

SBP Framework Standard 6: Energy and Carbon Balance Calculation

www.sustainablebiomasspartnership.org



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Documents associated with this Standard:

Instruction Document 6A: Energy and Carbon Balance Calculation for the Netherlands

Instruction Document 6B: Energy and carbon balance calculation for Belgium

For further information on the SBP Framework and to view the full set of documentation see www.sustainablebiomasspartnership.org

Document history

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List of abbreviations#

BP	Biomass Producer
CPET	Central Point of Expertise for Timber (run by DEFRA)
CB	Certification Body
CoC	Chain of Custody
CHP	Combined Heat and Power
CITES	Convention on International Trade in Endangered Species
DEFRA	UK Department for Environment, Food and Rural Affairs
DECC	UK Department of Energy and Climate Change
EUTR	European Union Timber Regulation
FM	Forest Management
FMS	Forest Management Scheme
FSC®	Forest Stewardship Council
GRI	Global Reporting Initiative
GGL	Green Gold Label
GHG	Greenhouse Gas
ILO	International Labour Organisation
LVS	Legality Verification Systems
LAV	Locally Applicable Verifiers
PPE	Personal Protective Equipment
PEFC	Programme for the Endorsement of Forest Certification
RRA	Regional Risk Assessment
RA	Risk Assessment
RSB	Roundtable on Sustainable Biomaterials
SVP	Supplier Verification Programme
SB	Supply Base
SBE	Supply Base Evaluation
SBR	Supply Base Report
SBP	Sustainable Biomass Partnership
SFI	Sustainable Forestry Initiative

1 Background

The Sustainable Biomass Partnership (SBP) was formed in 2013 by European utilities that are using biomass, mostly in the form of wood pellets or chips, in large thermal generating plants. Biomass-fired power and heat generation is seen as an important technology for achieving the EU's 2020 renewable energy targets and EU member states are adopting their own national approaches to ensuring that the biomass used is legally and sustainably sourced.

SBP's objective is to develop the tools necessary to demonstrate that, as a minimum, solid biomass used for energy production meets these national requirements. The SBP Framework is designed as a clear statement of principles, standards and processes necessary to demonstrate such compliance. Wherever possible, the Framework takes into account and builds on existing regulatory mechanisms and on voluntary certification standards already applied to other forest product streams or to other biomass sources.

The SBP Framework provides a means to collect data describing the nature of the feedstock as well as data to be employed in the regulatory calculations of greenhouse gas (GHG) savings from its use. It also provides a means to demonstrate that risks to forest carbon stocks are managed and that forests' carbon sequestration capability is maintained.

Collectively, the six SBP Standards represent a certification framework, or scheme, against which organisations can be assessed for compliance by independent third-party Certification Bodies (CBs). An organisation that satisfactorily demonstrates compliance receives a certificate and is entitled to make SBP claims in relation to its biomass.

The SBP Framework is made freely available for use by all supply chain actors irrespective of whether or not they are members of SBP.

2 Scope

This document (SBP Standard 6: Energy and Carbon Balance Calculation) defines the requirements and options for the calculation of energy and carbon balances. This is usually undertaken by the end use generator and compliance with other SBP standards is not a pre-requisite for the entity in demonstrating compliance with this standard.

SBP Standard 5: Collection and Communication of Data, sets out the requirements for energy and carbon data that must be collected along the supply chain and how it is to be communicated. Compliance with this standard requires that the data used in the calculations covered by the scope of the certification under this standard is certified as being supplied in compliance with Standard 5.

SBP Standard 4: Chain of Custody sets out the requirements for ensuring that the chain of custody of SBP-certified biomass is maintained. Biomass must be supplied by a legal owner within the scope of a valid SBP Chain of Custody certification if claims on compliance of that biomass with this standard are made.

The requirements for energy and carbon balance calculations vary between different regulatory frameworks. As such, the methodology by which calculations shall be made are specified in the associated Instruction Documents which are specific to regulatory requirements.

Compliance with this standard alone does not permit any claims to be made on the sustainability of biomass used or supplied.

3 Normative references

SBP Standard 1: Feedstock Compliance Standard

SBP Standard 2: Verification of SBP-compliant feedstock

SBP Standard 3: Certification Systems. Requirements for Certification Bodies

SBP Standard 4: Chain of Custody

SBP Standard 5: Collection and Communication of Data

4 Glossary of Terms and Definitions

Please refer to separate *SBP Glossary of Terms and Definitions*.

5 General principles

5.1 All calculations shall be supported by appropriate evidence which shall be available for verification by Certification Bodies.

6 Quality management system

Adapted from Reference Source: *Draft Document FSC-STD-40-004 V3-0 EN Chain of Custody Certification*.

6.1 Responsibilities

6.1.1 The organisation shall appoint a management representative that has overall responsibility and authority for the organisation's conformity with all applicable certification requirements.

6.1.2 The organisation shall define the personnel responsible for each procedure, together with the qualifications and/or training measures required for implementation of said procedure.

6.2 Documented procedures

6.2.1 The organisation shall implement and maintain documented procedures and work instructions covering all applicable certification requirements according to the scope of the certificate and adequate to the organisation's scale and complexity.

6.2.2 The last approval date and version number of the documented procedures shall be specified.

6.3 Training

6.3.1 The organisation shall train its staff to ensure that all applicable certification requirements and the measures defined in the documented procedures are correctly implemented.

6.3.2 All relevant staff shall demonstrate awareness of the organisation's procedures and competence in implementing the organisation's chain of custody management system.

6.4 Record keeping

6.4.1 The organisation shall maintain complete and up-to-date records covering all applicable requirements of this standard.

6.4.2 Retention time for all records shall be at least five (5) years.

6.5 Complaints

6.5.1 The organisation shall define the controls and related responsibilities and authorities for receiving, handling, and recording complaints relating to conformity with certification requirements, including the following minimum requirements:

- a) Acknowledge receipt of complaints;
- b) Provide initial response to the complainant, including an outline of the proposed course of action to follow up on the complaint, within two (2) weeks of receiving a complaint;
- c) Investigate the complaint and specify its proposed actions in response to the complaint within two (2) months of receiving the complaint;

- d) Take appropriate actions with respect to complaints and any deficiencies found in products that affect conformity with the requirements for certification;
- e) Notify the complainant when the complaint is considered to be closed.

NOTE: A complaint may be considered closed when the organisation has gathered and verified all necessary information, investigated the allegations, taken a decision on the complaint, and responded to the complainant.

7 Inputs

7.1 The organisation shall have and maintain up-to-date records of all suppliers who are supplying material within the scope of certification under this standard, including:

- a) The supplier's name(s);
- b) The supplier's SBP certification code(s), if applicable.

7.2 The organisation shall verify the validity and scope of the supplier's SBP certification through the SBP website.

7.3 The following information shall be recorded for all biomass received to which this standard applies:

- a) Invoice reference(s) or other transaction number
- b) A description of the physical product, including the sustainability characteristics and other data required in the SBP Instruction Document: Collection and Communication of Data
- c) The volume of physical input
- d) The supplier
- e) Transaction date
- f) The certificate numbers of any certified suppliers (in the form SBP-XX-YY)
- g) SBP GHG and profiling data scope reference number of the Biomass Producer (in the form SBP-XX-YY-ZZ)
- h) SBP batch specific reference number.

8 Energy and carbon balance calculation

8.1 Energy and carbon balance calculation shall be undertaken in compliance with the relevant Instruction Notes on energy and carbon balance calculation.

9 Business integrity, social, health and safety requirements in CoC

9.1 The organisation shall determine and implement effective arrangements against corruption, proportionate to the nature and the scale of organisation.

9.2 The organisation shall determine and implement effective arrangements to comply with all applicable laws, rules and regulations in countries where it conducts business activities.