2. Tables for Economic Evaluation

2.1 Base case selection at a 10% EIRR

An economic coal price at a 10% EIRR for every scenario is evaluated. The results, DCF cash flows along with foreign and local currency requirements, are presented as follows:

	Case 1	Case 2	Case 3	Case 4
Cash Flow	Table 8.1 (1)	Table 8.2 (1)	Table 8.3 (1)	Table 8.4 (1)
*F.C Requirements	Table 8.1 (2)	Table 8.2 (2)	Table 8.3 (2)	Table 8.4 (2)
	Case 5	Case 6	Case 7	
Cash Flow	Table 8.5 (1)	Table 8.6 (1)	Table 8.7 (1)	
F.C Requirements	Table 8.5 (2)	Table 8.6 (2)	Table 8.7 (2)	

* F.C: Foreign Currency

2.2 Variation in equipment price level

The price of equipment and spare parts to be supplied from the ex-COMECON countries in the project is estimated at 80% of the current international price level against 36% in reality at the moment. The impact of variations in equipment price has been evaluated for base case selection. Since Tables 8.1, 8.2 and 8.3 represent 80% of international price level, the following DCF cash flows are presented.

	International Price Level			
	70%	60%	50%	36%
Case 1	Table 8.8 (1)	Table 8.9 (1)	Table 8.10 (1)	Table 8.11 (1)
Case 2	Table 8.8 (2)	Table 8.9 (2)	Table 8.10 (2)	Table 8.11 (2)
Case 3	Table 8.8 (3)	Table 8.9 (3)	Table 8.10 (3)	Table 8.11 (3)

2.3 Base case study

The base case have been evaluated at the economic coal value of 6,057.1 Tg/t as shown in Table 8.12, 8.13 and 8.14 for Case 2, Case 4 and Case 6 respectively. DCF cash flows are presented here.

2.4 Economic sensitivity analyses

Since the project, of which EIRR is 97% in Case 6, is highly advantageous in terms of national economy, only the severest changes are presented as follows:

Price	(-20%)	Table 8.15
Exchange Rate	(-20%)	Table 8.16
Capital Costs	(+20%)	Table 8.17
Operating Costs	(+20%)	Table 8.18
Total Excavation	(+20%)	Table 8.19

2.5 Coal price vs. EIRR

A coal price vs. EIRR is presented on Table 8.20.

2.6 Discount rate vs. net present value

A discount rate vs. net present value at 6,057.1 Tg/t is presented on Table 8.21.

3. Tables for Financial Analyses

3.1 Cash flow analyses at a 10% FIRR on total project

The cash flow analyses at a 10% FIRR on the total project presented here are tabulated as follows:

Cash Flow	Case 1	Case 2	Case 3	Case 4
No Fixed Assets Revalued	Table 8.22(1)	Table 8.23(1)	Table 8.24(1)	Table 8.25(1)
*F.C. Requirements	Table 8.22(2)	Table 8.23(2)	Table 8.24(2)	Table 8.25(2)

Cash Flow	Case 5	Case 6	Case 7
No Fixed Assets Revalued	Table 8.26(1)	Table 8.27(1)	Table 8.28(1)
F.C. Requirements	Table 8.26(2)	Table 8.27(2)	Table 8.28(2)

*F.C.: Foreign Currency

3.2 Base case at 6,057.1 Tg/t on total project

After tax FIRRs on the total project at 6,057.1 Tg/t for the base case with fixed assets revalued have been evaluated and DCF cash flows are presented in Tables 8.29, 8.30 and 8.31 for Case 2, Case 4 and Case 6 respectively.

3.3 Tax exempted case (Cash Flows)

After tax FIRRs on the total project at 6,057.1 Tg/t for Case 6 in accordance with tax exemption steps are presented as follows:

Step ① Base Case (No Fixed Assets Revalued)		Table 8.32
Step ② Fixed Assets Revalued		Table 8.31
Step ③Carry-Over of Retained Operation Loss		Table 8.33
Step ④ No After Tax Expenses but Treated as Before Tax Costs		Table 8.34
Step ⑤ Equipment	Import Tax 7.5%	Table 8.35
	Trade Tax 10% to 5%	
Step ⑥Parts	Import Tax 15% to 0	Table 8.36
	Trade Tax 10% to 5%	
Step ⑦Coal Trade Tax 10% to 5%		Table 8.37
The remaining 5% kept by the mine		
Step ⑧ Equipment	Import and Trade Taxes 0	Table 8.38
Step ⑨Parts	Import and Trade Taxes 0	Table 8.39

3.4 Leverage

For the step⑨ tax exemption case in Case 6, after tax FIRRs on equity at 6,057.1 Tg/t have been evaluated and part of the results are presented as follows:

			Foreign Loan Interest Rate		
Debt	Equity		3%	5%	8%
0.10	0.90	DCF Cash Flow	Table 8.40(1)	Table 8.41(1)	Table 8.42(1)
		Financial Cash FLow	Table 8.40(2)	Table 8.41(2)	Table 8.42(2)
0.80	0.20	DCF Cash Flow	Table 8.43(1)	Table 8.44(1)	Table 8.45(1)
		Financial Cash FLow	Table 8.43(2)	Table 8.44(2)	Table 8.45(2)
0.90	0.10	DCF Cash Flow	Table 8.46(1)	Table 8.47(1)	Table 8.48(1)

		Financial Cash FLow	Table 8.46(2)	Table 8.47(2)	Table 8.48(2)
0.9999	0.0001	DCF Cash Flow	Table 8.49(1)	Table 8.50(1)	Table 8.51(1)
		Financial Cash FLow	Table 8.49(2)	Table 8.50(2)	Table 8.51(2)

3.5 Financial base case

The step ⑦ tax exemption case with 80% debt is assumed to be the financial base case. DCF and financial cash flows at a foreign loan interest rate of 2% are presented as follows:

	Price (Tg/t)		Debt (0.001)	Debt (0.800)	Debt (0.999)
(1)	6,449.2	DCF Cash Flow	Table 8.52(1)	Table 8.53(1)	Table 8.54(1)
		Financial Cash Flow	Table 8.52(2)	Table 8.53(2)	Table 8.54(2)
(2)	6,057.1	DCF Cash Flow	Table 8.55(1)	Table 8.56(1)	Table 8.57(1)
		Financial Cash Flow	Table 8.55(2)	Table 8.56(2)	Table 8.57(2)
(3)	5,902.1	DCF Cash Flow	Table 8.58(1)	Table 8.59(1)	Table 8.60(1)
		Financial Cash Flow	Table 8.58(2)	Table 8.59(2)	Table 8.60(2)
(4)	5,716.6	DCF Cash Flow	Table 8.61(1)	Table 8.62(1)	Table 8.63(1)
		Financial Cash Flow	Table 8.61(2)	Table 8.62(2)	Table 8.63(2)
(5)	5,631.7	DCF Cash Flow	Table 8.64(1)	Table 8.65(1)	Table 8.66(1)
		Financial Cash Flow	Table 8.64(2)	Table 8.65(2)	Table 8.66(2)

(1) Critical price of loan repaid on a 99.9% debt

(2) Economic coal value

(3) Critical price of loan repaid on a 80% debt

(4) 10% FIRR on equity on a 80% debt

(5) 8% FIRR on equity on a 80% debt

Table 8.1 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:
NON REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,307.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,307.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	5,257.3	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	21,029.2	21,029.2	20,257.6	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	19,537.5	453,066.5
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	7,167.9	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	7,406.1	169,691.5
Diesel Oil	811.5	811.5	897.0	926.8	926.8	925.8	926.8	926.8	926.8	926.8	926.8	925.8	925.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	925.8	21,055.4
Gas & Lub.	219.0	219.0	242.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	5,683.1
Electricity	716.0	810.4	910.1	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	23,724.1
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
W & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	865.0	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	20,341.9
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,495.7
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	3,850.7
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,708.2	11,523.0	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	12,420.3	283,653.6
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	9,414.5	9,320.0	8,334.6	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	169,412.9
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	9,414.5	9,320.0	8,334.6	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	7,117.2	169,412.9
After Tax Expenses	723.5	731.3	746.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	17,768.8
Retained Earning(Loss)	8,691.0	8,588.7	7,588.2	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	151,644.1
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,790.4	12,375.9	5,833.9	1,417.2	7,116.1	1,540.9	10,817.4	8,540.2	18,320.2	6,871.3	8,715.6	1,413.1	1,474.2	1,667.5	1,856.6	1,053.3	12,242.4	2,405.8	5,283.8	7,189.4	1,840.5	10,439.7	8,046.9	136,452.4
Additional Investment	4,515.7	0.0	1,658.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,574.4
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.8	128.2	0.0	1,903.6	0.0	3,036.6	0.0	128.2	0.0	0.0	2,149.0	1,903.6	0.0	1,185.8	0.0	1,971.3	0.0	0.0	14,021.8
Total Capital Cost	6,306.2	12,375.9	6,092.5	1,417.2	7,116.1	3,169.0	10,945.6	8,540.2	20,223.8	6,871.3	11,746.2	1,413.1	1,602.4	1,667.5	1,856.6	3,193.4	14,145.9	2,405.8	6,470.6	7,189.4	3,812.4	10,439.7	8,046.9	156,047.7
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	8,691.0	8,588.7	7,588.2	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	6,338.8	151,644.1
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,306.2	12,375.9	6,092.5	1,417.2	7,116.1	3,169.0	10,945.6	8,540.2	20,223.8	6,871.3	11,746.2	1,413.1	1,602.4	1,667.5	1,856.6	3,193.4	14,145.9	2,405.8	6,470.6	7,189.4	3,812.4	10,439.7	8,046.9	156,047.7
LESS:Working Capital	3,617.3	39.4	75.2	160.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	3,891.9
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-1,232.4	-3,826.6	1,420.5	4,761.6	-777.3	3,169.9	-4,606.8	-2,201.4	-15,885.0	-332.4	-5,407.4	4,925.7	4,736.4	4,671.3	5,282.2	3,145.4	-7,807.1	3,933.0	-131.8	-850.6	2,526.4	-4,100.9	-1,708.1	-8,285.5

Salvage	0.0
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3,891.9
Equipment	42,614.4
TOTAL	46,366.6

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 0.0

Table 8.1 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(EXISTING INVESTMENT)

EQUIPMENT.
REVALUATION OF ASSETS

COAL MINE REHABILITATION PROJECT

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
FOREIGN CURRENCY (10^6 Tk)												
(INVESTMENT)												
Existing Eq. Replacement	1,759.6	13,158.8	4,947.2	1,393.3	4,993.6	1,514.4	13,631.2	3,393.2	12,004.7	4,546.4	8,964.6	1,388.0
Additional Investment	4,428.0	0.0	1,040.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,600.0	136.0	0.0	1,870.3	0.0	2,579.4	0.0
Sub-total	6,187.6	13,158.8	5,987.6	1,393.3	4,993.6	3,114.4	13,793.2	3,393.2	13,875.0	4,546.4	11,544.0	1,388.0
(OPERATING COSTS)												
Material & Energy												
Parts	6,684.4	6,684.4	6,604.0	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6
Diesel Oil	518.7	518.7	571.2	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1
Gas & Lub.	131.0	131.0	136.7	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2
Electricity												
Explosives	511.3	511.3	538.9	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4
F & E Others												
Labor Costs												
Salaries & Wages												
Social Insurance												
Others												
Royalties & Charges												
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses												
Sub-total	7,795.4	7,795.4	7,850.8	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3
FOREIGN CURRENCY TOTAL	13,983.0	20,954.2	13,838.4	9,493.6	13,093.9	11,214.7	21,893.5	11,493.5	21,975.3	12,646.7	19,644.3	9,488.3
LOCAL CURRENCY (10^6 Tk)												
Increase in Working Capital	2,817.3	36.4	76.2	180.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0
(INVESTMENT)												
Existing Eq. Replacement	30.8	318.1	86.7	94.4	122.4	36.5	138.3	147.0	215.4	114.9	110.1	34.9
Additional Investment	77.8	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	28.0	2.2	0.0	32.3	0.0	53.3	0.0
Sub-total	108.6	318.1	104.9	94.4	122.4	64.5	140.5	147.0	247.7	114.9	163.4	34.9
(OPERATING COSTS)												
Material & Energy												
Parts	464.3	464.3	581.9	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5
Diesel Oil	294.3	294.3	295.3	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6
Gas & Lub.	98.0	98.0	109.4	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0
Electricity	751.0	810.4	910.1	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4
Explosives	46.5	43.5	44.0	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5
F & E Others	972.2	942.3	945.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9
Labor Costs												
Salaries & Wages	376.7	376.7	388.0	388.2	388.2	388.2	388.2	388.2	388.2	388.2	388.2	388.2
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5
Others												
Royalties & Charges	175.1	175.1	170.1	186.5	186.5	186.5	186.5	186.5	186.5	186.5	186.5	186.5
Payable Interest												
After Tax Expenses	728.5	731.9	764.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4
Sub-total	4,562.7	4,466.1	4,491.6	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4
LOCAL CURRENCY TOTAL	7,488.6	4,820.6	4,672.7	5,372.8	5,220.8	5,162.9	5,238.9	5,245.4	5,346.1	5,213.3	5,261.8	5,133.3
TOTAL	20,361.6	24,336.3	18,237.0	14,775.9	18,314.8	16,367.7	26,144.4	16,738.9	26,422.1	17,870.0	24,944.2	14,611.7
FOREIGN CURRENCY (10^3 US$)												
(INVESTMENT)												
Existing Eq. Replacement	4,395.0	20,426.9	12,386.0	8,432.0	17,494.0	3,784.0	26,577.9	30,889.9	45,011.9	18,891.0	21,418.9	3,472.0
Additional Investment	11,096.0	0.0	2,807.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	315.0	0.0	4,677.0	0.0	7,446.0	0.0
Sub-total	15,491.0	20,426.9	14,986.0	8,432.0	17,494.0	7,784.0	26,892.9	30,889.9	49,688.9	18,891.0	28,864.9	3,472.0
(OPERATING COSTS)												
Material & Energy												
Parts	16,591.1	16,597.1	16,515.1	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9
Diesel Oil	1,381.8	1,381.8	1,427.9	1,475.3	1,476.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3
Gas & Lub.	309.5	309.5	304.4	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5
Electricity												
Explosives	1,278.2	1,278.2	1,362.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1
F & E Others												
Labor Costs												
Salaries & Wages												
Social Insurance												
Others												
Royalties & Charges												
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses												
Sub-total	19,480.6	19,480.6	19,598.4	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7
FOREIGN CURRENCY TOTAL	35,957.6	40,770.5	34,484.4	28,728.7	37,734.7	28,034.7	47,143.6	41,138.7	69,939.6	39,141.7	49,110.6	23,722.7
LOCAL CURRENCY (10^3 US$)												
Increase in Working Capital	5,046.9	38.6	187.9	400.1	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0
(INVESTMENT)												
Existing Eq. Replacement	77.1	568.7	218.7	81.0	308.3	65.2	466.6	387.6	788.6	387.3	372.2	60.8
Additional Investment	198.4	0.0	46.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	70.1	5.5	0.0	91.9	0.0	130.5	0.0
Sub-total	275.5	568.7	265.5	81.0	308.3	135.4	472.1	387.6	880.5	387.3	502.7	60.8
(OPERATING COSTS)												
Material & Energy												
Parts	1,411.1	1,411.1	1,464.7	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4
Diesel Oil	728.8	728.8	824.5	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6
Gas & Lub.	246.1	246.1	270.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9
Electricity	1,709.9	2,084.1	2,274.2	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0
Explosives	108.7	108.7	112.5	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2
F & E Others	2,380.6	2,380.6	2,383.5	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2
Labor Costs												
Salaries & Wages	2,138.3	2,138.3	2,172.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4
Social Insurance	376.3	376.3	378.7	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2
Others												
Royalties & Charges	407.9	407.9	406.3	418.3	418.3	418.3	418.9	418.3	418.2	418.3	418.3	418.3
Payable Interest												
After Tax Expenses	1,858.6	1,882.4	1,886.9	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0
Sub-total	11,365.9	11,892.7	12,079.9	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1
LOCAL CURRENCY TOTAL	16,688.3	12,500.0	12,534.1	13,227.2	13,054.4	12,881.5	13,217.2	13,133.7	13,626.6	13,133.4	13,248.8	12,806.9
TOTAL	52,645.9	53,270.5	47,018.5	41,955.9	50,789.1	40,916.2	60,360.8	54,272.4	83,566.2	52,275.1	62,359.4	36,529.6

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
FOREIGN CURRENCY (10^6 Tk)												
(INVESTMENT)												
Existing Eq. Replacement	1,443.8	1,681.8	1,088.4	1,085.3	12,031.6	2,364.4	5,192.8	7,063.8	1,806.8	10,240.0	7,928.4	134,120.9
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,478.4
Additional Replacement	131.0	0.0	0.0	2,103.2	1,870.3	0.0	1,166.4	0.0	1,939.0	0.0	0.0	13,779.8
Sub-total	1,574.8	1,681.8	1,088.4	3,188.4	13,905.4	2,364.4	6,359.2	7,063.8	3,746.8	10,240.0	7,928.4	153,380.8
(OPERATING COSTS)												
Material & Energy												
Parts	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	6,825.6	154,388.9
Diesel Oil	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1	13,437.2
Gas & Lub.	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2	3,159.4
Electricity												
Explosives	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	12,430.0
F & E Others												
Labor Costs												
Salaries & Wages												
Social Insurance												
Others												
Royalties & Charges												
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses												
Sub-total	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	186,416.3
FOREIGN CURRENCY TOTAL	9,675.1	9,782.1	9,188.7	11,288.7	22,005.7	10,464.7	14,459.5	15,164.1	11,847.1	18,340.3	16,028.7	339,777.3
LOCAL CURRENCY (10^6 Tk)												
Increase in Working Capital	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	3,109.9
(INVESTMENT)												
Existing Eq. Replacement	24.4	28.7	18.2	18.1	310.8	41.4	91.0	129.8	31.7	179.9	188.5	2,349.6
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.0
Additional Replacement	3.2	0.0	0.0	38.4	32.4	0.0	20.4	0.0	34.0	0.0	0.0	241.4
Sub-total	27.6	28.7	18.2	56.5	343.2	41.4	111.4	129.8	65.7	179.9	188.5	2,686.9
(OPERATING COSTS)												
Material & Energy												
Parts	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5	580.5	13,201.7
Diesel Oil	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	306.6	7,043.8
Gas & Lub.	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	2,543.7
Electricity	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	23,734.1
Explosives	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	1,061.4
F & E Others	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,346.0
Labor Costs												
Salaries & Wages	388.2	388.2	388.2	388.2	388.2	388.2	388.2	388.2	388.2	388.2	388.2	8,841.9
Social Insurance	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,498.7
Others												
Royalties & Charges	186.5	186.5	186.5	186.5	186.5	186.5	186.5	186.5	186.5	186.5	186.5	4,263.7
Payable Interest												
After Tax Expenses	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	778.4	17,758.9
Sub-total	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	5,098.4	116,008.1
LOCAL CURRENCY TOTAL	5,126.0	5,127.1	5,116.6	5,154.9	5,441.6	5,139.8	5,209.8	5,228.2	5,164.1	5,278.3	5,286.9	121,804.9
TOTAL	14,806.1	14,898.3	14,306.3	16,385.1	27,344.7	15,604.4	19,669.3	20,391.1	17,011.3	23,618.4	21,305.7	461,388.0
FOREIGN CURRENCY (10^3 US$)												
(INVESTMENT)												
Existing Eq. Replacement	3,482.0	4,097.0	2,596.0	3,582.0	30,078.9	5,911.0	12,988.0	17,644.0	4,622.0	36,548.9	19,772.0	386,367.2
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,896.0
Additional Replacement	314.0	0.0	0.0	4,363.0	4,677.0	0.0	2,918.0	0.0	4,345.0	0.0	0.0	28,448.9
Sub-total	3,796.0	4,097.0	2,596.0	7,945.0	34,755.9	5,911.0	15,906.0	17,644.0	8,967.0	36,548.9	19,772.0	388,421.1
(OPERATING COSTS)												
Material & Energy												
Parts	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	17,088.9	392,976.4
Diesel Oil	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	33,917.9
Gas & Lub.	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5	7,948.6
Electricity												
Explosives	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	1,364.1	31,198.9
F & E Others												
Labor Costs												
Salaries & Wages												
Social Insurance												
Others												
Royalties & Charges												
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses												
Sub-total	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	466,040.9
FOREIGN CURRENCY TOTAL	24,137.7	24,347.7	22,846.7	28,195.7	54,006.6	26,161.7	36,156.7	37,894.7	29,217.7	56,799.6	40,022.7	894,948.3
LOCAL CURRENCY (10^3 US$)												
Increase in Working Capital	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	5,726.8
(INVESTMENT)												
Existing Eq. Replacement	48.5	71.3	46.5	45.9	567.0	108.4	337.4	308.5	78.7	449.4	366.4	6,273.7
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	240.0
Additional Replacement	6.5	0.0	0.0	98.1	91.9	0.0	51.1	0.0	94.9	0.0	0.0	640.6
Sub-total	55.0	71.3	46.5	144.0	658.9	108.4	388.5	308.5	173.6	449.4	366.4	6,717.3
(OPERATING COSTS)												
Material & Energy												
Parts	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	1,461.4	33,344.2
Diesel Oil	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	841.6	19,138.7
Gas & Lub.	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	275.9	6,369.2
Electricity	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	2,601.0	58,370.4
Explosives	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	116.2	2,663.7
F & E Others	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	56,064.4
Labor Costs												
Salaries & Wages	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	2,216.4	50,894.7
Social Insurance	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2	8,749.2
Others												
Royalties & Charges	418.3	418.3	418.3	418.3	418.3	418.3	418.9	418.3	418.3	418.3	418.3	9,558.2
Payable Interest												
After Tax Expenses	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	1,946.0	44,488.0
Sub-total	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	12,746.1	290,014.3
LOCAL CURRENCY TOTAL	12,801.1	12,817.4	12,792.6	12,890.1	13,405.0	12,854.5	13,134.6	13,054.6	12,919.7	13,195.5	13,112.5	302,458.2
TOTAL	36,939.8	37,165.1	35,639.3	41,085.8	67,411.6	39,016.2	49,291.3	50,949.3	42,137.4	69,995.1	53,135.2	1,197,406.1

Table 8.2 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NOW RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	4,916.2	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,664.8	19,664.8	18,943.2	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	18,269.9	423,671.0
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	6,609.9	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	157,602.3
Diesel Oil	811.5	811.5	1,055.9	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	24,498.6
Gas & Lub.	219.0	219.0	285.0	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,612.4
Electricity	716.0	810.4	934.0	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	21,869.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	695.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,626.6
Social Insurance	150.5	150.5	119.6	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	175.1	175.1	161.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,658.9
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,749.2	11,278.2	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	289,535.1
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	8,050.1	7,955.6	7,665.0	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	154,136.0
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	8,050.1	7,955.6	7,665.0	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	6,523.3	154,136.0
After Tax Expenses	722.5	730.5	708.2	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	16,523.7
Retained Earning(Loss)	7,327.1	7,225.2	6,956.8	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	137,212.2
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,790.4	12,375.9	4,638.3	1,417.2	7,050.2	1,540.9	680.3	2,439.6	7,193.8	1,823.9	8,324.0	1,413.1	1,408.2	1,120.5	1,058.6	130.2	11,418.2	1,120.1	4,888.2	7,189.4	1,774.6	312.6	2,869.4	83,987.5
Additional Investment	4,515.7	0.0	9,051.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,566.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,828.0	128.2	0.0	7,691.2	0.0	1,871.9	0.0	128.2	0.0	5,787.6	2,140.0	1,903.6	0.0	128.2	0.0	7,759.6	0.0	0.0	29,256.7
Total Capital Cost	6,305.2	12,375.9	13,689.3	1,417.2	7,050.2	3,168.9	808.5	2,439.6	14,885.1	1,823.9	10,292.0	1,413.1	1,536.5	1,120.5	6,844.2	2,270.3	13,321.7	1,120.1	5,016.4	7,189.4	5,534.1	312.6	2,869.4	126,820.9
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	7,327.1	7,225.2	6,956.8	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	5,785.2	137,212.2
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,305.2	12,375.9	13,689.3	1,417.2	7,050.2	3,168.9	808.5	2,439.6	14,885.1	1,823.9	10,292.0	1,413.1	1,536.5	1,120.5	6,844.2	2,270.3	13,321.7	1,120.1	5,016.4	7,189.4	5,534.1	312.6	2,869.4	126,820.9
LESS:Working Capital	3,614.7	37.6	-111.3	149.5	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,593.7	-5,188.3	-6,621.2	4,218.5	-1,265.0	2,616.2	4,966.7	3,345.6	-8,099.9	3,855.3	-4,506.8	4,372.8	4,248.7	4,664.7	-1,059.1	3,514.9	-7,536.6	4,665.1	768.8	-1,404.2	-3,748.0	5,472.6	2,915.8	6,790.7

Discount Rate (%) = 10.0 (10*6 Tg) NPV = -0.1

(%) EIRR = 10.0

Salvage	29,256.7
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3,690.5
Equipment	29,870.5
TOTAL	33,421.4

Table 8.2 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(EXISTING IMPROVEMENT)

EQUIPMENT:MON RAILWAY SYSTEM in 1996
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$ 400.0
TRCK C$ 100.0
Coal C$ 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (10^6 Tg)																								
(INVESTMENT)																								
Existing Eq. Replacement	1,759.6	12,182.6	4,558.4	1,392.8	8,228.8	1,314.4	676.4	2,387.8	7,070.0	1,798.4	8,176.8	1,388.8	1,184.0	1,101.2	1,038.4	128.0	11,221.8	1,100.8	4,404.0	7,085.8	1,744.0	307.2	2,820.0	82,541.4
Additional Investment	4,438.0	0.0	8,895.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,333.2
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,800.0	128.0	0.0	7,558.8	0.0	1,938.0	0.0	128.0	0.0	3,688.0	2,103.2	1,870.6	0.0	128.0	0.0	7,828.0	0.0	0.0	28,782.7
Sub-total	6,197.6	12,182.6	13,453.6	1,392.8	8,228.8	3,114.4	804.4	2,387.8	14,628.8	1,798.4	10,114.8	1,388.8	1,312.0	1,101.2	4,726.4	2,231.2	13,092.4	1,100.8	4,532.0	7,085.8	9,572.0	307.2	2,820.0	124,657.3
(OPERATING COSTS)																								
Material & Energy																								
Parts	6,634.4	6,634.4	6,071.6	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	6,284.2	145,748.3
Diesel Oil	518.7	518.7	872.2	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	684.7	15,598.6
Gas & Lub.	121.0	121.0	157.4	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	3,852.8
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	511.3	511.3	528.9	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	12,480.0
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	7,785.4	7,785.4	7,450.4	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	176,980.9
FOREIGN CURRENCY TOTAL	13,983.0	19,968.0	20,904.0	9,090.8	15,926.8	10,812.4	8,502.4	10,085.8	22,326.8	9,496.4	17,812.8	9,086.8	9,010.0	8,799.2	12,424.4	9,929.2	20,790.4	8,798.8	12,230.0	14,783.8	17,270.0	8,005.2	10,518.0	301,917.3
LOCAL CURRENCY (10^6 Tg)																								
Increase in Working Capi	3,614.7	37.8	-111.2	148.5	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	3,690.5
(INVESTMENT)																								
Existing Eq. Replacement	30.8	212.1	78.8	24.4	121.4	28.8	11.9	42.0	123.9	31.5	143.0	24.3	24.2	19.3	18.2	2.2	198.8	19.3	84.2	122.8	30.8	5.4	49.4	1,448.1
Additional Investment	77.8	0.0	155.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	233.6
Additional Replacement	0.0	0.0	0.0	0.0	0.0	26.0	2.2	0.0	132.4	0.0	34.0	0.0	2.2	0.0	98.7	28.8	22.8	0.0	2.2	0.0	133.6	0.0	0.0	502.9
Sub-total	108.6	212.1	235.7	24.4	121.4	54.8	14.1	42.0	256.3	31.5	177.2	24.3	26.5	19.3	117.0	31.0	221.6	19.3	86.4	122.8	164.2	5.4	49.4	2,183.7
(OPERATING COSTS)																								
Material & Energy																								
Parts	584.5	584.5	518.1	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	12,354.0
Diesel Oil	294.8	294.8	383.5	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	8,490.0
Gas & Lub.	98.0	98.0	127.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	2,958.8
Electricity	718.0	818.4	834.0	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	875.4	21,088.5
Explosives	43.5	43.5	45.0	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	1,081.5
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,285.8
Labor Costs																								
Salaries & Wages	874.7	874.7	885.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,820.8
Social Insurance	150.5	150.5	118.8	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	175.1	175.1	181.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,858.9
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	722.9	730.5	708.2	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	738.1	16,923.7
Sub-total	4,552.2	4,654.3	4,528.9	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	4,788.8	109,478.2
LOCAL CURRENCY TOTAL	8,275.5	4,904.2	4,580.4	4,889.7	4,908.2	4,841.4	4,800.9	4,828.8	5,043.1	4,818.3	4,964.0	4,811.1	4,813.2	4,806.1	4,904.8	4,835.9	5,011.2	4,806.1	4,873.2	4,910.8	4,950.8	4,792.2	4,838.2	115,352.4
TOTAL	22,258.5	24,853.1	25,584.4	14,051.5	19,834.8	15,853.7	13,303.2	14,924.4	27,369.8	14,314.7	22,776.2	13,872.8	14,021.2	13,605.2	17,329.0	14,765.0	25,808.5	13,604.8	17,501.1	19,674.1	22,018.8	12,797.3	15,356.2	418,970.2
FOREIGN CURRENCY (10^3 US$)																								
(INVESTMENT)																								
Existing Eq. Replacement	4,399.0	20,408.9	11,398.0	2,482.0	17,322.0	3,788.0	1,696.0	5,894.0	17,675.0	4,498.0	20,442.0	3,472.0	3,460.0	2,753.0	2,598.0	320.0	28,061.9	2,752.0	12,010.0	17,884.0	4,360.0	768.0	7,050.0	206,353.5
Additional Investment	11,095.0	0.0	22,237.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33,332.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	315.0	0.0	18,897.0	0.0	4,845.0	0.0	315.0	0.0	14,220.0	5,258.0	4,672.0	0.0	315.0	0.0	19,085.0	0.0	0.0	71,908.8
Sub-total	15,494.0	20,408.9	33,633.0	2,482.0	17,322.0	7,788.0	2,011.0	5,894.0	36,571.0	4,498.0	25,286.0	3,472.0	3,775.0	2,753.0	16,818.0	5,578.0	32,733.9	2,752.0	12,325.0	17,884.0	23,424.0	768.0	7,050.0	311,593.3
(OPERATING COSTS)																								
Material & Energy																								
Parts	18,581.1	18,581.1	15,228.4	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	363,120.8
Diesel Oil	1,281.8	1,281.8	1,685.9	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	38,398.0
Gas & Lub.	302.5	302.5	393.9	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	9,132.6
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	1,278.2	1,278.2	1,322.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	31,189.8
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	19,443.6	19,443.6	18,630.0	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	442,451.8
FOREIGN CURRENCY TOTAL	34,937.6	39,852.5	52,263.0	21,726.9	36,566.9	27,032.9	21,255.9	25,138.9	55,815.9	23,742.9	44,530.9	22,716.9	23,019.9	21,997.9	36,062.9	24,822.9	51,978.8	21,996.9	31,569.9	37,128.9	42,668.9	20,012.9	26,294.9	754,044.8
LOCAL CURRENCY (10^3 US$)																								
Increase in Working Capi	8,638.8	94.1	-278.2	372.7	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	8,826.2
(INVESTMENT)																								
Existing Eq. Replacement	77.1	532.7	199.7	81.0	302.5	66.3	28.7	105.0	309.7	78.8	358.1	60.8	60.5	48.2	45.5	5.8	491.5	48.2	210.4	308.5	78.4	13.5	122.5	3,915.3
Additional Investment	194.4	0.0	389.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	584.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	70.1	5.5	0.0	331.1	0.0	84.9	0.0	5.5	0.0	249.1	92.1	81.9	0.0	5.5	0.0	334.0	0.0	0.0	1,259.8
Sub-total	271.5	532.7	589.3	81.0	302.5	136.4	34.2	105.0	640.7	78.8	443.0	60.8	66.1	48.2	294.6	97.9	573.4	48.2	215.9	308.5	412.4	13.5	122.5	5,459.1
(OPERATING COSTS)																								
Material & Energy																								
Parts	1,411.1	1,411.1	1,295.2	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	30,885.1
Diesel Oil	735.9	735.9	958.9	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	22,247.4
Gas & Lub.	345.1	345.1	318.9	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	7,380.1
Electricity	1,798.9	2,026.1	2,085.0	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	54,871.3
Explosives	108.7	108.7	112.5	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	2,653.7
M & E Others	2,280.5	2,280.5	2,358.8	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	55,984.4
Labor Costs																								
Salaries & Wages	2,186.8	2,186.8	1,738.3	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	41,568.4
Social Insurance	376.2	376.2	299.1	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	7,151.2
Others																								
Royalties & Charges	437.9	437.9	452.8	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	9,147.4
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	1,807.4	1,826.2	1,770.5	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	1,845.3	42,308.4
Sub-total	11,380.5	11,635.5	11,349.1	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	11,967.0	273,885.4
LOCAL CURRENCY TOTAL	20,290.8	12,262.3	11,660.2	12,420.7	12,269.5	12,103.4	12,001.2	12,072.0	12,607.7	12,045.8	12,410.0	12,027.8	12,033.1	12,015.2	12,261.6	12,064.9	12,540.4	12,015.2	12,182.9	12,275.5	12,379.4	11,980.5	12,089.5	288,380.9
TOTAL	55,848.3	52,137.9	63,911.6	34,128.1	48,877.2	39,134.3	33,258.1	37,210.9	68,424.5	35,788.8	56,941.2	34,744.7	35,052.0	34,013.1	48,322.5	36,887.8	64,518.2	34,012.1	43,752.8	49,185.2	55,047.2	31,993.2	38,385.4	1,042,425.7

Table 8.3 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 2002

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,307.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,307.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	4,971.0	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,884.0	19,884.0	19,154.4	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	18,473.6	428,353.6
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.5	7,200.5	7,167.9	7,406.1	7,406.1	7,406.1	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	159,836.0
Diesel Oil	811.5	811.5	867.0	926.8	926.8	926.8	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	23,847.0
Gas & Lub.	218.0	218.0	242.1	250.1	250.1	250.1	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,436.6
Electricity	716.0	810.4	910.1	1,064.4	1,064.4	1,064.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	22,211.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	865.0	886.2	886.2	886.2	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	17,331.5
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,981.8
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,695.3
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,709.2	11,923.0	12,420.3	12,420.3	12,420.3	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	272,200.9
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	8,269.3	8,174.8	7,231.4	6,053.2	6,053.2	6,053.2	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	156,152.7
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	8,269.3	8,174.8	7,231.4	6,053.2	6,053.2	6,053.2	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	6,726.9	156,152.7
After Tax Expenses	723.0	730.6	745.3	776.9	776.9	776.9	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	17,862.3
Retained Earning(Loss)	7,546.3	7,444.2	6,486.1	5,276.3	5,276.3	5,276.3	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	139,116.5
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,739.4	12,375.9	5,033.9	1,417.2	7,116.1	1,540.9	690.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.2	11,413.2	1,120.1	4,988.2	7,189.4	1,774.6	312.6	2,869.4	84,449.1
Additional Investment	6,415.3	0.0	1,058.6	0.0	0.0	0.0	5,787.6	0.0	3,263.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,525.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	2,031.8	0.0	1,903.6	0.0	3,030.6	0.0	2,031.8	0.0	5,787.6	2,140.0	1,903.6	0.0	3,090.4	0.0	1,971.9	0.0	5,787.6	31,307.0
Total Capital Cost	8,265.7	12,375.9	6,092.5	1,417.2	7,116.1	3,169.0	8,509.7	2,439.6	12,360.8	1,829.9	11,350.6	1,413.1	3,440.0	1,120.5	6,844.2	2,270.3	13,321.7	1,120.1	7,978.6	7,189.4	3,746.5	312.6	8,657.0	132,285.0
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	7,546.3	7,444.2	6,486.1	5,276.3	5,276.3	5,276.3	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	5,988.5	139,116.5
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	8,265.7	12,375.9	6,092.5	1,417.2	7,116.1	3,169.0	8,509.7	2,439.6	12,360.8	1,829.9	11,350.6	1,413.1	3,440.0	1,120.5	6,844.2	2,270.3	13,321.7	1,120.1	7,978.6	7,189.4	3,746.5	312.6	8,657.0	132,285.0
LESS:Working Capital	3,815.1	37.9	75.5	158.1	0.0	0.0	-192.7	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-4,278.6	-4,969.6	320.1	3,701.0	-1,835.8	2,107.3	-2,328.4	3,548.9	-6,372.3	4,156.6	-5,362.1	4,575.4	2,548.5	4,868.0	-855.7	3,718.2	-7,333.2	4,868.4	-1,990.0	-1,200.6	2,242.0	5,675.9	-2,868.5	3,133.5

Salvage		
Reclamation		-135.7
Loan Borrowed		
Working Capital		0.0
Equipment		3,831.9
		32,213.5
TOTAL		35,765.7

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 0.6

Table 8.3 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 2002
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$) 400.0
TBCN (% 100.0
Coal (% 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (10^6 Tg)																								
[INVESTMENT]																								
Existing Eq. Replacement	1,758.8	12,182.8	4,947.2	1,382.8	8,992.8	1,514.4	578.4	2,397.8	7,070.0	1,798.4	8,178.8	1,388.8	1,384.0	1,101.2	1,038.4	128.0	11,221.8	1,100.8	4,804.0	7,085.8	1,744.0	307.2	2,820.0	82,895.0
Additional Investment	6,308.8	0.0	1,040.4	0.0	0.0	0.0	5,688.0	0.0	3,207.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,244.4
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,600.0	1,996.8	0.0	1,870.8	0.0	2,978.4	0.0	1,996.8	0.0	5,688.0	2,103.2	1,870.8	0.0	3,037.2	0.0	1,938.0	0.0	5,688.0	30,767.9
Sub-total	8,067.6	12,182.8	5,987.6	1,382.8	8,992.8	3,114.4	8,263.2	2,397.8	12,148.0	1,798.4	11,157.2	1,388.8	3,380.8	1,101.2	6,726.4	2,231.2	13,092.4	1,100.8	7,841.2	7,085.8	3,682.0	307.2	8,508.0	129,907.3
[OPERATING COSTS]																								
Material & Energy																								
Parts	6,636.4	6,636.4	6,608.0	6,825.5	6,825.5	6,825.5	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	6,294.2	147,358.8
Diesel Oil	518.7	518.7	571.2	590.1	590.1	590.1	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	694.7	15,184.7
Gas & Lub.	121.0	121.0	133.7	138.2	138.2	138.2	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	162.7	3,555.7
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	511.3	511.3	528.9	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	546.4	12,488.0
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	7,785.4	7,785.4	7,839.8	8,100.3	8,100.3	8,100.3	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	7,698.0	176,572.5
FOREIGN CURRENCY TOTAL	15,853.0	19,968.2	13,827.4	9,483.1	17,093.1	11,214.7	15,961.2	10,095.8	19,845.2	9,496.4	18,853.1	9,086.8	11,078.8	8,799.2	14,424.4	9,929.2	20,790.3	8,798.8	15,539.1	14,783.8	11,380.0	8,005.2	16,206.0	306,479.9
LOCAL CURRENCY (10^6 Tg)																								
Increase in Working Capital	2,815.1	37.9	73.5	138.1	0.0	0.0	-182.7	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	2,881.9
[INVESTMENT]																								
Existing Eq. Replacement	30.8	213.1	80.7	24.4	122.5	26.5	11.8	42.0	123.9	31.5	141.3	24.3	34.1	18.3	18.2	2.2	196.8	18.3	84.2	123.8	30.8	5.4	49.4	1,454.1
Additional Investment	110.5	0.0	18.2	0.0	0.0	0.0	99.7	0.0	56.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	284.6
Additional Replacement	0.0	0.0	0.0	0.0	0.0	28.0	35.0	0.0	32.8	0.0	52.2	0.0	25.0	0.0	98.7	36.8	32.8	0.0	53.2	0.0	34.0	0.0	98.7	539.1
Sub-total	141.4	213.1	104.9	24.4	122.5	54.5	148.5	42.0	212.9	31.5	195.4	24.3	59.2	18.3	117.0	39.1	229.4	18.3	137.4	123.8	64.5	5.4	148.1	2,277.7
[OPERATING COSTS]																								
Material & Energy																								
Parts	564.5	564.5	561.9	580.5	580.5	580.5	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	535.3	12,533.4
Diesel Oil	294.8	294.8	325.6	336.8	336.8	336.8	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	396.3	8,662.3
Gas & Lub.	98.0	98.0	108.4	112.0	112.0	112.0	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	131.8	2,880.9
Electricity	718.0	810.4	910.1	1,084.4	1,084.4	1,084.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	22,211.5
Explosives	43.5	43.5	45.0	46.5	46.5	46.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	48.5	1,061.5
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,235.8
Labor Costs																								
Salaries & Wages	874.7	874.7	869.0	886.2	886.2	886.2	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	17,331.5
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,981.8
Others																								
Royalties & Charges	175.1	175.1	170.1	188.5	188.5	188.5	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,885.3
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	723.9	730.8	745.3	778.9	778.9	778.8	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	738.4	17,082.2
Sub-total	4,552.3	4,854.3	4,828.5	5,097.0	5,097.0	5,097.0	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	4,787.1	110,798.2
LOCAL CURRENCY TOTAL	4,308.8	4,906.4	5,006.9	5,270.5	5,219.5	5,151.5	4,740.9	4,829.1	4,999.8	4,818.3	4,982.5	4,811.4	4,846.3	4,806.4	4,904.8	4,828.2	5,016.4	4,808.4	4,924.4	4,910.9	4,851.8	4,792.4	4,936.1	116,975.2
TOTAL	24,152.5	24,853.8	18,824.3	14,772.8	20,313.4	18,388.2	20,302.9	14,824.0	24,845.2	14,314.9	23,835.8	13,898.2	15,925.1	13,805.5	19,328.3	14,755.3	25,808.8	13,805.1	20,483.8	19,874.4	18,831.5	12,797.8	21,142.1	485,380.1
FOREIGN CURRENCY (10^3 US$)																								
[INVESTMENT]																								
Existing Eq. Replacement	4,398.0	30,408.9	12,388.0	3,482.0	17,484.0	3,788.0	1,698.0	5,894.0	17,675.0	4,498.0	20,442.0	3,472.0	3,450.0	2,753.0	2,598.0	320.0	18,053.9	2,752.8	12,010.0	17,884.0	4,380.0	788.0	7,050.0	207,487.5
Additional Investment	15,772.0	0.0	2,601.0	0.0	0.0	0.0	14,220.0	0.0	8,018.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40,610.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	4,992.0	0.0	4,677.0	0.0	7,446.0	0.0	4,992.0	0.0	14,220.0	5,258.0	4,677.0	0.0	7,593.0	0.0	4,845.0	0.0	14,220.0	76,919.8
Sub-total	20,171.0	30,408.9	14,989.0	3,482.0	17,484.0	7,788.0	20,907.8	5,894.0	30,370.0	4,498.0	27,887.9	3,472.0	8,452.0	2,753.0	16,818.0	5,578.0	22,730.9	2,752.8	19,603.0	17,884.0	9,225.0	788.0	21,270.0	325,018.2
[OPERATING COSTS]																								
Material & Energy																								
Parts	16,591.1	16,591.1	16,515.1	17,063.9	17,063.9	17,063.9	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	368,391.5
Diesel Oil	1,281.8	1,281.8	1,427.9	1,475.3	1,475.3	1,475.3	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	1,736.7	37,961.8
Gas & Lub.	302.5	302.5	334.4	345.5	345.5	345.5	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	406.7	8,889.1
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	1,278.2	1,278.2	1,322.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	1,366.1	31,198.9
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	19,453.6	19,453.6	19,599.5	20,250.7	20,250.7	20,250.7	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	19,244.8	446,442.4
FOREIGN CURRENCY TOTAL	39,624.6	49,862.5	34,588.5	23,732.7	37,734.7	28,038.7	40,152.6	25,138.8	49,614.8	23,742.8	47,132.7	22,716.8	27,696.8	21,997.8	36,062.8	24,822.8	41,975.7	21,997.6	38,847.8	37,128.8	28,469.8	20,032.8	40,514.8	771,459.6
LOCAL CURRENCY (10^3 US$)																								
Increase in Working Capital	7,037.8	94.8	182.8	305.2	0.0	0.0	-421.8	0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	7,220.8
[INVESTMENT]																								
Existing Eq. Replacement	77.1	532.7	218.7	91.0	306.3	98.2	29.7	105.0	300.7	78.6	358.1	60.8	58.6	48.2	45.5	5.8	491.5	48.2	210.4	309.5	78.4	13.5	123.5	3,633.2
Additional Investment	278.3	0.0	45.8	0.0	0.0	0.0	348.1	0.0	140.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	711.5
Additional Replacement	0.0	0.0	0.0	0.0	0.0	70.1	87.5	0.0	81.9	0.0	130.5	0.0	87.5	0.0	348.1	82.1	82.9	0.0	133.0	0.0	84.9	0.0	348.1	1,347.6
Sub-total	353.4	532.7	282.3	91.0	306.3	138.4	380.2	105.0	532.1	78.6	488.6	60.8	146.1	48.2	394.8	87.7	574.4	48.2	343.4	309.5	161.3	13.5	373.7	5,694.3
[OPERATING COSTS]																								
Material & Energy																								
Parts	1,411.1	1,411.1	1,404.7	1,451.4	1,451.4	1,451.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	1,338.4	31,333.4
Diesel Oil	736.8	736.8	814.5	841.8	841.8	841.8	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	990.7	21,655.7
Gas & Lub.	245.1	245.1	270.8	278.8	278.8	278.8	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	7,202.3
Electricity	1,780.0	2,026.1	2,275.2	2,881.0	2,881.0	2,881.0	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	2,438.5	55,528.8
Explosives	108.7	108.7	112.5	116.2	116.2	116.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	118.2	2,653.7
M & E Others	2,280.5	2,280.5	2,358.8	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	2,437.2	55,894.4
Labor Costs																								
Salaries & Wages	2,186.8	2,186.8	2,172.4	2,215.4	2,215.4	2,215.4	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	1,772.7	43,328.7
Social Insurance	376.2	376.2	373.7	381.2	381.2	381.2	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	7,454.4
Others																								
Royalties & Charges	437.9	437.9	425.2	418.3	418.3	418.3	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	393.4	9,236.3
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	1,807.8	1,826.5	1,863.2	1,942.3	1,942.3	1,942.3	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	1,846.0	42,705.7
Sub-total	11,380.7	11,835.8	12,071.3	12,742.5	12,742.5	12,742.5	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	11,967.7	276,775.3
LOCAL CURRENCY TOTAL	18,772.0	12,263.4	12,517.3	13,138.7	13,048.8	12,878.9	11,852.1	12,072.7	12,499.8	12,046.4	12,456.3	12,028.5	12,113.7	12,015.9	12,362.5	12,055.4	12,541.1	12,015.8	12,311.1	12,277.1	12,128.9	11,981.1	12,340.3	291,349.5
TOTAL	58,406.5	62,133.9	47,095.8	36,881.4	50,782.4	40,915.8	52,005.0	37,211.6	62,114.8	35,787.3	59,588.1	34,745.4	39,812.8	34,013.8	48,323.2	36,908.2	54,516.8	34,012.8	51,158.0	48,188.8	40,578.8	31,994.0	52,855.2	1,062,138.3

Table 8.4 (1)

ECONOMIC ANALYSIS
(EXPANSION)

EQUIPMENT:

BAGANUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 0.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
[Revenue]																								
Sale Price (Tg/t)	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	4,369.7	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	0.0	0.0	5,011.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	10,022.1	205,453.5
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	0.0	0.0	1,723.7	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	70,670.5
Diesel Oil	0.0	0.0	437.0	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	17,518.1
Gas & Lub.	0.0	0.0	118.0	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	4,836.3
Electricity	0.0	0.0	142.7	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	6,604.1
Explosives	0.0	0.0	183.0	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	7,501.3
M & E Others	0.0	0.0	249.0	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	10,207.6
Labor Costs																								
Salaries & Wages	0.0	0.0	178.8	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	5,292.6
Social Insurance	0.0	0.0	30.8	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	895.1
Others																								
Royalties & Charges	0.0	0.0	46.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	1,796.6
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	0.0	0.0	3,185.4	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	125,632.2
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	0.0	0.0	1,991.7	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	79,821.3
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	0.0	0.0	1,991.7	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	3,896.0	79,821.3
After Tax Expenses	0.0	0.0	196.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	7,990.3
Retained Earning(loss)	0.0	0.0	1,795.0	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	71,830.9
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	20,625.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,625.5
Additional Replacement	0.0	0.0	0.0	0.0	0.0	0.0	149.0	0.0	121.3	0.0	14,637.2	0.0	542.5	0.0	270.3	0.0	0.0	103.8	14,637.2	0.0	121.3	0.0	1,017.1	31,598.6
Total Capital Cost	0.0	0.0	20,625.5	0.0	0.0	0.0	149.0	0.0	121.3	0.0	14,637.2	0.0	542.5	0.0	270.3	0.0	0.0	103.8	14,637.2	0.0	121.3	0.0	1,017.1	52,225.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	0.0	0.0	1,795.0	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	3,506.3	71,830.9
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	0.0	0.0	20,625.5	0.0	0.0	0.0	149.0	0.0	121.3	0.0	14,637.2	0.0	542.5	0.0	270.3	0.0	0.0	103.8	14,637.2	0.0	121.3	0.0	1,017.1	52,225.1
LESS:Working Capital	0.0	0.0	983.3	965.1	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	0.0	0.0	-19,813.8	2,541.2	3,506.3	3,506.3	3,357.3	3,506.3	3,385.0	3,506.3	-11,130.9	3,506.3	2,963.8	3,506.3	3,236.0	3,506.3	3,506.3	3,402.5	-11,130.9	3,506.3	3,385.0	3,506.3	2,489.2	17,657.4

(%) EIRR =	10.0
Discount Rate (%) = 10.0 (10*6 Tg) NPV =	0.7

Salvage	
Reclamation	-80.1
Loan Repaid	0.0
Working Capital	1,948.4
Equipment	8,951.6
TOTAL	10,819.9

Table 8.4 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(EXPANSION)

EQUIPMENT:
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$ 400.0
TECH (% 100.0
Coal (% 0.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
FOREIGN CURRENCY (10^6 Tg)												
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	20,270.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	0.0	146.4	0.0	119.2	0.0	14,385.2	0.0
Sub-total	0.0	0.0	20,270.4	0.0	0.0	0.0	146.4	0.0	119.2	0.0	14,385.2	0.0
[OPERATING COSTS]												
Material & Energy												
Parts	0.0	0.0	1,588.5	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1
Diesel Oil	0.0	0.0	278.3	556.6	556.6	556.6	556.6	556.6	556.6	556.6	556.6	556.6
Gas & Lub.	0.0	0.0	65.2	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3
Electricity	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	0.0	0.0	168.6	337.2	337.2	337.2	337.2	337.2	337.2	337.2	337.2	337.2
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total	0.0	0.0	2,100.6	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2
FOREIGN CURRENCY TOTAL	0.0	0.0	22,371.0	4,201.2	4,201.2	4,201.2	4,347.6	4,201.2	4,320.4	4,201.2	18,586.4	4,201.2
LOCAL CURRENCY (10^6 Tg)												
Increase in Working Capital	0.0	0.0	983.3	965.1	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	355.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.1	0.0	252.0	0.0
Sub-total	0.0	0.0	355.1	0.0	0.0	0.0	2.8	0.0	2.1	0.0	252.0	0.0
[OPERATING COSTS]												
Material & Energy												
Parts	0.0	0.0	135.1	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2
Diesel Oil	0.0	0.0	158.7	317.5	317.5	317.5	317.5	317.5	317.5	317.5	317.5	317.5
Gas & Lub.	0.0	0.0	52.8	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6
Electricity	0.0	0.0	142.7	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1
Explosives	0.0	0.0	14.3	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
M & E Others	0.0	0.0	248.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9
Labor Costs												
Salaries & Wages	0.0	0.0	178.6	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2
Social Insurance	0.0	0.0	30.8	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
Others												
Royalties & Charges	0.0	0.0	46.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-
After Tax Expenses	0.0	0.0	196.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7
Sub-total	0.0	0.0	1,205.5	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6
LOCAL CURRENCY TOTAL	0.0	0.0	2,543.9	3,279.7	2,314.6	2,314.6	2,317.4	2,314.6	2,316.7	2,314.6	2,566.6	2,314.6
TOTAL	0.0	0.0	24,914.9	7,480.9	6,515.8	6,515.8	6,665.0	6,515.8	6,637.1	6,515.8	21,153.0	6,515.8
FOREIGN CURRENCY (10^3 US$)												
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	50,675.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	0.0	366.0	0.0	298.0	0.0	35,962.9	0.0
Sub-total	0.0	0.0	50,675.9	0.0	0.0	0.0	366.0	0.0	298.0	0.0	35,962.9	0.0
[OPERATING COSTS]												
Material & Energy												
Parts	0.0	0.0	3,971.4	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8
Diesel Oil	0.0	0.0	695.7	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4
Gas & Lub.	0.0	0.0	162.9	325.8	325.8	325.8	325.8	325.8	325.8	325.8	325.8	325.8
Electricity	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	0.0	0.0	421.5	843.1	843.1	843.1	843.1	843.1	843.1	843.1	843.1	843.1
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total	0.0	0.0	5,251.5	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1
FOREIGN CURRENCY TOTAL	0.0	0.0	55,927.4	10,503.1	10,503.1	10,503.1	10,869.1	10,503.1	10,801.1	10,503.1	46,466.0	10,503.1
LOCAL CURRENCY (10^3 US$)												
Increase in Working Capital	0.0	0.0	2,458.3	2,412.8	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	887.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	0.0	7.0	0.0	5.2	0.0	630.1	0.0
Sub-total	0.0	0.0	887.8	0.0	0.0	0.0	7.0	0.0	5.2	0.0	630.1	0.0
[OPERATING COSTS]												
Material & Energy												
Parts	0.0	0.0	337.8	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5
Diesel Oil	0.0	0.0	396.8	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7
Gas & Lub.	0.0	0.0	132.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0
Electricity	0.0	0.0	356.8	807.7	807.7	807.7	807.7	807.7	807.7	807.7	807.7	807.7
Explosives	0.0	0.0	35.8	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7
M & E Others	0.0	0.0	622.4	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8
Labor Costs												
Salaries & Wages	0.0	0.0	447.1	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0
Social Insurance	0.0	0.0	77.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0
Others												
Royalties & Charges	0.0	0.0	116.3	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-
After Tax Expenses	0.0	0.0	491.7	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2
Sub-total	0.0	0.0	3,013.6	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5
LOCAL CURRENCY TOTAL	0.0	0.0	6,359.7	8,199.3	5,786.5	5,786.5	5,793.5	5,786.5	5,791.7	5,786.5	6,416.6	5,786.5
TOTAL	0.0	0.0	62,287.1	18,702.4	16,289.6	16,289.6	16,662.6	16,289.6	16,592.8	16,289.6	52,882.6	16,289.6

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (10^6 Tg)												
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,270.4
Additional Replacement	533.2	0.0	265.6	0.0	0.0	102.0	14,385.2	0.0	119.2	0.0	999.6	31,055.5
Sub-total	533.2	0.0	265.6	0.0	0.0	102.0	14,385.2	0.0	119.2	0.0	999.6	51,325.9
[OPERATING COSTS]												
Material & Energy												
Parts	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	3,177.1	65,130.8
Diesel Oil	556.6	556.6	556.6	556.6	556.6	556.6	556.6	556.6	556.6	556.6	556.6	11,409.5
Gas & Lub.	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	130.3	2,671.2
Electricity	-	-	-	-	-	-	-	-	-	-	-	
Explosives	337.2	337.2	337.2	337.2	337.2	337.2	337.2	337.2	337.2	337.2	337.2	6,913.3
M & E Others	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	4,201.2	86,125.3
FOREIGN CURRENCY TOTAL	4,734.4	4,201.2	4,466.8	4,201.2	4,201.2	4,303.2	18,586.4	4,201.2	4,320.4	4,201.2	5,200.8	137,451.1
LOCAL CURRENCY (10^6 Tg)												
Increase in Working Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,948.4
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	355.1
Additional Replacement	9.4	0.0	4.7	0.0	0.0	1.8	252.0	0.0	2.1	0.0	17.5	544.1
Sub-total	9.4	0.0	4.7	0.0	0.0	1.8	252.0	0.0	2.1	0.0	17.5	899.2
[OPERATING COSTS]												
Material & Energy												
Parts	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	270.2	5,539.1
Diesel Oil	317.5	317.5	317.5	317.5	317.5	317.5	317.5	317.5	317.5	317.5	317.5	6,508.7
Gas & Lub.	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	2,164.7
Electricity	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	6,604.1
Explosives	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	588.3
M & E Others	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	10,207.8
Labor Costs												
Salaries & Wages	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	5,202.6
Social Insurance	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	895.1
Others												
Royalties & Charges	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	1,796.5
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	7,990.7
Sub-total	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	2,314.6	47,497.2
LOCAL CURRENCY TOTAL	2,324.0	2,314.6	2,319.3	2,314.6	2,314.6	2,316.4	2,566.6	2,314.6	2,316.7	2,314.6	2,332.1	50,345.0
TOTAL	7,058.4	6,515.8	6,786.1	6,515.8	6,515.8	6,619.6	21,153.0	6,515.8	6,637.1	6,515.8	7,532.9	187,796.1
FOREIGN CURRENCY (10^3 US$)												
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50,675.9
Additional Replacement	1,333.0	0.0	664.0	0.0	0.0	255.0	35,962.9	0.0	298.0	0.0	2,499.0	77,638.8
Sub-total	1,333.0	0.0	664.0	0.0	0.0	255.0	35,962.9	0.0	298.0	0.0	2,499.0	128,314.7
[OPERATING COSTS]												
Material & Energy												
Parts	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	7,942.8	162,827.1
Diesel Oil	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	1,391.4	28,523.7
Gas & Lub.	325.8	325.8	325.8	325.8	325.8	325.8	325.8	325.8	325.8	325.8	325.8	6,678.1
Electricity	-	-	-	-	-	-	-	-	-	-	-	
Explosives	843.1	843.1	843.1	843.1	843.1	843.1	843.1	843.1	843.1	843.1	843.1	17,283.3
M & E Others	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	10,503.1	215,313.2
FOREIGN CURRENCY TOTAL	11,836.1	10,503.1	11,167.1	10,503.1	10,503.1	10,758.1	46,466.0	10,503.1	10,801.1	10,503.1	13,002.1	343,627.8
LOCAL CURRENCY (10^3 US$)												
Increase in Working Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,871.1
[INVESTMENT]												
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	887.8
Additional Replacement	23.4	0.0	11.8	0.0	0.0	4.5	630.1	0.0	5.2	0.0	43.8	1,360.2
Sub-total	23.4	0.0	11.8	0.0	0.0	4.5	630.1	0.0	5.2	0.0	43.8	2,248.1
[OPERATING COSTS]												
Material & Energy												
Parts	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	13,847.8
Diesel Oil	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	793.7	16,271.7
Gas & Lub.	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	264.0	5,411.7
Electricity	807.7	807.7	807.7	807.7	807.7	807.7	807.7	807.7	807.7	807.7	807.7	16,510.2
Explosives	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	71.7	1,470.8
M & E Others	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	1,244.8	25,519.5
Labor Costs												
Salaries & Wages	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0	13,008.4
Social Insurance	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	108.0	2,237.7
Others												
Royalties & Charges	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	218.8	4,491.5
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	974.2	19,975.7
Sub-total	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	5,786.5	118,743.2
LOCAL CURRENCY TOTAL	5,809.9	5,786.5	5,798.3	5,786.5	5,786.5	5,791.0	6,416.6	5,786.5	5,791.7	5,786.5	5,830.3	125,862.4
TOTAL	17,646.0	16,289.6	16,965.4	16,289.6	16,289.6	16,549.1	52,882.6	16,289.6	16,592.8	16,289.6	18,832.4	469,490.2

Table 8.5 (1)

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:
NON REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

	1986	1987	1988	1989	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,987.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	19,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.4
Stripping Ratio (BCM/t)	3.5	3.5	3.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,600.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,266.0
[Revenue]																								
Sale Price (Tg/t)	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	4,976.8	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,907.2	19,907.2	24,884.0	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	29,903.7	692,891.5
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	8,891.6	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	10,853.4	240,362.0
Diesel Oil	811.5	811.5	1,334.0	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	1,800.8	38,973.6
Gas & Lub.	219.0	219.0	360.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	10,519.4
Electricity	716.0	810.4	1,052.8	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	1,387.5	30,328.2
Explosives	554.8	554.8	756.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	21,042.8
M & E Others	912.2	912.2	1,192.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	1,047.8	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	1,137.4	25,544.5
Social Insurance	150.5	150.5	180.3	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	195.7	4,394.7
Others																								
Royalties & Charges	175.1	175.1	216.5	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	5,647.3
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,814.7	11,793.2	15,032.4	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	18,546.5	409,285.8
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	8,292.5	8,198.0	9,851.6	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	253,605.6
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	8,292.5	8,198.0	9,851.6	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	11,363.2	253,605.6
After Tax Expenses	723.0	730.5	942.7	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	1,168.5	25,767.2
Retained Earning(Loss)	7,569.5	7,467.4	8,908.9	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	227,838.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,790.4	12,375.9	5,033.9	1,417.2	7,116.1	1,540.9	18,617.4	8,540.2	18,320.2	6,671.3	8,715.6	1,413.1	1,474.2	1,867.5	1,456.6	1,653.3	12,242.4	2,405.8	5,263.8	7,189.4	1,840.5	10,439.7	8,046.9	136,452.4
Additional Investment	4,515.7	0.0	21,684.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26,199.5
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	277.2	0.0	2,024.9	0.0	17,667.8	0.0	670.7	0.0	270.3	2,140.0	1,903.6	103.8	15,824.0	0.0	2,093.2	0.0	1,017.1	45,520.6
Total Capital Cost	6,306.2	12,375.9	26,718.0	1,417.2	7,116.1	3,169.0	11,054.6	8,540.2	20,345.1	6,671.3	26,383.4	1,413.1	2,144.9	1,867.5	1,326.8	3,193.4	14,145.8	2,509.6	21,107.8	7,189.4	3,933.7	10,439.7	9,064.0	208,272.8
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	7,569.5	7,467.4	8,908.9	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	10,194.6	227,838.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,306.2	12,375.9	26,718.0	1,417.2	7,116.1	3,169.0	11,054.6	8,540.2	20,345.1	6,671.3	26,383.4	1,413.1	2,144.9	1,867.5	1,326.8	3,193.4	14,145.8	2,509.6	21,107.8	7,189.4	3,933.7	10,439.7	9,064.0	208,272.8
LESS:Working Capital	3,615.2	38.0	1,060.3	1,129.3	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cash Flow	-2,351.9	-4,946.4	-18,869.3	7,648.1	3,078.5	7,025.7	-860.0	1,654.4	-10,150.4	3,523.4	-16,188.8	8,781.5	8,049.7	8,527.1	8,867.8	7,001.3	-3,851.3	7,685.0	-10,913.2	3,005.3	6,260.9	-245.1	1,130.6	13,722.9

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 1.2

(%) EIRR = 10.0

Salvage	
Reclamation	-219.8
Loan Unrepaid	0.0
Working Capital	5,842.7
Equipment	51,566.1
TOTAL	57,189.0

Table 8.5 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(AMORTIZATION COMBINED)

BAGANUUR COAL MINE RENOVATION PROJECT

BBT PAGE:
EVALUATION OF ASSETS

Item	1996	1997	1998	1999	2000	2001	2002	2003
FOREIGN CURRENCY (10^3 Tk)								
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity								
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others								
Labor Costs								
Salaries & Wages								
Social Insurance								
Others								
Royalties & Charges								
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses								
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY (10^3 Tk)								
Increase in Working Capital	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Labor Costs								
Salaries & Wages	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Social Insurance	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Others								
Royalties & Charges	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Payable Interest								
After Tax Expenses	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity								
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others								
Labor Costs								
Salaries & Wages								
Social Insurance								
Others								
Royalties & Charges								
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses								
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY TOTAL	36,157.4	35,270.6	36,436.9	34,336.9	45,237.7	36,539.8	36,012.7	51,778.7
LOCAL CURRENCY (10^3 US$)								
Increase in Working Capital	3,077.9	94.9	1,360.7	2,883.9	0.0	0.0	-0.0	0.0
[INVESTMENT]								
Existing Eq. Replacement	77.1	580.7	112.7	31.0	308.9	60.8	484.4	387.6
Additional Investment	190.4	0.0	[illegible]	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	70.1	11.3	0.0
Sub-total	377.3	580.7	1,140.1	31.0	308.9	130.4	472.4	387.6
[OPERATING COSTS]								
Material & Energy								
Parts	1,411.1	1,411.1	1,762.5	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9
Diesel Oil	705.9	705.9	1,211.4	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4
Gas & Lub.	340.1	340.1	482.9	543.9	543.9	543.9	543.9	543.9
Electricity	1,709.9	2,084.1	2,882.0	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6
Explosives	108.7	108.7	146.3	187.9	187.9	187.9	187.9	187.9
M & E Others	2,380.5	2,380.5	2,901.8	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1
Labor Costs								
Salaries & Wages	2,184.8	2,184.8	2,319.5	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4
Social Insurance	378.2	378.2	460.7	489.2	489.2	489.2	489.2	489.2
Others								
Royalties & Charges	407.9	407.9	541.6	686.1	686.1	686.1	686.1	686.1
Payable Interest								
After Tax Expenses	1,107.8	1,868.8	2,364.7	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4
Sub-total	11,380.8	11,370.8	15,088.7	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8
LOCAL CURRENCY TOTAL	20,658.3	12,289.5	16,387.4	21,438.1	18,846.1	18,670.8	19,011.8	18,904.4
TOTAL	56,842.7	48,139.1	108,288.2	56,858.8	87,877.1	57,338.8	77,026.1	70,188.1

Item	2004	2005	2006	2007	2008	2009	2010	2011
FOREIGN CURRENCY (10^3 Tk)								
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity								
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others								
Labor Costs								
Salaries & Wages								
Social Insurance								
Others								
Royalties & Charges								
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses								
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY (10^3 Tk)								
Increase in Working Capital	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Labor Costs								
Salaries & Wages	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Social Insurance	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Others								
Royalties & Charges	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Payable Interest								
After Tax Expenses	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity								
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others								
Labor Costs								
Salaries & Wages								
Social Insurance								
Others								
Royalties & Charges								
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses								
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY TOTAL	82,740.7	47,144.7	96,378.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY (10^3 US$)								
Increase in Working Capital	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
[INVESTMENT]								
Existing Eq. Replacement	738.0	387.7	776.1	83.1	88.5	71.8	45.5	45.2
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	87.3	0.0	780.5	0.0	38.9	0.0	11.4	92.1
Sub-total	825.3	387.7	1,556.7	83.1	98.9	71.8	57.1	137.1
[OPERATING COSTS]								
Material & Energy								
Parts	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9
Diesel Oil	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4
Gas & Lub.	543.9	543.9	543.9	543.9	543.9	543.9	543.9	543.9
Electricity	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6
Explosives	187.9	187.9	187.9	187.9	187.9	187.9	187.9	187.9
M & E Others	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1
Labor Costs								
Salaries & Wages	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4
Social Insurance	489.2	489.2	489.2	489.2	489.2	489.2	489.2	489.2
Others								
Royalties & Charges	686.1	686.1	686.1	686.1	686.1	686.1	686.1	686.1
Payable Interest								
After Tax Expenses	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4
Sub-total	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8
LOCAL CURRENCY TOTAL	19,400.6	18,970.9	19,845.5	18,904.8	18,698.1	18,606.3	18,680.3	18,477.2
TOTAL	100,160.9	86,986.7	115,348.1	52,880.4	54,648.9	58,446.3	52,804.7	52,273.0

Item	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (10^3 Tk)								
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity								
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others								
Labor Costs								
Salaries & Wages								
Social Insurance								
Others								
Royalties & Charges								
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses								
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY (10^3 Tk)								
Increase in Working Capital	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Labor Costs								
Salaries & Wages	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Social Insurance	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Others								
Royalties & Charges	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Payable Interest								
After Tax Expenses	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Investment	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Additional Replacement	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[OPERATING COSTS]								
Material & Energy								
Parts	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Diesel Oil	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gas & Lub.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Electricity								
Explosives	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
M & E Others								
Labor Costs								
Salaries & Wages								
Social Insurance								
Others								
Royalties & Charges								
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses								
Sub-total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FOREIGN CURRENCY TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LOCAL CURRENCY (10^3 US$)								
Increase in Working Capital	-0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	14,808.0
[INVESTMENT]								
Existing Eq. Replacement	107.0	108.5	377.4	300.6	79.2	448.4	306.4	5,073.7
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,137.0
Additional Replacement	31.0	4.4	881.2	0.0	80.1	0.0	40.8	1,983.6
Sub-total	138.0	109.0	908.1	300.6	109.8	448.4	350.2	8,394.3
[OPERATING COSTS]								
Material & Energy								
Parts	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9	2,138.9	47,108.4
Diesel Oil	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4	1,884.4	36,399.3
Gas & Lub.	543.9	543.9	543.9	543.9	543.9	543.9	543.9	11,770.8
Electricity	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6	3,463.6	76,090.6
Explosives	187.9	187.9	187.9	187.9	187.9	187.9	187.9	4,123.7
M & E Others	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1	3,082.1	51,108.5
Labor Costs								
Salaries & Wages	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4	2,843.4	58,881.1
Social Insurance	489.2	489.2	489.2	489.2	489.2	489.2	489.2	10,988.9
Others								
Royalties & Charges	686.1	686.1	686.1	686.1	686.1	686.1	686.1	14,112.9
Payable Interest								
After Tax Expenses	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4	2,981.4	64,418.0
Sub-total	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8	18,538.8	408,778.9
LOCAL CURRENCY TOTAL	19,142.7	18,641.8	19,448.4	18,848.3	18,708.3	18,948.3	18,978.9	426,860.7
TOTAL	58,483.4	58,443.6	100,047.0	57,381.0	58,131.5	75,888.9	71,947.7	[illegible]

Table 8.6 (1)

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10^3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.0
Overburden (10^3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	365,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10^3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10^3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10^3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.0
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10^3 BCM)	0.0	0.0	5,765.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10^3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden (10^3 BCM)	14,199.2	14,199.2	19,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.0
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10^3 BCM)	17,300.0	17,300.0	23,600.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	28,900.0	656,200.0
[Revenue]																								
Sale Price (Tg/t)	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	4,743.5	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10^6 Tg)	18,974.0	18,974.0	23,717.5	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	28,507.6	631,816.8
[OPERATING COSTS] (10^6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	8,333.6	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	228,272.8
Diesel Oil	811.5	811.5	1,492.9	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	42,416.7
Gas & Lub.	219.0	219.0	403.0	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	11,448.7
Electricity	716.0	810.4	976.7	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,472.6
Explosives	554.8	554.8	758.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	21,042.8
M & E Others	912.2	912.2	1,192.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	874.2	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	21,828.1
Social Insurance	150.5	150.5	150.4	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	3,755.6
Others																								
Royalties & Charges	175.1	175.1	207.6	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	5,455.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,789.2	14,387.6	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	385,107.3
[PROFIT] (10^6 Tg)																								
Before Tax Profit(Loss)	7,359.3	7,284.8	9,329.9	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	236,649.5
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	7,359.3	7,284.8	9,329.9	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	10,634.8	236,649.5
After Tax Expenses	722.7	750.0	904.6	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	24,919.0
Retained Earning(Loss)	6,636.6	6,534.8	8,425.2	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	211,730.4
[INVESTMENT] (10^6 Tg)																								
Existing Ec. Replacement	1,790.4	12,375.9	4,638.3	1,417.2	7,050.2	1,540.9	690.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.2	11,418.2	1,120.1	4,888.2	7,189.4	1,774.6	312.6	2,869.4	83,987.5
Additional Investment	4,515.7	0.0	29,676.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34,192.3
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.1	277.2	0.0	7,812.5	0.0	16,609.1	0.0	670.7	0.0	6,057.9	2,140.0	1,903.6	103.8	14,765.4	0.0	7,880.9	0.0	1,017.1	60,866.3
Total Capital Cost	6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,169.0	967.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	19,653.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
[CASH FLOW] (10^6 Tg)																								
Retained Earning(Loss)	6,636.6	6,534.8	8,425.2	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	9,506.7	211,730.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,169.0	967.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	19,653.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
LESS:Working Capital	3,613.4	36.7	873.1	1,117.2	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-3,282.9	-5,877.8	-26,762.7	6,972.3	2,456.5	6,337.7	8,539.2	7,067.1	-5,499.7	7,676.8	-15,422.5	8,093.6	7,427.7	8,386.2	2,392.2	7,236.4	-3,815.1	8,282.8	-10,146.9	2,317.3	-148.7	9,194.1	5,620.2	27,044.0

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10^6 Tg) NPV = 0.8

Salvage
Reclamation -219.8
Loan Unrepaid 0.0
Working Capital 5,640.4
Equipment 38,822.1
TOTAL 44,242.8

Table 8.6 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(RENOVATION COMBINED)

EQUIPMENT: NEW RAILWAY SYSTEM in 1996
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$) 406.0
TDCX (% 100.0
Coal (% 105.5

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
FOREIGN CURRENCY (1046 TL)												
(INVESTMENT)												
Existing Eq. Replacement	1,759.6	12,182.8	4,358.4	1,392.8	8,938.8	1,514.4	878.4	2,387.6	2,070.0	1,798.4	8,175.8	1,388.0
Additional Investment	4,438.0	0.0	29,365.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,800.0	772.4	0.0	7,878.0	0.0	18,323.2	0.0
Sub-total	8,187.8	12,182.8	33,723.8	1,392.8	8,938.8	3,314.4	1,650.8	2,387.6	14,748.0	1,798.4	26,499.0	1,388.0
(OPERATING COSTS)												
Material & Energy												
Parts	8,838.4	8,838.4	7,848.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3
Diesel Oil	518.7	518.7	850.3	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2
Gas & Lub.	121.0	121.0	232.9	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0
Electricity	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	511.3	511.3	887.5	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total	7,785.4	7,785.4	9,551.8	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2
FOREIGN CURRENCY TOTAL	12,883.0	19,948.2	43,275.8	12,792.0	18,838.0	15,213.8	12,550.0	14,286.8	26,647.2	13,697.8	38,378.3	13,288.0
LOCAL CURRENCY (1045 TL)												
Increase in Working Capital	3,812.4	38.7	873.1	1,117.2	0.0	0.0	0.0	0.0	0.0	-4.0	0.0	0.0
(INVESTMENT)												
Existing Eq. Replacement	30.8	212.1	78.8	36.4	121.4	38.5	11.9	41.0	122.9	31.5	143.7	34.2
Additional Investment	77.3	0.0	511.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	38.0	4.8	0.0	134.5	0.0	388.0	0.0
Sub-total	108.1	212.1	589.8	36.4	121.4	56.8	16.7	42.0	258.4	31.5	428.2	34.2
(OPERATING COSTS)												
Material & Energy												
Parts	584.5	584.5	853.2	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8
Diesel Oil	394.8	394.8	542.3	712.8	712.8	712.8	712.8	712.8	712.8	712.8	712.8	712.8
Gas & Lub.	90.0	90.0	188.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4
Electricity	778.0	818.4	978.7	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5
Explosives	43.5	43.5	50.3	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
M & E Others	812.2	812.2	1,182.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8
Labor Costs												
Salaries & Wages	874.7	874.7	874.2	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3
Social Insurance	150.5	150.5	150.4	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2
Others												
Royalties & Charges	175.1	175.1	307.8	344.9	344.9	344.9	344.9	344.9	344.9	344.9	344.9	344.9
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-
After Tax Expenses	722.7	720.0	904.8	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1
Sub-total	4,551.8	4,851.8	5,741.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7
LOCAL CURRENCY TOTAL	8,273.7	4,893.8	7,365.2	8,843.3	7,373.1	7,150.2	7,118.3	7,148.7	7,308.1	7,133.8	7,530.0	7,131.9
TOTAL	22,258.8	34,851.8	58,489.2	21,530.3	28,251.8	22,119.8	18,988.3	21,440.5	34,097.3	20,820.8	43,938.1	20,414.9
FOREIGN CURRENCY (1043 US$)												
(INVESTMENT)												
Existing Eq. Replacement	4,399.0	28,406.9	11,388.8	2,482.0	17,332.8	3,788.6	1,894.0	5,094.9	17,875.0	4,406.0	28,442.8	3,472.8
Additional Investment	11,895.8	0.0	72,113.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	883.0	0.0	10,195.0	0.0	40,807.8	0.0
Sub-total	15,494.0	28,406.9	84,208.8	2,482.0	17,332.8	7,788.0	2,777.0	5,094.9	28,058.2	4,406.0	11,249.8	3,472.8
(OPERATING COSTS)												
Material & Energy												
Parts	18,591.1	18,591.1	18,290.8	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2
Diesel Oil	1,291.8	1,291.8	2,278.8	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1
Gas & Lub.	302.5	302.5	556.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5
Electricity	-	-	-	-	-	-	-	-	-	-	-	-
Explosives	1,278.2	1,278.2	1,742.7	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total	18,483.5	18,483.8	23,277.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8
FOREIGN CURRENCY TOTAL	34,857.8	48,878.5	********	33,220.8	47,070.0	32,534.0	30,135.0	29,742.8	88,012.0	34,244.0	90,182.8	32,329.9
LOCAL CURRENCY (1043 US$)												
Increase in Working Capital	8,833.4	-31.8	3,182.8	2,783.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
(INVESTMENT)												
Existing Eq. Replacement	73.1	522.7	189.7	83.0	302.5	80.3	28.7	105.0	300.7	78.4	358.2	80.8
Additional Investment	184.4	0.0	1,377.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	70.1	11.9	0.0	338.3	0.0	715.0	0.0
Sub-total	271.5	522.7	1,477.1	83.0	302.5	138.4	41.5	105.0	648.0	78.4	1,073.1	80.8
(OPERATING COSTS)												
Material & Energy												
Parts	1,411.2	1,411.1	1,832.1	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9
Diesel Oil	738.0	738.0	1,355.7	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5
Gas & Lub.	345.1	345.1	458.8	503.5	503.5	503.5	503.5	503.5	503.5	503.5	503.5	503.5
Electricity	1,789.0	2,028.1	3,441.8	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2
Explosives	186.7	186.7	146.3	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0
M & E Others	2,288.5	2,288.5	3,801.3	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1
Labor Costs												
Salaries & Wages	2,188.8	2,188.8	2,185.6	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7
Social Insurance	378.2	378.2	378.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0
Others												
Royalties & Charges	437.0	437.9	519.0	812.2	812.2	812.2	812.2	812.2	812.2	812.2	812.2	812.2
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-
After Tax Expenses	1,888.7	1,825.0	2,381.8	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2
Sub-total	11,379.8	11,834.6	14,352.1	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2
LOCAL CURRENCY TOTAL	20,484.2	12,354.9	18,912.0	20,108.2	18,057.7	17,889.8	17,775.8	17,858.2	18,400.1	17,833.8	18,887.2	17,835.8
TOTAL	55,541.3	87,128.5	********	53,138.7	85,177.8	56,424.6	40,878.1	53,481.7	85,012.1	52,079.1	********	51,135.6

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (1046 TL)												
(INVESTMENT)												
Existing Eq. Replacement	1,384.0	1,101.2	1,036.4	128.0	11,221.0	1,106.0	4,884.0	7,085.6	1,744.0	307.2	2,820.0	82,541.4
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33,802.5
Additional Replacement	458.3	0.0	5,853.6	2,103.3	1,878.8	102.0	14,511.2	0.0	2,745.2	0.0	908.0	58,818.3
Sub-total	1,842.3	1,101.2	6,882.0	2,231.3	13,097.4	1,208.0	19,395.2	7,085.6	4,489.2	307.2	3,810.0	175,093.2
(OPERATING COSTS)												
Material & Energy												
Parts	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	218,378.1
Diesel Oil	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	27,009.1
Gas & Lub.	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	6,324.4
Electricity	-	-	-	-	-	-	-	-	-	-	-	
Explosives	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	19,383.3
M & E Others	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	282,105.9
FOREIGN CURRENCY TOTAL	13,242.4	12,998.4	18,881.2	14,130.4	26,391.0	13,102.0	31,214.4	18,984.8	21,388.4	12,206.4	15,718.8	458,068.1
LOCAL CURRENCY (1045 TL)												
Increase in Working Capital	0.0	0.0	0.0	0.0	0.0	-4.0	0.0	0.0	-4.8	0.0	0.0	5,848.4
(INVESTMENT)												
Existing Eq. Replacement	34.2	18.3	15.8	2.2	108.8	18.3	84.2	123.8	28.8	3.4	40.4	1,448.1
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	584.7
Additional Replacement	11.5	0.0	104.3	36.8	32.8	1.8	254.7	0.0	125.7	0.0	17.5	1,048.0
Sub-total	45.8	18.3	122.5	39.1	140.4	20.1	338.4	123.8	154.5	3.4	58.0	3,082.5
(OPERATING COSTS)												
Material & Energy												
Parts	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	17,892.7
Diesel Oil	712.8	712.8	712.8	712.8	712.8	712.8	712.8	712.8	712.8	712.8	712.8	15,497.6
Gas & Lub.	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	5,124.3
Electricity	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,472.0
Explosives	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	1,648.5
M & E Others	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs												
Salaries & Wages	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	988.3	21,822.1
Social Insurance	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	3,756.8
Others												
Royalties & Charges	344.9	344.9	344.9	344.9	344.9	344.9	344.9	344.9	344.9	344.9	344.9	7,455.5
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	1,128.1	34,918.0
Sub-total	7,101.7	7,101.7	7,141.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	7,101.7	154,988.4
LOCAL CURRENCY TOTAL	7,137.5	7,121.9	7,314.2	7,149.8	7,181.1	7,112.7	7,448.1	7,225.5	7,387.8	7,192.1	7,188.8	165,792.7
TOTAL	21,078.8	20,121.4	28,115.4	22,271.2	28,822.6	28,224.7	28,854.4	28,198.8	28,858.3	18,313.5	27,887.4	604,772.8
FOREIGN CURRENCY (1043 US$)												
(INVESTMENT)												
Existing Eq. Replacement	3,498.9	2,753.8	2,574.0	380.0	28,853.9	2,752.0	12,910.8	17,884.9	4,385.0	758.0	2,858.0	206,252.5
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84,808.8
Additional Replacement	1,848.9	0.0	14,884.0	5,258.0	4,877.0	255.0	28,277.8	0.0	18,282.0	0.0	2,482.0	142,545.8
Sub-total	5,198.0	2,753.0	17,458.0	5,378.0	32,730.9	3,007.0	40,287.8	17,884.9	22,723.8	758.0	5,340.0	438,847.8
(OPERATING COSTS)												
Material & Energy												
Parts	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	22,878.2	505,947.7
Diesel Oil	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	57,522.7
Gas & Lub.	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	15,811.1
Electricity	-	-	-	-	-	-	-	-	-	-	-	
Explosives	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	2,200.2	46,483.2
M & E Others	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs												
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	
Others												
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	29,748.8	657,764.8
FOREIGN CURRENCY TOTAL	34,894.0	32,501.9	47,226.0	35,378.0	52,478.1	32,755.9	38,936.0	42,612.0	53,478.0	38,518.0	21,287.0	1,087,872.7
LOCAL CURRENCY (1043 US$)												
Increase in Working Capital	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	14,191.1
(INVESTMENT)												
Existing Eq. Replacement	98.5	48.2	45.5	3.6	401.5	48.2	218.4	288.5	78.4	33.6	123.5	3,618.7
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,471.8
Additional Replacement	38.7	0.0	308.8	32.1	85.0	4.5	635.8	0.0	330.2	0.0	43.8	2,620.8
Sub-total	80.5	48.2	306.2	77.7	373.4	52.7	848.8	288.5	415.6	33.6	167.3	7,702.8
(OPERATING COSTS)												
Material & Energy												
Parts	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	2,012.9	44,734.2
Diesel Oil	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	38,510.1
Gas & Lub.	503.5	503.5	503.5	503.5	503.5	503.5	503.5	503.5	503.5	503.5	503.5	12,010.7
Electricity	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	71,181.5
Explosives	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	187.0	4,132.7
M & E Others	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	81,182.0
Labor Costs												
Salaries & Wages	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	2,498.7	54,572.8
Social Insurance	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	8,388.0
Others												
Royalties & Charges	812.2	812.2	812.2	812.2	812.2	812.2	812.2	812.2	812.2	812.2	812.2	18,536.0
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	2,820.2	62,297.0
Sub-total	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	17,734.2	382,451.8
LOCAL CURRENCY TOTAL	17,843.7	17,802.4	18,808.4	17,851.8	18,372.8	17,806.9	18,080.2	18,001.3	18,190.8	17,787.8	17,921.5	414,258.2
TOTAL	52,888.7	50,303.4	85,288.4	53,177.0	80,686.5	56,581.0	86,636.1	85,475.8	71,540.8	48,283.8	57,318.5	1,511,832.9

Table 8.7 (1)

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 2002

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCK (%): 100.0
Coal (%): 100.0

	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	6,909.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	15,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.8
Stripping Ratio (BCM/t)	3.5	3.5	3.5	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,608.0	25,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,209.0
[Revenue]																								
Sale Price (Tg/t)	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	4,781.0	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,124.0	19,124.0	23,905.0	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	28,732.9	636,811.6
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	8,691.6	10,853.4	10,853.4	10,853.4	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	230,560.5
Diesel Oil	811.5	811.5	1,334.0	1,900.8	1,900.8	1,900.8	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	41,765.2
Gas & Lub.	219.0	219.0	360.1	486.1	486.1	486.1	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	11,272.9
Electricity	716.0	810.4	1,052.8	1,387.5	1,387.5	1,387.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,815.6
Explosives	554.8	554.8	756.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	21,042.8
M & E Others	912.2	912.2	1,192.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	1,047.8	1,137.4	1,137.4	1,137.4	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	22,534.0
Social Insurance	150.5	150.5	180.3	195.7	195.7	195.7	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	3,876.8
Others																								
Royalties & Charges	175.1	175.1	216.6	254.0	254.0	254.0	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	5,491.8
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,769.2	15,032.4	18,546.5	18,546.5	18,546.5	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	397,833.1
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	7,549.3	7,414.8	8,872.6	10,186.5	10,186.5	10,186.5	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	238,978.5
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	7,549.3	7,414.8	8,872.6	10,186.5	10,186.5	10,186.5	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	10,860.1	238,978.5
After Tax Expenses	722.7	730.1	841.7	1,166.9	1,166.9	1,166.9	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	25,078.1
Retained Earning(Loss)	6,786.6	6,684.7	7,930.9	9,019.5	9,019.5	9,019.5	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	213,900.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,790.4	12,375.9	5,033.9	1,417.2	7,116.1	1,540.9	690.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.3	11,418.2	1,120.1	4,888.2	7,189.4	1,774.5	312.6	2,869.4	84,449.1
Additional Investment	6,419.3	0.0	21,684.1	0.0	0.0	0.0	5,787.6	0.0	3,293.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37,154.5
Additionmal Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	2,180.7	0.0	2,024.9	0.0	17,867.8	0.0	2,574.3	0.0	6,057.9	2,140.0	1,903.6	103.8	17,727.6	0.0	2,093.2	0.0	6,804.8	52,906.6
Total Capital Cost	8,209.7	12,375.9	26,718.0	1,417.2	7,116.1	3,169.0	8,658.7	2,439.6	12,482.1	1,829.9	25,987.8	1,413.1	3,982.6	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	22,615.8	7,189.4	3,867.6	312.6	9,674.2	184,510.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	6,786.6	6,684.7	7,930.9	9,019.5	9,019.5	9,019.5	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	9,731.8	213,900.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	8,209.7	12,375.9	26,718.0	1,417.2	7,116.1	3,169.0	8,658.7	2,439.6	12,482.1	1,829.9	25,987.8	1,413.1	3,982.6	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	22,615.8	7,189.4	3,867.6	312.6	9,674.2	184,510.1
LESS:Working Capital	3,613.7	36.5	1,058.1	1,126.1	0.0	0.0	-152.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-5,036.8	-5,728.1	-19,845.2	6,476.3	1,903.4	5,850.6	1,265.8	7,292.2	-2,750.3	7,901.8	-16,255.1	8,318.6	5,749.2	8,611.3	2,617.3	7,461.5	-3,590.0	8,507.9	-12,884.0	2,542.4	5,864.0	9,419.2	57.6	23,748.4

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 2.3 (%) EIRR = 10.0

Salvage	0.0
Reclamation	-219.8
Loan Unrepaid	0.0
Working Capital	5,642.9
Equipment	41,165.1
TOTAL	46,587.3

Table 8.7 (2)

ECONOMIC ANALYSIS
FOREIGN & LOCAL CURRENCY
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 2002
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$) 400.0
TDCN (Y) 100.0
Coal (Y) 100.0

	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (10^6 Tg)																								
(INVESTMENT)																								
Existing Eq. Replacement	1,750.6	12,182.8	4,947.2	1,302.8	8,893.5	1,514.4	878.4	2,397.8	7,070.0	1,798.4	2,178.8	1,388.8	1,384.0	1,101.2	1,028.4	128.8	11,221.8	1,100.8	4,804.0	7,045.8	1,744.0	307.2	2,820.0	82,895.0
Additional Investment	8,308.8	0.0	21,310.7	0.0	0.0	0.0	5,488.0	0.0	3,207.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38,314.7
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,800.0	2,143.2	0.0	1,990.0	0.0	17,383.9	0.0	2,530.0	0.0	5,953.8	2,102.2	1,878.8	182.0	17,422.4	0.0	2,057.2	0.0	6,887.8	61,823.5
Sub-total	8,066.4	12,182.8	29,257.9	1,302.8	8,893.8	3,314.4	8,509.8	2,397.8	12,287.2	1,798.4	25,549.3	1,388.8	3,914.0	1,101.2	6,982.0	2,231.2	13,099.4	1,282.8	22,226.3	7,045.8	3,801.2	307.2	9,707.8	181,333.2
(OPERATING COSTS)																								
Material & Energy																								
Parts	8,838.4	8,838.4	8,194.8	10,002.7	10,002.7	10,002.7	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	8,471.3	212,487.4
Diesel Oil	518.7	518.7	849.4	1,148.7	1,148.7	1,148.7	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	1,251.2	28,594.2
Gas & Lub.	121.0	121.0	198.8	288.5	288.5	288.5	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	293.0	6,227.3
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	511.3	511.3	807.5	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	883.7	19,392.3
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	7,785.4	7,785.4	8,840.4	12,301.5	12,301.5	12,301.5	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	11,899.2	254,702.2
FOREIGN CURRENCY TOTAL	15,851.8	19,948.2	38,198.3	13,694.3	18,295.1	15,415.9	20,408.8	14,278.8	24,188.4	13,697.8	37,438.5	13,288.0	15,813.2	13,000.4	18,881.2	14,130.4	24,981.8	13,192.0	34,125.5	18,944.8	15,700.4	12,206.4	21,408.8	448,035.4
LOCAL CURRENCY (10^6 Tg)																								
Increase in Working Capi	3,013.7	38.8	1,058.1	1,128.1	0.0	0.0	-182.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	5,042.0
(INVESTMENT)																								
Existing Eq. Replacement	30.6	273.1	88.7	34.4	122.5	28.5	11.9	42.0	133.9	31.5	143.3	34.3	34.3	18.3	18.2	2.2	198.8	18.3	84.2	123.8	30.8	5.4	48.4	1,454.1
Additional Investment	110.5	0.0	371.4	0.0	0.0	0.0	99.7	0.0	58.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	638.7
Additional Replacement	0.0	0.0	0.0	0.0	0.0	28.0	37.5	0.0	34.9	0.0	304.2	0.0	44.7	0.8	104.3	38.6	32.8	1.8	305.2	0.0	38.9	0.0	117.9	1,083.1
Sub-total	141.4	273.1	460.8	34.4	122.5	54.5	149.1	42.0	214.9	31.5	447.5	34.3	88.0	18.3	122.5	38.1	231.4	21.1	389.4	123.8	69.8	5.4	166.3	3,177.0
(OPERATING COSTS)																								
Material & Energy																								
Parts	584.5	584.5	887.0	850.8	850.8	850.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	805.8	18,073.1
Diesel Oil	294.8	294.8	454.4	854.1	854.1	854.1	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	713.8	15,171.0
Gas & Lub.	98.0	98.0	181.2	217.8	217.8	217.8	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	237.4	5,043.8
Electricity	718.0	810.4	1,052.2	1,387.5	1,387.5	1,387.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,815.8
Explosives	43.5	43.5	58.3	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	1,849.5
M & E Others	812.2	912.2	1,182.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	1,047.8	1,137.4	1,137.4	1,137.4	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	22,534.0
Social Insurance	150.5	150.5	180.3	195.7	195.7	195.7	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	185.2	2,878.8
Others																								
Royalties & Charges	175.1	175.1	210.8	254.0	254.0	254.0	244.9	244.9	244.9	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	244.0	5,482.0
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	722.7	730.1	941.7	1,186.0	1,186.9	1,188.9	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	1,128.4	25,978.1
Sub-total	4,552.9	4,853.9	8,093.7	7,411.0	7,411.0	7,411.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	7,102.0	158,708.0
LOCAL CURRENCY TOTAL	4,307.0	4,893.9	7,551.3	8,582.4	7,534.4	7,458.5	7,058.3	7,144.0	7,318.0	7,133.5	7,549.4	7,128.3	7,120.0	7,121.3	7,224.5	7,141.1	7,391.4	7,172.1	7,491.4	7,225.8	7,188.3	7,197.4	7,268.8	187,092.0
TOTAL	34,180.8	34,852.1	43,750.2	22,251.7	28,828.5	22,882.4	21,487.1	21,440.8	31,482.3	20,831.1	44,988.0	20,414.3	22,883.7	20,121.7	20,115.7	21,271.5	32,372.8	20,225.8	41,618.2	28,190.1	22,888.9	18,312.8	28,875.3	872,083.3
FOREIGN CURRENCY (10^3 US$)																								
(INVESTMENT)																								
Existing Eq. Replacement	4,399.0	30,498.0	12,384.0	3,482.0	17,484.0	2,788.0	1,898.0	5,894.0	17,875.0	4,498.0	25,442.0	3,472.0	3,480.0	2,751.0	2,398.0	320.8	28,052.8	2,732.0	12,010.0	17,884.0	4,380.0	758.0	7,050.0	207,487.5
Additional Investment	15,772.0	0.0	53,278.0	0.0	0.0	0.0	14,220.0	0.0	8,018.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	91,288.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	5,358.0	0.0	4,875.0	0.0	43,408.3	0.0	8,325.0	0.0	14,884.0	5,258.0	4,877.0	255.0	42,555.8	0.0	5,143.0	0.0	18,718.0	154,558.8
Sub-total	20,171.0	30,498.9	65,644.8	3,482.0	17,484.0	7,788.0	21,273.8	5,894.0	30,987.8	4,498.0	68,850.8	3,472.0	8,385.0	2,753.0	17,482.0	5,578.0	32,730.0	3,007.0	56,565.8	17,884.0	8,502.0	758.0	23,788.0	453,332.0
(OPERATING COSTS)																								
Material & Energy																								
Parts	18,591.1	18,591.1	20,488.5	25,008.8	25,008.8	25,008.8	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	23,878.2	531,218.0
Diesel Oil	1,291.8	1,291.8	2,122.8	2,888.7	2,888.7	2,888.7	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	3,128.1	68,483.5
Gas & Lub.	302.5	302.5	497.3	871.3	871.3	871.3	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	732.5	15,584.2
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	1,278.2	1,278.2	1,743.7	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	2,209.2	48,483.2
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	18,483.8	18,483.8	24,851.0	30,753.8	30,753.8	30,753.8	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	29,748.0	661,755.8
FOREIGN CURRENCY TOTAL	38,324.8	41,878.5	90,495.1	34,235.8	48,237.7	38,538.8	51,021.8	35,742.0	60,735.8	34,244.0	98,598.8	32,220.0	38,533.2	32,501.0	47,228.0	35,326.0	62,478.8	32,755.0	85,313.8	47,412.0	38,251.0	30,518.0	53,518.8	1,115,088.5
LOCAL CURRENCY (10^3 US$)																								
Increase in Working Capi	8,034.1	92.3	2,845.1	2,615.1	0.0	0.0	-481.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	13,104.8
(INVESTMENT)																								
Existing Eq. Replacement	77.1	532.7	218.7	81.0	308.3	68.3	29.7	105.0	300.7	78.8	354.1	90.8	80.8	48.2	45.5	3.8	401.5	48.2	210.4	308.5	78.4	13.5	122.5	3,835.2
Additional Investment	278.3	0.0	933.4	0.0	0.0	0.0	348.1	0.0	348.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,908.3
Additional Replacement	0.0	0.0	0.0	0.0	0.0	70.1	93.9	0.0	87.2	0.0	780.5	0.0	110.8	0.0	284.8	82.1	41.8	4.5	783.1	0.0	86.1	0.0	292.0	2,707.9
Sub-total	353.4	532.7	1,150.1	81.0	308.3	138.4	372.7	105.0	537.3	78.8	1,118.7	90.8	171.4	48.2	308.7	87.7	573.4	52.7	773.5	308.5	188.5	13.5	414.4	7,842.4
(OPERATING COSTS)																								
Material & Energy																								
Parts	1,412.1	1,412.1	1,742.5	2,128.9	2,128.9	2,128.9	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	2,013.0	45,182.8
Diesel Oil	738.9	738.9	1,211.4	1,835.4	1,835.4	1,835.4	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	1,784.5	37,877.4
Gas & Lub.	345.1	345.1	402.8	543.8	543.8	543.8	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	593.5	12,834.9
Electricity	1,780.8	2,028.1	2,832.0	3,488.8	3,488.8	3,488.8	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	3,248.2	72,030.8
Explosives	108.7	108.7	148.3	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	187.8	4,122.7
M & E Others	2,280.5	2,280.5	2,981.3	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	3,882.1	81,183.5
Labor Costs																								
Salaries & Wages	2,188.8	2,188.8	2,819.5	2,843.4	2,843.4	2,843.4	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	2,400.7	58,325.1
Social Insurance	378.2	378.2	450.7	480.2	480.2	480.2	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	413.0	8,892.1
Others																								
Royalties & Charges	437.9	437.9	541.5	635.1	635.1	635.1	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	612.2	13,720.8
Payable Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
After Tax Expenses	1,806.8	1,825.3	2,354.3	2,817.3	2,817.3	2,817.3	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	2,821.0	62,895.1
Sub-total	11,380.0	11,834.0	15,084.2	18,529.8	18,529.8	18,529.8	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	17,755.0	392,522.3
LOCAL CURRENCY TOTAL	20,767.5	12,259.7	18,879.5	21,405.8	18,838.1	18,668.2	17,645.9	17,860.0	18,292.3	17,833.7	18,872.6	17,815.8	17,926.4	17,803.2	18,061.7	17,832.7	18,328.4	17,807.6	18,728.5	18,094.4	17,871.4	17,768.4	18,171.4	417,589.8
TOTAL	59,402.1	52,130.2	********	55,641.7	67,073.8	57,206.8	68,667.8	53,601.9	78,708.2	52,077.7	********	51,035.8	57,458.4	50,304.2	65,288.2	53,178.7	80,407.3	50,562.8	********	65,478.4	57,172.4	48,284.4	71,688.2	1,532,654.1

Table 8.8 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:
REVALUATION OF ASSETS

BAGANJUR COAL MINE RENOVATION PROJECT

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	4,828.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,312.4	19,312.4	18,603.8	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	17,942.5	416,078.7
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	6,348.9	6,348.9	6,343.5	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	6,554.3	150,128.4
Diesel Oil	811.5	811.5	897.0	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	21,055.4
Gas & lub.	219.0	219.0	242.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	5,683.1
Electricity	716.0	810.4	910.1	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	23,724.1
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	869.0	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	20,341.9
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,495.7
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	3,850.7
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	10,762.7	10,857.2	11,098.6	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	11,568.5	284,088.8
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	8,549.7	8,455.2	7,505.2	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	151,990.1
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	8,549.7	8,455.2	7,505.2	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	6,374.0	151,990.1
After Tax Expenses	668.8	677.2	693.5	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	723.2	16,504.8
Retained Earning(Loss)	7,879.9	7,778.0	6,811.7	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	135,485.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,566.5	10,828.9	4,404.5	1,240.0	6,226.6	1,348.3	9,465.3	7,472.7	16,030.2	5,837.3	7,626.2	1,236.5	1,285.9	1,459.1	924.5	921.7	10,712.1	2,105.1	4,623.3	6,290.7	1,618.4	9,134.8	7,041.1	119,395.8
Additional Investment	4,515.7	0.0	1,058.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,574.4
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	1,903.6	0.0	3,030.6	0.0	128.2	0.0	0.0	2,140.0	1,903.6	0.0	1,186.8	0.0	1,971.9	0.0	0.0	14,021.0
Total Capital Cost	6,082.4	10,828.9	5,463.3	1,240.0	6,226.6	2,976.3	9,593.5	7,472.7	17,933.7	5,837.3	10,656.8	1,236.5	1,418.1	1,459.1	924.5	3,061.7	12,615.6	2,105.1	5,810.1	6,290.7	3,582.4	9,134.8	7,041.1	138,991.2
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	7,879.9	7,778.0	6,811.7	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	5,650.8	135,485.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,082.4	10,828.9	5,463.3	1,240.0	6,226.6	2,976.3	9,593.5	7,472.7	17,933.7	5,837.3	10,656.8	1,236.5	1,418.1	1,459.1	924.5	3,061.7	12,615.6	2,105.1	5,810.1	6,290.7	3,582.4	9,134.8	7,041.1	138,991.2
LESS:Working Capital	3,349.0	37.2	81.3	148.6	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-1,551.5	-3,088.1	1,267.2	4,262.1	-575.8	2,674.5	-3,942.7	-1,821.4	-12,283.0	-186.6	-5,696.0	4,414.3	4,232.7	4,191.7	4,726.3	2,589.1	-6,964.8	3,545.7	-158.3	-635.9	2,068.4	-3,484.0	-1,350.3	-7,121.9

		(%) EIRR =	10.0
Discount Rate (%) =	10.0	(10*6 Tg) NPV =	-1.5

Salvage	
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3,616.1
Equipment	37,609.2
TOTAL	41,085.6

Table 8.8 (2)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	96,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	96,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	4,600.0	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	18,400.0	18,400.0	17,724.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	17,094.8	396,421.4
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	6,348.9	6,348.9	6,012.7	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	142,960.1
Diesel Oil	811.5	811.5	1,055.9	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	24,498.6
Gas & Lub.	219.0	219.0	285.0	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,612.4
Electricity	718.0	819.4	834.0	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	21,868.5
Explosives	554.8	554.8	573.8	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	895.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,626.6
Social Insurance	150.5	150.5	119.6	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	175.1	175.1	161.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,658.3
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	10,762.7	10,857.2	10,681.0	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	11,123.6	254,892.9
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	7,637.3	7,542.8	7,043.8	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	141,528.5
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	7,637.3	7,542.8	7,043.8	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	5,965.2	141,528.5
After Tax Expenses	669.4	676.6	665.5	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	698.1	15,978.3
Retained Earning(Loss)	6,967.8	6,866.2	6,378.3	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	125,550.2
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,566.6	10,828.9	4,058.5	1,240.0	6,168.9	1,348.3	604.0	2,134.7	6,294.6	1,601.2	7,290.0	1,236.5	1,232.2	980.4	924.5	114.0	9,550.9	980.1	4,277.1	6,290.7	1,552.7	273.5	2,510.7	73,483.1
Additional Investment	4,515.7	0.0	9,051.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,566.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	7,691.2	0.0	1,971.9	0.0	128.2	0.0	5,787.6	2,140.0	1,303.6	0.0	128.2	0.0	7,759.6	0.0	0.0	28,286.7
Total Capital Cost	6,082.4	10,828.9	13,109.5	1,240.0	6,168.9	2,976.3	732.2	2,134.7	13,985.8	1,601.2	9,252.0	1,236.5	1,360.4	980.4	6,712.2	2,254.0	11,854.5	980.1	4,405.3	6,290.7	9,312.3	273.5	2,510.7	116,322.5
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	6,967.8	6,866.2	6,378.3	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	5,267.1	125,550.2
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,082.4	10,828.9	13,109.5	1,240.0	6,168.9	2,976.3	732.2	2,134.7	13,985.8	1,601.2	9,252.0	1,236.5	1,360.4	980.4	6,712.2	2,254.0	11,854.5	980.1	4,405.3	6,290.7	9,312.3	273.5	2,510.7	116,322.5
LESS:Working Capital	3,347.2	36.0	-33.9	141.3	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,461.8	-3,998.7	-6,701.7	3,885.8	-901.8	2,290.8	4,534.9	3,132.5	-8,718.7	3,665.9	-3,984.9	4,030.5	3,906.7	4,286.7	-1,445.0	3,013.1	-5,627.4	4,287.0	861.8	-1,023.6	-4,045.2	4,993.6	2,756.4	5,737.1

(%) EIRR = 18.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = -1.5

Salvage	
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3,490.6
Equipment	27,125.3
TOTAL	30,476.2

Table 8.8 (3)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 2002

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,399.0	17,399.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,399.0	17,399.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	4,633.8	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	18,535.2	18,535.2	17,855.1	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	17,220.4	358,334.2
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	6,348.9	6,348.9	6,343.5	6,554.3	6,554.3	6,554.3	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	6,212.5	144,316.3
Diesel Oil	811.5	811.5	897.0	928.8	928.8	928.8	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	23,847.0
Gas & Lub.	219.0	219.0	242.1	250.1	250.1	250.1	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,436.6
Electricity	718.0	818.4	918.1	1,064.4	1,064.4	1,064.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	22,211.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,285.8
Labor Costs																								
Salaries & Wages	874.7	874.7	869.0	886.2	886.2	886.2	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	17,331.5
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,981.8
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,695.3
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	10,762.7	10,857.2	11,098.6	11,568.5	11,568.5	11,568.5	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	11,129.6	256,627.2
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	7,772.5	7,678.0	6,756.5	5,651.9	5,651.9	5,651.9	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	142,797.1
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	7,772.5	7,678.0	6,756.5	5,651.9	5,651.9	5,651.9	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	6,090.8	142,797.1
After Tax Expenses	669.5	676.7	692.8	722.2	722.2	722.2	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	698.3	16,076.5
Retained Earning(Loss)	7,103.0	7,001.3	6,063.8	4,929.7	4,929.7	4,929.7	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	126,630.5
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,585.6	16,828.9	4,404.6	1,240.0	6,226.6	1,348.3	604.0	2,134.7	6,234.6	1,601.2	7,280.0	1,236.5	1,232.2	980.4	924.5	114.0	9,990.9	980.1	4,277.1	6,290.7	1,552.7	273.5	2,510.7	73,892.9
Additional Investment	5,419.3	0.0	1,056.6	0.0	0.0	0.0	5,787.6	0.0	3,263.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,529.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	2,031.8	0.0	1,983.6	0.0	3,030.6	0.0	2,031.8	0.0	5,787.6	2,140.0	1,903.6	0.0	3,090.4	0.0	1,971.9	0.0	5,787.6	31,307.0
Total Capital Cost	7,985.9	16,828.9	5,463.3	1,240.0	6,226.6	2,976.3	8,423.4	2,134.7	11,481.6	1,601.2	10,310.6	1,236.5	3,264.0	980.4	6,712.2	2,254.0	11,894.5	980.1	7,367.5	6,290.7	3,524.7	273.5	8,298.4	121,728.9
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	7,103.0	7,001.3	6,063.8	4,929.7	4,929.7	4,929.7	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	5,392.6	126,630.5
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	7,985.9	10,828.9	5,463.3	1,240.0	6,226.6	2,976.3	8,423.4	2,134.7	11,481.6	1,601.2	10,310.6	1,236.5	3,264.0	980.4	6,712.2	2,254.0	11,894.5	980.1	7,367.5	6,290.7	3,524.7	273.5	8,298.4	121,728.9
LESS:Working Capital	3,347.5	36.1	80.2	147.4	0.0	0.0	-119.7	0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	-0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-4,230.5	-3,863.8	520.4	3,542.3	-1,296.9	1,953.4	-2,911.2	3,257.9	-6,069.0	3,791.4	-4,918.1	4,156.1	2,128.6	4,412.1	-1,319.6	3,138.5	-6,501.9	4,412.5	-1,975.0	-898.1	1,867.9	5,119.0	-2,905.8	1,410.2

Salvage	32,820.0
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3,491.4
Equipment	28,468.2
TOTAL	

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 1.3

Table 8.9 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																									
A Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio	(BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation	(10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal	(10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden	(10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio	(BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation	(10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio	(BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation	(10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																									
Sale Price	(Tg/t)	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	4,399.0	
Trade Tax	(Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit	(10*6 Tg)	17,596.0	17,596.0	16,950.3	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	16,347.9	379,099.5
[OPERATING COSTS]	(10*6 Tg)																								
Material & Energy																									
Parts		5,487.0	5,487.0	5,519.0	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	5,702.4	130,561.4
Diesel Oil		811.5	811.5	897.0	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	21,055.4
Gas & Lub.		219.0	219.0	242.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	5,883.1
Electricity		716.0	810.4	910.1	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	23,724.1
Explosives		554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others		912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																									
Salaries & Wages		874.7	874.7	869.0	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	20,341.9
Social Insurance		150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,495.7
Others																									
Royalties & Charges		175.1	175.1	179.1	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	3,850.7
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																									
Past Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs		9,310.8	10,005.2	10,274.1	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	10,716.7	244,523.5
[PROFIT]	(10*6 Tg)																								
Before Tax Profit(Loss)		7,685.2	7,590.8	6,676.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	134,576.0
Corporate Income Tax	(0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)		7,685.2	7,590.8	6,676.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	5,631.2	134,576.0
After Tax Expenses		616.1	623.1	640.6	668.0	668.0	666.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	668.0	15,240.6
Retained Earning(Loss)		7,069.1	6,967.7	6,035.7	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	119,335.3
[INVESTMENT]	(10*6 Tg)																								
Existing Eq. Replacement		1,342.8	9,281.9	3,775.4	1,062.9	5,337.1	1,155.7	8,113.1	6,405.2	13,740.2	5,003.4	6,536.7	1,059.8	1,105.6	1,250.6	792.4	790.0	9,181.8	1,804.4	3,962.8	5,392.0	1,380.4	7,829.8	6,035.2	102,339.3
Additional Investment		4,515.7	0.0	1,058.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,574.4
Additional Replacement		0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	1,903.5	0.0	3,030.6	0.0	128.2	0.0	0.0	2,140.0	1,903.6	0.0	1,186.8	0.0	1,971.5	0.0	0.0	14,021.0
Total Capital Cost		5,858.5	9,281.9	4,834.0	1,062.9	5,337.1	2,783.7	8,241.3	6,405.2	15,643.7	5,003.4	9,567.3	1,059.8	1,233.8	1,250.6	792.4	2,930.0	11,085.3	1,804.4	5,149.7	5,392.0	3,352.3	7,829.8	6,035.2	121,934.6
[CASH FLOW]	(10*6 Tg)																								
Retained Earning(Loss)		7,069.1	6,967.7	6,035.7	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	4,963.1	119,335.3
Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost		5,858.5	9,281.9	4,834.0	1,062.9	5,337.1	2,783.7	8,241.3	6,405.2	15,643.7	5,003.4	9,567.3	1,059.8	1,233.8	1,250.6	792.4	2,930.0	11,085.3	1,804.4	5,149.7	5,392.0	3,352.3	7,829.8	6,035.2	121,934.6
LESS:Working Capital		3,080.6	34.9	87.4	137.4	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow		-1,879.0	-2,348.1	1,114.2	3,762.9	-373.9	2,179.4	-3,278.1	-1,442.0	-10,580.6	-40.3	-4,604.2	3,903.3	3,729.3	3,712.5	4,170.7	2,033.1	-6,122.2	3,158.8	-186.5	-428.9	1,610.8	-2,866.7	-1,072.1	-5,929.5

(%) EIRR =		10.0
Discount Rate (%) = 10.0	(10*6 Tg) NPV =	-0.4

Salvage	
Reclamation	-138.7
Loan Unrepaid	0.0
Working Capital	3,340.2
Equipment	32,694.0
TOTAL	35,894.6

Table 8.9 (2)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	4,283.9	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	17,135.6	17,135.6	16,506.8	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	15,920.1	369,180.3
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	5,497.0	5,497.0	5,415.5	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	128,318.0
Diesel Oil	811.5	811.5	1,055.9	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	24,496.6
Gas & Lub.	219.0	219.0	285.0	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,612.4
Electricity	716.0	810.4	834.0	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	21,868.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	695.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,626.6
Social Insurance	150.5	150.5	119.6	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	175.1	175.1	161.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,658.9
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	9,913.8	10,005.2	10,083.8	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	240,250.8
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	7,224.8	7,130.4	6,423.0	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	128,929.6
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	7,224.8	7,130.4	6,423.0	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	5,407.6	128,929.6
After Tax Expenses	615.9	622.8	651.5	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	658.1	15,032.7
Retained Earning(Loss)	6,608.9	6,507.6	5,771.5	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	113,896.8
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,342.8	5,281.9	3,478.7	1,062.9	5,287.6	1,155.7	517.7	1,828.7	5,385.4	1,372.4	6,240.0	1,658.8	1,056.2	840.4	792.4	97.7	8,563.6	840.1	3,666.1	5,392.0	1,330.9	234.4	2,152.0	62,590.6
Additional Investment	4,515.7	0.0	9,051.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,566.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	7,691.2	0.0	1,971.9	0.0	128.2	0.0	5,787.6	2,140.0	1,903.6	0.0	128.2	0.0	7,759.6	0.0	0.0	28,266.7
Total Capital Cost	5,858.5	5,281.9	12,529.7	1,062.9	5,287.6	2,783.7	645.9	1,828.7	13,086.6	1,372.4	8,212.0	1,658.8	1,184.4	840.4	6,580.1	2,237.7	10,467.2	840.1	3,794.3	5,392.0	9,090.5	234.4	2,152.0	105,824.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	6,608.5	6,507.6	5,771.5	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	4,749.4	113,896.8
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	5,858.6	9,281.9	12,529.7	1,062.9	5,287.6	2,783.7	645.9	1,828.7	13,086.6	1,372.4	8,212.0	1,658.8	1,184.4	840.4	6,580.1	2,237.7	10,467.2	840.1	3,794.3	5,392.0	9,090.5	234.4	2,152.0	105,824.1
LESS:Working Capital	3,079.6	34.3	43.6	139.1	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,329.3	-2,808.6	-6,781.8	3,553.4	-538.2	1,965.7	4,103.5	2,919.7	-8,337.2	3,377.0	-3,462.5	3,589.6	3,565.1	3,995.1	-1,830.6	2,511.7	-5,717.6	3,909.4	955.1	-642.6	-4,341.1	4,515.0	2,597.4	4,782.2

(%) EIRR = 16.0
Discount Rate (%) = 10.0 (10*6 Tg) NPV = 0.3

Salvage	
Reclamation	-139.7
Loan Repaid	0.0
Working Capital	3,290.6
Equipment	24,380.1
TOTAL	27,531.0

Table 8.9 (3)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 2002

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																									
A Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	14,159.2	14,159.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio	(BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation	(10*3 BCM)	17,300.0	17,300.0	17,854.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal	(10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden	(10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio	(BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation	(10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	14,159.2	14,159.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio	(BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation	(10*3 BCM)	17,300.0	17,300.0	17,854.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																									
Sale Price	(Tg/t)	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	4,296.5	
Trade Tax	(Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit	(10*6 Tg)	17,186.0	17,186.0	16,555.4	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	15,966.9	370,266.2
[OPERATING COSTS]	(10*6 Tg)																								
Material & Energy																									
Parts		5,497.0	5,497.0	5,519.0	5,702.4	5,702.4	5,702.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	5,595.4	128,742.5
Diesel Oil		811.5	811.5	897.0	926.8	926.8	926.8	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	23,847.0
Gas & Lub.		219.0	219.0	242.1	250.1	250.1	250.1	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,436.6
Electricity		716.0	910.4	910.1	1,064.4	1,064.4	1,064.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	22,211.5
Explosives		554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others		912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																									
Salaries & Wages		874.7	874.7	869.0	886.2	886.2	886.2	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	17,331.5
Social Insurance		150.5	150.5	149.5	152.5	152.5	152.5	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,981.8
Others																									
Royalties & Charges		175.1	175.1	170.1	166.5	166.5	166.5	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,695.3
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																									
Past Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs		9,910.8	10,005.2	10,274.1	10,716.7	10,716.7	10,716.7	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	10,512.5	241,053.4
[PROFIT]	(10*6 Tg)																								
Before Tax Profit(Loss)		7,275.2	7,180.8	6,281.3	5,250.3	5,250.3	5,250.3	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	129,212.8
Corporate Income Tax (0%)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)		7,275.2	7,180.8	6,281.3	5,250.3	5,250.3	5,250.3	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	5,454.4	129,212.8
After Tax Expenses		615.9	622.8	640.2	667.5	667.5	667.5	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	658.2	15,070.7
Retained Earning(Loss)		6,659.3	6,557.9	5,641.1	4,582.7	4,582.7	4,582.7	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	114,142.0
[INVESTMENT]	(10*6 Tg)																								
Existing Eq. Replacement		1,342.8	9,281.9	3,775.4	1,062.9	5,337.1	1,155.7	517.7	1,823.7	5,385.4	1,372.4	6,240.0	1,059.8	1,056.2	840.4	792.4	97.7	6,563.6	840.1	3,666.1	5,392.0	1,338.5	234.4	2,152.0	63,336.8
Additional Investment		6,419.3	0.0	1,058.6	0.0	0.0	0.0	5,787.6	0.0	3,263.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,528.0
Additional Replacement		0.0	0.0	0.0	0.0	0.0	1,628.0	2,031.8	0.0	1,903.6	0.0	3,830.6	0.0	2,031.8	0.0	5,787.6	2,140.0	1,903.6	0.0	3,090.4	0.0	1,971.9	0.0	5,787.6	31,387.0
Total Capital Cost		7,762.1	9,281.9	4,834.0	1,062.9	5,337.1	2,783.7	8,337.1	1,823.7	10,562.3	1,372.4	9,270.6	1,059.8	3,088.0	840.4	6,580.1	2,237.7	10,467.2	840.1	6,756.5	5,392.0	3,302.5	234.4	7,939.7	111,172.8
[CASH FLOW]	(10*6 Tg)																								
Retained Earning(Loss)		6,659.3	6,557.9	5,641.1	4,582.7	4,582.7	4,582.7	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	4,796.2	114,142.0
Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost		7,762.1	9,281.9	4,834.0	1,062.9	5,337.1	2,783.7	8,337.1	1,823.7	10,562.3	1,372.4	9,270.6	1,059.8	3,088.0	840.4	6,580.1	2,237.7	10,467.2	840.1	6,756.5	5,392.0	3,302.5	234.4	7,939.7	111,172.8
LESS:Working Capital		3,873.7	34.3	86.8	136.7	0.0	0.0	-46.7	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow		-4,182.6	-2,758.3	720.2	3,383.1	-754.3	1,799.0	-3,494.3	2,956.5	-5,766.1	3,423.8	-4,474.4	3,736.4	1,708.2	3,955.8	-1,783.9	2,558.5	-5,671.0	3,956.1	-1,960.3	-595.8	1,493.3	4,561.8	-3,143.5	-321.7

Salvage		0.0
Reclamation		-139.7
Loan Drawdown		0.0
Working Capital		3,298.9
Equipment		25,723.0
TOTAL		28,874.3

(%) EIRR = 10.0
Discount Rate (%) = 10.0 (10*6 Tg) NPV = -1.0

Table 8.10 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

	1986	1987	1988	1989	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,854.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,854.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	3,969.9	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	15,879.6	15,879.6	15,296.9	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	14,753.2	342,120.3
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	4,845.0	4,845.0	4,654.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	4,850.6	110,996.3
Diesel Oil	811.5	811.5	897.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	21,055.4
Gas & Lub.	219.0	219.0	242.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	5,683.1
Electricity	716.0	810.4	918.1	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	23,724.1
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,285.8
Labor Costs																								
Salaries & Wages	874.7	874.7	889.0	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	26,341.9
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,499.7
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	3,850.7
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	9,058.8	9,153.3	9,449.7	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	9,864.8	224,958.5
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	6,820.8	6,726.3	5,847.2	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	117,161.8
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	6,820.8	6,726.3	5,847.2	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	4,888.4	117,161.8
After Tax Expenses	562.4	568.9	587.6	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	612.9	13,976.4
Retained Earning(Loss)	6,258.4	6,157.4	5,259.6	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	103,185.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,119.0	7,734.9	3,146.2	885.7	4,447.6	963.1	6,760.9	5,337.6	11,450.1	4,169.5	5,447.3	883.2	921.4	1,042.2	660.4	658.3	7,651.5	1,503.6	3,302.4	4,493.4	1,150.3	6,524.8	5,029.3	85,282.7
Additional Investment	4,515.7	0.0	1,858.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,574.4
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	1,303.6	0.0	3,030.6	0.0	128.2	0.0	0.0	2,140.0	1,903.6	0.0	1,186.8	0.0	1,971.9	0.0	0.0	14,021.0
Total Capital Cost	5,634.8	7,734.9	4,204.8	885.7	4,447.6	2,591.1	6,889.1	5,337.6	13,353.7	4,169.5	8,477.9	883.2	1,045.6	1,042.2	660.4	2,798.4	9,555.0	1,503.6	4,489.2	4,493.4	3,122.3	6,524.8	5,029.3	104,878.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	6,258.4	6,157.4	5,259.6	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	4,275.5	103,185.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	5,634.8	7,734.9	4,204.8	885.7	4,447.6	2,591.1	6,889.1	5,337.6	13,353.7	4,169.5	8,477.9	883.2	1,045.6	1,042.2	660.4	2,798.4	9,555.0	1,503.6	4,489.2	4,493.4	3,122.3	6,524.8	5,029.3	104,878.1
LESS:Working Capital	2,811.9	32.6	93.6	126.3	-0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,188.3	-1,610.1	961.2	3,263.5	-172.1	1,684.4	-2,613.6	-1,062.1	-5,078.2	105.0	-4,202.4	3,392.3	3,225.8	3,233.3	3,615.1	1,477.1	-5,279.6	2,771.9	-213.7	-217.9	1,153.2	-2,249.3	-753.8	-4,757.9

Salvage
Reclamation -138.7
Loan Unrepaid 0.0
Working Capital 3,064.4
Equipment 27,598.8
TOTAL 30,523.5

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 0.8

Table 8.10 (2)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 1958

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																									
A Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	14,199.2	14,199.2	14,967.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio	(BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation	(10*3 BCM)	17,300.0	17,300.0	17,884.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal	(10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden	(10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio	(BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation	(10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	14,199.2	14,199.2	14,967.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio	(BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation	(10*3 BCM)	17,300.0	17,300.0	17,884.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																									
Sale Price	(Tg/t)	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	3,967.7	
Trade Tax	(Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit	(10*6 Tg)	15,870.8	15,870.8	15,288.4	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	14,745.0	341,930.7
[OPERATING COSTS]	(10*6 Tg)																								
Material & Energy																									
Parts		4,645.0	4,645.0	4,818.3	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	113,675.9
Diesel Oil		811.5	811.5	1,055.9	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	24,498.6
Gas & Lub.		218.0	218.0	285.0	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,612.4
Electricity		716.0	816.4	854.0	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	21,968.5
Explosives		554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others		912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																									
Salaries & Wages		874.7	874.7	855.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,526.6
Social Insurance		150.5	150.5	113.6	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																									
Royalties & Charges		175.1	175.1	161.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,658.9
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																									
Past Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs		9,058.8	9,153.3	9,488.6	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	225,608.6
[PROFIT]	(10*6 Tg)																								
Before Tax Profit(Loss)		6,812.0	6,717.5	5,801.8	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	116,322.1
Corporate Income Tax (0%)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)		6,812.0	6,717.5	5,801.8	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	4,849.5	116,322.1
After Tax Expenses		562.4	568.9	553.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	14,087.1
Retained Earning(Loss)		6,249.6	6,148.6	5,248.7	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	102,235.0
[INVESTMENT]	(10*6 Tg)																								
Existing Eq. Replacement		1,118.0	7,734.9	2,858.9	885.7	4,406.4	963.1	431.4	1,524.8	4,496.2	1,143.7	5,200.0	883.2	888.2	700.3	898.4	81.4	7,136.4	700.1	3,055.1	4,493.4	1,109.1	195.4	1,793.4	52,492.2
Additional Investment		4,515.7	0.0	9,051.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,566.8
Additional Replacement		0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	7,691.2	0.0	1,971.5	0.0	128.2	0.0	5,767.6	2,140.0	1,503.6	0.0	128.2	0.0	7,759.6	0.0	0.0	25,266.7
Total Capital Cost		5,634.8	7,734.9	11,949.9	885.7	4,406.4	2,591.1	559.6	1,524.8	12,187.4	1,143.7	7,172.0	883.2	1,008.4	700.3	6,448.0	2,221.4	9,039.9	700.1	3,183.3	4,493.4	8,868.7	195.4	1,793.4	95,325.6
[CASH FLOW]	(10*6 Tg)																								
Retained Earning(Loss)		6,249.6	6,148.6	5,248.7	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	4,231.4	102,235.0
Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost		5,634.8	7,734.9	11,949.9	885.7	4,406.4	2,591.1	559.6	1,524.8	12,187.4	1,143.7	7,172.0	883.2	1,008.4	700.3	6,448.0	2,221.4	9,039.9	700.1	3,183.3	4,493.4	8,868.7	195.4	1,793.4	95,325.6
LESS:Working Capital		2,811.9	32.6	121.1	125.1	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow		-2,197.0	-1,618.9	-6,842.4	3,220.6	-175.0	1,640.3	3,671.8	2,706.6	-7,956.0	3,087.7	-3,940.6	3,348.2	3,223.0	3,531.1	-2,216.6	2,010.0	-4,808.5	3,531.3	1,048.1	-262.0	-4,637.3	4,036.0	2,438.0	3,818.6

Salvage
Reclamation -138.7
Loan Unrepaid 0.0
Working Capital 3,098.7
Equipment 21,634.8
TOTAL 24,585.8

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = -0.9

Table 8.10 (3)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 2002

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TRCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,997.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,997.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	3,959.3	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	15,837.2	15,837.2	15,256.1	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	14,713.8	341,205.8
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	4,645.0	4,645.0	4,894.6	4,850.8	4,850.8	4,850.8	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	4,978.4	113,168.8
Diesel Oil	811.5	811.5	897.0	926.8	926.8	926.8	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	23,847.0
Gas & Lub.	219.0	219.0	242.1	250.1	250.1	250.1	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,436.6
Electricity	718.0	810.4	910.1	1,064.4	1,064.4	1,064.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	22,211.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
E & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	863.0	886.2	886.2	886.2	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	17,331.5
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,981.8
Others																								
Royalties & Charges	175.1	175.1	179.1	166.5	166.5	166.5	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,695.3
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	9,058.8	9,153.3	9,449.7	9,864.8	9,864.8	9,864.8	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	9,895.5	225,479.7
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	6,778.4	6,683.9	5,806.4	4,849.0	4,849.0	4,849.0	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	115,727.1
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	6,778.4	6,683.9	5,806.4	4,849.0	4,849.0	4,849.0	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	4,818.3	115,727.1
After Tax Expenses	562.4	568.9	587.6	612.8	612.8	612.8	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	618.1	14,064.9
Retained Earning(Loss)	6,216.0	6,115.1	5,218.8	4,236.2	4,236.2	4,236.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	101,662.2
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,119.0	7,734.9	3,146.2	885.7	4,447.6	963.1	431.4	1,524.8	4,455.2	1,143.7	5,200.0	883.2	880.2	700.3	650.4	81.4	7,136.4	700.1	3,055.1	4,493.4	1,169.1	195.4	1,793.4	52,780.7
Additional Investment	6,415.3	0.0	1,058.6	0.0	0.0	0.0	5,787.6	0.0	3,263.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,529.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	2,031.8	0.0	1,903.6	0.0	3,030.5	0.0	2,031.8	0.0	5,787.6	2,140.0	1,903.6	0.0	3,030.4	0.0	1,871.9	0.0	5,787.6	31,307.0
Total Capital Cost	7,538.3	7,734.9	4,204.8	885.7	4,447.6	2,591.1	8,250.8	1,524.8	9,663.1	1,143.7	8,230.6	883.2	2,911.9	700.3	6,448.0	2,221.4	9,039.9	700.1	6,145.5	4,493.4	3,081.0	195.4	7,581.0	100,616.6
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	6,216.0	6,115.1	5,218.8	4,236.2	4,236.2	4,236.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	4,200.2	101,662.2
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	7,538.3	7,734.9	4,204.8	885.7	4,447.6	2,591.1	8,250.8	1,524.8	9,663.1	1,143.7	8,230.6	883.2	2,911.9	700.3	6,448.0	2,221.4	9,039.9	700.1	6,145.5	4,493.4	3,081.0	195.4	7,581.0	100,616.6
LESS:Working Capital	2,811.8	32.5	93.5	126.2	0.0	0.0	26.4	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.9	-0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-4,134.1	-1,652.4	920.5	3,224.2	-211.4	1,645.1	-4,077.0	2,675.5	-5,462.9	3,056.5	-4,030.4	3,317.0	1,288.3	3,499.9	-2,247.8	1,978.8	-4,839.7	3,500.2	-1,945.3	-293.1	1,119.2	4,004.8	-3,380.8	-2,044.9

Salvage	0.0
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3,050.5
Equipment	23,977.8
TOTAL	26,928.6

(%) EIRR = 18.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = -0.2

Table 8.11 (1)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:
REVALUATION OF ASSETS

BAGANBUR COAL MINE RENOVATION PROJECT

	1986	1987	1988	1989	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	3,369.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	13,476.4	13,476.4	12,881.3	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	12,520.5	290,344.2
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	3,452.2	3,452.2	3,540.4	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	3,658.0	83,605.2
Diesel Oil	811.5	811.5	897.0	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	926.8	21,955.4
Gas & Lub.	219.0	219.0	242.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	5,883.1
Electricity	716.0	810.4	910.1	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	1,064.4	23,724.1
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	869.0	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	886.2	20,341.9
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,499.7
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	166.5	3,850.7
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	7,886.1	7,969.5	8,295.5	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	8,672.3	197,567.4
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	5,610.3	5,515.9	4,586.4	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	92,776.8
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	5,610.3	5,515.9	4,586.4	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	3,848.2	92,776.8
After Tax Expenses	487.1	492.9	513.4	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	535.6	12,206.2
Retained Earning(Loss)	5,123.3	5,022.9	4,173.0	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	80,570.6
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	885.7	5,565.1	2,265.2	637.7	3,202.2	693.4	4,867.8	3,843.1	8,244.1	3,002.1	3,522.0	635.9	663.4	750.4	475.5	474.0	5,589.1	1,082.6	2,377.7	3,235.2	828.2	4,697.8	3,621.1	61,403.6
Additional Investment	4,515.7	0.0	1,058.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,574.4
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	1,903.6	0.0	3,030.6	0.0	128.2	0.0	0.0	2,140.0	1,903.6	0.0	1,186.8	0.0	1,871.9	0.0	0.0	14,821.0
Total Capital Cost	5,321.4	5,565.1	3,323.9	637.7	3,202.2	2,321.4	4,996.1	3,843.1	10,147.7	3,002.1	6,552.6	635.9	791.6	750.4	475.5	2,614.0	7,412.6	1,082.6	3,564.5	3,235.2	2,800.2	4,697.8	3,621.1	80,998.9
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	5,123.3	5,022.9	4,173.0	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	3,312.6	80,570.6
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	5,321.4	5,565.1	3,323.9	637.7	3,202.2	2,321.4	4,996.1	3,843.1	10,147.7	3,002.1	6,552.6	635.9	791.6	750.4	475.5	2,614.0	7,412.6	1,082.6	3,564.5	3,235.2	2,800.2	4,697.8	3,621.1	80,998.9
LESS:Working Capital	2,435.4	28.3	102.4	111.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,633.5	-575.6	746.7	2,563.8	110.3	991.1	-1,683.5	-530.5	-6,835.1	310.5	-3,640.0	2,676.7	2,521.0	2,582.2	2,837.1	698.5	-4,100.1	2,230.0	-252.0	77.4	512.4	-1,385.3	-308.8	-2,106.5

Salvage	0.0
Reclamation	-135.7
Loan Unrepaid	0.0
Working Capital	2,678.2
Equipment	20,581.6
TOTAL	23,130.1

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 0.0

Table 8.11 (2)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A.Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B.Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C.Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	3,525.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	14,100.4	14,100.4	13,583.0	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	13,100.2	303,788.0
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	3,452.2	3,452.2	3,982.2	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	93,176.8
Diesel Oil	811.5	811.5	1,055.9	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	24,488.6
Gas & Lub.	215.0	215.0	285.0	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,612.4
Electricity	716.0	810.4	854.0	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	21,868.5
Explosives	554.8	554.8	573.8	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	582.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	685.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,626.6
Social Insurance	150.5	150.5	119.6	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	175.1	175.1	161.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,658.9
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	7,866.1	7,960.5	8,659.5	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	205,109.6
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	6,234.3	6,139.9	4,932.5	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	98,678.4
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	6,234.3	6,139.9	4,932.5	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	4,068.6	98,678.4
After Tax Expenses	487.4	493.4	539.4	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	562.1	12,753.1
Retained Earning(Loss)	5,747.0	5,646.5	4,393.1	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	85,915.3
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	805.7	5,569.1	2,087.2	637.7	3,172.6	693.4	310.6	1,087.8	3,237.2	823.5	3,744.0	635.9	633.7	504.2	475.5	56.6	5,138.2	504.0	2,195.7	3,235.2	798.5	140.7	1,281.2	37,794.4
Additional Investment	4,515.7	0.0	9,051.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,566.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	7,691.2	0.0	1,971.9	0.0	128.2	0.0	5,787.6	2,140.0	1,903.8	0.0	128.2	0.0	7,759.6	0.0	0.0	29,266.7
Total Capital Cost	5,321.4	5,569.1	11,138.2	637.7	3,172.6	2,321.4	438.8	1,087.8	10,928.4	823.5	5,716.0	635.9	761.9	504.2	6,263.1	2,196.7	7,041.8	504.0	2,327.9	3,235.2	8,558.1	140.7	1,281.2	80,627.8
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	5,747.0	5,646.5	4,393.1	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	3,506.4	85,915.3
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	5,321.4	5,569.1	11,138.2	637.7	3,172.6	2,321.4	438.8	1,087.8	10,928.4	823.5	5,716.0	635.9	761.9	504.2	6,263.1	2,196.7	7,041.8	504.0	2,327.9	3,235.2	8,558.1	140.7	1,281.2	80,627.8
LESS:Working Capital	2,438.9	30.2	229.7	114.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,011.3	47.1	-6,574.8	2,754.7	333.9	1,185.0	3,067.6	2,408.6	-7,422.0	2,683.0	-2,205.5	2,870.5	2,744.5	3,002.2	-2,756.7	1,397.6	-3,535.3	3,002.4	1,178.6	271.2	-5,051.7	3,365.8	2,215.2	2,478.8

Salvage	0.0
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	2,810.7
Equipment	17,791.5
TOTAL	20,462.6

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = -0.0

Table 8.11 (3)

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 2002

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCN (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.8
Overburden (10*3 BCM)	14,199.2	14,199.2	14,987.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,854.6	18,485.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.8
Overburden (10*3 BCM)	14,199.2	14,199.2	14,987.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,854.6	18,485.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	3,487.2	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	13,948.8	13,948.8	13,437.0	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	12,959.4	309,521.9
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	3,452.2	3,452.2	3,540.4	3,658.0	3,658.0	3,658.0	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	4,114.5	91,365.6
Diesel Oil	811.5	811.5	857.0	926.8	926.8	926.8	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	23,847.0
Gas & Lub.	219.0	219.0	242.1	250.1	250.1	250.1	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,436.6
Electricity	716.0	810.4	910.1	1,064.4	1,064.4	1,064.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	22,211.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	912.2	912.2	943.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	885.0	886.2	886.2	886.2	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	17,331.5
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,981.6
Others																								
Royalties & Charges	175.1	175.1	170.1	166.5	166.5	166.5	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,685.3
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	7,866.1	7,960.5	8,285.5	8,672.3	8,672.3	8,672.3	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	9,031.6	203,676.5
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	6,082.7	5,988.3	5,141.5	4,287.1	4,287.1	4,287.1	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	96,845.4
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	6,082.7	5,988.3	5,141.5	4,287.1	4,287.1	4,287.1	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	3,927.7	96,845.4
After Tax Expenses	487.3	483.3	513.3	536.2	536.2	536.2	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	562.0	12,656.5
Retained Earning(Loss)	5,595.4	5,485.0	4,627.6	3,750.9	3,750.9	3,750.9	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	84,188.9
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	865.7	5,569.1	2,265.2	637.7	3,202.2	693.4	310.6	1,097.8	3,237.2	823.5	3,744.0	635.9	633.7	504.2	475.5	58.6	5,133.2	504.0	2,198.7	3,235.2	798.5	140.7	1,291.2	38,002.1
Additional Investment	6,419.3	0.0	1,058.6	0.0	0.0	0.0	5,787.6	0.0	3,263.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16,529.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,528.0	2,031.8	0.0	1,963.5	0.0	3,029.6	0.0	2,031.8	0.0	5,787.6	2,140.0	1,963.6	0.0	3,094.4	0.0	1,971.9	0.0	5,787.6	31,307.0
Total Capital Cost	7,225.0	5,569.1	3,323.9	637.7	3,202.2	2,321.4	8,130.0	1,097.8	8,464.2	823.5	6,774.6	635.9	2,665.5	504.2	6,263.1	2,198.7	7,041.8	504.0	5,290.1	3,235.2	2,770.5	140.7	7,078.9	85,838.0
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	5,595.4	5,485.0	4,627.6	3,750.9	3,750.9	3,750.9	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	3,365.8	84,188.9
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	7,225.0	5,569.1	3,323.9	637.7	3,202.2	2,321.4	8,130.0	1,097.8	8,464.2	823.5	6,774.6	635.9	2,665.5	504.2	6,263.1	2,198.7	7,041.8	504.0	5,290.1	3,235.2	2,770.5	140.7	7,078.9	85,838.0
LESS:Working Capital	2,436.5	30.0	103.0	111.6	-0.0	0.0	128.6	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-4,066.1	-164.1	1,200.7	3,001.5	548.6	1,429.4	-4,892.9	2,268.0	-5,038.4	2,542.3	-3,408.8	2,729.5	700.3	2,861.6	-2,897.3	1,107.1	-3,676.0	2,861.7	-1,924.3	130.5	595.3	3,225.1	-3,713.1	-4,458.9

Salvage	
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	2,869.8
Equipment	25,134.5
TOTAL	22,864.6

(%) EIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 0.5

Table 8.12

ECONOMIC ANALYSIS
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	85,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	85,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	24,228.4	24,228.4	23,339.4	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	22,509.8	521,952.1
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	6,609.9	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	6,829.5	137,602.3
Diesel Oil	811.5	811.5	1,055.9	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	1,091.0	24,458.8
Gas & Lub.	219.0	219.0	285.0	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	294.5	6,612.4
Electricity	716.0	819.4	834.0	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	975.4	21,868.5
Explosives	554.8	554.8	573.8	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	592.9	13,541.4
M & E Others	812.2	812.2	843.5	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	974.9	22,265.8
Labor Costs																								
Salaries & Wages	874.7	874.7	895.3	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	709.1	16,626.6
Social Insurance	150.5	150.5	119.6	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	175.1	175.1	161.1	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	157.4	3,658.9
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,709.2	11,278.2	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	11,746.6	269,535.1
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	12,613.7	12,519.2	12,061.1	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	252,457.1
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	12,613.7	12,519.2	12,061.1	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	10,763.2	252,457.1
After Tax Expenses	724.6	733.3	712.4	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	743.9	17,848.0
Retained Earning(Loss)	11,889.1	11,785.9	11,348.8	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	235,409.1
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,790.4	12,375.9	4,638.3	1,417.2	7,058.2	1,540.5	690.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.2	11,418.2	1,120.1	4,888.2	7,189.4	1,774.6	312.6	2,869.4	83,087.5
Additional Investment	4,515.7	0.0	3,051.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,566.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	128.2	0.0	7,691.2	0.0	1,971.9	0.0	128.2	0.0	5,787.6	2,140.0	1,903.6	0.0	128.2	0.0	7,759.6	0.0	0.0	29,286.7
Total Capital Cost	6,306.2	12,375.9	13,689.3	1,417.2	7,058.2	3,169.0	818.5	2,439.6	14,885.1	1,829.9	10,292.0	1,413.1	1,536.5	1,120.5	6,844.2	2,270.3	13,321.7	1,120.1	5,016.4	7,189.4	9,534.1	312.6	2,869.4	126,820.9
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	11,889.1	11,785.9	11,348.8	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	10,019.3	235,409.1
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,306.2	12,375.9	13,689.3	1,417.2	7,058.2	3,169.0	818.5	2,439.6	14,885.1	1,829.9	10,292.0	1,413.1	1,536.5	1,120.5	6,844.2	2,270.3	13,321.7	1,120.1	5,016.4	7,189.4	9,534.1	312.6	2,869.4	126,820.9
LESS:Working Capital	3,622.9	43.6	-104.6	157.5	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	1,960.0	-633.5	-2,235.5	8,444.6	2,969.1	6,850.3	9,200.8	7,579.7	-4,865.8	8,189.4	-272.7	8,606.1	8,482.8	8,898.8	3,175.0	7,749.0	-3,302.5	8,895.2	5,002.9	2,829.9	485.1	3,706.7	7,149.9	184,868.7

(%) EIRR = ERR
Discount Rate (%) = 10.0 (10*6 Tg) NPV = 34,799.3

Salvage	
Reclamation	-138.7
Loan Unrepaid	0.0
Working Capital	3,719.4
Equipment	28,870.5
TOTAL	33,450.3

Table 8.13

ECONOMIC ANALYSIS
(EXPANSION)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TRCN (%): 100.0
Coal (%): 0.0

	1986	1987	1988	1989	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
[Revenue]																								
Sale Price (Tg/t)	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	0.0	0.0	6,546.1	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	13,892.3	264,791.3
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	0.0	0.0	1,723.7	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	3,447.3	70,670.5
Diesel Oil	0.0	0.0	437.0	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	874.1	17,918.1
Gas & Lub.	0.0	0.0	118.0	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	235.9	4,836.3
Electricity	0.0	0.0	142.7	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	323.1	6,694.1
Explosives	0.0	0.0	183.0	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	7,561.3
M & E Others	0.0	0.0	249.0	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	497.9	10,207.6
Labor Costs																								
Salaries & Wages	0.0	0.0	178.8	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	5,262.8
Social Insurance	0.0	0.0	30.8	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	895.1
Others																								
Royalties & Charges	0.0	0.0	46.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	87.5	1,796.6
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	0.0	0.0	3,109.4	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	6,126.1	125,632.2
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	0.0	0.0	3,436.7	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	159,159.1
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	0.0	0.0	3,836.7	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	7,766.1	159,159.1
After Tax Expenses	0.0	0.0	198.5	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	8,097.8
Retained Earning(Loss)	0.0	0.0	3,638.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	151,061.3
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	20,625.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,625.5
Additional Replacement	0.0	0.0	0.0	0.0	0.0	0.0	145.0	0.0	121.3	0.0	14,637.2	0.0	542.5	0.0	270.3	0.0	0.0	103.8	14,637.2	0.0	121.3	0.0	1,017.1	31,599.6
Total Capital Cost	0.0	0.0	20,625.5	0.0	0.0	0.0	145.0	0.0	121.3	0.0	14,637.2	0.0	542.5	0.0	270.3	0.0	0.0	103.8	14,637.2	0.0	121.3	0.0	1,017.1	52,225.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	0.0	0.0	3,638.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	7,371.2	151,061.3
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	0.0	0.0	20,625.5	0.0	0.0	0.0	145.0	0.0	121.3	0.0	14,637.2	0.0	542.5	0.0	270.3	0.0	0.0	103.8	14,637.2	0.0	121.3	0.0	1,017.1	52,225.1
LESS:Working Capital	0.0	0.0	992.6	982.2	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	0.0	0.0	-17,979.9	6,388.5	7,371.2	7,371.2	7,222.2	7,371.2	7,249.9	7,371.2	-7,266.0	7,371.2	6,828.6	7,371.2	7,100.5	7,371.2	7,371.2	7,267.4	-7,266.0	7,371.2	7,249.9	7,371.2	6,354.0	98,851.4

Salvage	
Reclamation	-80.1
Loan Unrepaid	0.0
Working Capital	1,974.8
Equipment	8,951.6
TOTAL	10,846.3

(%) EIRR = 36.6

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 23,780.5

Table 8.14

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,854.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,417.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,765.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	19,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.9
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,600.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,288.9
[Revenue]																								
Sale Price (Tg/t)	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	24,228.4	24,228.4	30,285.5	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	806,783.4
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	8,333.6	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	228,272.8
Diesel Oil	811.5	811.5	1,492.9	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	42,416.7
Gas & Lub.	219.0	219.0	403.0	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	11,448.7
Electricity	716.0	819.4	978.7	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,472.6
Explosives	554.8	554.8	756.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	21,042.8
M & E Others	912.2	912.2	1,192.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	874.2	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	21,823.1
Social Insurance	150.5	150.5	150.4	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	3,755.6
Others																								
Royalties & Charges	175.1	175.1	207.6	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	5,455.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,709.2	14,387.6	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	395,167.3
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	12,613.7	12,519.2	15,897.9	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	411,616.2
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	12,613.7	12,519.2	15,897.9	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	411,616.2
After Tax Expenses	724.6	733.3	910.5	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	25,145.8
Retained Earning(Loss)	11,889.1	11,785.9	14,987.0	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	386,470.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,790.4	12,375.9	4,638.3	1,417.2	7,050.2	1,540.9	680.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.2	11,418.2	1,120.1	4,888.2	7,189.4	1,774.6	312.6	2,865.4	83,587.5
Additional Investment	4,515.7	0.0	29,676.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34,192.3
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.6	277.2	0.0	7,812.5	0.0	16,609.1	0.0	676.7	0.0	6,057.9	2,140.0	1,903.6	103.8	14,765.4	0.0	7,880.9	0.0	1,017.1	69,866.3
Total Capital Cost	6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,169.4	957.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	19,653.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	11,889.1	11,785.9	14,987.0	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	386,470.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,169.4	957.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	19,653.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
LESS:Working Capital	3,622.9	42.6	888.0	1,139.7	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	1,959.0	-533.5	-20,215.8	14,833.5	10,340.2	14,221.5	16,423.0	14,950.8	2,384.1	15,560.5	-7,538.8	15,977.3	15,311.4	16,269.9	10,275.9	15,120.1	4,068.7	16,166.5	-2,263.1	10,201.0	7,735.0	17,077.8	13,503.9	281,739.1

(%) EIRR = 97.0

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 58,579.8

Salvage	66,866.3
Reclamation	1,017.1
	-218.8
Loan Unrepaid	0.0
Working Capital	5,694.2
Equipment	38,822.1
TOTAL	44,296.6

Table 8.15

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON-RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TSCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,859.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	2,283.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,815.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	6,008.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	19,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.0
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,600.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,208.9
[Revenue]																								
Sale Price (Tg/t)	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,382.8	19,382.8	24,228.5	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	29,121.8	645,429.4
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	8,333.6	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	228,272.8
Diesel Oil	811.5	811.5	1,492.9	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	42,416.7
Gas & Lub.	219.0	219.0	403.0	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	11,448.7
Electricity	716.0	810.4	976.7	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,472.9
Explosives	554.8	554.8	756.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	21,042.8
M & E Others	912.2	912.2	1,182.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	874.2	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	21,829.1
Social Insurance	150.5	150.5	150.4	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	3,755.6
Others																								
Royalties & Charges	175.1	175.1	287.6	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.5	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	5,455.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,614.7	11,709.2	14,387.6	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	385,167.3
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	7,768.1	7,673.6	9,840.9	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	250,262.1
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	7,768.1	7,673.6	9,840.9	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	11,249.0	250,262.1
After Tax Expenses	722.8	730.3	905.1	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	1,128.9	24,934.7
Retained Earning(Loss)	7,045.3	6,943.3	8,935.7	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	225,325.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,798.4	12,375.3	4,638.3	1,417.2	7,650.2	1,540.9	690.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,126.5	1,056.6	139.2	11,418.2	1,120.1	4,886.2	7,189.4	1,774.6	312.6	2,869.4	83,987.5
Additional Investment	4,515.7	0.0	29,676.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34,192.3
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	277.2	0.0	7,812.5	0.0	16,609.1	0.0	670.7	0.0	6,057.9	2,140.0	1,503.6	103.8	14,765.4	0.0	7,980.9	0.0	1,017.1	60,896.3
Total Capital Cost	6,306.2	12,375.3	34,314.8	1,417.2	7,650.2	3,169.0	967.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,126.5	7,114.5	2,279.2	13,321.7	1,223.9	19,652.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	7,045.3	6,943.3	8,935.7	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	10,120.1	225,325.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	6,306.2	12,375.3	34,314.8	1,417.2	7,650.2	3,169.0	967.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,126.5	7,114.5	2,279.2	13,321.7	1,223.9	19,652.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
LESS:Working Capital	3,614.2	37.3	874.3	1,116.9	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-2,875.1	-5,459.8	-26,253.9	7,583.9	3,869.9	6,951.1	9,152.6	7,680.5	-4,886.3	8,290.2	-14,809.1	8,706.9	8,041.1	8,993.6	3,005.6	7,845.8	-3,201.7	8,896.2	-9,532.5	2,930.7	464.6	9,807.5	6,233.5	40,624.8

Salvage	
Reclamation	-219.8
Loans Unrepaid	0.0
Working Capital	5,644.6
Equipment	38,822.1
TOTAL	44,247.0

(%) EIRR = 12.3

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 4,558.3

Table 8.16

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 1996

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 323.0
TBCK (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.5
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,735.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,322.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	19,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.0
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,500.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,200.0
[Revenue]																								
Sale Price (Tg/t)	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	4,845.7	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	19,382.7	19,382.7	24,228.4	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	29,121.6	645,426.8
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	5,766.7	5,780.7	6,666.9	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	8,221.5	182,618.2
Diesel Oil	849.2	849.2	1,194.3	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	1,572.0	33,933.4
Gas & Lub.	175.2	175.2	322.4	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	424.3	9,159.0
Electricity	716.6	810.4	976.7	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,472.6
Explosives	443.8	443.8	605.4	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	767.1	16,834.2
M & E Others	912.2	912.2	1,192.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	874.2	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	21,829.1
Social Insurance	150.5	150.5	150.4	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	3,755.6
Others																								
Royalties & Charges	175.1	175.1	287.6	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	5,455.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	9,857.5	9,951.5	12,190.4	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	15,126.6	334,531.1
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	9,525.2	9,430.8	12,038.0	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	310,895.7
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	9,525.2	9,430.8	12,038.0	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	13,995.1	310,895.7
After Tax Expenses	610.4	618.4	765.8	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	956.3	21,120.5
Retained Earning(Loss)	8,914.8	8,812.4	11,272.2	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	289,775.2
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,432.3	9,900.7	3,710.6	1,133.8	5,640.1	1,232.7	552.2	1,951.7	5,755.1	1,463.9	6,656.0	1,130.5	1,126.5	896.4	845.3	104.2	9,134.5	896.1	3,910.5	5,751.5	1,419.6	250.1	2,295.5	67,190.0
Additional Investment	3,612.6	0.0	23,741.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27,353.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,302.4	221.7	0.0	6,250.0	0.0	13,287.3	0.0	536.6	0.0	4,846.3	1,712.0	1,522.5	82.0	11,812.3	0.0	6,364.7	0.0	813.7	48,693.0
Total Capital Cost	5,044.9	9,900.7	27,451.8	1,133.8	5,640.1	2,535.2	774.0	1,951.7	12,005.1	1,463.9	19,943.3	1,130.5	1,663.2	896.4	5,691.6	1,816.2	10,657.4	978.1	15,722.8	5,751.5	7,724.3	250.1	3,109.2	143,236.8
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	8,914.8	8,812.4	11,272.2	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	13,038.8	285,775.2
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	5,044.9	9,900.7	27,451.8	1,133.8	5,640.1	2,535.2	774.0	1,951.7	12,005.1	1,463.9	19,943.3	1,130.5	1,663.2	896.4	5,691.6	1,816.2	10,657.4	978.1	15,722.8	5,751.5	7,724.3	250.1	3,109.2	143,236.8
LESS:Working Capital	3,652.1	40.1	736.9	952.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	817.8	-1,128.4	-16,916.5	10,952.5	7,398.6	10,503.6	12,264.8	11,087.1	1,033.7	11,574.9	-6,504.6	11,908.3	11,375.6	12,142.4	7,347.2	11,222.6	2,381.4	12,059.7	-2,684.1	7,287.3	5,314.4	12,788.7	9,929.6	141,756.8

Salvage 0.0
Reclamation -219.8
Loan Unrepaid 0.0
Working Capital 4,781.5
Equipment 31,057.7
TOTAL 35,619.4

(%) EIRR = 57.3

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 40,182.5

Table 8.17

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 1996

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TRCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.6	17,300.9	17,884.6	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	18,488.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,765.4	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	19,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.0
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,600.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,500.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,200.0
[Revenue]																								
Sale Price (Tg/t)	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	24,228.4	24,228.4	30,285.5	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	896,783.4
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	7,200.9	7,200.9	8,333.6	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	10,276.9	228,272.8
Diesel Oil	811.5	811.5	1,452.9	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	1,965.0	42,416.7
Gas & Lub.	219.0	219.0	403.0	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	530.4	11,448.7
Electricity	716.0	810.4	976.7	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	1,298.5	28,472.6
Explosives	554.8	554.8	756.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	21,042.8
M & E Others	912.2	912.2	1,182.5	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	1,472.8	32,473.4
Labor Costs																								
Salaries & Wages	874.7	874.7	874.2	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	960.3	21,829.1
Social Insurance	150.5	150.5	150.4	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	165.2	3,755.6
Others																								
Royalties & Charges	175.1	175.1	207.6	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	244.9	5,455.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	11,914.7	11,709.2	14,387.6	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	17,872.8	395,167.3
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	12,613.7	12,519.2	15,897.9	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	411,616.2
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	12,613.7	12,519.2	15,897.9	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	18,529.3	411,616.2
After Tax Expenses	724.6	733.3	910.5	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	1,138.8	25,145.8
Retained Earning(Loss)	11,889.1	11,785.9	14,987.0	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	386,470.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	2,148.5	14,851.0	5,565.9	1,700.6	8,460.2	1,848.1	828.3	2,927.5	8,632.6	2,195.9	9,584.0	1,695.8	1,689.9	1,344.6	1,267.9	156.3	13,701.8	1,344.1	5,865.8	8,627.2	2,129.5	375.1	3,443.3	100,785.0
Additional Investment	5,418.9	0.0	35,611.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41,030.7
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,953.6	332.6	0.0	9,375.0	0.0	19,331.0	0.0	804.9	0.0	7,269.5	2,568.1	2,284.3	124.5	17,718.5	0.0	9,457.1	0.0	1,220.5	73,039.5
Total Capital Cost	7,567.4	14,851.0	41,177.7	1,700.6	8,460.2	3,802.7	1,160.9	2,927.5	18,007.6	2,195.9	28,915.0	1,695.8	2,494.8	1,344.6	8,537.4	2,724.3	15,986.1	1,468.6	23,584.3	8,627.2	11,586.5	375.1	4,663.8	214,855.3
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	11,889.1	11,785.9	14,987.0	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	17,390.4	386,470.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost	7,567.4	14,851.0	41,177.7	1,700.6	8,460.2	3,802.7	1,160.9	2,927.5	18,007.6	2,195.9	28,915.0	1,695.8	2,494.8	1,344.6	8,537.4	2,724.3	15,986.1	1,468.6	23,584.3	8,627.2	11,586.5	375.1	4,663.8	214,855.3
LESS:Working Capital	3,622.9	43.6	888.0	1,139.7	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	698.8	-3,108.7	-27,078.8	14,550.1	8,929.2	13,587.7	16,229.5	14,462.9	-617.2	15,194.5	-12,524.6	15,694.7	14,895.6	16,045.8	8,853.0	14,666.1	1,404.3	15,921.8	-6,193.8	8,763.2	5,803.9	17,015.3	12,726.6	165,920.8

Salvage	-219.8
Reclamation	
Loan Unrepaid	0.0
Working Capital	5,694.2
Equipment	46,586.6
TOTAL	52,061.0

(%) EIRR = 35.3

Discount Rate (%) = 10.0 (10*6 Tg) NPV = 45,044.9

Table 8.18

ECONOMIC ANALYSIS
(REMOVATION COMBINED)

EQUIPMENT: NON RAILWAY SYSTEM in 1988

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,987.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.5	3.5	3.9	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,834.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,917.8
Overburden (10*3 BCM)	0.0	0.0	4,816.5	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	9,632.9	197,474.6
Stripping Ratio (BCM/t)	0.0	0.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	0.0	0.0	5,705.4	11,416.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	11,410.9	233,922.5
C Coal (10*3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden (10*3 BCM)	14,199.2	14,199.2	18,724.0	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	25,241.2	552,947.0
Stripping Ratio (BCM/t)	3.5	3.5	3.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Total Excavation (10*3 BCM)	17,300.0	17,300.0	23,600.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	29,900.0	656,200.0
[Revenue]																								
Sale Price (Tg/t)	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	
Trade Tax (Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit (10*6 Tg)	24,228.4	24,228.4	30,285.5	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	806,783.4
[OPERATING COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	8,841.1	8,841.1	10,000.3	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	273,927.4
Diesel Oil	973.8	973.6	1,751.5	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	50,980.1
Gas & Lub.	262.8	262.8	483.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	13,738.5
Electricity	858.2	972.5	1,172.0	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	34,167.1
Explosives	865.7	865.7	998.2	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	25,251.3
M & E Others	1,094.6	1,094.6	1,431.0	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	38,968.1
Labor Costs																								
Salaries & Wages	1,349.7	1,049.7	1,049.0	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	1,152.3	26,195.0
Social Insurance	216.7	216.7	216.8	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	237.9	5,498.0
Others																								
Royalties & Charges	187.7	187.7	221.4	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	260.8	5,813.4
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs	13,851.3	14,064.6	17,273.5	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	21,454.0	474,368.8
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	10,277.1	10,163.8	13,012.0	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	332,414.6
Corporate Income Tax (0%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)	10,277.1	10,163.8	13,012.0	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	14,948.1	332,414.6
After Tax Expenses	865.9	875.7	1,086.2	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	1,356.7	28,982.2
Retained Earning(Loss)	9,411.2	9,288.1	11,925.8	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	302,452.4
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	1,780.4	12,375.9	4,638.3	1,417.2	7,050.2	1,540.9	690.3	2,439.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.2	11,418.2	1,120.1	4,888.2	7,189.4	1,774.6	312.6	2,869.4	83,987.5
Additional Investment	4,515.7	0.0	29,675.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34,192.3
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,628.0	277.2	0.0	7,612.5	0.0	16,609.1	0.0	670.7	0.0	6,057.9	2,140.0	1,903.6	103.8	14,785.4	0.0	7,880.9	0.0	1,017.1	60,866.3
Total Capital Cost	6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,168.0	967.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,120.5	7,114.5	2,270.2	13,321.7	1,223.9	19,853.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
[CASH FLOW] (10*6 Tg)																								
Retained Earning(Loss)	9,411.2	9,288.1	11,925.8	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	13,591.4	302,452.4
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS: Total Capital Cost	6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,168.0	967.5	2,439.6	15,006.3	1,829.9	24,929.2	1,413.1	2,079.0	1,120.5	7,114.5	2,270.2	13,321.7	1,223.9	19,853.6	7,189.4	9,655.4	312.6	3,886.5	179,046.1
LESS: Working Capital	4,328.5	48.8	1,052.8	1,352.5	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-1,224.4	-3,136.5	-23,441.8	10,821.6	6,541.2	10,472.4	12,623.9	11,151.8	-1,415.0	11,761.5	-11,337.8	12,178.2	11,512.4	12,470.9	6,476.9	11,321.1	269.6	12,367.5	-6,062.2	6,402.0	3,935.9	13,278.8	9,704.9	116,622.7

		(%) EIRR =	28.9
Discount Rate (%) =	10.0	(10*6 Tg) NPV =	23,751.6

Salvage	45,386.0
Reclamation	-219.8
Loan Unrepaid	0.0
Working Capital	6,783.6
Equipment	38,822.1
TOTAL	

Table 8.19

ECONOMIC ANALYSIS
(RENOVATION COMBINED)

EQUIPMENT:NON RAILWAY SYSTEM in 1998

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$): 400.0
TBCM (%): 120.0
Coal (%): 100.0

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																									
A Coal	(10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden	(10*3 BCM)	17,659.2	17,659.2	18,486.5	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	19,306.1	438,927.9
Stripping Ratio	(BCM/t)	4.4	4.4	4.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1
Total Excavation	(10*3 BCM)	20,760.0	20,760.0	21,473.5	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	22,187.0	505,733.0
B Coal	(10*3 t)	0.0	0.0	1,146.8	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	2,293.5	47,017.8
Overburden	(10*3 BCM)	0.0	0.0	5,957.5	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	11,915.1	244,259.1
Stripping Ratio	(BCM/t)	0.0	0.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Total Excavation	(10*3 BCM)	0.0	0.0	6,846.5	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	13,693.0	289,707.0
C Coal	(10*3 t)	4,000.0	4,000.0	5,000.0	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	6,009.8	133,196.3
Overburden	(10*3 BCM)	17,659.2	17,659.2	24,444.0	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	31,221.2	684,187.0
Stripping Ratio	(BCM/t)	4.4	4.4	4.9	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1
Total Excavation	(10*3 BCM)	20,760.0	20,760.0	28,320.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	35,880.0	787,440.0
[Revenue]																									
Sale Price	(Tg/t)	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	6,057.1	
Trade Tax	(Tg/t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Economic Benefit	(10*6 Tg)	24,228.4	24,228.4	30,285.5	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	36,402.1	806,783.4
[OPERATING COSTS]	(10*6 Tg)																								
Material & Energy																									
Parts		8,641.1	8,641.1	10,000.3	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	12,332.2	273,827.4
Diesel Oil		973.8	973.8	1,751.5	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	2,358.0	50,904.1
Gas & Lub.		262.8	262.8	483.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	636.5	13,738.5
Electricity		858.2	872.5	1,172.0	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	1,558.2	34,167.1
Explosives		665.7	665.7	808.2	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	1,150.6	25,251.3
M & E Others		1,054.6	1,054.6	1,431.0	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	1,767.4	38,968.1
Labor Costs																									
Salaries & Wages		982.8	982.8	972.3	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	1,079.0	24,517.7
Social Insurance		169.1	169.1	167.3	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	185.6	4,218.1
Others																									
Royalties & Charges		180.7	180.7	212.7	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	251.0	5,594.3
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																									
Past Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Replacement		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Investment		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Costs		13,829.8	13,843.2	17,138.0	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	21,318.5	471,282.6
[PROFIT]	(10*6 Tg)																								
Before Tax Profit(Loss)		10,398.6	10,385.2	13,146.7	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	335,500.9
Corporate Income Tax (0%)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Profit(Loss)		10,398.6	10,385.2	13,146.7	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	15,083.5	335,500.9
After Tax Expenses		858.7	869.5	1,079.4	1,350.0	1,350.0	1,350.0	1,358.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,350.0	1,358.0	28,808.2
Retained Earning(Loss)		9,538.8	9,415.7	12,067.2	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	305,692.7
[INVESTMENT]	(10*6 Tg)																								
Existing Eq. Replacement		1,790.4	12,375.9	4,638.3	1,417.2	7,050.2	1,540.9	690.3	2,435.6	7,193.8	1,829.9	8,320.0	1,413.1	1,408.2	1,120.5	1,056.6	130.2	11,418.2	1,120.1	4,888.2	7,185.4	1,774.6	312.6	2,869.4	83,987.5
Additional Investment		4,515.7	0.0	29,676.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34,192.3
Additional Replacement		0.0	0.0	0.0	0.0	0.0	1,628.0	277.2	0.0	7,812.5	0.0	16,695.1	0.0	670.7	0.0	6,057.9	2,140.0	1,903.6	103.8	14,765.4	0.0	7,886.5	0.0	1,017.1	59,866.3
Total Capital Cost		6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,169.0	967.5	2,435.6	15,006.3	1,829.9	24,929.2	1,413.1	2,078.9	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	19,653.6	7,185.4	9,655.4	312.6	3,886.5	179,046.1
[CASH FLOW]	(10*6 Tg)																								
Retained Earning(Loss)		9,538.8	9,415.7	12,067.2	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	13,733.5	305,692.7
Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LESS:Total Capital Cost		6,306.2	12,375.9	34,314.8	1,417.2	7,050.2	3,169.0	967.5	2,435.6	15,006.3	1,829.9	24,929.2	1,413.1	2,078.9	1,120.5	7,114.5	2,270.3	13,321.7	1,223.9	19,653.6	7,185.4	9,855.4	312.6	3,886.5	179,046.1
LESS:Working Capital		4,298.7	48.8	1,049.6	1,352.7	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	
Payable Interest		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow		-1,066.1	-3,008.9	-23,297.2	10,963.5	6,683.4	10,564.6	12,766.1	11,298.9	-1,272.8	11,903.6	-11,195.5	12,320.4	11,654.6	12,613.1	6,619.1	11,463.3	411.8	12,509.7	-5,920.0	6,544.2	4,078.1	13,421.0	9,847.0	119,896.7

Discount Rate (%) = 10.0

(10*6 Tg) (%) EIRR = 30.0
NPV = 38,800.3

Salvage	45,352.2
Reclamation	-219.8
Loan Unrepaid	0.0
Working Capital	6,748.9
Equipment	38,822.1
TOTAL	

Table 8.20 Coal Price US EIRR

Baganuur Coal Mine

unit: %

Price Tg/t	Improvement	Expansion	Total
3,000	-17.9	-13.5	-16.7
100	-16.8	-11.7	-15.4
200	-15.7	-9.9	-14.2
300	-14.7	-8.1	-12.9
400	-13.6	-6.3	-11.6
500	-12.4	-4.6	-10.3
600	-11.3	-2.8	-8.9
700	-10.2	-1.1	-7.6
800	-9.0	0.6	-6.2
900	-7.8	2.3	-4.7
4,000	-6.5	4.0	-3.2
100	-5.2	5.6	-1.7
200	-3.8	7.3	-0.1
300	-2.4	8.9	1.5
400	-0.8	10.5	3.3
500	0.8	12.1	5.1
600	2.7	13.7	7.0
700	4.7	15.2	9.1
800	6.9	16.8	11.3
900	9.5	18.3	13.6
5,000	12.6	19.9	16.2
100	16.3	21.5	19.0
200	20.9	23.0	22.1
300	26.7	24.6	25.5
400	34.3	26.2	29.3
500	44.9	27.7	33.7
600	61.0	29.3	38.7
700	94.7	30.9	44.7
800	NA*	32.5	52.3
900	NA	34.1	62.4
6,000	NA	35.7	78.5
100	NA	37.3	NA
200	NA	39.0	NA
300	NA	40.6	NA
400	NA	42.3	NA
500	NA	44.0	NA
6,600	NA	45.7	NA

*NA: Not Available

Table 8.21 Discount Rate US Net Present Value
Baanuur Coal Mine

unit: 10^6Tg

D／R*1 (%)	Improvement	at 6,057.1 Tg/t Expansion	Total
0	138,318.9	107,707.7	246,026.7
1	117,444.6	91,235.8	208,680.4
2	100,326.8	77,584.8	177,911.6
3	86,216.2	66,220.5	152,436.6
4	74,523.6	56,717.8	131,241.4
5	64,783.8	48,737.4	113,521.3
6	56,628.5	42,007.0	98,635.5
7	49,764.3	36,307.3	86,071.6
8	43,957.2	31,461.1	75,418.3
9	39,019.2	27,324.6	66,343.8
10	34,799.3	23,780.5	58,579.8
11	31,175.3	20,733.1	51,908.4
12	28,048.0	18,103.5	46,151.5
13	25,336.6	15,827.0	41,163.7
14	22,975.1	13,849.9	36,825.0
15	20,909.1	12,127.6	33,036.7
16	19,093.9	10,622.8	29,716.7
17	17,492.4	9,304.7	26,797.1
18	16,073.8	8,146.9	24,220.8
19	14,812.4	7,127.7	21,940.1
20	13,686.7	6,228.3	19,915.0
21	12,678.6	5,432.9	18,111.5
22	11,772.6	4,728.2	16,500.8
23	10,955.9	4,102.7	15,058.6
24	10,217.5	3,546.5	13,763.9
25	9,547.8	3,051.2	12,599.0
26	8,938.8	2,609.5	11,548.3
27	8,383.6	2,215.1	10,598.7
28	7,876.1	1,862.6	9,738.7
29	7,411.2	1,547.1	8,958.3
30	6,984.3	1,264.6	8,248.9
35	5,297.9	234.0	5,531.9
40	4,135.6	-365.0	3,770.6
45	3,304.7	NA*2	2,596.2
50	2,693.2	NA	1,796.6
55	2,232.3	NA	1,243.5
60	1,877.8	NA	856.5
65	1,600.5	NA	583.7
70	1,380.2	NA	390.5
75	1,202.9	NA	253.6
80	1,058.5	NA	156.8
85	939.4	NA	88.9
90	840.4	NA	41.7
95	757.2	NA	9.7
100	686.7	NA	-11.3

*1 D/R: Discount Rate
*2 NA : Not Available

Table 8.22 (1)

FINANCIAL ANALISYS
(EXISTING IMPROVEMENT)

BAGAMUIR COAL MINE RENOVATION PROJECT

VAR = 1.0
DEBT : EQUITY = 0.000 1.000
EQUIPMENT:
NON REVALUATION OF ASSETS

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4.000.0	4.000.0	3.853.2	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	86.178.6
Overburden (10*3 BCM)	14.199.2	14.199.2	14.907.6	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	355.472.4
Stripping Ratio (BCM/t)	3.550	3.550	3.869	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.125
Total Excavation (10*3 BCM)	17.300.0	17.300.0	17.894.6	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	422.277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4.000.0	4.000.0	3.853.2	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	3.716.3	86.178.6
Overburden (10*3 BCM)	14.199.2	14.199.2	14.907.6	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	15.608.3	355.472.4
Stripping Ratio (BCM/t)	3.550	3.550	3.869	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.125
Total Excavation (10*3 BCM)	17.300.0	17.300.0	17.894.6	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	18.489.1	422.277.5
[Revenue]																								
Sale Price (Tz/t)	4.385.6	5.545.8	7.006.7	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	8.852.3	
Trade Tax (Tz/t)	395.1	564.2	637.0	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	804.8	
Revenue (10*6 Tz)	15.362.1	20.186.7	24.543.9	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	29.906.8	858.809.1
[OPERATION COSTS] (10*6 Tz)																								
Material & Energy																								
Parts	8.959.7	8.959.7	8.918.7	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	9.215.0	211.137.8
Diesel Oil	1.053.4	1.053.4	1.208.5	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	1.248.7	28.368.0
Gas & Lub.	262.4	282.4	290.0	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	299.7	6.608.6
Electricity	787.6	891.5	1.001.1	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	1.170.8	26.696.3
Explosives	690.3	690.3	714.0	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	16.848.9
M & E Others	1.003.4	1.003.4	1.037.9	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	1.072.4	24.492.1
Labor Costs																								
Salaries & Wages	940.6	940.6	934.4	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9	21.873.0
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3.499.7
Others																								
Royalties & Charges	671.5	797.6	924.5	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	1.082.4	24.841.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	780.8	780.8	767.6	767.4	767.3	761.9	759.6	513.7	89.3	79.4	32.0	14.2	13.4	13.4	13.4	13.4	13.2	13.2	7.2	7.2	6.5	6.5	6.5	6.218.9
Replacement	0.0	288.9	1.435.5	2.220.5	2.393.5	3.065.4	3.286.6	4.109.7	4.805.2	6.076.1	6.458.5	6.758.9	6.758.9	6.807.3	6.884.7	6.884.7	6.881.8	6.884.7	6.836.2	6.411.6	6.836.2	6.088.4	6.325.2	113.695.5
Additional Investment	0.0	770.6	770.6	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	926.7	20.075.2
Total Operation Costs	15.340.0	16.629.6	18.152.3	19.846.6	20.619.4	20.885.9	20.904.9	21.482.1	21.753.2	23.005.1	23.350.2	23.531.8	23.631.0	23.679.4	23.756.7	23.756.7	22.953.7	23.756.5	23.702.1	23.277.5	23.701.4	22.953.6	23.190.4	503.160.3
[PROFIT] (10*6 Tz)																								
Before Tax Profit(Loss)	622.1	3.537.1	6.391.6	10.060.2	9.887.4	9.220.9	8.001.9	8.424.7	8.153.6	6.901.7	6.556.6	6.275.1	6.275.9	6.227.4	6.150.1	6.150.1	6.853.1	6.150.3	6.204.7	6.629.4	6.205.4	6.953.2	6.716.4	155.648.8
Corporate Income Tax (40%)	248.8	1.414.8	2.556.6	4.024.1	3.955.0	3.688.4	3.600.8	3.369.9	3.261.4	2.760.7	2.622.6	2.510.0	2.514.3	2.491.0	2.460.0	2.460.0	2.781.2	2.460.1	2.481.9	2.651.7	2.482.2	2.781.3	2.686.6	62.258.5
After Tax Profit(Loss)	373.2	2.122.2	3.835.9	5.836.1	5.932.4	5.532.5	5.401.2	5.054.8	4.892.2	4.141.0	3.934.0	3.765.0	3.765.5	3.736.5	3.690.0	3.690.0	4.171.9	3.690.2	3.722.8	3.977.6	3.723.3	4.171.9	4.029.8	93.389.3
After Tax Expenses	728.0	739.5	758.9	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	796.6	16.158.3
Retained Earning(Loss)	-354.7	1.382.8	3.076.0	5.239.5	5.135.8	4.735.9	4.604.6	4.258.2	4.095.6	3.344.4	3.137.4	2.968.4	2.968.9	2.939.9	2.893.4	2.893.4	3.375.3	2.893.6	2.926.2	3.181.0	2.926.7	3.375.3	3.233.3	75.231.0
[INVESTMENT] (10*6 Tz)																								
Existing Eq. Replacement	2.111.5	14.595.4	5.936.6	1.671.4	8.392.3	1.817.3	12.757.4	10.071.8	21.605.8	7.867.7	10.278.7	1.666.6	1.738.6	1.966.6	1.246.1	1.242.2	14.437.9	2.837.3	6.231.4	8.478.7	2.170.6	12.312.0	5.490.1	160.923.8
Additional Investment	5.325.6	0.0	1.248.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.574.1
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1.920.0	151.2	0.0	2.245.0	0.0	3.574.1	0.0	151.2	0.0	0.0	2.523.8	2.245.0	0.0	1.399.7	0.0	2.325.6	0.0	0.0	16.535.5
Total Capital Cost	7.437.1	14.595.4	7.185.1	1.671.4	8.392.3	3.737.3	12.908.6	10.071.8	23.850.7	7.867.7	13.852.8	1.666.6	1.889.8	1.966.6	1.246.1	3.766.1	16.682.9	2.837.3	7.631.0	8.478.7	4.496.2	12.312.0	5.490.1	184.033.4
[CASH FLOW] (10*6 Tz)																								
Profit or Loss	-354.7	1.382.8	3.076.0	5.239.5	5.135.8	4.735.9	4.604.6	4.258.2	4.095.6	3.344.4	3.137.4	2.968.4	2.968.9	2.939.9	2.893.4	2.893.4	3.375.3	2.893.6	2.926.2	3.181.0	2.926.7	3.375.3	3.233.3	75.231.0
Depreciation	780.8	1.840.3	2.373.7	3.814.6	4.087.5	4.753.9	4.572.9	5.550.1	5.821.2	7.073.2	7.418.2	7.699.8	7.699.8	7.747.4	7.824.8	7.824.8	7.021.7	7.824.6	7.770.1	7.345.5	7.769.4	7.021.8	7.258.4	139.993.5
LESS:Total Capital Cost	7.437.1	14.595.4	7.185.1	1.671.4	8.392.3	3.737.3	12.908.6	10.071.8	23.850.7	7.867.7	13.852.8	1.666.6	1.889.8	1.966.6	1.246.1	3.766.1	16.682.9	2.837.3	7.631.0	8.478.7	4.496.2	12.312.0	5.490.1	184.033.4
LESS:Working Capital	3.639.8	57.5	97.3	188.4	0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	3.983.0
Debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-10.859.9	-11.429.8	-1.232.7	7.234.4	831.0	5.752.6	-3.331.2	-263.5	-13.833.9	2.549.9	-3.297.2	4.001.7	8.778.1	8.729.7	9.472.1	6.952.1	-6.285.9	7.880.8	3.085.3	2.947.8	6.199.9	-1.815.0	1.001.6	27.208.1

Salvage	
Reclamation	-139.7
Loan Unrepaid	0.0
Working Capital	3.983.0
Depreciation	50.258.8
TOTAL	54.102.1

(%) FIRR = 10.0

Discount Rate (%) = 10.0 (10*6 Tz) NPV = 0.0

Table 8.22 (2)

FINANCIAL ANALISYS
FOREIGN & LOCAL CURRENCY
(EXISTING IMPROVEMENT)

EQUIPMENT:
NON REVALUATION OF ASSETS

SAGANUUR COAL MINE RENOVATION PROJECT

	1996	1997	1998	1999	2000	2001	2002	2003
FOREIGN CURRENCY (10^6 Tg)								
[INVESTMENT]								
Existing Eq. Replacement	1,759.8	12,182.8	4,947.2	1,392.8	6,993.6	1,514.4	10,631.2	8,293.2
Additional Investment	4,438.0	0.0	1,040.4	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,600.0	126.0	0.0
Sub-total	6,197.8	12,182.8	5,987.6	1,392.8	6,993.6	3,114.4	10,757.2	8,293.2
[OPERATING COSTS]								
Material & Energy								
Parts	6,838.4	6,838.4	6,508.0	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5
Diesel Oil	518.7	518.7	571.2	590.1	590.1	590.1	590.1	590.1
Gas & Lub.	121.0	121.0	133.7	138.2	138.2	138.2	138.2	138.2
Electricity	-	-	-	-	-	-	-	-
Explosives	511.3	511.3	528.9	548.4	548.4	548.4	548.4	548.4
M & E Others	-	-	-	-	-	-	-	-
Labor Costs								
Salaries & Wages	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-
Others								
Royalties & Charges	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-
Sub-total	7,785.4	7,785.4	7,839.8	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3
FOREIGN CURRENCY TOTAL	13,983.0	19,948.2	13,827.4	9,493.1	15,093.9	11,214.7	18,857.5	16,393.5
LOCAL CURRENCY (10^6 Tg)								
[INVESTMENT]								
Existing Eq. Replacement	351.9	2,432.8	989.5	278.8	1,398.7	302.9	2,126.3	1,578.7
Additional Investment	887.6	0.0	208.1	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	320.0	25.2	0.0
Sub-total	1,239.5	2,432.8	1,197.6	278.8	1,398.7	622.9	2,151.5	1,578.7
[OPERATING COSTS]								
Material & Energy								
Parts	2,322.2	2,323.2	2,312.6	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4
Diesel Oil	578.7	578.7	637.4	658.8	658.8	658.8	658.8	658.8
Gas & Lub.	141.4	141.4	156.3	181.5	181.5	181.5	181.5	181.5
Electricity	787.8	891.5	1,001.1	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8
Explosives	179.0	179.0	185.1	191.3	191.3	191.3	191.3	191.3
M & E Others	1,003.4	1,003.4	1,037.9	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4
Labor Costs								
Salaries & Wages	940.8	940.8	934.4	952.9	952.9	952.9	952.9	952.9
Social Insurance	150.5	150.5	149.5	152.5	152.5	152.5	152.5	152.5
Others								
Royalties & Charges	571.5	797.8	924.5	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	728.0	739.5	758.9	798.8	798.8	798.8	798.8	798.8
Sub-total	7,501.7	7,743.3	8,097.7	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3
LOCAL CURRENCY TOTAL	8,741.3	10,175.9	9,295.2	8,906.9	10,027.0	9,251.2	10,779.8	10,307.0
TOTAL	22,724.3	30,124.1	23,122.6	18,400.0	25,120.9	20,465.9	29,637.2	26,800.4
FOREIGN CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	4,399.0	30,406.9	12,368.0	3,482.0	17,484.0	3,788.0	28,577.9	20,982.9
Additional Investment	11,095.0	0.0	2,601.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	315.0	0.0
Sub-total	15,494.0	30,406.9	14,969.0	3,482.0	17,484.0	7,788.0	28,892.9	20,982.9
[OPERATING COSTS]								
Material & Energy								
Parts	16,591.1	16,591.1	16,515.1	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9
Diesel Oil	1,291.8	1,291.8	1,427.9	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3
Gas & Lub.	302.5	302.5	334.4	345.5	345.5	345.5	345.5	345.5
Electricity	-	-	-	-	-	-	-	-
Explosives	1,278.2	1,278.2	1,322.1	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1
M & E Others	-	-	-	-	-	-	-	-
Labor Costs								
Salaries & Wages	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-
Others								
Royalties & Charges	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-
Sub-total	19,463.6	19,463.6	19,599.5	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7
FOREIGN CURRENCY TOTAL	34,957.6	49,870.5	34,568.5	23,732.7	37,734.7	28,038.7	49,143.6	41,233.7
LOCAL CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	879.8	6,081.5	2,473.8	696.4	3,496.8	757.2	5,315.7	4,196.7
Additional Investment	2,219.0	0.0	520.2	0.0	0.0	0.0	0.0	0.0
Additional Replacement	0.0	0.0	0.0	0.0	0.0	800.0	63.0	0.0
Sub-total	3,098.8	6,081.5	2,994.0	696.4	3,496.8	1,557.2	5,378.7	4,196.7
[OPERATING COSTS]								
Material & Energy								
Parts	5,808.1	5,808.1	5,781.5	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8
Diesel Oil	1,441.8	1,441.8	1,593.4	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4
Gas & Lub.	353.5	353.5	390.8	403.7	403.7	403.7	403.7	403.7
Electricity	1,968.9	2,228.7	2,502.7	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0
Explosives	447.5	447.5	462.8	478.2	478.2	478.2	478.2	478.2
M & E Others	2,508.5	2,508.5	2,594.7	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9
Labor Costs								
Salaries & Wages	2,351.4	2,351.4	2,335.9	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2
Social Insurance	376.2	376.2	373.7	381.2	381.2	381.2	381.2	381.2
Others								
Royalties & Charges	1,878.7	1,994.0	2,311.2	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	1,819.9	1,848.7	1,897.3	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5
Sub-total	18,754.3	19,358.2	20,244.1	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8
LOCAL CURRENCY TOTAL	21,853.2	25,439.7	23,238.0	22,267.2	25,067.6	23,128.0	26,949.5	25,767.4
TOTAL	56,810.7	75,310.2	57,808.4	45,999.9	62,802.3	51,166.7	76,093.1	67,001.1

	2004	2005	2006	2007	2008	2009	2010	2011
FOREIGN CURRENCY (10^6 Tg)								
[INVESTMENT]								
Existing Eq. Replacement	18,004.8	6,558.4	8,565.3	1,388.8	1,448.8	1,538.8	1,038.4	1,035.2
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	1,870.8	0.0	2,978.4	0.0	126.0	0.0	0.0	2,103.2
Sub-total	19,875.6	6,558.4	11,544.0	1,388.8	1,574.8	1,538.8	1,038.4	3,138.4
[OPERATING COSTS]								
Material & Energy								
Parts	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5
Diesel Oil	590.1	590.1	590.1	590.1	590.1	590.1	590.1	590.1
Gas & Lub.	138.2	138.2	138.2	138.2	138.2	138.2	138.2	138.2
Electricity	-	-	-	-	-	-	-	-
Explosives	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4
M & E Others	-	-	-	-	-	-	-	-
Labor Costs								
Salaries & Wages	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-
Others								
Royalties & Charges	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-
Sub-total	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3
FOREIGN CURRENCY TOTAL	27,975.9	14,658.7	19,644.3	9,489.1	9,675.1	9,639.1	9,138.7	11,238.7
LOCAL CURRENCY (10^6 Tg)								
[INVESTMENT]								
Existing Eq. Replacement	3,601.0	1,311.3	1,713.1	277.8	289.8	327.8	207.7	207.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	374.2	0.0	595.7	0.0	25.2	0.0	0.0	420.8
Sub-total	3,975.2	1,311.3	2,308.8	277.8	315.0	327.8	207.7	627.7
[OPERATING COSTS]								
Material & Energy								
Parts	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4
Diesel Oil	658.8	658.8	658.8	658.8	658.8	658.8	658.8	658.8
Gas & Lub.	181.5	181.5	181.5	181.5	181.5	181.5	181.5	181.5
Electricity	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8
Explosives	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3
M & E Others	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4
Labor Costs								
Salaries & Wages	952.9	952.9	952.9	952.9	952.9	952.9	952.9	952.9
Social Insurance	152.5	152.5	152.5	152.5	152.5	152.5	152.5	152.5
Others								
Royalties & Charges	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	798.8	798.8	798.8	798.8	798.8	798.8	798.8	798.8
Sub-total	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3
LOCAL CURRENCY TOTAL	12,603.5	9,939.6	10,937.1	8,906.1	8,943.3	8,956.1	8,836.0	9,256.0
TOTAL	40,579.3	24,598.3	30,581.4	18,395.1	18,618.3	18,595.1	17,974.7	20,494.7
FOREIGN CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	45,011.9	18,391.0	21,411.9	3,472.0	3,622.0	4,097.0	2,598.0	2,588.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	4,677.0	0.0	7,448.0	0.0	315.0	0.0	0.0	5,258.0
Sub-total	49,688.9	18,391.0	28,859.9	3,472.0	3,937.0	4,097.0	2,598.0	7,846.0
[OPERATING COSTS]								
Material & Energy								
Parts	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9
Diesel Oil	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3
Gas & Lub.	345.5	345.5	345.5	345.5	345.5	345.5	345.5	345.5
Electricity	-	-	-	-	-	-	-	-
Explosives	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1
M & E Others	-	-	-	-	-	-	-	-
Labor Costs								
Salaries & Wages	-	-	-	-	-	-	-	-
Social Insurance	-	-	-	-	-	-	-	-
Others								
Royalties & Charges	-	-	-	-	-	-	-	-
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-
Sub-total	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7
FOREIGN CURRENCY TOTAL	69,939.6	38,641.7	49,110.6	23,722.7	24,187.7	24,347.7	22,848.7	28,096.7
LOCAL CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	9,002.5	3,278.2	4,282.9	694.4	724.4	819.4	519.2	517.6
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Additional Replacement	935.4	0.0	1,489.2	0.0	63.0	0.0	0.0	1,051.6
Sub-total	9,937.9	3,278.2	5,772.1	694.4	787.4	819.4	519.2	1,569.2
[OPERATING COSTS]								
Material & Energy								
Parts	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8
Diesel Oil	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4
Gas & Lub.	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7
Electricity	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0
Explosives	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2
M & E Others	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9
Labor Costs								
Salaries & Wages	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2
Social Insurance	381.2	381.2	381.2	381.2	381.2	381.2	381.2	381.2
Others								
Royalties & Charges	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5
Sub-total	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8
LOCAL CURRENCY TOTAL	31,508.7	24,849.0	27,342.8	22,265.2	22,358.2	22,390.2	22,090.0	23,140.0
TOTAL	101,448.3	63,490.7	76,453.5	45,987.9	46,545.9	46,737.9	44,938.7	51,236.7

	2012	2013	2014	2015	2016	2017	2018	TOTAL
FOREIGN CURRENCY (10^6 Tg)								
[INVESTMENT]								
Existing Eq. Replacement	12,031.8	2,384.4	5,192.8	7,085.8	1,808.8	10,260.0	7,908.4	134,102.9
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,478.4
Additional Replacement	1,870.6	0.0	1,166.4	0.0	1,938.0	0.0	0.0	13,779.6
Sub-total	13,902.4	2,384.4	6,359.2	7,085.8	3,746.8	10,260.0	7,908.4	153,360.8
[OPERATING COSTS]								
Material & Energy								
Parts	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5	6,825.5	158,389.8
Diesel Oil	590.1	590.1	590.1	590.1	590.1	590.1	590.1	13,407.2
Gas & Lub.	138.2	138.2	138.2	138.2	138.2	138.2	138.2	3,136.4
Electricity	-	-	-	-	-	-	-	
Explosives	548.4	548.4	548.4	548.4	548.4	548.4	548.4	12,480.0
M & E Others	-	-	-	-	-	-	-	
Labor Costs								
Salaries & Wages	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	
Others								
Royalties & Charges	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	
Sub-total	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	8,100.3	185,413.2
FOREIGN CURRENCY TOTAL	22,002.6	10,484.7	14,459.5	15,185.9	11,847.1	18,360.3	16,008.7	338,773.2
LOCAL CURRENCY (10^6 Tg)								
[INVESTMENT]								
Existing Eq. Replacement	2,406.2	472.9	1,038.6	1,413.1	361.8	2,052.0	1,581.7	28,821.0
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,095.7
Additional Replacement	374.2	0.0	233.3	0.0	387.6	0.0	0.0	2,758.0
Sub-total	2,780.5	472.9	1,271.9	1,413.1	749.4	2,052.0	1,581.7	32,672.6
[OPERATING COSTS]								
Material & Energy								
Parts	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4	2,389.4	54,748.0
Diesel Oil	658.8	658.8	658.8	658.8	658.8	658.8	658.8	14,861.8
Gas & Lub.	181.5	181.5	181.5	181.5	181.5	181.5	181.5	3,869.1
Electricity	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8	1,170.8	25,096.3
Explosives	191.3	191.3	191.3	191.3	191.3	191.3	191.3	4,368.9
M & E Others	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	24,492.1
Labor Costs								
Salaries & Wages	952.9	952.9	952.9	952.9	952.9	952.9	952.9	21,873.0
Social Insurance	152.5	152.5	152.5	152.5	152.5	152.5	152.5	3,488.7
Others								
Royalties & Charges	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4	1,082.4	24,641.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	798.8	798.8	798.8	798.8	798.8	798.8	798.8	18,158.3
Sub-total	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3	8,628.3	195,908.7
LOCAL CURRENCY TOTAL	11,408.8	9,101.2	9,900.2	10,041.4	9,377.7	10,680.3	10,210.0	228,581.4
TOTAL	33,411.5	19,585.9	24,359.7	25,227.3	21,224.7	29,040.6	26,218.7	567,354.6
FOREIGN CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	30,078.9	5,911.0	12,982.0	17,684.0	4,522.0	25,649.9	19,771.0	335,257.2
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,696.0
Additional Replacement	4,677.0	0.0	2,916.0	0.0	4,845.0	0.0	0.0	34,448.9
Sub-total	34,755.9	5,911.0	15,898.0	17,684.0	9,367.0	25,649.9	19,771.0	383,402.1
[OPERATING COSTS]								
Material & Energy								
Parts	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9	17,083.9	390,974.4
Diesel Oil	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	1,475.3	33,517.9
Gas & Lub.	345.5	345.5	345.5	345.5	345.5	345.5	345.5	7,848.8
Electricity	-	-	-	-	-	-	-	
Explosives	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1	1,368.1	31,189.9
M & E Others	-	-	-	-	-	-	-	
Labor Costs								
Salaries & Wages	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	
Others								
Royalties & Charges	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	
Sub-total	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	20,250.7	463,540.8
FOREIGN CURRENCY TOTAL	55,006.6	26,161.7	36,148.7	37,934.7	29,617.7	45,900.6	40,021.7	846,942.9
LOCAL CURRENCY (10^3 US$)								
[INVESTMENT]								
Existing Eq. Replacement	6,015.9	1,182.2	2,596.4	3,536.8	904.4	5,130.1	3,954.2	67,052.4
Additional Investment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,739.2
Additional Replacement	935.4	0.0	583.2	0.0	969.0	0.0	0.0	6,889.9
Sub-total	6,951.3	1,182.2	3,179.6	3,536.8	1,873.4	5,130.1	3,954.2	76,681.5
[OPERATING COSTS]								
Material & Energy								
Parts	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8	5,973.8	136,870.1
Diesel Oil	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4	1,646.4	37,404.5
Gas & Lub.	403.7	403.7	403.7	403.7	403.7	403.7	403.7	9,172.8
Electricity	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0	2,927.0	65,240.7
Explosives	478.2	478.2	478.2	478.2	478.2	478.2	478.2	10,922.3
M & E Others	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	61,220.2
Labor Costs								
Salaries & Wages	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2	2,382.2	54,682.5
Social Insurance	381.2	381.2	381.2	381.2	381.2	381.2	381.2	8,749.2
Others								
Royalties & Charges	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0	2,706.0	60,103.7
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5	1,991.5	45,385.8
Sub-total	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8	21,570.8	489,771.8
LOCAL CURRENCY TOTAL	28,522.0	22,753.0	24,750.4	25,107.6	23,444.2	26,700.9	25,525.0	566,453.4
TOTAL	83,528.7	48,914.7	60,899.1	63,042.3	53,061.9	72,601.5	65,546.7	1,413,396.3

Table 8.23 (1)

FINANCIAL ANALISYS
(EXISTING IMPROVEMENT)

BAGANUUR COAL MINE RENOVATION PROJECT

VAR = 1.0
DEBT:EQUITY= 0.000 1.000
EQUIPMENT:NON RAILWAY SYSTEM in 1996
NON REVALUATION OF ASSETS

Foreign E.R (Tg/US$): 400.0
TBCM (%): 100.0
Coal (%): 100.0
Interest R. for F.Debt (%): 8.0
Interest R. for L.Debt (%): 8.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
[PRODUCTION]																								
A Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.550	3.550	3.869	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.125
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
B Coal (10*3 t)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overburden (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stripping Ratio (BCM/t)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Excavation (10*3 BCM)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C Coal (10*3 t)	4,000.0	4,000.0	3,853.2	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	3,716.3	86,178.6
Overburden (10*3 BCM)	14,199.2	14,199.2	14,907.6	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	15,608.3	355,472.4
Stripping Ratio (BCM/t)	3.550	3.550	3.869	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.125
Total Excavation (10*3 BCM)	17,300.0	17,300.0	17,894.6	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	18,489.1	422,277.5
[Revenue]																								
Sale Price (Tg/t)	4,233.4	5,252.5	6,517.0	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	8,085.8	
Trade Tax (Tg/t)	384.9	477.5	592.5	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	735.1	
Revenue (10*6 Tg)	15,394.2	19,190.0	23,828.5	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	27,317.3	603,667.9
[OPERATION COSTS] (10*6 Tg)																								
Material & Energy																								
Parts	8,959.7	8,958.7	8,224.3	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	8,497.6	136,095.9
Diesel Oil	1,083.4	1,083.4	1,422.7	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	1,469.9	33,088.1
Gas & Lub.	262.4	262.4	341.4	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	352.8	7,921.9
Electricity	787.6	891.5	917.4	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	24,655.1
Explosives	690.3	690.3	714.9	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	737.7	16,848.9
M & E Others	1,003.4	1,003.4	1,037.9	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	24,492.1
Labor Costs																								
Salaries & Wages	540.6	540.6	747.6	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	17,873.0
Social Insurance	150.5	150.5	115.8	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	654.4	765.6	864.0	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	995.6	22,195.5
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Depreciation																								
Past Depreciation	780.8	780.8	767.6	767.4	767.3	761.8	758.6	513.7	85.3	70.4	32.0	14.2	13.4	13.4	13.4	13.4	13.2	13.2	7.2	7.2	6.5	6.5	6.5	8,218.5
Replacement	0.0	288.5	1,124.5	1,851.2	2,024.1	2,886.3	2,907.5	2,934.4	3,086.8	3,547.6	3,851.6	3,959.9	3,950.9	3,989.3	4,033.7	4,033.7	3,230.6	4,033.7	3,985.2	3,568.6	3,985.2	4,033.7	3,881.3	70,781.7
Additional Investment	0.0	770.5	770.6	2,091.5	2,091.5	2,091.5	2,091.5	2,491.5	1,908.2	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,091.5	2,491.5	43,188.1
Total Operation Costs	15,323.0	16,587.6	17,051.7	18,793.5	19,966.3	20,623.1	20,842.0	20,623.0	20,147.7	20,732.9	20,858.4	21,140.0	21,139.2	21,187.6	21,221.3	21,221.9	20,418.5	21,221.7	21,167.3	20,742.7	21,166.5	21,215.0	21,062.7	485,544.7
[PROFIT] (10*6 Tg)																								
Before Tax Profit(Loss)	71.2	2,602.4	5,776.7	7,523.8	7,351.0	6,694.2	6,475.3	6,694.3	7,169.6	6,524.4	6,458.8	6,177.3	6,178.1	6,129.7	6,095.3	6,095.3	6,898.3	6,095.5	6,150.0	6,574.6	6,150.7	6,102.2	6,254.6	138,123.2
Corporate Income Tax (40%)	28.5	1,001.0	2,310.7	3,009.5	2,940.4	2,677.7	2,590.1	2,677.7	2,859.8	2,609.7	2,583.5	2,470.9	2,471.2	2,451.9	2,438.1	2,438.1	2,759.3	2,438.2	2,460.0	2,629.8	2,460.3	2,440.9	2,501.8	55,249.3
After Tax Profit(Loss)	42.7	1,601.5	3,521.8	4,514.3	4,410.6	4,016.5	3,885.2	4,016.6	4,289.7	3,914.6	3,875.3	3,706.4	3,706.9	3,677.8	3,657.2	3,657.2	4,139.0	3,657.3	3,690.0	3,944.8	3,690.4	3,661.3	3,752.8	82,873.9
After Tax Expenses	727.1	737.9	719.5	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	754.2	17,267.8
Retained Earning(Loss)	-684.4	763.6	4,802.4	3,760.1	3,656.4	3,262.4	3,131.0	3,262.4	3,535.6	3,160.4	3,121.1	2,952.2	2,952.7	2,923.6	2,903.0	2,903.0	3,384.8	2,903.1	2,935.8	3,190.6	2,936.2	2,907.2	2,998.6	67,661.9
[INVESTMENT] (10*6 Tg)																								
Existing Eq. Replacement	2,111.5	14,595.4	5,479.1	1,671.4	8,314.6	1,817.3	814.1	2,877.1	8,484.0	2,158.1	8,812.2	1,666.6	1,660.8	1,321.4	1,246.1	153.6	13,465.9	1,321.0	5,784.8	8,478.7	2,092.8	368.6	3,384.0	98,048.9
Additional Investment	5,325.6	0.0	10,674.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15,999.8
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,920.0	151.2	0.0	9,070.6	0.0	2,325.6	0.0	151.2	0.0	8,825.6	2,523.8	2,245.8	0.0	151.2	0.0	9,151.2	0.0	0.0	34,515.4
Total Capital Cost	7,437.1	14,595.4	16,144.3	1,671.4	8,314.6	3,737.3	965.3	2,877.1	17,554.6	2,158.1	12,137.8	1,666.6	1,812.0	1,321.4	8,971.7	2,677.4	15,710.5	1,321.0	5,916.0	8,478.7	11,244.0	368.6	3,384.0	148,565.1
[CASH FLOW] (10*6 Tg)																								
Profit or Loss	-684.4	763.6	4,802.4	3,760.1	3,656.4	3,262.4	3,131.0	3,262.4	3,535.6	3,160.4	3,121.1	2,952.2	2,952.7	2,923.6	2,903.0	2,903.0	3,384.8	2,903.1	2,935.8	3,190.6	2,936.2	2,907.2	2,998.6	67,661.9
Depreciation	780.8	1,840.3	2,802.7	4,710.1	4,882.9	5,539.7	5,758.6	5,539.6	5,084.3	5,795.5	5,775.1	6,055.6	6,055.8	6,104.2	6,138.6	6,138.6	5,335.6	6,138.4	6,083.5	5,659.3	6,083.2	6,131.7	5,979.3	120,188.7
LESS:Total Capital Cost	7,437.1	14,595.4	16,144.3	1,671.4	8,314.6	3,737.3	965.3	2,877.1	17,554.6	2,158.1	12,137.8	1,666.6	1,812.0	1,321.4	8,971.7	2,677.4	15,710.5	1,321.0	5,916.0	8,478.7	11,244.0	368.6	3,384.0	148,565.1
LESS:Working Capital	3,635.5	53.8	-32.1	173.6	-0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	0.0	0.0	0.0	3,770.8
Debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repayment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash Flow	-10,976.3	-12,045.2	-8,587.2	6,625.2	224.8	5,064.8	7,924.3	5,924.9	-8,934.7	6,711.9	-3,241.6	7,342.3	7,186.5	7,706.4	969.9	6,364.1	-6,990.5	7,720.5	3,103.7	371.2	-2,224.5	8,670.2	5,595.9	34,514.6

Salvage	38,860.0
Reclamation	-138.7
Loan Unrepaid	0.0
Working Capital	3,770.8
Equipment	35,228.8
TOTAL	0.0

(%) FIRR = 10.0
Discount Rate (%) = 10.0 (10*6 Tg) NPV = -0.5

Table 8.23 (2)

FINANCIAL ANALYSYS
FOREIGN & LOCAL CURRENCY
(EXISTING IMPROVEMENT)

EQUIPMENT:NON RAILWAY SYSTEM in 1996
REVALUATION OF ASSETS

BAGANUUR COAL MINE RENOVATION PROJECT

Foreign E.R (Tg/US$) 400.0
TBCK (%) 100.0
Coal (%) 100.0
Interest R. for F.Debt (%) 8.0
Interest L. for F.Debt (%) 8.0

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
FOREIGN CURRENCY (10^6 Tg)																								
(INVESTMENT)																								
Existing Eq. Replacement	1,759.6	12,152.8	4,558.4	1,392.8	6,928.8	1,514.4	978.4	2,397.8	7,076.0	1,792.4	8,176.8	1,388.8	1,384.0	1,101.2	1,034.4	128.0	11,323.8	1,100.8	4,804.0	7,385.8	1,744.0	307.2	2,820.0	82,541.4
Additional Investment	4,423.0	0.0	8,895.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,332.2
Additional Replacement	0.0	0.0	0.0	0.0	0.0	1,600.0	126.0	0.0	7,558.8	0.0	1,938.0	0.0	126.0	0.0	5,688.0	2,103.2	1,870.8	0.0	126.0	0.0	7,626.0	0.0	0.0	28,762.7
Sub-total	6,197.3	12,152.8	13,453.6	1,392.8	6,928.8	3,114.4	1,104.4	2,397.8	14,634.8	1,792.4	10,114.8	1,388.8	1,510.0	1,101.2	6,722.4	2,231.2	13,092.4	1,100.8	4,930.0	7,385.8	9,370.0	307.2	2,820.0	124,637.3
(OPERATING COSTS)																								
Material & Energy																								
Parts	8,538.4	8,538.4	8,281.8	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	8,294.2	145,248.3
Diesel Oil	518.7	518.7	872.3	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	894.7	15,599.8
Gas & Lub.	121.0	121.0	157.4	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	182.7	3,952.8
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	511.3	511.3	528.9	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	548.4	12,480.0
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	7,785.4	7,785.4	7,450.4	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	7,898.0	178,000.0
FOREIGN CURRENCY TOTAL	13,983.0	19,948.2	20,904.0	9,090.8	14,826.7	10,812.4	9,002.4	10,295.8	22,370.7	9,490.4	17,812.7	9,046.8	9,294.0	8,799.2	14,424.4	9,929.2	20,790.3	8,798.8	12,628.0	14,783.5	17,067.9	8,005.2	10,518.0	301,817.0
LOCAL CURRENCY (10^6 Tg)																								
Increase in Working Capi	3,634.8	53.0	-93.1	172.2	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,766.7
(INVESTMENT)																								
Existing Eq. Replacement	351.9	2,432.8	911.7	278.8	1,385.8	302.8	135.7	479.5	1,414.0	358.7	1,635.4	277.8	276.8	220.2	207.7	25.6	2,264.3	220.2	960.8	1,477.1	348.8	61.4	564.0	16,508.5
Additional Investment	887.6	0.0	1,779.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,666.7
Additional Replacement	0.0	0.0	0.0	0.0	0.0	320.0	25.2	0.0	1,511.8	0.0	387.6	0.0	25.2	0.0	1,137.6	420.6	374.2	0.0	25.2	0.0	1,525.2	0.0	0.0	5,752.6
Sub-total	1,239.5	2,432.8	2,690.8	278.8	1,385.8	622.8	160.9	479.5	2,925.8	358.7	2,023.0	277.8	302.0	220.2	1,345.3	446.2	2,618.5	220.2	986.0	1,477.1	1,874.0	61.4	564.0	24,927.6
(OPERATING COSTS)																								
Material & Energy																								
Parts	2,323.2	2,323.2	2,132.8	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	2,203.4	50,847.7
Diesel Oil	578.7	578.7	750.3	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	775.2	17,408.5
Gas & Lub.	141.4	141.4	184.0	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	190.1	4,288.1
Electricity	787.6	881.5	817.4	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	1,072.9	24,055.1
Explosives	179.0	179.0	185.1	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	4,366.9
M & E Others	1,003.4	1,003.4	1,037.9	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	1,072.4	24,472.1
Labor Costs																								
Salaries & Wages	940.6	940.6	747.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	17,878.0
Social Insurance	150.5	150.5	119.8	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	122.0	2,860.5
Others																								
Royalties & Charges	850.7	758.7	853.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	979.0	21,843.1
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	725.9	737.5	718.8	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	17,250.2
Sub-total	7,478.8	7,702.4	7,648.4	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	8,122.2	185,273.2
LOCAL CURRENCY TOTAL	12,354.1	10,187.9	10,244.1	8,573.0	9,508.0	8,745.1	8,283.1	8,601.7	11,048.9	8,481.9	10,145.2	8,400.8	8,424.8	8,342.5	9,467.5	8,568.5	10,740.7	8,342.4	9,108.2	9,535.4	9,996.2	8,183.7	8,686.2	213,987.7
TOTAL	26,337.1	30,136.2	31,148.1	17,663.8	24,334.7	19,557.5	16,785.5	18,897.3	33,374.7	17,978.3	27,957.9	17,481.7	17,672.2	17,141.8	22,881.8	18,487.8	31,531.1	17,141.1	21,736.2	24,288.8	27,064.7	16,188.8	19,204.2	515,565.8
FOREIGN CURRENCY (10^3 US$)																								
(INVESTMENT)																								
Existing Eq. Replacement	4,398.0	30,408.9	11,398.0	3,482.0	17,322.0	3,786.0	1,896.0	5,994.0	17,875.0	4,498.0	20,442.0	3,472.0	3,460.0	2,753.0	2,598.0	320.0	28,053.9	2,752.0	12,010.0	17,884.9	4,388.0	798.0	7,050.0	206,353.5
Additional Investment	11,085.0	0.0	22,237.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33,332.9
Additional Replacement	0.0	0.0	0.0	0.0	0.0	4,000.0	315.0	0.0	18,897.0	0.0	4,845.0	0.0	315.0	0.0	14,220.0	5,258.0	4,677.0	0.0	315.0	0.0	18,085.0	0.0	0.0	71,006.8
Sub-total	15,484.0	30,408.9	33,633.9	3,482.0	17,322.0	7,786.0	2,211.0	5,994.0	36,572.0	4,498.0	25,287.0	3,472.0	3,775.0	2,753.0	16,818.0	5,578.0	32,730.9	2,752.0	12,325.0	17,884.0	22,474.0	798.0	7,050.0	311,592.2
(OPERATING COSTS)																								
Material & Energy																								
Parts	16,581.1	16,581.1	15,228.4	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	15,735.5	362,170.8
Diesel Oil	1,291.8	1,291.8	1,680.8	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	1,738.7	38,899.0
Gas & Lub.	302.5	302.5	392.8	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	408.7	9,132.0
Electricity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Explosives	1,278.2	1,278.2	1,322.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	1,388.1	31,199.6
M & E Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Labor Costs																								
Salaries & Wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Social Insurance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Others																								
Royalties & Charges	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total	19,463.6	19,463.6	18,626.0	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	19,244.9	442,451.8
FOREIGN CURRENCY TOTAL	34,957.6	49,870.5	52,260.0	22,726.9	36,566.9	27,030.9	21,455.9	25,238.9	55,816.9	23,740.9	44,531.9	22,716.9	23,019.9	21,997.9	36,062.9	24,822.9	51,975.8	21,996.9	31,569.9	37,128.9	41,718.9	20,042.9	26,294.9	754,044.0
LOCAL CURRENCY (10^3 US$)																								
Increase in Working Capi	9,086.5	132.4	-232.7	430.4	0.0	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9,416.6
(INVESTMENT)																								
Existing Eq. Replacement	879.8	6,081.5	2,279.2	696.4	3,464.4	757.2	339.2	1,198.8	3,535.0	896.7	4,088.4	694.4	692.0	550.6	519.2	64.0	5,610.8	550.4	2,402.0	3,332.8	872.0	153.6	1,410.0	41,271.3
Additional Investment	2,219.0	0.0	4,447.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6,666.7
Additional Replacement	0.0	0.0	0.0	0.0	0.0	800.0	63.0	0.0	3,779.4	0.0	969.0	0.0	63.0	0.0	2,844.0	1,051.6	935.4	0.0	63.0	0.0	3,613.0	0.0	0.0	14,381.6
Sub-total	3,098.8	6,081.5	6,726.9	696.4	3,464.4	1,557.2	402.2	1,198.8	7,314.5	896.7	5,057.5	694.4	755.0	550.6	3,363.2	1,115.6	6,546.2	550.4	2,465.0	3,332.8	4,485.0	153.6	1,410.0	62,318.8
(OPERATING COSTS)																								
Material & Energy																								
Parts	5,808.1	5,808.1	5,331.4	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	5,508.6	127,119.2
Diesel Oil	1,441.8	1,441.8	1,875.8	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	1,938.1	43,521.1
Gas & Lub.	353.5	353.5	460.0	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	475.3	10,672.8
Electricity	1,968.0	2,228.7	2,382.5	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	2,682.3	60,137.8
Explosives	447.5	447.5	462.8	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	478.2	10,922.3
M & E Others	2,508.5	2,508.5	2,594.7	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	2,680.9	61,230.2
Labor Costs																								
Salaries & Wages	2,351.4	2,351.4	1,868.1	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	1,906.2	44,695.1
Social Insurance	376.2	376.2	299.1	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	305.0	7,151.2
Others																								
Royalties & Charges	1,826.7	1,896.8	2,132.4	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	2,447.6	54,607.7
Payable Interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
After Tax Expenses	1,817.3	1,843.8	1,797.2	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	1,883.4	43,125.5
Sub-total	18,696.9	19,255.9	19,116.1	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	20,305.6	463,183.0
LOCAL CURRENCY TOTAL	30,885.1	25,469.8	25,610.2	21,432.5	23,770.0	21,862.8	20,707.8	21,504.4	27,620.0	21,204.8	25,363.0	21,000.0	21,060.6	20,856.2	23,668.8	21,421.2	26,851.8	20,856.0	22,770.6	23,638.4	24,790.6	20,459.2	21,715.6	534,818.3
TOTAL	65,842.7	75,340.4	77,870.2	44,159.4	60,336.9	48,893.7	42,163.7	46,743.3	83,436.9	44,945.7	69,894.9	43,716.9	44,080.5	42,854.1	59,731.7	46,244.1	78,827.7	42,852.9	54,340.5	60,767.3	66,509.5	40,502.1	48,010.5	1,288,864.1