

OUR PARTNERS

terms of both expertise and markets.

The BioActiveMaterials project team consists of 3 nonprofit research institutes, 2 supporting associations and two SME User Committees consisting of SME's operating in different stages of the associated market sectors and along the packaging value chain (see below). The cooperation between all partners offers synergy of expertise and research facilities. In previous projects, it has been proven that the partners are complementary in

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BIOACTIVEMATERIALS

Development of recyclable bio-based materials with antimicrobial and antioxidant functionalities to improve food shelf life



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renewable naturally materials bio active using wastes as raw material using recycling material

ABOUT THE PROJECT

The BioActiveMaterials project aims to develop new multilayer packaging materials that are fully biobased, easily recyclable and provide suitable oxygen, water vapour and mineral oil barriers, as well as antioxidant and antimicrobial properties. These new materials are intended to replace existing multilayer packaging materials that are fossil-based and generally very difficult to recycle. To assure that the new materials can be implemented and exploited in their respective markets, the project combines material research with business case and feasibility studies.

The developments are centered around two cases, namely a food wrapper consisting of a recovered paper base combined with natural wax and protein coatings, and a pouch, consisting of a recovered paper base to which a bio-polymer film is applied using a bio-adhesive.

food wrapper	pouch
Natural Wax coating water vapor barrier antimicrobial	Bio-Polymer film water vapor barrier sealability
Protein Coating mineral oil barrier	Bio-Adhesive oxygen barrier mineral oil barrier
Recovered Paper mechanical carrier, stability deadfold properties, light protection	

ADRESSED MARKETS + BENEFITS

- ✓ PAPER INDUSTRY will obtain new market shares as the new material is paper-based and replaces fossilbased polymer packaging materials.
- ✓ AGRO-FOOD INDUSTRY can market their currently underutilised by-products as raw materials for the production of fossil-based materials
- ✓ CONVERTERS OF NATURAL MATERIALS can access new key markets.
- ✓ RETAILERS & BRAND OWNERS will gain access to easy-recyclable multilayer packaging materials that follow the new German packaging law, which is the strictest in Europe.
- ✓ CONSUMERS will benefit from increased quality and/or elongated shelf-lives of the food they buy.

ADRESSED SOCIETAL CHALLENGES

