

BUDGET MINI REFINERY

BASIC ASSUMPTION							
Land - 33 H for 6,000 barrels/day	USD						
Building & Civil Works (not included - to be calculated locally)	USD						
Refinery (turn key plant) CAPEX	USD	46,500,000					
Production capacity	barrel/day	6,000					
Barrel volume	liters	159					
Daily production	liters	954,000					
Yearly working days	days	350					
Yearly production	liters	333,900,000					
PRODUCT MIX							
DAR BLEND	Cracking output			Selling price (ex refinery)		*	
		liters	%				
	black oil	liters/barrel	8	5.0%	gas	USD/liter	0
	gasoline	liters/barrel	33	20.8%	gasoline	USD/liter	0.85
	diesel	liters/barrel	68	42.8%	diesel	USD/liter	0.85
	kerosene	liters/barrel	4	2.5%	kerosene	USD/liter	0.85
	masut - heavy fuel oil	liters/barrel	21	13.2%	heavy fuel oil	USD/liter	0.50
	bitumen (around 24 - 30 Kg)	liters/barrel	25	15.7%	bitumen	USD/Kg	0.50
	<b>TOTAL</b>	<b>liters/barrel</b>	<b>159</b>	<b>100.0%</b>			
BUDGET							
		liter/barrel	price/liter	income	daily income	yearly income	
				per barrel USD	USD	USD	
black oil		8.0	0	0	0	0	
gasoline*	USD/liter	33.0	0.85	28.05	168,300	58,905,000	
diesel*	USD/liter	68.0	0.85	57.8	346,800	121,380,000	
kerosene*	USD/liter	4.0	0.85	3.4	20,400	7,140,000	
masut - heavy fuel oil	USD/liter	21.0	0.50	10.5	63,000	22,050,000	
bitumen***	USD/Kg	25.0	0.50	12.5	75,000	26,250,000	
<b>TOTAL</b>		<b>159</b>		<b>112.25</b>	<b>673,500</b>	<b>235,725,000</b>	
Costs							
Crude oil cost (WTI Western Texas Intermediate)	USD/barrel	88.29			daily cost	yearly cost	
Discount applied	%	0.0%			USD	USD	
Crude oil cost ex refinery	USD/barrel	88.29			529,740	185,409,000	
Transport cost via oilduct	USD/liters	0			0	0	
Personnel					2,897	1,014,000	
Opex (operational expenditures)	USD/liters	0.0078			7,414	2,595,000	
Loan interest	USD						
Depreciation (tangible & intangible) 20%					26,571	9,300,000	
Gross margin					Yearly gross margin	37,407,000	
					Monthly gross margin	3,117,250	
					Daily gross margin	106,877	
pay back period	days	435					
	years	1.2					
* gasoline, diesel and kerosene are sold ex works, tax excluded. Transport costs from the refinery to the pumps are borne by the pumps themselves							
** black oil income is not considered, as it is entirely used for energy production (electricity and steam) required for process							

<b>PRODUCTION MIX</b>		<b>6,000</b>	<b>barrels/day</b>			
			<b>Cracking output 1 barrel</b>	<b>Daily production m3/day</b>	<b>Monthly production m3/month</b>	<b>Yearly production m3/year</b>
black oil	liters/barrel		8	48	1,400	16,800
gasoline	liters/barrel		33	198	5,775	69,300
diesel	liters/barrel		68	408	11,900	142,800
kerosene	liters/barrel		4	24	700	8,400
masut heavy fuel oil	liters/barrel		21	126	3,675	44,100
bitumen (24 - 30 Kg around)	liters/barrel		25	150	4,375	52,500
<b>TOTAL</b>	<b>liters/barrel</b>		<b>159</b>	<b>954</b>	<b>27,825</b>	<b>333,900</b>

yearly working days

350

monthly working days - average

29.16666667

PERSONNEL			Year 1		Year 2									
		n.	Monthly salary	yearly salary	Monthly salary	yearly salary								
			Euro	13 months Euro	Euro	13 months Euro								
Managing director		1	5,000	65,000	5,000	65,000								
Oil & Fuels technicians	only first year	3	2,500	97,500										
Process plant	3 workers/shift	15	1000	195,000	1,000	195,000								
Storage	1 workers/shift	5	1000	65,000	1,000	65,000								
Laboratory technician		1	5,000	65,000	5,000	65,000								
Utilities	1 workers/shift	5	1,000	65,000	1,000	65,000								
Fire water station	2 workers/shift	10	1,000	130,000	1,000	130,000								
Mechanic	1 worker/shift	5	1,700	110,500	1,700	110,500								
Generic blue collar		2	1,000	26,000	1,000	26,000								
Security	3 workers/shift	15	1,000	195,000	1,000	195,000								
<b>PERSONNEL</b>		<b>62</b>		<b>1,014,000</b>		<b>916,500</b>								
<b>Transport cost</b>	via oilduct			<b>0</b>		<b>0</b>								
<b>OTHER COSTS</b>														
<b>Board fee</b>				120,000		120,000								
<b>Start up costs (legal, consulting, travel)</b>				20,000		20,000								
<b>Assurance</b>				100,000		100,000								
<b>Travel expenses, board &amp; lodging</b>				20,000		20,000								
<b>Spare parts &amp; maintenance</b>	(3% on capex)			1,395,000		1,395,000								
<b>Consumptions materials</b>	(catalist, additives, lubrificants etc)			840,000		840,000								
<b>Contingency</b>				100,000		100,000								
<b>TOTAL</b>				<b>2,595,000</b>		<b>2,595,000</b>								
<b>Engineering fee</b>	(6 % on capex)	to be amortized		<b>0</b>		<b>0</b>								
<b>Interest on loan</b>	(see Loan sheet)													

## Profit &amp; Loss

	1° YEAR		2° YEAR		3° YEAR		4° YEAR		5° YEAR	
<b>PROFIT &amp; LOSS</b>	barrel/day		barrel/day		barrel/day		barrel/day		barrel/day	
	6,000		6,000		6,000		6,000		6,000	
1 Sales	235,725,000	100.0	235,725,000	100.0	235,725,000	100.0	235,725,000	100.0	235,725,000	100.0
2 Intermediary stocks		0.0		0.0		0.0		0.0		0.0
3 Intermediary stocks		0.0		0.0		0.0		0.0		0.0
<b>9 Total Incomes</b>	<b>235,725,000</b>	<b>100.0</b>	<b>235,725,000</b>	<b>100.0</b>	<b>235,725,000</b>	<b>100.0</b>	<b>235,725,000</b>	<b>100.0</b>	<b>235,725,000</b>	<b>100.0</b>
10 Raw material	185,409,000	0.4	185,409,000	78.7	185,409,000	78.7	185,409,000	78.7	185,409,000	78.7
11 Stock variation		0.0		0.0		0.0		0.0		0.0
12 Consumptions materials	840,000	0.4	840,000	0.4	840,000	0.4	840,000	0.4	840,000	0.4
13 Transport cost	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14 Spare parts & maintenance	1,395,000	0.6	1,395,000	0.6	1,395,000	0.6	1,395,000	0.6	1,395,000	0.6
<b>15 Production direct costs</b>	<b>187,644,000</b>	<b>79.6</b>	<b>187,644,000</b>	<b>79.6</b>	<b>187,644,000</b>	<b>79.6</b>	<b>187,644,000</b>	<b>79.6</b>	<b>187,644,000</b>	<b>79.6</b>
<b>16 Added value</b> (9-15)	<b>48,081,000</b>	<b>20.4</b>	<b>48,081,000</b>	<b>20.4</b>	<b>48,081,000</b>	<b>20.4</b>	<b>48,081,000</b>	<b>20.4</b>	<b>48,081,000</b>	<b>20.4</b>
17 Personnel	1,014,000	0.4	916,500	0.4	916,500	0.4	916,500	0.4	916,500	0.4
18 Independent personnel		0.0		0.0		0.0		0.0		0.0
<b>21 Total Manpower costs</b>	<b>1,014,000</b>	<b>0.4</b>	<b>916,500</b>	<b>0.4</b>	<b>916,500</b>	<b>0.4</b>	<b>916,500</b>	<b>0.4</b>	<b>916,500</b>	<b>0.4</b>
<b>22 Gross margin on production</b> (16-21)	<b>47,067,000</b>	<b>20.0</b>	<b>47,164,500</b>	<b>20.0</b>	<b>47,164,500</b>	<b>20.0</b>	<b>47,164,500</b>	<b>20.0</b>	<b>47,164,500</b>	<b>20.0</b>
23 Board fee	120,000	0.1	120,000	0.1	120,000	0.1	120,000	0.1	120,000	0.1
24 Assurance	100,000	0.0	100,000	0.0	100,000	0.0	100,000	0.0	100,000	0.0
25 Travel expenses, board & lodging	20,000	0.0	20,000	0.0	20,000	0.0	20,000	0.0	20,000	0.0
26 Contingency	100,000	0.0	100,000	0.0	100,000	0.0	100,000	0.0	100,000	0.0
27 Rentings		0.0		0.0		0.0		0.0		0.0
28 Start up costs	20,000	0.0		0.0		0.0		0.0		0.0
<b>40 Operating costs</b>	<b>360,000</b>	<b>0.2</b>	<b>340,000</b>	<b>0.1</b>	<b>340,000</b>	<b>0.1</b>	<b>340,000</b>	<b>0.1</b>	<b>340,000</b>	<b>0.1</b>
<b>41 EBIDTA</b> (22-40)	<b>46,707,000</b>	<b>19.8</b>	<b>46,824,500</b>	<b>19.9</b>	<b>46,824,500</b>	<b>19.9</b>	<b>46,824,500</b>	<b>19.9</b>	<b>46,824,500</b>	<b>19.9</b>
42 Depreciation on tangible assets	9,300,000	3.9	9,300,000	3.9	9,300,000	3.9	9,300,000	3.9	9,300,000	3.9
43 Depreciation on intangible assets (engineering fee)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
44 provision for extraordinary depreciation		0.0		0.0		0.0		0.0		0.0
45 Provisions for risks		0.0		0.0		0.0		0.0		0.0
46 other provisions		0.0		0.0		0.0		0.0		0.0
<b>49 EBIT</b> (41-42-43-44-45-46)	<b>37,407,000</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>
50 Financial incomes		0.0		0.0		0.0		0.0		0.0
51 Financial interests		0.0		0.0		0.0		0.0		0.0
52 Others		0.0		0.0		0.0		0.0		0.0
53 extra exeptional incomes		0.0		0.0		0.0		0.0		0.0
54 extra exeptional expenses		0.0		0.0		0.0		0.0		0.0
<b>59 EBT</b>	<b>37,407,000</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>
60 Taxes		0.0		0.0		0.0		0.0		0.0
<b>62 Net Income</b>	<b>37,407,000</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>	<b>37,524,500</b>	<b>15.9</b>

Cash flow 1st year

<b>CASH FLOW 1st YEAR</b>		To – 6 months	1° month	2° month	3° month	4° month	5° month	6° month	7° month	8° month	9° month	10° month	11° month	12° month	TOT
1	Equity	45,000,000													45,000,000
2	Shareholders loan														0
2	Bank Loan													0	0
4	Incentives														0
8	Sales		19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	235,725,000
8 bis	VAT														0
9 = 1+2+3+4+8	<b>TOTAL INCOMES</b>	<b>45,000,000</b>	<b>24,293,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>285,375,000</b>
10	Short Term														
11	Reimbursement bank loan														0
12	Suppliers														
13	Investment	41,850,000	4,650,000												46,500,000
14	VAT														0
16	Initial Stock raw material														0
17	Personnel		84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	84,500	1,014,000
18	Raw material - crude oil			15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	169,958,250
19	General expenditures (overheads)		216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	2,595,000
20	Transport		0	0	0	0	0	0	0	0	0	0	0	0	0
21	Interests														0
22	Taxes													0	0
23	Dividends														0
24 = 10 : 23	<b>TOTAL USES</b>	<b>41,850,000</b>	<b>4,950,750</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>15,751,500</b>	<b>178,217,250</b>
25 = 9 - 24	<b>MONTHLY CASH FLOW</b>	<b>3,150,000</b>	<b>19,343,000</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>3,892,250</b>	<b>62,157,750</b>
26	<b>CASH FLOW progression</b>	<b>3,150,000</b>	<b>22,493,000</b>	<b>26,385,250</b>	<b>30,277,500</b>	<b>34,169,750</b>	<b>38,062,000</b>	<b>41,954,250</b>	<b>45,846,500</b>	<b>49,738,750</b>	<b>53,631,000</b>	<b>57,523,250</b>	<b>61,415,500</b>	<b>65,307,750</b>	<b>65,307,750</b>
			Remark 1	crude oil payment - 30 days from delivery date											
			Remark 2	Sales : 100 % cash on delivey											

## Cash flow 2nd year

CASH FLOW 2nd YEAR		1° month	2° month	3° month	4° month	5° month	6° month	7° month	8° month	9° month	10° month	11° month	12° month	TOT
1	Equity													0
2	Shareholders loan													0
2	Bank Loan													0
4	Cash flow year 1	65,307,750												65,307,750
8	Sales	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	19,643,750	235,725,000
8 bis	VAT													0
9 = 1+2+3+4+8	<b>TOTAL INCOMES</b>	<b>84,951,500</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>19,643,750</b>	<b>301,032,750</b>
10	Short Term													
11	Reimbursement bank loan													
12	Suppliers													
13	Investment													
14	VAT													0
16	Initial Stock raw material													0
17	Personnel	76,375	76,375	76,375	76,375	76,375	76,375	76,375	76,375	76,375	76,375	76,375	76,375	916,500
18	Raw material - crude oil	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	15,450,750	185,409,000
19	General expenditures (overheads)	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	216,250	2,595,000
20	Transport	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Interests													0
22	Taxes												0	0
23	Dividends													0
24= 10 : 23	<b>TOTAL USES</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>15,743,375</b>	<b>188,920,500</b>
25 = 9 - 24	<b>MONTHLY CASH FLOW</b>	<b>69,208,125</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>3,900,375</b>	<b>112,112,250</b>
26	<b>CASH FLOW progression</b>	<b>69,208,125</b>	<b>73,108,500</b>	<b>77,008,875</b>	<b>80,909,250</b>	<b>84,809,625</b>	<b>88,710,000</b>	<b>92,610,375</b>	<b>96,510,750</b>	<b>100,411,125</b>	<b>104,311,500</b>	<b>108,211,875</b>	<b>112,112,250</b>	<b>112,112,250</b>
	Remark 1	crude oil payment - 30 days from delivery date												
	Remark 2	Sales : 100 % cash on delivey												