



Horizon 2020
European Union Funding
for Research & Innovation



PULPACKTION

Optimised moulded pulp for renewable
packaging solutions



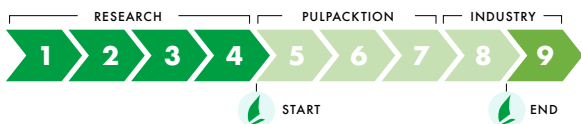
Photo by Jay Mantri



PULPACKTION'S TECHNICAL GOALS

- New pulp formulations that incorporate biopolymers and bio-additives, for wet moulding applications
- Production at industrial scale of wet compression moulded packages
- Demonstrate on Industrial scale production of new 100% bio-based polymer materials with enhanced barrier and mechanical properties for film and coating applications
- Development of bio-based inks to be used for inkjet printing applications
- Implementation at industrial scale of the production of 100% bio-based tailored-to-purpose packaging
- Bridging the innovation gap, moving from laboratory results to industrial implementation.

Project Technical Readiness Levels (TRLs) (5-8)





ABOUT PULPACKTION

A cellulose-based packaging solution able to compete with current fossil based packaging

Within the PULPACKTION project, a cellulose-based packaging solution able to compete with current fossil based packaging systems will be launched. This will be accomplished by the combination of improved cellulose pulps and bio-based polymers. The use of improved wet moulded cellulose as the main packaging material will reduce the final package weight and increase its sustainability, providing a controlled shaped part. PULPACKTION project will develop fully bio-based packaging materials with a high percentage of cellulose for food and electronic market applications. The package solution will help reduce the waste streams by substituting plastics with an ecofriendly bio-based solution.



Photo by Gustav Gullstrand

VISION

PULPACKTION envisions a 100% bio-based integral packaging solution with similar properties as existing fossil-based packaging solutions. The new product will fulfill medium and high barrier requirements as demanded from food and electronics industries. PULPACKTION will provide replacements to current fossil-based packaging using well-known and largely used material such as cellulose. Material properties will be enhanced through pulp formulation and processing, along with the use of bio-based polymeric formulations. Pulpaction will reach at least a 50 % reduction in CO2 emissions by taking today's moulding technology beyond state-of-the art, allowing for a more energy efficient process and decreased material needs. A successful project will also help reduce the amount of non-degradable plastics that are landfilled each year.



PULPACTION WORK PACKAGES

- WP1 Consumer Insight
- WP2 Bio-based pulp formulation for wet moulding packaging applications
- WP3 Cellulose-based packaging's production by wet moulding
- WP4 Advanced bio-based films and coatings
- WP5 Development of integrated packaging traceability system
- WP6 Production of demonstrators and validation at semi-industrial scale
- WP7 Validation of techno-economic feasibility of demonstrators in an industrial environment
- WP8 Evaluation of the new products' sustainability
- WP9 IPR and Dissemination Activities

PULPACKTION PARTNERS



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TOTAL



Corbion



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