NEW MEATING

Interpretation | Interpretación

<u>Computers</u>

- 1. Find the interpretation channel located on the bottom left of your screen (looks like a globe).
- 2. Click on the globe and then select a language channel by clicking on "My Interpretation Language". Select "English" or "Spanish" on the drop-down menu.
- 3. You may move the slider bar in the selection area to adjust the volume of either the Spanish interpreter or the English interpreter.

Cell Phones, Tablets

- 1. In the meeting controls, tap ... "More"
- Select "Language Interpretation." Tap "English"

<u>Computadoras</u> rar el canal de interpretaci

- Encontrar el canal de interpretación ubicado en la parte inferior izquierda de su pantalla (parece un globo terráqueo).
- Haga clic en el globo terráqueo y después seleccione un canal de idiomas haciendo clic en "Mi idioma de interpretación". Seleccione "Inglés" o "Español" en el menú desplegable.
- Puede mover la barra deslizante en el área de selección para ajustar el volumen del intérprete de español o del intérprete de inglés.

Celular, Tableta (Móvil)

- En los controles de la reunión, haga clic en ... "<u>More</u>" (Más)
- Seleccione "<u>Language Interpretation.</u>" Haga clic en "<u>Spanish</u>"



Original aud





NM Climate Action Plan



Agriculture, Forests, Wilderness Sector Meeting

Phillip King, Climate Action Plan Coordinator EMNRD ECAM Climate Policy Bureau

Robert Gomez, Sustainability & Resilience Officer EMNRD ECAM Climate Policy Bureau

Max Henkels, Division Director of Agricultural Programs and Resources NM Department of Agriculture

> Jacob Pederson, Resource Management Bureau Chief EMNRD Forestry Division

Dylan Burruss, Noxious Weed Program Coordinator NM Department of Agriculture

May 29th, 2025



- Greenhouse gas emissions inventories provide a science-based best estimate of greenhouse gas emissions for a particular time and place
 - NM's inventory uses NMED-led analysis of oil & gas industry with EPA and EIA data for other industries
 - New Mexico's latest greenhouse gas emissions inventory is for 2021, and it shows that greenhouse gas emissions *decreased* by 14% from 2005 to 2021
 - New Mexico's greenhouse gas emissions inventory also provides *future projections* of the state's emissions
 - To achieve 45% reduction by 2030 (Executive Order 2019-003), additional climate policy measures need to be developed and implemented
 - NM's Climate Action Plan will provide a roadmap for these policies



(MMT) Million Metric Tons

EXIC

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New Mexico 2021 GHG Emissions



- The four top GHG-emitting sectors in New Mexico are:
 - Oil & Gas 42%
 - Transportation 20%
 - Electricity Generation 13%
 - Agriculture 12%
- Collectively, these sectors are responsible for ~87% of NM's GHG emissions
- NM's Climate Action Plan will prioritize emissions reduction potential, cost, and feasibility while also accounting for cobenefits, community priorities, and LIDAC benefits

2021 NM Relative GHG Emissions By Sector

Oil & Gas		Transportation	
		Industrial	Buildings
Electricity Generation	Agriculture	Waste	Mining



New Mexico Forecast



- Current policy = 32%
 decrease in greenhouse
 gas emissions from 2021
 to 2030 in New Mexico
- To achieve 45% reduction by 2030, additional climate measures need to be developed and implemented
- New Mexico's Climate Action Plan will ensure the state meets its climate goals, and your feedback is important!



(MMT) Million Metric Tons



NM Climate Action Plan





[1] To reduce climate pollution 45% by 2030 (compared to 2005).
 [2] To lead New Mexico to net zero climate pollution by 2050.



PROGRAMS, POLICIES AND PROJECTS THAT FOSTER COMMUNITY HEALTH, WORKFORCE OPPORTUNITIES & ECONOMIC DEVELOPMENT.

DUE DECEMBER 2025



What Will the CAP Give NM?









- 1.) 2023 GHG Inventory
- 2.) GHG Emissions Projections
- 3.) Quantified Emissions Reductions by Measure
- 4.) Community & LIDAC Benefits Analysis
- 5.) Review of Authority and Timeline to Implement
- 6.) Cost Estimates and Funding Options
- 7.) Workforce Planning Analysis
- 8.) Stakeholder and Community Engagement
- 9.) Tribal Government Engagement
- 10.) Plan to Meet New Mexico's Emissions Targets



Climate Action Planning Timeline





December 2025 – July 2027: Status Update Phase



Measure Selection Criteria





Measures will be selected using 5 main criteria.

IMPACT OF CLIMATE POLLUTION REDUCTIONS COST AND AVAILABILITY OF FUNDING

FEASIBILITY OF IMPLEMENTATION

TRANSFORMATIVE IMPACT

COMMUNITY VALUES





Successful climate action planning looks different in different parts of the state. We sought to hear what participants would like it to look like in their community and statewide.















Round 1 Engagement



2/20 - Gallup



3/13 - Silver City

2/27 - Hobbs



3/20 – Las Vegas



3/6 - Tucumcari



3/27 - Albuquerque



4/3 – Statewide Virtual Meeting



Agriculture, Forests, and Wilderness



ssions are

- Agricultural emissions are mostly from nitrous oxide from fertilizer and soil management, and also from animal agriculture and manure management
- Natural lands, such as forests and wilderness, can both store carbon and emit greenhouse gases



Source: <u>New Mexico Greenhouse Gas Emissions Inventory and Forecast: 2021</u> Emissions Inventory and 2030–2050 Forecast, December 2024 (E3)

NM Emissions in Million Metric Tons (MMT) CO₂e



Greenhouse Gases (GHGs)



- □ CO₂: Carbon dioxide
- \Box CH₄: Methane
- \square N₂O: Nitrous oxide (LG)
- All GHGs can be converted to units of carbon dioxide equivalent (CO₂e) so they can be directly compared

Photos courtesy of



Agriculture in NM | New Mexico Partnership



Economic Contribution of the Beef Cattle Industry to New Mexico | New Mexico State University - BE BOLD. Shape the Future.



Agriculture in NM | New Mexico Partnership



Agriculture Emissions in Million Metric Tons (MMT)



Includes emissions from:

- Agricultural soil management (N₂O; ~50% of sector emissions)
- Enteric fermentation (~35%)
- Manure management (~15%)
- Other misc. sources including burning (<0.5%)

NM Agriculture Sector Emissions (Data Sourced From EPA National GHG Inventory)

Year	Agricultural emissions (MMT CO ₂ e)	Percentage of total NM emissions
2005 (new 2024 estimate)	11.15	11.6%
2021	10.25	12.4%
2030 (projected for current policy & mitigation scenarios)	10.21	15.5-19.3%



Above: Michigan State University Management of Nitrogen Fertilizer to <u>Reduce N₂O Emissions Fact Sheet</u>

Left: <u>New Mexico Greenhouse Gas</u> Emissions Inventory and Forecast: 2021 Emissions Inventory and 2030– 2050 Forecast, December 2024 (E3)





 Wildfires not explicitly included in NM GHG Els, which is consistent with current national and international practice

 However, wildfires are a <u>significant</u> source of GHG emissions and fuel reduction can help to mitigate future emissions



Wildfire GHG Emissions in New Mexico for 2022

Wildland Fire Emissions Inventory System

Wildland Fire Emissions Inventory System is used to provide informational values in EPA national GHG emissions inventory

- Also provides state-level data by year
- In 2022 (Hermit's Peak/Calf Canyon year), NM wildfire CO₂ and CH₄ emissions estimated to be 11.2 MMT CO₂e
- This quantity is ~15% of the total GHG emissions in NM in 2021

WFEIS webpage link



Wildfires and Emissions



2764 square Kilometers (km) is equal to 1067 square miles and is roughly the size of Bernalillo County!





GOAL: Wildfire Reduction

STRATEGY:

Undertake landscape-scale wildfire reduction and mitigation in high risk and high priority areas in forests and watersheds throughout New Mexico. Continue to enhance forest resilience against wildfires, pests, and diseases, while promoting carbon sequestration in forest ecosystems.

- Expand funding for critical range of activities including fuel reduction, controlled burns, pest management, reforestation projects, and biomass utilization.
- Expand fire management planning on state and private lands to reduce future emissions from catastrophic wildfire.



GOAL: Restoration and Conservation

STRATEGY:

Incorporate landscape-scale restoration that supports native plant communities, carbon storage, and drought mitigation on natural and working lands.

- Prioritize high-value permanent land protection opportunities and nature-based solutions in the conservation/restoration of forests, prairie and ranchlands.
- Mitigate post-fire erosion to reduce carbon emissions.
- Identify revegetation opportunities on degraded lands (e.g. brownfields, mine reclamation) to enhance carbon sequestration.



GOAL: Restoration and Conservation (cont.)

STRATEGY:

Incorporate landscape-scale restoration that supports native plant communities, carbon storage, and drought mitigation on natural and working lands.

- Reforest burned areas at a pace of 5 million seedlings per year starting in 2027 and ramping up by 2032.
- Increase urban canopies by 5% by 2040, to increase carbon sequestration capacity, decrease energy demand, and increase quality of life, while prioritizing lower income and disadvantaged communities.



GOAL: Expand Cropland and Soil Management

STRATEGY:

Support producer adoption of agricultural practices that mitigate carbon emissions

MEASURES:

• Expand the impact of NMDA's Healthy Soil Program on soil health management, reduced or no-till farming, cover cropping, nitrogen management, manure and feed management for livestock, organic soil amendments (biochar, compost, etc.), where appropriate.



GOAL: Build climate-smart locally owned and operated food distribution networks systems that reduce GHG emissions

STRATEGY:

Reduce GHG from food production, processing, packaging, transportation, storage, retail, and food preparation.

- Expand local food production, increase funding for projects that buy local food from disadvantaged and emerging farmers, distribute food to underserved communities and provide financial and technical assistance to local food producers.
- Expand organic waste and food waste prevention programs, composting, and edible food recovery program. Build a new program to holistically prevent food waste, reduce food waste in landfills, and divert edible food for human consumption.
- Expand in-state meat processing capacity, offset GHG emissions of imported foods.



GOAL: Carbon Sequestration

STRATEGY:

Identify and implement strategies for the collection and use of carbon sequestration and emissions data from natural and working lands to inform improved land management practice outcomes

- Support the collection, validation, and synthesis of carbon sequestration and emission data on NM lands.
- Create incentives for production and use of biochar to reduce organic waste and sequester carbon in soil.
- Enhance the ability for NM landowners to contribute to the 30x30 E.O. goals and participate in future carbon market opportunities.



Current Supporting Policies and Programs

Wildfire Reduction

 Executive Order 2021-52; Protecting New Mexico's Lands. Watersheds, Wildlife, and Natural Heritage.

Restoration and Conservation

- Executive Order 2021-052, Land of Enchantment Legacy Fund, Natural Heritage Conservation Act
- ✓ Noxious Weed Management Act, NMDA's District Opportunities Grant

Cropland and Soil Management

 Land of Enchantment Legacy Fund, Healthy Soil Act, Soil & Water Conservation District Program

Local Food Systems

✓ Governor's Food Initiative, State meat inspection program

Carbon Sequestration

✓ NMDA's Healthy Soil Program, NMSU Carbon Management and Soil Health Initiative



NM Climate Action Plan



Agriculture, Forests, Wilderness Sector Meeting Thank you!

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Climate Action Planning – New Mexico Climate Change Action