



"Limes Innovation" FOOD

Comparison between the use of straw and traditional fuels.

Sample comparison made for installation with total power of 1.7mW (Paired boilers BSB850 (twins))

FUEL	kcal/kg	kWh/kg	Fuel Price			
			€/l	Specific weight	€/kg	€/kWh
Straw 10% humidity	3 500	4,07			0,07	0,018
Straw 20% humidity	3 120	3,63			0,06	0,017
Straw 30% humidity	2 800	3,26			0,05	0,016
Industrial oil	9 443	10,98	0,84	0,89	0,95	0,086
Diesel oil	10 002	11,63	1,09	0,86	1,27	0,109
Natural Gas	7 749	9,01				0,059
LPG	11 008	12,80	0,44	0,56	0,79	0,061
Pellets	3 600	4,19			0,20	0,049
Wood	2 700	3,14			0,07	0,023
Electricity	860	1,00 Kwh				0,102

	kg	kWh
Round Straw Bale Diameter=1,8 m; L=1,2 m; humidity 20%	380	1 378,60

Sample - comparison between straw and other fuels	kW	Working hrs	kWh	Cost € per day	Cost € per 6 months (winter time)	Savings € if use straw
Paired boilers (twins) BSB850 - with a total capacity of 1.7 MW	1700	18	30600			
Industrial oil				2642	475 504	382 353
Diesel oil				3332	599 742	506 591
Natural Gas				1815	326 679	233 528
LPG				1877	337 881	244 730
Electricity				3129	563 239	470 088
Straw Bale 20% humidity				518	93 151	

* NOTE:

Price of fuels as of May 2018 r. In Bulgaria

The price of straw is indicative including transport and storage