



Sustainability Input Forums

Inputs received in Grand Forks, ND

PREPARED FOR



DATE

December 2023



EXECUTIVE SUMMARY

North Dakotans of all backgrounds were invited to come together to share innovative ideas, knowledge, and perceptions related to reducing greenhouse gas emissions during the state's Sustainability Input Forums held from October 31 through November 8, 2023, in eight locations around the state. In addition, more than 100 people shared their thoughts via an online survey through December 5, 2023.

Input received through this process will assist North Dakota in forming the basis for sustainability planning and actions in 2024 and for years to come. Information gathered will be used to inform the state's participation in U.S. Environmental Protection Agency's (EPA) Climate Pollution Reduction Grant (CPRG) program. North Dakota's Sustainability Input Forums are supported with a CPRG planning grant.

This report summarizes input received through conversations held in-person and online during three sessions in Grand Forks. Subsequent input received through the online comment form are italicized and attributed to this report based on ZIP codes indicated.

CONTEXT

The North Dakota Sustainability Input Forums were open public meetings that were organized to be conversational and informal. The role of the North Dakota Department of Environmental Quality (NDDEQ) was to host and to listen, with the assistance of an independent facilitator.

NDDEQ's goals for the forums were two-fold: 1) hear what North Dakotans are thinking and doing related to reducing greenhouse gas emissions, and 2) fuel conversation and connection between diverse stakeholders. To this end, conversations were held in a circle and lightly facilitated around a handful of core questions, as outlined in the following report. Each session generated at least two hours of interaction, with comments provided by participants in the form of verbal feedback, written comment cards, and online polls and chats.

Hosts for the forum were: Rebekah Pfaff, NDDEQ, presenter; Nancy Miller, ERM, facilitator; Monica Zattera, ERM, Online Facilitator.

Attendees included various individual from across industries/interests including, but not limited to, family farmers, agricultural industry professionals, public officials, and local residents with passion for the environment, wetlands, forestry and climate change. A total of 12 people contributed input from the Grand Forks area.

1. CONVERSATION SUMMARIES

Conversations in Grand Forks were adapted to accommodate some participants who had already seen previous presentations and came with their comment cards completed and ready to engage. This provided an opportunity to go deeper into topics of greatest participant interest.

Further details of discussion topics follow. Online comments from the region, but submitted subsequent to the meeting dates, have been noted in italicized type. Please note that bullets contain verbatim comments from Comment Cards, although similar points may be combined if mentioned more than once.

1.1 BENEFITS

Question: What BENEFITS do you see for North Dakotans as greenhouse gas emissions are reduced?

Concerns regarding current fertilizer use were raised, specifically related to regulation of dosage. By limiting or replacing the use of fertilizer there is a potential for improving water quality and reducing greenhouse gas emissions.

Comments:

- Improved quality of water
- Reduced use of urea-based fertilizers
- Reduced air pollution
- *Low carbon products*
- *CO2 for EOR (enhanced oil recovery)*
- *There are no benefits- it is not necessary to reduce carbon; plant life does it just fine.*

1.2 DOWNSIDES

Question: What DOWNSIDES do you see for North Dakotans as greenhouse gas emissions are reduced?

Participants highlighted the need for understanding the complexities of the compound effects of urbanization and how continual change can impact the people and economy. One participant mentioned that the natural variability of North Dakota's climate has left many residents unaware of climate change by comparison, creating a resistant perspective on change. No-till practices and other adaptive practices have also caused unintentional consequences such as higher phosphate levels that then bleed into waterways after flooding.

Comments:

- Change in lifestyle/tradition
- Higher valued products/more expensive energy
- Unfair regulation
- Undue burden on farmers who cannot adapt practices
- De-facto taxes on traditional farming materials including diesel and fertilizer perpetuates bad policy practices
- *Upfront cost to transition*
- *Risk to human health if done wrong*

- *Increased taxes on citizens*
- *Carbon capture is unsustainable and will contribute to waste long-term*

1.3 EXISTING EFFORTS

Question: What ALREADY is being done in North Dakota to reduce greenhouse gas emissions? Who is doing it?

Current programs available to agriculture/livestock producers were discussed, however participants agreed there is a long way to go with developing these programs as they are not designed by farmers/ranchers with their needs or timelines in mind. These programs are seen as too rigorous with unrealistic expectations that are not considerate to the natural uncertainty that comes with producing in the state. Current agricultural practices designed to preserve the environment were also mentioned with specific mention of no-tillage, cover crops and use of manure as fertilizer.

Comments:

- *Red Trail and Blue Flint are ethanol plants that inject CO2*
- *Continue development/investment in wind energy*
- *DGC research and regulatory framework for capture and sequestration of CO2*
- *Geo-thermal energy in workplace*
- *No-till and other adaptive farming practices*
- *Oil field operations addressing fugitive methane emissions*
- *Great Plains Synfuels plant capturing and sequestration of CO2*
- *Tax credits for energy star appliances and practices*
- *Regulations on flaring from petroleum and gas production*

1.4 POTENTIAL STATE INCENTIVES/SUPPORT

Question: In what ways would you want to see the state INCENTIVIZE, SUPPORT or just generally HELP with greenhouse gas reductions?

Attendees spent a substantial portion of time asking for the reformation of existing programs to be more understanding/inclusive to farmers and ranchers. A suggested modification was for the chemical recycling program to be restructured with more accessible time periods to better aid in the proper disposal of containers. Participants also asked for recycling programs to include materials such as iron, as a common practice currently is to leave discarded equipment on site, impacting productivity of soil.

Additionally, there were requests for general education improvements regarding personal practices to reduce individual impact on the environment ranging from more engagement in schools to free information sessions at community centers/gathering spaces.

Comments:

- *Fund GHG reduction research and how to keep current energy dependable*
- *Education of legislatures and citizens*
- *Create trust between regulatory bodies and the people*
- *Continue to offer discussion forums for people to talk collectively and think critically*
- *Utilize state colleges and programs to research fertilizer application rates*
- *Stop throwing our money away*

1.5 OTHER

Question: Is there anything else you want us to know on this topic?

Education was highlighted as a key opportunity, ranging from general education in schools/communities about environmental practices, to hands-on agricultural educational practices. Education regarding agricultural/ production practices also was recommended for bankers and insurance agents in rural farm communities so that they are more attuned to best practices. People in these positions are often seen as resources to farmers and will often make crop and/or program suggestions to farmers (specifically new farmers).

Comments:

- North Dakotans are used to variable weather and therefore don't notice alterations as much
- We need to educate the world on smart energy, clean energy
- Really need to look at the word Sustainability for the whole – all the elements that go into supposed "solutions" and calculate the environmental cost

2. DISCUSSION OF EXAMPLE GHG REDUCTION STRATEGIES

To bring the conversation to a more tactical level, a series of greenhouse gas emissions reductions examples were displayed on posters during each session for participants' reactions. It was noted that these examples were not proposals, just examples of strategies that have been implemented in other communities.

In-person participants were given red and blue sticker-dots to place next to any example on which they had an opinion. Blue was used to indicate support of an example for use in North Dakota; red indicated that they did not support the example for North Dakota. Participants were also given post-it notes to add additional examples, suggestions or comments/questions.

Online participants received a link via the chat in Zoom to a Microsoft form with the same list of examples. They were given the option to click "support", "not support" or "skip" the question. They also were able to elaborate on their responses.

All participants were cautioned that this process was meant to gauge general support or opposition to the various examples, that they were not voting.

The following "word cloud" graphic depicts how often (larger letters = more dots) that examples were selected, and to what degree they were supported (blue) or not supported (red).

SUMMARY OF REACTIONS



Note: The larger the type, the more often a strategy received a dot during this activity in Grand Forks.

Blue type = support. Red type = do not support.

In addition to placing red or blue dots on sample greenhouse gas emission reduction strategies posters, participants were invited to discuss the options and compare reactions to the sample strategies.

Strategy	Verbatim Comments
General	<ul style="list-style-type: none"> • There's nothing on this list that I immediately go, "oh no, that's a bad idea." • I'm definitely an all-of-the-above type person for this challenge. • Where is the state going to come up with the money to incentivize these things and how effective are they going to be? I need more information before I can support anything. • There's a much bigger conversation that needs to happen. • We need to know what net costs are from both economic and environmental standpoints. • The things I like best on the list are ideas that fit with something that the state can do versus something the state doesn't really have control over. But I'm not really sure what those things are.

	<ul style="list-style-type: none"> • What's clear is the science. What is less clear right now is what effect that greenhouse gases are having on the environment right here in North Dakota, and how those impacts vary across the state (e.g., colder places will be impacted more).
Economic Development	<ul style="list-style-type: none"> • Synergies can develop between existing industries, like between ethanol production industry and the oil and gas industry. • There are opportunities for new industries to be created.
Energy Efficiency	<ul style="list-style-type: none"> • The state could do a better job of getting information out to the general public (e.g., a website) on ways that they can save energy. • Educate the public about personal action we can take. • We need to know better what would work here from both private consumer and industry standpoints. • It would be great to have ways for people to easily find information on costs and benefits, including for elective vehicles. • Have to be able to explain costs – benefit vs. cost to sustainability
Industrial Efficiency	<ul style="list-style-type: none"> • Pursue research and a regulatory environment to address greenhouse gases from the industrial standpoint.
Renewable Energy	<ul style="list-style-type: none"> • When you start talking about electricity generation, how is it going to fit with our existing infrastructure and delivery systems? • Is adding more renewables going to be effective, or is it just going to mess things up because it adds instability to the grid? [00] • My comment is about storage for renewable energy that's generated. A lot of times, you've got the wind and you've got the sun, but the demand isn't there for use of all that. • Not everybody can afford renewables like solar. How do we help them get a leg up in obtaining some of these technologies? • Is it even going to make sense to put solar on low-income housing? I'm guessing most low-income people don't own their own home and so are solar panels even a benefit to them? Can a credit or incentive be passed on to renters? • Could farmers produce biodiesel right at the farm for what they need for fuel? • I'm uncomfortable with solar cell and battery storage technology. From extraction through manufacture, use and disposal we have to be careful not to embrace those things that are as toxic or worse. • Can't rely on solar in ND; only effective small parts of the year •
Conservation Practices	<ul style="list-style-type: none"> • I'm not really seeing a need for more green space in North Dakota.
Public Transportation	<ul style="list-style-type: none"> • If public transportation in Grand Forks was effective, we would already have it because we've tried with the bus system. But we don't have enough population to warrant a more effective transportation network.
Fertilizer Application Processes	<ul style="list-style-type: none"> • The lack of regulation on the application of fertilizers. Plus, you have the emissions from manufacturing and transportation. • Regulation of fertilizer is difficult because there are so many scientific variables. • We have little ability to do good soil testing for all the variables in a field. So, it is a lot of expense to try to solve. • Tiling systems and low-till, no-till farming here keeps non-natural phosphates on top, out of water. But when there are flood events, phosphate gets picked up, as well straw that hasn't been tilled into the soil and gets into the runoff. You get not only dissolved phosphate that runs off into the river, but you actually get particulate phosphate from the straw. • So it goes back to figuring out where those flood-prone areas are. And perhaps managing those in a different way.

	<ul style="list-style-type: none"> • There already is inherent extreme climate variability in this part of the country. And the likelihood is high that that is only going to continue, possibly increase. • But there still are simple things, like buffer strips on fields, that I think the U.S. Department of Agriculture would argue is still pretty viable and useful. • Surface-based aircraft and satellite-based sensors are providing observations that can be integrated to make data available down to the farmer level. (UND/Red River Basin Commission project)
Electric Vehicles	<ul style="list-style-type: none"> • What it takes to produce the steel and everything else to produce a car is much more polluting than to keep using the car you have • Having everyone switch to another type of car is not a solution • Burying up resources to manufacture multiple cars is not sustainable, people should use their existing cars as long as possible

3. WAYS TO ENGAGE

Sustainability Input Forums and the corresponding online survey were the first in a series of engagement opportunities led by North Dakota Department of Environmental Quality in support of long-term sustainability planning and North Dakota’s collective greenhouse gas emissions reductions work.

Video recordings, reports, notices of future engagement opportunities, and additional methods to provide feedback may be found at the NDDEQ website: <https://deq.nd.gov/sustainability/>

For additional information, contact Jennifer Skjod, NDDEQ Public Information Officer, via email at jskjod@nd.gov

Thank you to those who shared their passions and wisdom as part of this conversation.

APPENDIX - EXAMPLE STRATEGIES

The following strategies were provided as examples of greenhouse gas emission reduction strategies being implemented in U.S. communities. These examples were provided by ERM to generate discussion and reaction during North Dakota Sustainability Input Forums. Please note that these were not provided as proposals, nor were participants asked to rank or vote on them.

Energy Implementation and Development

- **Renewable Energy** - Incentives for installing renewable energy and energy storage systems on commercial properties
- **Energy Efficiency** - Incentives for installing end-use energy efficiency measures in commercial and residential buildings
- **Financing Programs** - Establish a financing program (e.g., grants or low-interest loans) for energy efficiency and renewable energy installations in new and existing buildings
- **Electric Vehicles and Charging** - Incentives to increase the share of electric vehicles (e.g., leasing and purchasing), and to expand electric vehicle charging infrastructure
- **Carbon Capture** - Programs to support or incentivize carbon capture, utilization, and storage (CCUS) at industrial and energy facilities
- **Industrial Efficiency** - Programs to support or incentivize implementation of energy efficiency measures in industry, including energy audits, strategic energy management, equipment upgrades, and waste heat utilization
- **Low/No Carbon Fuels** - Programs to support or incentivize greenhouse gas emission reductions in industrial energy use and industrial processes, including use of low/no carbon fuels, electrification, renewable energy, and process improvements
- **Low-Carbon Materials** - Programs to develop, expand, and support markets for low-embodied carbon materials and products, such as cement and steel
- **Renewables Permitting** - Streamline permitting for renewable energy projects
- **Waste Stream Reduction** - Increase the efficiency or effectiveness of waste reduction, reuse, recycling, or composting programs. Reducing the amount of materials entering landfills.
- **Wastewater Facility Efficiency** - Incentives for installing renewable energy and energy efficiency measures at wastewater treatment facilities
- **Reducing Landfill Emissions** - Incentives to reduce methane emissions from landfills and wastewater treatment facilities, including through collection for use

Agriculture

- **Anerobic Digesters** - Incentives to promote anaerobic digesters to capture methane and generate renewable energy or produce renewable fuel
- **Alternative Fuels Equipment** - Incentive programs to fund agricultural equipment technologies that use alternative fuels
- **Fertilizer Application Practices** - Incentives for technologies and techniques that reduce nitrous oxide emissions from fertilizer application such as precision agriculture practices
- **Using Natural Fertilizers** – Reinforcing soil health with the life cycle of the animal

- **Conservation Practices** - Implement programs that support best practices in agricultural conservation to help protect soil health, including cover crops, no-till, other runoff reduction techniques
- **Economic Development** - Programs for local and regional economic development partners to establish food- and agriculture-based economic development strategies, such as community-based food co-ops

Community, Public Service and Government

- **Solar Energy** - Increase access and funding for solar panels on your home or businesses in your community
- **Energy Efficiency** - Funding for increasing energy efficiency in your home or businesses in your community, including proper insulation
- **Electric Vehicles and Charging** - Increasing electric vehicle charging stations in your community
- **Sustainable Building Materials** - Utilizing sustainable building materials for your local buildings
- **Public Transportation** - Increasing the availability and access to public transportation in your community
- **Walking and Biking Paths** - Additional walking and biking paths in your community
- **Energy Storage** - Funding for battery technology to store solar energy at commercial businesses
- **Waste Reduction and Elimination Strategies** - Providing residential recycling and composting service
- **Freight Efficiency** - Increasing efficiency in freight movement.