



DELIVERABLE D.T2.2.2 REPORT BASED ON THE OUTCOMES OF THE BUSINESS SUPPORT SERVICE

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COUNTRY CONTEXT

In Italy the share of bioplastics in packaging has increase by 59% from 2013 to 2016 mainly thanks to the progressive implementation of legislation (law on the mandatory use of biodegradable/compostable shopping bags (January of 2011)). However, it represents, only 1.5% of the plastic on the market. The more recent implementation of the new legislation concerning ultralight plastic bags is expected to further increase the share of bioplastics in flexible packaging. With reference to paper/bioplastic multi-material products, currently there are few leading companies present in the market and clear statistics are not yet available. Although, the volume and associated value are difficult to estimate they still represents a niche market with a clear growing trend related to the potential replacement of conventional plastics in many packaging applications. The recent publication of plastic strategy and single use plastic products directive is actually shifting part of conventional plastic packaging to bioplastic also associated with paper to produce biodegradable and compostable products as well as replacing conventional plastic with bio-based plastic in paper based multi-materials that could be recycled in paper mills. Multi-material paper-based packaging are made normally with more than 80-90% of paper and may have some advantages in comparison to thick rigid bioplastic containers because paper disintegrate faster than some bioplastic products in composting plants. Moreover, in case of non-food packaging multi-material products or packaging in contact with dry food, the recyclability is still a potential option providing that the design of the material/product is evaluated for its impact on recyclability. In this context, in Italy the paper value chain is gaining a significant experience thanks to recent standard methodology to assess recyclability of paper based products (www.atichelca.it) that contributes to proper recycling oriented eco-design as well as the presence in the country of few specialized paper mills already equipped for recycling multi-material paper based liquid beverage containers.

ASSESSMENT REPORT

COMPANY PROFILE BASED ON AUDIT TOOL

The firm is a small-medium enterprise focused on paper based packaging production. The financial figures of the company show a growth trend in the last three years supported by a good attention to new developments in the market and a good attitude of the top management towards sustainability goals. The company presently holds an FSC certification for paper material and would like to expand their product portfolio by promoting multi-material products based on paper and bioplastic to their clients. Currently their knowledge on biomaterials is limited and furthermore, although fully aware about the importance of waste management options, they lack a good understanding of proper eco-design to reduce the impact on paper recyclability of their products.

Major need highlighted by the expert: find out bottlenecks of new biomaterials and additives in paper recyclability as well as develop of new compostable products for niche markets

Solution proposed by the expert: carry out stricter cooperation with external expert consultants in order to make proper material selection followed by experimental testing design. Technical training of key staff to develop higher internal knowledge. Widen cooperation network to search for new packaging solutions.

Feedback from Pilot action

Based on the survey, the pilot company has been open to have further information about country specific data in the field of biocomposite packaging material and technology and will stay in contact with BioCompack consortium in the future as well. The questions of the audit tool were found sufficient to depict the company profile, thus no additional suggestions were indicated. In principle also the technology feasibility questionnaire was found sufficiently clear as further details may emerge during face-to face discussion.

From the company's point of view, the information provided during pilot action proved to be interesting and the overall service was judged relevant to achieve a competitive advantage in the future operation, especially in the field of networking, knowledge of biocomposite materials as well as to help their decision-making process regarding product end-of-life. The number of participants and experts proved to be sufficient and after this pilot action the top management of the company expressed the intention to participate in further pilot actions as well. The solutions proposed during pilot action will be implemented in the company strategy to increase internal knowledge and sustainability of their products' portfolio

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