of innovative materials that sit in harmony with nature would be directly contradicted by any use of animal derived materials that required the death of that animal, such as leather and silk, even in recycled qualities.

PANGAIA does not identify as a vegan brand as we do work with animal derived materials such as cashmere, merino wool and sheep's wool. We will work with animal derived fibers and ingredients on the provision that the welfare of the animals and the ecosystems they inhabit and depend on are safeguarded. We do not believe an abstention from animal derived products is always healthier for the planet. On our mission to be fossil-fuel free, specific renewable animal fibers are an important part of our portfolio of materials.

#### Supply Chain Responsibilities

Suppliers must respect human animal welfare practices and work continuously towards implementing a best practice process that includes maintaining, breeding, raising, transportation and handling to ensure ethical conditions and treatments of animals.

All Suppliers providing animal derived products, using animals for harvesting and using animals for land management purposes must treat animals in accordance with the internationally recognized Five Domains of Animal Welfare. These Five Domains build off the Five Freedoms of Animal Welfare and incorporate both the physical and mental welfare of animals. These Domains are:

- Nutrition to minimize thirst and hunger by maintaining a species appropriate diet;
- Environment that minimizes discomfort, exposure to adverse environmental conditions and promotes physical comfort;
- Health that minimizes pain, disease and other discomforts, and promotes animal vigor;
- Appropriate behavior to minimize threats and unpleasant restrictions on behavior and movement, and to promote engagement in rewarding activities;
- Mental State for animals to have predominantly positive mental experiences and reduce negative states such as fear, frustration, hunger, pain, or boredom.

PANGAIA expects that suppliers implement animal welfare management programmes to ensure that quality of life is maintained for all animals within PANGAIA's supply chain. We do not support harmful and inhumane practices in any form and reserve the right to remediate this risk.

PANGAIA recognises these stipulations as our minimum requirements. We value and prioritize the efforts that go beyond minimizing discomfort, and promote the improvement of animal welfare and biodiverse ecosystems through all supply chains we engage with.

## **Shearing**

Suppliers providing products derived from the shearing of animals should eliminate all distressing practices and follow certification and best practice standards for shearing. Shearing must only be undertaken by trained professionals, and any injuries that may occur during the shearing practice must be treated immediately.

## **Transporting Animals**

PANGAIA expects good human-animal relationships to be in place and that animals are handled and transported around and off the farm in a way that protects their welfare. Animals should not be transported in a way that is likely to cause injury or undue stress and should not be transported live across long journeys or borders. All necessary arrangements should be made to minimize the length of journey and to meet the animals needs whilst in transit.

## **Animal Testing**

PANGAIA has a zero tolerance on animal testing for any product including beauty, cosmetic or lifestyle products and supports the work that is being undertaken to end animal testing for cosmetic products globally.

## **Animals in Marketing**

Any animals that are used as part of a marketing campaign must be treated in line with the Five Domains. Regardless of the content of the advertisement, all animals featured should be well looked after and must not be harmed or distressed in the process.

Guidance for marketing teams:

- Marketers should take care when considering depicting anything that is potentially harmful to animals and could feasibly result in harmful emulation. This would include interactions with and behavior towards animals.
- Marketing communications should not contain anything that is likely to cause serious or widespread offense, or undue fear or distress.

## **ANIMAL DERIVED MATERIALS & REQUIREMENTS**

### **Prohibited Materials**

At PANGAIA we do not accept the following materials, fibers or ingredients to be used in any of our products:

- Exotic skins
- Animal-derived fur of any kind (including Slinks, Karakul or Astrakhan)
- Animal-derived leather (including but not limited to; bovine, ovine, caprine, porcine, fish)
- Animal-derived feathers & Down
- Angora & Rabbit Hair
- Wool that has been sheared from animals where mulesing has taken place
- Mohair



- Silk
- Bone, Horn or Shell
- Cochineal/Carmine
- Chitin or Chitosan derived from crustaceans or insects
- Sourcing from/of species and materials derived from the CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) or IUCN (International Union for Conservation of Nature) lists of endangered species.
- Materials derived from the direct death of an animal or the harvesting of insects, including, but not limited to; gelatin, shellac, beeswax (if obtained through industrial farming).

We identify these materials/feedstocks as having a high risk of unethical procurement practices or a significant lack of due diligence to remediate risk. As a material science company focused on responsible innovation PANGAIA will continually reassess our position on materials to deliver our Earth Positive mission.

## **Virgin Fibers & Recycled Fibers**

PANGAIA prioritizes the use of recycled fibers as part of our animal derived material portfolio. We recognize that for some of our material developments we need to blend virgin fibers to meet quality requirements. We are constantly looking for new developments in recycling qualities to support higher recycled content.

## **Fibers Sourced from Regenerative Systems**

We will prioritize engagements that protect nature, rehabilitate soil health, support farmer livelihoods and protect biodiversity. We will work with our regenerative partners to ensure that animals experience a positive standard of animal welfare specific to the context in which animals are being raised. As we look to build deeper engagement with our supply chain and identify virgin fibers sourced from regenerative systems, we will identify projects that can prove improved pasture management practices, animal husbandry and are able to collect data and reports from field level practices that take place.

## **Animal Alternatives & Biofabrication**

PANGAIA recognizes the importance of reducing our reliance on animal based materials. We strongly believe in animal alternatives and their potential to positively disrupt our industry and we are continuously trying to implement and promote them for fashion and textile applications.

Our aim is to use next-generation materials derived from plant, biomass waste, mycelium and yeast (non-exhaustive list) to substitute animal-based components. However, we recognize that some biofabricated materials utilize animal derived inputs or feedstocks. We see vast potential in the field of bio-fabrication and recognise our responsibility when engaging with this emerging field.

Ethical expectations of suppliers & considerations:

- Suppliers must provide transparency to cultivation, husbandry, and extraction practices for organisms that have been collected with prior consent and/or have been collected without exploitative and harmful practices for biofabrication, when requested from PANGAIA. E.g. skin biopsy vs. fetal stem cells, culture/growth media with fetal bovine serum (non exhaustive list).
- Suppliers must declare the presence and use of Genetically Modified Organisms (GMO) for biofabrication, whether as part of the material itself or part of the process. PANGAIA will evaluate the ethical implications of application on a case-by-case basis, dependent on end use and other factors.
- Suppliers must disclose relevant supply chain information that could inform risk of invasive species disruption through utilization of GMO and/or non-GMO which are not native to the surrounding environment to which they could be intentionally or unintentionally released during cultivation or processing.
- PANGAIA will consider the possible impact and influence on socioeconomic welfare of existing industry workforce (e.g. land stewards) for which a technology may be replacing.

## ACCOUNTABILITY & VERIFICATION

### Onboarding Materials

All PANGAIA's materials are subject to stringent due diligence processes where we undertake a holistic evaluation, considering inputs and feedstocks for the material, how it is processed, and the relevance for end use application. When PANGAIA onboards a new material we assess the social and/or environmental benefit compared to conventional materials. Suppliers must provide transparent information to the best of their knowledge regarding the materials, the inputs and the production processes to help us accurately assess this.

### Certification

PANGAIA aims to have high standards not only for ourselves, but for our partners and to encourage the industry to be more responsible. Therefore we are committed to onboarding and partnering with Suppliers who hold the relevant certifications for our materials. To ensure that responsible animal welfare and husbandry is being implemented, certifications are required to verify that all Suppliers are compliant with these fundamental commitments. In exceptional circumstances where certification is not available Suppliers must provide evidence of verified best practice that adheres to our animal welfare standards.

### Life Cycle Assessment

As part of PANGAIA's commitment to measuring the life cycle of key materials and products Suppliers should be willing to collaborate with our team and partners to assess the impacts of those products or materials provided to PANGAIA by providing data relating to production and evidence of resources used. To support Suppliers with this request PANGAIA will provide information, guidance and access to trained experts that will assist Suppliers.

### Traceability & Supply Chain Visibility

We are committed to being transparent about where our products are coming from. Suppliers are integral partners to help us trace and understand the supply chains that PANGAIA source from. We expect Suppliers to share all relevant and known supply chain information and provide visibility to help PANGAIA with tracing products and giving visibility to production and animal husbandry practices.

### Remediation

If a Supplier becomes aware of a breach of the Code, in any part of the supply chain, the Supplier must immediately notify PANGAIA's Impact Team, and disclose any details that are deemed necessary to accurately assess the non-compliance.

Any violations of the policy by a Supplier may jeopardize the Supplier's business relationship with PANGAIA resulting in possible termination of the business relationship and other action that PANGAIA deems appropriate based on the nature of the violation. If the Supplier engages in conduct prohibited by this policy, the Supplier shall rectify the violation(s) through immediate action using documented strategies and procedures. The Supplier shall provide to PANGAIA copies of documents which show evidence of all remedial action.

PANGAIA is committed to working collaboratively with Suppliers and will provide guidance, support and encouragement to Suppliers working towards becoming more sustainable. For any advice or questions on this policy please contact: [impact@thepangaia.com](mailto:impact@thepangaia.com)

## REFERENCES

### Five Domains of Animal Welfare

This [set of principles](#) defines an approach that not only focuses on minimizing negative experiences but also enables and raises positive experiences to ensure the highest welfare throughout an animal's life. This set of principles builds off the Five Freedoms of Animal Welfare.

### Five Freedoms of Animal Welfare

- Freedom from hunger or thirst, by ready access to fresh water and diet for full health and vigor;
- Freedom from thermal or physical discomfort, by providing an appropriate environment including shelter and a comfortable resting area;
- Freedom from pain, injury and disease, by preventing or rapid diagnosis and treatment;
- Freedom to indulge in normal behavior patterns, by providing sufficient space, proper facilities and company of the animal's own kind; and
- Freedom from fear and distress, by providing conditions and treatment that avoid mental suffering.

### Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species. [CITES](#) accords varying degrees of protection to more than 36,000 species of animals and plants by applying different provisions to species.

### International Union for Conservation of Nature

An international organization working in the field of nature conservation and sustainable use of natural resources. It is involved in data gathering and analysis, research, field projects, advocacy, and education. [IUCN](#) monitors the impacts of climate change on nature, and guides the conservation and restoration of ecosystems to help mitigate and adapt to it.

## DEFINITIONS

### Animal welfare:

- Animal welfare means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behavior and is not suffering from unpleasant states such as pain, fear, distress (Animal welfare - world organization for animal health (2018) WOAH)

### Animal derived:

Any substance derived from the body of any animal such as wool, milk and eggs (non-exhaustive list).

### Animal derived (from the death of an animal):

Any substance derived from the death of an animal such as gelatine, fat and hides (non-exhaustive list).

### Biofabrication:

Biofabrication focuses on cutting-edge research regarding the use of cells, proteins, biological materials, and biomaterials as building blocks to manufacture biological systems (Biofabrication - IOP Science 2016)

### Co-product:

Valuable material generated during a cultivation alongside the primary commodity, not typically discarded as waste AND may be intentionally produced. A co-product may represent the second highest market value relative to other commodity components.

### By-product:

By-products are materials of value that are produced as a residual of, or incidental to, the cultivation process. By-products are not typically discarded as waste, but may not be intentionally produced.

**Biodiversity:**

Biodiversity or biological diversity is the variety and variability of life on Earth. Biodiversity is a measure of variation at the genetic, species, and ecosystem level. (Biodiversity, Resource Library, National Geographic 2022)

**Feedstock:**

A raw material that supplies or fuels a process.

**Flora:**

The plants naturally occur in a particular area. Some examples of flora include; grasslands, forests, flowering and non-flowering plants and trees.

**Fauna:**

The animal life that is naturally present in a particular area or region.

**Genetically Modified Organism (GMO):**

An animal, plant, or microbe whose DNA has been altered using genetic engineering techniques. (Genetically Modified Organism, Resource Library, National Geographic, 2022)

**Mulesing:**

Mulesing is the removal of strips of wool-bearing skin from around the breech of a sheep to prevent the parasitic infection flystrike.

**Next-generation materials:**

Livestock-free direct replacements for conventional animal based leather, silk, fur, down, wool, and exotic skins (also referred to as “incumbent materials”). Next-generation materials use a variety of biomimicry approaches to replicate the aesthetics and performance of their animal based counterparts. (Next-gen Materials white space report, Material Innovation Initiative, 2021)

**Regenerative Systems:**

Regenerative agriculture encompasses holistic practices that create net beneficial impacts on ecosystem services. These activities must provide net beneficial economic and social impacts for farmers and local communities to ensure sustainability over the long term.

**Supplier:**

Factories, vendors, manufacturers, mills, licensees, partners, affiliates, agents and any other party who supplies PANGAIA with goods or materials.

**Vegan:**

Abstaining from the consumption of materials derived from animals. (Veganism, Vegan Peace, 2020)