



Standardization in research and innovation projects

Success story: **bio-based economy**

OPEN-BIO :

Opening bio-based markets via standards, labelling and procurement is a 3 year FP7 project (November 2013 to October 2016) which aims at increasing the uptake speed for bio-based products in Europe by supporting the development of standards, labels and harmonized product information lists. As outlined in the European Commission's Bioeconomy Strategy, such measures are expected to have a positive effect on the European bio-based market. By coordinated, co-normative action with CEN, the project feeds into the drafting and effective use of European Standards.

www.open-bio.eu

THE PROJECT

The Open-Bio project covers research and demonstration activities on direct and indirect biomass content determination methods, functionality, managed end-of-life options, biodegradability and ecotoxicity tests. The project is partially a follow-up of an on-going pre-normative project KBBPPS. Methods to directly determine the biological content will now be complemented with indirect determinations. Next, already initiated investigations for degradability in soil and fresh water will be completed by tests supplying other comparison factors.

It will be important that all properties and applications are clearly communicated to the users of bio-based products. A concept of a label is developed that can help to clearly distinguish bio-based products and their properties. A database on bio-based products for procurement and guidelines for the information supplied together with the product will be developed.

STANDARDS: A SOLUTION FOR MARKET UPTAKE

The goal is to provide results to be adopted in European Standards, labelling and product information tools. These will tell what the biological content of a product is. That is of importance for producers and countries to achieve fossil material replacement goals. The standards also will tell how a product degrades in soil, rivers and oceans, whether it is compostable (also through home-composting in your own garden) or if it can be digested into biogas in an industrial installation. These 'end-of-life applications' are important in order to compare bio-based products (also in terms of sustainability) and develop applicable policies.

□□ A training for European Custom Laboratories based on the already available CEN standardization documents and the running EU-KBBPPS- or Open-Bio-projects will be organized. This would help the Member States since they are expressing technical difficulties in employing different relevant bio-based content methodologies. □□

HOW WILL THE STANDARD BE DEVELOPED?

As the project has been initiated recently, no standards have yet been developed as a direct result of Open-Bio. However, three reviews of existing standards and techniques in the field of centralized and decentralized composting and biogasification have already been published.

Project partners, as well as representatives from a wider community of manufacturers and researchers linked to the project, provide input to the standards' development in CEN/TC 411 "Bio-based products". They also reach out to some related bio-based product working groups under other Technical Committees (such as for lubricants and plastics). The exchange with the standardization community happens by participating as experts in working groups, including CEN experts in questionnaires, by socio-economic assessments or involving CEN experts in the organization of Round Robins for test method assessments. The link with standardization is visually supported by the fact that the project information is presented on the same website as the public information of CEN/TC 411: www.biobasedeconomy.eu

BENEFITS OF LINKING WITH STANDARDIZATION

Standardization is a key dissemination activity for the project. The work of Open-Bio is in essence co-normative work. It further assesses product information and labelling which is also a topic in a specific working group under CEN/TC 411.

The EC has specifically requested that the project will exchange its results beyond CEN in order to seek harmonization of standards. The project has incorporated American and Australian researchers that are also involved in local standardization.

LONG-TERM EXPECTED IMPACT

The total concept of developing bio-content and end-of-life determination techniques combined with advice regarding how to present the product and the conceptualization of a label that can be applied to both environmentally friendly and bio-based products should allow European producers to effectively market their products.

The socio-economic research in combination with real normative work will ensure that standards, labels and information lists address all relevant aspects for enabling the rapid market uptake of bio-based products.

The EC supports the use of CEN standards in public procurement and other regulatory activities related to the promotion of bio-based products. Following discussions on the establishment of new exemplary Combined Nomenclature (CN) and PRODCOM codes for bio-based polymers and lubricants based on already available CEN standards, the EC and the Open-Bio partners initiated a training. Here the different relevant methodologies employing bio-based carbon measurements for such substances are addressed.



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Every project is different. The CEN-CENELEC Research Helpdesk can provide you with advice on how to include standardization in your project. Please feel free to contact us!

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