NORA Board Meeting
Newport Marriott Hotel & Spa
Salon II
September 28th, 2023
11:00 am

I. Introduction – Chairman Roger Marran

II. Approval of Minutes

III. Financial Information

- NORA 2022 Audit – Natasha Perkins Auditor / UHY LLP
- NORA 2022 Budget Resolution
- NORA Budget 2024 – 2025
- NORA Financial Reporting Changes

IV. NORA May – September 2023 Activities – President Michael Devine

- Energy & Policy Institute - Request for Information
- NORA-CFAA Collaboration –
    - High Blends Testing – New Research Contract
    - High Blends Infrastructure Workshops
    - CSR Bootcamp

V. Research and Development – Director of Laboratory Dr. Thomas Butcher

VI. Education and Training – Bob O'Brien

VII. Old Business – NORA name change

VIII. New Business

IX. Adjournment

NORA Board Meeting
Meeting Minutes
Harrah's Waterfront Conference Center
Room 23, Avalon Ballroom
May 22nd, 2023
3:30 pm

I. Introduction – Chairman Roger Marran & President Michael Devine called the meeting to order at 3:37 pm

The following members of the NORA Board of Directors were in attendance and constituted a quorum.

Allison Heaney
Claudette Townsend
Kate Duffey
Mario Bouchard
Roger Marran
Carter Vaillancourt
Randy Groft
Steve Powers
Kristyn Schweitzer
David Coyne
John McCusker
Leann Pannebianco
Charlie Uglietto
Eric DeGessero
Gary Sippin
Rick Bologna
Chris Fazio
Brent Moore
Jacqueline Hart
Katie Foster
Ted Noonan
Mark Caspers
Greg Childs
Dan Mattice

II. Approval of Minutes – A motion was made by Allison Heaney and seconded by Charlie Uglietto and the minutes of the September 2022 meeting were submitted and approved.

Financial Information – Michael Devine presented the financial information to the Board of Directors.

NORA 2022 Year End Financials Report - NORA ended the year with a net profit of $1.8 million. The annual escrow is calculated as part of the audit and will continue to be reflected as a variance until the audit is finalized. Collections were approximately $9.5 million as of December 31st which is consistent with the prior year.

Central program expenses of $1.86 million are ahead of budgeted amounts due to additional costs incurred for research and development initiatives. State program expenses of $3.37 million are over budget by $333,000 due to the $1 million additional funds allocated in 2021 and 2022, respectively. The unallocated or non-programmatic expenses are approximately $276,000 as compared to an annual budget of $352,000.

As of December 31, 2022, the NORA Statement of Financial Position continues to be very strong with $9.9 million in available cash and $5.9 million in escrow. This is offset by $4.4 million in grants payable to the participating states and $877k in other current liabilities. Accounts payable is current as are the other accrued expenses. Net assets are in excess of $13.3 million.

During August 2022, NORA entered into a $350,000 contract with Clean Fuels Alliance America ("CFAA") for Research Development. NORA received the first installment of $200,000 during October and the second installment of $150,000 during November. As of December 31, 2022, NORA has incurred $77,948 in expenses; the remaining balance of $272,052 is classified as deferred contract revenue on the Statement of Financial Position.

NORA Q1 2023 Financial Report: NORA operated at a deficit of $2.1 million for the first three months of the year. This is the result of recording the state program expenses (Consumer Ed & Training, Research & Development and Home Efficiency) and state rebates in their entirety up front. Whereas the revenue/collections are recorded throughout the year. We expect this to smooth out as we continue to receive collections. Collections were approximately $2.6 million for the first three months of the year. This represents 32% of budgeted annual collections.

The annual escrow is calculated at year end and will continue to be reflected as a variance throughout the year. Central program expenses of $521K are behind budget by $1.1 million through March 31st as the expenses were not incurred. States and Rebates program expenses of $2.9 million and $1.1 million, respectively, are within budget as a result of recording the state program expenses in their entirely up front as noted above. In addition, as of March 31st, the states have not utilized their remaining balance of the $1 million additional funds allocated in 2021 and 2022, respectively. The unallocated or non-programmatic expenses are approximately $69K as compared to an annual budget of $352K. We expect the expenses to be incurred in the remainder of the year which will result in reducing the variance.

As of March 31, 2023, the NORA Statement of Financial Position continues to be very strong with $10.95 million in available cash and $5.9 million in escrow. This is offset by $7.6 million in grants payable to the participating states and $788k in other current liabilities. Accounts payable is current as are the other accrued expenses. Net assets are in excess of $10.9 million.

Assessments Receivable of $2.3 million represents amounts due from customers. The uncollected balance as of May 18th is $199K, which is expected to be collected.

During August 2022, NORA entered into a $350,000 contract with Clean Fuels Alliance America ("CFAA") for Research Development. NORA received the first installment of $200,000 during October 2022 and the second installment of $150,000 during November 2022. As of March 31, 2023, NORA has incurred $111,086 in expenses; $77,948 during 2022 and $33,138 during 2023. The remaining balance of $238,914 is classified as deferred contract revenue on the Statement of Financial Position.

III. NORA 2022 Activities – President Michael Devine

- **IECC Activities** – Update on 2023 activities – Regarding our efforts within the Commercial Committee

- Successfully kept combustion of liquid fuels in the code

- Blocked heat pump infrastructure
- NORA submitted a proposal to include renewable liquid fuels as eligible to offset on site renewable energy requirements
- Passed subcommittee 9-2
- Failed in main committee 17-10

Regarding our efforts on the IECC Residential Committee the NORA team was able to:

- Successfully kept combustion of liquid fuels in the code
- Blocked heat pump infrastructure
- NORA submitted a proposal to include renewable liquid fuels as eligible to offset on site renewable energy requirements
- Passed subcommittee 9-2
- Failed in main committee 17-10

- **Net Zero Hom**e – The NORA Team has engaged in active dialog with several state associations who have expressed serious interest in developing a Net Zero Home and in some cases have identified homes. These include the FMANJ, MEMA, PPA, CEMA, EMARI, EASA

- **In The Loop** – NORA Podcast Series – Three podcasts have been successfully completed thus far. Brian Clark will be hosting the In The Loop booth and the EEE trade show entrance, where he will be conducting interviews. So far, we have 20 individuals lined up for interviews at EEE.

- **SUNY Morrisville** – NORA Education Opportunities – Last week the NORA team traveled to SUNY Morrisville to visit the campus and their new renewable fuels center. We met with Ben Ballard who is the Associate Professor for the Renewable Energy Program. Dr, Jenny Frank our new research associate is a professor at the university and we hope to be able to collaborate together on some possible education programs and testing opportunities in the future

- **NORA-CFAA Collaborations** –

  High Blends Testing – NORA and CFAA are discussing a new contracted scope of work for 2023 & 2024 for collaboration. Dr. Butcher and Michael Devine have had several substantive meetings over the past couple of months with Scott Fenwick and Steve Howell from the CFAA technical team and we are planning to have a new contract executed in the next month or so.

  High Blend Infrastructure Workshops - NORA and Clean Fuels will establish a day long summit where industry supply chain participants will learn, discuss and adopt best practices and business strategies for how to prepare their specific link in the supply chain to accommodate the increasing blends of Biodiesel and Renewable Diesel required to fulfill the demand for low carbon liquid fuels into the home heating oil pool. Participants will include distillate fuel terminal wholesalers, biodiesel producers/marketers, retail fuel dealers, equipment manufacturers, and rail and marine industries' and other interested industry parties.

- Throughout the day the collaborative workshops will include a blend of direct instruction, peer interaction, panel presentations and breakout sessions. The intended outcome is to have a strategy moving forward on how to best prepare the supply chain for delivering higher blends of Bioheat® fuel.

- **CSR BIOHEAT® FUEL BOOTCAMPS -** The purpose of this event is to educate the front-line Customer Service Representatives on the opportunities that renewable liquid fuels provide and the right path forward for our industry. We will discuss who the liquid fuel customer is today, the changing demographics by generations and the current consumer attitudes towards the petroleum industry and renewable energy. These half day sessions will include topics such as How to talk about Bioheat® fuel, and How to position and sell Bioheat® fuel. These sessions will take place the day after the XBX workshop event at the same venue. Consumer Focus will provide the same level of support for the CSR Bootcamps as the XBX workshop events (i.e., marketing, outreach, etc.).

IV. Research and Development – Director of Laboratory Dr. Thomas Butcher

V. Education and Training – Bob O'Brien

VI. Executive Committee & Officers

VII. Old Business – No old business

VIII. New Business – There was a discussion that occurred, which suggested that NORA consider changing its name from the National Oil heat Research Alliance. As our industry moves to decarbonize, our name should reflect the future direction of the liquid heating industry and transition more appropriately from the term oil heat. Michael Devine shared with the Board that this item was actually discussed earlier in the year with Squire Patton & Boggs, however it was determined that a name change could be problematic with reauthorization on the horizon as the statue would need to be modified and many of the policy makers are familiar with NORA.

IX. Adjournment – A motion was made to close the meeting by Rick Bologna and was seconded by Charlie Uglietto.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

DECEMBER 31, 2022 AND 2021

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

DECEMBER 31, 2022 AND 2021

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INDEPENDENT AUDITOR'S REPORT

The Board of Directors
National Oilheat Research Alliance, Inc.
Alexandria, Virginia

Opinion

We have audited the accompanying financial statements of National Oilheat Research Alliance, Inc. (the Alliance, a not-for-profit organization), which comprise the statements of financial position as of December 31, 2022 and 2021, and the related statements of activities, functional expenses, and cash flows for the years then ended, and the related notes to the financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Alliance as of December 31, 2022 and 2021, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Alliance and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Emphasis of Matter - Adoption of New Accounting Pronouncement

As discussed in Note 10 to the financial statements, in 2022, the Alliance adopted Accounting Standards Update No. 2016-02, *Leases (Topic 842)*. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Alliance's ability to continue as a going concern within one year after the date that the financial statements are available to be issued.

The Board of Directors
National Oilheat Research Alliance, Inc.
Alexandria, Virginia

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with auditing standards generally accepted in the United States of America will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with auditing standards generally accepted in the United States of America, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Alliance's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Alliance's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The Schedules of Expenses by State/Jurisdiction on pages 17-20 for the year ended December 31, 2022, are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

McLean, Virginia
the report date

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

STATEMENTS OF FINANCIAL POSITION
DECEMBER 31, 2022 AND 2021

ASSETS

	2022	2021
ASSETS		
Cash	$ 9,920,538	$ 10,082,112
Assessments receivable	2,656,113	2,697,953
Prepaid state assessments	27,293	55,928
Operating right-of-use asset	274,512	-
Cash held in escrow	5,944,434	3,815,660
Other assets	73,271	70,375
TOTAL ASSETS	$ 18,896,161	$ 16,722,028

LIABILITIES AND NET ASSETS

	2022	2021
LIABILITIES		
Accounts payable	$ 221,320	$ 145,168
Deferred contract revenue	272,052	-
Refunds payable	423,646	415,152
State grants payable	2,242,331	2,503,142
Obligation for unallocated state rebates	2,403,161	2,106,810
Operating lease liability	281,314	-
Other liabilities	57,903	86,860
Total liabilities	5,901,727	5,257,132
NET ASSETS		
Net assets without donor restrictions available for obligation - other than for consumer education, safety, and training	263,942	181,784
Designated net assets:		
Pre-2014 reauthorization net assets	55,933	55,933
Unavailable for obligation until October 1, 2028	8,042,151	5,947,053
National spending not yet incurred:		
Research, development, and demonstration - not yet obligated	4,179,055	4,966,214
Research, development, and demonstration - obligated under contract	67,594	67,594
Heating oil efficiency and upgrade - not yet obligated	192,521	145,880
Consumer education, safety, and training - not yet obligated	193,238	100,438
Total net assets without donor restrictions	12,994,434	11,464,896
TOTAL LIABILITIES AND NET ASSETS	$ 18,896,161	$ 16,722,028

The accompanying notes are an integral part of these financial statements.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

STATEMENTS OF ACTIVITIES
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	2022	2021
CHANGE IN NET ASSETS WITHOUT DONOR RESTRICTIONS		
REVENUE		
Assessments revenue, net of refunds	$ 8,381,707	$ 8,461,408
Other income	107,300	61,087
Total revenue	8,489,007	8,522,495
EXPENSES		
Program services:		
Research, development, and demonstration	2,673,141	2,466,539
Heating oil efficiency and upgrade	896,350	1,055,724
Consumer education, safety, and training	1,736,587	1,670,758
Unallocated state rebates	1,178,557	1,255,095
Total program expenses	6,484,635	6,448,116
Administrative costs	228,570	239,921
General and special projects:		
Assessment and collection costs	178,435	217,852
Annual report costs	67,829	54,236
Total general and special projects	246,264	272,088
Total expenses	6,959,469	6,960,125
CHANGE IN NET ASSETS WITHOUT DONOR RESTRICTIONS	1,529,538	1,562,370
NET ASSETS, BEGINNING OF YEAR	11,464,896	9,902,526
NET ASSETS, END OF YEAR	$ 12,994,434	$ 11,464,896

The accompanying notes are an integral part of these financial statements.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

STATEMENTS OF FUNCTIONAL EXPENSES
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	2022							
	PROGRAM SERVICES							
	Research, Development, and Demonstration	Heating Oil Efficiency and Upgrade	Consumer Education, Safety, and Training	Unallocated State Rebates	Total Program Services	Administrative Costs	General and Special Projects	Total 2022
Grants	$ 959,941	$ 869,848	$ 1,549,387	$ 1,178,557	$ 4,557,733	$ -	$ -	$ 4,557,733
Salaries, taxes, and benefits	827,900	24,166	35,419	-	887,485	36,350	36,711	960,546
Professional fees	669,331	1,450	150,354	-	821,135	169,594	207,640	1,198,369
Occupancy	84,180	-	-	-	84,180	2,100	-	86,280
Other expenses	131,789	886	1,427	-	134,102	20,526	1,913	156,541
TOTAL EXPENSES	$ 2,673,141	$ 896,350	$ 1,736,587	$ 1,178,557	$ 6,484,635	$ 228,570	$ 246,264	$ 6,959,469

	2021							
	PROGRAM SERVICES							
	Research, Development, and Demonstration	Heating Oil Efficiency and Upgrade	Consumer Education, Safety, and Training	Unallocated State Rebates	Total Program Services	Administrative Costs	General and Special Projects	Total 2021
Grants	$ 1,055,573	$ 1,000,046	$ 1,413,359	$ 1,255,095	$ 4,724,073	$ -	$ -	$ 4,724,073
Salaries, taxes, and benefits	697,652	46,067	37,083	-	780,802	49,508	46,646	876,956
Professional fees	518,239	7,261	217,530	-	743,030	181,163	200,826	1,125,019
Occupancy	80,921	882	672	-	82,475	873	918	84,266
Other expenses	114,154	1,468	2,114	-	117,736	8,377	23,698	149,811
TOTAL EXPENSES	$ 2,466,539	$ 1,055,724	$ 1,670,758	$ 1,255,095	$ 6,448,116	$ 239,921	$ 272,088	$ 6,960,125

The accompanying notes are an integral part of these financial statements.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Change in net assets	$ 1,529,538	$ 1,562,370
Adjustments to reconcile change in net assets to net change in cash from operating activities:		
Operating lease	6,802	-
Changes in assets and liabilities:		
Assessments receivable	41,840	(163,576)
Prepaid state assessments	28,635	(55,928)
Other assets	(2,896)	42,917
Accounts payable	76,152	55,181
Deferred contract liability	272,052	-
Refunds payable	8,494	(75,454)
State grants payable	(260,811)	(669,621)
Obligation for unallocated state rebates	296,351	574,867
Other liabilities	(28,957)	5,030
NET CHANGE IN CASH AND CASH HELD IN ESCROW	1,967,200	1,275,786
CASH AND CASH HELD IN ESCROW, BEGINNING OF YEAR	13,897,772	12,621,986
CASH AND CASH HELD IN ESCROW, END OF YEAR	$ 15,864,972	$ 13,897,772

SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITY:

	2022	2021
Noncash change in operating right-of-use asset	$(89,623)	$ -
Noncash change in operating lease liability	$ 86,107	$ -

SUPPLEMENTAL BREAKDOWN OF CASH AND CASH HELD IN ESCROW:

	2022	2021
Cash	$ 9,920,538	$ 10,082,112
Cash held in escrow	5,944,434	3,815,660
Total cash and cash held in escrow	$ 15,864,972	$ 13,897,772

The accompanying notes are an integral part of these financial statements.

NOTE 1 - THE ORGANIZATION

National Oilheat Research Alliance, Inc. (the Alliance) is a non-profit trade organization developed under *the National Oilheat Research Alliance Act of 2000* (NORA), Public Law 106-469, legislation passed by the United States Congress and signed into law in November 2000. The law was amended in 2014 under Public Law 113-79. The Alliance was created to educate consumers about the benefits of oilheat, to perform research and development, to encourage heating oil efficiency and upgrades, and to provide technical training to provide better customer service. The Alliance's Board consists of members from the oilheat industry, retail markets, wholesale distributors, public members, and representatives from the states with the highest oilheat sales. The Alliance was incorporated on January 31, 2001. Funding under the Public Law 106-469 ceased on February 6, 2010. On February 7, 2014, the Public Law 113-79 extended the provisions of Public Law 106-469 to February 6, 2019. Funding under Public Law 113-79 resumed effective April 1, 2014. On December 20, 2018, Public Law 115-334, *the Agriculture Improvement Act of 2018* was signed. Public Law 115-334 extended and modified the provisions of Public Law 113-79 to February 6, 2029.

Pursuant to Public Law 113-79, Congress established a limit on the use of assessments revenue of 30 percent for consumer education, safety, and training; a minimum of at least 30 percent of assessments revenue for research, development, and demonstration; a minimum of at least 15 percent of assessments revenue for heating oil efficiency and upgrade; and a limit on the use of assessments revenue of 5 percent for administrative costs. Beginning February 6, 2019, Public Law 115-334 increased the limit on administrative costs to 7 percent of assessments revenue. Furthermore, Public Law 115-334 requires in each calendar year beginning February 6, 2019, the Alliance may not obligate an amount greater than the sum of (1) 75 percent of the amount of assessments estimated to be collected in the calendar year; (2) 75 percent of the amount of assessments actually collected in the most recent calendar year for which an audit report has been submitted less the amount estimated in (1) above; and (3) amounts permitted in preceding calendar years to be obligated that have been obligated. The assessments collected in excess of the amounts permitted to be obligated in (1), (2), and (3) above, shall be deposited in an escrow account and be unavailable for use until October 1, 2028, when it can be used consistent with the provisions of Public Law 106-469. In the years ended December 31, 2022 and 2021, the Alliance was in compliance with these percentages. From time to time, the Alliance may receive inquiries from government agencies, because of the nature of its funding sources. Management does not expect the result of such inquiries to impact the financial information of the Alliance.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements have been prepared on the accrual basis of accounting following the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC), which is the sole source of authoritative accounting principles generally accepted in the United States of America (GAAP). The Alliance reports information regarding its financial position and activities according to two classes of net assets: with donor restrictions and without donor restrictions.

Accounting Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that could affect certain reported amounts of assets, liabilities, revenue, and expenses, the disclosure of contingent assets and liabilities at the date of the financial statements, and functional allocations during the year. Actual results could differ from those estimates.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue Recognition

Assessments Revenue

The Public Laws 113-79 and 115-334 require wholesale distributors of No. 1 distillate and No. 2 dyed distillate to remit an assessment of two-tenths of one cent per gallon at the point of sale to the Alliance. If the No. 1 distillate or No. 2 dyed distillate is imported after the point of sale, the assessment is to be made when the product enters the United States of America. Assessments are due to be remitted to the Alliance at least quarterly based on actual sales.

Assessments Receivable

An estimate of assessments to be received, but not remitted to the Alliance as of year-end, was recognized as assessments receivable of $2,656,113, $2,697,953, and $2,534,377 as of December 31, 2022, 2021, and 2020, respectively. Receivables are charged to bad debt loss as they are deemed uncollectible based upon a periodic review of the accounts. As of December 31, 2022 and 2021, no allowance for uncollectible accounts was considered necessary by management.

Refunds Payable

Under the Public Laws 113-79 and 115-334's collections rules, any dyed distillate or blends are subject to assessment. Some of this fuel is used for non-heating applications and can be refunded. Assessments revenue is presented in the accompanying statements of activities net of refunds recorded of $1,065,987 and $965,253 for the years ended December 31, 2022 and 2021, respectively. The Alliance recorded a refunds payable of $423,646, $415,152, and $490,606 as of December 31, 2022, 2021, and 2020, respectively, for estimated refunds remaining unpaid based on historical and subsequent refunds paid.

Other Income

Other income includes contract revenue which is earned from research and development contracts with third parties and is recognized when services have been completed based on time and materials expended. Contract revenue received in advance of when service is provided is recorded as deferred contract liability and was $272,052 as of December 31, 2022. There was no deferred contract liability as of December 31, 2021 or 2020.

Other income also includes sales of oilheat related publications that are reported net of cost of sales and are recorded at the time of shipment. Also included in other income is interest income on the Alliance's bank accounts. A detail of other income as of December 31, 2022 is as follows:

Contract revenue	$ 77,948
Gross sales of publications	116,864
Less: cost of sales	(114,956)
Interest income	26,616
Other income	828
Total other income	$ 107,300

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

State Grants Payable and Obligation for Unallocated Rebates

Each year, the Alliance makes grants to state organizations to accomplish its mission. Grants are paid as the state organizations provide documentation of the expenditure of funds. Under Public Laws 113-79 and 115-334, the Alliance has entered into various grant agreements with state organizations, which may require periodic payment of grant funds. Grant obligations are recognized at the time the agreements are made. The outstanding grant liability by program was as follows as of December 31:

	2022	2021
Research, development, and demonstration	$ 781,233	$ 1,011,293
Heating oil efficiency and upgrade	367,009	343,767
Consumer education, safety, and training	1,094,089	1,148,082
Total state grants payable	2,242,331	2,503,142
Unallocated state rebates	2,403,161	2,106,810
Total state grants payable and obligation for unallocated state rebates	$ 4,645,492	$ 4,609,952

Functional Allocation of Expenses

The cost of providing the various programs and other activities have been presented on a functional basis in the accompanying statements of activities. Accordingly, certain costs have been allocated among the programs and supporting services benefited based on estimates of time and effort of staff.

Income Tax Status

The Alliance received a determination letter from the Internal Revenue Service (IRS) that it has been granted an exemption from federal income taxes and it qualifies under Section 501(c)(6) of the Internal Revenue Code. The Alliance believes its operations are consistent with the nature of their exemption granted by the IRS. There is no current liability for income taxes on unrelated business income and no temporary differences resulting in deferred taxes as of December 31, 2022 and 2021.

The Alliance is required to measure, recognize, present, and disclose in its financial statements uncertain income tax positions the Alliance has taken in the tax years that remain subject to examination or expects to take on an income tax return. The Alliance recognizes the tax benefits from uncertain income tax positions only if it is more likely than not the tax position will be sustained on examination by tax authorities. The Alliance recorded no liability for uncertain income tax positions for any open tax years.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Leases

In the statement of financial position as of December 31, 2022, the Alliance recorded an operating right-of-use asset and operating lease liability, initially measured at the present value of the total lease payments using a risk-free rate that approximates the remaining lease term. The Alliance considers the likelihood of exercising renewal or termination clauses in measuring its operating right-of-use assets and operating lease liabilities. Lease costs are calculated and allocated over the lease term on a straight-line basis. Short-term leases (those with an initial term of twelve months or less and no purchase option) are expensed over their terms, with no corresponding right-of-use asset or lease liability recorded. The Alliance expenses non-lease and variable components as they are incurred.

Subsequent Events

The Alliance has evaluated subsequent events through the report date, which is the date the financial statements were available to be issued.

NOTE 3 - CONCENTRATIONS OF CREDIT RISK

The Alliance maintains cash and investments in federally insured banks and broker-managed accounts and has exposure to credit risk on those accounts. Cash held with commercial banks is insured up to Federal Deposit Insurance Corporation (FDIC) limits. As of December 31, 2022, the Alliance had $6,661,883 cash in excess of FDIC limits. Assets held in broker-managed accounts are insured by the Securities Investor Protection Corporation (SIPC), which protects investors for up to $500,000 including a maximum of $250,000 for claims of cash if the brokerage firm holding the assets becomes insolvent, but it does not insure the underlying assets of $8,931,059 as of December 31, 2022. Management does not consider this a significant concentration of credit risk.

As of December 31, 2022, 33 percent of the Alliance's accounts receivable and 36 percent of total revenue and gains/losses were from four companies.

NOTE 4 - PROGRAM SERVICES

The Public Laws 113-79 and 115-334 place requirements on how the Alliance can spend the assessments it collects. At the beginning of each year, the Alliance makes an estimate of what total assessments are anticipated to be in the coming year. Grants are made to state organizations and national campaigns are undertaken based on the estimates. Actual assessments revenue differ from the estimates and the requirements of Public Laws 113-79 and 115-334. The difference between the estimates and actual assessments are to be reflected in the grants made in future years. The law establishes strict percentage allocations for program spending and these percentages are tied to the revenue received from assessments. Management has developed procedures to ensure these percentages are reflected in budgets and carried forward as appropriate. Variances between the percentages disclosed in the program descriptions below are descriptive of the current year's operations and management believes they do not indicate non-compliance with the statute.

NOTE 4 - PROGRAM SERVICES (continued)

Research, Development, and Demonstration

The Public Laws 113-79 and 115-334 require the Alliance to ensure not less than 30 percent of the assessments collected for each calendar year after the amounts required to be escrowed and not obligated until October 1, 2028, under Public Law 115-334 are used by qualified state associations or the Alliance to conduct research, development, and demonstration activities relating to oilheat fuel, including the development of energy-efficient heating systems to be placed into the marketplace. This also includes the Alliance, in conjunction with an institution or organization engaged in biofuels research, to develop consumer education materials describing the benefits of using biofuels as or in oilheat fuel based on the technical information developed.

In 2022, the Alliance granted or expended $2,673,141 for the research, development, and demonstration program, including $2,083,944 in national spending of past year's assessments revenue. In 2021, the Alliance Board voted to reallocate up to $1.0 million in national spending not yet incurred for research, development, and demonstration to those states that have utilized their budgeted grants for research, development, and demonstration for additional research, development, and demonstration spending. In 2021, the Alliance granted $307,545 in such national funds to states. The remaining amount of the $1.0 million not spent in 2021, was reallocated in 2022 in addition to up to another $1.0 million for grants to states that have used their research, development, and demonstration budgets. In 2022, the Alliance granted $370,743 in such national funds to states that is included in the amounts granted or expended above. Amounts of these additional grants not spent at the end of 2022 were forfeited by states and be used for future national spending. However, subsequent to year-end, the Alliance agreed to extend this additonal grant through the end of 2023. The Alliance also initially budgeted $1,270,000 in additional national spending from 2022 assessments revenue to be spent subsequent to year-end for the research, development, and demonstration program. In response to higher net assessments revenue than budgeted, subsequent to year-end, the Alliance budgeted another $13,143 to be spent for the research, development, and demonstration program, making the total for 2022, 30 percent of net assessments revenue after deducting the amount added to net assets unavailable for obligation until October 1, 2028. Additionally, unallocated state rebates of 2022 assessments revenue will be used for the research, development, and demonstration program.

Heating Oil Efficiency and Upgrade

The Public Laws 113-79 and 115-334 require the Alliance to ensure not less than 15 percent of the assessments collected for each calendar year after the amounts required to be escrowed and not obligated until October 1, 2028, under Public Law 115-334 are used by qualified state associations or the Alliance to carry out programs to assist consumers (i) to make cost-effective upgrades to more fuel efficient heating oil systems or otherwise make cost-effective modifications to an existing heating system to improve the efficiency of the system, (ii) to improve energy efficiency or reduce energy consumption through cost-effective energy efficiency programs for consumers, or (iii) to improve the safe operation of a heating system.

In 2022, the Alliance granted or expended $896,350 for the heating oil efficiency and upgrade program, including $26,502 in grants and spending of past year's assessments revenue. The Alliance also initially budgeted $60,000 in additional national spending from 2022 assessments revenue to be spent subsequent to year-end for the heating oil efficiency and upgrade program. In response to higher net assessments revenue than budgeted, subsequent to year-end, the Alliance budgeted another $13,143 to be spent for the heating oil efficiency and upgrade program, making the total for 2022, 15 percent of net assessments revenue after deducting the amount added to net assets unavailable for obligation until October 1, 2028. Additionally, unallocated state rebates of 2022 assessments revenue will be used for the heating oil efficiency and upgrade program.

NOTE 4 - PROGRAM SERVICES (continued)

Consumer Education, Safety, and Training

The Public Laws 113-79 and 115-334 require the Alliance to ensure not more than 30 percent of the assessments collected for each calendar year after the amounts required to be escrowed and not obligated until October 1, 2028, under Public Law 115-334 are used (i) to conduct consumer education activities relating to oilheat fuel, including providing information to consumers on energy conservation strategies, safety, new technologies that reduce consumption or improve safety and comfort, the use of biofuel blends, and federal, state, and local programs designed to assist oilheat fuel consumers, (ii) to conduct worker safety and training activities relating to oilheat fuel, including energy efficiency training, (iii) to carry out other activities recommended by the Secretary of Energy, or (iv) to establish a data collection process to track equipment, service, and related safety issues to develop measures to improve safety.

In 2022, the Alliance granted or expended $1,736,587 for the consumer education, safety, and training program, including $100,438 in grants and spending of past year's assessments revenue. The Alliance also budgeted $280,000 in additional national spending from 2022 assessments revenue for the consumer education, safety, and training program, of which $193,238 remained unspent as of December 31, 2022, making the total for 2022, 29 percent of net assessments revenue after deducting the amount added to net assets unavailable for obligation until October 1, 2028.

Unallocated State Rebates

In addition to the specific program commitments discussed previously, the Alliance has committed $1,178,557, which is 19 percent of net 2022 assessment revenue after deducting the amount added to net assets unavailable for obligation until October 1, 2028, for state rebates that have not yet been allocated to a program specified in Public Law 115-334. The Alliance plans to allocate these state rebates to the research, development, and demonstration and/or heating oil efficiency and upgrade programs. State organizations develop detailed plans for use of the rebates to do work under these programs. These funds will be allocated between programs in accordance with the requirements of Public Laws 113-79 and 115-334 as discussed previously.

NOTE 5 - ADMINISTRATIVE EXPENSE CAP

Public Law 115-334 requires the Alliance to limit expenditures for "Administrative" costs to 7 percent of revenue generated by assessment remittances net of amounts unavailable for obligation until October 1, 2028. In 2022, the Alliance expended $228,570 for Administrative expenses, which was 4 percent of net assessments revenue after deducting the amount added to net assets unavailable for obligation until October 1, 2028, in the year ended December 31, 2022. In 2021, the Alliance expended $239,921 for Administrative expenses, which was 4 percent of net assessments revenue in the year ended December 31, 2021. Thus, management believes the Alliance is in compliance with this provision of Public Laws 113-79 and 115-334.

NOTE 6 - ASSESSMENT AND COLLECTION COSTS

The Alliance has developed an audit system for collections compliance and has the legal authority to conduct audits to ensure member compliance. Collection costs include the costs incurred to process annual assessments, to publicize the collection system, and to ascertain compliance as stipulated by Public Laws 113-79 and 115-334. Assessment and collection costs were $178,435 and $217,852 for the years ended December 31, 2022 and 2021, respectively.

NOTE 7 - FINANCIAL ASSETS AND LIQUIDITY

Financial assets available within one year for operations that are not subject to restrictions that make them unavailable for general operations as of December 31, were as follows:

	2022	2021
Cash, except cash held in escrow	$ 9,920,538	$ 10,082,112
Assessments receivable due within one year	2,656,113	2,697,953
Prepaid state assessments	27,293	55,928
Other assets	16,683	33,367
Less: state grants payable	(2,242,331)	(2,503,142)
Less: obligation for unallocated state rebates	(2,403,161)	(2,106,810)
Less: amounts to be transferred to escrow	(2,097,717)	(2,131,393)
Less: designated net assets for national spending not yet incurred	(4,632,408)	(5,280,126)
Total financial assets available within one year for operations	$ 1,245,010	$ 847,889

The Alliance has a budgetary process to develop estimates and make grant payables to comply with Public Laws 113-79 and 115-334. Liquid assets are maintained in cash accounts to minimize risk of loss.

NOTE 8 - COMMITMENTS AND CONTINGENCIES

The Alliance has an operating lease agreement for a liquid fuels research center. Total rent expense under the lease was $95,373 and $94,582 for the years ended December 31, 2022 and 2021, respectively. The Alliance shared $23,843 and $21,904, respectively, of the rent with a state agency and that is therefore included in grants in the accompanying statements of functional expenses. The remainder is included in occupancy in the accompanying statements of functional expenses. The Alliance extended the lease through December 31, 2025. The remaining weighted-average lease term is 36 months. The lease contains an option for a second renewal term through December 31, 2030 that has not been exercised and is not considered reasonably certain. The Alliance has recorded an operating right-of-use asset of $274,512 and an operating lease liability of $281,314 as of December 31, 2022, based on a weighted-average discount rate of 1.37 percent. The Alliance also had a month-to-month lease for it's office space that was terminated in 2021 and transitioned to a mail service agreement.

Future minimum lease payments are as follows for the years ending December 31:

2023	$ 92,428
2024	95,200
2025	98,056
Undiscounted future cash flows	285,684
Less: discount to present value	(4,370)
Total lease liability	$ 281,314

NOTE 9 - NET ASSETS

Pre-2014 Reauthorization Designated Net Assets

As discussed previously, Public Law 113-79 became effective April 1, 2014. The Alliance designated the remaining net assets under the former Public Law 106-469 for use in a national oilheat education program. As of December 31, 2022 and 2021, $55,933 remained unspent and are designated for future use.

National Spending Not Yet Incurred Designated Net Assets

The Alliance budgets national spending in the accomplishment of its mission under Public Laws 113-79 and 115-334. The Alliance recorded $4,632,408 and $5,280,126 in national spending of assessments revenue, which had not yet been incurred as of December 31, 2022 and 2021, respectively. The Alliance has designated net assets in these amounts for future program spending, some of which, the Alliance has approved contracts to expend.

Net Assets Available for Obligation - Other Than For Consumer Education, Safety, and Training

The amount reported as net assets without donor restrictions available for obligation - other than for consumer education, safety, and training are the net amounts available for future obligation for all purposes other than consumer education, safety, and training, since Public Laws 113-79 and 115-334 have placed limits on the use of assessments revenue from consumer education, safety, and training.

Net Assets Unavailable for Obligation Until October 1, 2028

Public Law 115-334 established a requirement that funds be maintained in escrow and be unavailable for use until October 1, 2028. Net assets unavailable for obligation until October 1, 2028, is an accumulation of these net assets plus interest. The Alliance makes contributions annually to the escrow for the prior year's assessments after the conclusion of the audit.

The following is a detail of amounts unavailable for use until October 1, 2028, as of December 31:

	Assessments	Interest	Total
Unavailable balance, January 1, 2021	$ 3,814,803	$ 2,857	$ 3,817,660
Income on escrow	-	261	261
Assessments	2,129,132	-	2,129,132
Unavailable balance, December 31, 2021	5,943,935	3,118	5,947,053
Income on escrow	-	380	380
Assessments	2,094,718	-	2,094,718
Unavailable balance, December 31, 2022	$ 8,038,653	$ 3,498	8,042,151
Cash held in escrow account, December 31, 2022			5,944,434
Amount to be deposited in escrow after year-end			$ 2,097,717

NOTE 10 - ADOPTION OF NEW ACCOUNTING PRONOUNCEMENT

The Alliance implemented Accounting Standards Update (ASU) No. 2016-02, *Leases (Topic 842)*. This guidance is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the statement of financial position and disclosing key information about leasing arrangements. ASU No. 2016-02 requires lessees to report a right-of-use asset along with a lease liability.

The Alliance adopted ASU No. 2016-02 as of January 1, 2022, and, as a result, the statement of financial position as of December 31, 2022, includes an operating right-of-use asset and an operating lease liability, which are not reflected in the statement of financial position as of December 31, 2021. The Alliance recorded an operating right-of-use asset and operating lease liability of $364,136 and $367,421, respectively, as of January 1, 2022. There was no effect on the beginning net assets from the implementation of this standard.

The Alliance elected to apply all practical expedients available under the ASU, allowing it to (1) not reassess whether any expired or existing contracts previously assessed as not containing leases are, or contain, leases, (2) not reassess the lease classification for any expired or existing leases, (3) not reassess initial direct costs for any existing leases, and (4) to use hindsight in determining the lease term.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

SUPPLEMENTAL SCHEDULE OF EXPENSES BY STATE/JURISDICTION - RESEARCH, DEVELOPMENT, AND DEMONSTRATION
FOR THE YEAR ENDED DECEMBER 31, 2022

	Initial Amounts Granted in 2022	Additional Amounts Expended From National Budget	Total
STATE GRANTS:			
Connecticut	$ 81,369	$ -	$ 81,369
Indiana	263	-	263
Kentucky	1,527	3,617	5,144
Maine	42,957	28,381	71,338
MAPDA (Delaware, Maryland, and Washington, D.C.)	20,720	22,255	42,975
Massachusetts	70,989	38,092	109,081
Michigan	3,497	-	3,497
Nevada	174	-	174
New Hampshire	27,926	8,182	36,108
New Jersey	33,686	-	33,686
New York:			
UNYEA	32,265	28,793	61,058
HVOEC	19,359	-	19,359
NYSEC	77,437	4,007	81,444
North Carolina	13,620	39,210	52,830
Ohio	13,722	-	13,722
Pennsylvania	82,394	142,131	224,525
Rhode Island	24,320	-	24,320
South Carolina	5,202	8,282	13,484
Virginia	13,914	36,441	50,355
Vermont	13,584	11,352	24,936
Washington	2,976	-	2,976
Wisconsin	7,297	-	7,297
Total State Grant Expense	$ 589,198	$ 370,743	959,941
NATIONAL SPENDING IN 2022			1,713,200
TOTAL 2022 EXPENSE			$ 2,673,141
2022 NATIONAL BUDGET NOT YET SPENT			$ 1,296,784

In addition to these amounts, the unallocated state rebates detailed in the accompanying supplemental schedule of expenses by state/jurisdiction - unallocated state rebates will be used for either this program or for the heating oil efficiency and upgrade program.

See independent auditor's report.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

SUPPLEMENTAL SCHEDULE OF EXPENSES BY STATE/JURISDICTION -
HEATING OIL EFFICIENCY AND UPGRADE
FOR THE YEAR ENDED DECEMBER 31, 2022

	Amounts Granted in 2022	
STATE GRANTS:		
Connecticut	$ 120,025	
Indiana	388	
Kentucky	2,253	
Maine	63,365	
MAPDA (Delaware, Maryland, and Washington, D.C.)	30,564	
Massachusetts	104,713	
Michigan	5,159	
Nevada	256	
New Hampshire	41,194	
New Jersey	49,688	
New York:		
UNYEA	47,593	
HVOEC	28,556	
NYSEC	114,224	
North Carolina	20,093	
Ohio	20,241	
Pennsylvania	122,271	
Rhode Island	35,875	
South Carolina	7,674	
Virginia	20,524	
Vermont	20,038	
Washington	4,390	
Wisconsin	10,764	
Total State Grant Expense		$ 869,848
NATIONAL SPENDING IN 2022		26,502
TOTAL 2022 EXPENSE		$ 896,350
2022 NATIONAL BUDGET NOT YET SPENT		$ 73,143

In addition to these amounts, the unallocated state rebates detailed in the accompanying supplemental schedule of expenses by state/jurisdiction - unallocated state rebates will be used for either this program or for the research, development, and demonstration program.

See independent auditor's report.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

SUPPLEMENTAL SCHEDULE OF EXPENSES BY STATE/JURISDICTION - CONSUMER EDUCATION, SAFETY, AND TRAINING
FOR THE YEAR ENDED DECEMBER 31, 2022

	Amounts Granted in 2022	
STATE GRANTS:		
Connecticut	$ 217,973	
Indiana	704	
Kentucky	4,092	
Maine	115,075	
MAPDA (Delaware, Maryland, and Washington, D.C.)	55,506	
Massachusetts	190,166	
Michigan	9,368	
Nevada	465	
New Hampshire	74,810	
New Jersey	90,237	
New York:		
UNYEA	86,432	
HVOEC	51,859	
NYSEC	207,438	
North Carolina	6,181	
Ohio	36,758	
Pennsylvania	222,056	
Rhode Island	65,150	
South Carolina	13,937	
Virginia	37,272	
Vermont	36,389	
Washington	7,972	
Wisconsin	19,547	
Total State Grant Expense		$ 1,549,387
NATIONAL SPENDING IN 2022		187,200
TOTAL 2022 EXPENSE		$ 1,736,587
2022 NATIONAL BUDGET NOT YET SPENT		$ 193,238

See independent auditor's report.

NATIONAL OILHEAT RESEARCH ALLIANCE, INC.

SUPPLEMENTAL SCHEDULE OF EXPENSES BY STATE/JURISDICTION -
UNALLOCATED STATE REBATES
FOR THE YEAR ENDED DECEMBER 31, 2022

	Amounts Granted in 2022	
UNALLOCATED STATE REBATES:		
Connecticut	$ 158,440	
Indiana	512	
Kentucky	2,974	
Maine	83,645	
MAPDA (Delaware, Maryland, and Washington, D.C.)	40,346	
Massachusetts	138,227	
Michigan	6,809	
Nevada	338	
New Hampshire	54,377	
New Jersey	65,592	
New York:		
UNYEA	62,826	
HVOEC	37,695	
NYSEC	150,783	
North Carolina	56,835	
Ohio	26,719	
Pennsylvania	161,408	
Rhode Island	47,356	
South Carolina	10,130	
Virginia	27,092	
Vermont	26,450	
Washington	5,795	
Wisconsin	14,208	
TOTAL 2022 EXPENSE		$ 1,178,557

These unallocated state rebates will be allocated to either the research, development, and demonstration or the heating oil efficiency and upgrade programs based on detailed plans for use of the rebates to be submitted by the states.

See independent auditor's report.

UHY LLP
Certified Public Accountants

7900 Westpark Drive
Suite T420
McLean, VA 22102
Phone: 703-893-2660
Fax: 703-893-2123

September 22, 2023

Board of Directors
National Oilheat Research Alliance
600 Cameron Street, Suite 206
Alexandria, VA 22314

We have audited the financial statements of the National Oilheat Research Alliance (the Alliance) for the year ended December 31, 2022, and have issued our report thereon dated ___________. Professional standards require that we provide you with information about our responsibilities under auditing standards generally accepted in the United States of America, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated April 17, 2023. Professional standards also require that we communicate to you the following information related to our audit.

The following specific matters must be communicated:

A. Qualitative Aspects of Accounting Practices
B. Difficulties Encountered in Performing the Audit
C. Corrected and Uncorrected Misstatements
D. Disagreements with Management
E. Management Representations
F. Management Consultations with Other Independent Accountants
G. Other Audit Findings or Issues
H. Other Matters

Our comments on the above matters are presented in the attachment (Exhibit A) to this letter. The information contained therein is intended solely for the use of the Board of Directors and management of the Alliance and is not intended to be, and should not be, used by anyone other than these specified parties. We would welcome the opportunity to discuss the matters contained in this communication with you since they are best communicated in person.

Very truly yours,

McLean, Virginia

Attachment

National Oilheat Research Alliance

SIGNIFICANT AUDIT FINDINGS

A. Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Alliance are described in Note 2 to the financial statements. As described in Note 10 to the financial statements, the Alliance changed accounting policies related to accounting for leases by adopting Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2016-02, *Leases (Topic 842)* in 2022. Otherwise, no other new accounting policies were adopted and the application of existing policies was not changed during 2022. We noted no transactions entered into by the Alliance during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The estimates affecting the financial statements were:

- Recognition of refund reserves based on historical trends and subsequent payments.
- Valuation of receivables and assessments revenue based on subsequent and historical collections.
- Allocation of expenses based on actual time spent by function.

We evaluated the key factors and assumptions used to develop the estimates in determining that they are reasonable in relation to the financial statements taken as a whole.

The financial statement disclosures are neutral, consistent, and clear.

B. Difficulties Encountered in Performing the Audit

The completion of our audit was significantly delayed due to delays in closing of the books by the Alliance and due to analysis needed in response to classification errors noted for receipts and disbursements.

C. Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

D. Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. The following material misstatements detected as a result of audit procedures were corrected by management:

- To record gross amount of publication sales and cost of sales – approximately $117,000
- To reclassify designated net assets – approximately $129,000

E. Management Representations

We have requested certain representations from management that are included in the management representation letter dated _____________.

F. Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Alliance's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other independent accountants.

G. Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Alliance's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Statement on Auditing Standards (SAS) No. 134, *Auditor Reporting and Amendments, Including Amendments Addressing Disclosures in the Audit of Financial* Statements, clarified the requirements for auditors communications with those charged with governance to require the auditor to communicate about significant risks identified that could impact the financial statements. We identified the following significant risks that were considered in our audit process:

- Potential risk of management override of controls.
- Potential risk that lack of timely financial reporting and errors noted in interim statements could lead to financial statement misstatement.
- Potential risk that revenue recognition could contain errors including the risk that the estimated of assessments receivable is not reasonable, the risk that revenue from new contract with Clean Fuels Alliance America is recognized in the wrong period, the risk that the estimate of the reserve for future refunds is not reasonable, and the risk that accounting for publication sales and related accounts are not done correctly.
- Potential risk expenses and liabilities could be misstated or misclassified considering the complexities of the Alliance statute.
- Potential risk the Alliance is not in compliance with the spending minimums and maximums under the Alliance statute.
- Potential risk implementation of ASU No. 2016-02, *Leases (Topic 842)* was done incorrectly.
- Potential risk of the susceptibility of revenue to fraud.

H. Other Matters

With respect to the supplementary information accompanying the financial statements, we made certain inquiries of management and evaluated the form, content, and method of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

In 2023, the Alliance will implement ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. The standard updated guidance intended to provide financial statement users with more decision-useful information about the expected credit losses on financial instruments and other commitments to extend credit held by the Alliance each year. The main goal is to improve financial reporting by requiring earlier recognition of credit losses on financing receivables and other financial assets. This standard will require management to consider if its processes for estimating credit losses on accounts such as receivables and refunds reserve are representative of expected losses rather than actual incurred losses. This requires management to evaluate a broader range of factors when determining the expected loss on such accounts.

UHY LLP
Certified Public Accountants

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McLean, VA 22102
Phone: 703-893-2660
Fax: 703-893-2123

_____________, 2023

Board of Directors
National Oilheat Research Alliance
600 Cameron Street, Suite 206
Alexandria, VA 22314

In planning and performing our audit of the financial statements of National Oilheat Research Alliance (the Alliance) as of and for the year ended December 31, 2022, in accordance with auditing standards generally accepted in the United States of America, we considered the Alliance's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Alliance's internal control. Accordingly, we do not express an opinion on the effectiveness of the Alliance's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and, therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we identified certain deficiencies in internal control that we consider to be significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the organization's financial statements will not be prevented, or detected and corrected, on a timely basis. We did not identify any deficiencies in internal control that we consider to be material weaknesses.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the following deficiencies in the Alliance's internal control to be significant deficiencies:

Understatement of Accounts Payable

During our audit, we noted several invoices paid in 2023 that were for services obtained in 2022 that were not accrued in 2022 by the Alliance. Such invoices related to national spending by the Alliance. Accounting principles generally accepted in the United States of America (GAAP) requires the Alliance to record all expenses to be recorded in the year they are incurred regardless of when they are paid. This also impacted the remaining balances available for use of national spending. This required entries proposed by us made by management during the audit. We recommend the Alliance improve its process to search for unrecorded liabilities and improve its review of financial information.

Management's Response – Management agrees with this comment and is developing processes to address it.

Accounting for Publication Sales

The Alliance contracts with a third party to print, store, and fulfill sales orders for its technical publications. In 2022, the Alliance began printing larger print runs of these publications. To account for these purchases, the Alliance recorded them to inventory, a new account. Royalties on the sales of the publications net direct costs and commissions are remitted to the Alliance periodically. Such royalty payments were accounted for as a reduction to inventory. The third party conducted a physical count at year-end and provided that to the Alliance. GAAP requires inventory to be recorded at the net realizable value (the amount of the physical count, less any need for write-down for obsolescence). GAAP also requires the income to be recorded as publication sales at the gross amount of total sales. The printing, shipping, storage, sales taxes charged to customers, and commission should be recorded as cost of sales. The Alliance did not have a process in place to obtain information from the third party to record this properly thereby overstating inventory and understating sales and cost of sales. This required additional effort during the audit and entries proposed by us and made by management during the audit to correct the accounting for publication sales. We recommend the Alliance establish a process to reconcile publication sales and inventory to ensure the accounting is correct.

Management's Response – Management agrees with this comment and is developing processes to address it.

Classification of Designated Net Assets

The Alliance tracks amounts of national budgeted spending that has not yet been expended by program as designated net assets. The Alliance further distinguishes remaining national spending between amounts obligated under contract for example for future research project obligations and those that are not yet obligated under contract. This enables management to identify how much remaining spending is available for obligation going forward. During the audit, we noted amounts that were obligated in the past under a research contract were moved to unobligated even though at year-end these amounts were still obligated under the contract. This resulted in a reclassification of net assets proposed by us and made by management during the audit. We recommend more communication of contractual obligations be made internally so that the designated net assets can be properly calculated.

Management's Response – Management agrees with this comment and is developing processes to address it.

Accounting for Prepaid State Assessments

The Alliance makes grants to states under its programs. Periodically, states will exceed their budgets, especially in the consumer education, safety, and training program. Such amounts should be classified as a prepaid state assessment asset at year-end. During our audit, we noted overspent amounts remained in state grants payable rather than being classified as a prepaid state assessment asset. This required an entry proposed by us and made by management during the audit. We recommend a process be added to the year-end closing process to analyze grants payable balances and reclassify them as appropriate once all other reconciliations are complete.

Management's Response – Management agrees with this comment and is developing processes to address it.

The Alliance's written responses to the significant deficiencies identified in our audit have not been subjected to the audit procedures applied in the audit of the financial statements and, accordingly, we express no opinion on them.

This communication is intended solely for the information and use of the Board of Directors, management, and others within the Alliance, and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

McLean, Virginia

Now Therefore Be It Resolved: In 2022, assessments revenue net of amounts required to be maintained in escrow exceeded the original budget for 2022.

Be it Further Resolved: As a result, the original budgets for central spending on the research, demonstration, and development program and the heating oil efficiency and upgrade program were insufficient to meet the minimum requirements of Public Law 113-79 that requires a minimum of at least 30% of assessments revenue for research, development, and demonstration and a minimum of at least 15% of assessments revenue for heating oil efficiency and upgrade.

Be it Further Resolved: Therefore, the original budget for 2022 is amended to increase the central research, development, and demonstration budget from $1,270,000 to $1,296,784.43 (an increase of $26,784.43).

Be it Further Resolved: The original budget for 2022 is amended to increase the central heating oil efficiency and upgrade budget from $60,000 to $73,142.94 (an increase of $13,142.94).

Budget 2024 - 2025

August 2023

The National Oilheat Research Alliance Act of 2000 (Public Law 106-469) as amended by P.L. 113-79 requires the National Oilheat Research Alliance (the Alliance) to publish a biennial budget for public comment before August 1st of 2014 and every two years thereafter. That budget shall include the probable costs of all programs, projects, and contracts and other agreements.

Following public review and comment, the Alliance is required to submit a proposed budget to the Secretary of Energy and to the Congress.

Part I. Assessment Rate and Income

The Alliance has one primary sources of income. The federally authorized assessment on Oilheat sold in the states participating in NORA at $.002 per gallon. The Alliance also receives interest income on the investment of assessment funds. Additionally, the Alliance realizes revenue from the sale of books and other educational resources and expects to receive revenue from the provision of studies. Further, NORA periodically enters into contracts with other research organizations to conduct studies.

Assessment Collections

The Alliance estimates that revenues from assessments will be **$7,889,747. in 2024.** Similarly, the 2025 revenue from collections was placed at **$7,653,055**. These calculations are based on normalizing the most recent year's collections for weather, and then reducing by 3 percent per annum to accommodate conservation and loss of customers. To ensure the appropriate allocations to the accounts established by Congress are in line with actual collections, NORA adjusts the rebates to the states at the conclusion of the audit. Reductions or overages are generally made to the state rebates in the next year. This ensures that with the central budget and the state budget, Congressional allocations are followed.

The Alliance expects to receive interest of $100,000 in 2024 and $50,000 in 2025. NORA expects no continuing revenue from book sales as the publications are now printed and distributed independently and NORA distributes the materials with no expectation of revenue.

NORA will also be making it a priority to work with other organizations and provide services that benefit the oilheating industry. NORA anticipates that partnerships with organizations such as the Clean Fuels Alliance America and New York State Energy Research and Development Authority (NYSERDA) may provide as much as $450,000 per year in 2024 and 2025. However, since these grants are uncertain, they are not included in the Budget

Escrow

The Congressional Budget Office changed the scoring rules for programs like NORA since its inception in 2000. To ensure the program did not impact the deficit, the law requires that 25 percent of the funds be placed into escrow, and that those funds cannot be obligated or spent until October 1, 2028. This escrow will significantly curtail operations, and the reduced amounts are reflected in this budget.

Part II. General Expenditures and Capital Investments

Office Unallocated Expenses in 2024 are anticipated to be $ 356,000. and include salaries and other expenses related to administering the program, insurance, accounting fees and rent. This figure will be increased to $369,000. In 2025. However, the total of all unallocated expenses will thus be approximately 6.0 percent in 2024 and 6.4% of the program's collections after the escrow. Thus, they will be within the statutory cap of 7%.

Assessments and Collections.

The Alliance anticipates expenditures of **$230,000** for collection expenses in 2024 and 2025. These costs include processing of collections, publicizing the collection system, maintaining lists, and providing attorney's fees to ensure that the system is effective. It also includes expenses associated with refunds, and audit costs. These expenses reflect actual costs in previous years.

Part III. State Rebates

The Alliance has endeavored to ensure that the funds generated benefit consumers and the oilheat industry. The limitation on Administration contained in the Act and the current status of the industry also indicates that allowing local decision-making is the best way to maximize value. To that end, the Alliance therefore intends to return a substantial portion of the funds for use in the state where they are generated. In 2024, this is anticipated to be $3,761,309 and in 2025, it will be $3,515,790. The states will use these funds to accomplish many of the goals described herein and will be within the statutory directives and their spending will match congressional allocations.

Part IV. Program and Project Expenditures

The Act requires the Alliance to develop programs, and projects and enter into contracts or other agreements with other persons and entities for implementing this title.

The Act is designed to benefit consumers of Oilheat by allowing the industry to develop appropriate programs of consumer education, energy efficiency, research and development and education and training to benefit consumers.

This budget document will determine all spending. The Executive Committee of the Alliance and the Alliance will be responsible for reviewing contracts and approving them as appropriate and implementing this budget.

Education and Training and Consumer Education.

The Act requires the Alliance to enhance consumer and employee safety and training and provide consumer education. The total expenses available for these activities are $1,716,020 in 2024 and $1,664,539 in 2025. Of these expenditures the Alliance is proposing to budget $280,000 to be administered by the national office in each year. These budgetary amounts represent approximately 29% of the overall NORA budget, which falls below the statutory maximum of 30%. The national office will be producing and maintaining an online training center with these funds. In-person training is often the preferred method of training; however, many technicians are in remote areas and have limited access to training. Having a training center that can provide training, maintain student records and outreach to students is critical.

The states affiliated with NORA will be provided with $1,436,020 for 2024 and $1,384,539 in 2025. The states will develop internal budgets based on these allocations. The states will focus most of their funding on basic technician education. Extended management training to improve overall service and improve the oilheat consumer experience will also be developed and used.

Technician Certification Program

The Alliance will continue to improve its Technician Certification program. Recognizing excellence is a vital part of improving employee training which leads to improved consumer value and safety. To this end, the Alliance is continuously improving the website, training materials and the certification tests.

New Training Materials.

The Alliance will continue to develop training materials and course materials for the industry. NORA will continue to conduct Train-the-Trainer programs for the Gold and Silver program. NORA is working on online presentations of the subject areas of its expanded gold program, steam, hydronics, venting, advanced controls, air flow for warm air systems, and energy efficiency. NORA will continue to work with the states to bring these training opportunities into the community.

State Rebates

A significant portion of the Alliance generated funds will be returned to the states in conformance with the law to accomplish the objectives of the Act. The states will implement many of the programs described above. Providing in field training for technicians is critical.

Several of the states operate full time training facilities used by the industry. These include Maine, Vermont, Connecticut, New York, and Pennsylvania. The remaining states use the funds to do periodic training at temporary facilities.

Additionally, the states may allocate a portion of this to traditional consumer education activities using traditional media such as broadcast television and radio, and a limited amount of internet communications. Using broadcast media allows the industry to provide a small bit of information to consumers which might help them make decisions regarding Oilheat/Bioheat fuel. These consumer education activities will also provide information on energy efficiency and improvements to the equipment.

Research and Development

The Act requires the Alliance to provide for research, development, and demonstration of clean and efficient oilheat utilization equipment. The Alliance anticipates expending approximately $2,050,193 being directly allocated to research and development activities in 2024, and $1,996,937 in 2025. Of this, $1,270,000 will be directly funded by the central office. At a minimum, the research and development program will be 31% of the budget..

NORA is operating a research and development laboratory in New York. Staffing for that includes a full time director, as well as 2 research engineers, and a supporting technical expert. Additionally, NORA will continue to fund and develop new projects based on its research review meeting which established priorities for the industry, including biofuels, controls, novel burner technologies, and new appliances.

Under the revised statute, there are additional responsibilities which include the transition and facilitation of the entry of energy efficient heating systems into the marketplace. A report on biofuels in oilheat fuel utilization equipment, and the development of consumer education materials describing the benefits of using biofuels in oilheat fuel is also a core function of research and development in the act. It is likely that the states will use their funds to facilitate these two objectives. NORA had decided in 2021 & 2022 to allocate $1million dollars per year from its reserves and its central funds to states that are actively using research and development funds.

NORA anticipates that the core of its fundamental research will occur at the NORA laboratory in Plainview New York, while more product development projects will occur through funded projects. NORA will continue to work with the New York State Energy Research and Development Authority and the Clean Fuels Alliance America to advance the liquid heating industry.

Energy Efficiency

The Act also includes a requirement on "Heating Oil Efficiency and Upgrade Program. The Alliance has budgeted $937,596 in 2024 and $910,968 in 2025.

There are three main tasks under this section, and at least 16 percent of the assessments shall be used to assist consumers to

1) Make cost effective upgrades to more fuel-efficient modifications to an existing heating system or otherwise make cost-effective modifications to an existing heating system to improve the efficiency of the system.
2) To improve energy efficiency or reduce energy consumption through cost-effective energy efficiency programs for consumers, or
3) To improve the safe operation of the system

In carrying out this section, the Alliance shall to the maximum extent practicable coordinate, develop and implement the programs and activities of the Alliance in conjunction with an existing state energy efficiency program administrator.
The amount of funding in states will limit the amount of planning that is likely to occur. NORA believes that developing a series of programs that meets the goals of this section will be essential, and then each state affiliate will be able to work to the maximum extent practicable with its state energy efficiency administrator to develop the best plan for that state. Preliminary discussion have indicated that better understanding of efficiency and appropriate tools to measure and improve efficiency in the home, tune-ups of existing equipment, and setback thermostats may all be invaluable in fulfilling this task. States have also had robust rebate programs. However, the 25 percent cutback impacts those programs.

States will receive $872,596 in 2024 and 840,968 in 2025 to carry out and implement energy efficiency program activities.

<u>State Rebates</u>

NORA's Board has indicated a continued desire to utilize the state resources to implement the program. Thus, funds not specifically allocated to programs in accordance with this budget will be subject to the decision making of the states. Currently, $672,500 in 2024, and $563,345 in 2025.

<u>Central Office Expenses</u>

The budget provides for $356,000 to be spent on the management of the Alliance and compliance with specific program objectives in 2024, and $369,000 in 2023. These numbers have decreased since the last budget because we have moved the Audit expenses to Assessment and Collection Costs to better reflect Generally Accepted Accounting Principles (GAAP).

Part V. Budget Summary

The following pages provides an income statement for 2024 and 2025. The board has directed that the allocations to the states be adjusted annually based on the collections in the prior year. This is a formulaic adjustment and thus the allocations to the state for 2025 will not be known until 2024, however, the allocation for 2024 is based on the Board's formula.

	2024	2025
INCOME		
Collections and Assessments		
Collections	7,889,747.67	7,653,055.24
Escrow	1,972,436.92	1,913,263.81
Net Collections	5,917,310.75	5,739,791.43
PROGRAM EXPENSES		
Consumer Education and Training (Max. 30%)	1,716,020.12	1,664,539.51
Education and Training (Central)	280,000.00	280,000.00
Education and Training (States)	1,436,020.12	1,384,539.51
Research Development and Demonstration (Min. 30%)	2,050,193.23	1,996,937.43
Research Development and Demonstration (Central)	1,270,000.00	1,270,000.00
Research Development and Demonstration (States)	780,193.23	726,937.43
Home Energy Efficiency Program (Min. 15%)	937,596.61	910,968.71
Home Energy Efficiency Program (Central)	65,000.00	70,000.00
Home Energy Efficiency Program (States)	872,596.61	840,968.71
Total Program Expenses	4,703,809.96	4,572,445.66
Total Central	1,615,000.00	1,620,000.00
Total States	3,088,809.96	2,952,445.66
State Rebates	672,500.80	563,345.77

Office Unallocated Expenses

Salaries and Consulting (Admin)	165,000.00	165,000.00
Accounting (Admin)	35,000.00	35,000.00
Insurance (Admin)	15,000.00	20,000.00
Taxes	3,000.00	3,000.00
Postage	1,500.00	1,500.00
Web Pages	15,000.00	18,000.00
Rent and Telephone	7,500.00	8,000.00
Travel	7,500.00	8,000.00
Meeting Expenses	5,000.00	6,000.00
Office Supplies	2,500.00	2,500.00
Dues & Memberships	5,000.00	5,000.00
Bank Fees	3,000.00	4,000.00
Legal Expense (non-admin)	84,000.00	84,000.00
Equipment Consulting	3,000.00	5,000.00
Payroll Processing	4,000.00	4,000.00
Total Unallocated Expenses (7 Percent Cap)	356,000.00	369,000.00

General and Special Projects:		
Assessment and Collection Costs	230,000.00	230,000.00
Annual Report	55,000.00	55,000.00
Total General and Special Projects	285,000.00	285,000.00

Other Income (Expenses)

Other Revenue (Grants, CFAA grant, etc)	225,000.00	225,000.00
CFAA Research & Development Grant Expense	(225,000.00)	(225,000.00)
Cost of Goods Sold	-	-
Interest	100,000.00	50,000.00
Total Other Income/(Expense)	100,000.00	50,000.00
Net Revenue (Expense)		-

-

State Allocations

2024

State		Consumer Ed and Training	Research and Development	Energy Efficiency	Rebates
		$1,436,020.00	**$780,193.00**	**$872,596.00**	**$672,501.00**
CT		$182,374.54	$99,084.51	$110,819.69	$85,407.63
DC		$143.60	$78.02	$87.26	$67.25
DE		$8,616.12	$4,681.16	$5,235.58	$4,035.01
IN		$1,005.21	$546.14	$610.82	$470.75
KY		$21,540.30	$11,702.90	$13,088.94	$10,087.52
MA		$146,330.44	$79,501.67	$88,917.53	$68,527.85
MD		$42,362.59	$23,015.69	$25,741.58	$19,838.78
ME		$86,448.40	$46,967.62	$52,530.28	$40,484.56
MI		$26,997.18	$14,667.63	$16,404.80	$12,643.02
NC		$62,466.87	$33,938.40	$37,957.93	$29,253.79
NH		$55,286.77	$30,037.43	$33,594.95	$25,891.29
NJ		$62,036.06	$33,704.34	$37,696.15	$29,052.04
NV		$287.20	$156.04	$174.52	$134.50
NY					
	NYSEC =.6	$178,870.65	$97,180.84	$108,690.56	$83,766.72
	UNYEA =.25	$74,529.44	$40,492.02	$45,287.73	$34,902.80
	Hudson =.15	$44,717.66	$24,295.21	$27,172.64	$20,941.68
OH		$40,782.97	$22,157.48	$24,781.73	$19,099.03
PA		$210,520.53	$114,376.29	$127,922.57	$98,588.65
RI		$49,542.69	$26,916.66	$30,104.56	$23,201.28
SC		$25,417.55	$13,809.42	$15,444.95	$11,903.27
VA		$49,111.88	$26,682.60	$29,842.78	$22,999.53
VT		$30,730.83	$16,696.13	$18,673.55	$14,391.52
WA		$4,595.26	$2,496.62	$2,792.31	$2,152.00
WI		$31,305.24	$17,008.21	$19,022.59	$14,660.52
		$1,436,020.00	$780,193.00	$872,596.00	$672,501.00

State Allocations

2025

State		Consumer Ed and Training	Research and Development	Energy Efficiency	Rebates
		$1,384,540.00	**$726,937.00**	**$840,968.00**	**$563,346.00**
CT		$175,843.06	$92,321.00	$106,802.94	$71,544.94
DC		$138.46	$72.69	$84.10	$56.33
DE		$8,307.55	$4,361.62	$5,045.81	$3,380.08
IN		$969.21	$508.86	$588.68	$394.34
KY		$20,768.87	$10,904.06	$12,614.52	$8,450.19
MA		$141,089.82	$74,074.88	$85,694.64	$57,404.96
MD		$40,845.43	$21,444.64	$24,808.56	$16,618.71
ME		$83,352.38	$43,761.61	$50,626.27	$33,913.43
MI		$26,030.31	$13,666.42	$15,810.20	$10,590.90
NC		$60,229.71	$31,621.76	$36,582.11	$24,505.55
NH		$53,306.75	$27,987.07	$32,377.27	$21,688.82
NJ		$59,814.33	$31,403.68	$36,329.82	$24,336.55
NV		$276.92	$145.39	$168.19	$112.67
NY					
	NYSEC =.6	$172,464.65	$90,547.27	$104,750.97	$70,170.38
	UNYEA =.25	$71,860.27	$37,728.03	$43,646.24	$29,237.66
	Hudson =.15	$43,116.16	$22,636.82	$26,187.74	$17,542.59
OH		$39,322.38	$20,645.01	$23,883.49	$15,999.03
PA		$202,981.04	$106,568.96	$123,285.91	$82,586.52
RI		$47,768.39	$25,079.33	$29,013.40	$19,435.44
SC		$24,507.26	$12,866.78	$14,885.13	$9,971.22
VA		$47,353.01	$24,861.25	$28,761.11	$19,266.43
VT		$29,630.25	$15,556.45	$17,996.72	$12,055.60
WA		$4,430.69	$2,326.20	$2,691.10	$1,802.71
WI		$30,184.08	$15,847.23	$18,333.10	$12,280.94
		$1,384,591.00	$726,937.00	$840,968,00	$563,346.00

XBX EXPLORING BIODIESEL regional seminars

XBX 2023

HIGH BLENDS INFRASTRUCTURE WORKSHOP

& CSR BOOTCAMP

PROUDLY SPONSORED BY

NORA Advancing Zero-Carbon Home Heating

NEBRASKA SOYBEAN BOARD

PROGRAM OVERVIEW
CONNECTICUT & MASSACHUSETTS 2023

Clean Fuels ALLIANCE AMERICA

BIOHEAT

OVERVIEW

The XBX 2023 interactive sessions were held in Needham, MA and Greenwich, CT in the summer of 2023 to meet a critical need for members of the fuels industry representing multiple levels of the supply chain. The sessions created an opportunity for them to learn, discuss, and adopt best practices and business strategies to prepare to accommodate for increasing blends of biodiesel to fulfill the demand for low carbon liquid heating fuels.

The sessions were sponsored by the National Oilheat Research Alliance (NORA) and the Nebraska Soybean Board. Two events were held consecutively in each city: the High Blends Infrastructure Workshop and the CSR Bootcamp.

The agenda at the High Blends Infrastructure Workshops featured leading experts and representatives from the Upstream, Midstream, and Downstream channels of the fuel supply chain, including distillate fuel terminal wholesalers, biodiesel producers and marketers, retail fuel dealers, equipment manufacturers, and parties from the rail and marine industries. The session offered a blend of panel presentations, peer interaction, and collaborative breakout sessions to provide attendees with a hands-on learning experience to develop a strategy on how to best prepare the supply chain for delivering higher blends of Bioheat® fuel.

The agenda at the CSR Bootcamp events featured a combination of direct presentations and interactive role-playing demonstrations led by industry experts and customer service specialists. Topics focused on the fundamentals of Bioheat® fuel, understanding the importance of Bioheat® fuel for the future of the industry, best practices to build relationships with today's consumer, and how to apply this information to real-life scenarios with customers.

Audience Background

Attendees at the High Blends Infrastructure Workshops included owners, managers, VPs, wholesale representatives and sales directors from local fuel delivery companies. Attendees at the CSR Bootcamp events included customer service representatives, customer service managers, office personnel, and owners from local fuel delivery companies.

Schedule

NEEDHAM, MA	NEEDHAM, MA	GREENWICH, CT	GREENWICH, CT
CSR Bootcamp	**High Blends Workshop**	**CSR Bootcamp**	**High Blends Workshop**
July 26, 2023	**July 27, 2023**	**August 21, 2023**	**August 22, 2023**

HIGH BLENDS INFRASTRUCTURE WORKSHOPS

HIGH BLENDS INFRASTRUCTURE WORKSHOPS

Agenda & Speakers

Opening Remarks

Paul Nazzaro, Nazzaro Group & Michael Devine, NORA

Overview of the turning point the liquid fuels industry is facing and how imperative it is for all members of the liquid fuels supply chain to address the barriers and solutions for increasing blends beyond B20 Bioheat® fuel.

Upstream Panel

Moderated by Paul Nazzaro, Nazzaro Group

Panelists share perspectives of production through delivery to regional terminals with a focus on feedstock varietal, fuel specifications, rail and marine delivery, and assurance of supply.

Panelists in Needham, MA

Tim Keaveney, Hero BX
Joseph Uglietto, Diversified Energy Specialists
Wayne Kennedy, Kennedy Consulting Group
Jeff Turner, CSX Rail Services

Panelists in Greenwich, CT

Scott Fenwick, Clean Fuels Alliance America
Jeff Turner, CSX Rail Services
Eli Peterson, Kolmar Americas, Inc.

Midstream Panel

Moderated by Michael Devine, NORA

Panelists discuss strategies covering receipt of product, storing blending, and monitoring quality as well as strategizing supply of ratable and competitive fuel. Additional discussion regarding equipment consideration for developing infrastructure to accommodate higher blends at the terminal level of the supply chain and retrofitting of delivery trucks for deployment of higher blends.

Panelists in Needham, MA and Greenwich, CT

John McCusker, Global Partners
Kevin Grant, Sprague Energy
Jeff Carpenter, USDA
Michael Trask, Trask Engineering
Ryan Rogers, Dead River Company
Jim Rennie, Westmor Industries

Downstream Panel

Moderated by Dr. Tom Butcher, NORA

Panelists representing the equipment industries tackle the subject matter of equipment designed to ensure exceptional consumer experiences with higher blends of biodiesel in Bioheat® fuel.

Panelists in Needham, MA and Greenwich, CT

Rich Lyons, Carlin

Roger Marran, Energy Kinetics

Brian Coyne, Mitco Sid Harvey

John Nally, Applied Technologies

Interactive Group Discussion

Moderated by Paul Nazzaro, Nazzaro Group, Michael Devine, NORA & Dr. Tom Butcher, NORA

Moderators preside over white board sessions to extract key elements of each panel's discussion and begin an interactive session to share highlights and capture insight from attendees on perceived challenges and opportunities.

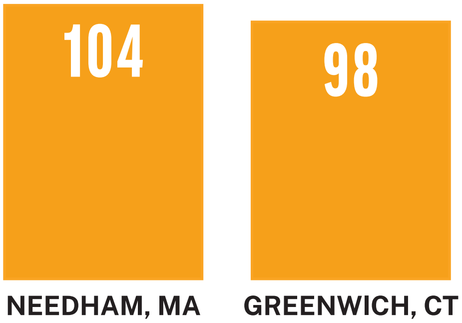
Program Wrap Up

Paul Nazzaro, Nazzaro Group & Michael Devine, NORA

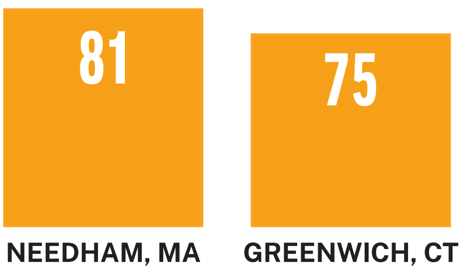
Overview of information learned and discussion for next steps to develop a road map to prepare the supply chain to accommodate higher blends of low carbon fuels to meet tomorrow's decarbonization expectations.

HIGH BLENDS INFRASTRUCTURE WORKSHOPS

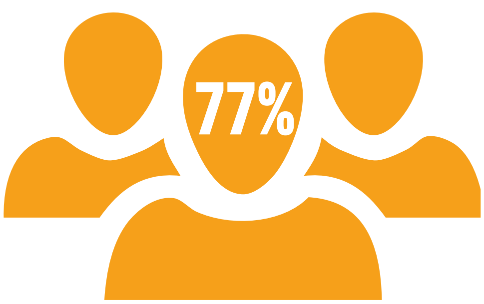
Registrations | 202 TOTAL REGISTRATIONS



Attendance | 156 TOTAL REGISTRATIONS



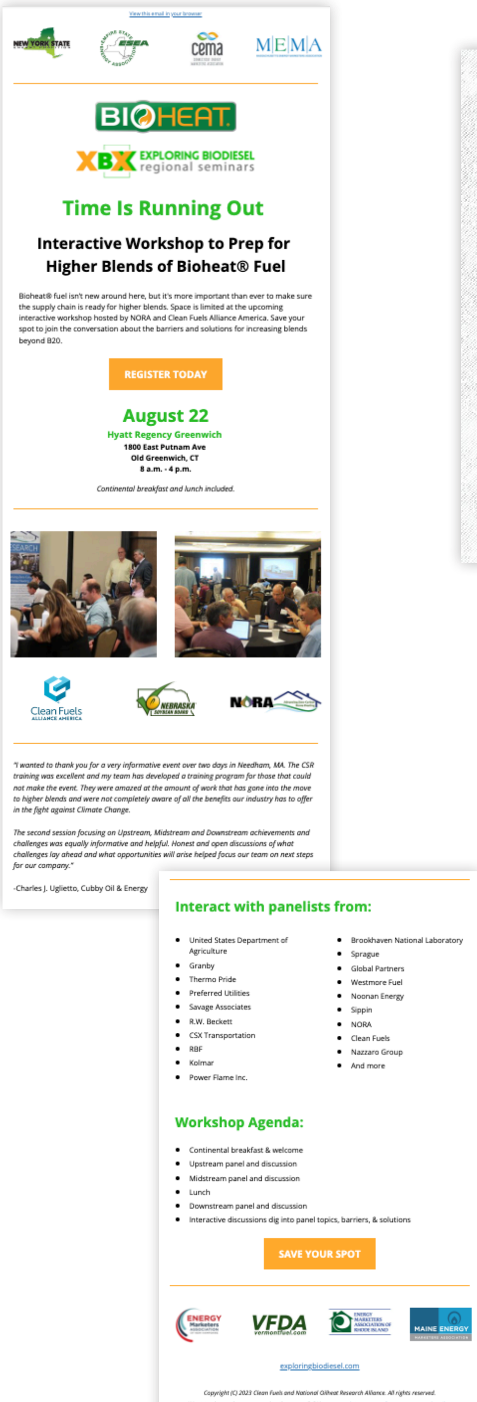
Attendance Rate



HIGH BLENDS INFRASTRUCTURE WORKSHOPS

Marketing Outreach

The High Blends Infrastructure Workshop events were promoted to a targeted audience of energy marketers in the surrounding areas of each location through a variety of channels, including email marketing, social media posts on Facebook and LinkedIn, and direct marketing through industry network contacts. Additionally, marketing materials were made available to local associations to share with their memberships.

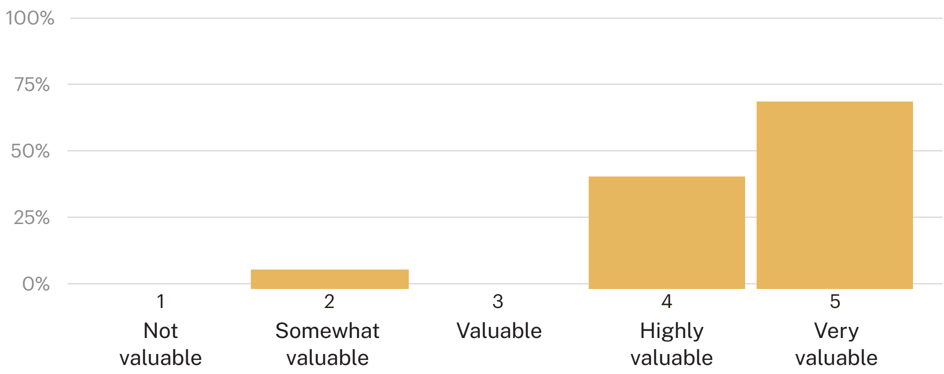


HIGH BLENDS INFRASTRUCTURE WORKSHOPS

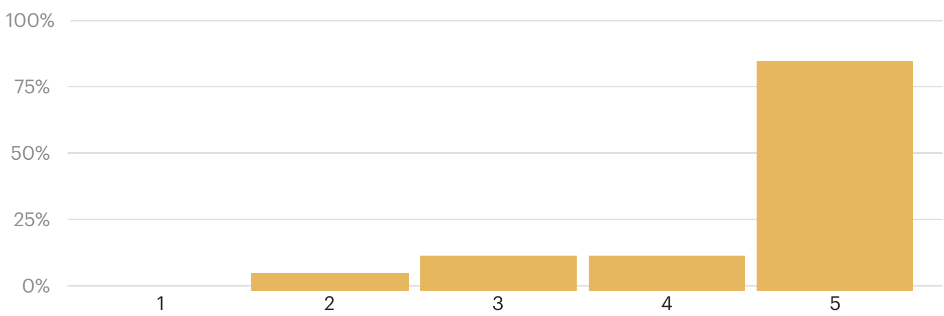
What Participants Had to Say

Attendees responded to a survey following their session to share their feedback.

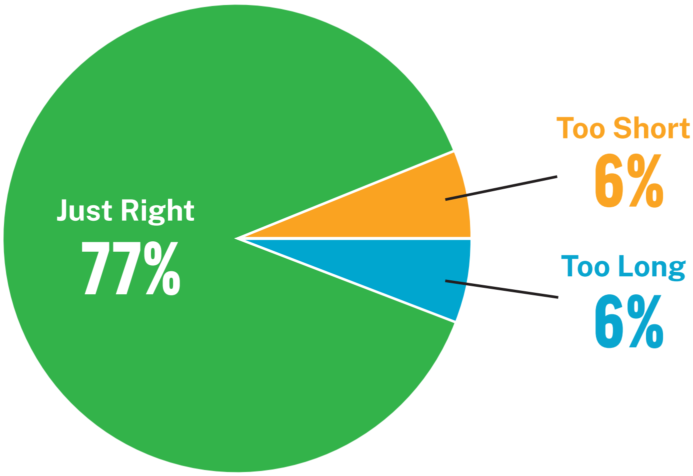
How valuable did you find the session? 17 responses collected.



How would you rate your interest in Bioheat® fuel? 18 responses collected.

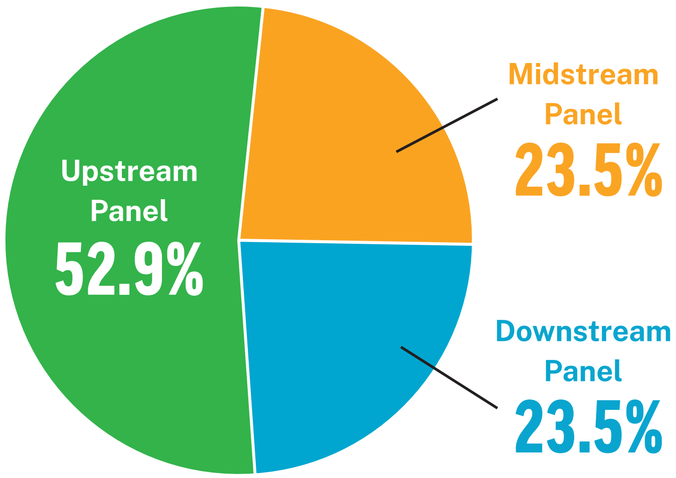


How would you rate the length of the workshop and the topics covered? 17 responses collected.



HIGH BLENDS INFRASTRUCTURE WORKSHOPS

Which panel did you find the most valuable? 17 responses collected.



What was your favorite part of the workshop? Some standout responses include...

"Learning all of the work necessary to transition an industry from selling carbon to a liquid renewable Bioheat® fuel."

"I personally gained more knowledge regarding CO reduction and the statistical data presented."

"I found the entire workshop valuable."

"I felt every speaker had good knowledge of their subject"

What did you feel could have been added to the curriculum? Some standout responses include...

"More in depth discussion on specific changes to the equipment that allow the use of higher bio-blends."

"More discussion about blending techniques."

"There are many uncertainties with what is coming with new legislation. Perhaps a mapping or timeline of (projected/actual) of when blends take effect."

Were there any topics you felt could have been removed or shortened?

The majority of respondents answered “None” and one suggested...

> “I think you should expand more on the CO reduction message and how to market it. Some of the small companies do not have the resources of marketing teams.”

Taking what you have learned, what questions have come to mind since your attendance that you would ask today specific to the area of interest you may have about up, mid, and downstream?

Some standout responses include...

> “I think producing a marketing packet for companies to buy and use would be invaluable in spreading the message of co-reduction and Bioheat® fuel. A united front among companies.”

> “Product constraints in the Northeast market.”

Key Takeaways

1. The demand to reach carbon-neutral blending levels will require greater infrastructure to support increased production.

Upstream panelists agree that expanded infrastructure is essential to support increased domestic production of biodiesel to meet higher blending goals, including expanded footprints for railroad transportation, diversity of feedstock sources, and year-round treatment and proactive tank maintenance to maintain product integrity in outdoor storage tanks.

2. Government incentives for production will be a significant motivator at the upstream level.

Transitioning tax credits from blending to production will incentivize more members of the upstream supply chain to decarbonize.

3. There are opportunities to resolve terminal storage challenges through consistent tank maintenance and increased demand.

Midstream panelists recommend improved storage methods for quality control and proper tank structure to prevent water issues and tank failures. Additionally, an increased demand for higher fuel blends would incur shorter storage timelines, which would help eliminate common storage issues.

4. Education for policymakers about renewable biodiesel and biodiesel is critical.

Policymakers are still uninformed about the distinction between biodiesel and renewable biodiesel and the opportunity for decarbonization that each fuel provides. Educating this audience is an important stepping stone towards reducing government limitations on feedstock technologies that could be used to meet increased demands for higher blends.

5. USDA grants for storage facilities are an important resource for the midstream of the supply chain to expand terminal storage capacity.

The federal government has hundreds of millions of dollars available in grants to fund fuel terminal storage facilities. Utilizing this resource will make investing in expanding fuel storage capacity more viable for the midstream level of the supply chain.

6. Manufacturers at the downstream level are committed to developing equipment that is compatible with higher blends.

Manufacturers are already producing equipment that is compatible with introductory blends of Bioheat® fuel and are actively working to adapt equipment components to successfully burn B100 Bioheat® fuel while maintaining combustion ratings. Downstream panelists agreed that manufacturers see decarbonization efforts as the only way forward to prevent "getting regulated out of business."

7. Misinformation among service technicians continues to be a challenge that must be addressed.

Service technicians continue to be skeptical about higher blends of Bioheat® fuel. Training and outreach for service department staff are critical to addressing reluctance towards new technology and preventing the spread of misinformation to the homeowner.

8. Consumer education and outreach is crucial to drive demand and help all levels of the supply chain move forward.

Adequate consumer education on the decarbonization opportunities of biodiesel, renewable biodiesel, and Bioheat® fuel remains an important element for progress at all levels of the supply chain. Consumer education will drive increased public demand for higher blends of Bioheat® fuels and influence policy decisions and individual purchasing choices.

CSR BOOTCAMP

NEEDHAM, MA

Agenda & Speakers

Opening Remarks

Paul Nazzaro, Nazzaro Group & Michael Devine, NORA

Clean Fuels 101

Paul Nazzaro, Nazzaro Group

Environmental Value

Dr. Jenny Frank, NORA

Climate Change Impacts in Massachusetts

Michael Ferrante, Massachusetts Energy Marketers Association

Understanding Today's Consumer

Michael Devine, NORA

Technical Considerations

Robert O'Brien, NORA

Dismissing Rearview Thinking

Paul Nazzaro, Nazzaro Group

CSR Real World Scenarios: The Sustainable CSR & CSR Negotiation 101

Kristen Williams, Consumer Focus Marketing & Michael Devine, NORA

CSR BOOTCAMP

GREENWICH, CT

Agenda & Speakers

Opening Remarks

Paul Nazzaro, Nazzaro Group & Michael Devine, NORA

Biodiesel: The Value Proposition & Inside Look at Bioheat® Fuel Marketing Positioning

Paul Nazzaro, Nazzaro Group

Understanding & Serving Today's Consumer

Michael Devine, NORA

Why Bioheat® Fuel Is Our Silver Bullet

Chris Herb, Connecticut Energy Marketers Association (CEMA)

Interactive Q&A Session

Paul Nazzaro, Nazzaro Group

Michael Devine, NORA

Chris Herb, CEMA

Rocco Lacertosa, New York State Energy Coalition (NYSEC)

Next Generation Thinking: Preparing Yourself to Talk Bioheat® Fuel with Your Customer

Paul Nazzaro, Nazzaro Group

Understanding the WHY: Why Providing Exceptional Service Is Essential for Customer Satisfaction

Kristen Williams, Consumer Focus Marketing

The Sustainable CSR

Michael Devine, NORA

Mapping Out the Future: An Interactive Session that Explores Real-Life Encounters

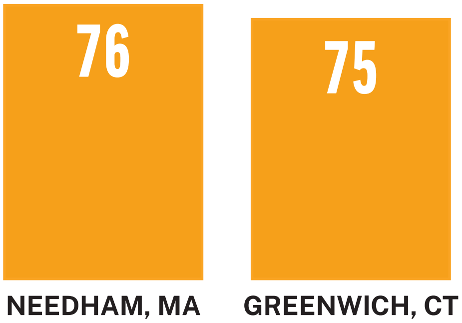
Kristen Williams, Consumer Focus Marketing

Paul Nazzaro, Nazzaro Group

Michael Devine, NORA

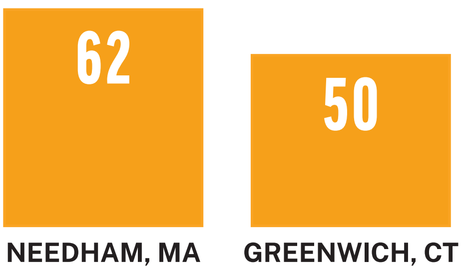
CSR BOOTCAMP

Registrations | 151 TOTAL REGISTRATIONS

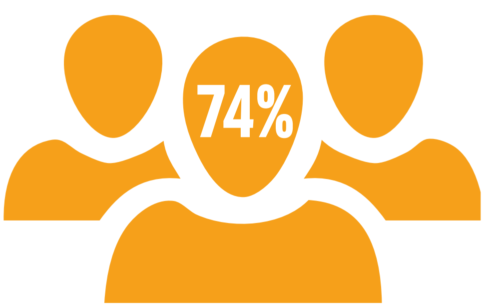


Participants said...
"I enjoyed the customer service aspect of the workshop. I left leaving with a better sense of my role in this business."

Attendance | 112 TOTAL REGISTRATIONS



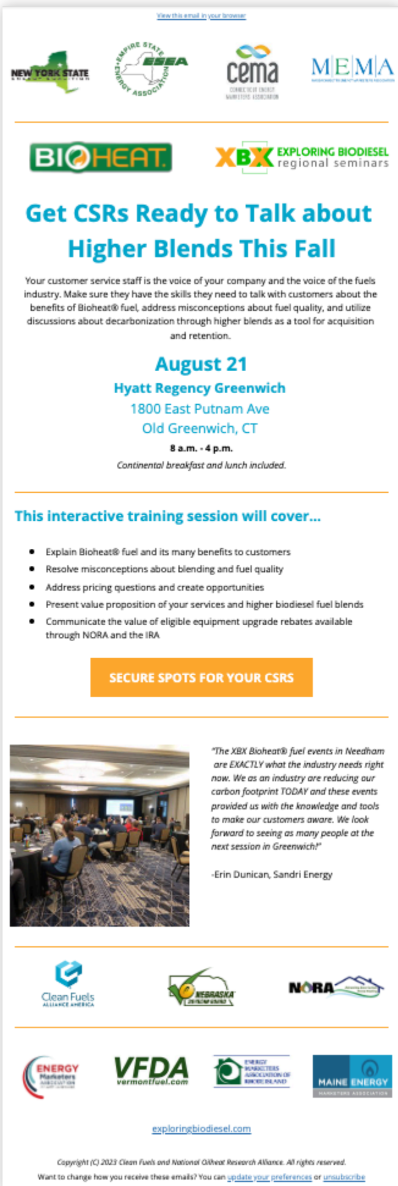
Attendance Rate



CSR BOOTCAMP

Marketing Outreach

The CSR Bootcamp events were promoted to a targeted audience of energy marketers in the surrounding areas of each location through a variety of channels, including email marketing, social media posts on Facebook and LinkedIn, and direct marketing through industry network contacts. Additionally, marketing materials were made available to local associations to share with their memberships.



What Participants Had to Say

Attendees responded to a survey before their session to ask questions and identify challenges.

Can you provide at least one example of a difficult scenario you've encountered as a CSR?
20 responses collected. Some standout responses include...

"Customer that would not listen or reason when trying to help them solve a problem."

"The full definition of what Bioheat® fuel is and explaining how it is cleaner for our environment."

"Irate customer over pricing."

"Discussing the benefits of Bioheat® fuel after another company came out to service a unit...telling them anything over B5 was damaging the system. We are still having to largely educate customers about Bioheat® fuel and its benefits."

"Speaking to customers that want to bargain pricing on services that they have not educated themselves on. Not comparing apples to apples, just looking at price point only."

Can you describe any tools, skills, or informational resources that would make your job easier if you had access to them? Some standout responses include...

"Maybe a graphic that shows Bioheat® fuel efficiency vs. Regular heating oil which can be emailed to a potential customer."

"Conversation strategies, listening techniques, and diffusion reminders..."

"Confidence in the reliability of Bioheat® fuel."

"Print outs on different scenarios and what to say for each."

"A laminated card that I can keep next to my phone breaking down the benefits that Bioheat® fuel provides the homeowners."

Key Takeaways

1. Customer service teams need consistent training on the environmental benefits and technical aspects of Bioheat® fuel.

There is still a lack of information and an overall need for more training about the environmental benefits and technical aspects of Bioheat® fuel at the customer service level. The majority of customer service representatives would benefit from more Bioheat® fuel training and resources to increase confidence in explaining why Bioheat® fuel is a great alternative energy resource and addressing concerns about equipment performance during conversations with customers.

2. Ongoing education and readily available resources about Bioheat® fuel are essential for continued success.

Printout and digital resources highlighting technical facts, environmental benefits, and common customer questions about Bioheat® fuel will reinforce skills and information learned at Bioheat® fuel training sessions. This will help customer service teams develop department-wide messaging to avoid confusion for consumers and maintain satisfactory interactions.

3. Staff members at all levels continue to benefit from training opportunities.

Customer service training isn't just for entry-level team members. Ongoing education for all levels of the customer service department will help individual employees continue to build their skills and reach new professional milestones while encouraging a shared mentality for continual progress.

4. Helping customer service representatives build their skills for negotiation and differentiator discussions is a worthwhile investment for energy companies to grow their business and respond to changes related to public decarbonization efforts.

The skills required for successful customer negotiations and differentiator discussions can serve a dual purpose for companies at the retail level of the liquid fuels industry. Customer service representatives can apply these skills to interactions that are typical to the fuels industry (customer complaints, price negotiations, retention and migration, product upsells, etc.) and to interactions specific to Bioheat® fuel.

Report created by Consumer Focus™
600 State Street, Suite 7 • Portsmouth, NH 03801
(603) 427-8325 • consumerfocusmarketing.com

NORA Research Update

Board of Directors Meeting
Southern New England Energy Conference
Newport, R.I.
September 2023

Tom Butcher, Technical Director
National Oilheat Research Alliance

CFAA Tasks

1. In-Lab Head Coking Tests
2. Expand High-Blend Field Tests
3. Cold Flow Testing
4. Filtration Studies
5. Work with Equipment Manufacturers on High Blend Questions
6. Support UL Processes
7. Monitor and Troubleshoot Quality Issues in the Field
8. White Papers, Topical Reports, and Conference Presentations as Needed
9. Emissions Screening for Additional B50, B100 Data
10. Studies on Outside Fuel Storage Tanks and High Blends
11. Education Tools for the Transition to High Blends

B100 Field Testing

Long Island– 12 sites, including some “prototype” equipment;
Mass. – 7 sites, a distilled biodiesel.

- Preparing to continue and expand testing this heating season;
- Will implement in the field measures learned to minimize head coking;
- Seek to add additional furnaces to test set;
- Focus on impact of deliveries on particulate mass and size distribution at the bleeder, B100 vs B0;
- First Long Island site fall deliveries have been made;
- Site visits in Mass happened earlier this week.

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In-House Head Coking Tests

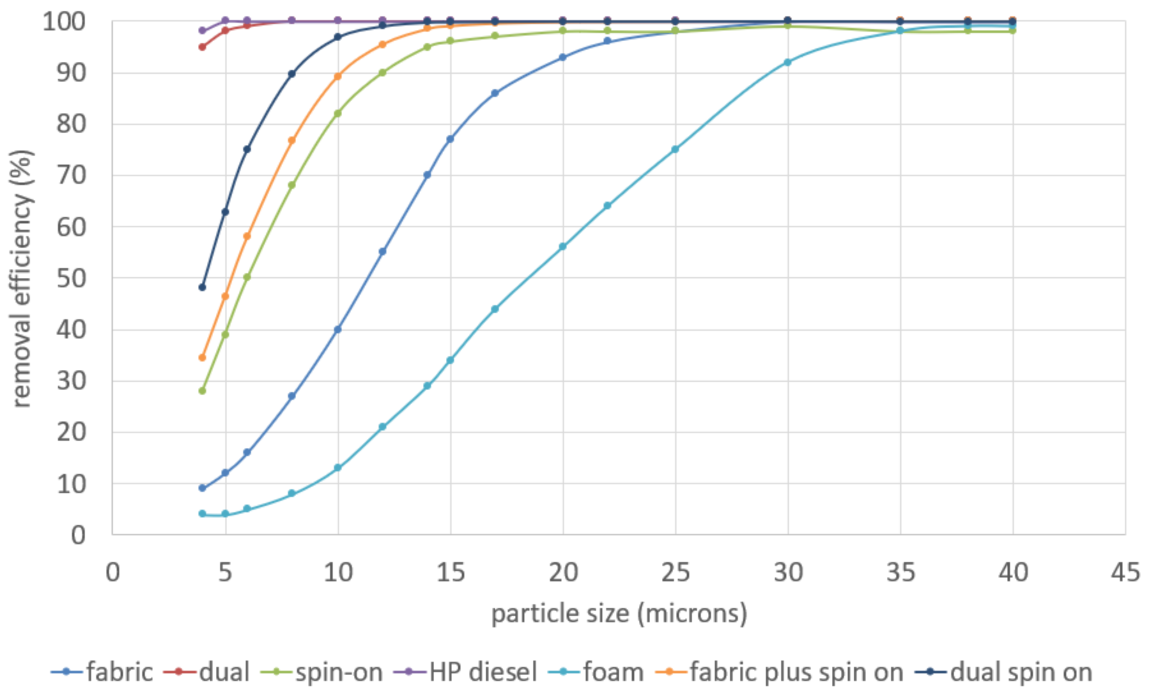
Currently two boilers operating in parallel, 4-day tests with heavy cycling;
Peerless “hot” chamber / Buderus “cold” chamber triple pass;
35 different conditions have been explored to date;
Results to date, factors that minimize coking:

- higher pump pressure
- hotter chamber / head
- reduced cycling
- head adjustments can help

Testing with Renewable Diesel has started this week.

Filter Performance

Our prior results have shown that the filtration efficiency of common cartridge filters is quite poor;
We have added to our equipment a PAMAS, laser-based particle counter that gives us particle size distribution;
Using this to better understand filter performance under different conditions in the field;
Draft report on work done to date has been completed.



Field Filtration Test Results - Example

Pump bleeder test – 14 micron particles per ml

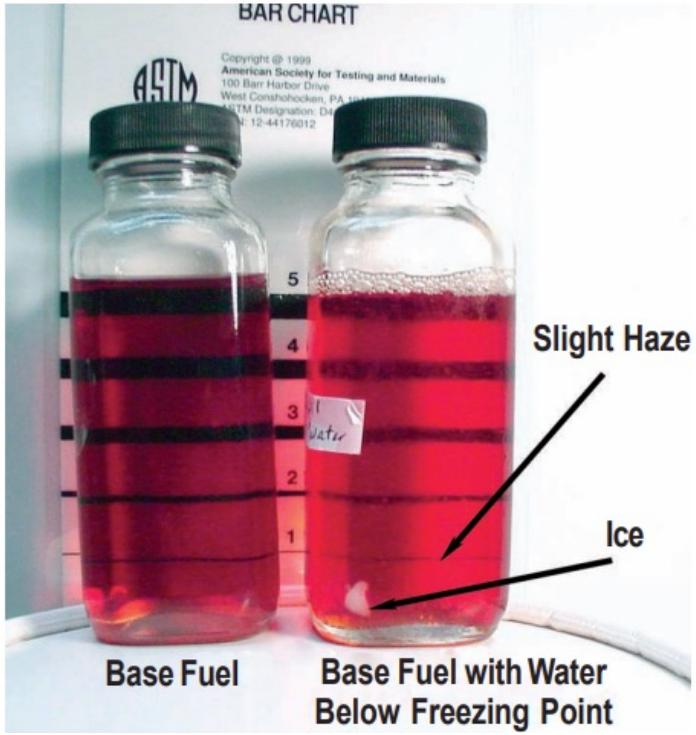
Case	Particles per ml
ISO Diesel Standard	80
After Summer	59
24 Hours After Fall Delivery	148
After 1A Filter at Tank – 24 Hours	443
Before 1A Filter at Tank- 24 Hours	8,862

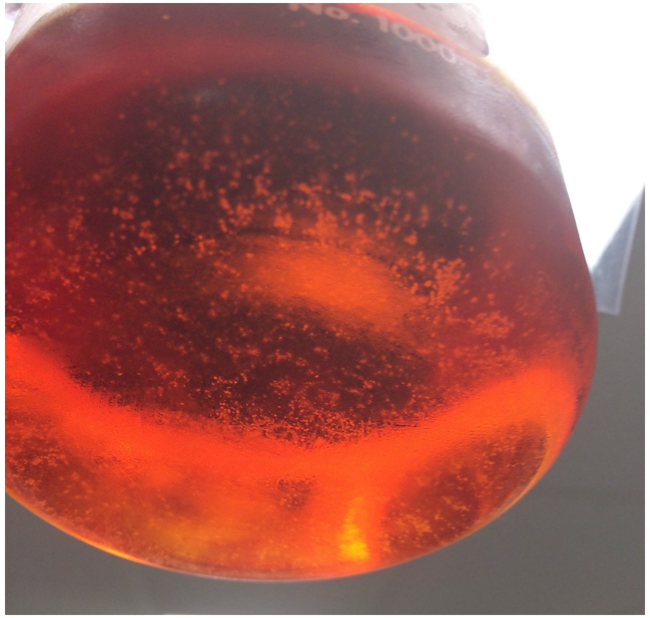
Cold Flow Testing - CEMA

- Last heating season we started a test of different heaters in outside B100 tanks;
- We had two failures with a high cloud B100 under very cold conditions;
- Tests are to continue this heating season with some changes to the tank arrangement, a stronger line heater, and additional sensors.

Cold Flow Additive Testing

- New additives can dramatically reduce pour point while changing cloud point very little;
- This means we could have, in the field cloudy fuels;
- Our tests are focused on evaluating filtration of fuels in this “cloud zone”;
- We have just added to the NORA lab a chest freezer and will be starting tests soon.





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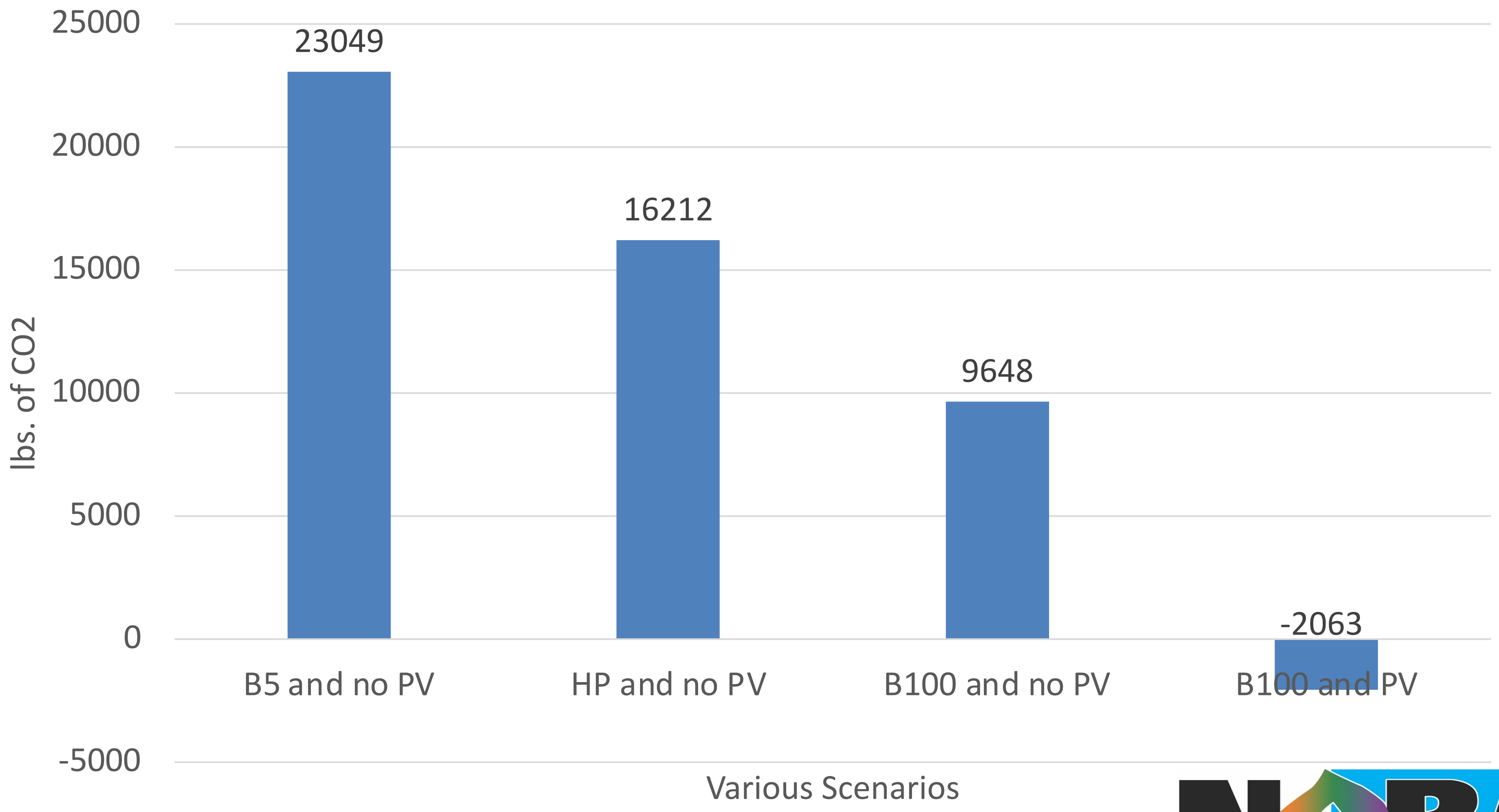
Net Zero Home – First Year Actual



NATIONAL OILHEAT RESEARCH ALLIANCE NORAweb.org

Ethyl Levulinate

- Focus is on support for ASTM Standard Process;
- Draft specs were presented to the ASTM Committee in June;
- We have received a new 5 gallon sample of EL, freshly produced;
- The as-received sample has an acid number higher than our draft specification;
- Detailed testing now in progress in collaboration with Biofine to help understand reasons for this;
- We may change spec to include a levulinic acid content vs an acid number limit;
- In-lab tests on oxidation stability, acid formation over time, and impact on steel coupon corrosion are now underway.

Reports

- Filtration – internal report completed
- Outside Tank Testing at CEMA – internal draft completed
- Field Testing Report – internal draft near completion
- Purple Air Report – draft near complete, planning publication
- Net Zero Home Paper for Publication – near complete
- Net Zero Home – ASHRAE Seminar Proposal Submitted

Thank you! NORA R&D Team

- Tom Butcher
- Neehad Islam
- Ryan Kerr
- Michael Persch
- Robert O’Brien
- Jenny Frank

NORA Education Update

Bob O'Brien
Newport , RI

September 28, 2023

NATIONAL OILHEAT RESEARCH ALLIANCE

Expanding Education

- Techs
- CSR's
- Instructors
- Consumers

Accredited Instructor Program

- Instructors are technically oriented but….
- Improve classroom & teaching skills
- CEU’s?
- First session was 6/6-6/9 2023

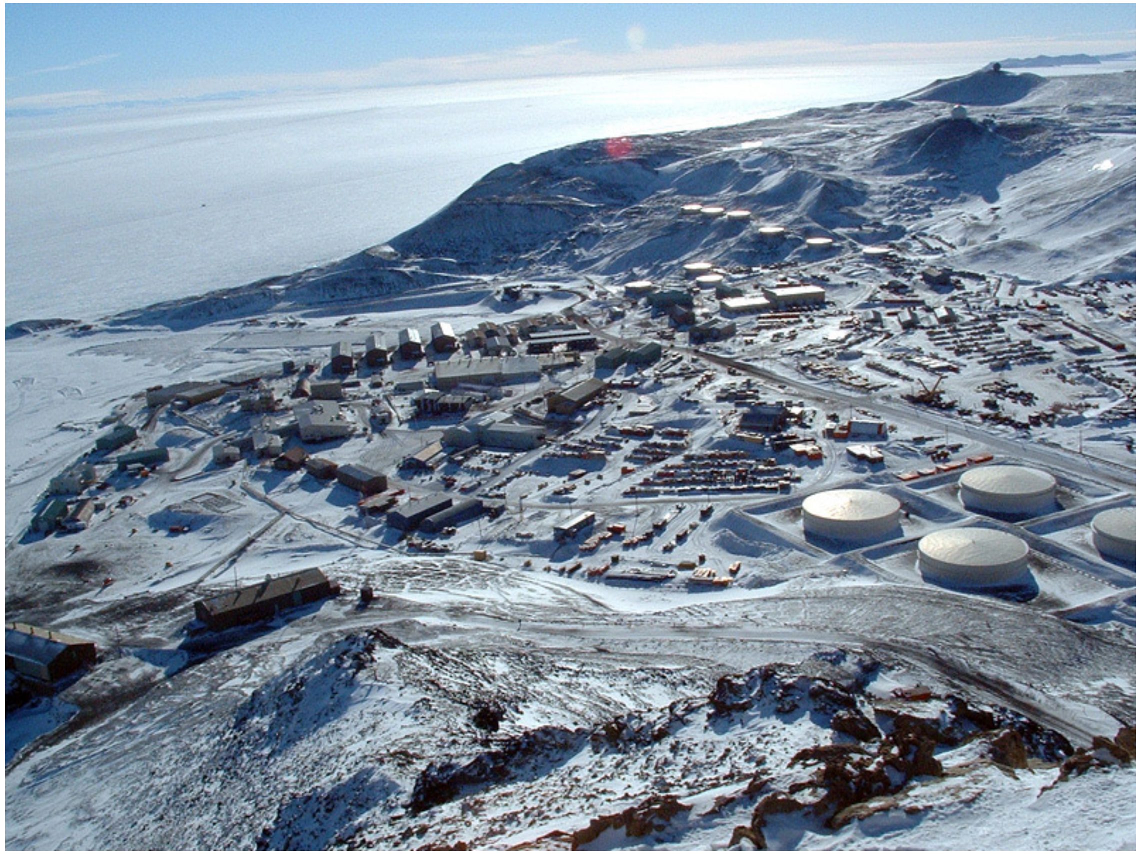
Accredited Instructor Program

- Outcome based education
- Three day program
- Next session in January 2024

CSR Certification Program

- CSR's are the voice of the industry
- Developed from CSR Workshops in MA & CT
- Technical training for Non-Technicians
- Understanding Bioheat
- Empowering CSR's
- 2024 Kickoff

Antarctica



Alaska DOC

- Establish an oil-heating curriculum in multiple facilities
- Approved and out for bid
- Provide support

Workforce Development

- Recruitment is essential & existential!
- Gen Z & Millennials
- Petroleum?
- Renewable Fuels!

EPA 608 Testing

- NORA is now approved to administer EPA 608 exams both in person and online
- Needed to purchase and handle refrigerants
- Hybrid systems

Building Performance Association

BUILDING PERFORMANCE ASSOCIATION

- Exhibiting in Springfield MA
- November 7-8 2023
- Energy Auditors, HVAC contractors
- Renewable fuels as the fastest decarbonization solution

ICC Conference

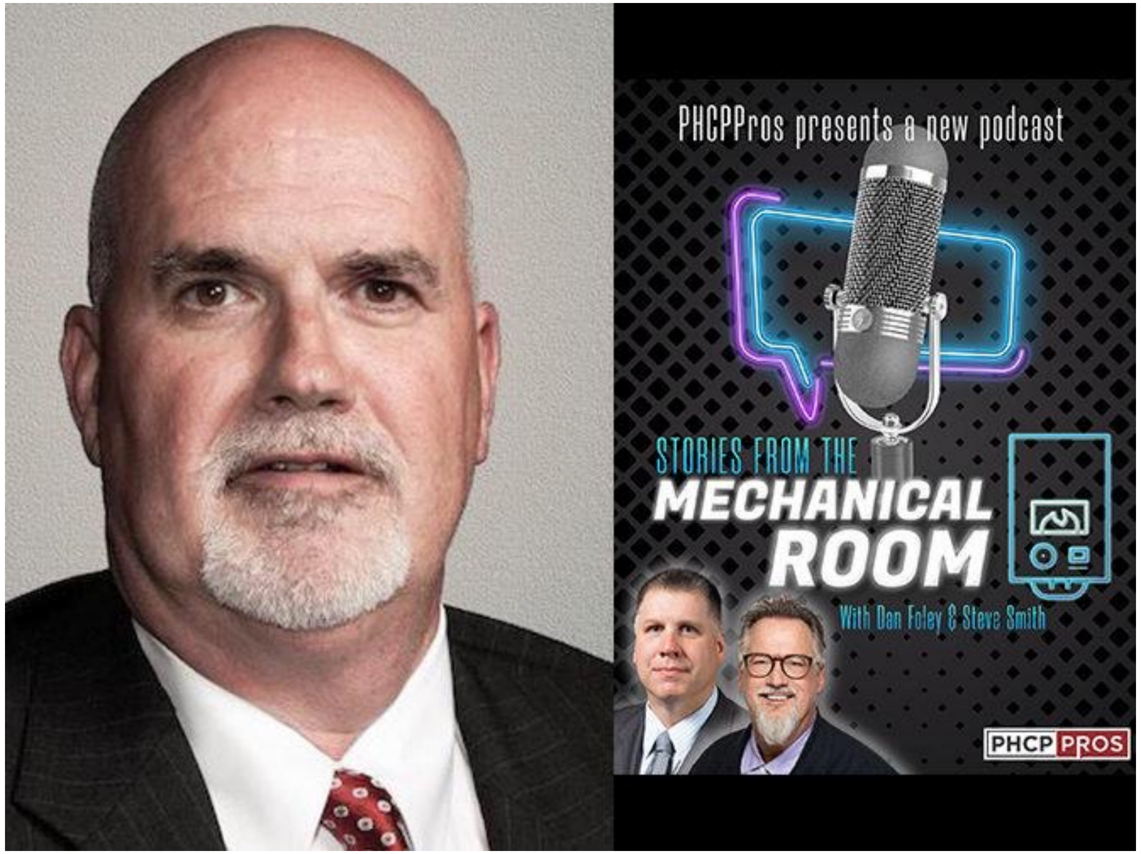
- Raise awareness of renewable liquid fuels
- Code officials, Inspectors, AHJ's
- Exhibiting in St Louis
- October 8-11 2023

HVAC Excellence

- HVAC and P&H communities aren’t familiar with renewable fuels
- Nationwide conference for HVAC educators
- 2023- Introducing Technicians to Liquid Renewable Fuels
- 2024- Decarbonizing Hydronic Systems

Podcasts


Episode 33
WITH
BOB O'BRIEN
NORA
DID YOU KNOW?
RENEWABLE FUELS ARE AN IMPORTANT PART OF THE DE-CARBONIZATION MOVEMENT


PHCPPros presents a new podcast
STORIES FROM THE
MECHANICAL
ROOM
With Dan Foley & Steve Smith
PHCP PROS

IECC

- 2021- Connecticut & New Jersey
- 2018 – Delaware, Maryland, New York and Pennsylvania
- 2015- Massachusetts, Maine, New Hampshire, Rhode Island and Vermont

IECC

INTERNATIONAL ENERGY CONSERVATION CODE

• Commercial

- Successfully kept combustion of liquid fuels in the code
- Blocked heat pump infrastructure
- NORA submitted a proposal to include renewable liquid fuels as eligible to offset on site renewable energy requirements
- Passed subcommittee 9-2
- Failed in main committee 17-10

• Residential

- NORA submitted a proposal to include Energy Star B20 rated Boilers & Furnaces as more efficient HVAC options to meet code requirements
- Passed subcommittee 5-2
- Failed main committee 19-10
- Proposed & passed new definitions

INTERNATIONAL ENERGY CONSERVATION CODE

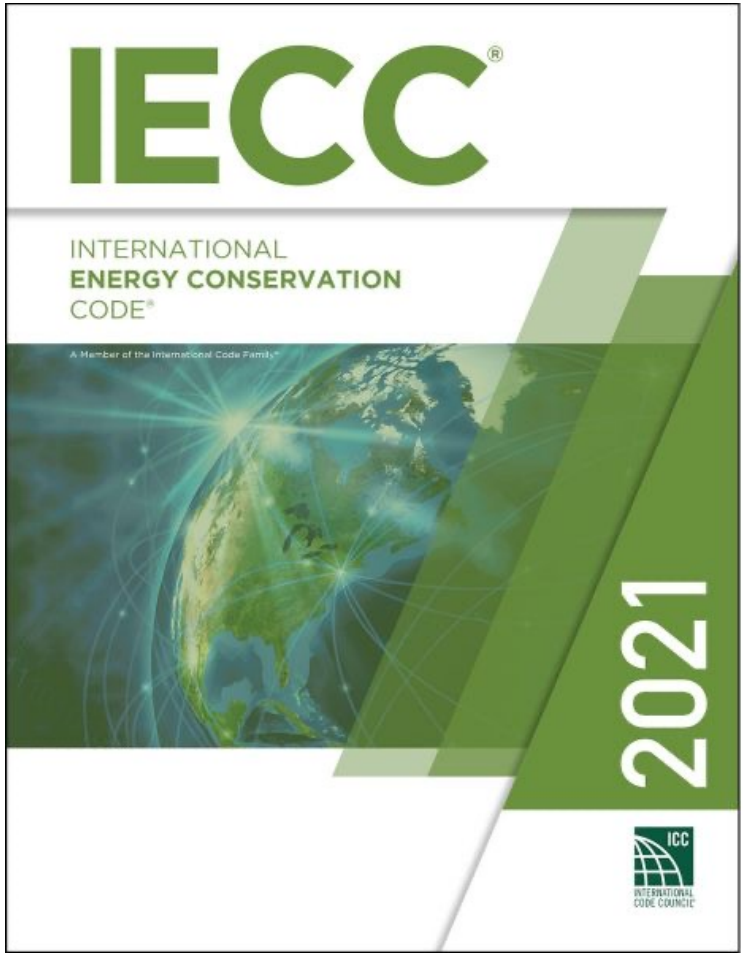
- **2024 International Energy Conservation Code [CE Project]**
- **Add new definition as follows:**
- **BIODIESEL BLEND.** A homogeneous mixture of hydrocarbon oils and mono alkyl esters of long chain fatty acids.
- **FUEL GAS.** A natural gas, manufactured gas, liquified petroleum gas or a mixture of these.
- **FUEL OIL.** Kerosene or any hydrocarbon oil having a flash point not less than 100°F (38°C).
- **LIQUID FUEL.** A *fuel oil* or biodiesel blend.
- **Fuel oil replaced by liquid fuels throughout code**

NORA Code Committee

Reps from across industry

Formulate plan to promote renewable liquid fuels as a decarbonization option

Organize a defensive strategy against anti-combustion and anti-renewable fuel proposals



IRA 2022 - Hope For Homes

- Homeowner Managed Energy Savings
- $2K greater than 20% but less than 35%
- $4K greater than 35%
- Doubled for low income
- State administered rebate
- Modeling based on BPI 2400 standard, no fuel exclusions

High Efficiency Electric Homes Rebate Act

- Funds disbursed as rebates through states- $4.3B
- Hybrid systems not precluded federally, by states?
- 8/24 Deadline
- Air to air, air to water both ducted and ductless
- 25C credits available now-30% up to $2K annually

HEEHRA Rebate Levels
For Qualified Electrification Projects

Income Eligibility and % Costs Covered	
Low-income: <80% Area Median Income (AMI) % costs covered (including installation)	**100%**
Moderate-income: 80-150% AMI % costs covered (including installation)	**50%**
Overall Incentives	
Max consumer rebate	**$14,000**
Max contractor rebate	**$500**
Rebates for Qualified Electrification Projects	
Heat pump HVAC	**$8,000**
Heat pump water heater	**$1,750**
Electric stove/cooktop	**$840**
Heat pump clothes dryer	**$840**
Breaker box	**$4,000**
Electric wiring	**$2,500**
Weatherization insulation, air sealing, ventilation	**$1,600**

Tax Credit vs. Rebates?

- They can be combined
- The rebate reduces the cost basis for tax credit
- For Example: $2K rebate on $10K boiler installation through HOMES
- $10K- $2K = $8K cost basis
- 30% of cost or $600 whichever is less= $600 tax credit

NORA Silver = BPI Heating Specialist

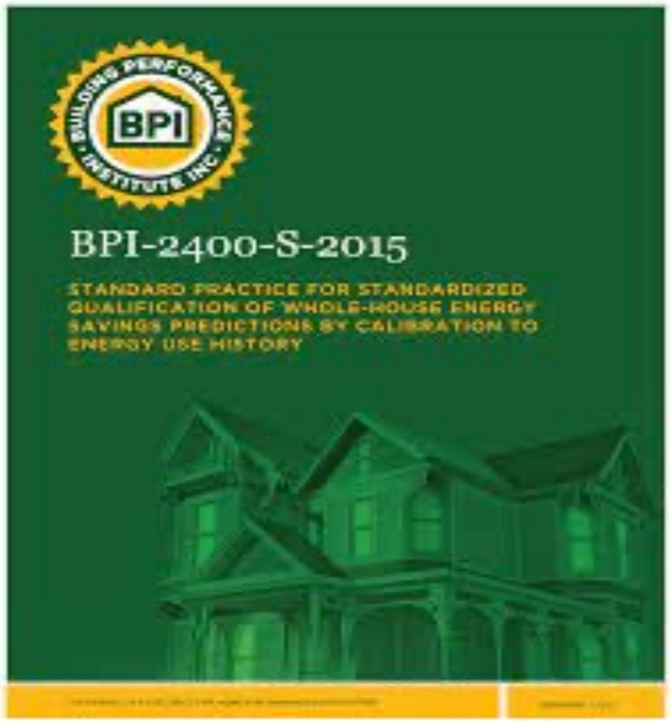
- Working to incorporate BPI BA training & testing
- Anyone can challenge test-Training?
- Both written and field test are mandatory

NORA/BPI

- Part of the solution vs. ?
- State /Federal programs
- Diversification opportunity
- BPI Standards Technical Committee – JL & RO
- Heating oil to liquid fuel- reduce CO limit 400PPM-100PPM

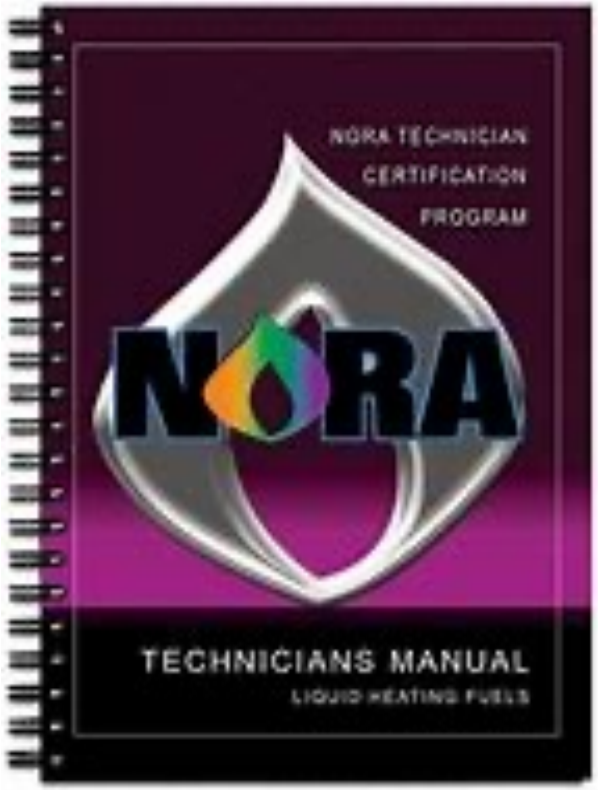
BPI 2400

- Protocol to predict energy savings for various upgrades
- Sec of DOE can authorize alternate methods to quantify potential savings
- QA required
- HPwES requires both BPI building analyst & heating specialist certification



Curriculum Updates

- E-book
- Audiobook
- Power points
- Quizzes
- 2800+ sales
- Biofuels update

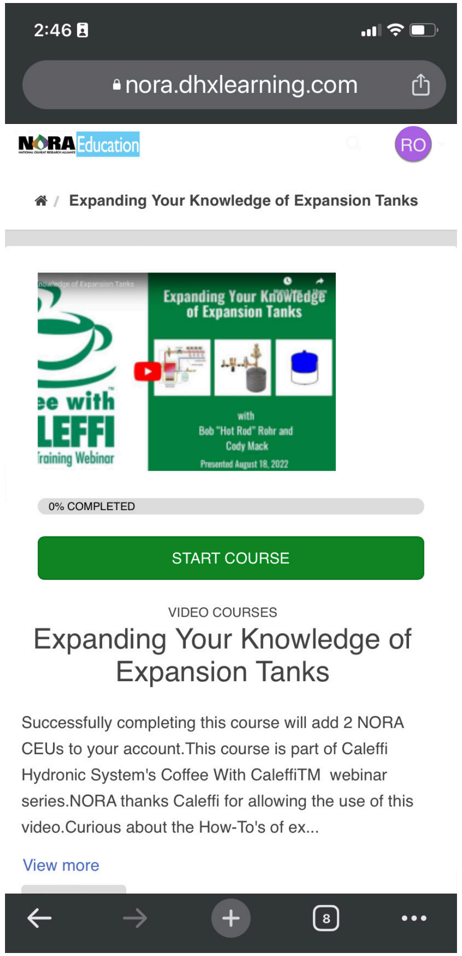


CEU's

- All renewals and upgrades are done via CEU's not testing

- Adding new video classes continually

- Most recently 5 from Caleffi



Bioheat Prerequisite

NORA LEARNING

NORA's Main Site | About NORA Certification | Technicians Manual | Technical Resources

Required Course

IMPORTANT

Effective December 9, 2022, all recertifications and certification upgrades require the course

Bioheat® Technical Guidance (NORA-109-1)

BRONZE CERTIFICATION

To upgrade to Silver Certification, twenty NORA approved credits (CUEs) are required along with three years in-field experience. Two of the twenty CEUs must come from the "Bioheat® Technical Guidance" course.

SILVER CERTIFICATION

To renew silver certification, twenty-four NORA approved credits(CEUs) are required. Two of the twenty-four CEUs must come from the "Bioheat® Technical Guidance" course.

GOLD CERTIFICATION

To upgrade to Gold certification, Silver certification is required along with five years experience and completing four of the NORA Gold Advanced courses. In addition to these, the "Bioheat® Technical Guidance" course is required.

To renew to Gold certification, twenty-four NORA approved credits(CEUs) are required. Two of the twenty-four CEUs must come from the "Bioheat® Technical Guidance" course.

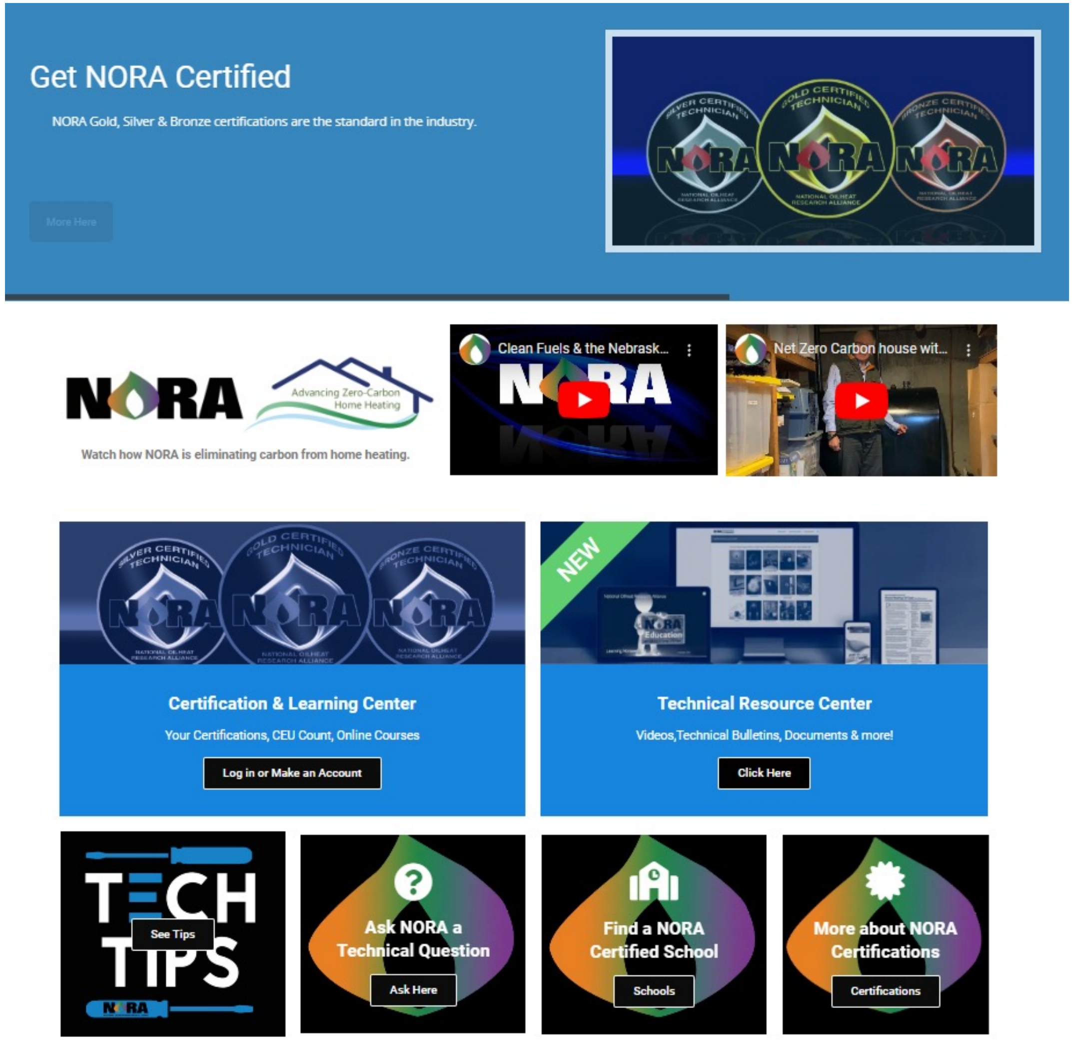
Look for this course in "Online Courses"

VIDEO COURSES

Bioheat® Technical Guidance (NORA-109-1)

Technical Resource Center

- Continually updateable
- OEM bulletins & guides
- OEM videos
- NORA generated content
- Short task-oriented videos
- “Living addendum”
- Social Media




ANY
QUESTIONS?