



CROATIA	BIOMASS				FOSSIL FUEL		
	Price/t (incl. VAT, excl. transport)	VAT for biomass in %	av. transport costs of biomass/km	Average energy content MWh/t of biomass ¹	Average energy content MWh/t for fossil fuels (a) natural gas ² (b) heating oil ³ (c) and coal	Price/unit & Price/t (incl. VAT, excl. transport)	Price/t ⁴ (incl. VAT, excl. transport) with the same energy content than 1 ton of the biomass product
Firewood	110.00 – 140.00 €/t	25%	1.20 €/km	2.3 – 4.2 MWh/t	natural gas: 12.7 – 14.1 MWh/t heating oil: 11.2 – 11.8 MWh/t coal: -	natural gas: 513.00 – 638.00 €/t heating oil: 670.00 – 900.00 €/t coal: -	natural gas: 84.00 – 211.00 €/t heating oil: 131.00 – 338.00 €/t coal: -
Wood chips	45.00 – 60.00 €/t	25%	1.20 €/km	2.0 – 4.2 MWh/t	natural gas: 12.7 – 14.1 MWh/t heating oil: 11.2 – 11.8 MWh/t coal: -	natural gas: 513.00 – 638.00 €/t heating oil: 670.00 – 900.00 €/t coal: -	natural gas: 73.00 – 211.00 €/t heating oil: 114.00 – 338.00 €/t coal: -
Wood pellets	210.00 – 275.00 €/t Enplus certified: > 250.00 € non/other certified: < 250.00 €	25%	1.20 €/km	4.8 MWh/t	natural gas: 12.7 – 14.1 MWh/t heating oil: 11.2 – 11.8 MWh/t coal: -	natural gas: 513.00 – 638.00 €/t heating oil: 670.00 – 900.00 €/t coal: -	natural gas: 175.00 – 241.00 €/t heating oil: 272.00 – 366.00 €/t coal: -
Wood briquettes	90.00 – 130.00 €/t	25%	1.20 €/km	4.8 MWh/t	natural gas: 1 2.7 – 14.1 MWh/t heating oil: 11.2 – 11.8 MWh/t coal: -	natural gas: 513.00 – 638.00 €/t heating oil: 670.00 – 900.00 €/t coal: -	natural gas: 175.00 – 241.00 €/t heating oil: 272.00 – 366.00 €/t coal: -

¹ Range of MWh/t for firewood, wood chips and charcoal depends on the tree species from coniferous and broad-leaf-trees as well as depending on the moisture content

² Conversion of natural gas unit from kWh/m³ to MWh/t: Upper heating value 10,28 kWh/m³, Lower heating value 9.26 kWh/m³ with a density of 0,731 kg/m³-> 1368m³/t

³ Heating Oil/Mazut: 1111l/t

⁴ Calculate: (Price for each fossil counterpart) * (min.& max. energy content of biomass / max. & min. energy content of fossil fuel) = price range of fossil fuel with same energy content than 1 ton of respective woody energy product