

Capacity factor = 90%, 328 days

Raw materials	Rate or quantity per year	Cost per rate or qty	Total cost
EFB pellet (ton)	48565.44	\$0.00	\$0
Staff, SPV, and Labor			\$158,571
Utilities			
Water			
Cooling	564973.44	\$0.29	\$161,421
Process			
Electricity	3199	\$0.00	\$0
Fuel	0	\$0.00	\$0
Refrigeration	121	\$430.00	\$52,030
Steam	87709.824	\$0.00	\$0
Waste water treatment and disposal	\$1,813.63	\$0.450	\$816
Maintenance and repair			\$2,307,719
Operating supplies			\$346,158
Laboratory charges			\$23,786
Royalties			\$0
Catalyst			\$106,209
Solvent Top Up	\$1,561,852.19	\$1.00	\$1,561,852
Subtotal Variabel Production Cost			\$4,718,562
Medical			\$14,286
Safety and protection			\$1,714
Plant Overhead cost			\$79,286
General Expenses			
Admin cost			\$23,786
Distribution and marketing cost			\$186,615
R and D cost			\$186,615
Total Product Cost			\$5,210,863.50

Utilitas	Kebutuhan (per tahun)	Satuan
Listrik	311960766	KW
Refrigerant R-13	45623215.4	ton
Air	350386294.3	ton
Steam	31623564.7	ton

121.9647
6.6622 52444.84
8.76288 3.983127 31355.18
0.18609 71.77 m3/h 564973.4

SN Chun

906.67
453.335
362.668