

[Erratum 1: In table 3.16 of the original published thesis, the last three columns, 5-7, had erroneously been filled with numbers from columns 2-4. This has been corrected in table 3.16 below. This page should replace page 46 of the original published thesis file. Jerry Ståhlberg 2010-04-20]

The product and energy yields of a kilogram oat straw at the enzymatic saccharification, ethanol fermentation and biogas digestion are summarized in table 3.16 below.

Table 3.16: Summary of Yields per a Kilogram of Dry Oat Straw						
	Lime Ferm.	Lund Ferm.	Cambi Ferm.	Lime Unferm.	Lund Unferm.	Cambi Unferm.
Enzymatic Saccharification Yields in g/kg Oat Straw						
Hexoses	149	160	242			
Pentoses	100	81	45			
Total Sugar	249	241	287			
Ethanol Fermentation Yields in g/kg Oat Straw						
Ethanol	85	115	150			
Biogas Digestion Yields in g/kg Oat Straw						
CH ₄	133	122	97	187	131	124
Energy Yields in MJ/kg Oat Straw						
Ethanol	2.28	3.10	4.04	0.00	0.00	0.00
CH ₄	6.64	6.10	4.85	9.36	6.56	6.22
Total	8.92	9.21	8.90	9.36	6.56	6.22
Energy Yield Ratio, Fermented/Unfermented	0.95	1.40	1.43	0.95	1.40	1.43
Remaining Residual Solid after Biogas Digestion, g/kg dry oat straw						
Volatile Solids (using measured CH ₄ content and biogas as CO ₂ and CH ₄)	246	257	294	81	346	380
Total Solids	313	324	361	148	413	447