

FARM SCALE BIODIESEL PLANT CAPITAL INVESTMENT

Asset	Notes	Cost
Press	Swedish Type 70	\$7,700
Furnace	Multi-Fuel	\$6,410
Hp-100 Biodiesel Processor	Includes scale and testing equipment	\$10,500
Dry Wash Tower	Includes pump and calculator	\$1,034
Building	20'X40' pole barn w/ concrete floor	\$12,000
Building Modifications	Wiring, augers, storage, grain hoppers, fans, etc	\$1,500
Other	Pumps and misc	\$400
Total Investment		\$39,544

PLANT OPERATING ASSUMPTIONS

ISSUE	AMOUNT
Plant Operation Days/Year	182.5 Days
Canola or Sunflower Seed Biodiesel Production/Year	7,300 Gallons
Plant Labor Required/Year (1.25 Hours per 100 Gallons)	91.25 Hours
Gallons of Vegetable Oil Required/Year (1.07 Gallons of Vegetable Oil per Gallon of Biodiesel)	7,811 Gallons
Pounds of Vegetable Oil Required/Year (7.7 Pounds/Gallon of Vegetable Oil)	60,145 Pounds
Pounds of Canola or Sunflower Seeds Required/Year (40% Oil Yield)	150,708 Pounds
Tons Of Canola or Sunflower Meal Produced (1,370 Pounds of Meal/Ton of Canola or Sunflower Seeds Processed)	52 Tons

OILSEED CROP OPERATING ASSUMPTIONS

ISSUE	AMOUNT
Canola Yield/Acre	2,000 Pounds
Canola Acres Required/Year (If Only Canola Is Used)	75.35 Acres
Total Cost To Produce The Canola Needed (If Only Canola Is Used @ a \$283.85 Production Cost/Acre. Includes \$85/acre land rent and an \$18.75/acre return to management. ¹)	\$21,388
Sunflower Seed Yield/Acre	2,500 Pounds
Sunflower Seed Acres Required/Year (If Only Sunflower Seeds Are Used)	60.28 Acres
Total Cost To Produce The Sunflower Seeds Needed (if Only Sunflower Seeds Are Used @ a \$434.30 Production Cost/Acre Includes \$85/acre land rent and an \$18.75/acre return to management. ²)	\$26,120

Estimated Cost to Produce Canola and Sunflower BioDiesel

Item	Canola (\$/gal)	Sunflower (\$/gal)
Oil Seed	\$2.93	\$3.58
Prod cost including labor	\$0.43	\$0.43
Overhead	\$0.79	\$0.79
Opportunity cost of capital	\$0.54	\$0.54
Estimated cost	\$4.69	\$5.34
Credit for Co-Product ¹	\$1.52	\$1.30
BioDiesel Cost	\$3.17	\$4.04

¹ The average of the Minneapolis canola meal and prices reported in the September 2008 issues of Feedstuffs were used to establish the value of the feed produced. Canola Meal = \$213/ton. Sunflower Meal = \$182/ton. The actual value can vary due to differences in quality.