



SolidStandards

Enhancing the implementation of quality and sustainability standards and certification schemes for solid biofuels (EIE/11/218)



D5.1a Reading guide



The SolidStandards project

The SolidStandards project addresses ongoing and recent developments related to solid biofuel quality and sustainability issues, in particular the development of related standards and certification systems. In the SolidStandards project, solid biofuel industry players will be informed and trained in the field of standards and certification and their feedback will be collected and provided to the related standardization committees and policy makers.

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About this document

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Contents

Contents	3
1. Introduction	4
2. Aims and Scope	5
3. Approach	6
4. References.....	7

Important notes:

1. All data and information were collected as of June and July 2012. There is a range of parallel processes taking place at present concerning the development of certification schemes, for e.g. IWPB.
2. A large part of the information is presented in cartography. The original blank map is a royalty free image taken from Bruce John Design Inc. (2009).

1. Introduction

Work Package 5.1 aims to build an updated overview of sustainability certification initiatives for solid biomass (both existing and in preparation) in the EU 27. This includes current status and developments of certification systems, and contextual review of sustainability criteria. It intends to analyse systems that have the potential to be used to evaluate energy use of biomass. The selected systems may include initiatives specifically addressing the bioenergy sector and also certification systems addressing the biomass production side, particularly forestry certification schemes (e.g. PEFC & FSC). Each initiative was described in a standardized format (fact sheets) covering general aspects, schemes characteristics, standard, accreditation and certification bodies, implementation and certification, and source of information. At the same time, the report will also discuss which systems are currently actually in use (and by how many market actors), thus providing an overview of the actual utilization of the various systems. The selected systems were then compared together from a few important aspects, including the actual utilization of the various systems. All information are updated to as of the first half of 2012.

At the time of writing (autumn 2012), the EC has not yet made any decision on sustainability criteria for solid biofuels, but recommended in its report of February 2010 to use the same criteria for liquid biofuels. Currently, only the United Kingdom has announced to adopt such criteria through the Renewables Obligation (ROO). The Netherlands is also considering to install similar criteria, and has drafted the Biomass Protocol (BP), which is closely related to the RED criteria. Both countries have benchmarked several voluntary schemes against ROO and BP, and two reports were published in May 2012 (ECOFYS, 2012; SMK; 2012). This work has reviewed these two studies by comparing their results. Conformities between schemes were also highlighted.

In addition, the analysis also put special emphasis on considering the EC recommended sustainability criteria for solid biofuels. This work presents a contextual review of each sustainability criteria, such as the overview of GHG calculation tools, the distribution of primary forests, the distribution of peatlands, etc., and relates them to the coverage of forest management systems. These will be largely presented in cartograms. This review focuses on European countries. It is very important to understand the facts and figures to relate the principles and criteria with actual situation. To the authors' knowledge, currently there is no such review available yet. Furthermore, this work also identifies sustainability criteria with high relevance to each country. For example, comparing with many other European countries which have no primary forests, Estonia has 43.5% of primary forest per total forest area. Therefore, the criteria regarding primary forest is very relevant to Estonia and countries with primary forest, but not to the others. An additional deliverable (a set of powerpoint slides) was developed (Appendix X) to be used for training purposes, showing European market actors involved in solid biomass trade which criteria they have to be well aware of and which options they currently have if they consider to have their biomass certified in the near future.

2. Aims and Scope

This study aims to provide an overview of the current status and actual utilization of sustainability certification schemes for solid biomass, as based upon available inventory material. More precisely, this series of reports will cover the following aspects:

1. Compile an updated inventory of sustainability certification initiatives for solid biofuel and solid biomass production based on past reviews
2. Synthesize an overview of actual utilization of these schemes – listing of market actors and mapping of geographical coverage
3. Review the benchmarking studies which have been carried out by ECOFYS for Ofgem and SMK for NL Agency
4. Derive a comparative analysis of sustainability schemes based on each sustainability criteria (as recommended by the European Commission) in European context
5. Highlight the conformities and recommend possible adaptation of different schemes
6. Compile a contextual review of each sustainability criteria, such as the overview of GHG calculation tools, the distribution of primary forests, the distribution of peatlands, etc., and relate them to coverage of forest management systems. This review focuses on European countries
7. Identify sustainability criteria with high relevance to each country and develop an additional deliverable (a set of powerpoint slides) to be used for training purposes, showing European market actors involved in solid biomass trade which criteria they have to be well aware of and which options they currently have if they consider to have their biomass certified in the near future

3. Approach

The output will be presented in separate (sub-)deliverables:

1. D5.1b: Factsheets of sustainability certification initiatives for solid biomass and solid biofuels
Compiling inventory of 7 selected systems (5 implemented which are compared in no.2; 2 under development) in a standard format with latest information extracted from reports, fact sheets and other available information.
2. D5.1c: Comparative analysis of sustainability certification initiatives for solid biomass and solid biofuels
 - Brief introduction of existing certification schemes relevant to energy use of solid biomass
 - Comparison of key characteristics of 2 selected forest management schemes and 3 industrial schemes for energy use of solid biomass, including geographical coverage, actual utilization, target market actors and etc.
 - Overall comparison of results from two benchmark studies conducted by SMK (for NL Agency) and ECOFYS (for Ofgem)
3. D5.1d: Contextual review of sustainability criteria recommended by the EC for solid biomass
Contextual review of each single criterion in European context:
 - i. Define the criteria and important terms in the criteria, and overview of tools that could be useful (such as GHG calculation tools)
 - ii. Describe the actual condition in Europe related to the criterion, for e.g. distribution of primary forests in Europe. Only European countries are selected for assessment.
 - iii. Identify countries with high relevance
4. D5.1e: PowerPoint slides for training of sub-deliverable D5.1-3

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