

CLEAN DEVELOPMENT MECHANISM (CDM) PROJECT
INVESTMENT ANALYSIS - OPTION 2 (INVESTMENT COSTS)
(IN THOUSANDS)

[illegible]

Year	Investment (US\$ K)	Incremental cash flow (US\$ K)	Depreciation	Taxable income	Tax	Net benefit	Cash flow without CER	Cash flow with CER (price assumed at \$5)
2006	465	-	39	(39)	-	-	(465)	(465)
2007	1'390	2'384	155	2'230	669	1'715	325	748
2008	12'590	3'109	1'204	1'905	572	2'537	(10'053)	(9'264)
2009	8'650	3'924	1'925	1'999	600	3'324	(5'326)	(3'840)
2010	6'450	4'398	2'462	1'936	581	3'817	(2'633)	(595)
2011		3'929	2'462	1'467	440	3'489	3'489	6'485
2012		3'463	2'462	1'001	300	3'163	3'163	6'159
2013		2'996	2'462	534	160	2'836	2'836	5'832
2014		2'531	2'462	69	21	2'511	2'511	5'507
2015		2'163	2'462	(299)	-	2'163	2'163	5'159
2016		1'868	2'462	(594)	-	1'868	1'868	4'864
2017	-2'955	1'558	2'462	(904)	-	1'558	4'512	9'377
IRR								
NPV - WACC						14.50%	2.32%	24.68%
NPV - GOVT BONDS						8%	(\$4'946)	\$5'813
							(\$3'411)	\$13'067

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Capital Expenditures	USD	465'000	1'390'000	6'450'000	6'450'000	2'462'083	2'462'083	2'462'083	2'462'083	2'462'083
Depreciation Exp		38'750	154'583	192'4583	2'462'083	2'462'083	2'462'083	2'462'083	2'462'083	2'462'083
Crude Production	Mt		6'201'203	6'341'066	6'423'206	6'423'206	6'423'206	6'423'206	6'423'206	6'423'206
Total Heat Consumption	TJ									
CC2		7729	8035	8085	8413	8457	8457	8457	8457	8457
NR3		4781	5001	5049	5087	5087	5087	5087	5087	5087
NR4		8172	8277	8348	8348	8348	8348	8348	8348	8348
Total		20682	21233	21415	21740	21891	21891	21891	21891	21891
Required Fuel Quantity - Baseline										
Bituminous coal	Mt									
CC2		310'042	322'301	337'486	339'242	339'242	339'242	339'242	339'242	339'242
NR3		175'495	183'580	185'561	186'722	186'722	186'722	186'722	186'722	186'722
NR4		318'837	319'818	322'987	325'704	325'704	325'704	325'704	325'704	325'704
Total		804'373	825'688	845'804	851'669	851'669	851'669	851'669	851'669	851'669
Light oil/diesel										
CC2		11'797	12'264	12'341	12'908	12'908	12'908	12'908	12'908	12'908
NR3		4'621	4'834	4'886	4'917	4'917	4'917	4'917	4'917	4'917
NR4		4'713	4'727	4'772	4'814	4'814	4'814	4'814	4'814	4'814
Total		21'131	21'825	21'999	22'640	22'640	22'640	22'640	22'640	22'640
Used / waste oils										
CC2		0	0	0	0	0	0	0	0	0
NR3		5'589	5'947	5'903	5'947	5'947	5'947	5'947	5'947	5'947
NR4		0	0	0	0	0	0	0	0	0
Total		5'589	5'947	5'903	5'947	5'947	5'947	5'947	5'947	5'947
Required Fuel Quantity - AFR										
Bituminous coal	Mt									
CC2		285'066	283'125	259'446	222'799	222'799	222'799	222'799	222'799	222'799
NR3		174'189	170'477.07	155'374.82	129'695.17	129'695.17	129'695.17	129'695.17	129'695.17	129'695.17
NR4		301'465	293'707	271'571	210'811	210'811	210'811	210'811	210'811	210'811
Total		761'721	747'309	686'392	563'305	563'305	563'305	563'305	563'305	563'305
Light oil/diesel										
CC2		8'870	9'221	9'279	9'705	9'705	9'705	9'705	9'705	9'705
NR3		4'621	4'834	4'886	4'917	4'917	4'917	4'917	4'917	4'917
NR4		4'713	4'727	4'772	4'814	4'814	4'814	4'814	4'814	4'814
Total		18'204	18'782	18'937	19'437	19'437	19'437	19'437	19'437	19'437
Used / waste oils										
CC2		0	0	0	0	0	0	0	0	0
NR3		6'179	6'460	6'460	6'574	6'574	6'574	6'574	6'574	6'574
NR4		0	0	0	0	0	0	0	0	0
Total		6'179	6'460	6'460	6'574	6'574	6'574	6'574	6'574	6'574
Crude palm oil										
CC2										
NR3										
NR4										
Blomass - PKS	Mt									
CC2		15'004	15'348	38'418	81'903	81'903	81'903	81'903	81'903	81'903
NR3		1'000	7'938	22'869	38'122	38'122	38'122	38'122	38'122	38'122
NR4		7848	15'696	23'544	95'557	95'557	95'557	95'557	95'557	95'557

AFR Biomass Co-Processing Facilities Projects
Source: Presentation material of AFR SC Meeting, October 2006 - "CC & NR Plants AFR Biomass Feeding Facilities Projects "

PLANT	INSTALLATIONS	BUDGET				
		2006	2007	2008	2009	2010
CC	Current Feed Point to SLC + Relocation of PKS Crusher		100'000			100'000
	Modification of SLC Feed System - Intermediate Bin + SC		125'000	125'000		250'000
	Burner Feed Point		550'000			550'000
	Preparation of Common AFR Storage + transport system		600'000	1'200'000		1'800'000
	Feeding of PKS in Kiln hood area to increase Hot air temp			600'000		600'000
	Upgradation of Kiln ID Fans			200'000		200'000
	Installation of Feed System for SLC-TAD			600'000		600'000
	Installation of Feed System for ILC-TAD			600'000		600'000
	CFD Study 2			80'000		80'000
	Shredder and Cutting			400'000		400'000
	Installation of Kiln Riser Duct Double/triple Flap + Transport			400'000	250'000	650'000
	Balling and compactor				700'000	700'000
	PKS Grinding - Size Reduction					2'500'000
	Modification of Calciners - Details to be studied				1'500'000	2'000'000
	AFR Biomass Feeding Installation	465'000			1'750'000	2'500'000
	Current Feed Point to SLC + Modifications		15'000			465'000
	Modification of SLC Feed System - Intermediate Bin + SC			250'000		250'000
	Burner Feed Point			600'000		600'000
NR4	Preparation of Common AFR Storage + transport system			1'200'000	1'200'000	2'600'000
	Feeding of PKS in Kiln hood area to increase Hot air temp			600'000		600'000
	Upgradation of Kiln ID Fans			200'000		200'000
	Installation of Feed System for SLC-TAD			600'000		600'000
	Installation of Feed System for ILC-TAD			600'000		600'000
	CFD Study 2			60'000		60'000
	Shredder and Cutting			500'000		500'000
	Installation of Kiln Riser Duct Double/triple Flap + Transport			500'000	150'000	650'000
	Balling and compactor				700'000	700'000
	PKS Grinding - Size Reduction				500'000	2'500'000
	Modification of Calciners - Details to be studied				500'000	1'500'000
	Burner feed point			1'300'000		1'300'000
	Upgradation of Kiln ID Fans			200'000		200'000
	CFD Study 2			50'000		50'000
	Shredder and Cutting - Heavy duty			1'125'000		1'125'000
	Raw Platform/storing area			150'000		150'000
	Installation of Kiln Riser Duct Double/triple Flap + Transport			450'000	200'000	650'000
	Balling and compactor				700'000	700'000
	Modification of Calciners - Details to be studied				500'000	2'000'000
NR3		465'000	1'390'000	12'590'000	8'650'000	29'545'000
	TOTAL					0

	100
	250
	550
	1'800
	600
	200
	600
	600
	80
	400
	650
	700
	2'500
	2'000

245000
2229500000
1%

FIXED PRICE LIST - FOR BUDGET 2007-2010

1.0500 1.0450 1.0430
0.000 0.00 0.00

	Cost	Segment		UOM	2008	2009	2010
					Finplan	Finplan	Finplan
	Diesel NR	All	Pur Price	ltr	6'707.32	7'378.06	8'115.86
			Inbound F	ltr	48.54	50.72	52.90
			Total	ltr	6'755.86	7'428.78	8'168.76
	Diesel CC	All	Pur Price	ltr	6'707.32	7'378.06	8'115.86
			Inbound F	ltr	19.75	20.64	21.53
			Total	ltr	6'727.08	7'398.70	8'137.39
	Gasoline	All	Pur Price	ltr	6'598.78	7'258.66	7'984.53
			Inbound F	ltr			
			Total	ltr	6'598.78	7'258.66	7'984.53
	IDO NR	Clk & Cern	Pur Price	ltr	6'435.39	7'078.93	7'786.82
			Inbound F	ltr	95.55	99.85	104.14
			Total	ltr	6'530.94	7'178.78	7'890.96
	IDO CC	Clk & Cern	Pur Price	ltr	6'435.39	7'078.93	7'786.82
			Inbound F	ltr	23.89	24.96	26.04
			Total	ltr	6'459.28	7'103.89	7'812.86

