



Results of Technical Modeling

Feedstock	500 sTPD DRY	588 sTPD moist.
Medium Products	CLEAN SYNGAS 579 402 m ³ /d	ASH 75.00 sTPD
Process water requirement	294 sTPD	
Final Products	TOTAL ELECTRIC POWER: 23.78 MWe	WASTE HEAT 66.34 GJ/h
HYDROGEN (Optional)	214 958 m ³ /day	

TCG Carbon Conversion Rate:	99.96%
TCG Energy Conversion Rate:	70%

Daily Products

Ash	68.04 ton/day
Electricity	670.66 MWh/day
Heat energy	1 692.14 GJ/day
HYDROGEN (Optional)	214 958 m ³ /day

Annual energy production and the energy demand fulfilled

Ash	21 233 ton/year
Electricity	178 088 MWh/year
Heat energy	496 866 GJ/year
HYDROGEN (Optional)	67 083 090 m ³ /year

Number of Citizens whose electricity demand can be covered by TCG-UC Power Plant

81 617 persons

Results of Financial Modeling

!! NOT FINAL MODEL !!

Capital Expenditures	Total Project Cost (Entire Project)	171 545 610 USD	=	160 636 155 EUR
Annual Operating Costs	Total Operation Costs:	\$8 963 250	=	8 393 232 EUR
Syngas Production for Sale	23 730 272 revenue US \$ per year from all the products =		=	22 221 144 EUR
Salary and Labor costs of TCG and Electricity Unit	Project Labor cost	10 507 US \$ per day	=	9 839 EUR/day
Annual EBITDA	15 928 088 US \$ EBITDA before paying interest, tax, repayment of principal, and income before amortization		=	14 915 140 EUR
Daily Cost	Total Daily Cost	\$59 333 For 30 years of life		
Daily Income	Daily Income of Production	\$76 040		
	Total Daily Income	\$92 050		
Daily Saldo		\$32 716		

!! NOT FINAL MODEL !!

RESULT OF PRELIMINARY MODELING

Daily Costs and Incomes

Daily Cost of Feedstock	-\$16 009
Daily Total Capital Expenditures	\$18 323
Daily Operating Cost	\$41 010
Total Daily Cost	\$59 333
Daily Income of Production	\$76 040
Daily Income from Feedstock	\$16 009
Total Daily Income	\$92 050

Project Rate of Return	7%
Time Frame of Return (Month)*	129.24 * + PIP
Time Frame of Return (Year)*	10.77 * + PIP

EROEI (TCG Unit)	27
EROEI(TCG-UC PLANT)	19

Specific Income of Technology:	152 US \$/short ton
Specific Income of the TCG-UC Project:	184 US \$/short ton

*PIP = Plant Installation Period