

Background

To foster an innovation-friendly market environment for bio-based products, the European Commission's Bioeconomy Strategy proposes the development of standards and standardized sustainability assessment methodologies as well as the promotion of bio-based products via public procurement. The Open-Bio project supports this policy initiative by performing co-normative research and by developing an information system to support the procurement of bio-based products.

Objective

To ensure the effectiveness of measures that support the demand of bio-based products, the research conducted at the TU Berlin aimed at the identification of key criteria for the acceptance of bio-based products and related standards and information systems, including labelling options for bio-based products.

Description of Activity

Two Delphi surveys were conducted in March/April 2014 (1st round) and April/May 2015 (2nd round) among business and procurement experts:

- The business survey (320 respondents from 17 EU member states) provides an overview of key market drivers and barriers as well as perceptions on the role of product labeling and standardization for enhancing the uptake of bio-based products.
- The procurement survey (171 respondents from 12 different EU member states) focused on possible measures and informational needs of public procurement officers for enhancing the uptake of bio-based products in (green) public procurement.



Market drivers and barriers

Most important market drivers	Most important market barriers
<ol style="list-style-type: none"> 1. positive public image 2. independence from fossil sources 3. savings in CO₂ emissions 4. compliance with environmental regulation <p>➤ The B2B market uptake of bio-based products is driven by their positive public image and certain environmental benefits.</p>	<ol style="list-style-type: none"> 1. higher cost of production 2. uncertainty about future regulation 3. volatility of feedstock prices 4. unsupportive regulatory environment <p>➤ Challenges related to the regulatory environment as well as high production costs and volatile feedstock prices are among the most important market barriers.</p>



Key country Differences

Taking your personal experiences in the bio-based market into account, please indicate to what extent you agree or disagree with the following statements.

➤ **Differences in response patterns were identified across various European countries.** The most significant differences were found in Italy and France.

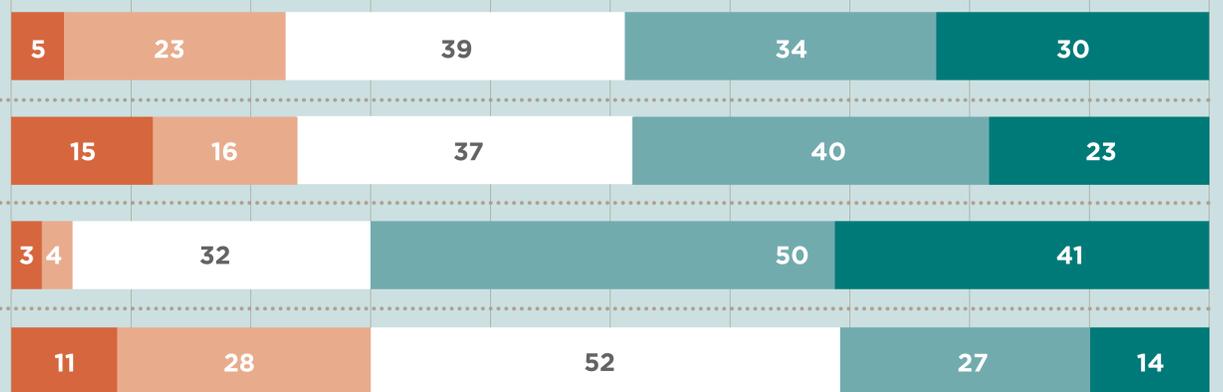
Compared to other European countries, end-of-life consideration (i.e. biodegradability, compostability, recyclability) are of particular importance for the future development of the B2B market for bio-based products in Italy.

Compared to other European countries, efforts to gain independence from fossil resources is of particular importance for the future development of the B2B market for bio-based products in France.

Compared to other European countries, efforts to promote domestic supply chains are of particular importance for the future development of the B2B market for bio-based products in France.

Compared to other European countries, environmental considerations (apart from CO₂ savings) have a relatively low level of importance for the future development of the B2B market for bio-based products of the Netherlands.

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



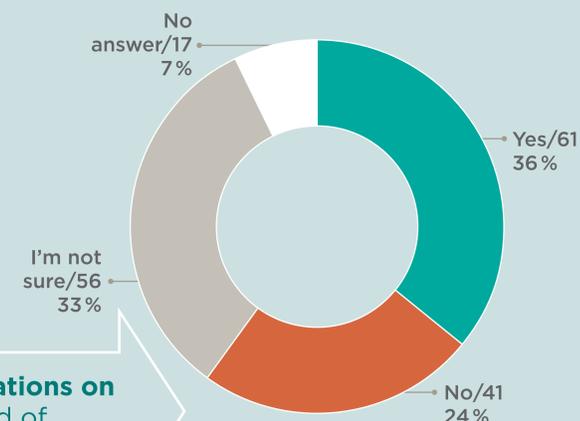
■ strongly disagree ■ disagree ■ neutral ■ agree ■ strongly agree

Public procurement and bio-based products

Most important reasons for the limited use of specifications on bio-based content in public procurement	Most effective measures for promoting bio-based products in public procurement
<ol style="list-style-type: none"> The available bio-based products are frequently too expensive. Specifications on bio-based content are difficult to verify. Information about available bio-based products as alternative for fossil-based products is not easy to find. Bio-based content is not considered a relevant product attribute. 	<ol style="list-style-type: none"> A political decision to promote bio-based products via public procurement Practical guidance for incorporating specifications on bio-based content in public procurement (e.g. text blocks for tender requirements) A checklist to facilitate a systematic comparison of bio-based products and conventional products A database of bio-based products containing key product information

Current practices

Would current public procurement practice in your organization allow you to utilize specifications on bio-based content as basis for taking a procurement decision?



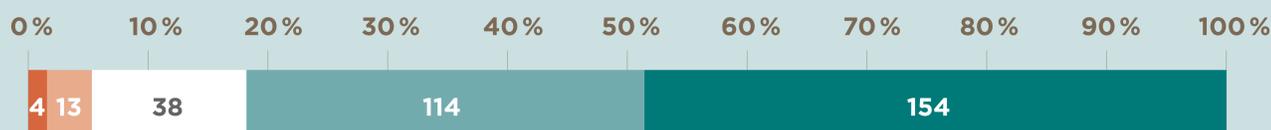
There is high uncertainty regarding the use of specifications on bio-based content in public procurement. Only a third of respondents is confident that this is permissible at their organization.

Labelling

Please indicate to what extent you agree or disagree with the following statements on a possible labelling scheme for bio-based products.

The creation of a European label for bio-based products is important for promoting the market for bio-based products.

Labelling is considered important for promoting the market for bio-based products.



Please answer to what extent you agree or disagree with the following statement: This item represents an important use of ecolabelling schemes in the content of green public procurement.

A reference for defining selection criteria for the procurement of environmentally friendly products and services.

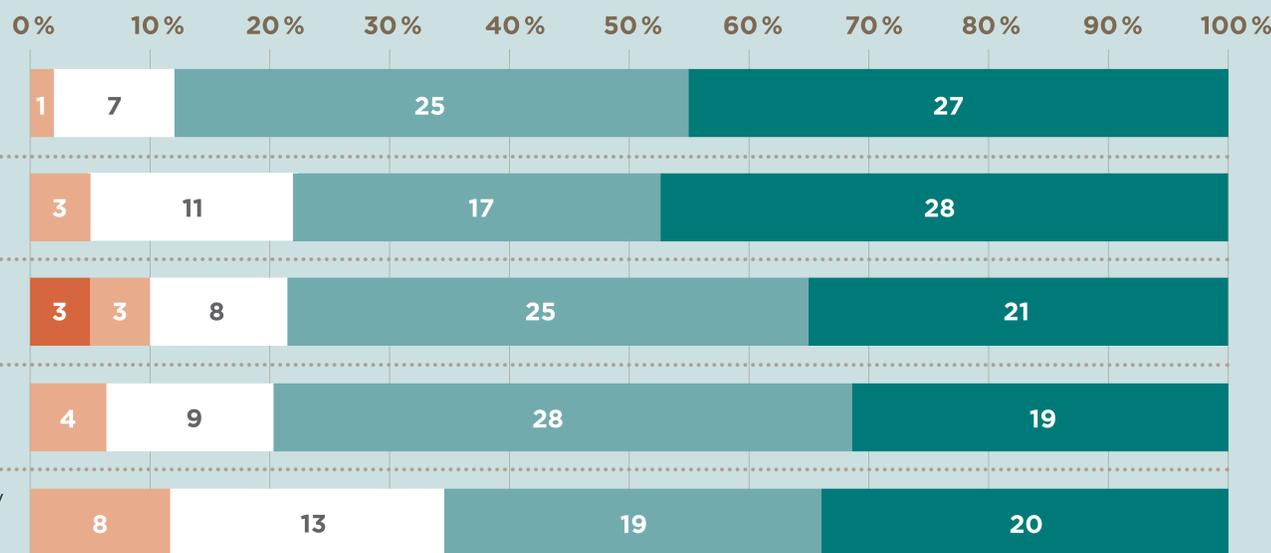
A reference for the definition of specifications for the procurements of environmentally friendly goods and services in the context of public tenders.

A recourse for identifying products of service providers, which are able to meet criteria defined in the context of green public procurement.

An instrument for verifying compliance with criteria defined in the context of green public procurement.

An eligibility requirement for the selection of an environmentally friendly product or service.

Eco-labeling schemes are considered important points of reference by procurement officers.



strongly disagree disagree neutral agree strongly agree

Lessons-learned and Recommendations

Higher prices are a main barrier for market acceptance. Higher cost of production and the volatility of feedstock prices are among the main barriers for a broader market acceptance of bio-based products.

Political commitment and stable regulatory support needed. Business experts identify uncertain and unsupportive regulatory environment as key market barriers. Simultaneously, environmental regulation is considered a key market driver. Procurement experts identify a political decision to promote bio-based products via public procurement as a key to enabling its uptake of bio-based products in green public procurement.

Bio-based products have to comply with multiple environmental criteria. If marketed as green products, bio-based products need to ensure compliance with a comprehensive set of environmental and sustainability criteria.

Country differences should be considered when developing European standards and regulations. End-of-life considerations are of particular importance in Italy, while feedstock-related concerns and local supply chain development are especially important in France.

(Eco-)labeling can be an important vehicle for supporting the uptake of bio-based products. A large majority of experts consider a label for bio-based product as an important instrument for promoting the uptake of bio-based products. Eco-labels represent important reference points for the practice of green public procurement. The incorporation of criteria for bio-based content in such labels can play an important role for their uptake in public procurement.