



VAUDE

VAUDE offers functional and innovative products for mountain and bike sports. As a sustainably innovative outdoor outfitter, VAUDE is contributing to making the world a better place so that the people of tomorrow can enjoy nature with a clean conscience.

In doing so, the family-owned company sets ecological and social standards worldwide. VAUDE (pronounced [fau'de]) stands for environmentally friendly products made from fair manufacturing.



Interview

with René Bethmann
Senior Innovation Manager
VAUDE Sport & Co. KG, Germany



René Bethmann graduated in Textile and Apparel Technology and has worked for several leading brands across Europe in the field of product and material management.

He has over 15 years' experience in the Sports Industry and is currently working at VAUDE as Senior Innovation Manager, managing innovation processes and related projects about material and joining technologies with strong focus on biopolymers and recycling strategies.

Furthermore, since 2020 he is a consultant of the VAUDE Academy for sustainable business.

VAUDE produces 100 % climate neutral outdoor equipment since 2022, i.e. they fully offset their global GHG emissions and strive for a climate-neutral supply chain in 2030. Furthermore, half of all products in 2022 are made primarily from renewable materials which reduces CO₂ emissions by about 50 % (depending on the material) compared to virgin materials.

Which renewable material sources, i.e. bio-based, CO₂-based and from recycling, do you mainly use and in which application?

We are currently undergoing a major transformation from our virgin fossil material portfolio toward a renewable carbon portfolio. This requires us to go further upstream in our supply chains, as the availability and choice of different renewable carbon solutions is still quite marginal. Recycled input streams currently represent the largest fraction. Especially when it comes to availability and scaling.

Nevertheless, we are also looking at other variants, like biomass, where we have already done a lot of pioneering work in the commercialisation of such. We monitor CO₂-based materials from CCU very closely and see them as a strong pillar in the near future. Depending on the application, we look at the best suited material.

In addition, the actual sustainability of each technology is closely examined and verified. We need confidence in our used technologies. We try to be as transparent as possible in our communication.

How far along are you in using these three material sources?

We have set ourselves ambitious material goals: By 2024, 90 % of all VAUDE products should have a bio-based/renewable or recycled material content of more than 50 %. This will allow us to save fossil resources and successively increase the share of renewable carbon. We currently see this target

as achievable. In bio-based synthetics, we have already established new supply chains in our industry. Which is outstanding for a company of our size. Nevertheless, the market needs to be further developed especially when it comes to availability and economic viability.

The big challenge, however, is availability. A good example is currently the area of recycled PET, which we are using on a large scale and will significantly increase the share. Used PET bottles serve as the primary source material available here. This raw material offers a good stable quality, but in the future beverage producers will use this raw material more for their own recycling, especially due to the required quotas.

Consequently, the textile industry's demand will not be met in future and other waste sources such as textile waste will be necessary. However, the way there is very arduous. We need new robust recycling processes and new waste collection streams which can handle complex multi-component textile products. We have recognised that there is no single solution, so we are looking at all possible sources and production routes.

However, they have to be economically and ecologically viable. Important for us are solutions that can also be scaled. This is the only way we can drive large-scale change in the industry.

What is the customers' perception of those three renewable material types? Are they well appreciated? How do you drive the customers' acceptance of these materials?

In the case of bio-based materials, we have found that there are significantly more questions concerning sustainability. For this, we have to go very deeply into the production of raw materials and weigh their environmental impact and risks exactly. A huge challenge is also the lack of suitable and accepted standards that cover regenerative agriculture. There is a much greater need for communication than with natural materials.

New recycling processes, such as pyrolysis in particular, and the associated mass balancing are often viewed critically. It is therefore all the more important to provide a transparent presentation and communication. We also see that the use of sustainable materials correlates with the non-use of fossil new goods.

Are your recycled products as functional (e.g. waterproof) as virgin materials?

We pay very close attention to ensure that recycled products meet our strict requirements. We do not make any exceptions to the requirements just because they come from recycled sources. This procedure requires a very high expenditure of resources, especially in testing. But this is the only way we can ensure that our quality requirements and those of the customer are met.

We sometimes have to make compromises when it comes to using sustainable materials, because the quality requirements for our products have the highest priority.

How will VAUDE's synthetics be recycled? Will you offer your own repair service and collection systems?

Textile waste is problematic since incineration and landfills are its primary end destinations. VAUDE's strategy to reduce waste is to invest in product design to make our products repairable and recyclable. We have developed a Repairability Index in which we can evaluate the repairability of our products based on various criteria with the help of a score.

These findings flow directly into our product development. Of course, at VAUDE we also offer a repair service where customers' defective products can be repaired. Long before the industry was talking about the issue of textile recycling, we had founded the "VAUDE Ecolog Recycling Network" in 1994. It was the first recycling system in the industry for pure polyester products, with take-back and recycling.

The only "problem" was that the products lasted virtually forever, and we therefore received very few used products back than the system could have worked with. That's why we had to discontinue Ecolog.

We now know that it makes little sense for a single brand to set up its own take-back and recycling system, so our ambition is to work on collective industry solutions through networks and initiatives. This is the only way we can close the loop.

What added value for VAUDE do you expect from your participation in the Renewable Carbon Initiative?

The Renewable Carbon Initiative gives us a framework for our efforts in reducing and ultimately eliminating fossil feedstocks and helps us to better evaluate technologies and assess risks. The scientific thematic elaborations also help us in our sustainability strategy.

Through the Renewable Carbon Initiative, we hope to contribute to a faster and better acceptance of new sustainable technologies, especially from the political side. The course must be set here so that investment security is given. Direct exchange with other members is also important for us, to be able to discuss current challenges and to build new business relationships.