



Sustainability Input Forums

Input received in Williston, ND

PREPARED FOR



DATE
December 2023



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 or purchasing), and to expand electric vehicle charging infrastructure

Carbon Capture - Programs to support or expand carbon capture, utilization, and storage at industrial and energy facilities

Energy Efficiency - Programs to support or expand implementation of energy efficiency measures in industry, including energy audits, 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-carbon carbon materials and products, including steel

Renewables Permitting - Streamline permitting for renewable energy projects

Waste Stream Reduction - Programs to increase the effectiveness of waste reduction or composting programs, and to reduce materials entering landfills

Wastewater Treatment - Programs to support or expand installing wastewater treatment measures

Reduction in Methane Emissions - Programs to support or expand methane emission reduction measures

Aerobic Digesters - Incentives to promote anaerobic digesters to capture biogas and produce renewable energy or produce renewable natural gas

Alternative Fuels Equivalency - Programs to help agricultural producers find alternative fuels

Fertilizer Application Practices - Programs to support best practices and techniques that reduce fertilizer application rates and improve precision agriculture practices

Using Natural Fertilizers - Programs to support best practices in agricultural conservation that 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 systems

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 Williston. 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 circle and lightly facilitated around a handful of core questions, as outlined in the following sections. Each session generated at least two hours of interaction, with comments provided by participants in the form of verbal feedback, comment cards, and online polls and chats.

The Williston sessions were hosted at the James Memorial Art Center by: Jennifer Skjod, NDDEQ, Presenter; Allison Ahcan, ERM, Discussion Facilitator; and Isabella Binger, ERM, Online Facilitator.

Attendees of Williston's sessions, including online participants, offered an array of backgrounds. Individuals attending had experience within the renewable energy industry, agriculture industry, cattle industry, public service, government, and education. All were engaged residents of the area. A total of 14 people from the Williston area provided input.

1. CONVERSATION SUMMARIES

Discussions held during the three sessions in Williston proved productive and insightful. Ever-present in the conversations were unique environmental and community challenges that came with the Bakken oil boom and sudden population growth. At the western edge of the state, Williston leaders often are left to resolve issues through home-grown leadership, and they said they place high priority on practical solutions that make sense to the community/area. There was shared interest in information-sharing throughout the Sustainability Plan development, especially related to the Climate Pollution Reduction Grant funding process. Educational initiatives that are collaborative and inclusive, involving people statewide, will expedite progress in implementing measures to reduce greenhouse gas emissions. Furthermore, it was proposed that incentives for such measures should be easily accessible and non-restrictive to individuals and organizations, rewarding both current and past adopters of sustainable practices.

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?

Participants noted that reducing greenhouse gas emissions will bring greater stability to the state. Improvements in technologies and processes boost agricultural and oil/gas profitability in North Dakota through increased yields and reduced input costs. This not only stabilizes the economy but also promotes healthier landscapes and mitigates global warming impacts. Additionally, collaboration across industries fosters unity and new opportunities, generating jobs and benefits for landowners.

Comments:

- Improvements in soil health lead to improved ag profitability due to better yields, better resilience, and reduced input costs
- Healthier landscapes
- Improvements in health
- A more stable environment resulting in a more stable economy
- Reduction in global warming impacts
- Collaboration across industries
- New industry opportunities bringing jobs, tax revenue, and landowner benefits
- An expansion of North Dakota's identity
- More federal funding
- Less defensive measures, more proactive approaches
- Innovation in industry
- Promotion of North Dakota as national/global player
- *Reduction in energy expenses for businesses, farms, and homeowners*
- *Many businesses have pledged to reduce greenhouse gas emissions and chose to locate their data centers where energy is produced with lower emissions*

1.2 DOWNSIDES

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

This segment of the discussion highlighted worries about the potential trade-off between long-term benefits and short-term impacts. Specifically, the conversation addressed how restrictions and mandates, while beneficial for long-term greenhouse gas reductions, could lead to an immediate economic downturn as markets adjust to change. Concerns were also raised about the potential favoring of large corporations by these restrictions. If carbon offsets are selected as a CPRG implementation measure, there is apprehension that companies might exploit them to limit actual emission reductions at home.

Comments:

- Reduced agricultural production (i.e., crop response to higher CO₂ levels)
- Carbon offsets (i.e., North Dakota reduces emissions, but big corporations take advantage of it to offset their emissions)
- More mandates/restrictions
- Reducing GHG could cause a swing towards over regulation resulting in harm to industries that are beneficial to North Dakota
- Economic downturn
- Long-term benefits, but at the expense of a short-term downturn
- Changes in lifestyle
- Confusion around net vs total emissions
- Money funded by government
- Loss of workforce/jobs
- If cattle grazing is removed, this will destroy our native rangeland
- Long term impacts and the uncertainty that creates
- Creation of new goals, who decides and how far do we take it
- Who will regulate reduction measures
- What happens to those not pulling their weight
- *Public Opposition*
- *Upfront economic costs of transitioning towards new practices*

1.3 EXISTING EFFORTS

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

Participants noted that substantial efforts are being made by North Dakotans in contributing to the reduction of greenhouse gas emissions and need to be highlighted. These efforts have not only resulted in increased production but have also contributed to additional reductions in greenhouse gases. Notably, in the agricultural sector, improvements have been made throughout the farming process, spanning from equipment to soil management, aimed at reducing emissions. This valuable information is disseminated within the community through shop talks organized by farmers across the state and local areas. Additionally, there is a growing willingness to embrace renewable energy sources in the state's energy portfolio, opening doors to new opportunities and fostering industry expansion.

Comments:

- Agriculture practices that protect soil, improve soil organic matter, and soil health
- Coal-fired generating plants have taken steps to reduce emissions
- No-till farming and cover crops
- Equipment that is being regulated to be more environmentally friendly
- Carbon capture in soil
- Conservation programs
- Introduction of Kernza grain (perennial agriculture)
- Improved grazing management by ranchers
- Seeding cropland back to grass for grazing production
- Leadership in communities to understand the task at hand and benefits
- ND investing in a team to explore CPRG
- Wind energy expansion
- Blue Flint aggregating at facilities
- Change in regulation/legislation/politician's perspectives
- *Natural Resources Conservation Service (NRCS) and Soil Conservation District (SCD) led conservation efforts*
- *Richardton Ethanol plant with CO2 storage on-site*
- *Carbon Capture and Sequestration (CCS) efforts with Project Tundra*
- *University of North Dakota research on CCS and deep geothermal electricity production*
- *Dr. Rebecca Phillips of Ecological Insights is researching natural carbon sequestration in grassland when coupled with managed cattle grazing*
- *Summit Carbon Solutions is working within North Dakota and surrounding states to capture carbon from ethanol production and sequester it in North Dakota*

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?

Both in-person and online comments show strong favor for using CRPG funding to increase education opportunities. In both the agriculture and energy sector, individuals shared examples of ways in which education and mentoring can be utilized to further industry knowledge and share best practices. Examples of this include on-farm demonstrations and educational opportunities to understand the benefits of renewable energy in North Dakota. Additionally, individuals emphasized that incentives from funding should be available to those who have already invested in the suggested strategies. Other suggestions included investing in more transmission lines and improving permitting processes for renewable energy operations.

Comments:

- Support educational events to keep producers informed on latest research findings that promote soil health and hear from other producers who have seen benefits from changes
- Support on-farm demonstration projects/programs that improve soil health and reduce emissions
- Cost share for farmers to adopt some of these practices
- Demonstration farms to display these successful practices
- Make climate data publicly available in a way that is engaging and easy to understand
- Don't limit incentives to new adopters
- Reward producers for what they are already doing
- Invest in infrastructure - transmission lines
- Smart policy to support renewables



- Streamline permitting processes
- *Provide larger grants for projects and conservation practices*
- *Prioritize sustainable and high-density development*
- *Preserve natural habitat*
- *Higher regulation of oil and gas development/operations*
- *Revise building code standards to have higher insulation standards and provide incentives to do so on existing structures*
- *Modernize construction trades' educational programs to encompass sustainable building practices*
- *Electricity codes including at minimum one charging port for electric vehicles (EVs)*
- *Create sustainability continuing education units (CEUs) for contractor licensing requirements*
- *Incentivize solar panels on roofs of businesses*
- *Outline transition from coal to natural gas, to an eventual phase out of most fossil fuels over the next 50 years*
- *Expand incentives for geothermal energy*
- *Rebuild electric energy system as a distributed system, to allow small solar farms and home/business solar installs to easily share with the grid*
- *Include greenhouse gas reduction as a criterion when selecting where state funding goes*
- *Provide resources and information on energy reduction measures*

1.5 OTHER

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

- As development increases due to the recent Bakken boom, there has been a new need to address community issues. Prioritizing public health has become essential due to emissions from recent oil operations, particularly emissions and flaring from oil wells
- The local hospital is facing capacity limitations in dealing with the consequences of tremendous population growth
- There have been incremental steps toward enhancing sustainable practices, including the addition of bike lanes through downtown for residents. However, there is recognition that there are still areas in need of improvement, such as strengthening recycling practices and addressing landfill emission concerns
- *Gov. Burgum has attempted to include CCS vis the Summit pipeline. This will not work as the only way to make ND carbon neutral is to reduce GHG emissions or capturing CO2 in soil and trees within the state*
- *The State of North Dakota should be implementing sustainability practices on buildings, travel, etc. Funded by state and local government*

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 Williston.

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
Electric Vehicles and Charging	<ul style="list-style-type: none"> • Electric vehicles are an interesting concept. Does it work out here? I'm still not a hundred percent committed. We're miles and miles separated from towns and then the amount of time it takes to charge a vehicle. • EVs are very expensive. And they allow those who have them to think they don't need to do anything more. • You're going to have to convince me this is a good idea, especially given winters. • We don't have time to sit and wait for our cars to charge. Out here we're swinging hammers and we're twisting wrenches and that kind of stuff.
Renewable Energy	<ul style="list-style-type: none"> • I believe solar should be on people's houses and not on big farms because of land impact, blanketing of the land and habitat. • Battery storage is worth looking at, if you could do something about recycling. • We need to make things like solar panels here, not China. Let's get down and figure out where the lithium is so we're not dependent on big deals with the rest of the world. • At the same time, oil and gas drilling is making technological advances.
Carbon Capture	<ul style="list-style-type: none"> • This is expensive to build. And with that money you could actually just stop the emissions. • What we can do right now is to capture carbon, put it underground, and make sure that what we're doing is not going to cause too much more harm than what's already there.
Public Transportation	<ul style="list-style-type: none"> • We don't even have enough workforce for school buses, much less public transportation.
Walking and Biking Trails	<ul style="list-style-type: none"> • Will this reduce greenhouse gas emissions?
Waste Stream Reductions	<ul style="list-style-type: none"> • Recycling is not a money-making deal. It's very hard to attract recycling organizations in this state • Nobody wants a landfill in their backyard. On-site composting is a great thing. • I can't tell you where they recycle plastics anymore.
Conservation Practices	<ul style="list-style-type: none"> • There needs to be more education, including demonstrating conservation practices. • There are differences from the west to east side of the state. People from the east still are debating if no-till works. In the west, we are talking about what's next; where do we go from here? Maybe one size doesn't fit all. • Farmers really learn best when they can get out and see what others are doing. For example, soil health workshops.
Anaerobic Digesters	<ul style="list-style-type: none"> • I'm not sure we want to put a lot of time and effort into it because we don't have a lot of big feedlot type operations in this area. Something that might be more beneficial would be looking at backyard composting. • You have to have such a large production in order to make it work.
Energy Efficiency	<ul style="list-style-type: none"> • Put resources where there actual improvements. For example, insulation, which I've heard is one of the biggest, most beneficial conservation measures. • General incentives and efficiency standards are great if it's for construction. Be proactive, not reactive.

	<ul style="list-style-type: none"> • When we have had storm damage or sudden growth, we had out-of-state contractors fly in to fix or put up new construction. But many weren't constructed for the north and not insulated properly.
Renewables Permitting	<ul style="list-style-type: none"> • I'm a little concerned about climate crisis on one hand and land use on the other hand. With streamlined permitting, things can get overlooked. • There's always the risk that streamlining goes too far.
Natural Fertilizers	<ul style="list-style-type: none"> • On a smaller scale, that's fine. And they already do that, but still to think you are going to capture enough fertilizer to sustain a farming operation is unrealistic.
General	<ul style="list-style-type: none"> • We need to tell our story. • Funding and economic benefit are always the number-one thing that gets people to enter spaces that might not naturally love renewables. When we are able to demonstrate the financial impact for our communities, that can be the tipping point. • Other countries need to realize that we're serious about what we're doing over here, and they'd better get serious about what they're doing over there. We need stronger alliances to build things here.

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 examples 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.