



Developing Sustainable Alternatives to Fossil Energy

MicroFueler™ Economics for Breweries & Wineries

You may be able to produce high-quality ethanol fuel for a negative net cost per gallon using your discarded alcohol waste streams. This fuel can be used in place of gasoline in almost any vehicle to reduce your annual gasoline purchases (and related costs & carbon emissions) by up to 85%. Your ROI can be under six months.

MicroFueler™ MSRP is \$9,995:

MicroFueler™ projected lifespan is (at least) 10 years, or 35,000 gallons of ethanol at 3,500 gal. per year.
MicroFueler™ (straight-line 10 year depreciation) cost is \$999.50 per year, or \$0.29 per gallon of ethanol.*

Estimated Gross Operating Costs (using discarded alcohol only)

Feedstock Cost = \$0.00 (wastewater containing >5% alcohol by volume)
Electricity consumption = 3-4 kwh (estimated) per gallons of ethanol fuel
Electricity = \$0.30 to \$0.40 per gallon (\$0.10 per kwh)
Depreciation = \$0.29 per gallon

Estimated Gross Production Cost ~ \$0.69 per gallon (before credits) *

Cost benefit of “boosting” alcohol content (using discarded alcohol plus sugar)

EFuel100-FM Feedstock costs approximately \$5.91 per 50 pound bag
Each 50 pound bag of EFuel100-FM will yield approximately 3.73 gallons of ethanol fuel
Add one bag of EFuel100-FM per 100 gallons of wastewater (from 5% ABV to 8.7% ABV)
Feedstock Cost = \$0.68 per gallon (\$5.91 / 8.73 gallons ethanol)
Electric consumption = 3 kwh (anticipated efficiency increase due to higher alcohol content)
Electricity = \$0.30 per gallon (\$0.10 per kwh)
Depreciation = \$0.29 per gallon

Estimated Gross Production Cost ~ \$1.27 per gallon (before credits) *

*** Federal and New York State tax credits for ethanol equipment purchase and production are significant:**

New York State 50% tax credit for Alternative Fuel Vehicle Refueling Property
Federal 30% tax credit for Alternative Fuel Vehicle Refueling Property
Federal Tax credit for producing cellulosic ethanol: \$1.01 per gallon (max)
Federal Tax credit for producing and using non-cellulosic ethanol: \$0.46 per gallon
Federal Tax credit for “small ethanol producers”: \$0.10 per gallon
New York State Tax credit for “small ethanol producers”: \$0.10 per gallon

*** MicroFueler™ retail price of \$9,995 can be reduced by up to 80% with existing tax credits:**

Net cost can be as low as \$1,999 after Federal & New York State tax credits (save 80%, or almost \$8,000!)
MicroFueler (straight-line depreciation) cost after credits is \$133/year, or \$0.06 per gallon of ethanol fuel

MicroFueler™ Estimated (Conservative) Net Production Costs:

Feedstock = \$0.00 to \$0.68 per gallon (assumes no wastewater or sewer savings)
Electricity = \$0.30 to \$0.40 per gallon (assumes 3-4 kwh per gallon @ \$0.10 per kwh)
Depreciation = \$0.057 per gallon (assumes full benefit of income tax credits for equipment purchase)
Income Tax Credits = \$0.56 per gallon (assumes full benefit of only non-cellulosic income tax credits)
Net “after credits” Production Cost = (\$0.103) to \$0.477 per gallon

(Note: numbers in parenthesis are negative. Ethanol production can have a **negative cost**)

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