



Thermowhey project will deliver trays, jars, cups and blisters with high deformation rates, stable thermoforming behaviour and good barrier properties (e.g. for products packed in modified atmosphere). Such solutions will meet the packaging market demands for the food, cosmetics and pharmaceutical sectors.

In contrast to certain controversial food competing biopolymers, ThermoWhey will represent a unique thermoformable barrier packaging solution that is derived from an agrofood by-product.

www.thermowhey.eu

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**THERMOFORMABLE
SUSTAINABLE BARRIER COATING**

thermowhey



On the one hand, there is a growing need for sustainable packaging solutions offering similar food protection to conventional plastic counterparts but recyclable and based on renewable resources.


While thermoforming is one of the dominant and growing technologies in the packaging market, existing bio-based thermoformed packaging do not meet the barrier properties required for sensitive food products.



On the other hand, the agrofood industry generates large amounts of residues. Over 20 million tonnes of whey, a by-product from cheese making, are discarded annually in Europe.

ThermoWhey will build on past projects that developed a biopolymer-coating based on whey protein for plastic films capable of replacing the expensive synthetic oxygen barrier layers currently used in food packaging such as Etylene vinyl alcohol copolymers (EVOH).

ThermoWhey will improve the long term thermoformability of whey protein coated packaging.



ThermoWhey project tackles the up-scaling of the manufacturing capacity of the participating SMEs throughout the supply and value chain. The coating process and formulations based on agglomerated whey protein, as well as the thermoforming process parameters and tools will be optimised. The performance of the thermoformed laminates with different structures with heightened sustainability will be tested in different applications especially in the food sector.