



Renewable Fuel Blending and Incentives

RIN Credits IRS Blender's Credit



Ginger Laidlaw/Jeff Hove

NATSO Alternative Fuels Council

Scott Disselhorst

All-Line Equipment

Oscar L. Garza

Oscar L. Garza & Associates, P.C.

February 2020

About NATSO's Alternative Fuels Council

Providing Fuels Insight and Compliance Solutions for the Transportation and Heating Oil Industry

- ▶ EPA and IRS Fuels Program Registrations
- ▶ RIN Credit Compliance and Marketing
- ▶ Dedicated Staff Offering 24/7 Compliance Assistance
- ▶ Infrastructure, Logistics, and Best Practices Consulting
- ▶ Specialists in State and Federal Fuels Policies



Workshop Agenda

- ▶ Policies Driving Renewable Fuels
 - ▶ EPA Renewable Fuel Standard (RFS)
 - ▶ IRS Blender's Tax Credit
- ▶ Biodiesel Blending Economics
- ▶ Biodiesel Blending Options and Infrastructure
- ▶ Break - 10 minutes
- ▶ IRS Biodiesel Blender's Tax Credit
- ▶ Calculating the Blending Economics
 - ▶ <https://www.natsoaltfuels.com/calculator.html>

*In Your Folders:
Additional Resources

Why Blend Biofuels?

- ▶ Blenders have the ability to price fuels more competitively
- ▶ Blending Renewable Fuels will likely increase Fuel Retail Profit Margins
- ▶ Assist with Reducing Carbon Emissions
- ▶ Blending biofuels is not a requirement for our industry*

Policies Driving Renewable Fuels

Federal Incentives

- ▶ U.S. EPA Renewable Fuel Standard (RFS)
- ▶ IRS Biodiesel Blender's Tax Credit (BTC)

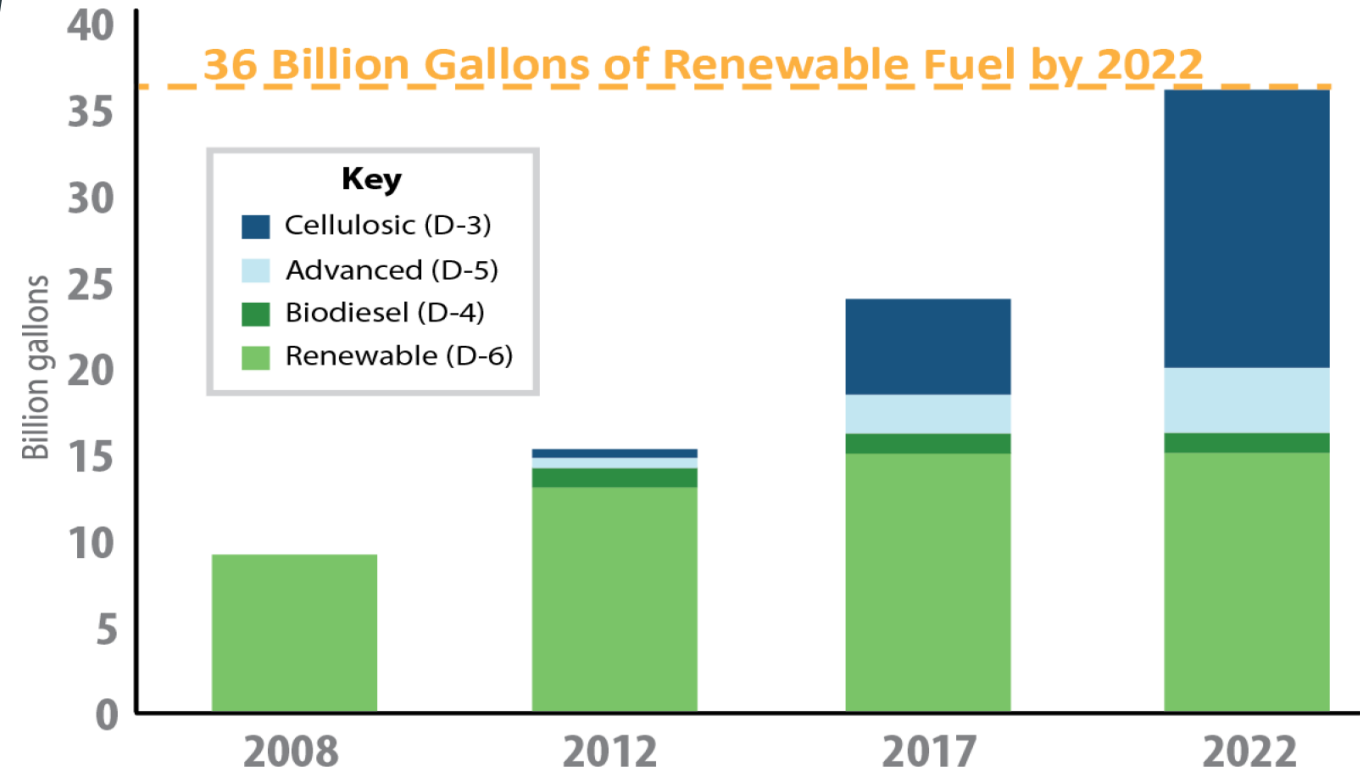
Individual State Incentives

- ▶ <https://www.natsoaltfuels.com/more-resources.html>
- ▶ California Low Carbon Fuel Standard (LCFS)
- ▶ Oregon Clean Fuels Program
- ▶ Illinois, Texas, Iowa, New York....see link above
- ▶ Watch for new LCFS state and regional programs in 2020 and 2021
- ▶ MANDATE IS A DIRTY WORD

The Renewable Fuel Standard (RFS)

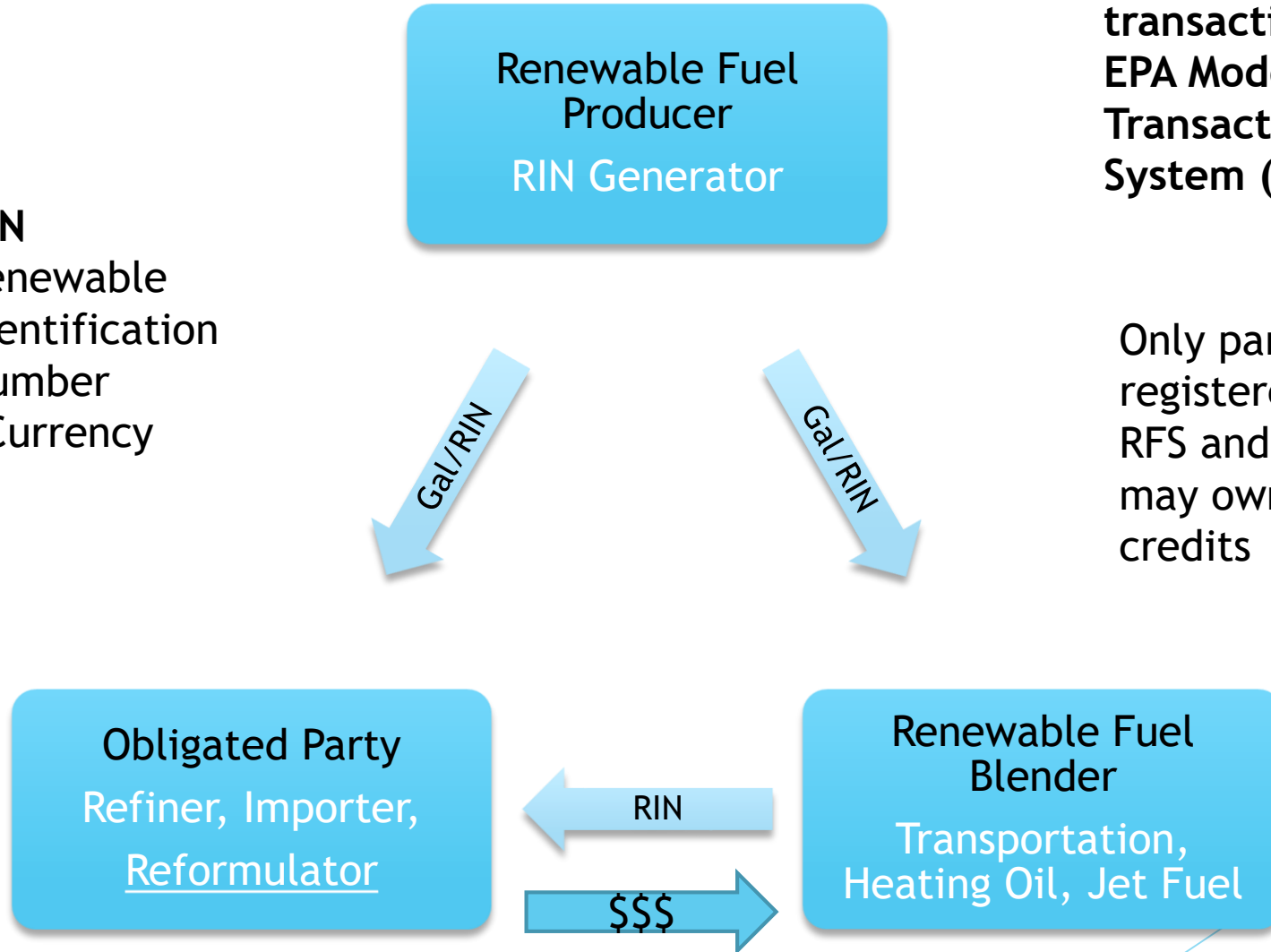
Goals set by Congress to:

- ▶ Reduce Dependence on Foreign Oil
- ▶ Reduce Greenhouse Gas (GHG) Emissions
- ▶ Increase Job Growth in “Green” Job Sector
- ▶ Note: “Set” Provisions will Provide Renewable Fuel Standard post 2022



The RFS Players

RIN
Renewable
Identification
Number
=Currency



EPA tracks all RIN transactions in the EPA Moderated Transaction System (EMTS)

Only parties registered under RFS and EMTS may own RIN credits

Steps to Get Involved

1. EPA RFS Registration
 - ▶ Requirement for RIN ownership
 - ▶ Reporting and Annual Audits....we got this.
2. IRS 637M License
 - ▶ Necessary for all Blending - Remitting Fuel Taxes
 - ▶ Necessary for Collecting the \$1/gal BTC
3. Determining Fuel Supply
 - ▶ Competitive Supply Options

What is a RIN?

- ▶ **A Renewable Identification Number (RIN)** is an identifier that tells EPA who made the fuel, when it was made, and what type of fuel was produced.
- ▶ **EPA uses the RIN to track the production and the selling of the wet gallon**
 - ▶ Any party taking title to RINs must first be registered under the RFS and have a four-digit EPA registration number
 - ▶ EPA tracks RINs via the EPA Moderated Transaction System
 - ▶ EPA also tracks the point at which the RIN is blended

Gallon to RIN Ratios

Renewable Fuel Type	D-code	Equivalence Ratio*
Renewable Fuel (Ethanol)	D6	1:1
Biomass Based Diesel (Biodiesel)	D4	1:1.5
Advanced (RCNG, Waste to Etoh)	D5	1:1 up to 1:1.7
Cellulosic Eth/Diesel	D3/D7	1:1 up to 1:1.7

*Equivalence Ratio determined by the level of Greenhouse Gas Reduction Potential: Ethanol = 20% reduction, Biodiesel = 50% reduction. Ethanol is the baseline for all D-codes.

RINs Attached versus Separated

- ▶ Attached or Assigned RINs
 - ▶ Producer creates the RIN as fuel is produced or sold downstream
 - ▶ Producer must create a Renewable Identification Number (RIN) and attach to the wet gallons. (**K1 = Assigned/Attached RINs**) The RIN travels with the wet gallon until it has been blended.
 - ▶ K1 RINs cannot be sold as-is
- ▶ Separated RINs
 - ▶ Once the renewable fuel is blended to make transportation fuel, heating oil, or jet fuel, the RIN becomes Separated (**K2 = Separated RIN**)
 - ▶ K2 RINs may be sold
- ▶ ***RINs are fungible and may not represent the actual gallon you are buying. It is strongly suggested that you only accept K1 RINs with your Gallons and know who produced the RIN being transferred to your company.*

Qualified versus Unverified RINs

- ▶ Some Renewable Fuel Producers employ Third Party Engineering Firms to “qualify” their production and RIN Generation. (“Q-RIN”)
 - ▶ A Q-RIN gives us assurance that the RIN can be sold to an Obligated Party and at Market Value.
 - ▶ Biofuels that should have a Q-RIN status are Advanced (D5), Biodiesel (D4), and Cellulosic (D3/D7). Ethanol (D6) does not typically require a Q-RIN status to be marketable
 - ▶ Very large and well-established Biodiesel Producers may be an exception and will not require the Q-RIN status to be sold.

RIN Generation for Renewable CNG

Natural Gas Off-take Agreement

Renewable Natural Gas (Digester)



Meter Gallons Sold

Compressed NG Retailer



RIN Credit Generation - 11.7 RINs per MMBTU

RINs Sold to Obligated Party

Where is Policy Driving Demand?

- ▶ EPA must Announce Standards Requirements by Nov 30 of preceding year.
- ▶ Biomass-based Diesel (Biodiesel) set one year in advance:

Fuel Type	D-code	Statutory Goal	2020 (gal)	2021 (gal)
Cellulosic Biofuel (CB)	D3/D7	10.50	0.590	NA
Biomass-based diesel (BD)	D4	≥1.0	2.43	2.43
Advanced Biofuel (AB)	D5	15.0	5.09	NA
Renewable Fuel (Eth)(RF)	D6	30.0	20.09	NA

Blending Discovery and Implementation Checklist

- ❑ Biodiesel Supply Availability?
 - ▶ Pipeline Terminal
 - ▶ Production Facility
 - ▶ Bulk Terminal
 - ▶ Transport/RXR
- ❑ Positive Blending Economics?
 - ▶ B100 versus B99 (IRS Blender's Credit)
 - ▶ RIN Values
 - ▶ State Incentives
 - ▶ Product Pricing
- ❑ State/Federal Compliance
 - ▶ EPA RFS Registration-Owning/Reporting RIN Credits
 - ▶ IRS Blenders License (637M)
- ❑ Ethanol Blending Potential
 - ▶ Blending Economics
 - ▶ Sourcing in Terminal (637S)
- ❑ Fuel Quality/Consumer Satisfaction
 - ▶ Apply Best Practices
 - ▶ ASTM 6751/BQ9000
 - ▶ Clean Tanks and Avoid Water
 - ▶ Blending Practices



BIO BLENDER™

Presented by Scott Disselhorst

www.bioblending.com



Blending Strategies

- Splash – Biofuel and diesel are loaded into transport compartments separately. Product mixing occurs as the fuel is agitated during the delivery of the biodiesel blend to the end user.
- In-Tank – Biofuel is pumped into a tank while diesel is gravity dropped.
- Rack - Inject biodiesel directly at the rack into the tank truck.
- In-Line – Biofuel is added to a stream of diesel as it travels to dispensers. Blending occurs as the two products move through the pipe.

Blending on Demand

- In-line blending as product is dispensed
- Product stored in tanks remains pure
- Automated - No human interaction required for deliveries
- Blend rates can be changed, paused, or adjusted with ease
- Option to continue to offer unblended fuels as well



Blending Platform



Not Blending / Off

● Diesel



Blending



- Diesel
- Biofuel
- Biodiesel

Maintenance

We recommend cleaning
strainers every 6 months



Product Blend

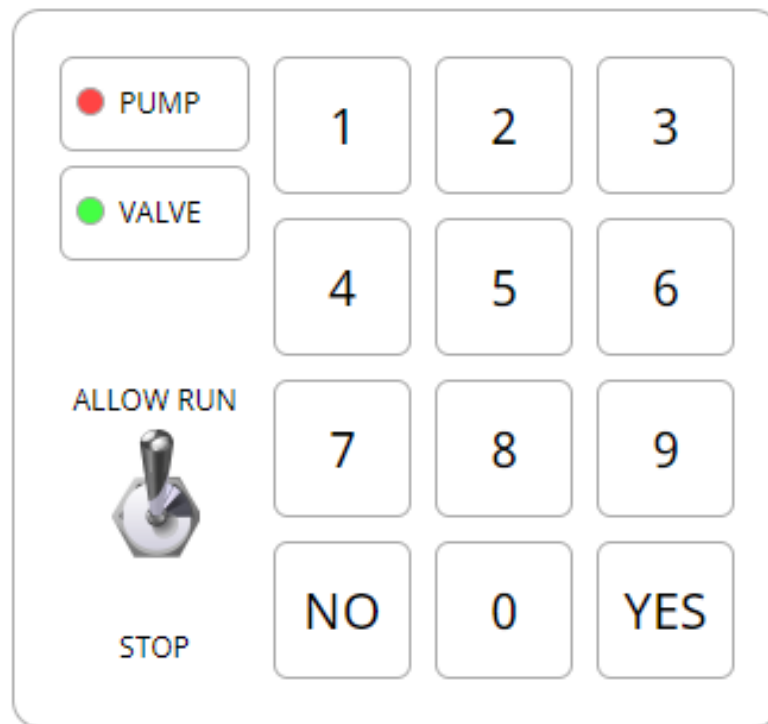
- No leak detectors required on bio product line
- No heat has been required on bio line (optional)
- Consistent Blends
- Easily disabled / bypassed
- Can also blend ethanol and gas

System Management

- Custom built controller
- Change blend ratios at any time
- Web-based remote management mirrors controller display and functionality
- System oversight available (remote connection required)



Diesel: 11015, 71 GPM
Bio: 2753.600 G
Set For: B0+B100=B20
Result: B20.0
Speed: 6%
Status: ACTIVE



Access to Data

- Records product use and blend accuracy
- On demand and scheduled reporting
- Alarm history
- Records history of max flow rate for diesel
- Pending Integration with RIN software

Records for February 2020

You can also [download these records](#) to your computer. Hover over a header to see its description.

Click [here](#) to jump to this month's summary.

SEQUENCE	SERIAL	DATE	TIME	SITE NAME	TYPE	TOTAL MAIN	TOTAL MAIN METER	HIGH MAIN FLOW RATE	BLEND PERCENTAGE	TOTAL BIO	TOTAL BIO METER	TARGET BIO	ACCURACY	ERRORS
2181	A1001541	02/01/2020	13:02	Bioblender Site	BLEND	230.0	234.7	36.4	20.0	57.472	52.778	57.499	100.0%	No errors.
2182	A1001541	02/01/2020	13:26	Bioblender Site	BLEND	81.0	82.7	42.1	20.0	20.163	18.509	20.252	99.6%	No errors.
2183	A1001541	02/01/2020	14:32	Bioblender Site	BLEND	158.7	162.0	42.1	20.0	39.641	36.402	39.686	99.9%	No errors.
2184	A1001541	02/01/2020	14:06	Bioblender Site	BLEND	335.1	341.9	42.3	20.0	83.699	76.861	83.764	99.9%	No errors.
2185	A1001541	02/01/2020	15:07	Bioblender Site	BLEND	508.4	518.8	42.3	20.0	127.069	116.694	127.094	100.0%	No errors.
2186	A1001541	02/01/2020	15:56	Bioblender Site	BLEND	811.3	827.8	42.3	20.0	202.777	186.220	202.820	100.0%	No errors.
2187	A1001541	02/01/2020	16:12	Bioblender Site	BLEND	128.5	131.1	38.1	20.0	32.106	29.484	32.120	100.0%	No errors.
2188	A1001541	02/01/2020	16:42	Bioblender Site	BLEND	169.5	173.0	38.1	20.0	42.349	38.889	42.387	99.9%	No errors.
2189	A1001541	02/01/2020	17:30	Bioblender Site	BLEND	269.1	274.5	41.7	20.0	67.237	61.747	67.263	100.0%	No errors.

Summary

Total Main Product 2,691.6 gallons

Total Main Product through Meter 2,746.5 gallons

Total Bio Product 672.513 gallons

Total Bio Product through Meter 617.584 gallons

Total Bio Required 672.885 gallons

Highest Main Flow Rate 42.3 gallons per minute

Overall Accuracy 99.92%

Fine Print Friendly

- In compliance with federal tank laws
- Does not void tank warranties



BIO BLENDER™

Scott Disselhorst

scott@bioblending.com

1-866-356-3336

www.BioBlending.com

Renewable Fuel Blending and Incentives

RIN Credits
IRS Blender's Credit

Please Thank Our Session
Sponsor!



Brief Session Break
10-15min

IRS Blender's Tax Credit (BTC)

- ▶ Re-established \$1.00/gallon of B100 through 2022 and retroactive for 2018 and 2019

IRS Guidance and Forms:

- ▶ <https://www.natsoaltfuels.com/more-resources.html>
- ▶ Filing for the BTC
 - ▶ 720X Quarterly Filing - Alternative Fuels Mixture Credit
 - ▶ 8849 Schedule 3 - Single submission for Retro 2018 and 2019
 - ▶ Retro Claims may be submitted no later than **August 11, 2020**
 - ▶ Biodiesel Certificates must be available

Biodiesel Tax Credit

▶ IRS Blending License

- ▶ Inside Terminal Blending/Position Holder = **637S License**
- ▶ Downstream of Terminal Blending = **637M License**
- ▶ See also state tax licensing and tax remittance requirements

▶ Blender Definition

- ▶ **EPA:** Biodiesel is not considered a “Transportation Fuel” until it has been blended at or below 80% with ULSD (B80 or less)
- ▶ **IRS:** Biodiesel may be considered “blended” at a B99 for the sole purpose of claiming the BTC

▶ Tax Treatment

- ▶ The BTC is currently considered non-taxable income
- ▶ Blender must account for any fuels excise tax liability
- ▶ A Blender mixing B99 and ULSD cannot apply for the BTC
 - ▶ If your B99 Supplier shares a portion of the \$1.00, this will be taxable income



NATSO Alternative Fuels Council

Fuel Tax Mixture Credits

Denver, Colorado

February 7, 2020

History of the Tax Credit

- American Job Creation Act of 2004
 - Enacted §6426 and §6427
 - provides tax credit for biodiesel, alcohol, renewable diesel and alternative fuel blenders, users and retailers including:
 - a refundable income tax credit under §34 via §6427
 - **an excise tax credit under §6426**
 - A non-refundable biodiesel fuel income tax credit under §40A (Energy Policy Act of 2005)

History of the Tax Credit

- Many taxpayers claim the mixture credit as an excise tax credit.
- The alcohol fuel mixture credit expired on December 31, 2011.
- The biodiesel, renewable diesel and alternative fuel credits constantly expire and return.

Analysis of the Tax Credit

- The alcohol and biodiesel fuels tax credits in §§40 and 40A are includible in gross taxable income.
- §6427 and other §34 tax credits are not includible in gross taxable income.

Analysis of the Tax Credit

- §87 was amended to include the §40A biodiesel income tax credits but not the excise tax credits.
- Congress has stated consistently the §§40 and 40A credits are includible in gross taxable income but has NEVER stated that §6426 credits are includible in income.
- IRS forms support the position that the §§6426 and 6427 credits are NOT includible in gross taxable income.

Analysis of the Tax Credit

- Form 720
 - Statutory requirement that the credits be claimed first as an offset against §4081 excise tax liability, using Form 720, Schedule C,
 - Tax offset is not the same as a deduction which reduces income tax liability.
- Form 8849
 - A payment of a tax credit as required in §6427, not a refund of tax paid

Conclusion

- The §6427 excise tax credits and related §34 refundable income tax credit are NOT includible in gross income and are exempt from federal income tax.

Sunoco (Court of Claims)

Though the statutes at issue are not crystal clear, the Court ultimately finds the Government's interpretation more persuasive. The Court holds that the Mixture Credit must be treated first as a reduction of the taxpayer's excise tax liability, with any remaining Mixture Credit amount treated as tax-free payment. Had Congress intended, as Sunoco argues, to drastically increase the tax incentives fuel producers receive from blending alcohol into their fuels, one would expect to see at least some inkling of this intent in the legislative history or the Internal Revenue Code. No such inkling appears. Therefore, Sunoco cannot claim that it overpaid its income taxes because it correctly used its net excise taxes paid in calculating its cost of goods sold. The Government's motion for judgment on the pleadings is GRANTED, and Sunoco's cross-motion for partial summary judgment is DENIED.

Example

- TS Co. purchases 1,000 gallons of B100.
- TS Co. blends B100 to make B5 or 20,000 gallons of taxable fuel.
- Because TS Co. has 637-M, TS Co. pays to the IRS 24.4 cpg on the 1,000 gallons, or \$244
- TS Co. completes line 60(b) of form 720 with \$244.
- TS Co. completes line on schedule C of form 720 with \$244.

Form 720

(Rev. April 2019)
Department of the Treasury
Internal Revenue Service

Quarterly Federal Excise Tax Return

▶ See the instructions for Form 720.

▶ Go to www.irs.gov/Form720 for instructions and the latest information.

OMB No. 1545-0023

Check here if:
 Final return
 Address change

Name	Quarter ending
Number, street, and room or suite no. (If you have a P.O. box, see the instructions.)	Employer identification number
City or town, state or province, country, and ZIP or foreign postal code	

FOR IRS USE ONLY

T	
FF	
FD	
FP	
I	
T	

Part I

IRS No.	Environmental Taxes (attach Form 6627)	Tax	IRS No.
18	Domestic petroleum oil spill tax		18
21	Imported petroleum products oil spill tax		21
98	Ozone-depleting chemicals (ODCs)		98
19	ODC tax on imported products		19
Communications and Air Transportation Taxes (see instructions)		Tax	
22	Local telephone service and teletypewriter exchange service		22
26	Transportation of persons by air		26
28	Transportation of property by air		28
27	Use of international air travel facilities		27
Fuel Taxes			
		Number of gallons	
		Rate	
		Tax	
60	(a) Diesel, tax on removal at terminal rack	\$.244	60
	(b) Diesel, tax on taxable events other than removal at terminal rack	.244	
	(c) Diesel, tax on sale or removal of biodiesel mixture (not at terminal rack)	.244	
104	Diesel-water fuel emulsion	.198	104
105	Dyed diesel, LUST tax	.001	105

11 Sales by Registered Ultimate Vendors of Aviation Gasoline Registration number ▶

Claimant sold the aviation gasoline at a tax-excluded price and has not collected the amount of tax from the buyer, repaid the amount of tax to the buyer, or has obtained written consent of the buyer to take the claim; and obtained an unexpired certificate from the buyer and has no reason to believe any information in the certificate is false. See the instructions for additional information to be submitted.

	Rate	Gallons	Amount of claim	CRN
a Use by a nonprofit educational organization	\$.193		\$	324
b Use by a state or local government	.193			

12 Biodiesel or Renewable Diesel Mixture Credit Registration number ▶

Biodiesel mixtures. Claimant produced a mixture by mixing biodiesel with diesel fuel. The biodiesel used to produce the mixture met ASTM D6751 and met EPA's registration requirements for fuels and fuel additives. The mixture was sold by the claimant to any person for use as a fuel or was used as a fuel by the claimant. Claimant has attached the Certificate for Biodiesel and, if applicable, the Statement of Biodiesel Reseller. **Renewable diesel mixtures.** Claimant produced a mixture by mixing renewable diesel with liquid fuel (other than renewable diesel). The renewable diesel used to produce the renewable diesel mixture was derived from biomass, met EPA's registration requirements for fuels and fuel additives, and met ASTM D975, D396, or other equivalent standard approved by the IRS. The mixture was sold by the claimant to any person for use as a fuel or was used as a fuel by the claimant. Claimant has attached the Certificate for Biodiesel and, if applicable, Statement of Biodiesel Reseller, both of which have been edited as discussed in the instructions for line 13. See the instructions for line 13 for information about renewable diesel used in aviation.

	Rate	Gal. of biodiesel or renewable diesel	Amount of claim	CRN
a Biodiesel (other than agri-biodiesel) mixtures	\$1.00		\$	388
b Agri-biodiesel mixtures	1.00			390
c Renewable diesel mixtures	1.00			307

13 Alternative Fuel Credit and Alternative Fuel Mixture Credit Registration number ▶

For the alternative fuel mixture credit, claimant produced a mixture by mixing taxable fuel with alternative fuel. Claimant certifies that it (a) produced the alternative fuel, or (b) has in its possession the name, address, and EIN of the person(s) that sold the alternative fuel to the claimant; the date of purchase; and an invoice or other documentation identifying the amount of the alternative fuel. The claimant also certifies that it made no other claim for the amount of the alternative fuel, or has repaid the amount to the government. The alternative fuel mixture was sold by the claimant to any person for use as a fuel or was used as a fuel by the claimant.

	Rate	Gallons, or gasoline or diesel gallon equivalents (see instructions)	Amount of claim	CRN
a Liquefied petroleum gas (LPG)	\$.50		\$	426

Example

- TS Co. files form 8849 to claim the remaining \$756 biodiesel mixture credit.
- This amount is income tax free!
- What if TS Co. formed Blend Co. which purchased B100, blended with .1% diesel and sold B99.9% to TS Retail Co.

Example

- Blend Co. purchases 1,000 gallons of B100.
- Blend Co. blends B100 to make B99.9 or 1,001 gallons of non-taxable fuel.
- Blend Co. then sells B99.9 to Retail Co. which then makes B5.
- Because TS Co. has 637-M, TS Co. pays to the IRS 24.4 cpg on the 1,001 gallons, or \$244
- TS Co. completes line 60(b) of form 720 with \$244.

Example

- Blend Co. files form 8849 to claim the \$1000 biodiesel mixture credit.
- This amount is income tax free!
- For 2018 and 2019, although form 8849 is used to file the one time claim, the amount of income tax free is the amount greater than the excise tax paid on the form 720 for the two years.

Example

- Tax years 2016 and 2017 should still be open.
- Did you pay income tax on biodiesel mixture credits?
- May want to look at filing amended return.
- Is blending operation in the same legal entity as the one paying the excise tax?
- May want to consider forming Blend Co.

Questions?

Oscar L. Garza
1 Greenway Plaza, Ste. 330
Houston, Texas 77046
832.758.9034
olgarza@olgarza.com

Pricing and Calculating Incentives

BTC and Pricing Forward

- ▶ B99
- ▶ B100 = B99 + BTC Value

RIN Value (x 1.5 for Biodiesel Gallon)

Additional State Incentives

Per RIN Value 0.8

Clear Price Per Gal 2.5

Alternative Fuel Price Per Gal 3.42

Alternative Blend % 20

Tax Credit Value Check if tax credit applies

State Incentives

0.24 RIN Value

2.444 On-Road Net Product Cost

-0.0560000000 Price Differential

(\$0.06) favorable to the price of clear diesel.

Show Advanced Calculations

Clear Cost 2

Alternative Fuel Cost 0.684

2.684 Blended Product Cost

Calculate Price Differential

Clear

*Clearing the calculator is not required before each calculation

Evaluating Blend Economics

RIN Equivalence Ratio (RINs/Gal)

1.5

Current RIN Value

0.42

Clear Price Per Gal

1.794

Alternative Fuel Price Per Gal

3.10

Alternative Blend %

20

Biodiesel Tax Credit

1.00

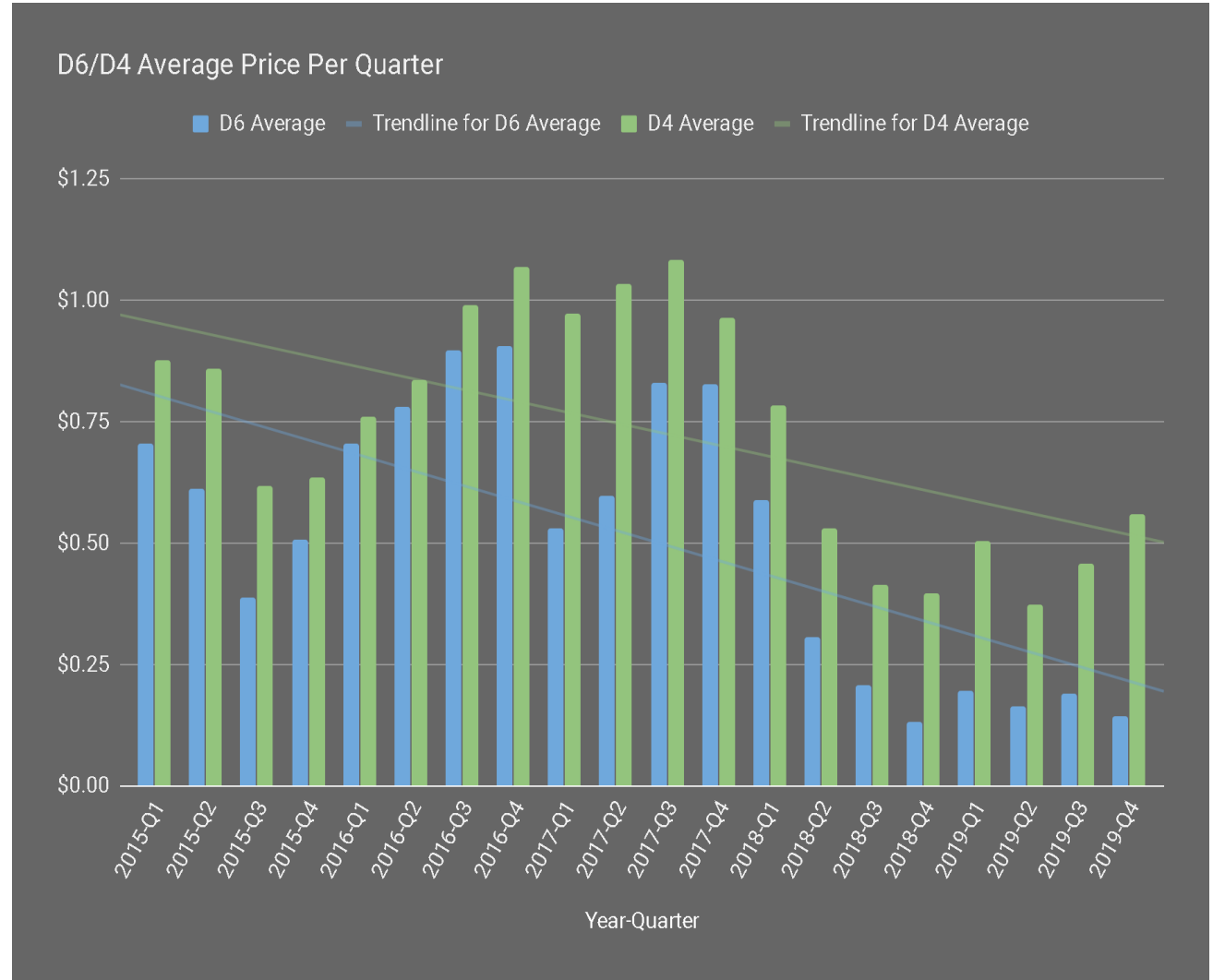
Calculate Price Differential

Blended Fuel Cost

1.7292

Clear

Blended fuel cost is \$0.065 favorable to the price of neat fuel.



<https://www.natsoaltfuels.com/calculator.html>

NATSO's Alternative Fuels Council Questions?

- ▶ Online RIN Management Services
- ▶ Registration, Reporting, and Auditing Services
- ▶ RIN Tracking and Marketing
- ▶ IRS Blender's Tax Credit Management
- ▶ Supply Contract Management Tools

Call us for a free one-hour consultation and demonstration



Thank You

www.natsoaltfuels.com

Jeff Hove, jhove@natsoaltfuels.com

703-739-8560 or 515-250-2966