

A photograph of a bee in flight over a yellow flower, set against a green background. The image is partially obscured by a dark green horizontal band containing text.

“Better biomass” certification scheme in the context of the CEN/TC 411 standard on sustainability criteria for bio-based products



Programme

- Generals about Better Biomass
- Link with European (CEN) and global (ISO) sustainability standards
- Generals about FprEN 16751:2015 Bio-based products — Sustainability criteria
- Comparison of sustainability criteria FprEN 16751:2015 and Better Biomass criteria
- Better Biomass certification process



Characteristics of Bio-based products

Many relevant characteristics for bio-based products, including:

- LCA
- Toxicity
- Sustainability of the biomass used
- Bio-based content
- Biodegradability
- Marine biodegradability
- ... and many more



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Background and general structure of the Better Biomass certification system



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 certification system

- 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: 31 July 2012
- Harmonized with international standards (CEN & ISO)



What are the sustainability criteria?

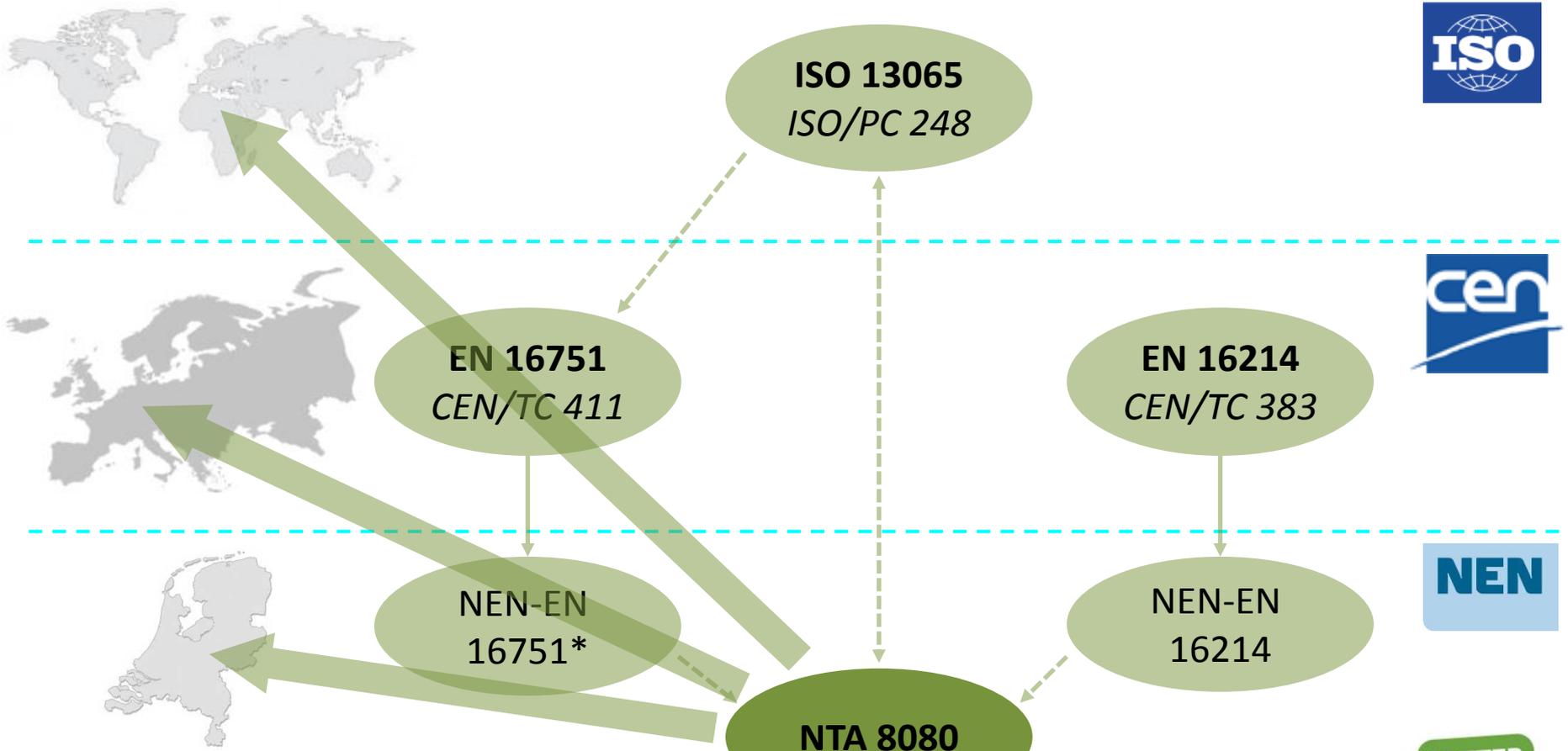
- Very inclusive definition of sustainability
- Criteria covering People, Planet & Profit
- Broad stakeholder support (industry, academics, policy and NGO's)
- Revision just finalized



What is the link with European (CEN) and global (ISO) sustainability standards?



Standardization activities



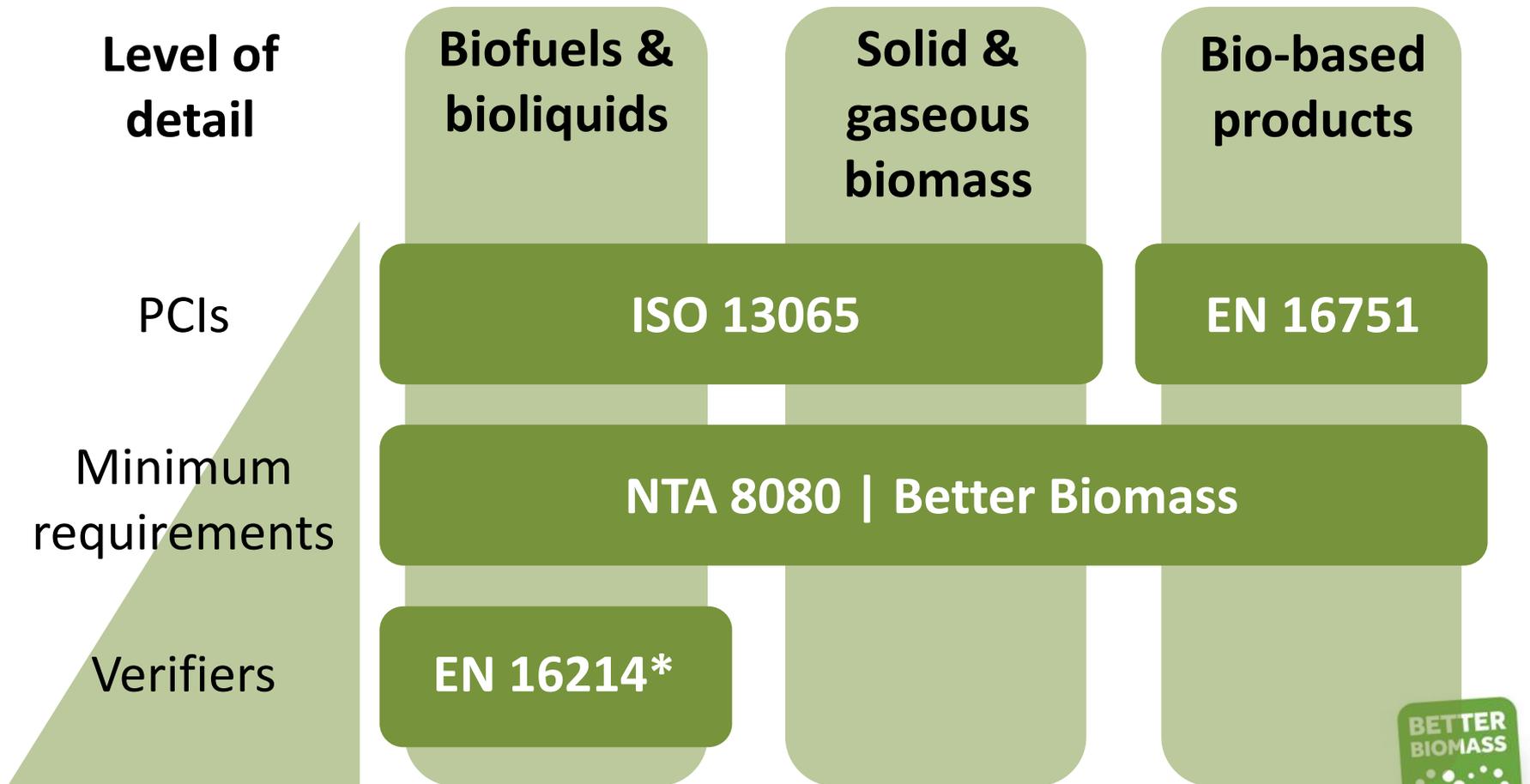
* National adoption after publication of EN 16751

—→ Mandatory national adoption

- - -→ Input in standard



Overview of applicability



* Only RED sustainability aspects



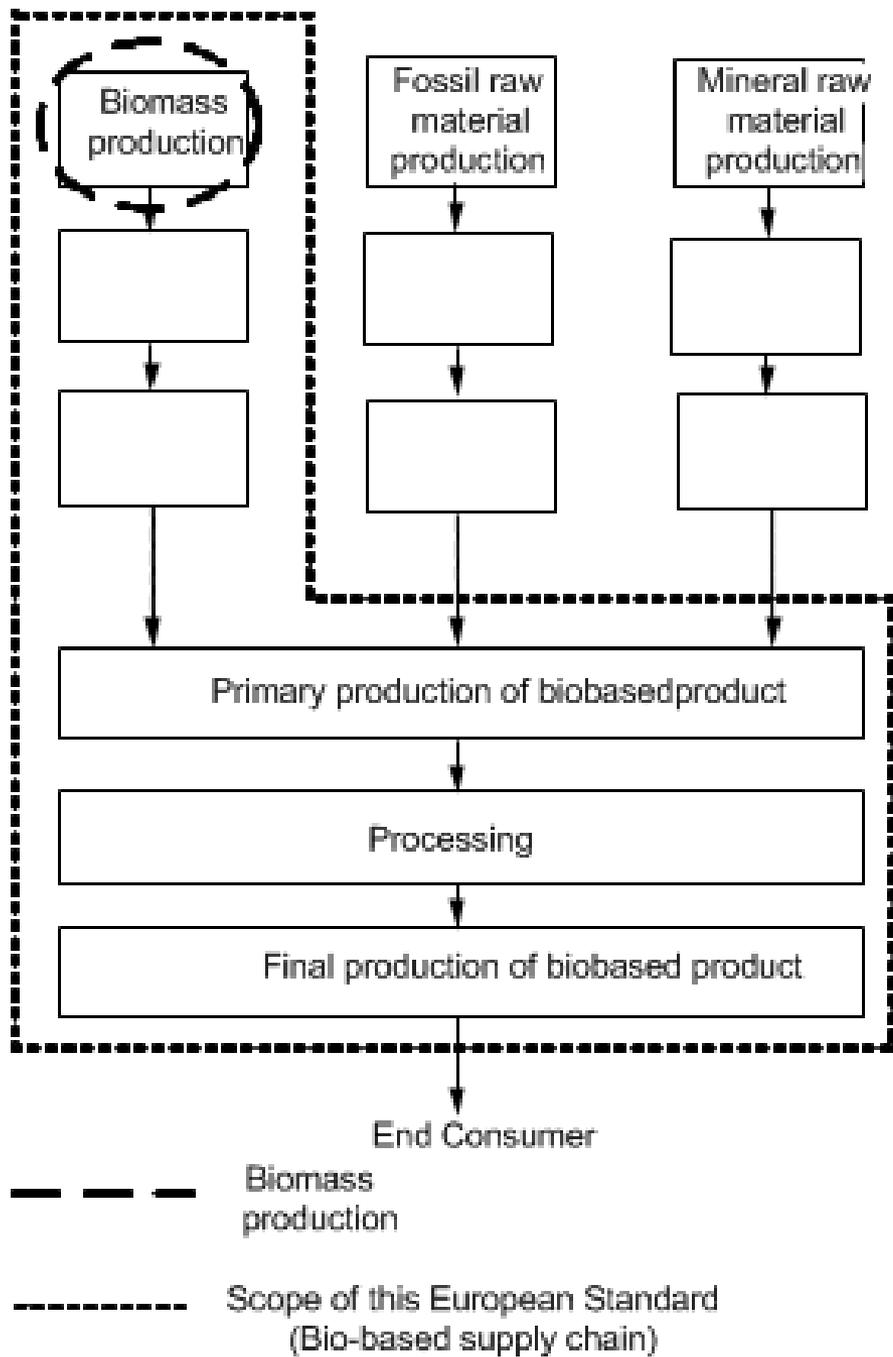
Generals about FprEN 16751:2015 Bio-based products — Sustainability criteria



(Fpr)EN 16751 'Bio-based products- Sustainability criteria'

- Identifies sustainability aspects applicable to all bio-based products, covering all three pillars of sustainability (**environmental, social and economic**).
- Defines a common framework for provision of information on management of sustainability aspects.
- Criteria can be used by an operator or schemes or standards
- Refers to the bio-based part of products only: not an LCA (EN 16760)
- All criteria in this European Standard shall be addressed for the biomass production
- If indicators are not relevant/not applicable on objective grounds for the operations considered, it shall be justified
- *FV closes 2015-12-15*





Comparison of sustainability criteria FprEN 16751:2015 and Better Biomass criteria



Principles (Fpr)EN 16751

- Promote good air quality and reduce GHG emissions.
- Conserve and protect water resources.
- Protect soil quality and productivity.
- Promote the positive and reduce the negative impacts on biodiversity.
- Promote efficient use of energy and material resources and the prevention of resource depletion.
- Promote responsible waste management.
- Respect labour rights, land use rights, water use rights.
- Promote local development.
- Produce and trade bio-based products in an economically and financially viable way.



Principles Better Biomass (Cramer criteria)

1. The greenhouse gas balance of the production chain 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



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



Mapping of principles

(Fpr)EN 16751	Better Biomass
Air quality & reduce GHG emissions	<p>7 In the production and processing of biomass the air quality must be maintained or improved</p> <p>1 The greenhouse gas balance of the production chain and application of the biomass must be positive</p> <p>2 Biomass production must not be at the expense of important carbon sinks in the vegetation and in the soil</p>
Conserve and protect water resources	<p>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</p>
Protect soil quality and productivity	<p>5 In the production and processing of biomass, the soil, and soil quality must be retained or even improved</p>
Biodiversity	<p>4 Biomass production must not affect protected or vulnerable biodiversity and will, where possible, have to strengthen biodiversity</p>
Efficient use of energy and material resources and the prevention of resource depletion	<p>6.5.4.2 Use of residual flows</p>

Mapping of principles

(Fpr)EN 16751	Better Biomass
Waste management	6.5.4.1 Waste management
Labour rights, land use rights, water use rights	9 The production of biomass must contribute towards the social well-being of the employees and the local population
Promote local development	3 The production of biomass for energy must not endanger the food supply and local biomass applications (energy supply, medicines, building materials)
economically and financially viable	8 The production of biomass must contribute towards local prosperity + 9





Examples

- General
- Biodiversity
- GHG emission reduction



General

- FprEN 16751
 - *“Economic operators shall maintain records and documentation of procedures described to address indicators in this European Standard.”* (4.4.3 Information recording)
- Better Biomass
 - *“The organization is expected to take measures for the sustainability aspects in accordance with Annex A, which contribute to each of those sustainability aspects. The organization shall assess the effectiveness of these measures, taking into consideration its size and the nature of its activities...”*
 - *“...assess whether additional measures are possible in order to achieve further improvements and consider these measures”* (5.7 Monitoring, measurement, analysis, evaluation and continual improvement)



Biodiversity

- FprEN 16751
 - The economic operator provides information on how biodiversity values are addressed within the area of operation and the environment directly influenced by the economic operator
- Better Biomass
 - ...shall not produce biomass from land with high biodiversity value
 - ...the organization shall leave at least 10 % of the cultivation area of the production location
 - ... the organization shall take measures that are necessary in order to a) preserve, and where possible **improve**, biodiversity



Greenhouse gas emissions

- FprEN 16751
 - Describe the measures taken to reduce GHG emissions
- Better Biomass
 - The saving is calculated in relation to the reference system with fossil fuels in accordance with the minimum percentages stated in Table 1



Better Biomass certification process



Standards and certification

Sustainability criteria

NTA 8080-1
NTA 8080-2

Certification

NTA 8081

Certifying
bodies

Application

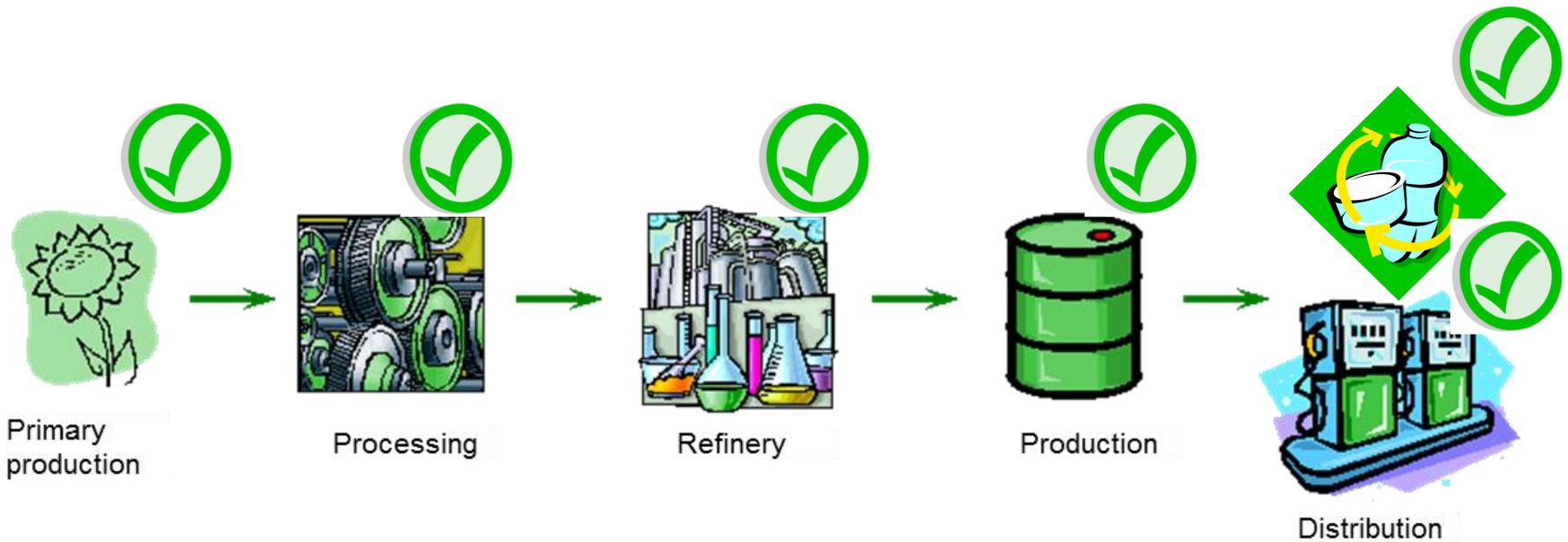
Companies

Law and
regulation

Policy
framework



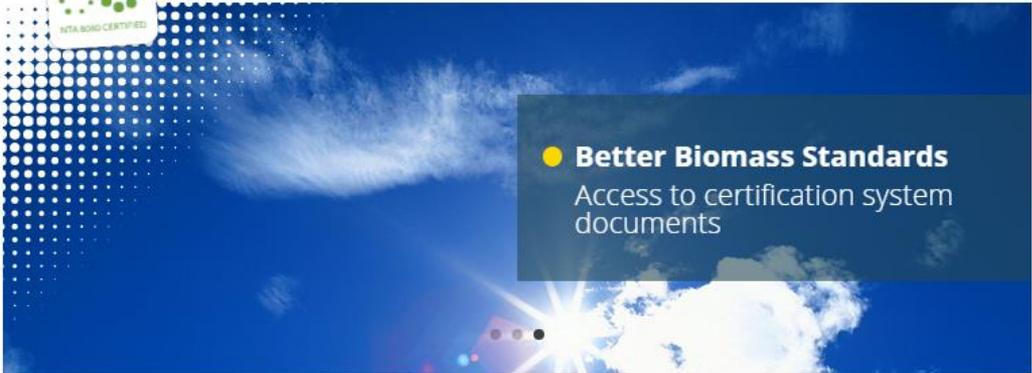
Scope of certification



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)





★ 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.

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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, 2015

- 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, 2015

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?



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