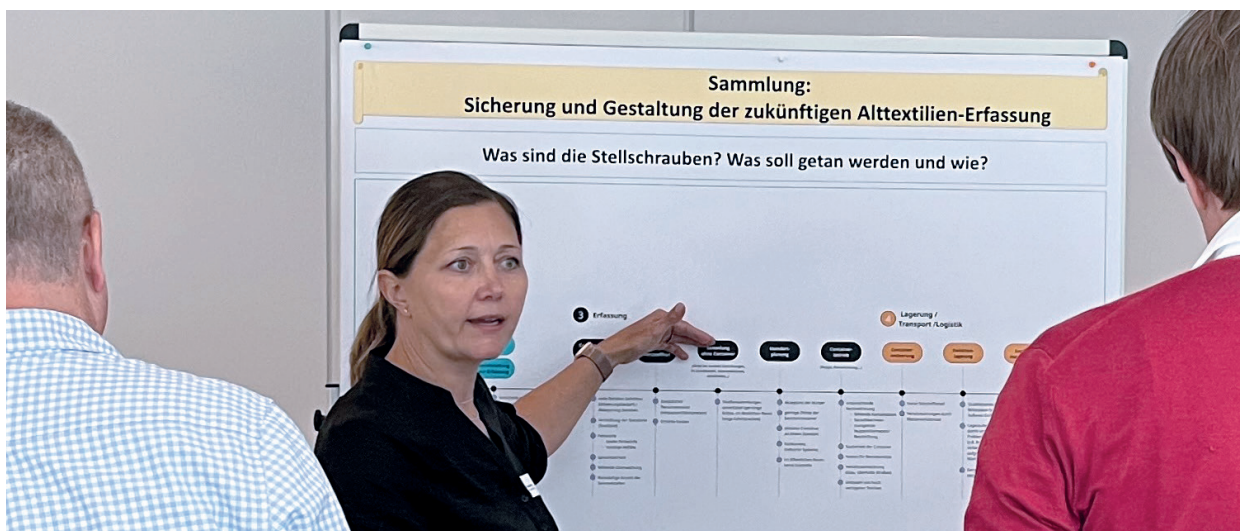


MaKoSaTex

From research to the Bavarian Circular Economy Strategy



How can the collection of used textiles in Bavaria be safeguarded when collection volumes are rising, the quality of used textiles is falling, and established recycling channels are coming under economic pressure? The bifa Environmental Institute, in collaboration with Augsburg University of Applied Sciences (THA), is addressing these questions as part of the MaKoSaTex project.

The project is being carried out on behalf of the Bavarian State Ministry for the Environment and Consumer Protection (StMUV). Since our first report in 'bifa aktuell', the

project has made significant progress – and has been incorporated into the draft Bavarian Circular Economy Strategy (BayKWS).

MaKoSaTex in the BayKWS

In the catalogue of measures within the draft BayKWS strategy, MaKoSaTex is listed as a specific measure under the 'Textiles and Clothing' priority area. This underlines the project's significance for the further development of the textile circular economy in Bavaria. Application-oriented research can therefore make a direct >>

page 2 Residual waste sorting analyses

Knowing what's in the bin



page 3 Climate communication that motivates

The KlimKomHub project in its practical phase



page 4 Focus on the PPWR and VerpackDG

bifa and the IHK Schwaben support companies

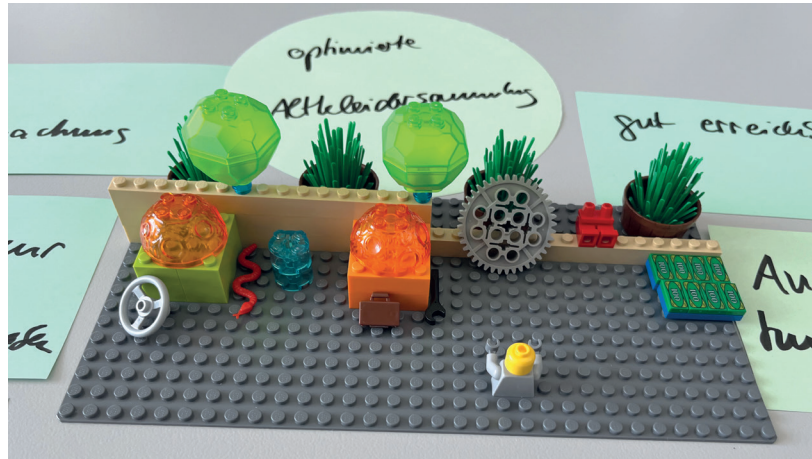


>> contribution to ensuring that policy strategies are based on a sound technical foundation, whilst simultaneously driving forward solutions for local authority practice.

Developing sustainable solutions for end-of-life textiles together

The project focuses on public waste management authorities (örE), which face growing challenges: falling revenues from the marketing of end-of-life textiles are coupled with rising sorting and disposal costs. At the same time, the planned implementation in Germany of the European requirements on extended producer responsibility (EPR) raises questions about future funding and the distribution of roles. MaKoSaTex is therefore examining collection structures, market and material flow trends, as well as national and international EPR models.

Direct dialogue with practitioners is particularly important. Representatives from local authorities and the textile value chain came together in two dialogue workshops in May and July 2026. Discussions focused on approaches to safeguarding collection, improving public information, and developing sustainable sorting and recovery models. In a scenario workshop, initial models for solutions that can be implemented in the short term were developed based on these discussions.



The next steps will involve consolidating the findings and translating them into concrete recommendations for action for local authorities and the Free State of Bavaria. This will also involve examining greenhouse gas savings across various scenarios for the future collection and recovery of end-of-life textiles. The aim remains clear: a collection system for end-of-life textiles that functions under difficult market conditions, enables high-quality reuse and recovery, and offers local authorities a reliable outlook.

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Residual waste sorting analyses

Knowing what's in the bin

What ends up in residual waste shows how well separate collection and waste advice are working – and where there is potential for climate and resource protection. Residual waste sorting analyses provide a data basis for this.

This issue is particularly topical in Baden-Württemberg

The 2024 Waste Management Plan provides for household waste to be analysed every five years from 2025 onwards. By 2030, the quantities of bio-waste and recyclables in household waste are to be halved. With baseline figures of less than 50 and 20 kilograms respectively, the target values are a maximum of 25 kilograms of bio-waste and 10 kilograms of recyclables per inhabitant per year.

The LUBW guidelines for the analysis of residual waste establish a standardised methodology

The waste is sieved, sorted by hand and recorded. Organic matter such as kitchen and garden waste, food scraps and packaged food is identified, as are paper, plastics, glass, metals, composites, electrical appliances, textiles and hazardous substances. Results are reported as a percentage by weight and in kilograms per inhabitant



Sorting of residual waste for the Sigmaringen district

per year. The plan involves at least two campaigns independent of the season, different settlement structures and 48 sampling units.

This reveals which materials are being lost to recycling and where action can be taken, for example in waste advisory services, collection systems, and >>

>> bin and fee structures. Repeat analyses show whether measures are effective.

bifa supports public waste management authorities, from planning representative sampling through sampling and sorting to statistical analysis and recommen-

dations for action. In this way, a look inside the bin provides a sound basis for sustainable decisions.

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Climate communication that motivates – collaboratively, locally and positively

The KlimKomHub project in its practical phase



Since April 2025, bifa has been researching, in partnership with Kempten University of Applied Sciences and the sine Institute, how innovative climate communication can drive forward future projects. Three use cases have been identified for this purpose in the model regions of Ost-Allgäu and Zwickau.

Our three use cases

In East Allgäu, a trial is being conducted in collaboration with hospitality businesses to explore how tourists can be encouraged to use public transport. A nudging experiment is investigating which incentives are particularly effective in this regard.

In the Gennach-Hühnerbach-Singold 'sponge region', the aim is to strengthen public awareness of water as a resource – both amongst the local population and within the Buchloe local authority – through targeted communication.

In Zwickau, the city is being supported in communicating the background to current climate adaptation measures and in promoting climate-resilient urban development through communication.

A key methodological component of the use cases is the PhotoVoice method

Participants capture their perspectives on the themes of 'water' and 'a liveable city' through photography and



Project staff members Lotta Stöbe and Lara Lutzeier (from right: both from Kempten University of Applied Sciences) distributing the activity packs at one of the participating establishments.

subsequently discuss them in focus groups. This brings diverse perspectives to light, which can then be incorporated into communication strategies.

The project is funded by the Federal Ministry for the Environment, Climate Protection, Nature Conservation and Nuclear Safety (BMUKN) via the project management organisation ZUG.

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BRIEFLY INFORMED

EVENT

Hydrogen Day 2026 on 29 October 2026, Augsburg Technology Centre

The focus will be on current innovation, technology and research topics relating to hydrogen. Interactive workshops with research partners offer the oppor-

tunity to discuss technical issues, meet new project partners and find solutions to specific challenges.

We look forward to seeing you at our bifa information stand.

EU PVSEC

Innovation platform for the global PV solar sector

EU PVSEC is the world's leading forum for research and development in the field of photovoltaics, the largest conference on solar energy and the most important platform for exchange between academia and industry.

At this year's conference, held at the World Trade Centre in Rotterdam (NL), 1,500 PV experts from over 60 countries

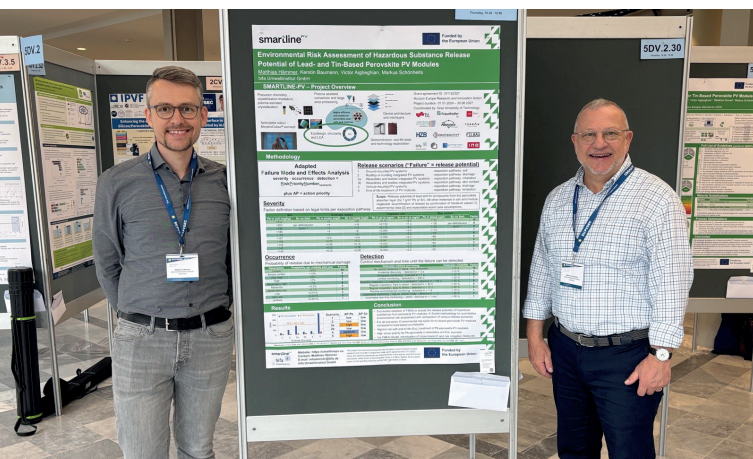
came together. Through some 1,200 scientific presentations, poster sessions, and expert and industry workshops, they were able to gain insights beyond their own specialist fields, exchange knowledge and take advantage of valuable networking opportunities.

Alongside impressive progress in the further development of PV technologies, the topic of the circular economy in particular is increasingly coming into focus.

bifa presents posters from funded projects

The bifa Environmental Institute was represented at EU PVSEC by Dr Matthias Hämmer and Markus Schönheits. Three posters from the Smartline-PV and BIMPV funded projects were presented on the topics of 'Ecodesign Guidelines', 'Environmental Risk Assessment of Hazardous Substance Release Potential' and 'Retrospective BIM Approach to the Life Cycle-Oriented Integration of BIMPV Systems in the Building Envelope'.

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Focus on the PPWR and VerpackDG

bifa and the Swabian Chamber of Industry and Commerce (IHK Schwaben) support companies with practical implementation

With the EU Packaging Regulation (PPWR) and the Packaging Implementation Act (VerpackDG), packaging manufacturers face new regulatory requirements – and small and medium-sized enterprises, in particular, are often left with unanswered questions.

Who is required to register with the Central Packaging Register (ZSVR)? What quantities must be reported? And where does the line between packaging and non-packaging lie?

Our areas of expertise

The sustainable design and assessment of packaging, e.g. as part of life cycle assessments, has been one of the core competencies of the bifa Environmental Institute for many years – ranging from research and development projects to applied consultancy for businesses.

On behalf of the Swabian Chamber of Industry and Commerce (IHK Schwaben), bifa has now developed a practical guide that clearly explains the key obligations for manufacturers regarding registration and volume reporting – supplemented by an Excel tool for calculating their own packaging volumes.



In doing so, bifa is making a concrete contribution to making complex regulatory requirements more accessible to businesses.

You can access the guide, the Excel tool and all further information from the IHK here: <https://www.ihk.de/schwaben/produktmarken/energie/kreislaufwirtschaft/eu-verpackungsverordnung-6546516>

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