

VIDA Energi AB
Therese Lindberg
Sågverksvägen 8
560 13 HOK

AR-20-SL-298469-02

EUSELI2-00822803

Client code:: SL7624749

Reference:
280

ANALYTICAL REPORT

Sample code:	177-2020-11180899	Sampling date (only)	2020-11-17		
Description:					
Matrix	Biofuel, solid				
Received:	2020-11-18				
Report date:	2020-12-04				
Start Analysis Date	2020-11-18				
Client Sample:	Vida pellets 2020-11-17				
Analysis	Result	Unit	Unc.	Method	
Sample Preparation	1.0			SS-EN ISO 14780:2017	a)
Moisture content	7.7	%	10%	SS-EN ISO 18134-1:2015, -2:2017, -3(mod):2015	a)
Ash content incl. ash contaminants	0.35	% dw	10%	EN-ISO 18122:2015	a)
Ash incl ash contaminants, as received	0.32	%	10%	EN-ISO 18122:2015	a)
Sulfur S	<0.011	% dw	10%	EN ISO 16994:2016 mod	a)
Sulfur S as received	<0.010	%	10%	EN ISO 16994:2016 mod	a)
Chlorine Cl	<0.011	% dw	25%	EN ISO 16994:2016	b)
Chlorine Cl as received	<0.010	%	25%	EN ISO 16994:2016	b)
Carbon C	51.5	% dw	5%	EN ISO 16948:2015	a)
Carbon C as received	47.6	%	5%	EN ISO 16948:2015	a)
Hydrogen H	6.1	% dw	10%	EN ISO 16948:2015	a)
Hydrogen H as received	6.5	%	10%	EN ISO 16948:2015	a)
Nitrogen N	<0.11	% dw	30%	EN ISO 16948:2015	a)
Nitrogen N as received	<0.10	%	30%	EN ISO 16948:2015	a)
Oxygen O (calculated)	41.9	% dw		EN ISO 18125:17	a)
Oxygen O as received (calculated)	45.5	%		EN ISO 18125:17	a)
Ash fusibility (oxidizing)	:			ISO 21404:2020	a)
Shrinkage start temp SST	1150	°C	10%	ISO 21404:2020	a)
Deformation temp DT	1450	°C	5%	ISO 21404:2020	a)
Hemisphere temp HT	1490	°C	5%	ISO 21404:2020	a)
Flow temp FT	1500	°C	5%	ISO 21404:2020	a)
Bulk density	670	kg/m ³	5%	EN ISO 17828:2016 mod	a)
Durability (ASAE)	98.2	%	1%	EN-ISO 17831-1:2016 mod	a)
Total amount of removed ash contamin	0.00	% dw			a)*

This test report has been created electronically and has been verified and authorised.

Symbol description:

The laboratory/laboratories are accredited by the respective national accreditation body. Non-accredited tests are marked *.

For microbiological analyzes the confidence interval is specified. Further information regarding measurement uncertainty is available upon request.

The results may not be reproduced except in full, without a written approval of the laboratory. The results relate only to the sample analysed.

AR-007v30

EN ISO 18125:17 1) a)		MJ/kg	kcal/kg	MWh/metric tonne
Calorific value	As received	18.893	4515	5.247
	Dry basis	20.463	4891	5.682
Net calorific value	Const volume As received	17.562	4195	4.877
	Const volume Dry basis	19.212	4589	5.335
	Const volume db ashfree	19.278	4605	5.354
	Const pressure As received	17.485	4176	4.856
	Const pressure Dry basis	19.141	4572	5.315
	Const pressure db ashfree	19.207	4587	5.334

1) Uncertainty 5%

Net calorific value includes removed ash contaminants i.e. metals.

Test was performed by / subcontractor:

- a) Eurofins Biofuel & Energy Testing Sweden AB, SWEDEN, ISO/IEC 17025:2017 SWEDAC 1820
- b) Eurofins Water Testing Sweden, SWEDEN, ISO/IEC 17025:2017 SWEDAC 10300

Report comments:

Replaces previous sent report with the same sample number.
Reason for new report(AR-20-SL-298469-02):engelska

Albin Klint, ASM

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FSC® CHAIN OF CUSTODY CERTIFICATE

Certificate No:
DNV-COC-000211 DNV-CW-000211
Issue Number:
10

Initial certification date:
December 29, 2009

Valid:
December 29, 2019 - December 28, 2024

The validity of this certificate shall be verified on www.info.fsc.org.

This is to certify that the

Vida Wood AB

Lyckegårdsvägen, 342 21 Alvesta, Sweden
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to FSC standard:

**FSC-STD-40-004 ver 3.0, FSC-STD-40-005 ver 3.1,
FSC-STD-40-003 ver 2.1**

This certificate is valid for the following scope:

**Purchase, import, sales and distribution of round wood, sawn & planed goods
FSC Mix, FSC 100% and FSC Controlled Wood, using the transfer system.
Manufacturing of sawn & planed goods, sawdust and wood chips from
coniferous and non-coniferous wood, using the credit system. FSC Mix and
FSC Controlled Wood.**

A list of the certificated products can be obtained from the FSC database, www.info.fsc.org.

This certificate itself does not constitute evidence that a particular product supplied by the certificate holder is FSC-certified (or FSC Controlled Wood). Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents.

Place and date:
Solna, October 08, 2020



The mark of
responsible forestry

For the issuing office:
**DNV GL - Business Assurance
Elektrogatan 10, 171 54, Solna, Sweden**


Ann-Louise Pätt
Management Representative

Certificate No: DNV-COC-000211 DNV-CW-000211
 Place and date: Solna, October 08, 2020
 Issue Number: 10

Appendix to Certificate

Vida Wood AB

Locations included in the certification are as follows:

Site Name	Address
Vida Alvesta AB - Alvesta	Lyckegårdsvägen, 342 21 Alvesta, Sweden
Vida Wood AB - Alvesta	Lyckegårdsvägen, 342 21 Alvesta, Sweden
Vida Borgstena AB - Borgstena	Länsvägen, 513 97 Borgstena, Sweden
Vida Tranemo AB	Industrigatan 4 514 24 Tranemo, Sweden
Vida Bruza AB - Hjärtevad	Rysebovägen 1, 570 32 Hjärtevad, Sweden
Vida Energi AB - Hestra	Flodalaindustriområde, 330 27 Hestra, Sweden
Vida Hestra AB- Hestra	Flodalaindustriområde, 330 27 Hestra, Sweden
Vida Skog AB - Borgstena	Länsvägen 513 97 Borgstena, Sweden
Vida Hästveda- Hästveda	Jägersborgsvägen 280 23 Hästveda, Sweden
Vida Urshult AB - Urshult	Hunnamålavägen, 360 13 Urshult, Sweden
Vida Vislanda AB - Vislanda	Västergatan 8, 342 50 Vislanda, Sweden
Vida Nössemark AB- Ed	Rörviken 170, 668 93 Ed, Sweden
Vida Wood UK - Essex	Union House 117 High str CM12 9AH Billericay, UK
Vida VMO AB Vimmerby	Hamrasåg 140, 598 91 Vimmerby, Sweden
Vida VMO AB Mörlunda	Bergsväg, 570 84 Mörlunda, Sweden
Vida VMO AB Orrefors	Bruksvägen 50, 380 40 Orrefors, Sweden
Vida Gransjö AB	Gransjö 104, 361 94 Eriksmåla, Sweden

PEFC CHAIN OF CUSTODY CERTIFICATE

Certificate No:
2013-SKM-PEFC-62
Issue Number:
6

Initial certification date:
November 11, 2013

Valid:
November 12, 2018 - November 11, 2023

The validity of this certificate shall be verified on www.pefc.org.

This is to certify that the

Vida Wood AB

Lyckegårdsvägen 342 21 Alvesta, Sweden
and the sites as mentioned in the Appendix accompanying this Certificate

has been found to conform to PEFC standard:
PEFC ST 2002:2013: Chain of custody of forest based products

This certificate is valid for the following scope:

**Purchase, import, sales and distribution of round wood, sawn & planed goods
Pefc 100% and PEFC controlled sources. Production of sawn & planed goods
and cable drums from coniferous and non-coniferous wood. PEFC 100%
according to percentage based method.**

Place and date:
Solna, October 07, 2020



For the issuing office:
DNV GL - Business Assurance
Elektrogatan 10, 171 54, Solna, Sweden


Ann-Louise Pått
Management Representative

Certificate No: 2013-SKM-PEFC-62
 Place and date: Solna, October 07, 2020
 Issue Number: 6

Appendix to Certificate

Vida Wood AB

Locations included in the certification are as follows:

Site Name	Address
Vida Wood AB - Alvesta	Lyckegårdsvägen 342 21 Alvesta, Sweden
Vida Tranemo AB	Industrigatan 4,514 24, Tranemo, Sweden
Vida Alvesta AB - Alvesta	Lyckegårdsvägen 342 21 Alvesta, Sweden
Vida Borgstena AB - Borgstena	Länsvägen 513 97 Borgstena, Sweden
Vida Hestra AB	Flodalaindustriområde 330 27 Hestra, Sweden
Vida Bruza AB - Hjärtevad	Ryssebovägen 1 570 32 Hjärtevad, Sweden
Vida Energi AB - Hestra	Flodalaindustriområde 330 27 Hestra, Sweden
VIDA Hästveda- Hästveda	Jägersborgsvägen 280 23 Hästveda, Sweden
Vida Urshult AB - Urshult	Hunnamålavägen 360 13 Urshult, Sweden
Vida Vislanda AB - Vislanda	Västergatan 8 342 50 Vislanda, Sweden
Vida Wood UK - Essex	Union House 117 High str CM12 9AH Billericay, UK
Vida Nössemark AB	Rörviken 170, 668 93 Ed, Sweden
VIDA Skog AB	Västergatan 8 342 50 Vislanda, Sweden
Vida Packaging AB	Flodalaindustriområde 330 27 Hestra, Sweden
Vida VMO AB Vimmerby	Hamrasåg 140, 598 91 Vimmerby, Sweden
Vida VMO AB Mörlunda	Bergsväg, 570 84 Mörlunda, Sweden
Vida VMO AB Orrefors	Bruksvägen 50, 380 40 Orrefors, Sweden
Vida Gransjö AB	Gransjö 104, 361 94 Eriksmåla, Sweden

PEFC FORESTRY CERTIFICATE

Certificate No:
2015-SKM-PEFC-111
Issue Number:
2.0

Initial certification date:
28 June, 2013

Validity:
28 June, 2021

The validity of this certificate shall be verified on www.pefc.org.

This is to certify that

Vida Skog AB

Lyckegårdsvägen 3, 342 21 Alvesta, Sweden

has been found to conform to PEFC standard(s):

Swedish PEFC Forestry standard PEFC SWE 002:4

**Swedish PEFC requirements for direct certification and certification in group
PEFC SWE 004:4**

This certificate is valid for process certification of:

Wood procurement organization that plans and conducts forestry activities.

Place and date:
Solna, 18 June, 2020



Accred. no. 1053
Certification of
Products
ISO/IEC 17065

For the issuing office:
**DNV GL – Business Assurance
Sweden AB**

Ann-Louise Pått
Management Representative



Vidas produkter så som plank, brädor, träemballage, pellets och ströbalar kommer från ett ansvarsfullt skogsbrukande. Vida köper endast råvara från kända säljare som kan påvisa spårbarhet från skogen hela vägen till våra anläggningar. Skogsvårdslagen reglerar att skogen som avverkas har uppnått en viss ålder och att ytan inom fem år efter avverkning har en säkerställd ny föryngring. Vida köper inte skog från Nyckelbiotoper eller andra skogar med höga bevarandevärden om inte virket kommer från naturvårdande skötsel.

För vidare frågor kontakta

Pelle Ström
Skog och Miljöansvarig

Vida AB's products such as solid wood, packaging material, pellets och bedding bales comes from responsible forest management. All timber purchased by Vida comes from controlled sources, that means that we can trace all timber from harvesting sites to Vida's sawmills. The Swedish Forestry Act regulates that the minimum harvesting age for a forest tract and that there must be a new generation of forest growing within five years after harvesting. Vida don't purchase timber from *High conservation value areas* (HCV) unless it comes from actions to increase biological or ecological values.

For more information, please contact

Pelle Ström, Forestry and ecology

Pelle Ström
Skog och Miljöansvarig