Ag Innovation News

Feb-Apr 2023, Vol. 33, No.1

The newspaper of the Agricultural Utilization Research Institute

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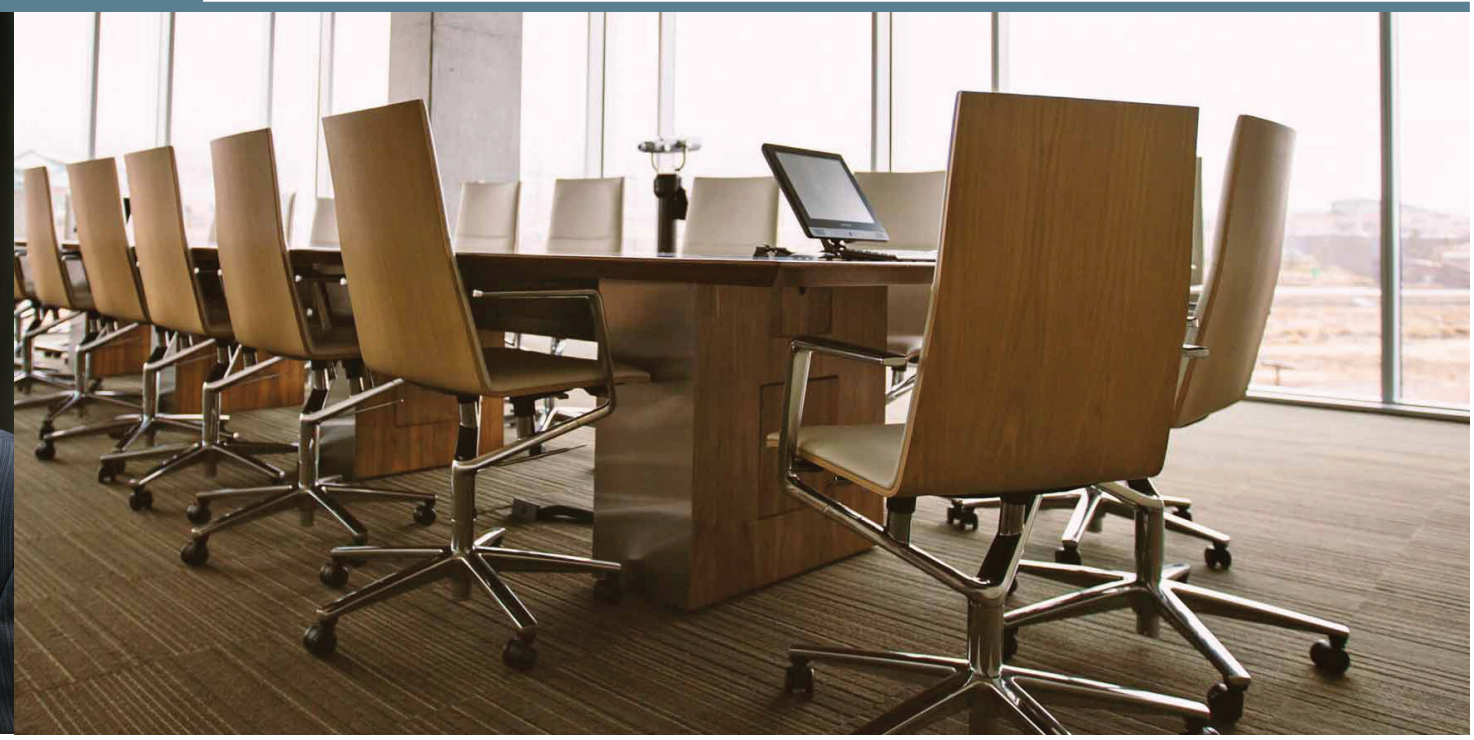

ONE OF THE KEYS TO SUCCESS IS HAVING A BOARD COMPRISED OF INDIVIDUALS WHO OFFER A BREADTH OF KNOWLEDGE AND EXPERIENCE AS WELL AS UNIQUE PROFESSIONAL BACKGROUNDS

In light of the retirement of one of AURI's longest-serving board members and past Board Chair, Ron Obermoller (learn more on page 3), I've been thinking a lot about the importance of having a robust Board of Directors and a director's role in an organization's success. More specifically, the key is having a board comprised of individuals who offer a breadth of knowledge and experience as well as unique professional backgrounds that can communicate their ideas and philosophies in a way that advances the mission of AURI. This is no easy thing to do on an individual level, and it's even more difficult to find the right combination of expertise and approach that enhances these qualities.

AURI has been blessed with strong interest in its open board positions and new board members over the last several years. I have enjoyed the positive experience of working with board members from various commodity groups, agribusinesses, the legislature and the entrepreneurial sector. As such, AURI has benefited from their leadership and forward looking vision to advance Minnesota agriculture.

Now as we have entered the new year, AURI has four new members that I'd like to welcome to our Board of Directors.

Senator Aric Putnam, the Chair of Senate Agriculture, Broadband and Rural Development committee. Sen. Putnam represents Senate District 14 and lives in St. Cloud, Minn. with his wife and two children.

Rep. Samantha Vang, the Chair of the Agriculture Finance and Policy Committee. First elected in 2018, Rep. Vang serves the citizens of House District 38B, which includes Brooklyn Center and Brooklyn Park.

Joe Serbus, the current Board Chairman for the Minnesota Soybean Research and Promotion Council and longtime farmer from Bird Island, Minn.

Lauren McNamara, Vice President and Assistant General Manager, Plant Based Food & Beverage for SunOpta, which is located in Eden Prairie, Minn.

Each of these new board members bring unique perspectives, a wealth of industry experience and a passion for exploring the possibilities value-added agriculture has to offer. I believe their contributions to AURI will have a positive impact on the state and regional agriculture industry and innovation ecosystem. Please join me in welcoming them to AURI!

Board Spotlight

Q&A with Board Director, Ron Obermoller

This quarter, Ag Innovation News bids a fond farewell to former Board Chair and longstanding board member, Ron Obermoller. After more than a decade spent serving AURI faithfully and diligently, Ron has termed out of his director seat and retired from the board. In the lead-up to his retirement, AIN staff interviewed Ron to learn more about his wealth of experience and explore the next steps on his personal and professional journey.

In doing so, Ron shared highlights from his time at AURI and his vision for the future. As you read on, we hope you will join us in celebrating Ron's contribution to value-added agriculture and to AURI over the years. His significant impact on both will be felt for years to come.

What are some of the highlights of your time on the AURI Board? Do you have a favorite memory?

RO: I keep thinking of the Bio-Char presentation a couple of years ago. Here comes a rural-looking group to present and they had developed a way to continually make pretty much anything organic into charcoal with pieces of scrap form their backyard. Great lesson for me to not judge people by my first impression.

In your time on the AURI Board, what has been the most challenging? Similarly, what has been the most rewarding experience?

RO: For me, the most challenging experience might have been getting my fellow board members to see the potential of what AURI could become. It took a lot of work to help them take off their everyday cap and put on their AURI cap.

What do you feel has been your greatest success as the Board Chair?

RO: That's easy—my greatest success was working with legislators from both sides of the of the aisle at the state capitol to build support for AURI.

What has changed most about AURI during your time on the board?

RO: During my tenure, I'd have to say the biggest change was the organization's work culture. Thanks to the work of many, AURI became a place where people wanted to come to work. It became a place where everybody's opinions mattered where everybody's efforts mattered. The whole culture improved to be a model for other organizations.

What will you miss most about being an AURI leader?

RO: I'll miss the people the most. The staff, the board, the clients—all of them. They teach me something new at every board meeting and everyone is engaging while working for the common good of moving Minnesota forward.

What would you like your legacy at AURI to be?

RO: That's a harder question. I guess I'd like to be remembered for having set up AURI for a much larger impact in Minnesota's rural areas. AURI is now a lot stronger and on the verge of explosive growth. The end result is all of Minnesota will benefit from this.

What's next for you?

RO: I'm not sure yet but I know I won't fully retire. I plan to stay involved with some agricultural groups but I don't have a definite plan at this time.

As you move into the next chapter of your life, do you have any advice for future AURI board members?

RO: The best advice I can give is this: be optimistic for the future of AURI and don't forget to dream. There is a place for all sizes of dreams, the little ones that change a single person's life and the big ones that impact the whole state and beyond.

Federal Grant Expands AURI Support for Producers

By Dan Lemke

While the Agricultural Utilization Research Institute (AURI) is already positioned to provide unique resources to develop innovative uses for agricultural products, a recently awarded federal grant will help it expand capacity to producers to assess and respond to emerging value-added opportunities.

Funded through the U.S. Department of Agriculture (USDA) Rural Development, the Agricultural Innovation Center (AIC) awards grants to eligible organizations that provide technical assistance to agricultural producers to help them develop and market value-added agricultural products. AURI was awarded $500,000 and matched 50% of the federal funds through its long-term partnership with the Minnesota Legislature to benefit the state's agriculture economy.

AURI worked with stakeholders to gauge industry needs and narrow the focus of its application. "With the work being centered on producers, we were looking at how we can serve them best," said Jennifer Wagner-Lahr, AURI senior director of business development and commercialization.

AURI's Center will leverage existing programs, the knowledge and expertise of AURI's project and technical staff, as well as the organization's unique facilities, to deliver several services to agricultural producers in Minnesota and surrounding states. Federal funds will enable the Center to reach an expanded number of producers. In addition to serving a wide array of value-added agricultural products, Wagner-Lahr said the Agricultural Innovation Center funding will allow AURI to add some additional capabilities in the areas of market research analysis and biogas production.

Through the Center, AURI will offer a variety of one-on-one technical assistance for producers developing value-added agricultural products. Staff will also develop both educational materials and seminars for individual producers interested in furthering value-added agricultural products.

What technical assistance does the Agricultural Innovation Center Offer?

AURI's newly formed Agricultural Innovation Center will provide direct services to producers in Minnesota and surrounding states. That assistance includes:

Business development services.
The Center will provide direct services and referrals related to feasibility studies and business planning.

Market development services.
The Center will assist agricultural producers with efforts related to marketing plans, branding, customer identification and market intelligence.

Process development services.
The Center will provide engineering services, scale production assessments, systems development and other technical assistance related to the development, implementation, improvement and operations of processes and systems.

Value chain coordination.
The Center will connect agricultural producers to distribution systems, developers, processing facilities and commercial kitchens.

Product development.
The Center will offer ideation, concept testing, feasibility and cost analysis, demographic and consumer analysis, production analysis, evaluation of packaging and labeling options and brand development.

Additional Expertise

The Agricultural Innovation Center funding will support the hiring of a market research analyst who can assist producers in evaluating their options for the development of value-added ag products. Wagner-Lahr stated that the product development process can involve a wide range of AURI technical assistance, and that adding a market research analyst will help entrepreneurial producers refine their business and marketing plans.

“One of the things that became clear is that we are missing the deeper market research perspective that could amplify the work of our team and better inform our clients around their opportunity area of interest,” Wagner-Lahr said. “Farmers have a lot of options in terms of what value-added ag products they could produce and where to market them. They’re kind of starting at ground zero.”

“The market research analyst is a new position that we’re bringing on to really help improve that line of sight when it comes to the market and early-on assessment of what market producers want to go after and how best to do it,” Wagner-Lahr explained.

Wagner-Lahr said the market research analyst will help give producers a solid view of where the market is going, what the competition looks like and where there might be particularly good channels for their products.

Adding resources to help farmers and agribusinesses analyze opportunities for biogas production grew out of activities in Minnesota and elsewhere in the country. Minnesota’s passage of the Natural Gas Innovation Act, federal incentives, and low-carbon fuel programs are fostering increased interest in anaerobic digestion of manure and food waste.

“Interest in anaerobic digestion has been growing across the state and nationally,” Wagner-Lahr said. “You have states like Massachusetts banning the landfill of food waste from entities generating a half-ton of food waste or more per week. This has led to a lot of innovation in the state of Massachusetts. The Natural Gas Innovation Act amplified the conversation in Minnesota about how we can utilize waste and feedstocks coming from our farms to produce renewable natural gas.”

“There’s a lot going on right now in terms of different companies and developers looking to get into biogas production to access carbon markets as well as low carbon fuel market incentives,” Wagner-Lahr said. “We know that there are a lot of farmers who are dealing with anaerobic digester companies and developers who want to evaluate the potential of buying their manure for new biogas projects.”

“Farmers have developers knocking on their doors and they’re trying to understand the opportunity. How should I structure an agreement? Who do I need to talk to? What key variables should I analyze? What is my risk? What have other producers done? What is the upside opportunity? There are just so many questions,” Wagner-Lahr explained.

The AIC will provide farmers with the resources they need to answer critical questions and help producers make decisions about potential opportunities.

The Agricultural Innovation Center will provide resources to producers and stakeholders who are involved in potential biogas production from manure or food waste.

Wagner-Lahr said AURI should have the market research analyst and anaerobic digestion specialist staff in place early in 2023. In the meantime, AURI business development and technical staff are available to assist producers who are interested in accessing services through the Agricultural Innovation Center.

Growing Synergy

AURI has a track record of providing value-added agriculture development assistance that spans more than 30 years. The recent AIC funding is not the first time AURI received federal support.

“Over time, we’ve been developing a stronger and stronger relationship with USDA Rural Development and even starting to have forays and building relationships with USDA Agricultural Marketing Services,” said Lisa Gjersvik, AURI senior director of strategy management. “This funding provides another tool in our toolbox that is an expansion of collaboration with an alignment of priorities of USDA and AURI to benefit Minnesota’s agriculture industry and state economy.”

Information on the Agricultural Innovation Center program is available at auri.org. Interested producers can access the resources provided by the AIC by connecting with AURI’s business development team.

AURI PARTNERS WITH NON-ALCOHOLIC BREWERS TO BOTTLE SUCCESS

Jeff Hollander and Paul Pirner started a business with a simple premise: non-alcoholic beer should taste good and be made with quality ingredients and attention to detail. They enlisted the help of the Agricultural Utilization Research Institute (AURI) to grow their brand from a home brewing operation to an award-winning favorite among craft beer enthusiasts. Both men agree the journey from idea to commercialization, and ultimately to the sale of the brewery during the summer of 2022 would not have been possible without AURI's encouragement and expertise.

"The biggest positive of working with AURI was knowing that what we were trying to do would be met with enthusiasm," Pirner said. "We had some beverage experience, but we didn't quite know how to turn this into a successful business. They gave us the confidence that entrepreneurs and young companies need. What we learned from AURI is, 'yes, it's possible to do what you want to do.'"

Hollander and Pirner first met in Minneapolis in the early 2000s. Back then, Hollander worked in sales and Pirner worked in advertising and as a food and wine journalist. They reconnected at a holiday party several years ago and, after catching up, learned that they both recently quit drinking alcohol. Both also shared a common frustration that the non-alcoholic options on the market at the time were boring and, in their opinion, not very good.

"We found that when you carry around an old fashioned, non-alcoholic (NA) beer at a party or a social function, it comes with a stigma and a judgment from others," Hollander said. "We wanted to create a brand of NA beer to celebrate the bold flavors of the craft beers that we loved but that could also be appreciated as a delicious beverage first and foremost. There just wasn't anything like that available at the time."

Soon after that holiday party, they met for coffee to sketch out a business idea. Before he quit drinking alcohol, Pirner dabbled in home brewing as a hobby. They got to talking about making a non-alcoholic beer using some craft brewing techniques.

"We believed there was a market for this product. So much of life entails being out with friends and drinking, especially here in the Midwest. And if you eliminate alcohol from your life, you almost become an outsider," Pirner said. "So, we asked ourselves, 'How do we celebrate those people who have made the choice to stop drinking?' From there it was the two of us saying, 'Well, what is the worst that can happen? Let's give this a shot.'"

Hairless Dog is produced differently than common non-alcoholic beers. Most NA beers are brewed by creating alcohol which is then removed from the final product. In addition to removing most (but not all) of the alcohol, the dealcoholizing process also removes some of the developed flavor. Hairless Dog, on the other hand, does not introduce alcohol to the liquid during the brewing process so all of the flavor molecules remain within the liquid and the end result is a tastier, more complex beverage.

With Pirner in charge of brewing and Hollander leading sales and marketing, the Hairless Dog Brewing Company was born. They hit on the name Hairless as a play on the term 'hair of the dog'— a euphemism for consuming alcohol to cure a hangover. The name also works because both Pirner and Hollander love dogs.

"No one was really looking at the NA segment of the market as being legitimate. It was ignored and written off," Hollander said. "We couldn't find any data and there was no consumer research. So, we decided to find out who drinks non-alcoholic beer. We knew there are people like us who had stopped drinking but were interested in a delicious, craft-style beer."

To develop their audience and test their product, Hollander and Pirner talked to friends who owned liquor stores and asked if they saw a market for a high-quality, non-alcoholic product. They also entered Hairless Dog in local beer festivals to gather feedback and make business connections. It was at one of these festivals that they learned about AURI.

Hollander and Pirner were referred to AURI's Ben Swanson, a Scientist of Food and Nutrition. Swanson was a home brewer himself and brought his knowledge to the partnership.

One of the earliest tasks was to scale up production. Hairless Dog needed commercial space and Swanson identified a copacker in Marshall, Minn. where the company could brew large batches of their beverages to can and sell in liquor stores. AURI provided insight on ingredients and processes to help meet the regulatory classification of non-alcoholic beer under state and federal regulations.

AURI and Swanson also advised on optimizing production as well as safety and formulation issues related to preservatives in the beer, which prevent spoilage. The partnership between AURI and the brewers was successful for many reasons. Swanson said he could tell early on that Hollander and Pirner were dedicated to making the business work and have a product that would be popular with consumers.

"The best part of my job is working with a client when they are just starting out and then see it through to success," Swanson said. "With Hairless Dog, getting the beer into liquor stores was a big deal at first, and then it skyrocketed from there. The next thing you know they're selling out in a few days, and then they're in Total Wine, a national retailer."

Swanson and AURI were "instrumental" in the company's success, Hollander and Pirner said.

> **"EVERYONE AT AURI WAS SO HELPFUL AND BELIEVED SO EMPHATICALLY IN WHAT WE WERE DOING THROUGHOUT THIS JOURNEY," SAID PIRNER. "REGARDING THE BREWING TECHNIQUE, I KNEW WHAT I THOUGHT WE COULD DO, BUT IT'S COMPLEX AND SOME OF THE SCIENCE WAS OVER MY HEAD. HAVING THAT EXPERTISE FROM AURI AS A RESOURCE WAS INCREDIBLY IMPORTANT DURING THE EARLY STAGES.**

Hairless Dog quickly developed from a passion project between two friends into a viable business venture. The first beers hit shelves in the fall of 2018, and the response was immediate. By December of 2018, they sold out of the initial run of production and demand for the product surged. The manager of an area liquor store called Pirner to let him know there was a line of customers out the door at a recent Hairless Dog tasting event.

"We would be at liquor stores or festivals and people would come up to us and hug us and tell us how grateful they were to have a NA product they actually enjoyed. It was soon after we launched that I had to decide if I wanted to keep my sales job or dedicate to this full-time. I saw enough to know that Hairless Dog was something I loved," Hollander said.

As the business grew, so did the market. Hairless Dog launched at an opportune time. There was an explosion in the sober-curious lifestyle over the past few years. While stuck at home during the COVID-19 pandemic, many Americans chose to give up alcohol or consume less alcohol, as part of a commitment to a healthier lifestyle. These individuals sought a high-quality, non-alcoholic beverage alternative and found the available offerings lacking.

Pirner and Hollander are adamant that they are not "anti-alcohol." Instead, they want to make something that people who don't drink would be proud to carry around at a party or order in a bar.

"It used to be that when you went to a liquor store you had one or two NA options," Swanson said. "Now there is an entire section of non-alcoholic craft beer and spirits. Hairless Dog was perfectly timed with this trend. Plus, they have a fun brand and a thoughtful approach to marketing. I love how they infused it into their entire company. It could not have worked out any better for them."

In early 2022, Minneapolis-based Finnegan's Brewery approached Pirner and Hollander about acquiring their company. They were approached previously about selling the business but the opportunity with Finnegan's felt different.

"We were to the point where we couldn't take the brand any further. We expanded our presence, but we didn't have our own brewery. It was time to look at partnerships. When Finnegan's approached us, they were fans, and held a passion for our beer. Plus, they wanted to build on what we created," Hollander said. "It seemed like the perfect opportunity."

Pirner said he and Hollander were drawn to Finnegan's mission of service and creating community and positive social impact through the business. Ultimately, the decision to sell was a "no brainer," he said. The sale was finalized in late summer 2022.

"It came down to this being our chance to do something with Finnegan's and try to change some things we feel passionately about. There was great synergy between the two brands. They're from Minnesota and they have great people running the business. Most importantly, they are going to continue the arc that we started," Pirner said. "We couldn't be happier with how it all turned out."

2022
Minnesota Renewable Energy Roundtable

Explores the Promise of Renewable Natural Gas Produced from Anaerobic Digestion

Late last year, a group of scientists, researchers, academics and business leaders discussed the latest advancements and innovations in renewable natural gas and anaerobic digestion at the 2022 Minnesota Renewable Energy Roundtable (RER).

For those who are unfamiliar with the topic, anaerobic digestion is the controlled use of biodegradable organic materials to produce renewable energy in the form of biogas and fertilizer. It is an ancient technology and a naturally occurring biological process during which consortia of bacteria decompose organic matter in the absence of oxygen to obtain the energy necessary for their metabolism.

The Agricultural Utilization Research Institute (AURI) hosted the 2022 RER event in Waseca, Minn. In addition to the presentations from experts, the roundtable event also included a tour of AURI's anaerobic digester at its Waseca Coproducts Pilot lab.

"There is so much activity going on in Minnesota in anaerobic digestion right now, more than many of us realize," said Shannon Schlecht, executive director of AURI. "The benefit of an event like the Renewable Energy Roundtable is we bring the right group of people together to learn more about what is happening. How are different developers and companies looking at using biomass feedstocks? What are the state and federal policies and incentives available? Working together across the value chain, we can have meaningful discussions about how to make these projects viable going forward."

There are numerous industrial applications as well as economic and environmental benefits for the Upper Midwest's agricultural sector. There has been significant growth in biogas in recent years across the United States. According to the American Biogas Council, Minnesota ranks eighth out of 50 states for biogas potential.

"The potential is massive," said Dr. Luca Zullo, AURI's senior director of science and technology. He estimated there are about 2,000 sites in the U.S. that produce biogas using anaerobic digestion and the vast majority are at municipal wastewater treatment facilities. He said experts identified an additional 8,000 sites for agriculture, 2,000 sites for food waste and 15,000 sites for biogas generation across the country. There is work needed to build out the potential, but it is possible to achieve real results, Zullo stated.

Targeted growth and development of this technology will benefit agriculture and the entire regional economy through increased investment and more jobs. Recent global developments underscore the importance of producing energy closer to home that is immune to market shocks and geopolitics.

Venus Welch-White is the U.S. Environmental Protection Agency's (EPA) Senior Advisor to the Administrator's Agriculture Advisor. She was one of the presenters at the roundtable event and said the EPA has significant interest in this space and cited many examples of how the federal government is working to advance the adoption and expansion of renewable gas produced by anaerobic digestion.

There is a voluntary program co-administered by the EPA and the U.S. Department of Agriculture to advance sustainable manure management practices in agriculture. There are also federal efforts and incentives underway to reduce methane emissions in landfills and to reduce food loss and food waste.

Further, President Biden's administration signed executive orders that address methane emissions reduction and the catalyzation of climate-smart technologies to address the climate change crisis. Meeting the goals outlined in both executive orders will include significant input from the anaerobic digestion space, Welch-White said.

"The EPA supports voluntary incentives rather than using a regulatory hammer," Welch-White said. "Anaerobic digestion plays a significant role in all of this work as we look to address these priorities."

Megan Lennon, the Energy and Environment Section Supervisor-Ag Marketing and Development Division for the Minnesota Department of Agriculture, outlined many of the policies and incentives from the state of Minnesota that deal with anaerobic digestion and renewable natural gas. Lennon said several factors are encouraging further innovation and growth in anaerobic digestion. In addition to the federal government, Minnesota set several goals to reduce greenhouse gas and carbon emissions as part of the state's Climate Action Framework. Private industry in the U.S. has also identified sustainability goals and targets. Further, there has been an injection of capital investment into the sector with the potential to kick-start renewable gas adoption and usage, especially on the west coast of the United States. There are a few facilities in Minnesota that are already producing biogas and adding it into the energy pipeline to earn credit in California's low carbon fuel market, Lennon said.

"When these factors align, renewable natural gas and anaerobic digestion is elevated to the forefront and seen as a key solution to meeting various climate change goals," Lennon said. "[Anaerobic digestion] is also part of a solution for a variety of different sectors, not just agriculture, which is hard to decarbonize. I really believe the deployment of [anaerobic digestion] is going to increase in the short term."

Emma Ingebretsen is the Senior Project Manager for Decarbonization Projects at CenterPoint Energy. The utility company is working to reduce carbon emissions both for its customers and its operations. CenterPoint Energy set goals to achieve Net Zero emissions from its operations and facilities by 2035 and to reduce emissions from the natural gas usage of its residential and commercial customers by 20 to 30 percent by 2035 (from a 2021 baseline).

One tool CenterPoint will use to achieve those benchmarks is the Natural Gas Innovation Act, a new law allowing the utility to invest further in innovative clean energy resources and technologies to reduce emissions, including green hydrogen and renewable natural gas.

Biogas and renewable natural gas made using anaerobic digestion has significant potential to play a key role in reducing the carbon intensity of the energy the utility delivers to customers, Ingebretsen said. Further, made-in-Minnesota energy like renewable natural gas can further support job creation and economic development, while also diversifying CenterPoint's own energy supply.

CenterPoint is developing an innovation plan to submit to the Minnesota Public Utilities Commission (PUC) for consideration and review. The expansion of biogas and the addition of new anaerobic digesters are among the pilot project concepts that CenterPoint is vetting for consideration to be included in the final text. If the PUC approves CenterPoint's plan, the utility company can recover some of the cost of implementation of the new strategies and tools.

"As we prepare our first innovation plan for regulatory review under the Natural Gas Innovation Act, we are definitely exploring the possibility of sourcing made-in-Minnesota [renewable natural gas] and supporting anaerobic digester projects from a variety of feedstocks," Ingebretsen said. "We are developing a portfolio of projects, including biogas and renewable natural gas, to include in our first innovation plan that we expect to submit to the Minnesota Public Utilities Commission in the first half of 2023."

The National Renewable Energy Laboratory (NREL) is a national laboratory focused on finding creative answers to today's energy challenges. Dr. Kevin Harrison is the Program Manager for NREL's Energy Systems Integration Facility. In that role, he supports several near-commercial research and development projects, including renewable hydrogen production, systems integration and renewable natural gas production via biomethanation. Harrison works to identify high-impact research capabilities and develop strategic partnerships with industry leaders.

He spoke about the importance of events like the Minnesota Renewable Energy Roundtable and the potential for the Upper Midwest and Minnesota to become a leader in the field of biogas and anaerobic digestion.

"The state has a lot of opportunities in the agriculture sector obviously, there is also high potential in the culture of Minnesota being progressive enough to not only consider hydrogen production but also really exploring turning waste back into energy," he said. "When you have farmers, the university, industry support groups, utilities and developers all in the same room, you get a great section of ideas and diverse questions."

Harrison said he feels a great sense of urgency centered around creating hydrogen gas from renewable molecules. The NREL exists to help businesses, governments and research centers refine and improve the technologies to drive down costs. He said industry estimates the return on investment in this field is $6 to $8 returned for every $1 invested.

"The next step is to create a team where we can deploy and demonstrate the value here and teach the next generation of famers, researchers and scientists how to decarbonize utilizing energy created from waste," he said.

Thom Petersen, Commissioner of the Minnesota Department of Agriculture, attended the Minnesota Renewable Energy Roundtable. He said the innovations and advancements discussed play a crucial role in Minnesota's energy and economic future.

"The Department of Agriculture is very interested in the work being done in this field," he said. An idea like manure digestion has been around for a while and our gains have been slow, but there is certainly a renewed interest in the technology now. We are seeing similar excitement for digestion in food and commercial waste. Discussions like the Renewable Energy Roundtable are very helpful in terms of getting a sense of the landscape and then really pinpointing opportunities where we can make progress."

If you'd like to learn more from the Renewable Energy Roundtable event, visityoutube.com/@AURIMN to watch a recording of the event.

The Agricultural Utilization Research Institute (AURI) will host its New Uses Forum on Tuesday, April 11, 2023, from 7:30 a.m.-7:30 p.m. at the Minneapolis Marriott West in Minneapolis, Minn. A component of the AURI Connects program, the New Uses Forum is an annual conference dedicated to accelerating innovation and investment in value-added food and agriculture.

This year's conference will feature a keynote speaker, panel discussions on economic conditions, as well as food and bio-industrial opportunities, under the common theme of Exploring the Intersection of Innovation and Investment in Food and Agriculture. Attendees will be able to engage with industry experts who will emphasize trends and innovations in value-added areas of fermentation applications, consumer decisions related to health and food purchases, economic considerations and investment trends.

The New Uses Forum is open to anyone with an interest in value-added agriculture, innovation in agriculture, finance and investment, and supporting Minnesota's entrepreneur ecosystem.

This year's event will be hybrid, offering in-person ($100) or virtual ($25) attendance options. Please visit swoogo.com/nuf2023 for event agenda, speaker list and registration.

The 2023 New Uses Forum will conclude with the Bold Open and Smash the Senses events.

BOLD OPEN

The Bold Open, which utilizes an open innovation platform and a reverse pitch model, brings together notable food and agriculture companies to find solutions to problems they are facing in their business or industry. Presenters will share challenges and seek novel, innovative solutions via this unique reverse pitch event.

The event encourages individuals and organizations with pioneering ideas that could benefit the food and ag industry to submit an application for partnership consideration. Minnesota has a rich ecosystem of food and agriculture companies that broadly support innovation and this platform provides a point of entry for novel and innovative ideas to be considered.

Previous challenges included: Spoilage Sensing and Detection for Protein Products, Commercialization Partnerships for a Colloidal Barrier Mulch, New Uses for Oat Byproducts, Gamifiation Models for Farm Management Data, Sustainable Winter Road Maintenance Solutions, Personalized Protein Snacks or Meals, New Uses for Soybean hulls, and more.

This year's Bold Open will feature several challenges from the food and agriculture industry and attendees will have the opportunity to network with the featured companies in an effort to accelerate collaborations and solve current challenges.

SMASH THE SENSES

Following the Bold Open session, AURI will partner with Naturally Minnesota to highlight some unique entrepreneurial products from Minnesota's growing food and beverage ecosystem during its Smash the Senses event. Attendees will have a chance to mingle while enjoying delicious food and drinks from Minnesota entrepreneurs. Last year's offerings included samples from Sara's Tipsy Pies, Artisan Naan Bakery, The Amazing Chickpea, Isadore Nuts, Social Mixers and One Step Foods, among others.

AG INNOVATOR OF THE YEAR AWARD

The Agricultural Utilization Research Institute's Ag Innovator of the Year Award has lauded innovative Minnesota businesses for more than a decade. Each year, AURI's Board of Directors bestows this honor upon a client company or entrepreneur who generates significant impact in the areas of product innovation, uniqueness and commercialization potential, as well as for its contributions to value-added agriculture.

The award launched in 2002 and previous recipients include: New Starch Solutions (Plymouth, Minn.), Milk Specialties Global (Eden Prairie, Minn.), Chippewa Valley Ethanol Co-op (Benson, Minn.) Mississippi Topsoils (Cold Spring, Minn.) and Smude Oil (Pierz, Minn.). The 2023 award will be presented during the New Uses Forum luncheon.

FIELDS OF INNOVATION

Smude's Brand™

Innovator Q&A

AURI Connects: Fields of Innovation Innovator Profiles is a Q&A series with Minnesota entrepreneurs who have partnered with AURI to build capacity and successfully commercialize new crop and livestock opportunities, including new traits for existing crops.

Katelyn Smude

Marketing Manager

For those who may not be familiar, what should people know about Smude Sunflower Oil?

When Tom and Jenni Smude began their journey with Smude's Sunflower Oil, they recruited everyone they knew to help build their dream. Much of their success can be attributed to being a family-oriented business, with most employees being family and friends. This is key for them because they are able to build strong connections with their employees.

What is your involvement with the Agricultural Utilization Research Institute (AURI)?

The team at AURI has helped us throughout the years with nutritional labeling, shelf-life trials, byproduct development (protein powder and sunflower meal), etc. AURI has been instrumental in turning ideas into marketable and desirable products

What are some of the reasons people might purchase your product(s)?

Smude's Sunflower Oil aims to positively impact the world in so many ways! We've had an all-natural mission since the very beginning, and our sunflower oil is produced by cold pressing—which means no heat or chemicals while retaining all the wonderful flavor and nutritional value. Retaining that nutritional value means Smude's Sunflower Oil is a heart-healthy cooking option. St. Cloud Hospital's renowned Cardiac Care Unit gives samples of Smude's Sunflower Oil to its patients in hopes of preventing future cardiac issues by guiding people to heart-healthy diet choices. As an additional part of our all-natural mission, we developed an innovative and chemical-free microwave popcorn that consists of three simple ingredients: popcorn, sunflower oil and salt. We take great pride in providing people with a delicious, healthy and convenient snacking option. We're also very proud to be a zero-waste company, and we aim to use recycled and/or recyclable materials where we can, like our shipping boxes.

What are the challenges presented and opportunities offered?

Tom and Jenni started out as crop farmers, but two straight years of crop devastation tested both their faith and their finances. After extensive research into drought-tolerant crops, they took a gamble and planted sunflowers. Their original goal was to sell sunflower meal as animal feed and to sell sunflower oil in bulk by the semi-load. However, three months in, they faced another tough decision when the price for bulk oil dropped. Even though there wasn't much sunflower oil on the retail market, they took another leap of faith into the retail business and hoped their big idea would take off. All their hard work began to show dividends when word started to spread about the delicious sunflower oil, and soon retailers came calling.

How do you see your business growing?

Even though Tom and Jenni are over a decade into their venture, it's still really exciting to hear how many people love their products. They obviously look forward to continued growth and innovation and can't wait to make their way into more and more homes. Their customers can continue to expect the delicious, quality and all-natural products they know and love—and Smude's Sunflower Oil will continue to be available in more and more retail markets, whether it be traditional stores or online.

How can AURI's readers and supporters purchase your products, connect with your business online and/or help your business thrive?

The best place is to visit our website at smudeoil.com. You can also connect with us on our social media channels — Facebook, Instagram, Twitter, YouTube and Pinterest.

**This interview was edited for length and clarity.*

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND

Funding for this project was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

ABOUT AG INNOVATION NEWS

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Photography by benjaminshoots.photos

Design by russellherder.com

Electronic pdf copies of current and previous Ag Innovation News issues are available on the website: auri.org.

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The Agricultural Utilization Research Institute (AURI) is accepting applications for the organization's Entrepreneur in Residence Program (EiR). This is a comprehensive program created to catalyze and support small businesses and entrepreneurial innovation in value-added agriculture.

Qualified entrepreneurs selected to participate will benefit from the direct use of AURI's laboratories and equipment, as well as the organization's expertise in its focus areas of food, coproducts, renewable energy and biobased products. In addition, the program can also support entrepreneurs in their efforts to obtain non-dilutive funding through grants from federal, state and other public or private entities. While some research and development grants may not allow financing for laboratory space and facilities, or may require matching funds, this program can help qualified entrepreneurs increase the likelihood of grant awards by providing them with a source of in-kind match funding.

Program participants will have access to AURI's Coproducts lab in Waseca and its Analytical Chemistry, Bioproducts and Food and Meat Processing labs in Marshall. These facilities house equipment that will assist individuals in product and process development, scale-up, nutritional assessment, pilot production line development and production for market assessment. AURI's scientists and business development experts will be available to advise on issues related to technical soundness and quality of product and process development, analytical testing, product formulation, evaluation and testing of the product, prototype development, sourcing of ingredients and feedstock, choice of materials, equipment and services selection, market suitability and prospects and commercialization viability.

Who is Eligible?

The EiR program is open to single proprietors, partnerships or limited liability corporations organized under the laws of Minnesota or with a principal place of business in the state. Those expected to benefit the most from the program are pre-revenue, small or individual businesses. To be eligible for AURI's services, EiR candidates must benefit Minnesota's agricultural sector while demonstrating the potential for positive impact on Minnesota's economy. Program candidates must also demonstrate the capacity and intent to continue commercializing their idea upon residency completion. Finally, EiR candidates must provide a work plan, as well as a preliminary business plan with a budget that reflects an ability to support the project during residency, and its strategy to continue its funding beyond EiR.

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The newspaper of the Agricultural Utilization Research Institute

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