

## Project: Power Prospect 9.9MW Rice Husk Power Plant

### Results of the Investment Analysis and the Sensitivity Analysis

Parameter	Variation	IRR	
		Without CER	With CER
Base case	-	12.63%	15.18%
Capital cost	-10%	14.15%	16.84%
O&M costs	-10%	12.98%	15.50%
Biomass fuel cost	-10%	13.50%	15.98%
steam revenue	10%	13.23%	15.73%
Plant utilization factor	10%	14.52%	17.15%
Electricity tariff	10%	14.52%	16.92%

\*Benchmark = 15%

### BASE CASE

### INPUT PARAMETERS

Parameter	Value	Unit	Note
Project Life	20	years	Expected project lifetime
Generating Capacity	9.9	MW	Sourced from PPCL
Power Generation			
Full Year	70,246	MWh	Ex-ante estimated net power generation as in the PDD
Electricity Tariff	2.44	THB/kWh	Calculated based on the methods specified in EGAT's SPP firm contract and prevailing gas prices in 2005
Capital Cost	719,653,818	THB	Sourced from the tender document (EPS) received during the bidding stage
O&M Cost			
Full Year	30,777,000	THB/year	Based on PPCL's estimation of 4.3% of capital cost
Fuel Cost			
Rice Husk	77,438,000	THB/year	The unit price of rice husk (1,000 THB/tonne) was sourced from "Study on CDM case studies in Thailand" published by ONEP ( <a href="http://www.onep.go.th/CDM/CDM_project_potentials_in_Thailand_Report.pdf">www.onep.go.th/CDM/CDM project potentials in Thailand Report.pdf</a> )
Income Tax			These are the income tax privilege rates offered by the Board of Investment of Thailand ( <a href="http://www.misaspacific.com/thailand-bol-promotional.php">http://www.misaspacific.com/thailand-bol-promotional.php</a> ). The assumption of tax privileges is conservative.
Year 1 - 8	0	%	
Year 9 - 13	15	%	
Year 14 - 25	30	%	
Other incomes			
Sale of Fly Ash	6,872,623	THB/year	The unit price of fly ash was assumed as 500 THB/tonne
Sale of Steam to Rice Mill	53,381,250	THB/year	The unit steam price of 300 THB/tonne was sourced from PTT Public Company Limited ( <a href="http://pttinternet.pttplc.com/csc_gas/csc_ind/utlization/co-generation_gas-engine.asp">http://pttinternet.pttplc.com/csc_gas/csc_ind/utlization/co-generation_gas-engine.asp</a> )
Grid CEF	0.510	1CO2/MWh	Thai Power Grid (Data was sourced from AT Biopower Rice Husk Power Project whose PDD was publicly available at the time)
CERs			
Full Year	35,825	1CO2/year	Calculated value
CER Unit Price	15.00	USD	An assumed unit price based on payment against delivery
Exchange Rate	41.00	THB/USD	Exchange rate in 2005
Depreciation Rate	5.00%	-	Based on PPCL's assumption

## IRR

Project Year	Expense Stream					Revenue Stream					Cash Flow					IRR			
	Capital Cost	O&M Cost	Fuel Cost	Depreciation	Sub Total	Power Export	Steam Export	Fly Ash Sales	CER Sales	Sub Total	Before Tax	Interest expense	Income tax rate	Income Tax	Add Back		After Tax		
-2	359,826,909				359,826,909					CER	(359,826,909)	(359,826,909)			Depreciation	BAU	CER	BAU	CER
-1	215,896,145				215,896,145						(215,896,145)	(215,896,145)							
0	143,930,764				143,930,764						(143,930,764)	(143,930,764)							
1		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	31,085,000	0%	-	35,982,691	123,439,113	145,471,770
2		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	28,981,000	0%	-	35,982,691	123,439,113	145,471,770
3		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	26,359,000	0%	-	35,982,691	123,439,113	145,471,770
4		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	23,216,000	0%	-	35,982,691	123,439,113	145,471,770
5		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	18,516,000	0%	-	35,982,691	123,439,113	145,471,770
6		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	13,815,000	0%	-	35,982,691	123,439,113	145,471,770
7		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	9,115,000	0%	-	35,982,691	123,439,113	145,471,770
8		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	4,415,000	0%	-	35,982,691	123,439,113	145,471,770
9		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	15%	13,118,463	35,982,691	110,320,649	132,353,307
10		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	15%	13,118,463	35,982,691	110,320,649	132,353,307
11		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	15%	13,118,463	35,982,691	110,320,649	132,353,307
12		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	15%	13,118,463	35,982,691	110,320,649	132,353,307
13		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	15%	13,118,463	35,982,691	110,320,649	132,353,307
14		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
15		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
16		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
17		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
18		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
19		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
20		30,777,000	77,438,000	35,982,691	144,197,691	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	87,456,422	109,489,080	-	30%	26,236,926	35,982,691	97,202,186	119,234,844
																		12.63%	15.18%



## SA2 - CAPITAL EXPENSES

INPUT PARAMETERS			
Parameter	Value	Unit	Note
Capital Cost	647,688,436	RMB	10% decrease as compared to base case

IRR	Project Year	Expense Stream					Revenue Stream					Cash Flow					IRR				
		Capital Cost	O&M Cost	Fuel Cost	Depreciation	Sub Total	Power Export	Steam Export	Fly Ash Sales	CER Sales	Sub Total	CER	Before Tax	CER	Interest expense	Income tax rate	Income Tax	Add Back Depreciation	After Tax	BAU	CER
	-2	323,844,218				323,844,218						(323,844,218)	(323,844,218)						(323,844,218)	(323,844,218)	
	-1	194,306,531				194,306,531						(194,306,531)	(194,306,531)						(194,306,531)	(194,306,531)	
	0	129,537,687				129,537,687						(129,537,687)	(129,537,687)						(129,537,687)	(129,537,687)	
	1		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	31,085,000	0%	-	32,384,422	123,439,113	145,471,770	
	2		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	28,981,000	0%	-	32,384,422	123,439,113	145,471,770	
	3		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	26,359,000	0%	-	32,384,422	123,439,113	145,471,770	
	4		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	23,216,000	0%	-	32,384,422	123,439,113	145,471,770	
	5		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	18,516,000	0%	-	32,384,422	123,439,113	145,471,770	
	6		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	13,815,000	0%	-	32,384,422	123,439,113	145,471,770	
	7		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	9,115,000	0%	-	32,384,422	123,439,113	145,471,770	
	8		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	4,415,000	0%	-	32,384,422	123,439,113	145,471,770	
	9		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	15%	13,658,204	32,384,422	109,780,909	131,813,567	
	10		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	15%	13,658,204	32,384,422	109,780,909	131,813,567	
	11		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	15%	13,658,204	32,384,422	109,780,909	131,813,567	
	12		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	15%	13,658,204	32,384,422	109,780,909	131,813,567	
	13		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	14		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	15		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	16		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	17		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	18		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	19		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
	20		30,777,000	77,438,000	32,384,422	140,599,422	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	91,054,691	113,087,349	-	30%	27,316,407	32,384,422	96,122,705	118,155,363	
																				14.15%	16.84%

INPUT PARAMETERS				
Parameter		Value	Unit	Note
O&M Cost Full Year		27,699,300	RMB/year	10% decrease as compared to base case

IRR	Project Year	Expense Stream				Revenue Stream				Cash Flow					IRR							
		Capital Cost	O&M Cost	Fuel Cost	Depreciation	Sub Tot	Power Export	Steam Export	Fly Ash Sales	CER Sales	Sub Total	Before Tax	After Tax	Interest expense	Income tax rate	Income Tax	Add Back	Depreciation	BAU	After Tax	BAU	CER
	-2	359,826,909				359,826,909					(359,826,909)	(359,826,909)						(359,826,909)	(359,826,909)			
	-1	215,896,145				215,896,145					(215,896,145)	(215,896,145)						(215,896,145)	(215,896,145)			
	0	143,930,764				143,930,764					(143,930,764)	(143,930,764)						(143,930,764)	(143,930,764)			
	1		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	31,085,000	0%	-	35,982,691	126,516,813	148,549,470		
	2		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	28,981,000	0%	-	35,982,691	126,516,813	148,549,470		
	3		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	26,359,000	0%	-	35,982,691	126,516,813	148,549,470		
	4		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	23,216,000	0%	-	35,982,691	126,516,813	148,549,470		
	5		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	18,516,000	0%	-	35,982,691	126,516,813	148,549,470		
	6		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	13,815,000	0%	-	35,982,691	126,516,813	148,549,470		
	7		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	9,115,000	0%	-	35,982,691	126,516,813	148,549,470		
	8		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	4,415,000	0%	-	35,982,691	126,516,813	148,549,470		
	9		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	15%	13,580,118	35,982,691	112,936,694	134,969,352		
	10		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	15%	13,580,118	35,982,691	112,936,694	134,969,352		
	11		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	15%	13,580,118	35,982,691	112,936,694	134,969,352		
	12		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	15%	13,580,118	35,982,691	112,936,694	134,969,352		
	13		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	15%	13,580,118	35,982,691	112,936,694	134,969,352		
	14		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
	15		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
	16		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
	17		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
	18		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
	19		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
	20		27,699,300	77,438,000	35,982,691	141,119,991	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	90,534,122	112,566,780	-	30%	27,160,236	39,356,576	121,389,234			
																				12.98%	15.50%	

#### SA4 - ELECTRICITY TARIFF

INPUT PARAMETERS			
Parameter	Value	Unit	Note
Electricity Tariff	2.6840	RMB/kWh	10% increase as compared to base case

RRR	Project Year	Expense Stream				Revenue Stream					Cash Flow										IRR	
		Capital Cost	O&M Cost	Fuel Cost	Depreciation	Sub Total	Power Export	Steam Export	Fly Ash Sales	CER Sales	Sub Total	Before Tax		Interest expense	Income tax rate	Income Tax	Add Back	After Tax				
											CER		CER				Depreciation	BAU	CER	BAU	CER	
-2	359,826,909				359,826,909								(359,826,909)	(359,826,909)					(359,826,909)	(359,826,909)		
-1	215,896,145				215,896,145								(215,896,145)	(215,896,145)					(215,896,145)	(215,896,145)		
0	143,930,764				143,930,764								(143,930,764)	(143,930,764)					(143,930,764)	(143,930,764)		
1		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	31,085,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
2		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	28,981,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
3		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	26,359,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
4		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	23,216,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
5		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	18,516,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
6		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	13,815,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
7		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	9,115,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
8		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104	4,415,000	0%	-	35,982,691	140,579,137	162,611,794	162,611,794		
9		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		15%	15,689,467	35,982,691	124,889,670	146,922,328			
10		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		15%	15,689,467	35,982,691	124,889,670	146,922,328			
11		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		15%	15,689,467	35,982,691	124,889,670	146,922,328			
12		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		15%	15,689,467	35,982,691	124,889,670	146,922,328			
13		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		15%	15,689,467	35,982,691	124,889,670	146,922,328			
14		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
15		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
16		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
17		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
18		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
19		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
20		30,777,000	77,438,000	35,982,691	144,197,691	188,540,264	53,381,250	6,872,623	22,032,658	248,794,137	270,826,794	104,596,446	126,629,104		30%	31,378,934	35,982,691	109,200,203	131,232,861			
																					14.52%	16.92%

### SA5 - BIOMASS FUEL COST

### INPUT PARAMETERS

Parameter	Value	Unit	Note
Fuel cost	69,694,200	RMB	10% decrease as compared to base case

## IRR

Project Year	Expense Stream				Revenue Stream				Cash Flow				IRR						
	Capital Cost	O&M Cost	Fuel Cost	Depreciation	Sub Total	Power Export	Steam Export	Fly Ash Sales	CER Sales	Sub Total	CER	Before Tax	Interest expense	Income tax rate	Income Tax	Add Back Depreciation	After Tax BAU	After Tax CER	
-2	359,826,909				359,826,909							(359,826,909)	(359,826,909)				(359,826,909)	(359,826,909)	
-1	215,896,145				215,896,145							(215,896,145)	(215,896,145)				(215,896,145)	(215,896,145)	
0	143,930,764				143,930,764							(143,930,764)	(143,930,764)				(143,930,764)	(143,930,764)	
1		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	31,085,000	0%	-	35,982,691	131,182,913	
2		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	28,981,000	0%	-	35,982,691	131,182,913	
3		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	26,359,000	0%	-	35,982,691	131,182,913	
4		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	23,216,000	0%	-	35,982,691	131,182,913	
5		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	18,516,000	0%	-	35,982,691	131,182,913	
6		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	13,815,000	0%	-	35,982,691	131,182,913	
7		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	9,115,000	0%	-	35,982,691	131,182,913	
8		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	4,415,000	0%	-	35,982,691	131,182,913	
9		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	15%	14,280,033	116,902,879	138,935,537	
10		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	15%	14,280,033	116,902,879	138,935,537	
11		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	15%	14,280,033	116,902,879	138,935,537	
12		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	15%	14,280,033	116,902,879	138,935,537	
13		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	15%	14,280,033	116,902,879	138,935,537	
14		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
15		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
16		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
17		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
18		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
19		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
20		30,777,000	69,694,200	35,982,691	136,453,891	171,400,240	53,381,250	6,872,623	22,032,658	231,654,113	253,686,770	95,200,222	117,232,880	-	30%	28,560,066	124,655,504	124,655,504	
																		13.50%	15.98%

SA6 - STEAM REVENUE

### INPUT PARAMETERS

Parameter	Value	Unit	Note
Steam revenue	58,719,375	RMB	10% increase as compared to base case

## IRR

Project Year	Expense Stream					Revenue Stream					Cash Flow					IRR			
	Capital Cost	O&M Cost	Fuel Cost	Depreciation	Sub Total	Power Export	Steam Export	Fly Ash Sales	CER Sales	Sub Total	CER	Before Tax	Interest expense	Income tax rate	Income Tax	Add Back Depreciation	After Tax	BAU	CER
-2	359,826,909				359,826,909							(359,826,909)	(359,826,909)				(359,826,909)	(359,826,909)	
-1	215,896,145				215,896,145							(215,896,145)	(215,896,145)				(215,896,145)	(215,896,145)	
0	143,930,764				143,930,764							(143,930,764)	(143,930,764)				(143,930,764)	(143,930,764)	
1		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	31,085,000	0%	-	35,982,691	128,777,238	150,809,895
2		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	28,981,000	0%	-	35,982,691	128,777,238	150,809,895
3		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	26,359,000	0%	-	35,982,691	128,777,238	150,809,895
4		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	23,216,000	0%	-	35,982,691	128,777,238	150,809,895
5		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	18,516,000	0%	-	35,982,691	128,777,238	150,809,895
6		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	13,815,000	0%	-	35,982,691	128,777,238	150,809,895
7		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	9,115,000	0%	-	35,982,691	128,777,238	150,809,895
8		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	4,415,000	0%	-	35,982,691	128,777,238	150,809,895
9		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	15%	13,919,182	15,982,691	150,809,895	
10		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	15%	13,919,182	15,982,691	150,809,895	
11		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	15%	13,919,182	15,982,691	150,809,895	
12		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	15%	13,919,182	15,982,691	150,809,895	
13		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	15%	13,919,182	15,982,691	150,809,895	
14		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
15		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
16		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
17		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
18		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
19		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
20		30,777,000	77,438,000	35,982,691		171,400,240	58,719,375	6,872,623	22,032,658	236,992,238	259,024,895	92,794,547	114,827,205	-	30%	27,838,364	35,982,691	100,938,874	
																		13.23%	15.73%