Open-Bio
Opening bio-based markets via standards, labelling and procurement

Work package 8

Product information list

Deliverable N° 8.1:

Available tools and best practices

Public

Version: 2

Hürth, 08.04.2014

prepared by:

nova-Institut GmbH

Asta Eder, Lara Dammer

nova-Institut GmbH
Chemiepark Knapsack
Industriestr. 300
50733 Hürth
Germany
Tel.: +49-2233-481455
Fax: +49-2233-481450
Email: asta.eder@nova-institut.de,
lara.dammer@nova-institut.de
Partner website : www.nova-institut.de
Project website : www.open-bio.eu (to be published)

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° KBBE/FP7EN/613677.

Table of content

1 Introduction

This document presents the research carried out under Task 8.1 of Work Package 8 within the project Opening bio-based markets via standards, labelling and procurement (Open-Bio) and the obtained results. This work package aims at developing a European product information database of bio-based products that could be used for public procurement (B2P) and communication among producers of bio-based materials (B2B). The database should also be used to promote the uptake of bio-based products in consumer markets (B2C).

As a first step within this work package, a mapping of existing product information databases was carried out and analysed in terms of target group focus, information content and usability. The search covered all of Europe and some non-European countries, as far as it was possible due to language reasons. The matrix in which the existing databases were assessed included the criteria listed in Table 1 below. The starting point of the analysis were well-known, established product information lists dedicated to or including bio-based products, such as the Ecolabel catalogue website, Agrobiobase of IAR, iBIB of nova-Institute and Specialchem4bio in Europe and the BioPreferred website from the U.S. Going further from there, the research was able to identify 24 product information lists with a procurement focus, and 23 lists with a focus on business-to-business communication. The complete overview of all analysed databases can be found in Annex I.

Table 1: Matrix of analysis criteria

Name / website
Owner
Financing: Public / Private
Description by owner
Information included
Additional (web) features
Nation
Geographic focus: national / regional / global
Languages
Access free: yes / no
Target group: B2B / B2C / B2P
Information focus: Products / Companies and their services
Product properties: yes / no
Comparison between products: yes / no
Company information: yes / no
Information bio-based share: yes / no
Measuring method for bio-based share: yes / no
Biomass feedstock information: yes / no
Starting year of the webpage
Number of listed products
Certificates / Label information: yes / no
Label: which one

Based on the mapping according to these criteria, an analysis of best practices is carried out that will serve as an orientation for the upcoming tasks within the work package. Criteria for being classified as a best practice were success / longevity (as far as identifiable), user friendliness and quick access to vital information. From each category – B2B and B2P – six samples were chosen to illustrate the best practices. The conclusion will interpret the findings and give recommendations to the further proceedings of the work package.

2 Available tools and best practices[1]

2.1 Mapping of available product and procurement information

The overview of the analysed information platforms, relevant for bio-based products is offered in the following Table 2. Relevant information databases count 24 primarily for procurement and 23 predominantly for B2B. Additional B2C information was offered by 45 % of B2B databases, much less (7%) of the procurement information websites focus also on B2C. Very few offer only information for end users. About a third of all consumers in Western Europe is estimated to consist of a new type of consumer, the so called LOHAS, “Lifestyle of Health and Sustainability” (Kirig and Wenzel, 2009). This group wants to have a luxurious lifestyle, but aspects of sustainability, climate change and health are driving forces of their consuming behaviour, also the marketing message considering the ecological benefits depends on the targeted group of consumers. If ”LOHAS” are to be addressed, the ecological and social aspects are crucial to any communication strategy, according to experts. Otherwise one should better argue with technical benefits than with ecological values.

Some databases offer information for all focus groups, which seems not to be very effective in terms of structure as the information requirements of the target groups are quite different.

Almost half of the procurement databases offer best practice samples or political framework information (58%) and tender text bloc examples (21%). These might not be very interesting for end users (OSU 2014). General information on sustainability (economic, ecological, social) was offered by 33% of the B2P focused archives; this could – in contrast to previous findings (Haider et. al. 2012) – be also interesting for all user groups Such assumptions should and will be further investigated in the following tasks of the work package that also look into target group requirements.

The most important drawback of the websites offering information for all the user group lies therefore on complicated and not user friendly structures, since the more focused catalogues offer greater usability as the required information can be found in shorter time.

The information platforms on procurement are more focused as more than 87% put emphasis on public procurement, the B2B platforms have less focus (77%) and cover a broader range of information, e.g. 55% also offer information targeted to end consumers. The information for B2B and B2C seems to be better combinable than B2P with B2C.

[1] Please note: The total number of lists included in the analysis / Annex I was increased by one additional list through an update after the official delivery of the document. Therefore, the indicated percentages in the following analysis are slightly incorrect, since we did not recalculate them. The impact of the altered percentages on the analysis and the following research questions / recommendations is marginal to non-existent and would thus not justify the effort to make a complete recalculation. Also the selection of best practices was not influenced by the update.

Table 2: Overview of analysed information platforms

	Focus Procurement	**Share**	**Focus B2B and B2C**	**Share**
Number of product information lists relevant for Open-Bio	24	100%	23	100%
Focus B2C	4	17%	10	45%
Focus B2B	15	65%	18	77%
Focus B2P	20	87%	13	59%
National (or a few countries)	16	67%	7	32%
European (or multiple EU countries)	6	25%	9	41%
International/Global	2	8%	6	27%
Supplier information included	5	22%	18	82%
Information focus on products	13	54%	20	91%
Comparison between products	1	4%	5	23%
Information on product properties	-	-	8	36%
Hosted by a single Eco labelling organisation	1	4%	3	13%
Information on labels	14	58%	15	68%
Information on bio-based share	1	4%	8	36%
Information on methodology of the measurement of bio-based share	1	4%	7	32%
Information on bio-mass feed stock/sources	3	13%	10	45%
Private financing			12	55%
Public financing			9	41%
Bio-based share	1	4%	8	36%
Political framework information	14	58%		
Tender text bloc examples	5	21%		
Information sustainability (economic, ecological, social)	8	33%		
Information on Standardisation	5	21%		
Case studies/ Best practise examples	11	46%		

Table 2 shows that only a modest portion of the existing procurement websites have a (semi) European focus. Most of the procurement databases are focused on national information (67%), which seems user-friendly considering language, framework conditions, best practices and a shorter way to product sources. In contrast, 41% of the B2B databases are European, owing to the fact that most European businesses trade internationally on the EU's internal market. The global/international databases make up the minor share (9% of B2P and 27% of B2B), these are mainly associated with different environmental labels (5% of B2P and 13% of B2B). Product Information lists do not necessarily offer data about bio-based shares of the products, except for some certification bodies that have an expressed focus on bio-based feedstock such as Vinçotte, BioPreferred and DIN CERTCO.

The research resulted in finding several websites in German and English speaking countries but there are only very few from France, Italy, Spain and Belgium. One reason for this might be that the languages are less prevalent in Europe. Some part of the explanation can also be found in the fact that the German speaking area constitutes a strong European economic area that has a long-standing focus on bio-based economy. However, other European countries with a firmly established bio-based economy such as France, Italy or the Netherlands might have a stronger tradition of consolidating these activities, which would explain that a smaller number of databases was found, but that they are of high quality (see best practices analyses below).

In terms of information focus, the greatest share of databases considering green procurement (54%) and green economy (91%) focus on product information, but not on general information or company descriptions. However, some platforms also offer information about supplier companies (82% of B2B and 22% of B2P), such as expertise and experience of the companies, especially in the case of consulting services in the B2B directories of bio-based economy such as the iBiB or Agrobiobase, which belong to the privately financed databases (55%). The experience with these databases shows that it is not easy to attract companies that are willing to pay a fee for being included in such a database, but that through proper marketing activities it is possible to establish a database. The procurement databases enjoy public financing to 100%, as they are mostly hosted by ministries or other public bodies, so there is no evidence on their popularity and the potential viability without public backing.

Unfortunately there is very few public data about the hits on the databases that would show to which extent they are used and to make a comparison of the number of hits on the information platforms based on objective data. Only nova-Institute publishes data about the hits at the iBIB database, where over 61,500 visits of the company descriptions were registered within the last year (information sheets about actors of bio-based economy), which was a plus of 46,500 hits compared to the previous year.

Information on the bio-based share is given by 4% of B2P and by 36% of B2B databases. In almost all of these instances, also information on the methodology of the measurement of the

bio-based share (Biobased carbon content, measured according to ASTM D6866) is available: in 4% of B2P and 32% of B2B databases. This kind of specific information is mostly available from the homepages of the labelling organisations, which offer reliable possibilities to find focused information on bio-based products. Information on the bio-based feedstock type (without any quantification of the share in the total feedstock base) of the bio-based products is available from 45% of B2B focused websites and from 13% of the procurement information sites.

2.2 Best practices and (dis-)advantages

In the following you find the samples of information platforms that were classified as best practice examples, they are listed in the following Table 3 and

Table 4 once for procurement and once for B2B. The listing includes all relevant databases that were found for bio-based products and the best practise samples are marked with an X. 6 samples were chosen from each category as best practices. Proper procurement samples were found in the U.S. (BioPreferred), UK (WRAP Sustainable Procurement and Sustainable Procurement and Resource Center) and Germany (Compass for Sustainability and NawaRo-Kommunal). These are countries that have already focused on the support of bio-based products longer than the European average. The 6 best practices to deliver primarily information for business were also found in US (BioPreferred), Germany (iBIB), but also in France, such as SpecialChem and Agrobiobase or in the Netherlands (Biobased Delta).

One criterion to look for in a best practice example is the success or longevity of the information platform. It is not always easy to find that kind of information, but the best-known platform BioPreferred has been in existence since 2002 and the iBIB has been running successfully since 2009, showing that some activities are already quite established.

It is important to differentiate between the public and private financing models. SpecialChem, Agrobiobase and iBiB and a few others (55%) of the B2B pages have managed successfully to collect private funding to keep the platforms running, which shows that it is possible to establish a product information system and it can be successful in the market. Marketing activities are necessary as there is already a keen competition between the platforms, although many companies active in the bio-based economy take advantage of several possibilities to present their products. The public procurement systems on the other hand were all financed publically, although some of them use also advertisements to gather a broader interest base.

Interesting online features and usability were also criteria for best practice. Among the offered features were information for vendors (i.e. regarding green claims), FAQ, links to more information, or a cost calculator. Nawaro-Kommunal offers events on bio-based products and a newsletter next to a strong focus on bio-based resources and therefore falls into the category of best practices, but the structure of the database was found to be lacking in usability, as the interface is quite complicated and does not offer quick access to the required information or comparison between products in terms of advantageousness.

Table 3: Listing of platforms for bio-based procurement and best practices

Platform	Webpage	Best Practice
Environmentally Preferable Purchasing	http://www.epa.gov/epp/pubs/guidance/standards.htm	
NawaRo-Kommunal	http://kommunal.fnr.de/	X
GGP Homepage	http://ec.europa.eu/environment/gpp/index_en.htm	X
Compass for sustainability	http://www.kompass-nachhaltigkeit.de/	X
Buy smart - Green procurement in Europe	http://www.buy-smart.info/	

Sustainable Procurement and Resource Center	http://www.sustainable-procurement.org/	X
Eco-Innovation Policies for Green public procurement	http://www.ecopol-project.eu/en/green_public_procurement	
ÖkoBeschaffungsService (ÖBS) Vorarlberg	http://www.umweltverband.at/handlungsfelder/oekologisch-einkaufen/oebs-shop/	
Kompetenzstelle für nachhaltige Beschaffung	http://www.nachhaltige-beschaffung.info/DE/Home/home_node.html,	
Umweltfreundliche Beschaffung	www.beschaffung-info.de	
BioPreferred	http://www.biopreferred.gov/	X
WRAP Sustainable Procurement	http://www.wrap.org.uk/content/sustainable-procurement	X
International Green Purchasing Network	http://www.igpn.org/	
Center for Sustainable Procurement	http://www.bsr.org/en/our-work/working-groups/center-for-sustainable-procurement	
Sustainable Development in Government	http://sd.defra.gov.uk/tag/procurement/	
Sustainable Forest Products	http://www.sustainableforestprods.org/	
Soy Biobased Products	http://www.soybiobased.org/resources/tools-and-other-resource-information/best-practices-information/	
Procurement for a sustainable future	http://www.msr.se/en/	
buy green	http://www.buygreen.com/	
Memo AG	www.memo.de	
Austrian sustainable Procurement	http://www.nachhaltigebeschaffung.at	
Sustainable Construction and Innovation through Procurement	http://www.sci-network.eu/about/	
PIANOo, the Dutch Public Procurement Expertise Centre	http://www.pianoo.nl/about-pianoo	
GPPnet The Green Public Procurement Network	http://www.compraverde.it/en/index.html	

The GGP Homepage offers features such as social web, glossary, FAQ, newsletters and a helpdesk, with the latter being the best possibility to help with complicated questions considering procurement. Some more criteria to choose the samples for the best practice procurement were additionally: Personal accounts, self check for sustainable procurement and online shop for procurement.

The usability of the homepages offered covers a very broad range. One of the best practice samples offered was BioPreferred, which is chosen as a sample of both best procurement and also B2B information. The database offers very practical search features to look for products and compare them, which strongly simplifies a decision process. Furthermore, the bio-based share is always given in this list.

SpecialChem and Agrobiobase or Biobased Delta are samples of very good usability and suitable design for bio-based products and these platforms offer diverse possibilities to find products and their suppliers as well as additional information on the topic of bio-based economy.

Information on the bio-based share is given regularly only by B2B databases, the BioPreferred database being an exception to that, which provides also information for procurement. The BioPreferred database offers a listing of the product categories including their labels and bio-based shares. Each category has a minimum share of bio-based share defined, e.g. structural wall panels should have a minimum bio-based content of 94% to be recognized and included in this system. The shares are all defined by the same measuring method following ASTM6866. The iBIB offers a highly combinable search by indexes, which offers flexibility to a multitude of potential users and their needs. The Vinçotte homepage offers also an updated listing of all products holding the label as a PDF file, which is also a good service for users.

Table 4: Listing of platforms for B2B communication and best practices

Platform	Webpage	BP
Agrobiobase	http://www.agrobiobase.com/	X
Biobased Delta	http://www.biobaseddelta.nl/	X
The Biopolymer Database	http://biopolymer.materialdatacenter.com	
Nawaro-Kommunal	http://datenbank.fnr.de/anwendungen/	
The Ecolabel Catalogue	http://ec.europa.eu/ecat/	
Nordic Ecolabelling	http://www.nordic-ecolabel.org	
Ecolabelling Sweden	http://www.svanen.se	
Ecolabelling Denmark	http://www.ecolabel.dk/	
Ecolabel Finland – Motiva Services Oy	http://joutsenmerkki.fi/	
Das Österreichische Umweltzeichen	http://www.umweltzeichen.at/cms/home/produkte/content.html	
Sustainable Procurement Campaign	http://www.procuraplus.org/	
buy-smart - Green procurement in Europe	http://www.buy-smart.info	
Materials	http://materia.nl/	
SpecialChem	http://www.specialchem.com/	X
Groene Grondstoffen	http://groenegrondstoffen.nl/	
BioPreferred	http://www.biopreferred.gov/	X
LOHAS -life style of health and sustainability	http://www.lohas-magazin.de/eco-produkte.html	
DIN CERTCO	http://www.dincertco.tuv.com/companies/12248?locale=de	
The Sustainable Biomaterials Collaborative (SBC)	http://www.sustainablebiomaterials.org/index.php	
Vincotte	http://www.okcompost.be/en/home/	X
The International Business Directory for Bio-based Materials	http://www.bio-based.eu/iBIB/	X
Business Directory (NNFCC)	http://www.nnfcc.co.uk/business-directory	
Global Ecolabelling Network (GEN),	http://www.globalecolabelling.net/	

3 Conclusion

3.1 Achievements and recommendations for further research

The mapping of existing product information platforms has resulted in a list of 24 procurement tools and 22 B2B communication tools from all over Europe and the U.S.. Even if not all parts of Europe are equally represented due to language restrictions, this is a very good coverage of existing schemes. Input from project partners, advisory partners and other related research projects was collected in order to overcome as many barriers as possible and to keep a broad horizon during the research.

Reflecting the information analysis, the greatest share of databases considering green procurement and green economy focus on product information. This focus should be underlined in the future database to keep the information focused on bio-based products and their features and benefits and overall information on sustainability or procurement should be offered additionally in clear separate sections.

The study showed that only a modest portion of the existing procurement websites has a (semi) European focus. Most of the procurement databases are focused on national information, which seems user-friendly considering language, best practices and a shorter way to product sources. Since procurement law is European, however, it would be recommendable for the further research to investigate whether this national focus of procurement websites makes sense. Language reasons might be powerful arguments in favour of nationally focused procurement websites, but it should be clarified what the potential target users deem appropriate and useful for the development of the future tool. Similar questions apply to B2C information on bio-based products – products are often sold within the whole internal European market, but language and individual culture reasons might be good reasons for differentiated marketing through the Member States.

Considering information for B2B a European or international database is recommended.

The best practice analysis (see Table 5) has shown that there is a wide range of possibilities of which information can be included and how the database can be structured. For the following research this means:

- Thorough research on target group requirements is necessary.
- Clear structuring of the information content to be included in the future tool is necessary.
- User interfaces need to be designed carefully in order to enable easy handling of the tool.

For the structuring of the information, which will be done in later stages of the work package, the best practice samples should be used as inspiration. Especially the comparability of products is a big bonus for the users as it makes buying decisions much easier.

Table 5: Listing of platforms with best practices

Platform	Best practice Webpage	Focus Group	Country / Region
GGP Homepage	http://ec.europa.eu/environment/gpp/index_en.htm	B2P	EU
Compass for sustainability	http://www.kompass-nachhaltigkeit.de/	B2P	DE
Sustainable Procurement and Resource Center	http://www.sustainable-procurement.org/	B2P	UK
BioPreferred	http://www.biopreferred.gov/	B2P/ B2B	USA
WRAP Sustainable Procurement	http://www.wrap.org.uk/content/sustainable-procurement	B2P	UK
NawaRo-Kommunal	http://kommunal.fnr.de/	B2P	DE
Agrobiobase	http://www.agrobiobase.com/	B2B	FR/EU
Biobased Delta	http://www.biobaseddelta.nl/	B2B	NL
The International Business Directory for Bio-based Materials	http://www.bio-based.eu/iBIB/	B2B	DE/EU
SpecialChem	http://www.specialchem.com/	B2B	FR
Vincotte	http://www.okcompost.be/en/home/	B2B	NL/EU

In terms of financing it has become clear that the two models of private and public funding are fundamentally different. Both models have advantages: On the one hand, it seems detrimental to build up a competition to successful and economically viable private options by spending public funds. On the other hand, the example of the BioPreferred list shows that a focused governmental action makes it possible to set down clear rules of what can be considered a bio-based product, to award one clear label and compile a very comprehensive product list, combining it with a preferred procurement programme for public authorities. The latter is not possible with a multitude of private organisations offering their own lists with their own criteria. However, a clear European bio-based label could offer transparency and guidance even within different product information systems.

Also, the BioPreferred (USDA 2012) system of defining a minimum bio-based share per product category in order to be included in the scheme is a recommended approach for the further project activities.

3.2 Project planning

During the kick-off meeting of the overall project in Delft in December 2013, the work package partners already met in order to plan the research ahead and to collect input on existing product information platforms.
In order to coordinate the research, several telephone calls were held between the work package leader FNR and the task leader NOVA, aside from regular communication via email.

FNR provided the research on the existing procurement lists, while NOVA focused on the B2B lists and on the analysis as well as the report.

In order to harmonize the research of task 8.1 (Mapping of existing product information lists) with the following tasks (target group requirements and conceptualizing the tool), regular communication was also kept with the leading partners of the ensuing tasks, BTG and TUB. A continuous exchange via email and telephone was complemented by personal meetings: BTG visited the NOVA office on 10 February 2014; TUB visited the NOVA office on 17 February (also to discuss work package 9).

This report was handed in with a slight delay of 12 days, which was communicated in advance to the Work Package leader and which will not have any foreseeable impact on the following tasks. They will still be able to execute their research within the planned timeframe.

4 References and background literature

Carus et al. 2014: Environmental Innovation Policy: More resource efficiency and climate protection through sustainable material uses of biomass. English short version of the final project report. Dessau-Roßlau 2014. Accessible at: http://bio-based.eu/policy/en/studies/environmental-innovation-policy.php (last accessed 2014-03-13).

CEN/TC 411 Bio-based products 2014: Consultation B2B Product information sheet, accessible at: https://sites.google.com/a/willemse.nu/productinfosheets-b2b/ (last accessed 2014-03-13).

The Ohio State University (OSU) 2014: Evolution of the Biobased Market: Survey of Consumer Attitudes. Summary of research findings. Ohio 2014.

European Bioeconomy Panel 2013: Summary of the kick-off meeting on 17 September 2013 in Brussels. Accessible at: http://ec.europa.eu/research/bioeconomy/news-events/news/20131007_en.htm (last accessed 2014-03-13).

The British Standards Institution (2013) Bio-based products – Guide to standards and claims, accessible at: http://shop.bsigroup.com/en/ProductDetail/?pid=000000000030262005 (last accessed 2014-03-13).

USDA (United States Department of Agriculture) 2012: BioPreferred Program Product Categories, accessible at: http://www.biopreferred.gov/ProductCategories.aspx (last accessed 2014-03-13).

Haider, A., Eder, A., Sozak, L., Grestenberger, G. 2012: Market opportunities for bio-based composites: Biobased materials - 9th WPC, Natural Fibre and other innovative Composites Congress and Exhibition, Feldbach 2012.

Kirig, A., Wenzel, E. 2009: Lohas, Bewusst grün - alles über die neuen Lebenswelten, Redline Verlag, München 2009.