

Table 1: Ethylene production plant economics.

ETHYLENE PRODUCTION PLANT ECONOMICS		
Plant Capacity		
Daily	195.14	(mt/d)
Annual (95%)	67664.32	(mt/y)
Gas Consumption		
Per metric ton	98.06	MMBTU
Per day	19134.8	MMBTU
Ethane Volume (1,770 Btu/scf)	10.81	MMSCFD
Feed Gas Needed (20 years)	74971.64	MMSCF
Capital Investment		
Battery Limits	\$20,864,974.00	USD
Offsite	\$7,302,740.90	USD
Owner's Project Costs	\$5,633,542.98	USD
TOTAL FIXED INVESTMENT	\$33,801,257.88	USD
Production Cost		
Ethane gas (\$8/MMBTU)	784.46	US \$/mt
Utilities, chemicals	15	US \$/mt
Variable Costs	799.46	US \$/mt
Fixed Costs (labour, maintenance, over- heads)		
	10	US \$/mt
Total Cash Costs	809.46	US \$/mt
Depreciation (10% of TFI)	2.5	US \$/mt
Total Cost of Production	811.96	US \$/mt
Return on Investment (before tax) 20% of TFI	5	US \$/mt
Required Plant Gate Price	816.96	US \$/mt
Shipping (20% CAPEX)	5	US \$/mt
Total Required Delivered Price	821.95	US \$/mt

Table 2: Estimated revenue accrued from sales.

ESTIMATED REVENUE		
Plant Capacity		
Daily	195.14	(mt/d)
Annual (95%)	67664.32	(mt/y)
Ethylene	Average Price	
Per metric ton	\$1,060.00	\$
Daily Revenue	\$206,846.94	\$/d
Yearly Revenue (95%)	\$71,724,176.19	\$/y
Propylene	Average Price	
Per metric ton	\$997.00	0
Daily Revenue	\$4,101.32	\$/d

Yearly Revenue (95%)	\$1,422,133.32	\$/y
TOTAL		
Daily Revenue	\$210,948.26	\$/d
Yearly Revenue (95%)	\$73,146,309.51	\$/y