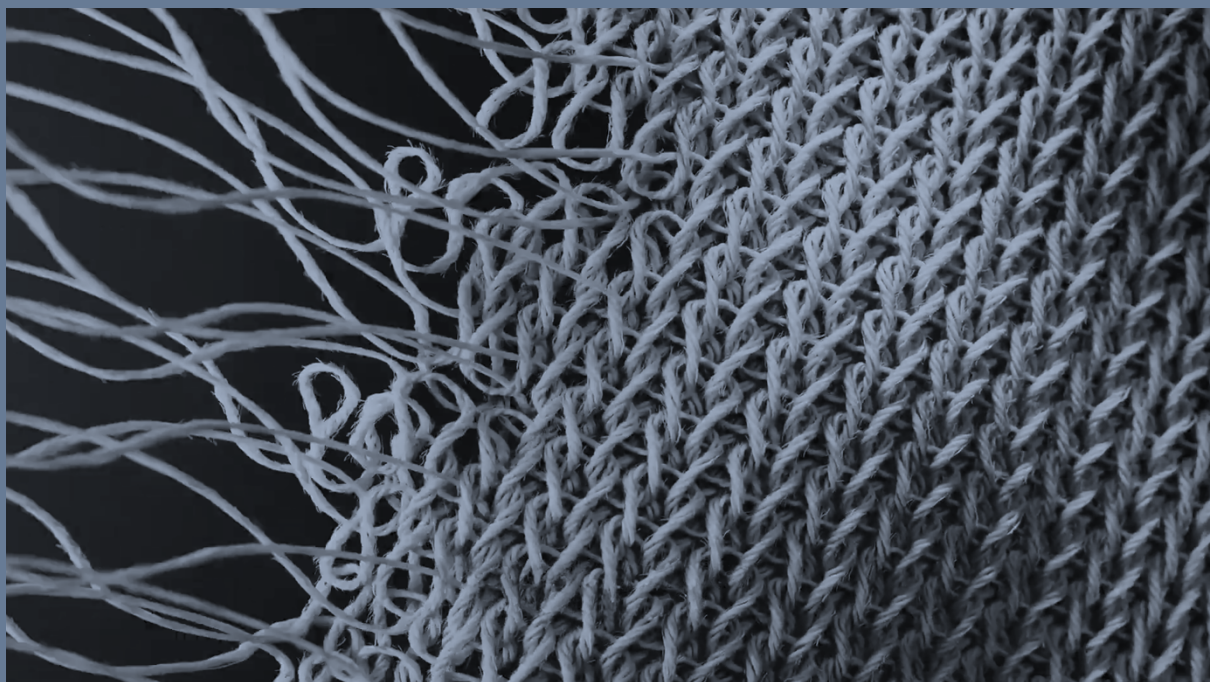




TEXTILKOMPASSEN
TEKSTILKOMPASSET



New project seeks to untangle the textile industry's Gordian knot

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What is actually the most sustainable? Cotton or polyester? A woollen jumper or a synthetic fleece jacket?

How many times has this question been asked? And how desperately has the textile industry itself sought a definitive answer? For years, organisations such as the Sustainable Apparel Coalition (now Cascale) and, not least, the EU's Joint Research Centre (JRC) have grappled with this issue, with a view to being able to clearly communicate to consumers which product they should choose over another. Now, efforts are being stepped up in the context of new directives and regulations.

It is within this intertwined and complex landscape that Interreg has decided to invest in a project aimed at untangling this ever-tightening Gordian knot. It is Interreg's Green Belt, the Trøndelag and Jämtland Härjedalen regions, which have allocated funding for a three-year project designed to lead the way. Hence the name 'Tekstilkompasset'. The project partners are IUC Jämtland Härjedalen, Mid Sweden University, Nord University and Fibershed Norway.

The project, which was launched in Stjørdal in mid-April 2026, could scarcely be more timely. Right now, the EU and many European countries are discussing whether extended producer responsibility should be eco-modelled – meaning that those who demonstrably pollute less should pay less, whilst those who pollute more should pay more. In addition, extensive work is underway on ecodesign regulation, which has chosen textiles as its first case study.

In the context of the ESPR (Ecodesign for Sustainable Products Regulation), work is being carried out in stages, with milestone reports and consultation rounds, but one thing is nevertheless clear. The EU wants clear product labelling in line with the energy labelling for white goods and electrical appliances, which provides information on the products' environmental and carbon footprints. Furthermore, they are keen for us to use what we have for longer, and have been exploring concepts of quality, using terms such as 'durability' and 'robustness'. This latter term stems from the third milestone on which the industry, NGOs, researchers and many others provided feedback at the end of March this year. The JRC has moved away from using highly physical tests (such as Martindale) towards a more simplified approach, they say. This has, of course, led to protests during the consultation from, amongst others, testing laboratories, which envisaged a new golden age, but the conclusion of the consultation is yet to be reached.

At the same time, a great deal is happening in relation to the data set that may be used to compare different fibres and materials. There is considerable disagreement amongst many experts as to whether fibres and materials of different origins (fossil and non-renewable sources versus natural and renewable sources) can be compared at all. It *is done* all the time in the textile industry, using the available tools and databases that make this possible, such as Glimpact and Ecobalyse.

One tool that has been widely used in this context is the Higg Index, and much of this work has been incorporated into the EU's Product Environmental Footprint (PEF) for Apparel and Footwear (A&F), as well as their Environmental Footprint in ESPR. Surprisingly, the two do not overlap. But it was also here, in the wake of the third milestone, that something interesting happened in the discussion regarding data sources and life cycle assessments as tools.

The entire data basis for the PEF for A&F had the rug pulled out from under it at the end of 2025. The official database, EcoInvent, was suddenly no longer valid. It had long been argued that the data set in question was outdated and therefore unusable, and the JRC took this seriously. They demanded that the Technical Committee on Textiles and Footwear produce new datasets as soon as possible, and furthermore instructed the EU to consider whether the current 16 parameters should be expanded to include entirely new parameters.

This suits the Textile Compass very well, as it provides the project with a unique opportunity and has thus also opened up a whole new perspective, which was discussed at the kick-off meeting. What if life-cycle assessments will never make a positive contribution to our ecosystems, simply because they are based on flawed and incomplete data and only include what is negative and problematic? That they therefore fail to capture reality.

What is unique about the partners in Tekstilkompasset is that they see this as an opportunity, based on Nord University's expertise in ecological economics, which fits like a glove with Fibershed's philosophy of downscaled, local value chains, cultural and biological diversity, the circular economy and an approach that puts the ecosystem at the centre. On the Swedish side, IUC Jämtland Härjedalen works closely with the industry and ensures that Tekstilkompasset remains relevant and practical, whilst Mid Sweden University, with its scientific foundation, develops the indicators and the knowledge base on which the tool is to be based. This convergence of practical application and research creates a holistic framework that makes the approach possible.

What if we were actually to steer the compass towards what is positive, rather than merely focusing on the negative? After all, LCAs were originally designed to highlight what was negative and needed rectifying, never what contributed positively to ecosystems. As mentioned, the PEF currently has 16 parameters, all of which measure something negative. Following a recent meeting of the EU's Technical Advisory Board, it was decided that two new aspects should be measured, one of which is positive provided the data is handled correctly: the physical effects of microplastics and microfibrils on biota (all life), as well as biodiversity. A third proposal, to include whether a fibre or material is renewable or not, was not adopted. We note that the French version of the PEF (Ecobalyse) has removed two parameters. Human toxicity in general and in relation to cancer has been eliminated by assigning a weight of zero to both. The weight assigned to freshwater ecotoxicity, on the other hand, has been increased to 21 per cent, giving this parameter in Ecobalyse the same weight as climate change. This is likely to come as a surprise to many.

We envisage that there are also other parameters that could safely be removed, such as 'land use', which is detrimental to both ecological and regenerative land and agricultural systems. This is because we measure kilograms of fibre per square metre; LCAs are, after all, about 'efficiency' and never about 'sufficiency'. In the book *The Benefits of Small-Scale Farming: On the Value of the Art of Limitation in the 21st Century*, written by Marcus Feldthus and Oscar Haumann, several studies are described which prove that if one measures nutrients and biodiversity per hectare, small-scale, regenerative mixed farming outperforms conventional, monocultural industrial farming. The problem is that, until now, weight – rather than nutrients (protein, vitamins and minerals) – has been used to measure how effectively industrial agriculture delivers results.

Laura Vang Rasmussen, a senior lecturer at the Department of Geosciences and Natural Resource Management at the University of Copenhagen, was the lead author of a study published in 2024, which involved 58 researchers across five continents and reviewed 24 other research projects, and found positive outcomes in three areas – nature, food security and profitability – without any loss of productivity, by focusing on diversity and small-scale farming. The report recommends moving away from monoculture and industrialised thinking. Anthropologist Andrew Flachs, in *Feeding the World as if People Mattered*, writes that smaller, more biodiversity-based farms contribute to soil health, human health, rural communities and the biosphere. They are therefore concerned with the positive effects that are not currently captured by 'land use'. Unfortunately – given the way LCAs are constructed – a parameter relating to biodiversity is also likely to yield a negative result. The more land used to grow cotton or for grazing ruminants, the worse the biodiversity – when in reality the opposite is true if the system is regenerative.

A recently published [Green Book](#) from the IWTO (International Wool Textile Organisation) challenges many of the sources of error underpinning LCAs, and in particular PEF and Ecobalyse. One of these is the failure to distinguish between biogenic and fossil carbon. The former is constantly cycling and therefore does not contribute to global warming, unlike fossil carbon. This ties in with how regenerative agriculture and grazing systems contribute to balance and carbon sequestration in a completely different way to industrial agriculture, which has, in essence, depleted our soil and contributed to the loss of biodiversity. Furthermore, new research has revealed that methane emissions from oil and gas extraction are significantly underestimated.

And not only are they underestimated, but there are no requirements to trace the origin of the oil and gas, so for all we know, the polyester or acrylic in your clothes could come from Russian oil. When it comes to natural materials, absolutely everything is measured and weighed, and the requirements for supply chain transparency are relentless. Not so with fossil-based materials. SPIN360, an Italian database company recently acquired by Veritas, has also revealed that fossil raw materials are allocated based on energy extraction, not on the economic value of the end products. There is little energy to be gained from an all-weather jacket or a polyester fleece jumper. Consequently, none of the fibre formation is attributed to textiles.

Are we witnessing a paradigm shift here?

We believe so. But time will tell. In every sense. This opens up a whole new realm of possibilities for transparency, and not least for a publicly accessible dataset that is understandable to most people and consistent with common sense. For the first time in a very long while, we see the possibility of building a decision-making tool that corresponds to reality rather than to a constructed and incomprehensible model of reality. We hope that any readers who have projects working in this field, or who possess knowledge we can draw upon, will get in touch.

Project overview:

Tekstilkompasset is a project that aims to build an open, science-based decision-support framework for the selection and procurement of textile materials – from soil and seeds to fibre. By integrating knowledge on biodiversity, land use and ecosystem health into a transparent and accessible knowledge base, the project aims to help businesses, researchers and decision-makers make more informed decisions regarding procurement and materials.

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