

April 8, 2026

Chair Paul Anderson, Chair Rick Hansen
House Agriculture Finance and Policy Committee
Centennial Office Building
658 Cedar Street, St. Paul, MN 55155



RE: HF 2103 (Anderson) as amended—Ammonia, hydrogen, and renewable energy certification tracking system appropriation

Chair Anderson, Chair Hansen and Committee Members,

The Minnesota Made Ammonia Coalition (MMAC) writes to express our support for HF 2103, as amended, investing in the research, demonstration, and infrastructure needed to launch local ammonia production in Minnesota.

MMAC brings together organizations across energy, agriculture, mining, manufacturing, environment, research, and other sectors with the goal of identifying the policy and practical pathways needed to establish a local ammonia economy in Minnesota.

Minnesota's agricultural and industrial sectors depend on nearly a million tons of ammonia annually, with almost all of it produced out of state—primarily on the Gulf Coast, using natural gas and shipped thousands of miles. As a result, farmers and other industries across Minnesota are exposed to the volatility of the global ammonia market, including unstable prices, supply chain disruptions, and geopolitical risk, and none of the economic value of production staying local. The recent events in Iran have only underscored how urgent this vulnerability is.

Minnesota has the wind resources, the demand, and the infrastructure to produce ammonia in our own backyard. HF 2103 makes a targeted investment through the Renewable Development Account in applied research, a commercial-scale demonstration facility, siting and curtailment analysis, and ammonia-specific energy attribute certification, comprising the foundational pieces needed to prove the model. Over 8 million megawatt-hours of wind energy are curtailed annually in MISO North, directly reducing counties' production tax revenue. Local ammonia production puts that otherwise-wasted generation to productive use, benefiting the industries that depend on ammonia while protecting tax revenue for the Greater Minnesota communities that host energy infrastructure.

Central Farm Service, a farmer-owned cooperative, is the distribution partner for the first facility. Once proven at commercial scale, the model is designed to replicate as distributed, modular systems sited across Minnesota where energy resources, grid congestion, and industrial demand align, making this a statewide opportunity and one piece of a broader circular economy that Minnesota is uniquely positioned to build.

In addition to the wide variety of industries and organizations supportive of locally-made ammonia, this bill has bipartisan support from metro and Greater Minnesota legislators across both bodies, reflecting the breadth of industries and areas this investment stands to benefit. MMAC encourages you to support HF 2103, as amended. Thank you for your consideration.

Sincerely,

The Minnesota Made Ammonia Coalition

AgriGrowth, AURI, Better In Our Back Yard, Blue Earth Light & Water, Central Farm Service, CleanCounts, Clean Energy Economy Minnesota, Conservation Minnesota, General Ammonia Company, Great Plains Institute, Minnesota Conservative Energy Forum, Rural Minnesota Energy Board, TalusAg





CONSERVATION
MINNESOTA

April 8, 2026

RE: HF2103 (Anderson) and Support for Green Ammonia

Chairs Anderson, Hansen, and members of the House Agriculture Committee,

Conservation Minnesota wishes to share our support for HF2103 (Anderson), and the language in the DE amendment, to support research and development of green ammonia in Minnesota. This investment prepares the state to simultaneously tackle issues facing our climate and our farming communities.

As we continue to modernize our energy and agricultural economies, we need to find solutions that work for both. Input costs for farmers are increasing, and we are amid transitioning our grid over to cleaner, renewable energy, among other forces. Developing an in-state green ammonia production and distribution supply chain has the potential to be an important tool in this work, and we believe it is an exciting option for the state to support.

The proposed project brings together partners across industry, academia and the state to explore this new path, and invests in the research, development and infrastructure needed to make this technology viable and scalable across the state. Should it succeed, we will see more stable ammonia costs for farmers, cleaner and more efficient production, direct economic impact across the state - especially in greater Minnesota - and decarbonization across the supply chain.

When ideas like this present themselves, it is the duty of the state to uplift them through investment and help get innovative new products off the ground. In the case of green ammonia, we believe the impact for our climate and our farmers is well worth the investment.

While we recognize the committee will not act on this today, we strongly encourage you to make the investment in a Minnesota based green ammonia supply chain and believe HF2103 (Anderson) and the DE amendment are a great way to do so.

Sincerely,
Nels Paulsen
Policy Director
nels@conservationminnesota.org

James Lehner
Policy Associate
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Fresh Energy

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April 8, 2026

The Honorable Paul Anderson and Rick Hansen
Agriculture Finance and Policy Committee
Minnesota House of Representatives
75 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155

Co-Chairs Anderson, Hansen, and Committee Members,

Fresh Energy is a 30-year-old, Minnesota-based nonpartisan, not-for-profit organization. We work to shape and drive bold policy solutions to achieve equitable carbon-neutral economies. We appreciate the opportunity to share our thoughts in support of funding the distributed ammonia project proposed in the DE3 amendment to House File 2103.

Every year, Minnesota imports approximately 900,000 metric tons of ammonia products, costing farmers between \$500 million and \$1 billion. Fresh Energy believes that this project represents a strategic deployment of beneficial technologies that will strengthen Minnesota's agricultural economy, while leveraging existing, under-utilized infrastructure.

With no local production, Minnesota farmers are entirely reliant on ammonia product imports, which primarily come from Gulf Coast states. This exposes farmers to volatile commodity markets and global supply chain disruptions, which we are witnessing real-time in the ammonia space. Minnesota's efforts to develop local, distributed ammonia production will significantly reduce price volatility by stabilizing fertilizer costs through long-term off-take agreements, as demonstrated by the 10-year agreement that this project is built upon.

The University of Minnesota has been a leader in the research and development of wind-to-ammonia technologies. This project serves as an opportunity to build on those efforts through scaling and deployment, while continuing to fund additional research.

A final, important energy consideration is that the project intends to leverage curtailed wind resources. The project aims to provide economic vitality to rural communities, through new production and associated price stability, and the ability to maximize existing wind resources provides additional community benefits.

Sincerely,
Brandon Isakson
Managing Director, Industry
Fresh Energy
Isakson@fresh-energy.org



April 7, 2026

Chair Paul Anderson, Chair Rick Hansen
House Agriculture Finance and Policy Committee
Centennial Office Building
658 Cedar Street, St. Paul, MN 55155
RE: HF 2103 as amended

Dear Chair Anderson, Chair Hansen, and Committee Members,

I am writing on behalf of the Great Plains Institute (GPI) to share our organization's support of HF 2103, as amended, as an important step toward making Minnesota a global leader in the production of green ammonia, an industry poised for growth in our state with significant agricultural, economic, and environmental benefits. GPI is a nonpartisan, nonprofit organization with the mission to accelerate the transition to net-zero carbon emissions for the benefit of people, the economy, and the environment. We recently published an extensive report on the potential of "distributed green ammonia," or DGA, and included an overview of the economic impacts of curtailed wind power in Minnesota and the opportunity for DGA facilities to harness this low-cost energy and return dollars to rural MN communities. HF 2103 supports a targeted investment from the Rural Development Account (RDA) to help fund applied research and the construction of the first commercial-scale DGA facilities in the state.

Minnesota has a strategic opportunity to meet the challenges with current ammonia production—sensitive to volatile global fossil fuel markets, requiring hundreds of millions of dollars in import costs, and a large greenhouse gas emitting footprint—by transitioning from importing this critical resource to growing its own *local* ammonia industry that leverages the state's significant advantages, including the country's leading researchers on DGA production.

DGA, produced on-farm or within the agricultural area where it will be used, is a particularly interesting path to zero-emissions ammonia for Minnesota because it allows for localizing ammonia production near renewable energy projects in Greater Minnesota and the farms where the ammonia is needed. This helps reduce the agriculture sector's carbon footprint, including emissions from ammonia transport, and further improves the economics of renewable energy generation. Maximizing Minnesota's existing wind generation infrastructure also has important benefits for local governments. Unlike most states, wind project owners in Minnesota pay a local production tax based on the turbines' annual generation, meaning any curtailed generation, is unrealized revenue for rural communities. DGA can provide an outlet for curtailed wind generation and create additional tax revenue for rural communities.

RDA funding is an excellent fit for the DGA projects proposed and aligns with the RDA's mission to accelerate solutions that benefit Minnesota ratepayers, reduce emissions, and spur rural economic development. The \$8 million requested is necessary not only to build new infrastructure, but also to support a rigorous certification process and research that will be critical to scaling commercial production of green ammonia in Minnesota.

Thank you for your consideration of HF 210 as amended.





**GREAT PLAINS
INSTITUTE**

Better Energy.
Better World.

Sincerely,

Val Stori
Senior Policy Manager, Renewable Energy
Great Plains Institute



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BETTERENERGY.ORG

April 8, 2026

House Agriculture Finance and Policy Committee
Capitol RoomG3
St. Paul, MN 55155

RE: Support for efforts to expand green fertilizer production in Minnesota

Dear Co-Chairs Anderson, Hansen and committee members:

Together and on behalf of our memberships, we support efforts to expand Minnesota's leadership in manufacturing fertilizer using renewable energy. Regional production of 'green fertilizer' will help control the cost of inputs, decarbonize agriculture, and keep money circulating locally.

Minnesota's farmers have long led in developing and commercializing the technology needed produce fertilizer using renewable energy. Through the Minnesota Corn Research and Promotion Council (MCR&PC), Minnesota corn farmers have invested in research looking at the production of green fertilizers. Over a decade ago, the MCR&PC supported research projects at the University of Minnesota West Central Research and Outreach Center aimed at producing ammonia using wind energy. Minnesota's corn farmers investment in this research, work out of a belief that local production of sustainably produced fertilizer could improve the value proposition of corn production and support local economic development. Minnesota Farmers Union (MFU) and others advocated for a first of its kind grant program to incentivize cooperative ownership of green fertilizer production. And in 2024, we brought partners together in Morris for the first Green Ammonia Summit.

Today, we are eager to see this work scaled in a way that will allow more local control of this key input. The value in harnessing this opportunity is underscored by the recent spikes in fertilizer costs due to the shutdown of shipping through the Strait of Hormuz.

Beyond a more stable and predictable market for inputs, benefits of green fertilizer include the opportunity to lower the carbon intensity—and marketability—of crops, create local jobs, and place Minnesota on the forefront of novel applications for green hydrogen. Globally, nitrogen fertilizer contributes two percent of total greenhouse gas emissions.

As we work to build this new economy in Minnesota, we are focused on ways to ensure that farmers benefit economically and over the long-term. We are eager to find opportunities to promote farmer ownership, including through cooperatives.

Thank you for your attention and we hope you will continue to promote Minnesota's leadership on this issue.

Sincerely,

Handwritten signature of Gary Wertish in black ink.

Gary Wertish
President
Minnesota Farmers Union

Handwritten signature of Wesley Beck in black ink.

Wesley Beck
President
Minnesota Corn Growers Association



Minnesota Farm Bureau®

April 8, 2026

Representative Paul H. Anderson, Co-Chair
Representative Rick Hansen, Co-Chair
Minnesota House Agriculture Finance and Policy Committee
Centennial Office Building
658 Cedar St
St. Paul, MN 55155

RE: Support for HF 2103 (Anderson, P.H.)

Dear Co-Chair Anderson, Co-Chair Hansen, and members of the committee,

On behalf of the 30,000 members of the Minnesota Farm Bureau Federation (MFBF), I write to express our support for HF 2103. MFBF supports continued research and development of green ammonia, along with investments in domestic production capacity that deliver practical, on-the-ground benefits for farmers and strengthen long-term input reliability.

In recent years, fertilizer prices have been highly volatile and closely tied to global supply chains and market disruptions. Recent international tensions have underscored how quickly prices can spike ahead of planting season, creating significant uncertainty as farmers make critical input decisions months in advance. These fluctuations directly impact farm profitability and increase financial risk at a time when margins are already tight.

HF 2103 takes a comprehensive approach to addressing this challenge by investing in ammonia production, research, and the development of a certification and tracking system. Together, these components support the growth of in-state production capacity and strengthen local supply chains, helping reduce exposure to global market volatility.

The Renewable Development Account (RDA) is designed to support innovative energy projects that expand domestic production and utilize renewable energy resources. By investing RDA funds into in-state

ammonia production, this proposal helps convert Minnesota's energy assets, particularly curtailed wind, into a reliable agricultural input and supports a more predictable pricing environment for farmers.

Greater price predictability allows farmers to plan with more confidence, manage risk more effectively, and remain economically viable. Investments that reduce exposure to global price shocks are critical to maintaining a stable and competitive agricultural sector in Minnesota.

Thank you for your consideration. If you have any questions regarding our support, please contact Hunter Pederson, Public Policy Specialist, at hunter.pederson@fbmn.org.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Glessing". The signature is written in a cursive style with a large initial "D".

Dan Glessing, President

Minnesota Farm Bureau Federation



April 8, 2026

Minnesota House of Representatives
Agriculture Finance and Policy Committee
Capitol 123
Saint Paul, MN 55155

RE: House File 2103 Green ammonia research and development appropriations

Dear Chairs Anderson and Hansen and Committee Members,

The Center for Rural Affairs is a private non-profit organization that advocates for policies that strengthen rural communities in order to create a more vibrant future. We connect rural citizens with opportunities to engage in the decisions that affect their lives. Investments in energy initiatives can help ensure that rural communities will continue to thrive.

The Center supports House File 2103, which assists in facilitating local investments in fertilizer production, reducing the financial impacts on the state's farms and farm businesses. Local production reduces costs associated with transportation while creating local economic development opportunities in rural areas.

House File 2103 appropriates a total of \$8 million to support research of renewable-based hydrogen and ammonia energy systems, exploration of existing and future areas of the state that are suitable for ammonia production near energy facilities experiencing curtailed power, the development of at least two green fertilizer production facilities, and a system to ensure that the fertilizer is being produced with renewable energy.

The proposed green ammonia projects could use power that would otherwise be curtailed, providing a win-win in using this energy. Curtailment negatively impacts renewable energy projects, as it prevents a system from producing its maximum amount of energy. Counties that are home to renewable projects benefit from energy production tax revenue. This revenue, which often supports local schools, emergency services, and local infrastructure, is affected when energy production is curtailed, resulting in major county income losses.

Minnesota continues to make investments in carbon neutral technology, aiding the state's move towards providing 100% carbon-free electricity by 2040. Taking steps to reduce the state's carbon emissions while supporting rural development and agriculture is essential to mitigating and addressing climate change while also providing benefits to rural communities.

Sincerely,

Cora Hoffer, Senior Policy Associate
Savage, MN