



Better Biomass

Demonstrating sustainability of biomass resources

27 October 2023

Harmen Willemse



Characteristics of bio-based products

- Bio-based products are characterised by several aspects:

Life-cycle analysis

Bio-based content

Sustainability of biomass

Biodegradability

Toxicity

Marine biodegradability

... and many more



Main questions for Biochemicals & Biomaterials

What is the

biobased share

in the product or material?

Is the biomass from

sustainable resources

?



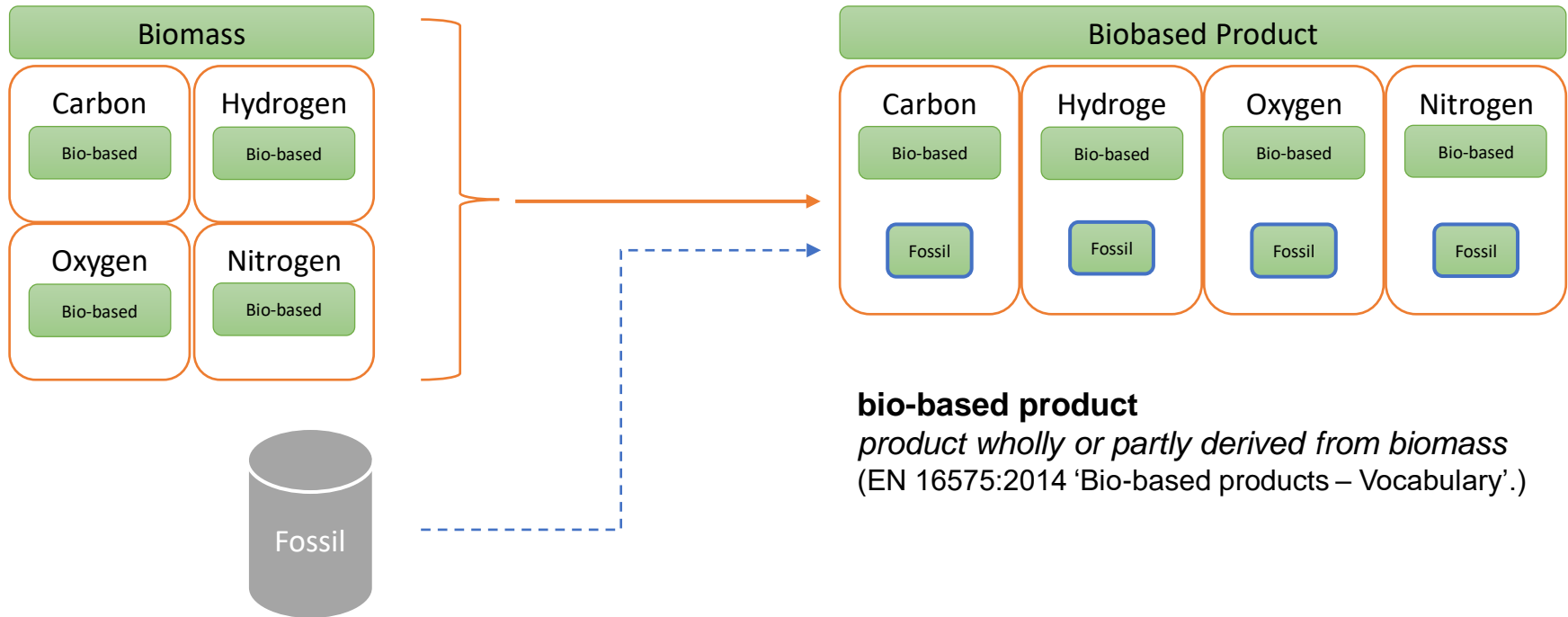
EU BIOBASED CONTENT CERTIFICATE

Bio-based content label

- Based on EN 16785-1
- The bio-based content stated shall be a **minimum content**
- Difference between stated values and measured values determine **precision** of statement
- Elements (H,N,O) bound to bio-based carbon are considered to be part of the bio-based content
- Label or certificate as proof of conformity.
- Revision just finalised



Biobased product



bio-based product

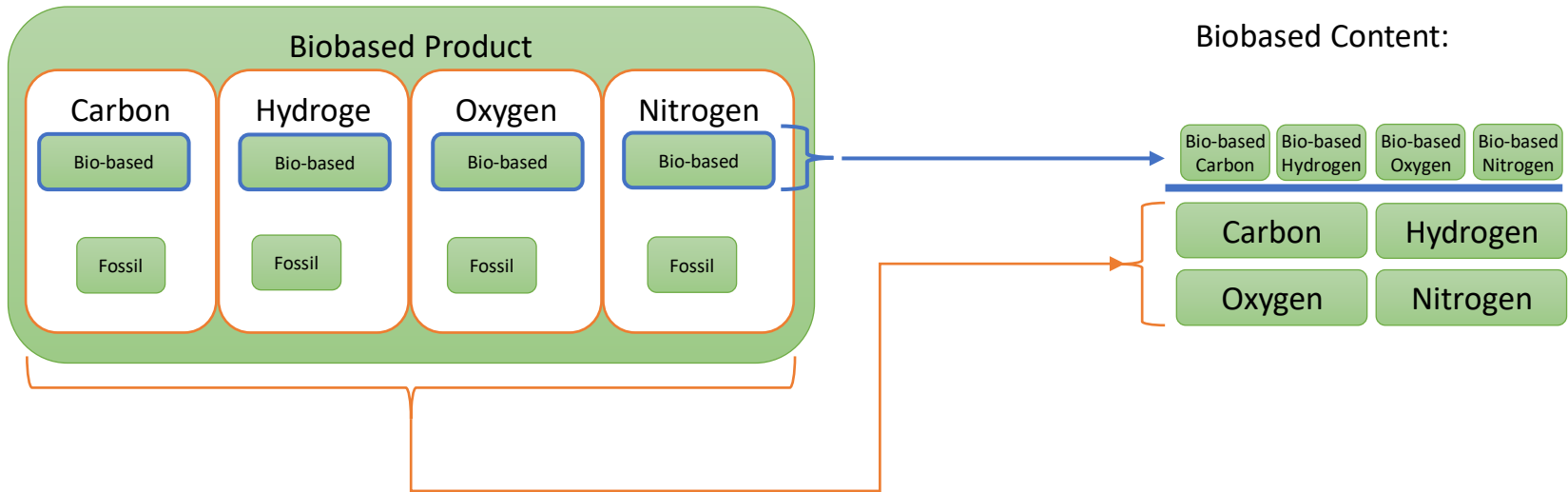
product wholly or partly derived from biomass
(EN 16575:2014 'Bio-based products – Vocabulary'.)

Determination of bio-based content

- EN 16785-1 specifies a method of determining the bio-based content in products, based on the **radiocarbon analysis and elemental analysis**.
 - Involves not only the **bio-based carbon content**, but also the other elements **hydrogen, oxygen and nitrogen**
- EN 16785-1 is applicable to any solid, liquid and gaseous product containing carbon, provided that a statement is available about the elemental composition and the bio-based content of the product(s).

Biobased content

Minimum percentage of biomass content **in relation to the total (dry) mass of the product.**



www.biobasedcontent.eu



CERTIFICATION ROADMAP

How to become certified

[ABOUT US](#)
[CERTIFICATION](#)
[CERTIFICATE HOLDERS](#)
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Bio-based content

Bio-based products are products which are wholly or partly derived from biomass. Therefore, it is essential to characterize the amount of biomass contained in the product.

The European bio-based content certification scheme is used to specify and validate the amount of biomass in a bio-based product, based on the European standard EN 16785-1:2015. This European standard provides a method of determining the bio-based content of solid, liquid and gaseous products using the radiocarbon analysis and elemental analyses.

Bio-based content certification enables transparent and credible communication about the bio-based content of a product in the business-to-business and business-to-consumer communication, which not only involves the bio-based carbon content, but also the other elements hydrogen, oxygen and nitrogen.



Certification

Certification Bodies:

- DIN CERTCO
- TÜV Austria Belgium
- SGS INTRON Certificatie B.V.



Certificate holders

The register contains an overview of all the organizations that own a certificate, including the bio-based content (%). It also states the scope of the certificate.

More information about the certification, including the bio-based carbon content, can be obtained through the registers maintained by the associated certification bodies:

DIN CERTCO – Type certificate number (i.e. DIC-nnnnn) in full text search

TÜV Austria – Select 'NEN Bio-based' under conformity mark or type certificate number (i.e. VIN-nnnnn or TAB-nnnnn) under certificate number

Search:

Product description	Certificate holder	Certificate number	Bio-based content (%)	Scope	Certified since	Status	Certification Body
2K Derocryl Lack Durapid 2K, Deripox Protec 2K Derocryl Hartgrund HS 2K Derocryl Lack 70 ST 2K Derocryl Lack Finish GL	Dr. Demuth Denisol Lackfarben GmbH & Co. KG	DIC-00008	5	Product	2018-05-08	Valid	DIN CERTCO GmbH
Bagasse coffee capsules	Sustina Caps GmbH	DIC-00019	98	Product	2022-01-22	Valid	DIN CERTCO GmbH
Bio-based products	Österreichische Vialit GmbH	DIC-00007	100	Product	2018-03-27	Valid	DIN CERTCO GmbH
Bio-Leather	Jiangxi Fuxing Leather Goods Co., Ltd.	DIC-00025	80	Product	2022-11-09	Valid	DIN CERTCO GmbH
BTI 43, BBI 50, BBII 80, BBIII 100	Bastin Pack N.V.	DIC-00011	89	Product	2020-03-25	Valid	DIN CERTCO GmbH
BTI, BBI, BBII	Bio4Pack GmbH	DIC-00002	89	Product family	2017-02-20	Valid	DIN CERTCO GmbH
Capsule ECO	Foreg AG	DIC-00021	77	Product	2022-05-23	Valid	DIN CERTCO GmbH
Capsule ECO HOME	Foreg AG	DIC-00022	100	Product	2022-05-23	Valid	DIN CERTCO GmbH
Capsule PREMIUM	Foreg AG	DIC-00010	79	Product	2018-09-28	Valid	DIN CERTCO GmbH
Coated Coffee Pallet	Delica AG	DIC-00020	100	Product	2022-01-31	Valid	DIN CERTCO GmbH
Elastollan N 1195 A 10 002	BASF Polyurethanes GmbH	DIC-00023	48	Product	2022-06-30	Valid	DIN CERTCO GmbH
Elastollan SP N 1155 A12 PU	BASF Polyurethanes GmbH	DIC-00024	56	Product	2022-06-30	Valid	DIN CERTCO GmbH

BETTER BIOMASS CERTIFICATE

**BETTER
BIOMASS**



NTA 8080 CERTIFIED
WWW.BETTERBIOMASS.COM

Booming Biomass

- Biomass is global business
- Large opportunities for new activities in the field of biomass
- Must not be at the expense of other important values for nature, environment and society
- European biomass demand will exceed domestic production

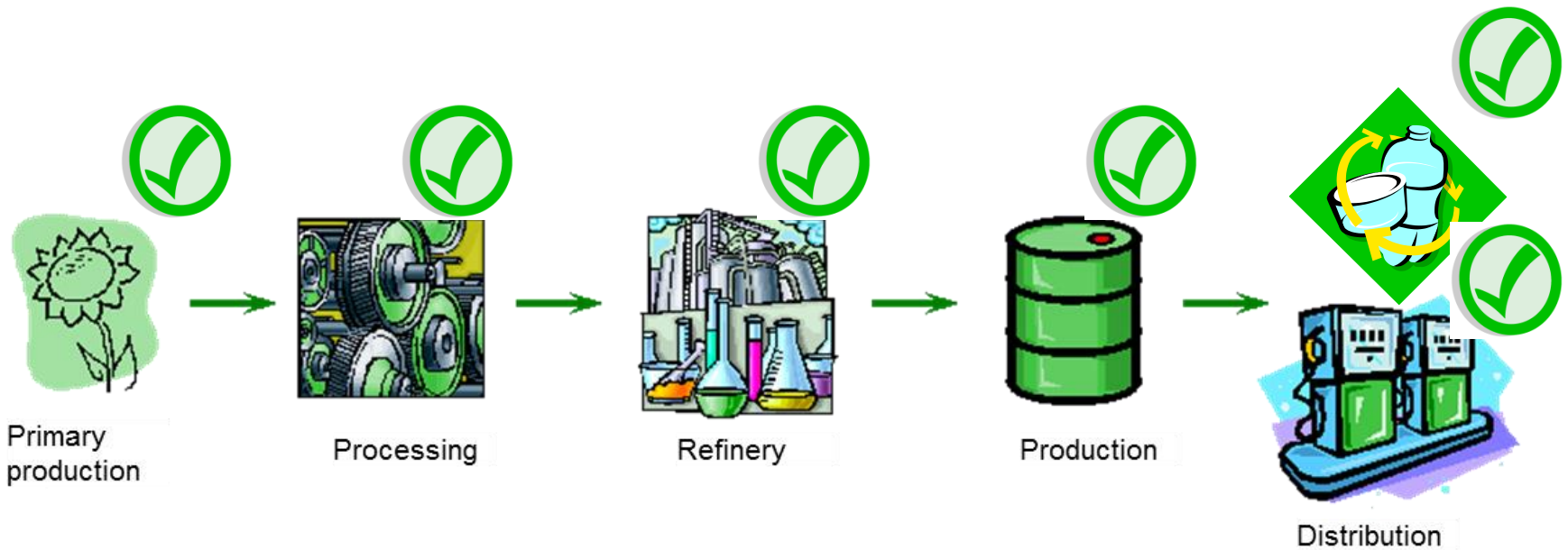


Better Biomass at a glance

- For solid, liquid and gaseous biomass chains
- Electricity, heating, transport fuel and bio-based products
- Operational since early 2011
- Accreditation by RvA (EA, IAF member)
- European recognition for RED since 31 July 2012
- Approved for Dutch legal framework solid biomass since November 2018
- Harmonized with international standards (CEN & ISO)



Scope of certification



What are the sustainability criteria?

- Broad definition of sustainability
- Criteria covering People, Planet & Profit
- Broad stakeholder support (industry, academics, policy and NGO's)



Basic principles Better Biomass (Cramer criteria)

1. The **greenhouse gas balance** of the production and application of the biomass must be positive
2. Biomass production must not be at the expense of important **carbon sinks** in the vegetation and in the soil
3. The production of biomass for energy must not endanger the **food supply and local biomass applications** (energy supply, medicines, building materials)
4. Biomass production must not affect protected or vulnerable **biodiversity** and will, where possible, have to strengthen biodiversity
5. In the production and processing of biomass, the soil, and **soil quality** must be retained or even improved



Basic principles Better Biomass (Cramer criteria)

6. In the production and processing of biomass **ground and surface water** must not be depleted and the water quality must be maintained or improved
7. In the production and processing of biomass the **air quality** must be maintained or improved
8. The production of biomass must contribute towards **local prosperity**
9. The production of biomass must contribute towards the **social well-being** of the employees and the local population



How to get certified?




1. Preparation
 - a) Membership
2. Initial audit
 - a) phase 1: research and preparation
 - b) phase 2: on-site audit and feedback
3. Granting of certificate
4. Maintaining certificate
 - a) Surveillance audit (annual)
 - b) Re-certification (within 5 years)




Certification Documents

- **BETTER BIOMASS SUSTAINABILITY REQUIREMENTS**
 - NTA 8080-1:2015
 - **BETTER BIOMASS CHAIN-OF-CUSTODY REQUIREMENTS**
 - NTA 8080-2:2015
 - **BETTER BIOMASS CERTIFICATION SCHEME**
 - NCS 8080:2018-08
 - **INTERPRETATION DOCUMENTS**
- Available at: BetterBiomass.com



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● Better Biomass Standards

Access to certification system documents

★ **WHAT IS BETTER BIOMASS?**

The Better Biomass certificate is used by organizations to demonstrate that the biomass they produce, process, trade or use

[➤ MORE](#)

📍 **HOW CAN I GET CERTIFIED?**

The process for being granted a certificate is described in the road map.

[➤ MORE](#)

📄 **WHICH COMPANIES HAVE A BETTER BIOMASS CERTIFICATE?**


The register contains all the organizations that have received the 'Better Biomass' certificate.

[➤ MORE](#)

Enter the market for sustainable biomass

Better Biomass is an international certification system for solid, liquid and gaseous biomass. The Better Biomass certificate is used to demonstrate the sustainability of the biomass used for energy, fuels or bio-based products. The underlying sustainability criteria have been established in a multi-stakeholder consensus process between private companies, government and civil society organizations and are published in the standard NTA 8080. These criteria cover important values for nature, environment and society (People, Planet, Profit).

Better Biomass is managed by NEN, the Netherlands Standardization Institute, a CEN and ISO member. NEN has an international accreditation as a scheme manager and certification audits are done by accredited independent certifying bodies.




📍 **ENECO'S BIOMASS PLANT RECEIVES BETTER BIOMASS CERTIFICATE**

May 6, 2013

- First certificate under new name On the 6th of May in Delfzijl, the Netherlands, Eneco received the Better Biomass ...

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📄 **BETTER BIOMASS: NEW NAME 'NTA 8080 APPROVED' CERTIFICATE**

April 22, 2013

Certificates issued to companies which produce, trade or process sustainable biomass, based on NTA 8080, are now called ...

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📄 **DRAFT NTA 8080 AVAILABLE FOR COMMENTS**

November 24, 2014

Recently, a working group consisting of representatives from biomass producers and users, NGOs, research institutes, gov...

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Questions?



Harmen Willemse
info@betterbiomass.com
www.betterbiomass.com