DELIVERABLE D.T1.1.2 "NATIONAL WORKSHOPS ON VALUE CHAIN MAPPING WITH STAKEHOLDERS"

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GENERAL INFORMATION

COUNTRY: ITALY

Title of the seminar in English: Circular Economy: opportunities and problems of paper-bioplastics products in the packaging value chain

Location: Milano

Date: 30 November 2017

N° of participants : 40 (including project partners- signed list attached)

SHORT DESCRIPTION OF THE WORKSHOP

The seminar took place in Milano at Legambiente premises. The workshop was organised with five introductory presentations pointing out some of the main issues related to paper-plastic value chain in Italy.

- Graziano Elegir (Innovhub-SSI)
- Marco De Benedetti (Bionet - Green Chemistry Association)
- Alberto Confalonieri (CIC- Composting Association)
- Barbara Bonori (Comieco- Recovered Paper Association)
- Massimo Ramunni (Assocarta – Paper Association)

Afterwards a round table with key company players (Novamont, Natureworks and Carton Specialist) was carried out to open the discussion among participants.

KEY FEEDBACKS GATHERED FROM STAKEHOLDERS

Alberto Confalonieri, CIC: There's only a little fraction (2,4 %) of paper in the Organic Fraction of Municipal Solid Waste (OFMSW), normally represented by tissue papers. **There's a common perception that paper products have to be recycled in the paper collection, even if they could be compostable**.
Presently, only about 50% of the annual bioplastic production is recovered in the organic fraction of the municipal solid waste (OFMSW) the remaining is lost in other waste fractions. **The contamination of conventional plastic in composting plants is still very high leading to a further loss of bioplastic during cleaning operations.**

Marco Benedetti, ASSOCIAZIONE CHIMICA VERDE BIONET: In the food packaging market, normally the biobased products are evaluated (from the companies) for their biodegradability and cost.
Actually, **most of these the success stories happen when biobased food packaging products are evaluated for their functionality, sustainability, communication and machine runnability. These are the real priorities.**
Some of the benefits of paper-bioplastic composites: (dalle slide della presentazione)
-complementarietà nel recupero della materia prima (produzioni agricole dedicate o produzioni da scarti agricoli).
-complementarietà nel fine vita (biodegradabilità o rigenerabilità)
-complementarietà nella mescola (es. piatti monouso, filo stampanti, carta cucina cellulosa/pla)
-flessibilità nella produzione di spessori diversi (vasetto da yogurt e sacchetto pane)
-mancanza di contaminanti tossici nei laminati (con biopolimeri a contatto con l'alimenti -ftalati/bisfenoli)
-permeabilità al vapore (traspirabilità) del film biopolimero
-batteriostaticità del pla a contatto con alimenti

Massimo Ramunni, ASSOCARTA: **It is important to investigate the behaviour of bioplastic films in the paper recycling process**. For Assocarta, **the main end of life option for paper based packaging materials is recycling, in order to recover cellulose fibers (unless they are strongly contaminated by food and then not recyclable in the paper fraction).**

ROUND TABLE:

NATUREWORKS: they presented **a success story, a paper sack with a PLA window** (instead of PP window) intended for packing bread in big retailers. The plastic window is used only for its transparency, in order to make the product visible to customers.
They demand for the new product came from the retailer, **the main driver was not biodegradability but the necessity of a specific functional product.** As the bread is packed when it's still warm, it's necessary to have some transpiration in the sack. In the case of PP window it's necessary to have small holes in the film (but it's not well accepted by customers, because some flour can spill). In the case of PLA window the film has not holes because the material can assure the necessary transpiration itself.

NOVAMONT: for their experience, one of the main driver for increasing the use of paper-bioplastic products is the direct communication of the retailers towards customers.
It is necessary to have strong dialogue among different value chains, in order to create clear rules for the end of life best option for different materials (recycling or composting).
Clear indication of the recovery option to customers (for instance positive list of products suitable for composting).

COMIECO: the first option for the end of life of paper based products should be recycling.
Biobased packaging can be particularly useful in some application, like containing organic food (fruit, vegetables, ecc) in retailers. When the product has expired, the whole packaging+food can be ideally recovered in the organic fraction.

CARTONSPECIALIST: their success case is a range of **paper based trays with bioplastic film/coating,** containing food to be cooled and/or heated. **The main driver was the company vision of developing sustainable products, in order to be used also for catering and food services**. The biopolymer can increase some product functionalities.
The main problem is that communication to customers is not still clear. The other critical point is that some end user are not inclined to face the higher cost of these products, if they can't perceive and clearly communicate the benefits with respect to traditional products.