

Forum for Bio-Based Innovation in Public Procurement

Work package 4
Capacity building

Deliverable No 4.5:
Standardization bodies' dialogue

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1. Introduction

The dialogue session with standardization experts and Public Procurers is intended on one side to develop suggestions for criteria setting but also to look into additional needs for functional and performance related standards. This dialogue is also a trial on how these exchanges could best be arranged and what each of the participating groups could do to get public procurers become more engaged in the standardization process.

On 18 January 2018 the standardization bodies' dialogue was organised in the city of Rotterdam in the Netherlands. The standardisation dialogue was organized to create understanding with participants on how standards can support and stimulate bio-based procurement. The standardization dialogue was organized with procurers, bio-based product developers and European standardization experts. The evaluation of the meeting has given input for further improving the format; the recommendations are given at the end of this report. The discussed and identified barriers are used as input to develop clear recommendations to decision makers and for further improvements in standardization to effectively lower the barriers for procurement of BBPS (see Deliverable 4.4).

2. Preparation

2.1 Objective, coordination and location

The original objective of the standardisation bodies' dialogue was to stimulate the dialogue between public procurers and standardization bodies. In this dialogue the creation of a common language was to be stimulated and potential barriers to be identified. However during the lifetime of the project the outcomes of the trainings and dialogues made it clear that procurers do not have much experience with bio-based standards in their procurement processes. The objective of the dialogue was therefore slightly adjusted to create more understanding with participants on how standards can support and stimulate bio-based procurement and on the other side give feedback to standardisation bodies on the knowledge and use of standards with public procurers.

The importance to have international standardization bodies involved was recognized by the project participants. The idea that followed was to have the session connected with a CEN group meeting. By doing so more standardization experts could be involved and it would be a benefit to them to take

part in such a discussion. One hurdle was identifying a good CEN (or even ISO) meeting with sufficient time available around it for organizing a separate session adjacent to it. The main disadvantage was that the procurers had to have the session in a foreign language. It was also concluded that only local procurers would come to such a session; they would not go to other countries for this. When focussing on a locally organized session, the intention of the dialogue became to facilitate a meeting where both programme and location inspire continued collaboration.

The date and location of the dialogue was set at 18 January 2018, BlueCity, Rotterdam. BlueCity is an incubator for circular entrepreneurs in and around Rotterdam. The location (situated in a former swimming pool) and dynamic community (of entrepreneurs, researchers, neighbours, the government and education) serve as a breeding ground for 16 innovative, circular companies linking their waste-streams. They want to create a much needed tangible and inspiring example for the circular economy, close the loops and build the city and economy of the future. Their goal is to provide start-ups and scale-ups with access to circular resources, knowledge and talent, to turn ideas into action and ultimately: to help sustainable entrepreneurs to grow from intention to impact. With the iconic history of the BlueCity and the inspiring activities of its entrepreneurs; BlueCity was seen as the appropriate place to hold the Standardization Bodies' Dialogue.

The anticipated participants to this dialogue are strategic public procurers or decision makers on one side and international standardization experts on the other side. The minimum number would be five of each, preferably more. The advice is to use a national procurement agency as the origin of invitees on the one side and to address either the national standardization body or a CEN expert from the country where the dialogue is organized for invitees on the other side. Personal invitation is preferred.

It was concluded that the programme should focus on insights into the standardization process as well as the procurement process in relation to bio-based products. Also a background story from people with experience, preferably on procuring as well as on selling the bio-based product, was seen as a vital part to initiate a dialogue.

The objective, date and location were determined by the organising teams of NEN and PIANOo.

2.2 Chairperson and speakers

Harmen Willemse was the chairperson of the day. Harmen Willemse is a standardization consultant at NEN, the Netherlands Standardisation Institute. Working at the Energy division, he is responsible for the roll-out of the Better Biomass certification system for sustainable biomass for energy purposes. This certificate can be used worldwide to demonstrate the sustainability of solid, liquid and gaseous biomass. He is also the secretary of the European standardisation committee for bio-based products. In this position he supports the development of European standards for various aspects of bio-based products, including sustainability and determination of bio-based content.

The invited speakers were Henk Vooijs, Mariska van Dalen and Mark Geerts.

Henk Vooijs is an international standardization expert. He is the chairperson and convener of Working Group 5 of the CEN/TC 411 (Bio-based Products). The task of this Working Group is the development of declaration and certification tools applicable to bio-based products identifying which characteristics can/should be assessed and how they should be reported. He is also a board member of Holland Bioplastics. Holland Bioplastics aims to connect parties and share and provide easier access to information about bioplastics. Attention for bioplastics is increasing. Bioplastics are usually made from renewable resources, and can contribute towards combatting climate change and reducing our dependence on fossil fuels. In addition, bioplastics open up new possibilities for processing waste streams. Innovation and investments are taking place in new materials, knowledge and technologies in order to make the transition from an oil-based, linear economy to a more bio-based, circular economy. This provides an important contribution to our economy and serves to create new jobs.

Mariska van Dalen is senior consultant sustainability at Tebodin Netherlands B.V. She is a consultant for the province of Zeeland. The province of Zeeland is a front runner in the procurement of bio-based products. In 2016, the province of Zeeland issued vouchers for circular and bio-based products. These vouchers were intended to encourage innovative SME entrepreneurs to develop new circular and / or bio-based products, services, processes or concepts. In addition to boosting innovation, an important side effect is inspiring entrepreneurs and making them familiar with the circular and bio-based economy.

Mark Geerts is CEO of Paperfoam. Paperfoam is an award-winning leader in innovative green packaging solutions. With their certified Bio-based material and patented injection moulding technology they serve customers in consumer electronics, medical, cosmetics and dry food industries from production facilities in the USA, Europe and Asia.

2.3 Participants

Participant were invited through different channels. These channels were: direct (personal) invitations, open invitations on the websites of PIANOo and NEN as well as invitations sent to standardization groups related to bio-based procurement.

Interest in participation to the dialogue from both the standardization and procurement community was high. 12 participants signed up for the dialogue, all active in public procurement. Unfortunately extreme weather events (Code red, which severely reduced transport options) reduced the actual level of participation. In the end 5 public procurers and 3 standardization experts attended.. Together with the speakers we had a total of 11 participants in the Standardization Bodies' Dialogue.

2.4 Program

See Table 1 for the background on the programme

Table 1: Program of the standardization bodies' dialogue in Rotterdam (the Netherlands)

| Time indication | Subject | Objective | Who | How |
|-----------------|-----------------------------|---|---|--|
| 20 minutes | Welcome | Introduction to the standardization bodies' dialogue | Harmen Willemse (NEN, international bio-based standardization expert) | Verbal presentation |
| 20 minutes | Normalisation and bio-based | Introduce the participants to normalisation and bio-based standards | Minique Vrans (NEN, Standardization expert) | Short inspiration movie and a presentation |
| 30 minutes | Procurement of Bio-based | Participants understand how others have bought bio-based. | Mariska van Dalen (Province | Presentation with insight |

| Time indication | Subject | Objective | Who | How |
|-------------------|--|---|--|--|
| | products | Since procurement of BBPS is different for every subject, the best way to approach it is by learning from real cases. | of Zeeland) | details Open Discussion |
| 30 minutes | Experiences from a bio-based product developer | Participants understand the challenge a bio-based product developer faces to get his products on the market. | Mark Geert (CEO, Paperfoam) | Presentation with insight details Open Discussion |
| 30 minutes | European standards for bio-based products | Participants learn the basics on how bio-based standards are developed and in what way they can be used. | (Harmen Willemse, NEN, international bio-based standardization expert) | Presentation with insight details Open Discussion |
| 15 minutes | Wrap up | Participants give feedback | Participants Chairperson | Round table |
| 40 minutes | Tour | Learn about the building and its circular/bio-based community | Participants Chairperson | |
| | End of the workshop | | | |

3. Results of the Standardization Bodies' dialogue

With a diverse content focusing on insights into the standardization process and the procurement process in relation to bio-based products the programme was interesting to all parties concerned. An example of a specifically well discussed presentation from the standardization community was one that covered the aspects of certification and the current options available in the market. Procurers

pointed out that they are looking for a single certificate that states that a product is ‘a good bio-based product’. This is however not possible as there are many specifications to a bio-based product and one is not better than the other (sustainability of the biomass, bio-based content, water use etc.).

It is up to the procurers to develop a clear vision on what they find important aspects of a bio-based product. The developed bio-based standards can help with the development of this vision. In Annex 2 the developed bio-based standards are listed.

3.1 Basic Knowledge of Standardization

It turned out that in practice, public procurers rarely make use of standards when they procure bio-based products. The Province of Zeeland used the standard: CEN/TR 16208:2011 to help set up their bio-based procurement procedures. They did find this very helpful to structure the procedures and criteria. Since 2011 several other bio-based standards have been developed. These standards, for example, give requirements for determining the bio-based content of products (EN 16785: ‘*Bio-based products - Bio-based content*’), define general terms to be used in the field of bio-based products to avoid confusion (EN 16575: ‘*Bio-based products – Vocabulary*’) or provides guidance for the assessment of bio-based products over their entire life cycle (EN 16760: ‘*Bio-based products - Life Cycle Assessment*’) and so there are a few more.

Though these standards might be useful for procurement processes they are currently not used. This makes the statement from procurers that they do not have the means to make a solid decision on procuring bio-based products interesting. These standards could help make this decision. See Annex 2 for an overview of these standards.

3.2 Different certification schemes in the market

Certification schemes for bio-based products have been developed to help consumers, manufacturers, distributors, traders to choose the right products for their purpose. Over the last years many certificates have been developed for this reason by NGOs, authorities or certification bodies. Certificates to demonstrate the sustainability of biomass, certificates to prove the bio-based content of a product, certificates for the end-of-life.

For bio-based procurers there is not one particular certification scheme that states a product is “good”. Procurers of bio-based products have the challenge to make decisions concerning

characteristics of bio-based products. Characteristics can be: percentage bio-based content, the sustainability of the biomass, the biodegradability or compostability of a product. Based upon the choice of importance procurers can set criteria with the developed bio-based standards for the procurement.

3.3 Standards that are perceived as hurdles to get bio-based products on the market

Bio-based product developers face challenges to get their products accepted in the market. For bio-based product developers standards are in some cases seen as a hurdle. Mark Geerts, CEO of Paperfoam explained his experience with a bio-based product for which he had difficulties getting approval/certification. Because most of the properties of Paperfoam as a material are still unknown on a long term, getting Paperfoam products accepted in the market is a challenge. Material testing is currently based on existing materials. Paperfoam has different material properties compared to paper and plastic. Regulations are currently based on existing materials. To get new materials approved by regulators and certifying agencies can be a real challenge. Complying with standards developed for existing materials is therefore often a real challenge for these new bio-based materials.

4 Conclusions on the Standardization Bodies' dialogue

In terms of organizing such a dialogue, public procurers would require a session in their own language. It could be (and should preferably be) linked to a standardization meeting, but that requires mainly that the national experts have to prepare and take part in the dialogue. Suggestion is to make sure that an introduction is given by an international expert in the local language. That requires that base presentations would be translated and adapted to local situations.

The overview of the bio-based standards (as in Annex 2) is a benefit for the dialogue and the advice is that it would be kept updated by CEN (TC 411) on a regular basis at a public place. NEN is working on developing a website where these standards will be placed along with additional information around bio-based and standards.

Another discussed topic is a challenge from a bio-based product developer concerning the acceptance of new materials in the market. These newly developed bio-based products need to comply with traditional product properties to conform to standards and regulations. In practise it turns out that this can be a real challenge. This feedback from market participants will be fed into the CEN/TCs that are concerned with these subjects.

The above topics gave direct insight into discrepancies between both sectors and indicated a clear need for more structured information dissemination and collaboration between the standardization bodies and public procures and decision makers.

The following advices can be laid down in terms of standardization:

- Continue to communicate about the developed bio-based standards
- Keep the developed bio-based standards updated in a public place
- Have regularly dialogues with procurers and market participants to continue the discussion and keep both sides informed of developments

The following advices can be laid down in terms of procurement:

- Make use of the developed bio-based standards when setting up bio-based procurement processes
- Use the handbook and toolbox developed by InnProBio for procurement of bio-based products
- Reach out to standardization bodies when coming across irregularities concerning standards

In conclusion the standard bodies' dialogue was deemed relevant by both the standardization community as the procurement community. Both indicating the wish for a more intensified collaboration and exchange of experiences.

ANNEX 1 Invitation Standardization Bodies' Dialogue

Invitation Standardization Bodies' Dialogue

18 January 2018, BlueCity, Rotterdam

The standardisation dialogue was organized to create understanding with participants on how standards can support and stimulate bio-based procurement. The participants were from national and local Dutch government. The program was diverse from presentations on the basics of standards, provincial bio-based procurement experiences, bio-based product producer to a background of the development of European bio-based standards.

De resultaten van de dialoog worden onderdeel van de aanbevelingen vanuit het InnProBio project aan de Europese Commissie om biobased inkopen verder te ondersteunen en stimuleren.

Programma

De bijeenkomst vindt plaats op **18 januari 2018 van 09.30 tot 12.45 bij BlueCity, Maasboulevard 100, Rotterdam**. Aansluitend wordt er om 12.45 afgesloten met een gezamenlijke lunch, waarna er nog de mogelijkheid is om deel te nemen aan een rondleiding door het BlueCity gebouw. Het programma bevat verschillende presentaties van ervaren partijen uit de biobased markt. Tijdens de bijeenkomst zal er genoeg ruimte zijn om vragen te stellen aan de desbetreffende experts.

| | | |
|-------|--|---------------------------------------|
| 09:30 | Welkomstwoord | Harmen Willemse (NEN) |
| 09:45 | Normalisatie en biobased | Minique Vrins (NEN) |
| 10:15 | Europese normen voor biobased producten | HenkVooijs (InnovationQuarter) |
| 10:45 | Inkopen van Biobased producten | Mariska van Dalen (Provincie Zeeland) |
| 11:15 | Koffiepauze | |
| 11:45 | Ervaringen van een biobased product producent: | Mark Geerts (Paperfoam) |
| 12:10 | Discussie en Q&A | Harmen Willemse (NEN) |
| 12:30 | Conclusies en sluiting | Harmen Willemse (NEN) |
| 12:45 | Lunch | |
| 13:30 | Rondleiding BlueCity | Optioneel |

Aanmelden

Aanmelden voor deze bijeenkomst kan tot uiterlijk 11 januari per email naar Okke-Jaap.Prent@nen.nl.

Over InnProBio

InnProBio is een Europees Horizon 2020 project dat als doel heeft om de inkoop van biobased producten te stimuleren door hiervoor handvatten te bieden aan (publieke) inkopers. Onderdeel van dit project zijn trainingen in verschillende Europese landen, een handboek en deze normalisatie dialoog. Het project wordt uitgevoerd door een Europees consortium, bestaande uit:

- NEN- Normalisatie Instituut Nederland
- PIANOo - Expertisecentrum Aanbesteden van het ministerie van Economische Zaken en Klimaat
- FNR - Fachagentur Nachwachsende Rohstoffe
- BTG - Biomass Technology Group
- ICLEI - Local Governments for Sustainability
- UHULL - The University of Hull
- University of Łódź
- Nova-Institut

Meer informatie over het project is te vinden op: www.innprobio.eu

ANNEX 2 Developed standards CEN/TC 411

- EN 16575: *'Bio-based products – Vocabulary'*
- EN 16785-1: *'Bio-based products - Bio-based content - Part 1: Determination of the bio-based content using the radiocarbon analysis and elemental analysis'*
- EN 16785-2: *'Bio-based products - Bio-based content - Part 2: Determination of the bio-based content using the material balance'*
- CEN/TS 16640: *'Bio-based products - Determination of the bio based carbon content of products using the radiocarbon method'*
- CEN/TR 16721: *'Bio-based products - Overview of methods to determine the bio-based content'*
- EN 16760: *'Bio-based products - Life Cycle Assessment'*
- EN 16751: *'Bio-based products – Sustainability' criteria*
- EN 16848: *'Bio-based products - Template for B2B reporting and communication of characteristics - Data sheet'*
- EN 16935: *'Bio-based products - B2C reporting and communication - Requirements for claims'*
- CEN/TS 16766: *'Bio-based products - Bio-based solvents - Requirements, application classes and test methods'*

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Partners:

