



# **Open-BIO**

## **Opening bio-based markets via standards, labelling and procurement**

**Work package 8**  
**Product information list**

### **Deliverable N° 8.8:**

## **Final interaction tool**

**Public**

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## 1 Introduction

This report presents a short overview on the final version of the product information list developed from December 2015 – October 2016 in the research project Open-Bio. The real Deliverable is the website, online and published at [www.open-bio.eu](http://www.open-bio.eu).

The original aim of the Work Package 8, within the Open-Bio project was to develop “a European product information database on bio-based products that could be used for public procurement (for business-to-public or B2P) and bio-based producers (business-to-business or B2B). The database should also be used to promote their uptake in consumer markets (business-2-consumer or B2C)”.

The concept of the database was developed after comprehensive stakeholder consultation through workshops, webinars and surveys including public procurers, businesses, consumers, researchers and standardization experts. Results concluded that the Open-Bio database should concentrate on B2P product communication.<sup>1</sup>

The database focuses on providing information about bio-based end-products relevant for public procurement. It presents product information according to the requirements of public procurement authorities but also additional information which supports procurers to conduct market orientation exercises as part of their procurement need assessment process.

The report describes the different features of the database and the final interaction tool (Chapter 2). Experiences and lessons learned from filling the database with product information are shared in Chapter 3. Furthermore, the report explains how the database will be put into practical use in the project InnProBio (Chapter 4).

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<sup>1</sup> See: Behrens, Martin; Peuckert, Jan; et al (2014): Requirements of product information list, Open-Bio, Deliverable 8.2; Gülzow-Prüzen; Berlin, Den Haag, source: [http://www.biobasedeconomy.eu/media/downloads/2014/10/Open-Bio-D8-2-final\\_14-09-24.pdf](http://www.biobasedeconomy.eu/media/downloads/2014/10/Open-Bio-D8-2-final_14-09-24.pdf). as well as Vos, John; Behrens, Martin; et al (2015): Product information list guidelines, Open-Bio, Deliverable 8.4; Enschede.

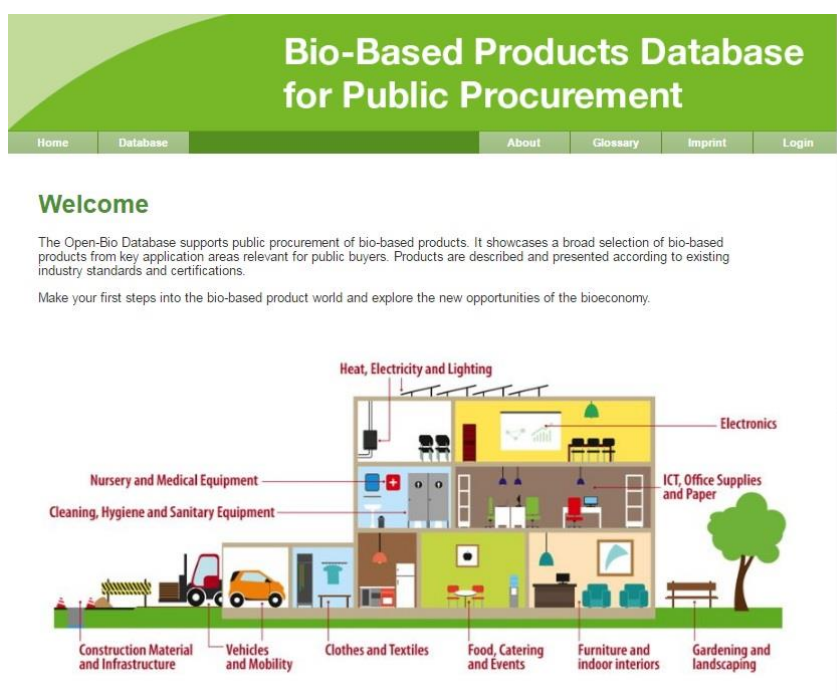
## 2 The interaction tool

The Open-Bio database was developed by nova Institute and FNR according to the concept provided by the Open-Bio Deliverable 8.4 'Product Information List Guidelines'. A first version was presented in February 2016 and constantly improved until the testing of the public procurers started in May 2016. After the testing the database was filled with product data until the end of the Open-Bio project in October 2016. The tool is currently available as a subpage to the Open-Bio website: <http://www.biobasedeconomy.eu/research/open-bio/database/>.

The website is divided into 5 subsections including the following pages:

- Home
- Database
- About
- Glossary
- Imprint.

**Home:** This subpage is the entrance point for the user. Central to the page is the graphic of a bio-based house representing different product application areas relevant for public procurers. Users can directly access the database information through a mouse click on the house. There is a short welcome note introducing the purpose of the website.



Picture 1: Screenshot of the home page

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**Database:** The database is the core of the website. Users can access product information through a full product list, by application area and through different search options including a full text search, a search by biomass type, a search by tag and a search by Common Procurement Vocabulary Code (CPV-Code). Product information is provided on a single page which includes information on the following aspects:

- Product name
- Product picture
- Supplier
  - e-mail
  - phone
  - contact person
  - website
- Product group according to CPV
- CPV code
- Application and additional value of the product/ functionality
- Bio-based carbon content
- Bio-based content
- Biomass type and biomass origin
- Additives and ingredients
- Environmental impact
- Product life cycle properties

Product providers are free to provide information on any of the information items. Information on the bio-based carbon content and bio-based content was made required information.<sup>2</sup>

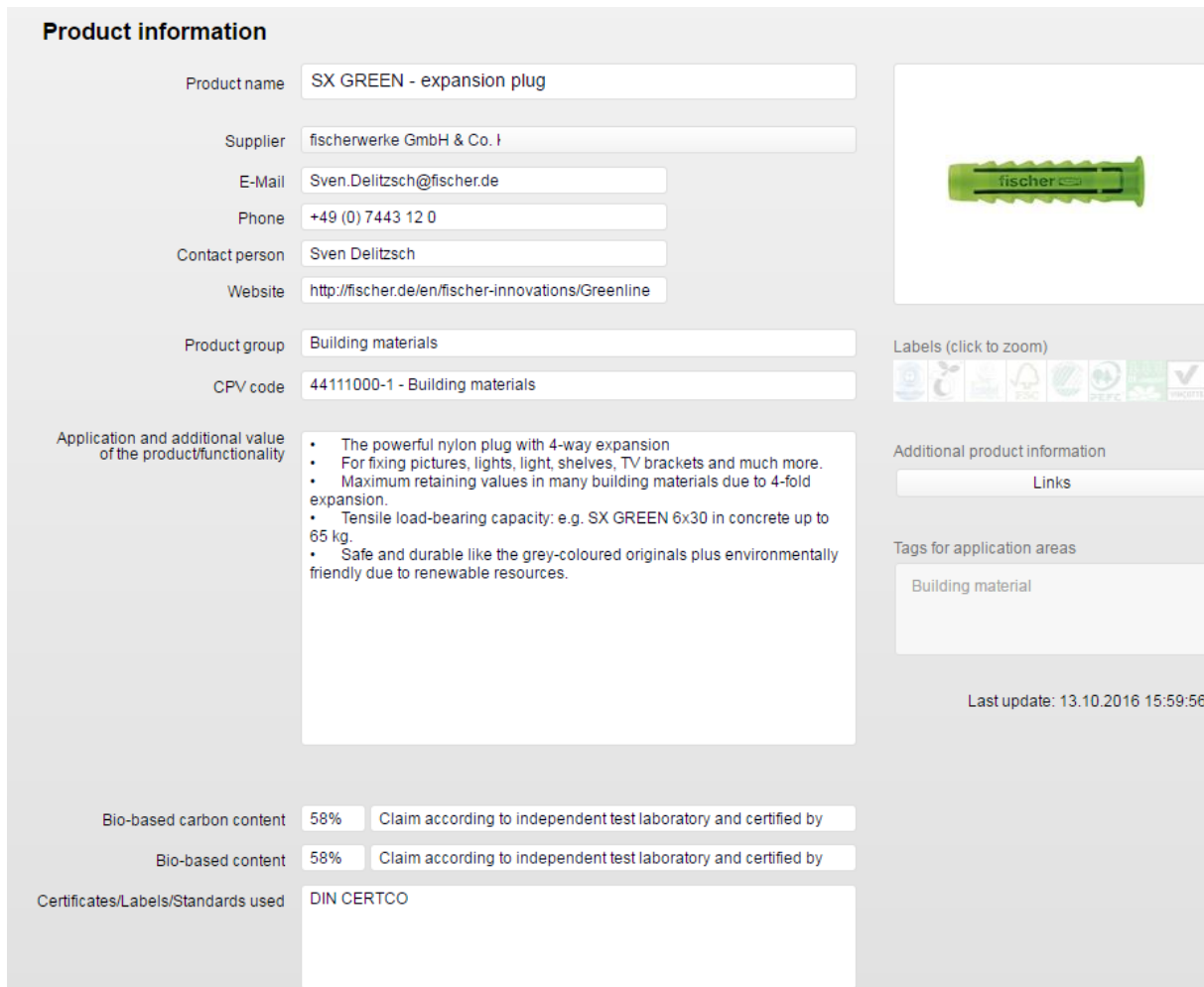
Each section includes a text field for information on certificates/labels/standards used to prove the specific claims. Some of the main labels are presented with a graphic icon.

Product suppliers can access the database through company accounts and take charge of their own product data. Additional to the information provided directly in the database, product supplier can upload documents such as technical specifications, further product information and certificates. It is also possible to include hyperlinks to additional information.

Final approval remains in the hand of the website administrator who checks if data provided meets the database information requirements of the Open-Bio project. However companies will be accountable for the product information they provide. On the bottom of the single product page is a disclaimer stating that responsibility for the information provided remains with the product suppliers.

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<sup>2</sup> The reason for that was the strong interest of the Open-Bio consortium to see if standard methodology to measure bio-based content and bio-based carbon content was taken up by businesses. Open-Bio WP 3 looked into measurement methodology and conducted performance tests and assessments of related methods.



**Product information**

Product name: SX GREEN - expansion plug

Supplier: fischerwerke GmbH & Co. I

E-Mail: Sven.Delitzsch@fischer.de

Phone: +49 (0) 7443 12 0

Contact person: Sven Delitzsch

Website: <http://fischer.de/en/fischer-innovations/Greenline>

Product group: Building materials

CPV code: 44111000-1 - Building materials

Application and additional value of the product/functionality

- The powerful nylon plug with 4-way expansion
- For fixing pictures, lights, light shelves, TV brackets and much more.
- Maximum retaining values in many building materials due to 4-fold expansion.
- Tensile load-bearing capacity: e.g. SX GREEN 6x30 in concrete up to 65 kg.
- Safe and durable like the grey-coloured originals plus environmentally friendly due to renewable resources.

Labels (click to zoom)

Additional product information

Links

Tags for application areas

Building material

Last update: 13.10.2016 15:59:56

Bio-based carbon content: 58% Claim according to independent test laboratory and certified by

Bio-based content: 58% Claim according to independent test laboratory and certified by

Certificates/Labels/Standards used: DIN CERTCO

Picture 2: Screenshot Single Product Page (display detail)

Besides viewing the full product page, users can compare up to 3 products which will be presented next to each other.



Bio-Based Products Database for Public Procurement					
Home	Database	About	Glossary	Imprint	Login
<a href="#">&lt; Product list</a> Compare					
Product name	Green Waste Bag	Green Waste Bag Inliner	Waste food bag		
Product picture					
Labels (click to zoom)					
Supplier	Pacovis AG	Pacovis AG	Bionatic GmbH & Co.KG		
Product group	Polythene waste and refuse sacks and bags.	Polythene waste and refuse sacks and bags.	Polythene waste and refuse sacks and bags.		
CPV code	19640000-4	19640000-4	19640000-4		
Bio-based carbon content			100%		
Bio-based content	47%	47%	100%		
Biomass type	starch, plant oil	starch	corn, starch		
Biomass origin			Europe - Central		
Additives and Ingredients	1,4-Butandiol (0000110-63-4 5mg/kg) Hexamethylen-diisocyanat (000822-06-0, QM(T) = 1mg NCO/kg) Dual Use Additives: E422				
Environmental Impact			no GMO		
Product Life Cycle Properties	Compostable according to DIN EN 13432 (suitable for industrial composting facilities).	Compostable according to DIN EN 13432 (suitable for industrial composting facilities).	Compostable according to DIN EN 13432 (suitable for industrial composting facilities).		

**Picture 3: Screenshot Product Comparator**

**About:** The about page gives additional information on the Open-Bio project and a more detailed idea how the database could be used by public procurers.

**Glossary:** The glossary page provides a list of definitions and terminology, which is used to describe bio-based products. It also includes information on relevant standards for bio-based products.

**Imprint:** Includes contact information to NEN (project coordinator); nova-Institute (technical development) and FNR (product information).



### 3 Lessons learned from filling the database with product data

Currently, there are 123 products from 26 product suppliers available on the website. Data sets for another 124 products have been created, which still need additional data before they can be published. These products are supplied by 23 new companies. Among the published products, suppliers come from Germany, Denmark, the United Kingdom, the USA, Austria and Switzerland. More information on the current status of product data filling is provided below.

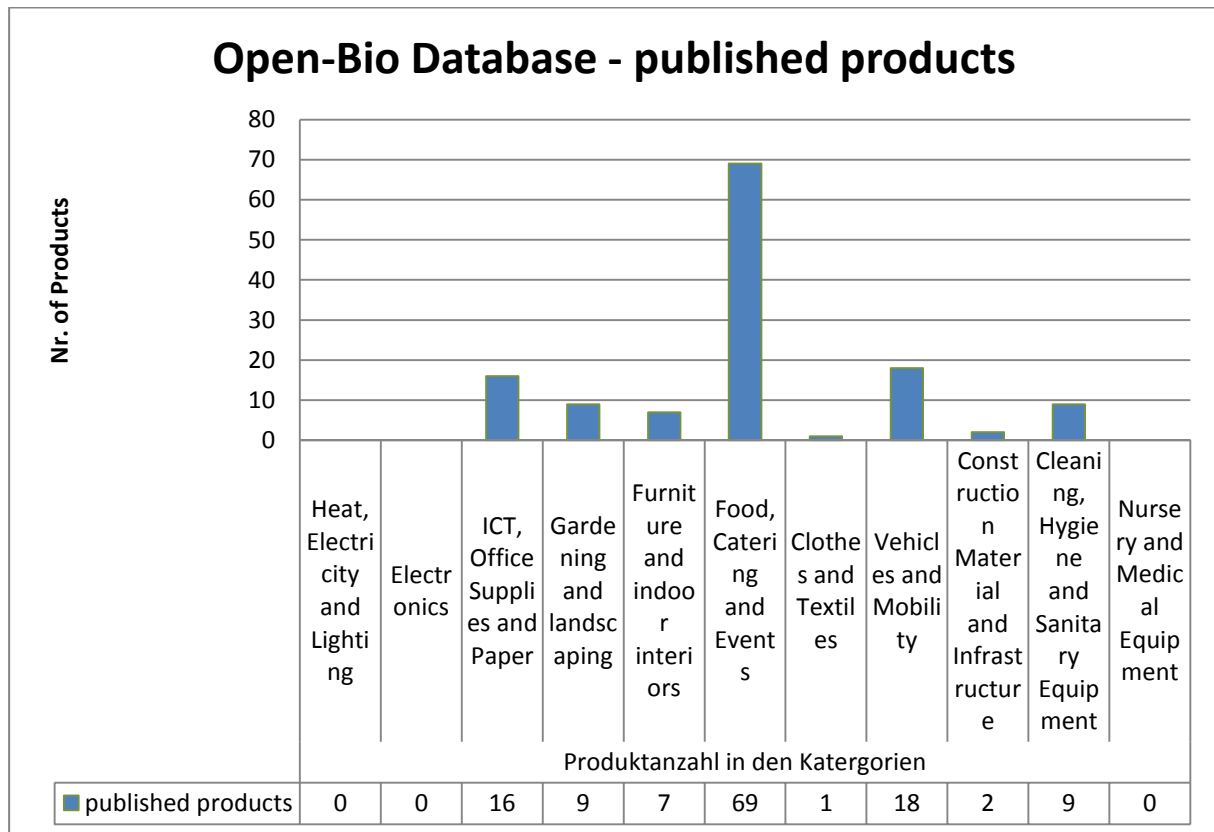
The database was filled in two steps. During the first step, data was put in on a sufficient number of products and companies in order to demonstrate the concept and the usability of the database. This data was used during the testing of the database.<sup>3</sup> For practical reasons, first input data was derived from an existing German database run by FNR, which focuses on public procurement and bio-based products as well. This allowed quick filling of data. Only limited modification was necessary to meet the Open-Bio product information requirements and the contents were translated into English.

In the second step, filling with product data continued after beta testing had been completed. However, the starting focus on products from the German speaking market can still be seen in a high majority of products offered by German providers. These suppliers who were already presenting their products in the German database had a quick start. They were able to finish the process towards providing the required information in a relatively short timeframe of 3-4 weeks. This is different with companies from other countries which first needed to get familiar with the database concept before they could provide the right data. That is why the timeframe was considerably longer for them to complete the data provision process. It lasted up to 6-8 weeks from the first contact to the final approval of a dataset (with usually several products). Products from other countries are slowly but steadily catching up.

Furthermore, there seems to be a higher availability of products belonging to certain application areas compared to others. Also some companies can easily provide data for many only slightly different products (i.e. lubricants or catering products), while others struggle with providing data for only a few but quite different kind of products (i.e. office equipment or IT). For some of the product application areas, it was not possible to find any product yet (i.e. Nursery and Medical Equipment). The table below gives an overview of the existing products which are currently published on the database website.

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<sup>3</sup> This was reported in a separate restricted deliverable 8.6 which presented the database test results. See: Behrens, Martin; Ladu, Luana; Vos, John (2016): Database test results, Deliverable 8.6, Open-Bio Project, July 2016, Gülzow.



**Table 1: Open-Bio Database - Published products<sup>4</sup>**

Apart from the issues described above there were repeating difficulties faced by companies to come up with the required data. The main problem was to provide information on the bio-based content and bio-based carbon content. This was the only required information which needed to be provided by each product supplier. Information included the percentage of the bio-based content, information about the type of claim and the used method which led to the claimed bio-based content information. Companies could choose between:

- Self-Claim
- Claim according to independent test laboratory
- Claim according to independent test laboratory and certified by a third party.

The majority of companies chose the self-claim option. Companies quite often had difficulties to distinguish between the bio-based carbon content and the bio-based content. Also they often could only provide one of the two bio-based content information items. Another difficulty was to provide information about the test method which was used to measure the bio-based content of their products. Last but not least providers of more complex products which used various different materials often only provided information about parts of their product. For example, when providing information about a computer mouse they could give information about the bio-based content of the casing but not of other components of the product.

<sup>4</sup> Double counting is possible with a few products which can be applied in more than one area. The data presented shows the status quo at the publication date of this deliverable.

It can be concluded that the requirement to provide information on the bio-based content and bio-based carbon content caused considerable difficulties during data collection. The Open-Bio team which collected the data used several methods to reduce these difficulties:

- Provide additional information on bio-based content and bio-based carbon content including reference to available test methods and testing facilities
- Support to product providers to interpret material information sheets and available technical information
- Acceptance of the provision of one of the two information items as long as information was presented as a clear percentage and included the used test method
- Accept simple mass and material balance based information, since most of the product suppliers could not provide laboratory test data
- Accept claims which related to only parts of a product (e.g. the casing) as long as these circumstances were made transparent

There are good reasons to continue this more liberal way of dealing with the product information requirements of Open-Bio. Previous research and consultation with public procurement officials showed that the bio-based share of a product is currently not considered the most relevant information for their procurement processes and product selection criteria in tender notices. What is of more importance is product functionality and performance. If this comes with a claim of using biomass as renewable feedstock, it is a 'nice to have' aspect only. Therefore, the lack of information on bio-based content and bio-based carbon content from the side of the product supplier is not necessarily an important gap in a product information profile.

## 4 Exploitation

During the final project meeting of Open-Bio, the decision was taken to transfer the Open-Bio product information database to the project InnProBio (Forum for Bio-Based Innovation in Public Procurement)<sup>5</sup>. The project is financed under the EU Horizon 2020 programme. The InnProBio project specifically deals with public procurement of innovative bio-based products and provides tools and hands-on information for public procurers who want to assess the possibilities of bio-based products and services.

The Open-Bio database was developed as a test case to see how standardized information and product information requirements can be matched and presented in a comprehensive database. Within the InnProBio project, this research result can become a valuable tool for public procurement stakeholders who could use it for their purchasing activities. It can also be supported, further filled and developed by the new project. This provides the possibility to fill in missing products and product categories and tackle some of the flaws regarding the presented product selection. It also provides the opportunity to further develop the database, include new features and tools which can support the public procurement of bio-based products and make the 3-year exercise of the Open-Bio project of developing this database worthwhile.

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<sup>5</sup> [www.innprobio.eu](http://www.innprobio.eu)

## 5 Conclusions

This report presented the main features of the Open-Bio product information tool and database for public procurement of bio-based products. It also explained the lessons learned during the filling of the database which were mainly related to the information requirement to provide information on the bio-based content and bio-based carbon content of each product including information of the used test method.

It showed why and how the project team diverted from these strict requirements while keeping high standards on the information provided and the transparency of product related claims.

Last but not least it described how the Open-Bio database was transferred to the InnProBio project where it can now be used by public procurers who are interested in purchasing bio-based products and services.

The Open-Bio database is available on the website of the project: [www.open-bio.eu](http://www.open-bio.eu).

## **6 Acknowledgement**

We would like to thank all stakeholders, from both the business and the public procurement sector, that provided valuable feedback and comments during the development of Open-Bio product database. The validation process included various surveys, workshops, webinars, phone interviews and e-mails exchanges.

A special thanks goes to the work package 8 core partner organizations nova Institute, BTG, TU-Berlin, DLO and FNR and their involved staff