











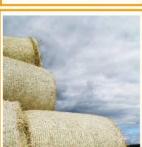
Enhancing the implementation of quality and sustainability standards and certification schemes for solid biofuels (EIE/11/218)













D4.5d Workshop report 19 March 2014 Assens, Denmark







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.

SolidStandards is coordinated by:

WIP Renewable Energies Sylvensteinstrasse 2 81369 Munich, Germany Cosette Khawaja & Rainer Janssen cosette.khawaja@wip-munich.de rainer.janssen@wip-munich.de Tel. +49 (0)89 72012 740



About this document

This document is part of work package 4.6 of the SolidStandards project. It is the summary report of the national workshop on sharing the experience on standards implementation. This document was prepared in March 2014 by:

Morten Tony Hansen FORCE Technology Hjortekaersvej 99 DK-2800 Kongens Lyngby mth@force.dk Tel. +45 7215 7755



Intelligent Energy Europe

The SolidStandards project is co-funded by the European Union under the Intelligent Energy Europe Programme (Contract No. EIE/11/218).



Co-funded by the Intelligent Energy Europe Programme of the European Union

The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EACI nor the European Commission are responsible for any use that may be made of the information contained therein.

1. Event summary

The WP 4 workshop took place 19th of March 2014 in Assens, Denmark and comprised four presentations on quality issues, resource issues and standard implementation as well as a visit to the CHP plant of Assens Fjernvarme, the case study district heating company. The aim of combining standardisation and quality issues with resource information that is currently heavily debated in Denmark was to attract as many stake holders as possible.

The workshop invitation was sent to more than 550 stake holders and the workshop was announced in the national bioenergy research magazine (FIB) as well as on the website of FORCE Technology.



An unexpectedly large number of stake holders (42 persons) registered for the workshop. Thus, the event had to be relocated from the premises of Assens Fjernvarme to the conference center, Arena Assens, the old, recently renovated sugar mill.



Due to the timing of the event, it was possible to present the results of the project. The final brochure of SolidStandards was disseminated to the participants. Also, the wood chip booklet from Austria was disseminated.

At the end of the workshop, 9 participants were in favour of implementing EN standards in their own processes.

2. Participants

Finally, 42 stake holders including speakers participated. The participants covered forest operators, fuel manufacturers, logistic companies, traders, plant owners/end users and researchers etc. from all over Denmark - from the very north of Jutland (Hjørring) to the very East (Bornholm).

A list of participants is provided as an annex to this report. The list was signed by most participants.

3. Programme

3.1. Agenda

The following agenda was presented in the invitation:

- 13.00 13.15 Welcome, Marc Hintze Assens Fjernvarme
- 13.15 13.30 Introduction to the SolidStandards project, Morten Tony Hansen FORCE Technology
- 13.30 14.00 How is wood chip quality handled at Assens Fjernvarme, Marc Hintze Assens Fjernvarme
- 14.00 14.20 Case study on implementation of quality standards, Morten Tony Hansen FORCE Technology
- 14.20 14.40 Coffee break
- 14.40 15.10 Wood chip resources in Danmark now and ind the future, Ernst Secher Eriksen HedeDanmark
- 15.10 15.30 Quetions and further debate
- 15.45 Visit to Assens Fjernvarme CHP plant

In practice, since the event took place at another site than anticipated, it became efficient to change a bit in order of the programme: Morten Tony Hansen asked the participants a warm welcome and introduced the project and its results.

The original programme (Danish) can be seen in the annex.





3.2. Situation in Denmark

Solid biomass is used in heat and CHP generation in many plants in Denmark from small to large scale. Currently, plant owners at large are planning to convert plants from fossil fuels to solid biomass. Pellets and straw account for the main share while wood chips are used at many heating plants and some CHP plants.

It is the impression that during the time of the SolidStandards project, stake holders have become increasingly aware that solid biomass gains importance and is increasingly internationally traded and thus the demand for standards along the supply chains. Especially the need for sustainability criteria have been accentuated by Danish stake holders. But also standards aimed at assisting daily safe operation of plants are gaining increased importance.

4. Feedback from participants

As mentioned above, nine participants actively showed their interest towards implementing CEN standards or parts of the standards for solid biofuels in their respective businesses. They raised their hand when the question was posed. No further analysis of the origin of these stake holders or to what extent they would use standards were carried out.

A further correspondence with stake holders on the same subject will be carried out at a later stage.

Annex I - Participants list and original programme

Appendix 2. List of participants

15 Je	14 Je	13 Ja	12 Ja	11	10 Fi	9	ω	7 E	6 D	5 C	4 B	3 B	2 AI	1	No.
Jesper Stokholm Larsen	Jens Schear Mikkelsen	Jan Mayland	Jan Christensen	Henrik Mehlsen	Finn Christensen	Ernst Secher Eriksen	Erik Dalby	Erik Bundsbæk	Dan Nissen	Carsten Villadsen	Brian Falkenberg	Benny Corneliusen	Allan Abildskov	Alex Hansen	Name
Hjørring Varmeforsyning	Sønderborg Fjernvarme	TM Trading E-Co	Dansk Biotransport GmbH	E.ON Danmark A/S	Stenstrup Fjernvarme	Hede Danmark	Miljøministeriet, Naturstyrelsen	Skjern fjernvarmecentral	Sønderborg Fjernvarme	AB Skovservice	DSHwood A/S	Verdo	Verdo	Hjordkær Fjernvarme A.m.b.a.	Organisation
	<	1	(T)	C	C	7/9	\$/0 (authority		C	0	-1	C		C	Type of organisation*
		O Jan W. V.	Zad Chilter	Manden	For Miles	- Home) Eughballon	Entiplication	V	Mr M	THE STATE OF THE S	Jen Vle	Alla Clark	Alex Man	Signature

^{*(}P) producer, (T)supplier/trader, (U) end-user, (S/C) standardisation or certification organisation, (O)other, specify (e.g. training organisation, R&D, analysis laboratory). Note: same organisation can have different roles (e.g. pellet producer and end-user).

32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
Per Diget	Ole Olesen	Ole Nielsen	Ole John	Nina Holmboe	Niels-Henrik Elnegaard	Morten Tony Hansen	Michael Ringkøbing	Michael Christensen	Martin Radoor	Marc Hintze	Lars Bloch	Klaus Kristensen	Kate Wieck-Hansen	Jørgen Sørensen	Jørgen Pedersen	John Myrup
NIRAS	Genfa I/S	Forsyning Bornholm A/S	WEBSTECH	HOFOR A/S	Lohals Varmeforsyning	FORCE Technology	Lem Varmeværk	CM Biomass Partners A/S	Lohals Varmeforsyning	Assens Fjernvarme	Andritz Feed & Biofuel A/S	Skovdyrkerne Fyn	Dansk Fjernvarme	Sdr. Omme Varmeværk Amba	Skovdyrkerne Fyn	Weiss A/S
O (consut)	7	C	O (tech suppl)	C	C	0 (RLDCh)	C	_]	C	C	(feg supply)	7/9	O (insustry org)		1/3	O locile
A Down	Colleger Co	Ole sise	Differ.		White of & his and		Coff May Michael	MM	Plays in Radio	√	<i>'</i>	Have C		Africa Sprensen		") ~ Lawwho!!

^{*(}P) producer, (T)supplier/trader, (U) end-user, (S/C) standardisation or certification organisation, (O)other, specify (e.g. training organisation, R&D, analysis laboratory). Note: same organisation can have different roles (e.g. pellet producer and end-user).

hh	43	42	41	40	39	38	37	36	35	34	33
Jens Or Knidson	Torben Møller	Thomas Langholz Valentin	Svend Manø	Sten Andersen	Søren Nielsen	Simon Skov	Peter Chrois Møller	Per Thomsen	Per Sørensen	Per Ravn	Per Hilbert
Beens Flernbarm 7	TM Trading	Skovdyrkerne Syd	Græsted Fjernvarme	Webstech ApS	Forsyning Bornholm A/S	Københavns Universitet	Miljøministeriet, Naturstyrelsen	Hjørring Varmeforsyning	Hjørring Varmeforsyning	Ravn.cc	Skovdyrkerne Sekretariatet
	1	6	C	O (tech suppl.) (C	O(research)	O(anstronty)/P	C	C	_	O (industrions) C
A Section of the sect	UM Mill	Thomas Indah,	Maigh)		Aces Midwee	from Sies	N	Pur Te		Dest	(industricy) for that will

^{*(}P) producer, (T)supplier/trader, (U) end-user, (S/C) standardisation or certification organisation, (O)other, specify (e.g. training organisation, R&D, analysis laboratory). Note: same organisation can have different roles (e.g. pellet producer and end-user).