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Douglas W. O'Donnell
Deputy Commissioner for Services and Enforcement
CC:PA: LPD:PR (REG-117631-23)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Re: Section 45V Credit for Production of Clean Hydrogen; Section 48(a)(15) Election to Treat Clean Hydrogen Production Facilities as Energy Property, Notice of Proposed Rulemaking and Notice of Public Hearing, 88 Fed. Reg. 89,220 (Dec. 26, 2023) (the "**Proposed Rule**") issued by the U.S. Department of Treasury ("**Treasury**") pursuant to a Notice of Proposed Rulemaking ("**NOPR**").

Dear Mr. O'Donnell:

Cresta Fund Management ("**Cresta**"), a middle-market private equity fund manager that focuses on, among other things, funding entrepreneurs that are building renewable natural gas ("**RNG**") projects, with a focus on dairy RNG projects, appreciates the opportunity to submit comments on the Proposed Rule. Cresta supports and incorporates by reference the comments submitted by Coalition for Renewable Natural Gas (the "**RNG Coalition**"), but we highlight the following concerns.

Introduction

We ask Treasury to alter the Proposed Rules in a manner that recognizes RNG's valuable role in the energy transition, in particular the important role of dairy RNG. While RNG can be used to produce hydrogen, among multiple other end-uses, that is not the point, really. RNG is, in our mind, indispensable (at least in the near term) to the energy transition because it decarbonizes agriculture and waste industries that are both notoriously hard to decarbonize and also crucial to ongoing economic activity and quality of life. With the 45V program, Treasury has an opportunity to incentivize a rapid build-out of RNG capability, directing it to hydrogen, but, more importantly, mitigating millions of tonnes of greenhouse gas (GHG) emissions that may continue, unabated, absent changes to the Proposed Rules. We estimate the cost of doing so – an implied price per tonne of \$52.00, in the context of the dairy RNG build-out (more detail on that below) – compares very favorably to other carbon prices implicitly or explicitly included in U.S. federal and state renewable incentive regimes. Given this, it is essential that Treasury adopt the changes to the Proposed Rules recommended by the RNG Coalition and that we recommend below.

About RNG – Focusing on Dairy RNG

RNG Has a Unique Decarbonization Effect: RNG's decarbonizing mechanism is unique and markedly different from renewable electricity's. The very act of producing dairy RNG has decarbonization value since anaerobic digesters capture environmentally damaging methane, nitrous oxide and carbon dioxide (CO₂) emissions from waste and agriculture sites such as dairy farms. Renewable electricity facilities – such as wind or solar generation farms – have energy transition value only if their production displaces fossil fuel-based electricity production or encourages electrification of processes that currently use CO₂-emitting fossil fuels (e.g. transportation (electric vehicles), home heating, etc.). RNG is different.

RNG Fights Methane Emissions: Methane emissions and nitrous oxide emissions are especially damaging – methane emissions have 28x the global warming impact of CO2 emissions from fossil fuels.¹ As recognition of the damaging effect of methane emissions grows,² the focus on the value of mitigating its effects is growing. For example, the U.S. Environmental Protection Agency (“**EPA**”) is imposing requirements on the oil and gas industry to track and mitigate methane emissions associated with extracting and transporting fossil fuels.³ Methane emissions from livestock are just as damaging as methane emissions associated with oil and gas operations. Incentivizing a quick and rapid build-out of anaerobic digesters is a quick and simple way to address dairy operation methane emissions and a great complement to the work the EPA and others are doing in the oil and gas business.

RNG Addresses Tough Decarbonization Problems: Agriculture accounts for ~10% of U.S. GHG emissions, a substantial portion of which comes from livestock.⁴ There are few technologically executable solutions to livestock emissions – electrification of dairy operations can play a small role, but it won’t address the bulk of the emissions. Putting an anaerobic digester on a dairy farm to produce RNG does not solve all of dairy’s emission problems, either, but it is a substantial step.

RNG is Immediately Deployable: Over time, consumers may switch, en masse, to dairy substitutes, such as soy milk, or there may be technological solutions that are scalable and can address enteric fermentation. There is limited visibility or certainty on either of these outcomes, though. In the meantime, a quick build-out of dairy anaerobic digesters can blunt the climate change effects of U.S. dairy consumption without requiring politically infeasible and inequitable solutions (e.g. banning dairy products or making them more expensive) or assuming the rapid advancement and deployment of speculative technological fixes.

RNG Doesn’t Require a Big Infrastructure Build: For RNG to have its decarbonization impact, producers of RNG can just connect to the massive U.S. interstate natural gas network and benefit from the existing 3 million miles of U.S. natural gas pipeline network.⁵ This built-in advantage emphasizes RNG’s decarbonization advantages over renewable electricity, since moving from an electric grid powered primarily by coal and gas-fired generation to one powered by wind and solar will require a massive re-plumbing of the U.S. transmission network.

RNG Has Minimal Induced Emission Risk: Unlike renewable electricity, RNG will remain a small fraction of U.S. natural gas consumption. This difference in relative scale means that the induced emission concerns that are prominent in renewable electricity are not a concern with RNG. Total U.S. natural gas demand for the full-year 2020 was ~30.6 billion MMBtu⁶ and total produced RNG was 93 million MMBtu⁷ – i.e., produced RNG was less than 1% (approximately 200 basis points) of total natural gas demand. Even if RNG production increases to optimistic projections and total U.S. natural gas demand decreases as the United States electrifies, total RNG production would remain very small on a relative basis. Total U.S. feasible RNG production could reach 410 million MMBtu per year,⁸ if all commercially develop-able RNG sources – such as landfills and dairies – are built out, increasing RNG’s share to ~1.4% of total natural gas demand. Compare this to renewable electricity, where the objective is for renewable electricity to comprise as high a percentage of total generation, over time, as is feasible. In some grids, such as ERCOT, installed intermittent renewable generation capacity (wind and solar) is nearly 40% of generation capacity already.⁹ If the market successfully builds out a meaningful portion of the commercially executable RNG, its share of total U.S. natural gas usage will equal, approximately, the share that wind and solar had of the ERCOT

¹ Based on relative warming potential values assigned by the Intergovernmental Panel on Climate Change (IPCC), measured over a 100-year period.

² See, for example, the global methane pledge adopted at COP 28 ([GMP key messages on methane at COP28 - final for website.pdf](#) ([globalmethanepledge.org](#)) and recently adopted EPA rules on methane emissions from the oil and gas industry ([Biden-Harris Administration Finalizes Standards to Slash Methane Pollution, Combat Climate Change, Protect Health, and Bolster American Innovation | US EPA](#)).

³ www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations/epas-final-rule-oil-and-natural-gas#main.

⁴ See EPA, Sources of Greenhouse Gas Emissions (visited January 27, 2024), available at <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.com>.

⁵ Source: <https://www.eia.gov/energyexplained/natural-gas/natural-gas-pipelines.php> <https://www.eia.gov/energyexplained/natural-gas/natural-gas-pipelines.php>.

⁶ Source: https://www.eia.gov/naturalgas/annual/pdf/table_001.pdf.

⁷ Source: Nomura Greentech.

⁸ Source: www.nrel.gov/docs/fy14osti/60178.pdf.

⁹ Source: www.ercot.com/files/docs/2022/02/08/ERCOT_Fact_Sheet.pdf.

electricity generation mix in the late 1990s. Induced emissions in electricity are driven by the ever-greater share that renewables have of the generation grid combined with their intermittency. This is not a concern with RNG.

There is Way More Natural Gas Storage than Electricity Storage: Currently, existing natural gas storage dwarfs existing and projected electricity storage. The United States has around 4 trillion cubic feet of storage, or 48 days of natural gas storage based on average daily U.S. demand. There is, we estimate, around 32 minutes of electricity storage, based on an estimated 250 gigawatt hours of electricity storage and U.S. average daily electricity consumption of ~11,000 gigawatt hours.¹⁰ If building battery storage costs \$151/kWh,¹¹ as a recent estimate suggests, it would cost ~\$80 trillion to build a sufficient amount of battery storage such that the amount of available electricity storage matched the current amount of natural gas storage, on a relative basis.

RNG is Simple, Cleans Up Dairies and Good For Farmers: Dairy RNG relies on anaerobic digestion, a proven technology; mitigates manure-odor and unsightliness in local communities; and provides financial benefits to farmers and helps them lower their carbon footprint.

Cresta's Vantage Point on RNG

Cresta manages energy transition-focused private equity funds and is in the business of making capital allocation decisions, choosing among a variety of decarbonization investment opportunities. We began pursuing RNG investments in 2020 and our focus, to date, has been on dairy anaerobic digesters, which mitigate damaging methane and nitrous oxide emissions associated with dairy products. We chose a dairy RNG focus in 2020 in part because we recognized what a valuable energy transition tool dairy RNG can be, as highlighted above. RNG, is a versatile, efficient, cost-effective way to address energy transition challenges that renewable electricity is not in a position to address. As with other capital allocators similarly situated to us, though, we are not solely focused on dairy RNG; we fund a variety of different infrastructure projects and businesses. We are concerned that the Proposed Rules, as drafted, will not incentivize a meaningful dairy RNG facility build-out. I.e., without changes, Cresta, and others like us, may choose to invest our capital elsewhere. If that happens, damaging methane and CO₂ emissions from dairies will continue, unabated.

Incentivizing a Dairy RNG Build-Out

There are ~32,000 dairy farms in the United States. These dairy farms, especially the ones that do not have an anaerobic digester, have significant GHG emissions. Enteric fermentation and manure management are the single largest source of anthropogenic methane emissions from any source, comprising 32% of such emissions. In fact, livestock is responsible for significantly more methane emissions than oil and gas production (which are responsible for ~23% of anthropogenic methane emissions).¹² Manure management, by itself, which dairy RNG can mitigate, comprises 9% of U.S. anthropogenic methane emissions.¹³ Given this, it would be a disconnect to focus on regulating methane emissions from the oil and gas sector, as the recently adopted EPA rules do,¹⁴ while passing on an opportunity to incentivize methane emission mitigation from dairies through the 45V tax credit.

~2,700 of these ~32,000 dairies have over 500 head of cattle and operations that could justify an anaerobic digester. As of January 2023, there were fewer than 300 dairy anaerobic digesters operating.¹⁵ We estimate that, if just half the feasible build-out of dairy anaerobic digesters is completed, those newly built digesters would mitigate ~16.25 million metric tonnes of CO₂ equivalent (CO₂e) emissions per year, or ~162.5 million metric tonnes of avoided

¹⁰ Battery installations are increasing, but as of the end of Q3 2023, there was only 42.7 gigawatt hours of available battery storage (source: www.spglobal.com/commodityinsights/en/market-insights/latest-news/electric-power/111423-us-battery-storage-capacity-surpasses-146-gw-in-q3-35-gw-planned-in-q4). It is tough to evaluate how much pumped hydro storage there is exactly, as that information is not readily available, but we believe that, on high end, there may be 184 gigawatt hours of storage (source: www.eia.gov/energyexplained/electricity/energy-storage-for-electricity-generation.php). This site (www.ceicdata.com/en/united-states/electricity-supply-and-consumption/electricity-consumption) is the source for average daily electricity consumption.

¹¹ Source: www.cleanpower.org/facts/clean-energy-storage/.

¹² Source: page 6-7 of www.iatp.org/emissions-impossible-methane-edition.

¹³ Source: Tudor Pickering Holt & Co. equity research report issued November 18, 2021, at page 24.

¹⁴ www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations/epas-final-rule-oil-and-natural-gas#main.

¹⁵ Source: www.epa.gov/agstar/agstar-data-and-trends and www.epa.gov/agstar/agstar-market-opportunities-report.

CO₂e emissions in just the next 10 years.¹⁶ This is a significant energy transition win, especially since livestock is a “tough to decarbonize” sector that is key to U.S. consumer quality of life, and especially given the Biden administration and global focus on mitigating methane emissions.

We appreciate that Treasury has questions about the counterfactual in this assessment; namely, should vented methane comprise the baseline for comparison when evaluating the energy transition effect that RNG has on hydrogen production. Regardless of where Treasury ends up on this point, though, the fact is that these dairies are emitting methane and that those emissions will continue until something happens – construction of anaerobic digesters or some other solution – to mitigate their effect. As such, when judging the effect of incentivizing dairy anaerobic digester build-out, it is analytically correct to consider the actual facts on the ground, i.e. vented methane at most dairy farms, as the appropriate counterfactual, even if Treasury chooses not to do so for purposes of measuring how much 45V tax credit RNG will generate.

If Treasury chooses not to alter the Proposed Rules to make them more constructive for dairy RNG, and, as a result, the digester build-out is delayed, this will be an unnecessary energy transition loss. The decarbonization effort will not get these lost years of abatement back, as ongoing dairy operations will continue to add to the concentration of greenhouse gases in the atmosphere. It’s possible that, even absent a significant incentive from the 45V program, the economics of some other program will incentivize a build-out of RNG facilities. It’s also possible, although in our view unlikely, that state or federal regulation will require dairies to construct anaerobic digesters as a condition to their license to operate. However, given how meaningful the abatement opportunity is, Treasury should pass on this opportunity to accelerate a dairy RNG facility build-out. Even if these facilities are eventually built, in response to other incentives or requirements, the emissions that continue, unabated, until that build occurs are adding to our carbon debt and are unlikely to be reversed.

Suggested Changes

There are a few things Treasury should change to incentivize the dairy RNG facility build-out that, for reasons we describe, would provide the United States with an easy and valuable energy transition win.

First, Facilitate Clean Hydrogen Demand for RNG: To incentivize the build-out of dairy RNG facilities, the Proposed Rules should ensure there are a sufficient number of places dairy RNG can be used to produce clean hydrogen. RNG’s role in hydrogen production is through its use in steam methane reformation (SMRs) or auto thermal reformation (ATRs). The likely end use of that hydrogen is use in hydrogen-powered vehicles or in the production of renewable fuels (like e-methanol, renewable diesel or sustainable aviation fuel) (“**Renewable Transportation Fuels**”) or conventional transportation fuels (like diesel). Under the Proposed Rules, to generate the 45V tax credit, RNG would need to be used in a ATR or SMR that meets one of the following criteria: 1: the ATR/SMR is a new-build placed in service after December 31, 2022; 2: the ATR/SMR has undergone a substantial renovation after December 31, 2022, meeting the Proposed Rules’ 80/20 rule; or 3: a taxpayer has modified the ATR/SMR after December 31, 2022 in a manner that enables it to generate clean hydrogen (a “**Clean Hydrogen Modification**”).

There is ~10 million metric tonnes of hydrogen production per year in the United States,¹⁷ most of it made with ATRs or SMRs that could use dairy RNG to produce clean hydrogen, if that dairy RNG was available. However, the Proposed Rules specifically note that “[c]hanging fuel inputs to the hydrogen production process, such as switching from conventional natural gas to renewable natural gas, would not qualify” (i.e. “**Fuel-Switching**”) as a Clean Hydrogen Modification (the “**Anti-RNG Directive**”).

While we appreciate the reason for this Anti-RNG Directive, it takes one of RNG’s key advantages as an energy transition tool – it is a drop-in replacement for fossil natural gas that requires little or no infrastructure changes to effect its decarbonization advantages – and turns it on its head, making it a major disadvantage. There are multiple

¹⁶ Our assumptions: In 2021, estimated dairy RNG production was 15 million MMBtu, according to Nomura Greentech. According to the NREL, potential production from dairy RNG is ~99 million MMBtu/year (www.nrel.gov/docs/fy14osti/60178.pdf). Dairy RNG can have a carbon intensity score of -283 because it mitigates damaging methane emissions (www.trilliumenergy.com/en/news/archive/2020/march/how-can-renewable-natural-gas-provide-a-negative-carbon-impact). If half of that additional 85 million MMBtu/year is built out (ie ~ 42.5 million MMBtu/year), that RNG production would imply ~16.25 million tonnes of CO₂ are mitigated per year, or 162.5 million tonnes over the course of a 10-year period.

¹⁷ Source: www.hydrogen.energy.gov/docs/hydrogenprogramlibraries/pdfs/16015_current_us_h2_production.pdf?Status=Master.

ways to address our concern. One potential approach is to provide that the Anti-RNG Directive does not apply if the hydrogen is ultimately used in hydrogen-powered vehicles or as a step in the production of other Renewable Transportation Fuels. This is a minor tweak to the Anti-RNG Directive, narrowing it slightly, and in a way that will both encourage Renewable Transportation Fuel production and incentivize the build-out of dairy RNG facilities. We do not think narrowing the Anti-RNG Directive will create a perverse incentive or windfall to owners of SMRs/ATRs, as these owners will not be able to generate the hydrogen credit through Fuel-Switching unless they are able to source RNG, which will incentivize a build-out of RNG facilities.

Second, Additional RNG-to-Hydrogen Pathways Must be Included: The statute requires the use of the GREET model (or a successor) to determine emissions rates for purposes of Section 45V. The GREET model is transparent and well-respected. Importantly, it has included RNG pathways in its modeling for some time, including recognizing that RNG facilities avoid emissions in cases where the biogas may otherwise have simply been flared or released into the atmosphere. These avoided methane emission benefits are key and an important part of any lifecycle analysis for RNG.

The Argonne National Laboratory has provided a GREET model targeted for the Section 45V tax credit—the 45VH2-GREET model. But, this revised model appears to only include landfill gas pathways for hydrogen production, which is only one potential source of RNG. The current GREET model, however, includes additional RNG pathways that must be added. We urge Treasury to ensure these additional pathways are included, as well as pathways that are likely to be most used in the near future. These include, at a minimum, Biogas from Anaerobic Digestion of Animal Waste, Biogas from Anaerobic Digestion of Wastewater Sludge, Biogas from Anaerobic Digestion of MSW, and RNG-to-hydrogen via electrolysis. For the reasons we describe above, it is particularly important that Treasury adopt an RNG-to-Hydrogen pathway for dairy RNG, as failure to do so will miss an easy, and relatively inexpensive, opportunity to incentivize the build-out of anaerobic digestion facilities that will mitigate millions of metric tonnes of CO₂e emissions annually.

Third, Provide Clarity on Coupling Credits from State and Federal Clean Fuel Programs: Treasury should clarify that generating the availability of the 45V tax credit is not foreclosed if RNG is used to produce clean hydrogen in connection with the production of Renewable Transportation Fuels that also participate in the federal renewable fuel standard (RFS) or state low carbon fuel standard (LCFS) programs. The Proposed Rules are a little unclear on whether, by way of example, a producer of renewable diesel (“RD”) is precluded from generating the 45V tax credit if that producer that uses RNG in its SMR (displacing fossil natural gas) to lower the RD’s carbon intensity score, increasing the RD’s LCFS value in California. Treasury should revise the guidance to clarify that an RD producer could generate the 45V tax credit in this circumstance. Almost all potential dairy RNG build-out has a break-even cost above \$20.00 per MMBtu.¹⁸ We estimate that the 45V program will generate a tax credit of \$19.87 per MMBtu. As such, unless producers of hydrogen can generate a 45V tax credit and also realize the benefit of other subsidies, the 45V tax credit will not incentive meaningful dairy RNG facility build-out.

Fourth, Where Incentives are Expected to Result in New RNG Production at Numerous Existing Waste Sites, Treasury Must Defer on Including any “Induced Emissions” for RNG: For electricity, the Proposed Rule has raised concerns with what is referred to as “induced emissions,” a type of indirect emission that is attributed to the production of renewable electricity in one region for which credit is used in another region that requires increased energy to meet the demand in that region. While we understand potential concerns with unintended consequences as a result of increased hydrogen production, it is important to note that the RNG/natural gas market operates very differently than the electricity grid, and the Proposed Rule provides no evidence of similar “induced” emissions for RNG. We further note that the statute imposes limits on the indirect emissions that can be included—that is, they must be significant, they must be tied to the production of RNG, and they must be included in GREET. Such is not the case for RNG.

These “induced emissions” appear to be the basis for potential incrementality, deliverability, or temporality requirements for use of RNG. While we do not believe such requirements are consistent with the statute, the anticipated requirements noted in the Proposed Rule would be unduly limiting and should not be adopted. Of particular concern is the “first productive use” requirement that would likely exclude viable RNG projects that could support clean hydrogen production today. RNG projects have a long runway from development to operation, and it would be difficult, if not impossible, to match up initial operations with the startup of a hydrogen facility. If either are delayed,

¹⁸ Orennia Pulse, Devil’s in the Details, issued April 2023, at page 5.

that could have adverse impacts on the ability of the other facility. In particular, an RNG facility cannot be left idle, severely impacting its financial viability. Thus, requiring the RNG project and the hydrogen production facility to come on-line in the same year (or for the RNG project to come on-line after) is simply unworkable and must not be adopted in the final rule. The requirement would cause a significant value discrepancy for new RNG projects creating a market distortion, greater risk of stranded RNG for existing projects, added complexity, and higher prices for end-consumers. This is counter to the goals of the IRA.

The concerns underlying the incrementality requirements for electricity are not present for RNG. It is speculative to believe that RNG in existing uses will be diverted for hydrogen production and backfilled with fossil fuels, where RNG production today largely contributes to mandated renewable fuel programs which would continue to support investments in *new production*. Indeed, there is ample potential biogas sources already existing to support RNG production to meet growing demand, provided the right incentives are available. On the other hand, removing incentives for existing sources to support hydrogen production could result in additional GHG emissions if these facilities lose available markets.

Since RNG is in the growing stages of the industry and to address potential concerns regarding unintended increases in GHG emissions, Treasury could find projects built prior to 2030 meet any such “additionality” requirements with a check on the market impacts of increased hydrogen production to determine if any such patterns can be discerned and allow for continuing policy changes to take shape.

Fifth, Temporality and Deliverability Requirements are Also Not Appropriate or Necessary for RNG: We endeavored to outline, above, all of the advantages that RNG has, compared to intermittent renewable power. Because of these advantages, the temporality and deliverability requirements that the Proposed Rules apply to renewable electricity are unnecessary for RNG.

Addressing Likely Objections

There are and would be several potential good-faith objections to our suggested changes to the Proposed Rules, but we believe the responses to each are sufficient to, on balance, indicate clearly that adopting our proposed changes to 45V, or comparable changes, such as those suggested by the RNG Coalition, are in the best interests of the Biden Administration’s efforts to accelerate and facilitate the energy transition and consistent with the IRA.

Cost: We do not think the changes we suggest will be costly; in fact our changes to the Proposed Rules are a relatively efficient way to mitigate carbon emissions compared to other U.S. incentives and subsidies, e.g. the 45Q credit for carbon capture, which pays out at \$85/tonne for captured and sequestered carbon from industrial facilities and \$180/tonne for direct air capture. We estimate there is ~85 million MMBtu/year of dairy RNG production build-out that a properly structured 45V tax credit could incentivize. Assuming all of this gets built out is aggressive, although feasible. If half gets built out – i.e. ~43 million MMBtu/year of capacity, and if the related RNG has a weighted-average carbon-intensity score of -283,¹⁹ we estimate this would result in an aggregate of ~\$850 million/year of 45V tax credits paid to hydrogen producers who use this RNG and mitigate ~16.25 million tonnes of CO₂ equivalent emissions per year, for a cost of ~\$52.00 per tonne.²⁰ This \$52/tonne cost is attractive, in light of the 45Q pricing (\$85 and \$180), and given that the Proposed Rule changes we recommend will have resulted in a build-out of anaerobic digestion facilities that mitigate livestock-related methane emissions that have few decarbonization alternatives and that the Biden Administration’s efforts to contribute to the global fight against methane emissions will have been meaningfully advanced.

Other RNG incentives: There are other RNG incentives, but it’s not clear they are sufficient to incentivize a rapid dairy RNG facility build-out. The California LCFS program provides incentives for using RNG in compressed natural gas (CNG) vehicles, but that market is already saturated with RNG, and the relevant California regulatory body (CARB) has a stated intention to encourage the eventual electrification all transportation to free up RNG for things like hydrogen production. Other states have, or are considering, LCFS programs, but California consumes over half of all CNG in the United States.²¹ Oregon and Washington also have LCFS programs, but their CNG

¹⁹ Source: www.trilliumenergy.com/en/news/archive/2020/march/how-can-renewable-natural-gas-provide-a-negative-carbon-impact.

²⁰ We calculated this based on each MMBtu of gas producing 6.62 kg of hydrogen, generating a \$19.87 credit (\$3.00 x \$6.62) per MMBtu of RNG. We estimate that this cost would increase to over \$300/tonne if the full effect of dairy RNG’s negative CI score was allowed.

²¹ Orennia Pulse, Devil’s in the Details, issued April 2023, at page 9.

markets are also becoming saturated, and the magnitude of demand in those states is not significant. The New Mexico House and Senate recently passed LCFS legislation that the governor is expected to sign, as well, but there is not a lot of transportation demand for RNG in New Mexico. Other states, such as New York, are considering LCFS programs, but there is no assurance those programs will be adopted. Currently, several states have programs that mandate or encourage regulated gas distribution companies (LDCs) to blend RNG into the natural gas they provide to residential and other customers for home heating, etc. However, to date, these programs have not driven significant demand for RNG, and, given the uncertainty around how the mandates will be implemented, it is unlikely these programs will drive significant additional RNG build. The IRA extended the Section 48 Investment Tax Credit (“ITC”) to anaerobic digestion facilities, and Treasury recently revised the rules in a manner that is constructive for incentivizing a dairy RNG build-out. However, given dairy RNG’s high operating costs, absent incentives (such as 45V tax credit) that drive end-user demand for RNG, we do not believe the Section 48 ITC will be sufficient to drive the build-out of dairy RNG operations we describe above. The Section 45Z production tax credit could, subject to Treasury guidance, provide a meaningful incentive for RNG build, but, as of now, the details of that credit are uncertain, pending guidance. Finally, there is a possibility that the EPA adopts an e-RIN program, allowing RNG to be used in thermal power generation to electrify transportation, but the EPA’s efforts to move e-RINs forward ran aground in late 2023, and there is no assurance when, and whether, the EPA will revisit the program. In summary, while there are other incentive programs, the uncertainties associated with these programs create a risk that capital allocators such as Cresta, when deciding whether to invest capital in dairy RNG facility build-out or to turn their attention elsewhere, will continue their “wait-and-see” approach.

Environmental justice concerns: The environmental justice community frequently has several objections to governmental incentives, such as the 45V tax credit, that, in theory, provide financial incentives for continued dairy operations. They are concerned, for instance, that these types of programs advantage larger farms, e.g. concentrated animal feeding operations, or CAFOs, over smaller dairy operations, and therefore incentivize a consolidation of dairy farms into CAFOs. There is no evidence that, that is actually occurring, however.²² Restricting RNG’s ability to generate the 45V tax credit based on a hypothetical is not appropriate. If concerns were to emerge in this regard in the future, Treasury could revisit the 45V program to address those concerns. The environmental justice community also advocates for changes to consumer preferences away from foods that generate a lot of GHG emissions, such as dairy products, and towards more environmentally friendly substitutes. Acknowledging the good-faith nature of the environmental justice community’s aspiration on these points, they are not reason enough to limit the 45V tax credit’s applicability to dairy RNG, as doing so would entail a high-risk approach to carbon mitigation – i.e., do not take steps to mitigate emissions from current sources of food production, and instead gamble that there will be a mass change to consumer preferences that makes such mitigation unnecessary. We look at it as the equivalent of discouraging seat belt use to incentivize safe driving. Treasury does not have the luxury of running such a risk, nor would doing so be consistent with the IRA.

Conclusion

We request that, in light of RNG’s unique and versatile impact on the energy transition, Treasury adopt the changes to the Proposed Rules we describe above or similar changes such as those recommended by the RNG Coalition. Doing so will, we believe, bring capital allocators such as Cresta off the sidelines and incentivize a rapid build-out of the ~2,700 U.S.-based dairies that need to add anaerobic digesters to mitigate damaging methane, nitrous oxide and CO₂ emissions. Treasury should take this opportunity to notch a relatively easy win in the energy transition that has all of the other benefits for farmers, local communities and the production of Renewable Transportation Fuels we describe above.

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²² EPA, Renewable Fuel Standard (RFS) Program: Standards for 2023-2025 and Other Changes: Response to Comments, at 206 (2023), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P1017OKN.pdf>.

We appreciate this opportunity to provide Treasury with our thoughts on the Proposed Rules. Please do not hesitate to contact Jessica Groshek (jessica.groshek@crestafunds.com) or me (ben.nelson@crestafunds.com) if you have any questions regarding our comments or if we can be of further assistance. We would be happy to discuss our comments in further detail. Thank you in advance for your time and consideration of issues of critical importance to us.

Sincerely,

Ben Nelson

Ben Nelson
Chief Operating Officer of Cresta