From: Dominguez, Alexander
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BTR Exec Summary 8.8.17.pdf
USDA E-RIN Summary.pdf
WI Pagel Ponderosa (Gallagher).compressed.pdf

- John (Jack) Barrow, BTR Energy
- James (Jim) Lemon, BTR Energy
- Michael Lemon, BTR Energy

We'd like to discuss the "electric pathway," which is a part of the Renewable Fuel Standard that would allow small animal farms, like dairies in Wisconsin and Pennsylvania, to benefit from the generation and sale RINS. A final rule promulgated three years ago gives EPA significant flexibility to implement the electric pathway by approving applications on a case-by-case basis, but EPA staff have been pushing for yet another rule-making.

BTR Energy is an applicant under the electric pathway, and we're completely unique in our focus on driving value to parts of the animal agricultural industry. We'd like to discuss approving our application and adjusting the 2018 renewable volume obligations to account for the RINs we can currently create. We work with almost two dozen dairy, swine, and cattle farms across the country that would immediately benefit from our program, and our work now has the support of over a dozen members of Congress, including folks like Congressman Chris Collins from NY and Congressmen Mike Gallagher and Sean Duffy from WI.

Approving our application shouldn't be a big lift for EPA staff, in our view. The supply and delivery of the renewable fuel (electricity) is there, and we've done most of the work, as the rule has been in place and inactive for three years (we can discuss that more in the meeting). In that way, the program is extremely efficient: low effort for EPA, high impact on farms that have traditionally been locked out of the RFS.

I've attached a summary document that explains the issue and profiles two of our partners. I've also attached a letter of support one of our partners wrote to their Congressional representatives and an executive summary of BTR Energy.

We've had more than a half dozen meetings with staff in the OTAQ office over the last three

years. Last week I had coffee with Ben Hengst, who supports Chris Grundler, the director of OTAQ. Ben suggested we aim to meet with Mandy Gunasekara individually so that we could be candid about our experience.

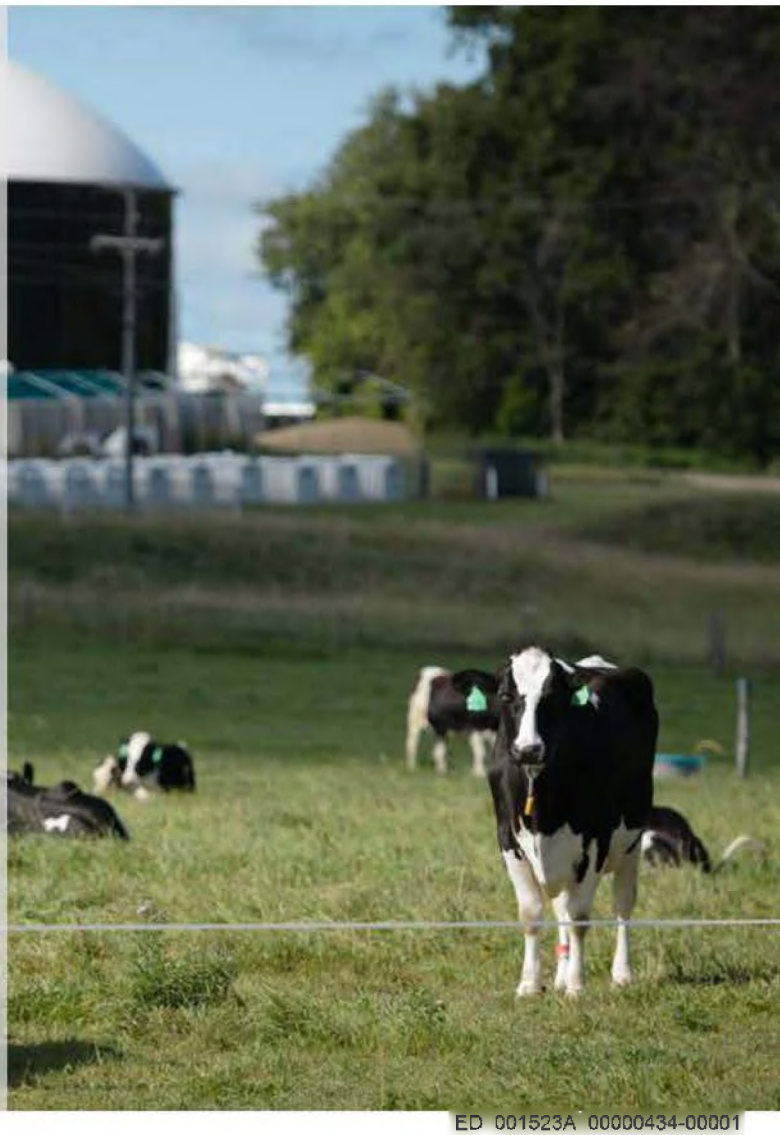
We also met with Mr. Kell Kelly last week, who agreed that Mandy is the right person.

I hope all that helps. We can provide a lot more context in the meeting.

INTRODUCTION

BTR ENERGY

Benefit LLC



AN AGRICULTURAL PROGRAM THAT CREATES JOBS AND PROTECTS THE ENVIRONMENT

Background: Animal agricultural operations like dairy, swine, and cattle farms produce manure that can create ecological and odor problems. Some animal farms currently operate anaerobic digesters (ADs) that process manure to produce domestic, baseload electricity and other co-products like fertilizer and bedding. AD technology helps these operations, small and large, manage manure and prevent nutrient runoff, and in many cases, AD can generate significant cost savings and even additional revenue for the farm. And ADs support an average between two and four technical jobs, an exciting opportunity for rural employees.

Problem: How can we accelerate the investment in anaerobic digestion technology on animal agricultural operations, enabling those operations to effectively *and profitably* manage animal waste?

Solution: Under the EPA's Renewable Fuel Standard program, farms that produce electricity through anaerobic digestion can qualify to generate additional revenue through the creation and sale of RINs. ***This program is called the Electric Pathway,*** and if implemented correctly, it could increase the revenue farms earn from the generation of electricity through AD by between 50% and 200%, adding up to $100M to the animal agricultural industry, unlocking new investment in AD projects, and creating jobs in America's rural communities.

Electricity Production Data (Biogas)

+

Electricity Consumption Data (Electric Vehicles)

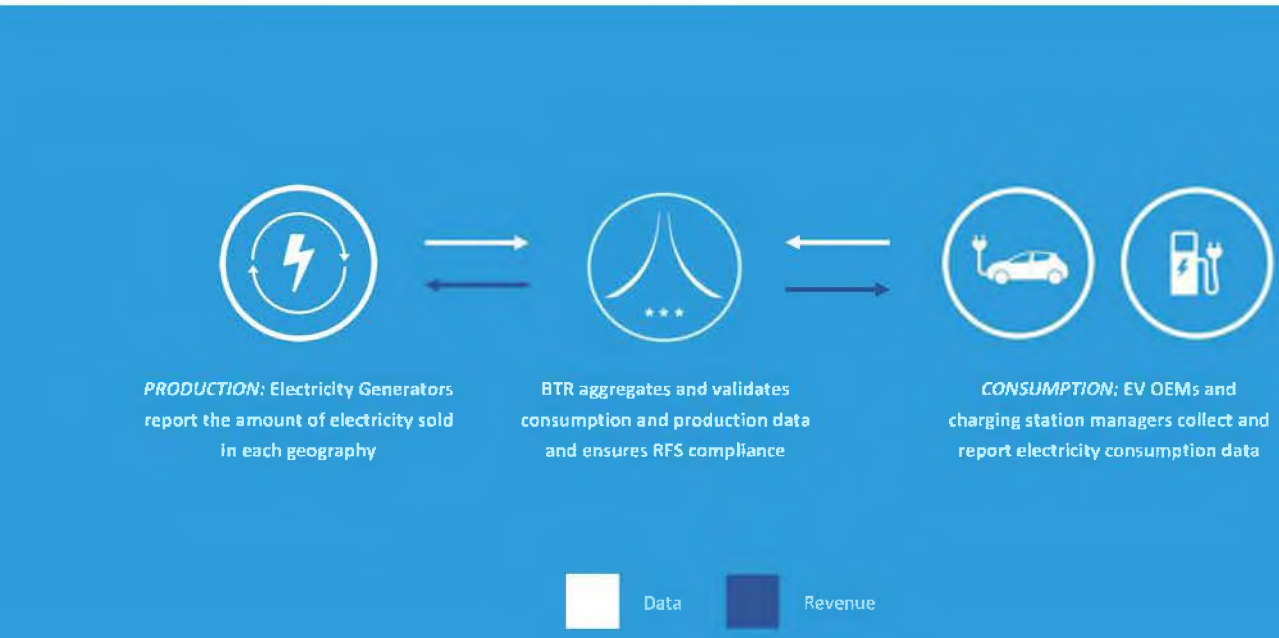
= E-RIN

THE ELECTRIC PATHWAY

In 2014, the EPA created the "Electric Pathway" under the Renewable Fuel Standard program to accelerate the production of biogas-based electricity by bringing additional parts of the American agricultural industry in to the RFS and allowing for the creation of "electric-RINs." **E-RINs are created by proving that electric vehicles used biogas-based electricity to charge.**

BTR ENERGY

BTR Energy has created a unique data-driven program that is supported by a coalition from different sectors in the EV, agricultural, and waste management industries. BTR allows its partners to realize the full value of the e-RIN pathway with limited effort.



BTR MANAGES THE PROGRAM FOR ITS PARTNERS

BTR acts as a compliance manager and data clearinghouse designed to eliminate expenses and administrative hurdles inherent to participating in the RFS. BTR combines data from anaerobic digestion projects, landfill gas projects, EV OEMs, and charging station networks. We then generate and sell e-RINs and distribute revenue back to our partners.

OUR GOAL: A PROFITABLE ANAEROBIC DIGESTER ON EVERY FARM

BTR Energy was created by three people passionate about American agriculture and energy. Our mission is to increase the production of renewable electricity from waste on farms and large feed operations across the country: **we want to help the American biogas-electricity industry realize its potential and all the benefits that go with it.** What's good for our rural economies is good for the country.

In BTR's model, **the electric pathway could currently add as much as $100 million in revenue annually to the anaerobic digestion industry.** That makes it an economically viable practice and will create jobs, provide for new investment, and reduce odors and runoff on farms in rural communities across the country.

Potential of the American Biogas Industry

13,000	$33 Billion	275,000	18,000
New Biogas Sites	New Investment	Short-term Construction Jobs	New Permanent Jobs

A TRUE WIN-WIN

While providing support to the biogas industry in particular, **the electric pathway may also reduce and stabilize the cost of compliance with the RFS for obligated parties by improving prices in the cellulosic category RIN market.** In fact, several obligated parties, including Shell and BP, posted public comments that support the implementation of the electric pathway, despite their general criticism of the RFS.

From Shell

- *"In general, we support the inclusion of electricity generated from renewable feedstocks in the program. We believe that inclusion of such renewable fuels is consistent with the intent of the law..."*

From BP

- *"We believe it would strengthen the RFS program if additional renewable sources (feedstocks) were considered eligible to generate RINs."*

NEXT STEPS

EPA has retained the right to implement the electricity pathway under existing legislation from July 2014 (without another rulemaking):

- *"... it is currently possible for the EPA to approve, as part of the registration process, parties in the biogas distribution system other than the ultimate renewable fuel producer to generate RINs."*
- *"EPA believes [an] appropriate approach at this time is to examine registrations on a case by case basis" in reference to the electric pathway.*

EPA therefore has the legal authority to approve applications to generate e-RINS immediately based on their merits, making it an ideal program for President Trump's administration. The electric pathway is consistent with EPA's dual pro-growth, pro-environment mandate; it will create jobs and economic opportunity in rural communities; and, it does not require new regulations.

This is an opportunity for EPA and Administrator Pruitt to demonstrate their commitment to the President's agenda and constituency. A final rule has been in effect since 2014, and EPA simply needs to approve BTR's application to begin realizing the immense benefits of the program.


WHO WE ARE
BTR ENERGY
Benefit LLC
QUALCOMM
RENAULT

OUR EXECUTIVE TEAM

Jim Lemon

Jim was an international compliance specialist at United Technologies Corp. for 27 years, overseeing accounts including Pratt & Whitney, Sikorsky Helicopters, among others. He has a long history of work with the US government, particularly the State Department.

Jack Barrow

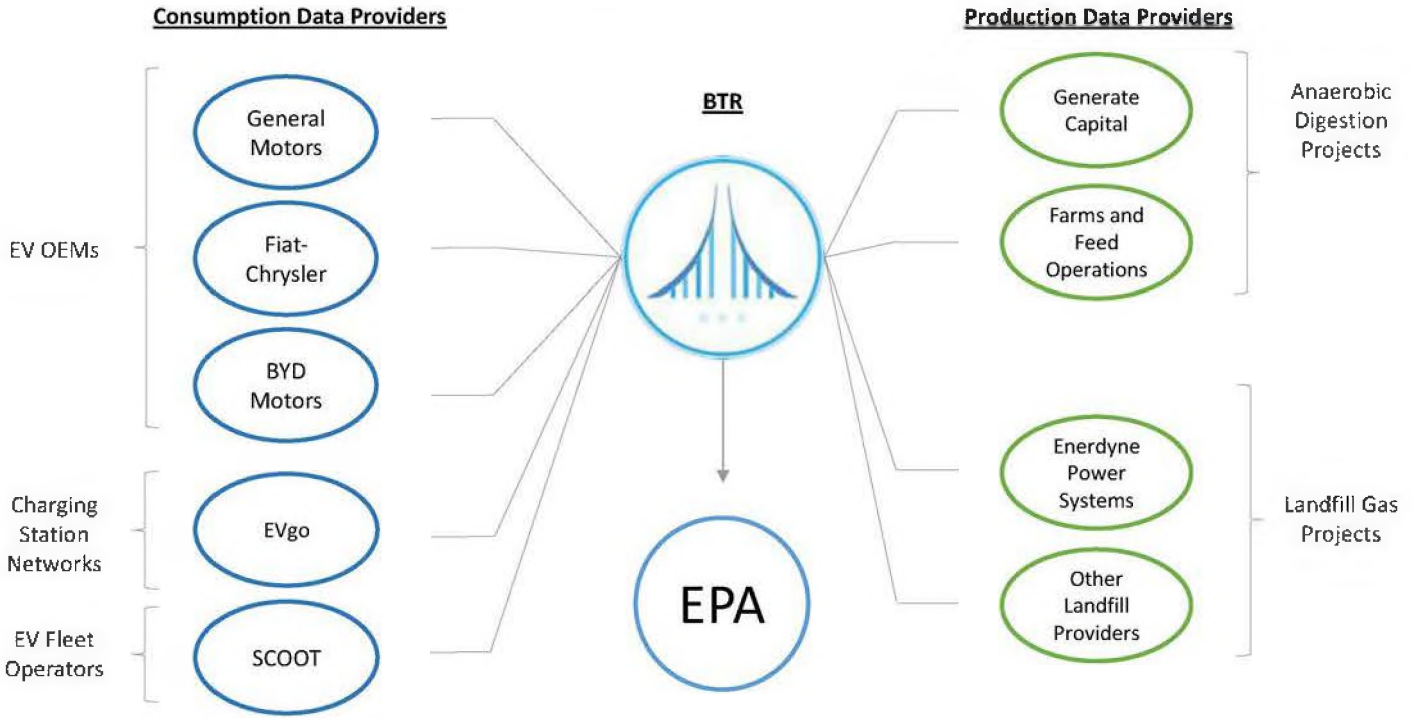
Jack worked with the c-suites of F500 companies at the Corporate Executive Board, where he eventually became one of two founding partners in CEB-Ventures, a $100M corporate venture fund focused on enterprise software. He brings experience working with large clients and launching high potential, venture-backed companies.

Mike Lemon

Mike is a thought leader in the renewable energy community and identified the opportunity for BTR. He has given presentations at leading industry conferences, the EPA, and other US government agencies. After studying biogas in Europe, he started the non-profit Biogas Reseachers with his father, Jim.

BTR ENERGY: AN INDUSTRY STANDARD

BTR's model has the support of multiple stakeholders representing each of the industries EPA would like to participate in the electric pathway, **making it the ideal solution from a policy perspective**. Our goal is to activate the electric pathway in an inclusive way that works for everyone.



THANK YOU

BTR ENERGY

Benefit LLC

BTR Energy, Benefit LLC
1440 G Street NW
Washington, DC 20005

The Electric Pathway

EPA, recognizing electricity as a valid transportation fuel for use in electric vehicles, completed the "electric pathway" under the Renewable Fuel Standard through a final rule promulgated in 2014. The electric pathway works by proving that electricity produced using biogas is used to charge electric vehicles, which then allows the biogas producers to benefit from the creation and sale of RFS credits called electric-RINs (e-RINs).

Animal Agriculture and Anaerobic Digesters

Many animal farms currently process manure in what are called "anaerobic digesters" (ADs). These digesters convert manure and other organic wastes into biogas that is often used to generate electricity. The AD can also produce co-products like animal bedding and – through nutrient recovery – fertilizer, which can then either be used on the farm or sold.

In many cases, processing animal waste in an anaerobic digester is an agricultural best practice. Encouraging the adoption of AD would therefore be consistent with President Trump's goals: ADs "improve the quality of life of people in rural areas"[1] by protecting soil and water quality and reducing odors; ADs contribute to "reliable" work opportunities for those communities; and, ADs represent investment in new technology in parts of our agricultural industries.

Community Benefits of Agricultural Anaerobic Digesters

AD technology helps farms manage manure and prevent nutrient runoff and odors, and a typical AD supports between two and four technical jobs.

- **Economic Growth/ Job Creation:** approximately 9000 agricultural sites in the US could support a digester, and each digester creates jobs. In total, growth in the industry could drive $30 billion in capital deployment and create as many as 15,000 permanent jobs in rural communities[2].
- **Water Pollution Prevention:** processing manure in an anaerobic digester helps prevent nutrient runoff, which is particularly important in areas near major watersheds. Encouraging farms to adopt AD would advance work done by the Great Lakes Initiative, for example.
- **Odor Mitigation:** Using manure productively reduces odors caused by uncovered manure lagoons.

On-Farm Benefits of Anaerobic Digesters (Revenue from Electricity)

There are approximately 200 on-farm anaerobic digesters currently operating that generate electricity. The principal source of revenue generated by those digesters comes from the sale of electricity to a local utility. The value of that electricity varies significantly by state.

- Average revenue per kWh of Electricity Produced: $0.05 - $0.12 (BTR Estimate)
- Average kWh produced at each digester: 4.75 million kWh[3]
- **Total average farm revenue from electricity sales: $237,500.00 - $570,000.00**

Expected Benefits from the Electric Pathway (Additional Revenue from e-RINs)

- BTR projected additional revenue from e-RINs per kWh: $0.04-$0.07
- BTR projected total additional revenue from e-RINs: $190,000.00 – $332,500.00

Total average farm revenue from electricity sales with e-RINs: $427,500.00 - $902,500.00

In total, ***the e-RIN pathway could add as much as $66 million annually to parts of the animal agricultural industry*** and would significantly accelerate the development of additional digesters, creating jobs in rural communities.

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[1] "Inaugural Rural Prosperity Taks Force Meeting," June 15, 2017. https://www.usda.gov/media/press-releases/2017/06/15/secretary-perdue-hosts-inaugural-rural-prosperity-task-force

[2] "Biogas Opportunities Roadmap," US Department of Agriculture, US Environmental Protection Agency, US Department of Energy. https://www.usda.gov/oce/reports/energy/Biogas_Opportunities_Roadmap_8-1-14.pdf

[3] "AgSTAR Data and Trends," US Environmental Protection Agency. https://www.epa.gov/agstar/agstar-data-and-trends#adpotential

BTR Energy Partner Profile: *Compass Farms (Kirkwood, PA)*

Left to Right: Andrea and Cliff Sensenig, Compass Farms' digester

Description for BTR Energy

"Our digester has greatly improved our farm's prosperity, reduced our environmental impact, and helped our rural community. Because of the added revenue from electric sales and tipping fees (from taking food waste), even after making payments on the HUGE investment this digester was for a couple of young farmers, our farm was once again viable. We no longer wondered how long to try to hold on to the farm before we sold out. ***Plain and simple, the digester saved our farm.***

We use manure from three farms in one place. All the manure is piped in, and piped back out to the respective farms for fertilizing fields. This takes a lot of truck, trailer, and tractor traffic off the roads, a benefit all the neighbors enjoy. Also, digested manure has an 80% odor reduction -- you really can't even smell it -- another big benefit for our neighbors! Finally, we are better equipped to be the good stewards of the environment we are called to be.

Our farm is in the highly-sensitive Chesapeake Bay Watershed. By bringing our manure into one location, being able to separate manure solids and do proper nutrient testing of the soil and digester effluent, we are able to precisely manage our manure to ensure the designated high-quality stream that starts on our farm remains as such. Everyone in farming strives to be sustainable, and I believe AD is one technology that helps farmers succeed in sustainability's three main areas: economic, environment, and social. ***The added revenue that RIN credits could add to a farm could quite possibly be the deciding factor when a farmer is looking at the feasibility of installing a digester on their farm."***

-Andrea Sensenig, owner

Size of farm: 100 dairy cows
Feedstock used in digester: manure from three farms
Total amount of electricity sold to local utility/ year: 970,000 kWh
Current price/ kWh: $0.07197/ kWh
Total revenue from electricity sales: $70,000.00

Projected additional revenue from the e-RIN program: $68,000.00 (at $0.07/ kWh)

Total revenue from electricity sales with e-RINs: $138,000.00

Use of proceeds: Compass Farms is a smaller operation, which makes the additional revenue from the e-RIN program even more impactful on the family owners. Andrea put it best: "plain and simple, the [additional revenue] from the digester saved our farm," and the e-RIN revenue would be equally as significant.

BTR Energy Partner Profile: *Green Valley Dairy (Krakow, Wisconsin)*

Left to Right: John and Mark Jacobs and family, Green Valley Dairy's three anaerobic digesters

Description for BTR Energy
Established in 2000, Green Valley Dairy, located in rural Krakow, Wisconsin, is currently home to 3,800 cows and three anaerobic digesters. Owners John and Mark Jacobs are first-generation dairymen with a long-term vision of creating a sustainable dairy operation that could be successfully transitioned to future generations. Co-owners Ken Peters and John's three sons—John, Jr., Paul and Joe—embrace the same vision.

The three anaerobic digesters convert the dairy's manure into clean, renewable electricity which is then sold to the local utility power grid. Essentially all water is reclaimed and returned to the dairy's ecological system, much of it through six miles of piping delivering low-solids nutrients directly and efficiently to croplands.

According to John Jacobs, ***the investment in digesters has dramatically decreased the farm's environmental impact and carbon footprint.*** The major benefits: generating renewable energy which is used by the farm, odor issues have been greatly diminished, nutrients are more available to plants, and the 98% pathogen-free cow bedding is essentially free.

Size of farm: 3800 dairy cows
Feedstock used in digester: manure
Total amount of electricity sold to local utility/ year: 8,000,000 kWh
Current price/ kWh: $0.04245/ kWh
Total revenue from electricity sales: $340,000.00

Projected additional revenue from the e-RIN program: $560,000.00 (at $0.07/ kWh)

Total revenue from electricity sales with e-RINs: $900,000.00

Use of proceeds: Even as a relatively large dairy, the current price of electricity the Jacobs family receives in WI does not cover the cost of operating their digesters. In fact, the farm has been forced to shut down one of the generators that produce electricity to reduce cost. The additional revenue from the e-RIN program will help keep the digesters online and will ultimately help pay for technology upgrades that will allow the farm to do more with the digesters (create fertilizer, for example).

Next Steps to Activate the Electric Pathway

In its 2014 Final Rule (found here), EPA gave itself flexibility to approve applications to generate e-RINs (like that of BTR Energy) on their merits ("a case by case basis"). Abridged BTR legal analysis below.

In order to begin realizing the benefits outlined in this document, EPA needs to quickly:

1. Issue any internal or external guidance that EPA deems necessary to clarify existing regulations;
2. Begin approving pending applications, such as BTR Energy's (filed under Bridge to Renewables, Benefit LLC), that maximize the impact the pathway could have on farms and feedlots beginning in 2018; AND,
3. Adjust the "renewable volume obligation" for 2018, as appropriate, to account for the credits created under the pathway.

All of these actions are executed by the staff in the Office of Transportation and Air Quality, lead by Christopher Grundler. The deadline to adjust the proposed RVO is November 30th, 2017.

As a company and an application, BTR Energy is unique in its focus on agricultural digesters. BTR Energy is also capable of bringing a significant share of the electric vehicle market to bear – as we partner with large traditional auto manufacturers like General Motors – meaning BTR Energy can create the largest benefits for the ag industry.

BTR Energy Statutory Analysis

- In November 2016, EPA issued a Proposed Renewables Enhancement and Growth Support (REGS) rule that covered a variety of RFS issues. In the preamble of the proposed REGS rule, EPA stated clearly it was seeking input on the approach to RIN generation for renewable electricity that would best further the goals of the RFS program, but was not proposing a preferred approach. EPA also stated clearly it was seeking comment on how best to implement and/or revise the RFS regulations pertaining to the generation of RINs for renewable electricity but was not proposing changes to those regulations.

- Because no "e-RIN" regulatory amendments were included in the proposed 2016 REGS rule, EPA may implement its existing regulations, as finalized on July 18, 2014. Those regulations provide flexibility in approving applications: "EPA believes an appropriate approach at this time is to examine [e-RIN] registrations on a case by case basis, and to learn from this experience..."[4]

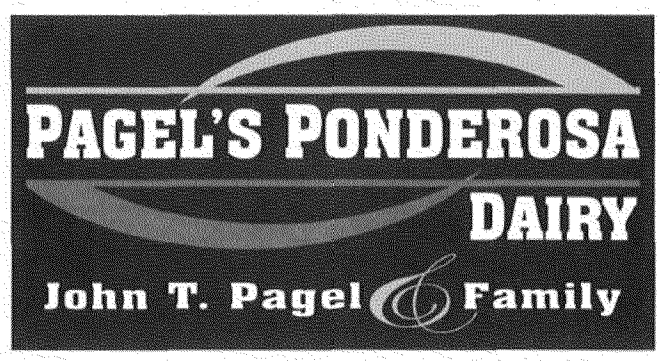
- When implementing the existing regulations, EPA may give priority to approving applications for generating RINs that are compliant with existing regulations and "best achieve the greater goals of the RFS program," which BTR Energy's application would because of its work with animal agricultural industries and because BTR is supported by the large, traditional auto manufacturers, like General Motors and Fiat Chrysler Automobiles. As a Benefit LCC, BTR exists to make this program a success for the industries it serves.

- The Administrator may approve such priority applications even if their approval may preclude, in whole or part, temporarily or permanently, the approval of one or more other pending applications that would not, in the Administrator's judgement, best achieve those same goals.

- "EPA and stakeholders will benefit from experience in implementing the current regulatory provisions before adopting significant modifications."[5] This clearly indicates that EPA can and should implement its existing regulations and simply issue guidance where necessary.

[4] "Regulation of Fuels and Fuel Additives." US Environmental Protection Agency, July 18, 2014. https://www.gpo.gov/fdsys/pkg/FR-2014-07-18/pdf/2014-16413.pdf

[5] "Regulation of Fuels and Fuel Additives." US Environmental Protection Agency, July 18, 2014. https://www.gpo.gov/fdsys/pkg/FR-2014-07-18/pdf/2014-16413.pdf



July 6, 2017

Congressman Mike Gallagher
8th District of Wisconsin
1007 Longworth HOB
Washington, DC 20515

RE: EPA's Renewable Fuel Standard Program

Dear Congressman Gallagher:

I am writing to request your assistance on a long-delayed matter now awaiting action at the U.S. Environmental Protection Agency ("EPA") concerning electricity produced with biogas, and an opportunity for our farm to participate in the EPA's Renewable Fuel Standard ("RFS") program.

As you may know, Pagel's Ponderosa Dairy, LLC, is a family owned and operated dairy farm located within your district in Kewaunee, Wisconsin. We previously used the biogas produced from our dairy to power an electric generator and then sold the electricity to Wisconsin Public Service; however, due to a reduction in revenues, our digester is no longer used for that purpose.

Although the primary fuel in the RFS program has always been ethanol produced with corn, the EPA issued final regulations in 2014 categorizing electricity produced with biogas as an RFS fuel for use in electric vehicles. Accordingly, for the first time it appeared that dairies like ours that have the ability to generate electricity could participate in the RFS program; however, because the EPA has still not activated the RFS "electric pathway," our dairy and many others remain unable to participate in this federal program.

The American Biogas Council ("ABC") has asked the EPA to implement the RFS electric pathway without further delay, and in a way that gives our farm and others an opportunity to voluntarily participate in the RFS program. Participation in the program would enable our farm to generate additional revenues from the electricity our dairy is able to produce. Because the economic viability of our digester depends largely on electricity revenues, participation in the RFS program could help secure our ability to realize the other very important benefits of operating a digester: converting a problematic waste into a useful resource, reducing odors, improving soil health and limiting water pollution. In short, our dairy could benefit significantly from participation in the RFS program.

For these reasons, we respectfully request that you work to ensure that the EPA activates the RFS electric pathway as soon as possible this year, so that our farm and others may finally have an opportunity to participate in and benefit from the RFS program.

If you have any questions about our farm or digester, please contact me directly. If you have any questions about the RFS electric pathway, please contact Jim Lemon of Bridge to Renewables, an ABC member that is assisting in this effort, at 202-810-4246 or by e-mail at jim.lemon@btr.energy.

I greatly appreciate your help on this matter.

Sincerely,

PAGEL'S PONDEROSA DAIRY, LLC

By:_____

John T. Pagel, its President
Office: 920-388-3333
Cell: 920-255-3939
N4893 County Road C, Kewaunee, WI 54216
johnt@pagelsponderosa.com