

IRR calculations for Gas Turbine Project in Apollo Tyres							
Project parameters							
Initial Investment of the proposed project (2 x 4.2 MW) (Rs in millions)	275.00						
Annual administrative cost (Rs in millions)	0.50						
Annual escalation in administrative cost	5.00%						
Expected CER pricing (Rs/ ton of Co2)	308.00						
Production loss during project implementation (Rs in million)							
Year	2005	2006	2007	2008	2009	2010	2011
Expenditure							
Initial investment (equity)	275.00						
Recurring cost							
Cost of insurance (1.5% of project cost) every year		4.13	4.13	4.13	4.13	4.13	4.13
Income Tax on Energy Savings		44.58	52.11	60.40	69.51	79.53	87.34
Total cashflow out (A)	275.00	48.71	56.24	64.52	73.63	83.66	91.46
Income							
Salvage Value of project (10%)		0	0	0	0	0	0
Saving in income tax due to depreciation (35% of depreciated amount)		8.66	8.66	8.66	8.66	8.66	8.66
Savings in operating cost based on following figures. F.O Price of Rs. 12/kg with 10% Escalation, Grid power at price of Rs. 5.3/kWh with 10% escalation N.G. Price of Rs. 8.2/SM3 with constant price for first 5 years and 10% Escalation for next 5 years Maintenance cost escalation 5%							
	0	127.37	148.89	172.56	198.60	227.23	249.54
CER credits	0	13.94	13.94	13.94	13.94	13.94	13.94
Total project income without considering CER credits(B)	0	136.04	157.56	181.23	207.26	235.89	258.20
Total project income with considering CER credits(C)	0	149.98	171.49	195.16	221.20	249.83	272.14
Net cash flow without considering CER Credits (A-B)	-275.00	87.33	101.32	116.70	133.63	152.24	166.74
Net cash flow with considering CER Credits (A-C)	-275.00	101.27	115.26	130.64	147.56	166.18	180.68
IRR of the project without considering CER credits	44.36%						
IRR of the project with considering CER credits	48.41%						

2012	2013	2014	2015	2016	2017	2018	2019	2020
4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13
97.41	105.37	115.76	127.18	139.75	153.57	168.78	185.50	203.89
101.54	109.49	119.88	131.31	143.87	157.70	172.90	189.62	208.02
0	0	0	0	0	0	0	0	27.5
8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66
278.32	301.05	330.73	363.38	399.28	438.78	482.21	529.99	582.55
13.94	13.94	13.94	13.94	13.94	13.94	13.94	13.94	13.94
286.98	309.72	339.40	372.04	407.95	447.44	490.88	538.66	618.71
300.92	323.66	353.33	385.98	421.88	461.38	504.82	552.59	632.65
185.44	200.22	219.51	240.73	264.07	289.74	317.98	349.03	410.69
199.38	214.16	233.45	254.67	278.01	303.68	331.92	362.97	424.63

