



Clean Fuels
ALLIANCE AMERICA



CHALLENGE ACCEPTED
ANNUAL REPORT 2023

FROM THE CEO



I still enjoy a good road trip—the chance to see beaches and mountains I’ve never seen or tour towns I’ve never visited. It’s the possibility of reaching places I’ve never been before or perhaps seeing old friends or timeless vacation spots. Despite the occasional delay at the airport, I love touching down in a place I’ve never been and experiencing the local culture. Each mile on these trips is a mixture of achievement and anticipation, the understanding that I’m getting somewhere and that I still have new milestones ahead.

This report recounts the past year in clean fuels—a year that included achievements we could only hope for early in our journey. Investments in clean fuels are being made on an unprecedented scale. Companies have committed over \$6 billion in increased soybean crush capacity through new or expanded facilities, largely due to demand for our fuels. States across the country are increasingly turning to clean fuels. Nebraska and Missouri passed tax incentives for biodiesel, and Northeastern states are adopting policies that support Bioheat® fuel as the region looks for a greener alternative to traditional home heating oil. Minnesota and Illinois also passed legislation to support biodiesel and sustainable aviation fuel (SAF). Federal Higher Blends Infrastructure Incentive Program (HBIIP) grants are expanding the infrastructure required for the greater adoption of our fuels across the country.

Along with these legislative wins, corporations are increasingly driving the use of our fuels. They’ve responded to consumer demand for greener practices and turned to our clean fuels to reduce carbon in heavy-duty and long-distance fleets, often finding we are the clear option for immediate carbon reduction. They now know what we have been stating for years: our fuels are better, cleaner and available now.

The exponential growth of renewable diesel and SAF is only just beginning, and biodiesel, despite being a mature industry now, has the opportunity to unlock substantial new markets in the near future. While B20 was once the recommendation for most fleets, we’re about to enter an era where higher blends, including B100, are needed to meet corporate carbon reduction targets. New biodiesel markets are emerging in rail and marine as these fleets seek to implement sustainable solutions now to meet the needs of their customers.

I’m honored to continue this journey with our members—including the 17 new member companies we added this fiscal year—America’s soybean farmers, our excellent staff, advocates, and the researchers and technical experts who keep moving us forward.

We’ve exceeded projections of how far we’d go, yet it’s hard not to be focused on the opportunities that still lie ahead. The journey has never been easy, and will never be easy, but we in the clean fuels industry have miles of open roads ahead of us right now with our sights set on a more climate-friendly future destination.

A handwritten signature in dark ink, reading "Donnell M. Rehagen". The signature is fluid and cursive, with the first name being the most prominent.

Donnell Rehagen
CEO, Clean Fuels Alliance America

FROM THE CHAIRMAN



To say there have been some changes in the last couple of years would be an understatement. Shifting consumer perspectives, advancing industry, and a changing landscape have altered the way we approach business. While consumer choices and our business environment will continue to evolve in the future, one thing is certain: Carbon reduction is here to stay.

More than 300 companies have signed The Climate Pledge, committing to reaching net-zero carbon emissions. Industries from stationary energy, rail, marine, over-the-road transportation and now airlines are navigating aggressive sustainability goals and ESG demands emphasizing the need for better, cleaner fuels.

As consumers look for options at the pump that empower them, governments are pushing renewable energy sources through regulations and incentives. Effective policies at the state level, including California's LCFS, have led to increased production with biomass-based diesel now replacing over 57% of the state's diesel pool— a major milestone for our industry and the association representing biodiesel, renewable diesel and sustainable aviation fuel (SAF).

At the federal level, we continue to build stability in tax policy with an extension of the existing biodiesel and renewable diesel tax incentives through 2024 and new incentives through 2027. With the addition of an enhanced SAF tax credit and significant investments in feedstock availability, advanced biofuel producers have announced plans to ramp up production of SAF to more than 1 billion gallons by 2025.

These investments helped Clean Fuels secure an increase in final volumes for biomass-based diesel in EPA's Renewable Fuel Standard, allowing for continued market growth over the next three years.

As we map out our vision for the future, it is important to recognize the strong foundation we've built over the decades. We are in a leadership position to help meet carbon reduction goals because of the partnerships we have built and the dedication of our stakeholders. Both will continue to play a critical role in meeting demand from emerging markets in aviation, rail, heating and marine. Everyone has a specialty, and tapping into each company's assets is vital to our success.

It's an exciting time in the clean fuels industry, and I thank you for allowing me the opportunity to contribute as your board chairman.

A stylized, handwritten signature in white ink that reads "ML Rath".

Mike Rath
Chairman, Clean Fuels Alliance America

MEMBER TESTIMONIALS



Victor Bohuslavsky - United Soybean Board

Biodiesel is a huge success story for our soybean checkoff investment. As a member of the United Soybean Board and as a farmer, I am grateful to Clean Fuels Alliance America and their members for recognizing soybean oil as a valuable feedstock in the renewable fuels industry. Clean Fuels is positioned to meet the challenges and opportunities of our industry to ensure continued growth and consumption of our product. I have had the privilege of seeing the biodiesel industry grow from the beginning, and I am proud of the accomplishments of this mighty venture.

Mike Devine - President, National Oilheat Research Alliance

The collaboration between Clean Fuels Alliance America and NORA has been instrumental in advancing the renewable liquid heating industry in the United States. Clean Fuels continues to invest in technical projects together with NORA, which are slowly breaking down the barriers to achieve higher blends of biodiesel in liquid home heating. The ultimate goal of reaching 100% renewable liquid heating in the U.S. is on the horizon. The gateway to the liquid heating consumer is through their distributors. Clean Fuels provides education and outreach efforts enabling distributors to take advantage of the marketing tools available for them to succeed when communicating with today's consumer.



Courtney Lawrenson - Vice President for Oils and Energy, Ag Processing Inc.

Since joining Clean Fuels Alliance America in 1999, Ag Processing, Inc (AGP) considers the organization a long-term strategic partner giving our company additional access to resources and experts that impact our biodiesel and feedstock operations. The continued success and advancement of biodiesel is important to agriculture and our members. AGP is proud not only to be a member of Clean Fuels but to also serve on the Governing Board. Our partnership with the association has allowed us to become successful as a producer and feedstock provider by staying closely connected to core issues that impact our company on both the federal and state levels.

FINANCING OUR MOMENTUM: INDUSTRY SUPPORT

The ability of Clean Fuels to leverage membership dues with outside funding sources helps increase the organization’s ability to make an impact for its members. In FY23, membership dues made up just over 28% of the total revenue.



Clean Fuels
ALLIANCE AMERICA

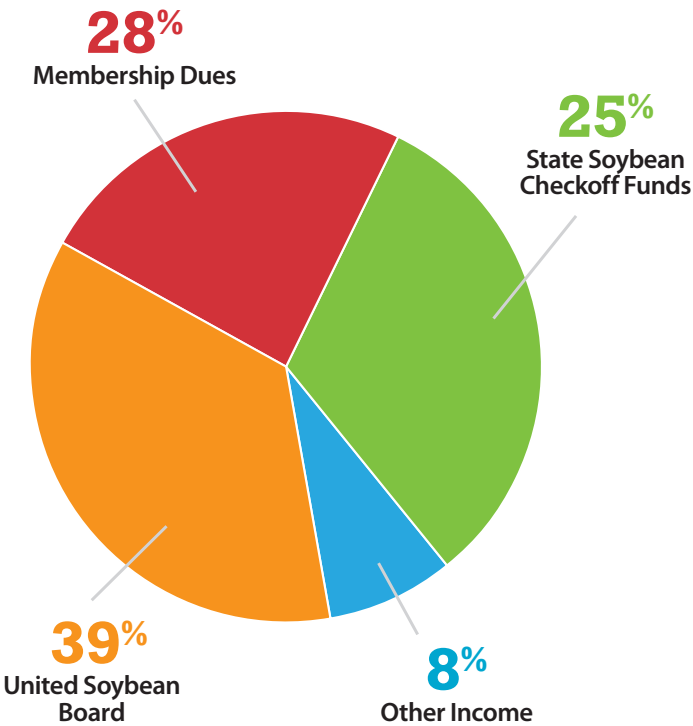
Clean Fuels Funding Sources

39% United Soybean Board – The United Soybean Board provides checkoff funds for biodiesel and renewable diesel programs related to technical and market development efforts. Clean Fuels submits proposals each year through USB’s annual planning process. By law, checkoff dollars cannot be used for lobbying. Using these funds to execute programs allows membership dues to focus solely on policy.

28% Membership Dues – These dues play a significant role in Clean Fuels policy programs. In fact, membership dues and member donations are the only sources of Clean Fuels’ national and state lobbying efforts. Federal regulations prohibit checkoff funds and federal grants from being used for lobbying, so Clean Fuels uses membership dues almost exclusively on policy.

25% State Soybean Checkoff Funds – State Soybean Boards, through their checkoff dollars, fund technical, communications, sustainability and education work on behalf of the industry. Each year, Clean Fuels staff submits proposals and continues to obtain strong support from more than 20 different state organizations. Over \$4.4 million was invested from these organizations in 2023, funding critical biodiesel and renewable diesel program areas.

8% Other Income – Income from programs and additional partners rounds out the Clean Fuels annual budget. These funds include BQ-9000, conferences and corporate partners.



FY23 Budgeted Revenue Estimate

PAC: SUPPORTING OUR CHAMPIONS

Clean Fuels Alliance America's political action committee helps re-elect lawmakers who support our industry by contributing funds to their campaigns and providing them an opportunity to develop stronger relationships with their constituents outside the Halls of Congress.

During the first half of 2023, Clean Fuels PAC contributed a record \$44,300 to the campaigns of our industry champions in Congress, including long-time supporters Sen. Amy Klobuchar of Minnesota, Rep. Adrian Smith of Nebraska and Sen. Tammy Baldwin of Wisconsin. The PAC also supported the campaigns of new friends such as Rep. Mark Alford of Missouri, Rep. Eric Sorensen of Illinois and Sen. Pete Ricketts of Nebraska.

The PAC hosted a pair of fundraisers, for freshman Rep. Zach Nunn of Iowa in June and Rep. Michelle Fischbach of Minnesota in March. Beginning this year, Clean Fuels PAC will expand its support to state-level candidates, a reflection of the increasingly critical role state lawmakers play in biofuels policy.

Clean Fuels PAC would not be able to support these campaigns without the voluntary contributions it receives from eligible members of Clean Fuels Alliance America. We thank you for your generous support for this vital advocacy tool.



\$44,300
**contributed
to champions
first half of 2023**



FEDERAL AFFAIRS: GROWING MARKETS THROUGH POLICY

Over the past year, Clean Fuels' federal affairs team secured multi-year stability on several priorities. This enabled Clean Fuels to focus on ensuring that our industry's fuels are supported in federal policies to help build new markets, such as for sustainable aviation fuel (SAF).

Biodiesel Fair Trade

The Clean Fuels Fair Trade Coalition achieved renewal of antidumping and countervailing duties on biodiesel from Argentina and Indonesia through 2027. The coalition engaged with the Department of Commerce and U.S. International Trade Commission during the required five-year "sunset" review and successfully petitioned to expedite the process. With minimal input from Argentina and Indonesia, the duties were extended for another five years.

Tax Incentives

Congress extended the biodiesel and renewable diesel tax incentive through 2024 and created a new SAF blender credit for 2023 and 2024. Through Clean Fuels' advocacy, Congress also ensured that U.S. biodiesel, renewable diesel and SAF producers are equally supported in the new Clean Fuel Producer Credit that begins in 2025. Clean Fuels' federal affairs team continues to engage with the U.S. Treasury, Department of Energy, EPA, and USDA to ensure that U.S. producers using homegrown feedstocks are supported in the new tax policy, that co-processing remains ineligible and that the incentives equitably support biodiesel, renewable diesel and SAF producers.

Higher Blends Infrastructure Incentive Program (HBIIP)

Clean Fuels advocated to extend USDA's successful Higher Blends Infrastructure Incentive Program through 2030. Congress approved an additional \$500 million for the program, and USDA has committed to announcing funding opportunities on a quarterly basis. At Clean Fuels' urging, USDA will dedicate \$5 million each quarter to the home heating oil sector and \$20 million each quarter to terminals.

Renewable Fuel Standard (RFS)

Clean Fuels engaged with EPA as it finalized the Renewable Fuel Standards for 2023, 2024 and 2025. Clean Fuels organized members and coordinated with allies – such as American Soybean Association, National Oilseed Processors Association, and North American Renderers Association – to provide EPA convincing data on feedstock availability to enable rapid growth. While the final volumes remain well below the industry's demonstrated capacity, EPA acknowledged Clean Fuels' input as the primary reason for the increase in the final volumes for advanced biofuels and biomass-based diesel.



STATES PURSUE AGGRESSIVE DECARBONIZATION GOALS

The biodiesel and renewable diesel industry saw significant policy wins in 2023. Clean Fuels proudly played a supporting role in these successes that will drive demand and production throughout the nation. Clean Fuels assisted the efforts by:

- Testifying at many legislative and regulatory hearings.
- Offering technical, economic and environmental data in support of carbon policies and biodiesel incentive programs.
- Assisting in the development and implementation of legislative strategy to ensure passage of biodiesel, renewable diesel and sustainable aviation fuel priorities.

Midwest Success



Nebraska

Successfully passed new biodiesel incentives that will lead to **60 million gallons of biodiesel demand**. The incentive provides a 14 cents per gallon credit for B100 at Nebraska fuel retailers.



Missouri

Successfully passed legislation that made changes to the biodiesel producer tax incentives that will streamline the distribution of credits. The legislation also increased the cap for biodiesel production tax incentives.



Indiana

Legislation that would provide incentives for retail sale and blending of biodiesel was introduced. While this bill did not pass, it will likely get more consideration in the next legislative session. The bill has the **potential to drive biodiesel demand by over 130 million gallons** when fully implemented.



Michigan

Working with Michigan Soybean, Clean Fuels introduced and/or supported three significant policies in the state that will help grow demand for biodiesel, renewable diesel, and sustainable aviation fuel.

The “Big 3” include:

1. **Michigan Biodiesel Tax Incentive for Retail And Production**
 - Retail - 2 cents per gallon for the sale of B5-B10, 5 cents per gallon for the sale of B11+.
 - Producers - 2 cents per gallon for biodiesel produced in the state.
 - Potential biodiesel demand growth of over 93M gallons.
2. **Michigan Clean Fuel Standard**
 - Modeled after the CA LCFS, this bill would reduce the carbon intensity of transportation fuel sold or used in Michigan by 25% below a 2019 baseline by the end of 2035.
 - This bill is fuel and technology-neutral and uses the latest GREET model when calculating fuel pathways.
 - If passed, the bill would be the first in the nation to recognize and promote the adoption of smart farming practices that reduce emissions.
3. **Michigan SAF Incentive**
 - Provides a 1 cent per gallon credit on SAF purchased in Michigan and used for business flights departing the state.
 - The amount of credit per gallon increases 2 cents for each additional 1% reduction in carbon dioxide equivalent emissions above 50% but shall not exceed \$2.00 per gallon.



Clean Fuels
ALLIANCE AMERICA

West Coast Success



Oregon

- Adoption of more stringent statewide carbon-intensity reduction targets.
- Originally set at a 10% CI reduction by 2020 but expanded to require a 20% by 2030 then leapfrogging California's LCFS as leader with a 37% target by 2035.
 - The updates are expected to **expand biomass-based diesel demand up to nearly 600 million gallons.**

Portland, Oregon

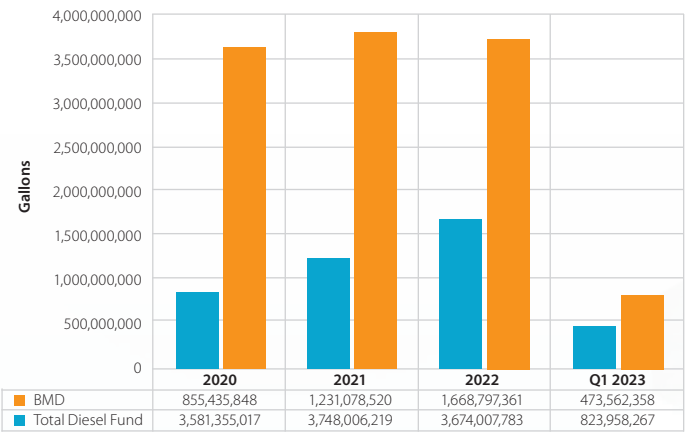
A first-of-its-kind citywide ban on petroleum diesel to be phased in stages, with a mandate for complete replacement with 100% biodiesel, renewable diesel, or a blend thereof by 2030.



Washington

Passed several significant SAF incentives, including business and operations (0.275% of gross income), sales tax (0.275% of gross proceeds), and production credits similar to the \$1-\$2 per gallon production incentive being developed in Michigan.

Overall BMD Growth in CA, 2020 - Q1 2023



East Coast Success



New York

- Clean Fuels' engagement with New York legislators and regulators yielded progress in a state which consumes over 2 billion gallons of diesel fuel annually.
- Clean Fuels urged state officials to lift a non-enforcement order which resulted in the imposition of a statewide mandate of five percent Bioheat® fuel, a 50-million-gallon demand. The legislative mandate requires the state to increase the blend to 10 percent in 2025.
 - Clean Fuels and other stakeholders urged legislators to trim back a proposed ban on liquid fuels in new multi-story buildings as well as burner and appliance replacements for multi-story buildings. The Legislature agreed to limit the ban to new construction only and Clean Fuels is working to ensure that the implementing regulations allow for the use of low-carbon liquid fuels.
 - Clean Fuels and other stakeholders supported a "Cap-and-Invest" program covering all carbon emissions that will likely lead to increased biomass-based diesel market share in heating, transportation, off-road and industrial applications. The program was included as part of the states FY24 budget.



Vermont

A Clean Fuels-supported Clean Heat Standard passed. The bill requires the state to design an LCFS-type program for liquid heating fuels. In 2024, Clean Fuels will engage with the state's Public Utilities Commission as the agency develops regulations implementing the program.

SUPPLY CHAIN EDUCATION DRIVES VOLUME

Clean Fuels continues to maintain a prominent leadership position helping reshape the national liquid fuels supply chain. For more than two decades we have made significant strides in helping expand the low-carbon liquids supply network to accept receipt of, store and blend biodiesel into regions that had formerly been challenged to secure a reliable and competitive biodiesel supply. Beyond conceiving Bioheat® fuel we have empowered through strategic education and outreach a supply chain prepared to bring it intelligently and confidently to the consumer desiring clean burning transportation fuel and home heat.

Through our comprehensive outreach, education programs and collaboration with numerous liquid fuels leadership groups, we have aided the national liquid fuels supply chain in succeeding to deliver increased levels of high-quality biodiesel from production through consumption. Execution of 50+ field visits, 12+ conference leadership sponsorships and keynote addresses, and 24+ virtual webinars and meetings have helped elevate market knowledge on strategies designed to convey to the consumer the advantages of biodiesel, renewable diesel and sustainable aviation fuel. These efforts prepared fuel handlers to deliver Bioheat® fuel competitively and safely to satisfy the emerging demand of these growth markets.

A significant milestone this year was the announcement of an improved cold flow chemistry developed collaboratively between Clean Fuels, National Oil heat Research Alliance, Clariant Refinery Business and several downstream partnerships that resolved a notable operability challenge associated with the storage of B50 blend levels. The product development pathway and results were revealed during the Keynote address at this year's Eastern Energy Exposition held in Atlantic City, New Jersey. Dr. Kerstin Muller, Global Head of Application Development, Clariant Refinery Business joined Scott Fenwick, Technical Director, Clean Fuels and Paul Nazzaro, President, Advanced Fuel Solutions to present the purpose, process and results that led to a marked improvement in high blend storage environments. This success will allow biodiesel handlers to increase blend levels to achieve their respective carbon reduction goals.



ECONOMICS AND MARKET ANALYTICS: DETERMINING DEMAND WITHIN EMERGING MARKETS

Analyzing market trends continues to better position the use of biodiesel, renewable diesel and sustainable aviation fuel in the marketplace. Three markets have been identified as the next markets primed for clean fuel consumption: home heating oil, rail and marine.

Bioheat® Fuel

Clean Fuels is working with a talent agency to secure a celebrity influencer to market Bioheat® fuel more widely in New England and the Mid-Atlantic, a 4-billion-gallon marketplace for home heating oil. The influencer will not only target fuel distributors but also consumers, who may be seeking energy diversity and lack knowledge of Bioheat® fuel as a readily available choice. Negotiations are ongoing.

Rail Industry

The next most near-term market primed for clean fuel consumption is the rail industry. In 2021, it is predicted that of the total 4 billion gallons of diesel consumed only about 1.8% was biomass-based diesel (BBD). Each railroad company has stated publicly that biofuels are going to be the major lever used to lower carbon emissions, with two separate Class I railroads announcing that about 50% of their carbon reductions will come from biofuels by 2030. Clean Fuels has identified that costs are heavily weighed by railroads, making biodiesel the most attractive option. Clean Fuels is forecasting around 100 million gallons of BBD uptake within the rail industry in 2023 with increased volumes moving forward.

Maritime Industry

The maritime industry is being pressured to decarbonize from investors in both Europe and Asia where there has been a large uptake in biodiesel sales into marine fuel grades over the past two years. The uptake of biofuels in marine space in the US has lagged significantly behind due to the requirement to retire RINs in “ocean-going” vessels per the Renewable Fuel Standard. Clean Fuels is asking marine companies to identify whether they would be interested in changing those requirements. On top of these changes, the International Maritime Organization (IMO) has put together an IMO 2023 plan to reduce greenhouse gas emissions by 40% by 2030, using a 2008 baseline.

Inland waterways, such as rivers, and smaller boats that stay within harbors already have access to RINs to lower biofuel purchasing costs, but this is not well-known within the marine industry. Clean Fuels is increasing educational efforts to allow brown-water marine operations to take advantage of the domestic production of biodiesel and renewable diesel.



Clean Fuels has identified that costs are heavily weighed by railroads, making biodiesel the most attractive option.

REVAMPING RESOURCES: COMMUNICATIONS

Clean Fuels Relaunches Website

This summer, Clean Fuels relaunched its website to create a single-source hub of content for those seeking information on biodiesel, renewable diesel and sustainable aviation fuel. Prior to the launch, more than 10 websites had been created throughout the association’s history to access information on various programs. The transformation positions Clean Fuels as the premiere expert with the strongest voice representing all aspects of the industry. The new website builds on previous priorities to support the needs of current members and stakeholders by providing valuable materials to promote marketing and advocacy. As our organization dives deeper into emerging market territory, cleanfuels.org will play a critical role in promoting awareness and education.

Advertising elements for the launch included:

- Programmatic Display
- Social Media Marketing
- Streaming Audio and Video
- Email Marketing

So far, these tactics have generated over 80,000 new users to cleanfuels.org in just over a month.



Brownfield Ag News Partnership

Clean Fuels subject matter experts shared their insight into the growth of the industry and its impact on agriculture, the environment and energy diversification through a series of interviews aired across Brownfield Ag News networks. Brownfield featured a 13-week program with segments lasting three minutes and covering topics related to biodiesel and renewable diesel. Among the Clean Fuels staff and industry leaders, additional broadcasts included Jayson Lusk, head of agricultural economics at Purdue University, Bailey Arnold, director of clean air initiatives with the American Lung Association, and Tom Hammer, president and CEO of the National Oilseed Processors Association.

Brownfield is America’s largest agricultural news radio network with these interview segments playing on more than 500 affiliate radio stations throughout the Midwest. They also shared the segments digitally via Brownfield’s news site and social media channels.

Moving Forward

The Clean Fuels communications program continues to make strides in building awareness of our brand and fuels by expanding our presence on multiple fronts. Efforts include participation in emerging market trade shows and conferences, advertising in trade publications, targeted digital marketing tactics, and maintaining a robust social media presence. Moving forward, implementing new assets will increase the caliber of original content across all digital platforms and publications.



TECHNICAL PROGRAM – QUALITY ASSURANCE, BIOHEAT AND OEM PROGRAMS

The program saw significant growth and advancements in 2023 leading to tighter specifications for higher blends of biodiesel and increased confidence from original equipment manufacturers (OEMs).

ASTM D6751, Standard Specification for Biodiesel Fuel Blendstock (B100) for Middle Distillate Fuels, was highlighted during ASTM's 125th anniversary to begin the year. The standard's magnitude stems from the ability to revise the specifications and limits needed for successful implementation and performance of biodiesel blends in response to the global push for more low-carbon liquid fuels. Revisions in 2023 included lowering the requirement for Cetane Number to allow more feedstocks to qualify and meet performance limits; and lowering the allowable metals limit to support use of higher blends in today's aftertreatment systems.

The sixth annual *Assessment of BQ-9000 Biodiesel Properties* quality report released data proving that today's biodiesel meets these tighter limits indicating that the overall quality of biodiesel well exceeds the minimum ASTM requirements.

The team assisted with a revision of the sixth edition of the *NREL Biodiesel Handling and Use Guide* which includes more current and consolidated research. This document has been one of the most globally read and cited documents for biodiesel handling.

Underwriters' Laboratories (UL) finalized protocols for testing and certifying home heating oil equipment for up to B100 use. Additionally, Clariant and Clean Fuels worked to develop a cold flow additive for Bioheat® fuel that can provide cold flow operability for B50 blends.

In 2027, new emissions regulations will take effect reducing tailpipe emissions by approximately 90% over current emissions. The new vehicle technologies are described as Ultra-Low Emissions Diesel Engines (ULEDEs) with near zero-emissions.

The Targeted Market Outreach program follows the technical work over the last several years in the railroad and marine markets, both showing vast interest in biodiesel. With efforts underway to address the current requirement to retire RINs for biodiesel used in "ocean-going" vessels, the marine market alone could consume nearly all the biodiesel produced within the U.S.

Class I railroads are also recognizing biodiesel as their lowest cost option toward decarbonization to meet ESG goals. Clean Fuels is working with locomotive manufacturers and railroads to increase their confidence and comfort with higher biodiesel blends and the current specifications.



Scott Fenwick and Dr. Kerstin Muller at the 2023 Eastern Energy Expo

**New emission regulations in 2027
will reduce tailpipe emissions by
90% OVER CURRENT
EMISSIONS.**

ENVIRONMENTAL SCIENCE PROGRAM

Through research and analysis, Clean Fuels' Environmental Science Program quantifies and effectively communicates the environmental value of biodiesel, renewable diesel and sustainable aviation fuel. This year, it helped fund important work at Purdue University, the home of the Global Trade Analysis Project, and its model on biofuels, GTAP-BIO, to update its database with the latest economic data that drives the modeling results and the California Air Resources Board's calculation for indirect land use change (ILUC) used in the Low Carbon Fuel Standard. As a result of this work, the updated GTAP-BIO produces an ILUC score for soy-based biodiesel at a 69% reduction from what CARB currently uses in the LCFS. The improved data may be considered by CARB as it undertakes its latest LCFS rulemaking.

The Environmental Science program also joined four coalition groups, including the Coordinated Research Council's Sustainable Mobility Committee and ASCENT, the federally funded Center of Excellence for Alternative Jet Fuels and Environment, to leverage research resources and participate in the technical work that comes out of these influential

bodies. These groups are focused on the transportation sector, and our industry plays an important role in decarbonizing it. Clean Fuels continues to consider participation in additional groups to leverage technical expertise more effectively in other areas of our supply chain, including agriculture.

Did you know there are over a dozen standards and guidance documents on corporate greenhouse gas accounting relevant to the clean fuels industry? This year the environmental science team conducted a technical gap analysis from the fuel producer and end-user perspectives to determine what additional guidance Clean Fuels' members need to assess the emissions benefits of biodiesel, renewable diesel and sustainable aviation fuel according to Scope 1, 2 and 3 emissions and how best to convey that information to fuel customers. Streamlining and improving the transparency of quantifying the environmental value of clean fuels could create additional demand as companies seek cost-effective ways to fulfill their corporate commitments to decarbonize.



Understanding the Time Value of Carbon

Reducing CO₂ emissions now can avoid decades, even centuries, of associated heating.

If you wait until 2030 to take climate action, you will need to avoid 30 TONS CO₂ for EVERY 1 TON you do not avoid today.

MEETING DEMAND: FEEDSTOCKS

Agriculture continues to supply ample feedstock to the United States low-carbon biofuels market. U.S. production of biomass-based diesel in 2022 derived from slightly more than one-half vegetable oils and the remaining feedstock from animal fats, used cooking oil (UCO), and distillers corn oil (DCO). This diversity allows biodiesel, renewable diesel and sustainable aviation fuel producers using lipids to alter feedstock use based on regional and global market dynamics. In December 2022, EPA approved a new pathway for canola-based renewable diesel, renewable jet, naphtha, liquified petroleum gas and heating oil. The new pathway has led to increased use of canola oil; with expectations of doubling use in 2023 relative to 2022. UCO continues to be a significant feedstock for producers with usage increasing more than 30% in the first five months of 2023 relative to 2022.

North American Crush Industry Answers the Call

Perhaps the most significant impact on feedstock supplies has been investment by North American oilseed processors. Based on industry announcements, more than 20 new processing plants or expansions to existing plants are under construction or have been planned between 2022 and 2026. These facilities, located in ten states, would add approximately 650 million bushels of additional crush capacity, equaling almost one billion gallons of additional soybean oil supplies, and reflecting a cash investment in rural America of over \$6 billion.

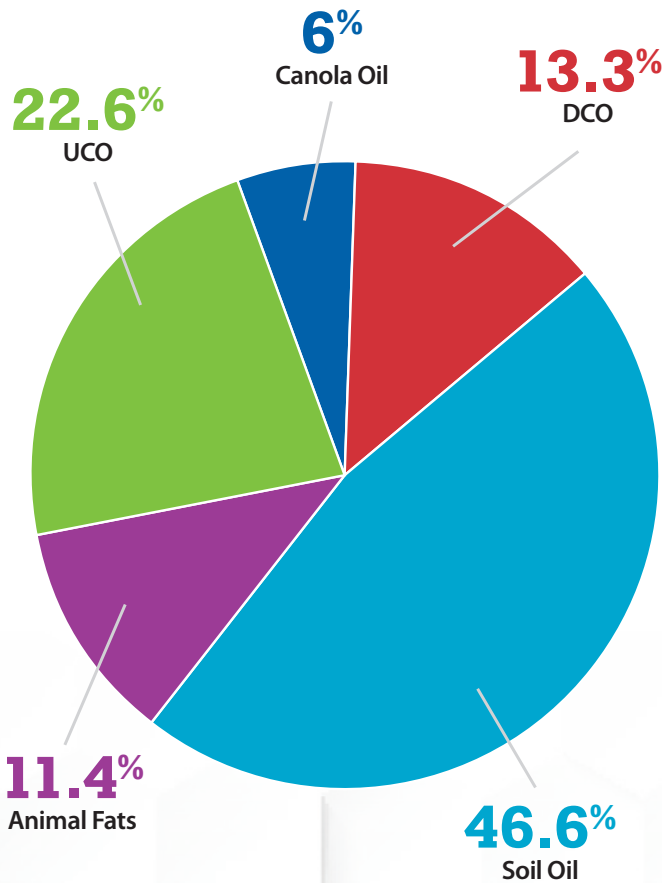
Expansion has not been limited to soybean production. Over the past ten years, canola acres in the U.S. have increased by approximately 70%; demonstrating their economic performance for U.S. agricultural producers and an economic fit in their rotations. Although the expansion of U.S. oilseed processing assets has predominantly focused on soybeans, more than one of these projects will have the ability to process soft seeds such as canola. During the 2023 to 2025 timeframe, more than 20% of the new crush capacity planned in the U.S. will have soft seed capabilities.

Multiple companies are working to commercialize new oilseeds that would primarily be grown as winter annuals. Growers can now contract acreage for new crops such as brassica carinata, CoverCress™ and camelina.

The United States and Canada have an open and mutually beneficial canola sector with an integrated marketplace. New canola processing facilities in Canada are being constructed or expanded, with 5.7 million metric tons announced. Of those announcements, 80% are targeted to come online in 2024 and represent more than 500 million gallons of additional feedstock supplies.

Our markets also continue to seek additional fats and oil supplies with a favorable carbon footprint. Multiple companies are working to commercialize new oilseeds that would primarily be grown as winter annuals. Growers can now contract acreage for new crops such as brassica carinata, CoverCress™ and camelina.

Biomass-based Diesel Feedstocks (2022)



DEVELOPMENT AND FOUNDATION: LINKING OPPORTUNITIES

Development

The Clean Fuels development program raised over \$11 million dollars to execute the 2023 program plan. This funding of technical and educational programs allows unrestricted member dues to fund critical federal and state policy programs.

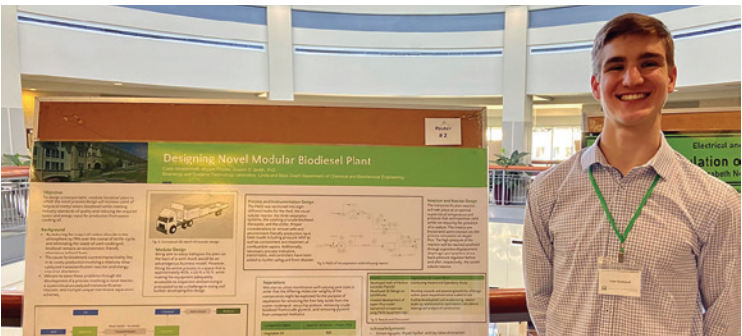
In addition to member dues, Clean Fuels operates thanks to the generous support of the following:

- 1. United Soybean Board
- 2. Nebraska Soybean Board
- 3. 23 other state soybean boards
- 4. Clean Fuels Alliance Foundation

Clean Fuels development activities included outreach presentations at numerous conferences, Clean Cities coalitions and direct connections such as Berkshire Hathaway's Sustainability Leadership Council (Lubrizol, BNSF Railroad, etc.). These efforts help inform key stakeholders on the merits of biodiesel, renewable diesel and sustainable aviation fuel to help them affordably achieve their sustainability goals.

The Clean Fuels development team successfully encouraged USDA to direct \$500 million toward a Higher Blends Infrastructure Incentive Program to increase the availability of higher blends of biofuels including biodiesel through the growth of biodiesel distribution facilities. Infrastructure projects include terminal operations, home heating oil distribution centers, depots, fleet facilities and midstream partners.

Clean Fuels also helped members learn about 70-80 funding opportunities totaling \$40 billion in federal grants and loans. In addition, 75 coaching sessions were provided to aid in seeking specific grant, loan or federal assistance programs. Members received more than \$28 million in federal grant awards last year alone.



Sustainability Award Winner Caleb Moellenhoff

Clean Fuels Foundation Accomplishments:

- 1. **Congressional Tours:** Organized three congressional tours for staffers including representatives from USDA and EPA highlighting infrastructure for renewable diesel in New Orleans, biodiesel and soy markets around Washington, D.C. and sustainable aviation fuel markets in Los Angeles. Participants represented key and new congressional champions – such as Reps. Mike Flood (NE), Larry Buchson (IN), Glenn G.T. Thompson (PA) – and relevant committees – such as House Energy and Commerce, Senate Energy and Senate Agriculture.
- 2. **Sustainability Workshop:** Around 50 industry and academic experts met in St. Louis to discuss current sustainability research, corporate accounting practices and other measurement and verification standards. The next Workshop will be held in Kansas City in Spring of 2024.
- 3. **Beth Calabotta Sustainability Award:** Caleb Moellenhoff was this year's recipient of the grant money and the opportunity to attend the Clean Fuels Sustainability Workshop. Moellenhoff has been interested in research since he started at the Missouri University of Science and Technology where he was assigned to the Supercritical Biodiesel Process Scale-Up and Design project.



New Orleans Congressional Tour

CLEAN FUELS GOVERNING BOARD 2023



Chair
Mike Rath
Darling Ingredients



Vice-Chair
Rob Shaffer
ASA



Second Vice-Chair
Gary Louis
Seaboard Energy



Treasurer
Ryan Pederson
North Dakota
Soybean Council



Secretary
Paul Teta
Kolmar Americas



Past Chair
Kent Engelbrecht
ADM



Greg Anderson
Nebraska Soybean
Board



Danielle Brannan
New Leaf Biofuel



Neville Fernandes
Chevron Renewable
Energy Group



Chris Hill
Minnesota Soybean
Research & Promotion Council



Timothy Keaveney
HERO BX



Courtney Lawrenson
Ag Processing



Tim Ostrem
United Soybean Board



Harry Simpson
Crimson Renewable
Energy



Dave Walton
Iowa Soybean
Association

MEMBERSHIP

ADM	Gilbarco Veeder-Root	New York Corn & Soybean Growers Association
Advanced Biofuels Canada	Terry Goerger	NEXT Renewable Fuels, Inc.
Ag Processing Inc.	Grecycle Arizona, LLC	NGL Energy Partners LP
Algae Biomass Organization	Green Plains Inc.	North American Renderers Association
Altitude Fuel Inc.	Growmark	North Dakota Soybean Council
American Feed Industry Association	HTP Energy	North Dakota Soybean Growers Association
American Lung Association	ICOF America Inc.	Novozymes
American Soybean Association	Illinois Soybean Association	Novum Energy Trading Inc.
Arkansas Soybean Promotion Board	Imperial Western Products	Nuseed
Baker Commodities, Inc.	Incobrasa Industries, Ltd.	Ohio Soybean Council
Barr Engineering Company	Indiana Soybean Alliance	Optimus Technologies
BASF	Indigenous Energy, Inc.	Par Pacific Holdings
Bayer Crop Science	Intertek USA, Inc.	Paseo Cargill Energy, LLC
Be8	Iowa Biodiesel Board	Pennsylvania Soybean Board
Biodiesel Coalition of Missouri	Iowa Central Fuel Testing Laboratory	Propane Education and Research Council
Blue Ridge Biofuels	Iowa Renewable Energy, LLC	PSC Group, LLC
Broco Oil	Iowa Renewable Fuels Association	RBF Port Neches LLC
Bunge North America, Inc.	Iowa Soybean Association	Renew Kansas Biofuels Association
California Advanced Biofuels Alliance	Iveco Group	Renewable Energy Group, Inc.
Canada Clean Fuels	Johann Haltermann, Ltd.	Restaurant Technologies
Canary Biofuels Inc.	John Deere	ROC 1954
Cape Cod Biofuels, Inc.	Kansas Soybean Association	Sack Energy Company
Christianson CPAs & Consultants	Kansas Soybean Commission	SCB Brokers LLC
CHS Inc.	Kentucky Soybean Board	Scott Petroleum Corporation
CNH Industrial America LLC	Kolmar Americas, Inc.	Seaboard Energy LLC
Consolidated Grain & Barge	HERO BX	South Dakota Soybean Association
Continental Refining Company	Lincoln Energy Solutions	South Dakota Soybean Checkoff
CoverCress Inc.	Louisiana ECO Green, LLC	StoneX Financial Inc. - FCM Division
Crimson Renewable Energy LLC	Louisiana Soybean & Grain Research & Promotion Board	Tennessee Soybean Promotion Board
Crown Iron Works Company	Magellan Midstream Partners, L.P.	Third Coast Commodities
Cubby Oil & Energy	Maine Bio-Fuel Inc.	Thumb BioEnergy, LLC
Darling Ingredients Inc.	MEG Corp	Tina Biofuels LLC
DEASYL SA	Methanol Institute	U.S. Canola Association
Diamond Green Diesel, LLC	Michigan Soybean Committee	United Metro Energy Corp.
Diesel Technology Forum	Mid-America Biofuels	United Soybean Board
Diversified Energy Specialists, Inc.	Mid-Atlantic Soybean Boards	USD Clean Fuels LLC
DSM	Minnesota Soybean Processors	Valley Pacific Petroleum Services, Inc.
EcoEngineers	Minnesota Soybean Research & Promotion Council	V-TIC Services Inc.
Eni Trading & Shipping Inc	Missouri Soybean Merchandising Council	W2Fuel LLC
Environmental & Energy Study Inst.	National Energy & Fuels Institute	Western Dubuque Biodiesel, LLC
Environmental Operating Solutions, Inc.	National Oilheat Research Alliance	Western Iowa Energy, LLC
ET Products LLC	Nebraska Soybean Board	Wisconsin Soybean Marketing Board
Ever Cat Fuels LLC	New Leaf Biofuel, LLC	World Energy LLC
Evonik Corporation		WWS Inc. dba WWS Trading
Gevo, Inc.		

CLEAN FUELS STAFF

Donnell Rehagen - Chief Executive Officer

Doug Whitehead - Chief Operating Officer

April Yaeger - Chief Financial Officer

Desiree Hale - Accounting Manager

Anne Klempke - Accounting Manager

Heather Buechter - Director of Communications

Katherine Reed - Senior Communications Manager

Bev Thessen - Information Coordinator

Jonathan Martin - Director of Economics & Market Analytics

Veronica Bradley - Director of Environmental Science

Brad Shimmens - Director of Operations and Membership

Kurt Kovarik - Vice President of Federal Affairs

David Cobb - Director of Federal Affairs

Paul Winters - Director of Public Affairs and Federal Communications

Kate Shenk - Director of Regulatory Affairs

Tom Verry - Director of Outreach and Development

Scott Fenwick - Technical Director

Floyd Vergara - Director of State Governmental Affairs

Steve Dodge - Director of State Regulatory Affairs

Jeff Earl - Director of State Regulatory Affairs

Scott Tremain - Information Technology & Digital Content Director



Clean Fuels
ALLIANCE AMERICA

MISSION & VISION

Mission Statement: Representing biodiesel, renewable diesel and sustainable aviation fuel, Clean Fuels Alliance America will advance the interests of its members by supporting sustainable biodiesel, renewable diesel and sustainable aviation fuel industry growth. Clean Fuels serves as the industry's central coordinating entity for technical, environmental and quality assurance programs and will be the strongest voice for its advocacy, communications and market development.

Vision: Biodiesel, renewable diesel and sustainable aviation fuel will be recognized as mainstream low-carbon fuel options with superior performance and emission characteristics. In on-road, off-road, air transportation, electricity generation and home heating applications, use will exceed 6 billion gallons by 2030, avoiding over 50 million metric tons of CO₂ equivalent greenhouse gas emissions annually. With advancements in feedstock, use will reach 15 billion gallons by 2050.

Mainstream low-carbon fuel options

6 BILLION
gallons by 2030



Avoiding over
50 MILLION
metric tons
CO₂ equivalent
green house gas
emission annually



Growing to
15 BILLION
gallons by 2050

FORT WORTH, TEXAS 2024



F E B R U A R Y 5 - 8

Connect with the Key Players of the Clean Fuels Industry

Register at
CleanFuelsConference.org



LOCATIONS

Headquarters

605 Clark Ave
P.O. Box 104898
Jefferson City, MO 65110
(800) 841-5849
info@cleanfuels.org

California Office

1415 L Street
Suite 460
Sacramento, CA 95814
(916) 760-8870

Massachusetts Office

36 Jonspin Road
Suite 227
Wilmington, MA 01887
(978) 267-3020

Washington, D.C. Office

1331 Pennsylvania Ave., NW
Suite 505
Washington, D.C. 20004
(888) 246-3437

www.cleanfuels.org



Clean Fuels
ALLIANCE AMERICA



All logos and trademarks are sole property of their respective owners.