Technical Advisory Group

Input on New Mexico's Climate Goals and Implementing Actions

June 2022

Report prepared by Lupine Collaborative & the Consensus Building Institute

CBI
CATALYZING COLLABORATION

Lupine Collaborative and the Consensus Building Institute prepared this report as part of their contracted facilitation work during the Technical Advisory Group process. This report is not a work product of the Climate Change Task Force nor of its co-chair agencies, the New Mexico Environment Department and the Energy, Minerals and Natural Resources Department.

Report Purpose

In the Spring of 2022, the New Mexico Climate Change Task Force (CCTF, Task Force) convened the Technical Advisory Group (TAG) to 1) assess the state's climate goals and implementing actions proposed in the draft climate action plans (CAPs), 2) offer concrete ideas to strengthen the actions, and 3) fill in any perceived gaps in the goals and/or implementing actions. The purpose of this assessment is to help New Mexico achieve at statewide reduction in greenhouse gas emission of at least forty-five percent by 2030 as compared to 2005 levels while strengthening its economy and integrating equity into its climate planning. This report documents the process, input, and recommendations gathered from the TAG to inform the CCTF's next steps to achieve the reduction target.

Climate Planning and Greenhouse Gas Emissions Reduction Efforts in New Mexico

Executive Order 2019-003 and the Climate Change Task Force

In January 2019, Governor Michelle Lujan Grisham issued Executive Order 2019-003 on Climate Change and Waste Prevention (EO 2019-003), which created the state's interagency CCTF and included directives for agencies to incorporate climate mitigation and adaptation practices into their policies and operations.

The CCTF is co-led by the Secretaries of the Department of Energy, Minerals and Natural Resources (EMNRD) and the Environment Department (NMED). The Task Force's work is supported by nine smaller, agency-staff-led working groups, called Climate Action Teams (CATs), that are responsible for proposing, planning, and implementing actions to reduce greenhouse gas emissions and enhance New Mexico's ability to adapt to climate change.

Climate Action Teams and Climate Action Plan Development

The CATs are organized thematically into emission-reduction related CATs (Transportation; Clean and Efficient Electricity and Buildings; Oil and Gas and Other Industry; and Natural and Working Lands), resilience-focused CATs (Emergency Management, Health, and Resilience; Sustainable Infrastructure and Planning; and Natural and Working Lands), and sector-cross-cutting CATs (State Leadership; Cultural Heritage; and Economic Transition).

For the current planning effort, the emission-reduction-focused CATs developed a proposed suite of additional climate goals and implementing actions beyond those specified in the Governor's initial Executive Order, in order to further reduce greenhouse gas emissions and achieve the specified 45% reduction of emissions by 2030 in accordance with EO 2019-003. EMNRD then engaged the Rocky Mountain Institute (RMI) to work with the CATs in modeling the estimated emissions reductions for sector-specific proposed goals and actions. RMI's modeling showed that the draft goals and implementing actions would get New Mexico closer to the 2030 emission reduction target but that more actions are needed to fully meet the target. As documented in this report, the TAG is recommending additional goals and implementing actions that may help New Mexico reach a 45% reduction in emissions by 2030. At the beginning of 2023, the Task Force plans to release a comprehensive 2023-2028 Climate Action Plan, taking into account the feedback and suggestions from the TAG and other stakeholder and internal review processes, in order to have the 'decisive decade' of work needed to reach the ambitious 2030 goal —and to set New Mexico on the path to net-zero emissions by 2050.

Climate Equity Guiding Principles

To center equity in New Mexico's climate work, in May and June of 2021 the CCTF co-chair agencies convened a climate equity working group with community advocates and environmental justice experts from around the state. This group developed a set of climate equity principles. The CCTF is integrating the equity principles into its climate change mitigation and adaptation actions and the TAG's equity-motivated recommendations are an important part of that process.

As defined by the workshop participants, climate equity affirms the fundamental right to political, economic, and cultural self-determination of all people. The TAG specifically evaluated proposed and in-progress strategies against these principles and the CCTF will report on progress as outlined in the principle on accountability and transparency. The equity principles are below:

Principles Regarding Processes to Develop and Implement Climate Policies

1. Engage Overly Burdened Communities
2. Respect Tribal Sovereignty and Require Collaboration and Consultation
3. Maintain Accountability and Transparency

Principles Regarding Design and Effects of Climate Policies

4. Incorporate Traditional Knowledge and Experience
5. Advance Equitable Economic Transition
6. Prioritize Creating and Maintaining Universal Access to Utilities
7. Reduce Health and Environmental Impacts

Technical Advisory Group

Purpose

To include the perspectives of a diverse constituency, the TAG membership includes representatives from industry, environmental, government, tribal and environmental justice organizations. Over the course of the eight meetings, the TAG reviewed, discussed, and advised on the climate goals and implementing actions developed by the CATs. The TAG specifically vetted the proposed goals and actions with an eye for strengthening New Mexico's economy and integrating equity principles into its climate planning.

The TAG engaged in the following activities:

- Reviewed the goals and implementing actions developed by the CCTF and suggested improvements, identified gaps and omissions for CCTF to address;
- Identified concrete ways to build equity into the proposed actions, including by applying the seven equity principles described above; and
- Identified those draft goals and implementing actions that have support and/or opposition, and those that have significant questions that need to be answered by the CCTF.

The TAG did not seek consensus or take votes on goals and actions.

Process and Schedule

The TAG met virtually every 1-3 weeks from March through April 2022, and covered the topics listed by the dates below. At its final and in-person meeting on May 18, 2022 in Albuquerque, the TAG integrated the conversations held throughout the process and created final recommendations.

- March 2: **TAG Kickoff Meeting**
- March 9: **Electricity**
- March 23: **Buildings**
- March 30: **Oil and Gas Industry**
- April 6: **Transportation and Natural and Working Lands**
- April 20: **Carbon Pricing/Market Mechanisms**
- May 18: **Integration Discussion and Final Recommendations**

At each topic-specific meeting, following a briefing from CAT leaders or other advisors and with the guidance of meeting facilitators, the TAG explored and reviewed the proposed climate goals and implementing actions. TAG members shared their technical and policy input through focused TAG discussions; the intent was not for the TAG to reach consensus on individual recommendations but instead to collate and understand stakeholder input, in order for the Task Force to refine and deepen those goals and implementing actions. The final report highlights recommendations that emerged from the meetings, includes questions submitted by the TAG and documents the support or areas of disagreement expressed by TAG members on the proposed climate goals and implementing actions.

On July 18th, 2022, the CCTF is planning to hold a virtual public meeting where participating TAG members will provide attendees with a summary of the stakeholder process and resulting recommendations.

Membership

The Cabinet Secretaries of NMED and EMNRD, in consultation with CCTF leadership and with the approval of the office of Governor Lujan Grisham, selected the TAG members. The members represent diverse backgrounds, many geographic regions of the state, differing areas of expertise, and experience in different sectors that contribute to the state's greenhouse gas emissions. Due to the rapid pace of the process and competing demands on their time, a number of stakeholders were constrained in their capacity to participate in the TAG. Some organizations withdrew from the TAG after initially accepting the invitation, some never participated, several only attended 1-2 meetings, and others withdrew towards the end of the process. Of the 13 members who RSVPd for the final meeting, 10 members were able to attend because several had last-minute conflicts and others shared final thoughts through email. A list of members can be found in Appendix A.

Facilitators, Staff and Advisors

The CCTF hired facilitators to support the TAG process. The facilitators served as advocates for members' procedural interests while remaining impartial to the substance of the issues under discussion. The facilitation team provided for all logistics, including virtual meeting needs, scheduling, and direct communications with the TAG.

NMED and EMNRD staff worked with the facilitators to develop focused agendas. They provided the necessary in-house technical assistance to aid the TAG in its work to help ensure a well-informed, technically credible, and operationally feasible set of final recommendations.

Members of each of the emissions-reduction-focused CATs provided background briefings and technical support for discussions of each of the major sectors. Their briefs are included in Appendix B of this report.

Summary Results: TAG Input on Draft Goals and Proposed Implementing Actions

The tables below, one for each sector, contain the specific feedback from the TAG on the proposed goals and associated implementing actions and summarize feedback from the TAG over the course of its work together. These tables are used to present the information in this report because this is the format that was used during the TAG process, and because it is the most efficient way to communicate a significant volume of information. The labeling and numbering system provides guidance on whether the action is a goal (in bold without a decimal number) or implementing action (a goal number followed by a decimal number sequentially indicating the numeric sequence of the implementing action).

The first three columns in the table, highlighted in gray, include both original and proposed new draft goals and proposed implementing actions. The second three columns, highlighted in blue, include alternative and edited draft goals or proposed implementing actions. The last column, highlighted in yellow, captures specific comments and questions captured throughout the meetings.

At the last meeting of the TAG, the ten participants used color-coded dots to indicate their degree of support and opposition to the draft goals and proposed implementing actions (original, edited, and new). The grey opinion column refers to draft goals and proposed actions in the same-colored column to its left, and the blue opinions column refers to the suggested edits column to its left. All active members of the TAG were given an opportunity after May 18 to provide a final round of input.

This was not a voting or a consensus process, and participants were invited to focus their contributions to those elements for which they had significant opinions or questions. TAG members not able to participate in the in-person meeting were invited via email to submit final comments and opinions using the same methodology. No additional comments were received after the May 18th meeting.

The three colors indicate the following:

- Green = strong support
- Yellow = significant questions or concerns
- Red = strong opposition

For example, Electricity Sector Goal 1 appears like so:

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG1	**Goal 1 Original: Promote development of 11 GW of total renewables operating by 2030 (7 GW solar, 4 GW wind).**	2	**EG1.A1**	**Alternative 1: Promote development of 11 GW of total renewables operating by 2030 (7 GW solar, 4 GW wind), displacing fossil fuel energy.**	1	Make goal language less technical so members of public can understand

In this case, two TAG members expressed strong support for goal 1 (EG1), and one member expressed serious concerns with the suggested edit (EG1.A1). This concern is described under the "Questions, Notes" column.

Electricity Sector

Key Areas of Support, Concern, and Opposition

There was broad support in general for efforts related to electrification and renewable energy. The TAG raised a number of important questions and comments for the CCTF to explore and answer. The cost of electrification to low-income households raised equity concerns. Comments about electricity focused on several areas:

- The goal(s) should focus on decarbonization and zero-emissions in the sector, opening up additional options for meeting emissions reductions goals. Implementing actions could be geared towards increasing the total gigawatts of renewable energy, and additional potential approaches such as demand-reduction, nuclear power, etc
- Planning and siting of larger-scale renewable projects needs to be done in collaboration with Nations, Tribes and Pueblos, impacted communities, utilities, and other stakeholders.
- An assessment of the actual and projected demand for electricity in New Mexico needs to be taken into consideration as the state sets concrete targets.
- Distributed and community solar and other approaches show promise for supporting households in frontline communities.
- A new goal was proposed, focusing on reducing demand for electricity through integrated efforts in buildings, transportation, etc.

Table of Detailed TAG Feedback

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
Electricity Goal 1						
EG1	**Goal 1: Promote development of 11 GW of total renewables operating by 2030 (7 GW solar, 4 GW wind).**	2	**EG1.A1**	**Alternative 1: Promote development of 11 GW of total renewables operating by 2030 (7 GW solar, 4 GW wind), displacing fossil fuel energy.**	1	Make the goal language less technical so members of the public can understand.

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
			EG1.A2	**Alternative 2: Require utilities to achieve 90% emissions reductions from a 2005 baseline by 2030 and near-zero emissions by 2035.**	3	The goal should be about decarbonization, with an implementing action focused on developing the necessary renewables online to meet demand.
EG1.1	[Original] Develop and pass legislation that establishes an energy storage procurement target (i.e., 1 GW of long-duration [>8 hour] by 2026 or other action to drive energy storage infrastructure to increase reliability). Given seasonal variation in wind and diurnal variation in solar, these longer duration options will be necessary.					The target [wattage] should be considered further to make sure it matches utility load/need, etc.
EG1.2	[Original] Develop a strategy to streamline renewable energy project permitting across jurisdictions, potentially working with a local government to develop a model process that other local governments can adopt.	1	**EG 1.2.1**	Establish a means of streamlining renewable energy project permitting across jurisdictions.	1	[EG 1.2] What is renewable? Why not zero emission? Is natural gas with Carbon Capture Storage (CCS) a solution? Is nuclear power a solution? [EG 1.2.1] Scary. Details will REALLY matter.
			EG 1.2.2	Develop a strategy to streamline renewable energy and transmission project permitting across jurisdictions, potentially working with a local government to develop a model process that other local governments can adopt.	1	
EG1.3	[New] Expand renewable energy leases on state trust lands.	1				

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG1.4	[New] Fast track the Renewable Portfolio Standard (RPS).	1 1				
EG1.5	[New] Standardize permitting across the state to make it easier to site projects in local communities.	2				Communities don't like being told what to do with codes, but standardized permitting is helpful.
EG1.6	[New] Explore participation in a regional transmission organization by NM utilities, through legislation or study.					
EG1.7a **EG1.7b** **EG1.7c**	[EG1.7 New] Generate electricity from additional sources (e.g. natural gas-derived hydrogen and CCS). [EG1.8 New] Establish a geothermal strategy to renewal portfolio mix. [EG2.14] [New] Develop programs to generate energy from municipal waste sites (methane from landfills).	1				[EG 1.7] Geothermal could be interesting but we don't need fossil fueled gas.
EG1.9	[New] Develop an agro-voltaic strategy - integrate solar and agriculture, coordinate with energy and grazing leases to avoid conflicts; integrate renewable and conservation/natural climate solutions.	1				[EG 1.9] Encourage or incentivize but don't require.
EG1.10	[New] Include incentives for grant seekers who use geothermal and other renewable sources (e.g. add points for renewable use to the evaluation of applicants who apply for water and wastewater funding).					

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG1.11	[New] Ensure local communities benefit from renewable development. Benefits could include employment, property taxes, and funding for communities.	4				
Electricity Goal 2						
EG2	**Goal 2: Enable universal clean electricity access for all New Mexicans by 2030.**		**EG2.A1**	**Alternative 1: Enable universal and affordable clean electricity access for all New Mexicans by 2030, and an opportunity to access incentivized, customer-sited utilities for all New Mexicans.**	1 1	Make goal language more precise - need to be able to use models and metrics for evaluation.
EG2.1	[Original] Identify households without electricity access in order to develop and fund a program or partnership to enable universal electricity access across NM.		**EG1.1.1**	Identify households without consistent and reliable electricity access in order to develop and fund a program or partnership to enable universal electricity access across NM.	1	
EG2.2	[New] Respect communities without access to electricity that do not want it, and provide funding to Tribal governments and counties with access problems.	2				
EG2.3	[New] Provide access to legal support to gain access to electricity.	2				
EG2.4	[New] Develop a microgrids program - especially for rural and Tribal communities.	2				
EG2.5	[New] Identify and prioritize communities with the dirtiest sources of electricity.					

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG2.6	[New] Target $500 million in state/utility funding for low-income weatherization by 2030 – with a goal to weatherize every low-income home in the state by 2030.	4				Fund exists - just needs more money.
EG2.7	[Original] Continue existing programs (e.g. solar tax credit, now also a rebate).	1	**EG2.7.1**	Continue and expand existing programs (e.g. solar tax credit, now also a rebate). Expand to include renters.		[EG 2.7] Maybe say decrease greenhouse gas (GHG) tax package.
EG2.8	[Original] Work to expand access to energy efficiency programs to buffer rising costs of energy.					
EG2.9	[New] Improve communication and education around available resources to support renewable energy and energy efficiency (e.g. rebate programs).	1				
EG2.10	[New] Allocate more funding for home renovation programs and solar tax credits to make solar more equitable and accessible to low-income residents.	2				
EG2.11	[New] Provide support to local jurisdictions and municipalities in the form of resources, funding, and other support.					
EG2.12	[New] Grow a renewable energy workforce when electrifying homes.	2				
EG2.13	[New] Develop incentives for community-based outreach for energy efficiency programs – this can be a model to support and pay for community liaisons to work alongside electric utility technicians to gather information and input.					[See Electricity Goal 1 proposed new action.]

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
Electricity Goal 3						
EG3	**Goal 3: Deploy 6 GW transmission capacity to connect new renewables and coordinate statewide transmission planning.**	2				
EG3.1	[Original] Establish a formal process for identifying priority transmission corridors and a streamlined statewide transmission planning process.	2				Integrate water, wildlife, and land considerations.
EG3.2	[New] Make New Mexico (NM) grids more independent to address overload issues and support economic diversification.	3				– What does it mean for the grid to be "independent"? Regional coordination is CRITICAL for reliability and affordability, and decarbonization. – Interconnection helps, not independence. – Does this allow for community solar projects? Does this allow for energy grid autonomy?
EG3.3	[New] Ensure robust Tribal and community participation in any and all infrastructure decisions.	4				
EG3.4	[New] Coordinate efforts from NM to seek federal funds. Utilities and developers are already preparing grant writers to seek funding individually. States could identify priorities to evaluate or support proposals.	3				
Electricity Goal 4						
EG4	**Goal 4: Incorporate distributed energy resources (DER) integration and distribution system updates in state and PRC planning.**	1				

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG4.1	[Original] Work with Public Regulation Commission (PRC) and others to implement Grid Modernization Roadmap recommendations (e.g. updating NM's Interconnection Rule).					
EG4.2	[Original] Work in close coordination with other sectors on energy efficiency and transportation planning to shed light on grid issues.					
EG4.3	[New] Develop a coordinated plan for supply chain issues (e.g. copper, transformers, etc). Plan ahead and procure either in advance or collectively and strategically.	1				
EG4.4	[New] Quickly identify available funds through the Infrastructure and Jobs Act and apply ASAP.					
EG4.5	[New] Advance meters and other unexciting stuff.	1				What does this mean?
EG4.6	[New] Consider developing a law that allow utilities to own CGP (up to a certain percentage).					
EG4.7	[New] Anchor to microgrids, institutions, and key facilities (hospitals, schools, police etc.) to allow for access and to ensure redundancy.					
EG4.8	[New] Emphasize equity and working with groups as key partners – ensure representation from frontline communities at all levels and stages of design and rollout.					
EG4.9	[New] Pass law requiring and/or incentivizing utilities to invest in microgrids.					

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG4.10	[New] Look at best practices for implementation (e.g. shade structures to mitigate reflective heat).					
Electricity Goal 5						
EG5	**Goal 5: Advocate for NM's interests in western states' dialogue around regional electricity coordination.**	1	**EG5.A1**	Advocate for NM's interests in the various efforts across the West for regional electricity transmission and wholesale market coordination.	3 1	Clarify the goal (e.g. "Ensure that Western regional electricity coordination leads to greater opportunities to decarbonize NM's electricity supply and lower customer costs").
EG5.1	[Original] Assess impacts of participation in Western Energy Imbalance Market on supply/demand and per kWh cost.		**EG5.1.1**	Partner with the PRC and utilities participating in imbalance markets (Public Service Company of NM [PNM] and El Paso Electric Company [EPE] in California Independent System Operator 's [Cal-ISO] Western Energy Imbalance Market [EIM] and Southwestern Public Service Company [SPS] in Southwest Power Pool's [SPP] Energy Imbalance Service market[EIS]) to assess impacts of participation on emissions and ratepayer costs.		
			EG5.1.1 V2	Partner with the PRC and the utilities participating in imbalance markets (PNM and EPE in Cal-ISO's WEM and SPS in SPP's EIS market) to assess the benefits, including cost savings, of leveraging renewable resources or avoided curtailments.	2	[EG5.1.1 V2] Such an analysis could be done by EMNRD or EDD rather than PRC. Good goal, but maybe PRC is not the right agency to explore? [EG5.1.1 V2] GHG accounting standards can facilitate development of an regional transmission organization while ensuring the integrity of NM's goals. NM can help lead / facilitate this process.

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG5.2	[Original] Continue with regional dialogues/regional participation	1	**EG5.2.1**	Ensure that state representatives and NM utilities actively participate in regional dialogues around the Western Markets Exploratory Group.	1	
EG5.3	[New] Engage with SPP to explore whether it is willing to create a market for non-CA western utilities.					
EG5.4	[New] Identify the regulatory considerations and market design principles that NM should advocate for in wholesale markets, including day-ahead markets, offered through a regional transmission organization to ensure that wholesale market participation benefits can fairly and equitably trickle down to the retail ratepayer level.		**EG5.4.1**	Identify the regulatory considerations and market design principles that NM would pursue in future wholesale market constructs (including day-ahead markets) of a west-wide regional transmission organization).		
EG5.5	[New] Explore innovative rate designs to ensure wholesale market participation benefits can fairly and equitably trickle down to the retail ratepayer level.					
Electricity Goal 6						
EG6	**Proposed New Goal: Increase the number or percentage of households in NM with solar panels. Create a requirement that is borne by electricity providers and some homeowners with subsidies to help economically disadvantaged households.**					
Electricity Goal 7						

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
EG7	**Proposed New Goal: Reduce demand for electricity. (E.g. more efficient heating and cooling, appliances; enhanced mass transit; facilitated bicycling and walking). NOTE: requires integration with other sectors.**					

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Buildings Sector

Key Areas of Support, Concern, and Opposition

While there was support in general terms for the focus on buildings and building codes as a key arena for greenhouse gas emissions reductions, members added a number of proposed new goals and implementing actions focused on existing buildings and elevating the needs of residential and multi-family buildings. In addition, energy efficiency was emphasized and noted as particularly important from an equity perspective. Questions were raised about the balance between stretch codes and establishing a statewide building code in support of the state's climate goals.

Table of Detailed TAG Feedback

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
Buildings Goal 1						
BG1	**Goal 1: Establish legislation requiring 100% fuel switching of gas space and water heating systems at end-of-life by 2023**	2 2				
BG1.1	[Original] Establish legislation that ensures an equitable transition of the gas infrastructure system with steps to begin by 2023		**BG 1.1.1**	Add: Include a partial electrification mandate for replacement space and water heating appliances.	1	
			BG 1.1.2	Add: Identify action(s) that will encourage and ensure that new buildings can support electrification of space and water heating as well as electric vehicles.		
BG1.2	[Original] Implement training programs so that implementers and installers are comfortable with and knowledgeable about the technology.	3		Suggestions: – Use demo homes to show technology, and as teaching labs. – Make experts available for knowledge transfer. – Inform and educate about the latest technology. – Provide ongoing education to architects, builders, tradespeople.		

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
				– Make the programs available and accessible to Tribal/low-middle income communities.		
BG1.3	[New] Establish mechanism and metrics for buildings without current infrastructure (not just fuel switching).	1				
BG1.4	[New] Prioritize larger homes and give smaller homes more time to transition, for equity impacts.	1 1 1				
Buildings Goal 2						
BG2	**Goal 2: Electrify 1/3 of the space and water heating in buildings by 2030 by providing financing and incentives.**	1	**BG2.A1**	**Alternative Goal 2: Electrify 1/3 of the space and water heating in buildings by 2030.**		Original goal 2 was edited because it was duplicative, and financing and incentives is an implementing action.
BG2.1	[Original] Identify other funding mechanisms, such as green banks, that can help bridge the funding gap.	2				
BG2.2	[Original] Implement training programs so that implementers are comfortable with technology and able to recommend the technology.	1				
BG2.3	[New] Add specific actions for buildings without current infrastructure (e.g. no space/water heating).					
BG2.4	[New] Identify where existing programs (state, utility, or federal) can be expanded or refocused to meet space	2				

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
	and water heating electrification needs (especially in LMI and underserved communities). Target financing and incentives on local, public, and community buildings.					
Buildings Goal 3						
BG3	**Goal 3: Establish a building performance standard by 2023 that drives a 33% reduction in commercial gas consumption by 2030.**		**BG3.A1**	**Alternative Goal 3: Establish a building performance standard by 2023 that drives a 33% reduction in commercial gas consumption by 2030 in existing buildings.**	3	
BG3.1	[Original] Implement and build on building and trade training programs on codes.					
BG3.2	[Original] Take legislative action to establish an authority for energy standards for existing buildings.					
BG3.3	[New] Establish a short-term loan program for small and other businesses that may struggle to implement changes.					
BG3.4	[New] Review existing sustainable building incentives for residential buildings and ensure they also apply to commercial (e.g. all new buildings are solar-ready, etc.).					
BG3.5	[New] Establish priorities for big visible businesses that will make an impact; consult with commercial sectors not represented on the TAG.	2				Very subjective.

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
Buildings Goal 4						
BG4	**Goal 4: Develop and incentivize the adoption of an all-electric, net-zero-carbon stretch code that is adopted by municipalities representing 50% of NM's population by 2025.**	2	**BG4.A1**	Alternative Goal 4: Goal 4: Develop and incentivize the adoption of a net-zero-emissions stretch code that is adopted by municipalities representing 50% of NM's population by 2025.	1	There is some debate about the benefits of stretch versus standard codes. On the one hand, flexibility helps local communities best meet local needs. On the other hand, developers prefer standardized codes as opposed to "jurisdictional islands." Couple this with rate design elements so it does not create an economic burden.
BG4.1	[Original] Take legislative action to establish an authority for energy standards for existing buildings.					
BG4.2	[Original] Create stretch code guidelines that can be used by municipalities so they wouldn't need to put in the work to do that themselves.					
BG4.3	[Original] Determine and implement appropriate incentives.					
BG4.4	[New] Establish administrative support for training in new codes.					
BG4.5	[New] Design programs to support diversity of municipalities and incentivize smaller localities to be early adopters.					
BG4.6	[New] Prioritize new codes to larger homes sooner and smaller homes later to address equity impacts. If the stretch code includes retrofits, smaller homes can be considered sooner.					
Buildings Goal 5						
BG5	**Proposed New Goal: To reduce energy demand, improve building efficiency**					

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
	and ensure NM implements the most up to date building/energy codes.					
BG5.1	[New] Audit existing codes, incentives, and commissioning programs. Assess current compliance and enforcement, assess barriers to compliance and enforcement before passing new laws or implementing new requirements.					
BG5.2	[New] Require by law that NM stay up to date on international building codes. NM recently upgraded from the 2009 international energy efficiency building codes to the 2018 codes.	3				Require that remodel upgrades be to code.
BG5.3	[New] Identify and coordinate with existing programs that could be leveraged to increase low-income home efficiency upgrades, weatherization, appliance upgrades.	2				Suggested edit: "improve implementation of…" Mortgage and finance authority money is supposed to be for this, but staff don't appear to have comprehensive knowledge of how to distribute funds in support of this purpose
BG5.4	[New] Consider establishing a building performance or certification standard - but include funding or other incentives to support certification of specific projects.					
Buildings Goal 6						
BG6	**Proposed New Goal: Set appliance and fixture efficiency standards that exceed basic federal efficiency standards.**	6				And high-performance envelope requirements.

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
BG6.1	Take legislative action requiring and incentivizing certain appliances, plumbing fixtures, and other products sold for residential or commercial use to meet energy efficiency and water efficiency standards that exceed basic federal efficiency standards. For example, see CO HB 19-1231: https://leg.colorado.gov/sites/default/files/documents/2019A/bills/2019a_1231_enr.pdf					
BG6.2	Consider legislation that would provide state-level tax incentives for new heat pumps for electrification.	2				
Buildings Goal 7						
BG7	**Proposed New Goal: Use legislation to redesign utility rates by 2023 so that electrification is cost-effective on a lifecycle basis for 90% of residential customers.**					
BG7.1	[New] CEED Block Grant program implementation.					
BG7.2	[New] All inefficient homes (or homes below a certain threshold) will have energy efficiency audits by a certain year with a low-income carve out.	1				
BG7.3	[New] Could include energy efficiency audits. Could include heat pumps.					
BG7.4	[New] Pass legislation to have PRC consider affordability in rate design.	2				Low income rates.

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes
Buildings Goal 8						
BG8	**Proposed New Goal: Capture electrification opportunities in new buildings through building codes and standards, those requiring new buildings to be all-electric or "ready to electrify," prioritizing access to resources and support for marginalized communities.**	2				
Buildings Goal 9						
BG9	**Proposed New Goal: Establish new and enhanced utility incentives for energy efficiency and electrification.**					

Additional Original Building Goals

The CCTF developed the following Buildings goals, but did not provide implementing actions for them. The TAG did not discuss these goals at the March 23 meeting and they did not garner comments from the TAG during the post-meeting comment period.

- Buildings Goal 10: Use legislation to redesign utility rates by 2023 so that electrification is cost-effective on a lifecycle basis for 90% of residential customers.
- Buildings Goal 11: Establish legislation that ensures an equitable transition of the gas infrastructure system, with steps to begin in 2023, clear benchmarks to be achieved throughout, and a focus on avoiding spiraling costs for remaining consumers.
- Buildings Goal 12: Establish requirements that reduce embodied carbon refrigerant emissions from new residential and commercial buildings by 1/3 by 2030.
- Buildings Goal 13: Ensure that every electrification requirement, once enacted, is immediately and directly supported by at least one long-term education or technical assistance program for both the supply side (contractors, manufacturers, etc.) and for consumers.
- Buildings Goal 14: Adopt a state base code that requires all new buildings to be all-electric by 2030.

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Oil and Gas and Industry Sector

Key Areas of Support, Concern, and Opposition

The oil and gas discussions raised significant questions and highlighted areas of deep disagreement among members of the TAG. At the most fundamental level, debate focused on whether to use existing and developing technology in the sector to achieve significant reductions versus focusing efforts on a rapid transition away from fossil fuels.

Concern and opposition to draft oil and gas goals and proposed implementing actions focused on two areas: carbon capture and storage (CCS), and the proposed hydrogen hub. In both cases, significant disagreement existed among TAG members regarding the accuracy of existing science and data, models, and technology. With regards to hydrogen, opinions shifted based on the source and production methods to be used and became more contentious where the source fuel is natural gas. In addition, substantial equity concerns were raised about both strategies, and discussions around both CCS and hydrogen highlight the importance of a robust equity-informed community engagement process.

Table of Detailed TAG Feedback

Overarching comments:

- The commodification of air doesn't align with Indigenous values. We are having to ask ourselves where do we fit into this global market.

Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
Oil and Gas Goal 1						
OG1	**Goal 1: Reduce the operational intensity of methane and carbon dioxide emissions from oil and gas production and processing by 60% from a 2020 baseline by 2025.**	3	**OG 1.A1**	**Alternative Goal 1: Reduce the operational intensity of methane and carbon dioxide emissions from oil and gas production and processing by 60% from a 2020 baseline by 2025 and 90% by 2030.**	1 3	
OG1.1	[Original] Implementation and adoption of EMNRD waste and NMED volatile organic compound (VOC) rules.	1				Need a program review to see how rules are working.

Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
OG1.2	[New] Secure resources necessary for implementation of EMNRD waste and NMED VOC rules with budgets for enforcement and monitoring.	3 1				Get implementation funding.
OG1.3	[New] Continue to work with oil and gas companies to experiment and innovate for more efficiency (i.e. use waste heat for power onsite; ongoing improvements to efficiency for pneumatics)	1				
OG1.4	[New] Explore and support opportunities to incorporate renewables (e.g. high density solar, geothermal) in operations to tie in and sell back to the grid.	6				Also as a way of reducing emissions.
OG1.5	[New] Pass legislation / improve regulatory system to enable interconnection of production and processing facilities with green energy.	2				Where has it been clearly defined? Clean energy has different definitions by different perspectives.[1]
Oil and Gas Goal 2						
OG2	**Goal 2: Remediate all existing abandoned infrastructure by 2030 (half by 2025).**	4 2				All infrastructure? How about evaluate impacts and assign resources accordingly?
OG2.1	[Original] Implement Infrastructure Investment and Jobs Act funding in NM over the next ten years.	3				Oil Conservation Division (OCD) needs more staff to do this.

[1] Needs source.

Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
OG2.2	[Original] Increase Oil Recovery Fund bonding amounts to ensure remediation of newly abandoned infrastructure begins within 12 months of abandonment.	4				
OG2.3	[New] Support training opportunities for disadvantaged, indigenous communities, especially during transition.	2 2				
Oil and Gas Goal 3						
OG3	**Goal 3: Achieve 50% reduction of industrial/oil and gas CO2 by 2030 (based on 2018 inventory) through carbon capture and sequestration (CCS).**	2 2	**OG 3.A1**	**Alternative Goal 3: Achieve 50% reduction of Industrial/oil and gas CO2 by 2030 (based on 2018 inventory).**		Remove "through CCS" and have separate goal related to CCS if it is found to have benefits in some applications and if society is comfortable with the science.
OG3.1	[Original] Apply for and use Class VI primacy, in order to regulate CCS.	3 3				Move off oil and gas.
OG3.2	[Original] Clarify ownership of pore space and CO2 injected for CCS. Will likely require Oil and Gas Act updates.	2 1				Any update should be accompanied by environmental and community protection.

Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
OG3.3	[New] Maintain Class II (oilfield waste) wells while Class VI is pursued.	2				
OG3.4	[New] Implement a broad educational campaign on CCS to combat negative impressions.	1 2				
OG3.5	[New] Provide direction to businesses on methods of CCS.	2				
Oil and Gas Goal 4						
OG4	**Goal 4: Create one clean hydrogen hub in NM by 2028.**	1 2 2	**OG4.A1**	**Reframe Goal 4: focus on hard-to-decarbonize sectors more specifically instead of a new hydrogen hub.**		– The suggested reframe appearing as OG4.A1 wanted to remove the reference to a specific policy approach and instead focus at a higher level on hard-to-decarbonize sectors, opening up the options for specific strategies. – Any hydrogen incentive must be tied to a stringent, lifecycle GHG emissions standard. – This seems like a "build it and they will come" scenario. This is more of economic development than emissions reduction.
OG4.1	[Original] Pass and implement the Hydrogen Hub Act to create a clean hydrogen economy to accelerate decarbonization of industrial fuels.	2				

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
		3				
OG4.2	[New] Establish small pilot projects to test the hydrogen concept and if it is successful move to broader policy/projects.	2				Focus on contaminated water. With the solar shortage, it is questionable if this is a good use of renewables.
OG4.3	[New] Prioritize hard-to-decarbonize sectors such as transportation.	2				
Oil and Gas Goal 5						
OG5	**Proposed New Goal:** Plan for a managed move away from oil and gas extraction.			This recommendation was added at the May 18 meeting and did not have an opportunity to garner opinions from participants.		

Additional TAG comments provided via email regarding oil and gas:

- Reduction of O&G emissions intensity, while welcome, doesn't necessarily mean that net emissions are actually reduced – you might, in fact, either hold emissions steady or even increase them, depending on the rate/expansion of production. Earthworks did some good work on this a few years ago, pushing back on industry's use of methane "intensity": https://earthworks.org/blog/oil-and-gas-methane-pollution-intensity-is-industrys-latest-distraction/
- O&G provisions don't align w/literature/analysis providing that new fossil fuel production projects are incompatible with U.S. and global commitments to reach net zero emissions by 2050[2]. Previous reports echo this conclusion[3]. And more recently, the U.N. Environment Programme *et al*.'s Production Gap report found that: [T]he world's governments still plan to produce more than double the amount of fossil fuels in 2030 than would be consistent with limiting global warming to 1.5°C, and 45% more than consistent with limiting warming to 2°C. Collectively, although many governments have

[2] International Energy Agency, *Net Zero by 2050: A roadmap for the global energy system* at 21 (2021).
[3] Oil Change International, *Sky's the Limit: Why the Paris climate goals require a managed decline of fossil fuel production* (2016).

pledged to lower their emissions and even set net-zero targets, they have not yet made plans to wind down production of the fossil fuels that, once burned, generate most of those emissions[4].

- Using CCS to reduce emissions 50% below 2018 levels by 2030 may very well prove financially/economically/technically imprudent and infeasible.
- There is not enough integration of GHG emissions with equity and justice, whether in terms of community-based guardrails to define action re: O&G or in terms of revenue/economic diversification support.

[4] U.N. Environment Programme, et al., *The Production Gap: Governments' Planned Fossil Fuel Production Remains Dangerously Out of Sync With Paris Agreement Limits*, Executive Summary at 3 (2021).

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Transportation Sector

Key Areas of Support, Concern, and Opposition

There was relative agreement around the draft goals and proposed actions for the transportation sector, with the exception of the clean hydrogen pilot refueling transportation hub. Discussions focused on potential disproportionate impacts on low-income and rural residents when it comes to vehicle miles traveled (VMT) and the introduction of road usage charges (RUC). Several new goals were proposed by the TAG, focused on idling, coordination and collaboration, and community education and engagement.

Table of Detailed TAG Feedback

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
Transportation Goal 1						
T1	**Goal 1: Achieve a 20% reduction in fuel carbon intensity (CI) by 2030 via a Clean Fuel Standard (CFS).**	4				
T1.1	[Original] Pass the Clean Fuel Standard Act in the state legislature in 2023.	2				
T1.2	[Original] Explore existing CFS rulemaking authority within the NM Air Quality Control Act.					
T1.3	[Original] Seek funding for 6 Full-Time Equivalent positions in a team at NMED for rulemaking and implementation.	2				
T1.4	[Original] Complete CFS rulemaking by 2025.					
T1.5	[Original] Implement the CFS beginning in 2026.					
T1.6	[New] Include sustainable performance measures in metropolitan planning agency processes.					
T1.7	[New] Partner with Land of Enchantment Clean Cities Coalition and					

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
	others to educate the public about the CFS.					
Transportation Goal 2						
T2	**Goal 2: Reduce light-duty vehicle miles (VMTs) traveled by 20% by 2030.**	1 4				Is this possible for rural communities? Great aspirational goal! Can't count on this being achieved for reductions. Vehicle miles are governed by urban organization. This needs to be integrated with densifying living.
T2.1	[Original] Have NM Department of Transportation (DOT) host bi-monthly VMT meetings to update the Transportation CAT on DOT actions in this area and how funds are being used to promote reductions in VMT.					
T2.2	[Original] Identify and compare policies and best practices that will support multi-modal transit/VMT reduction.					
T2.3	[Original] Seek federal infrastructure funding for the expansion of transit and transit electrification.	2				
T2.4	[Original] Implement incentive programs to increase the use of multi-modal transportation in NM.					Specifically - Free fares on public transit to promote use
T2.5	[Original] Adopt and implement education programs in NM to increase multi-modal transportation use.					
T2.6	[Original] Establish the electric bicycle and electric moped rebate program and subaccount to encourage the purchase and use of e-bikes and electric mopeds.		**T.2.6.1**	Add: Integrate with street-side stormwater features that make walking and riding more enjoyable. Enhance "complete streets" ordinances.		

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
T2.7	[Original] Adopt CO-like 2019 Transportation law requiring funding formula for multi-modal in all projects.					
T2.8	[New] Free, zero carbon transit in every city.	2				
T2.9	[New] Use federal infrastructure funding to leverage multi-modal transportation in local projects (e.g. Complete Streets, Anaheim electric buses).					Federal funds in the bipartisan infrastructure package are highly flexible and virtually all of the $3 billion available over the next 5 years could be spent on transit, bike, and pedestrian improvements.
T2.10	[New] Develop legislation to establish state planning programs and perhaps urban land-use reform.		**T2.10.1**	Add: And/or develop NM DOT prioritization of VMT-reducing projects over road improvements/expansions.		
T2.11	[New] Incentivize denser, city-center development, incentivize local zoning allowing small markets, disincentivize big commercial developments in outlying areas that require driving.					
T2.12	[New] Subsidize/support bike, e-bike, and e-scooter rental programs (and prohibit cities from prohibiting them).					
T2.13	[New] Implement performance measures for metropolitan planning organizations (MPOs) and a state transportation plan tied to VMT reductions, conventional/toxic pollution reductions, and equitable transportation.					
T2.14	[New] Require MPOs to evaluate emission impacts of any land-use or transportation decisions and prioritize those that reduce GHGs.					

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
T2.15	[New] Incentivize/require counties to focus development within cities and cities to prioritize in-fill development and stop sprawl.					No new roads for sprawl.
T2.16	[New] Require health impact assessments of any proposed highway expansion projects in the state.					
T2.17	[New] Increase broadband internet access and incentivize (1) businesses to support work from home and (2) service providers to go online (e.g. telehealth) to reduce commuting.	1				
T2.18	[New] Ensure all road projects not considered to be highways include protected sidewalks and bike lanes.					
T2.19	[New] Target 100% of streets to have protected bike lanes and sidewalks by 2030.					
T2.20	[New] Target 0 pedestrian/bicycle deaths by 2030.					
T2.21	[New] Support policies and practices that promote alternative modes of transportation.	1				Does this include public transport and urban planning initiatives for affordable housing and public transit?
T2.22	[New] Decrease traffic lanes (road diet) to allow space for non-car transportation. Make it safe for these other forms of transit.					
T2.23	[New] Reduce the area dedicated to cars, increase the area dedicated to these other modes of transit, including parking.					
T2.24	[New] Utilize the Rural Opportunities Taskforce Legislative Interim Committee's findings to make VMT reduction equitable.					

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
Transportation Goal 3						
T3	**Goal 3: Reach 500,000 (~25% penetration) zero-emission light-duty vehicles on the road by 2030.**					
T3.1	[Original] Use NMED's existing authority in the NM Air Quality Control Act to pass by 2023 and implement California's proposed additional clean car standards (Advanced Clean Car II).	3				These should go in statute as well, to make them more durable.
T3.2	[Original] With State tax credit/refund or other funding, incentivize the purchase of new and used alternative fuel vehicles, including electric vehicles (EVs) (e.g. 2021 Senate Bill 21).		**T3.2.1**	– Provide larger incentives to lower income people and either caps or no incentives for the affluent. Utilize a 2-tier or graduated incentive system. – Ensure any program providing rebates or incentives for low-income people to purchase EVs applies to the purchase of used EVs.		
T3.3	[Original] Create mandatory state executive branch fleet purchase requirements or GHG emission limits (e.g. Colorado executive order concerning the Greening of State Government).		**T3.3.1**	Expand this to electrify city and county fleets, as well as police vehicles. EV's speed, acceleration and low operating costs make them ideal for police.		
T3.4	[Original] Launch a voluntary, lead-by-example Clean Car Challenge to spur governments, businesses, and other entities to decarbonize their light-duty fleet.					
T3.5	[Original] Conduct outreach and education programs for alternative-fuel, light-duty vehicles (EVs, fuel cells).					– Educate dealerships about zero-emission vehicles and find other ways to overcome inertia. Albuquerque has a dealership certification program. – Nine states developed a zero-emission vehicle (ZEV) action plan for 2018-2021 focused on increasing

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
						consumer awareness and incentives, building out infrastructure and vehicle dealership training, among other initiatives: https://www.nescaum.org/topics/zero-emission-vehicles.
T3.6	[Original] Implement a program that uses state or public funds to provide rebates or other support to replace vehicles that fail emissions testing or are otherwise emissions intensive. Large volumes of cars in the Albuquerque metro area fail. California's Clean Cars 4 All program is an example.	1				
T3.7	[New] Review state law (NMSA section 66-4-1 et seq.) to see if restricting auto companies from selling directly to consumers is an impediment to shifting to ZEVs.					
T3.8	[New] Examine if the Tesla dealership on sovereign Pueblo land benefits the tribe, and if this kind of partnership should be replicated. A 2022 law passed in the legislature establishes that instead of having to pay the excise tax to state of NM when a vehicle is sold on Tribal land, the tax goes to the pueblo or tribe.	1				
T3.9	[New] Promote Ford and Tesla's EV trucks - particularly in rural areas.	1				
Transportation Goal 4						
T4	**Goal 4: Reach 15,000 (~25% penetration) zero-emission medium-**	1	**T4.A1**	Suggested change: Use clean trucks as percentage of sales as target numbers.	1	I have concerns regarding technological feasibility.

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
	and heavy-duty trucks and buses on the road by 2030.					
T4.1	[Original] Consider adopting CA Advanced Clean Trucks (ACT) rule.		**T4.1.1**	Adopt CA Advanced Clean Trucks (ACT) rule in 2022 and other clean truck rules.	3	
T4.2	[Original] Support federal Heavy Duty Engine and Vehicle Standards.					
T4.3	[Original] Design and execute a clean hydrogen pilot refueling transportation hub, in partnership with the oil and gas industry.	2 2	**T4.4.1**	Before designing a clean hydrogen hub, require a full lifecycle emissions analysis of the GHG impact of doing so, using updated current % fugitive methane data.	4	Electrification is way easier. Focus on electrification.
T4.4	[Original] Conduct outreach, education programs, and pilot projects for electric and fuel cell (hydrogen) heavy-duty vehicles.		**T4.5.1**	Facilitate funding schools to convert school bus fleets.		
T4.5	[Original] Lead by example with government and non-government fleet targets.					Establish a best practices manual for employers with large fleets. Coordinate with federal government conversion. The Biden administration is improving vehicle efficiency for the US Postal Service fleet.
T4.6	[New] Fund full fleet replacement with EVs for all state and local medium and heavy-duty vehicles (buses, school buses, garbage trucks, etc.) by 2025.	1				
T4.7	[New] For entities that can't replace their fleet, use technology that monitors usage; these can reduce fuel consumption significantly and are often encouraged by insurance companies. PNM uses this technology.					

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
T4.8	[New] Conduct a cost-benefit analysis to confirm whether construction of all new trucking infrastructure for a conversion to hydrogen fuel cell vehicles is of the most benefit and least negative impact.					
Transportation Goal 5						
T5	**Goal 5: Reach 2,000 DC Fast Charger (DCFC) stations statewide by 2030.**		**T5.A1**	**Alternative Goal 5: Support necessary charging infrastructure and rate design to support expanded EV deployment across the state.**	4	
			T5. A1.1	Add "Deploy 2,000 DC Fast Charger (DCFC) stations statewide by 2030" as an action to accompany the edited goal.		
T5.1	[Original] Continue to engage with Regional Electric Vehicle Plan for the West (REV West) to increase EV awareness and coordinate the placement of EV charging station locations.					
T5.2	[Original] Develop a planning framework to track existing and site new alternative fuel infrastructure to effectively deploy $38 million from Infrastructure Investment and Jobs Act over next 5 years, in accordance with US DOT requirements.		**T5.2.1**	Add: Plus the $14M in utility Tucson Electric Power (TEP) funds and $10M in American Rescue Plan Act (ARPA)-NM DOT funds for EV charger buildouts, plus $10 million in special session budget from December 2021.		
T5.3	[Original] Coordinate with utilities to use TEP resources effectively	1				This doesn't go here. Should be under electricity.

CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
T5.4	[Original] Require new commercial and multifamily building codes to incorporate EV-ready infrastructure.		**T5.4.1**	Edit: Require new residential, commercial, and multifamily building codes to incorporate EV-ready infrastructure; ensure equitable access for multifamily units.	1	Information on EV car sharing and mobility hubs in affordable housing: https://www.transformca.org/landing-page/mobility-hubs-affordable-housing-pilot.
T5.5	[Original] Work with utilities to establish EV-friendly and grid-use optimizing charging rates.					
T5.6	[New] Train tradespeople to repair charging infrastructure. Utilize community colleges and trade schools.					Luna Community College is beginning a program. There is a pilot training program in the State of California.
T5.7	[New] Incentivize small businesses, and target minority- and women-owned businesses, to locate near DCFC stations for economic development co-benefits.					
Transportation Goal 6						
T6	**Goal 6: Replace or complement the gas tax with an alternative mechanism for funding road maintenance and construction by 2026.**	1				
T6.1	[Original] Continue participation and membership in Road Usage Charge (RUC) West.					
T6.2	[Original] Conduct a RUC study and pilot project					
T6.3	[Original] Pass legislation to replace the gas tax with efficiency-adjusted RUC.		**T6.3.1**	Pass legislation to replace the gas tax with efficiency-adjusted RUC by 2030 (and not before); ensure legislation addresses needs of low income and rural communities.		RUCs would need to have exceptions for rural and LMI residents, including tribes. Rural residents need to drive more and would be unfairly overburdened.

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
			T6.3.2	Rather than an RUC system, have a distributed monthly payment registration fee as a basis for everyone.		
			T6.3.3	Disincentivize large personal trucks through RUCs, they cause more damage to roads and produce more GHGs.		
T6.4	[Original] Implement a RUC system.					
T6.5	[New] Index gas tax to inflation and sales.					
T6.6	[New] Examine a bill drafted by students in 2019 for a gas tax increase with a rebate under a certain income level. Receiving low-income rebates plus a reduced driving rebate would be a double benefit.					
T6.7	[New] Fund road maintenance with a progressive increase in the income tax.					Dispense with the concept of user-pays for road maintenance. All consumers rely on goods and service transported by road regardless of whether they themselves drive. Higher earners consume more and thus should pay more for road maintenance.
Transportation Goal 7						
T7	**Proposed New Goal: Reduce emissions from gas and diesel medium- and heavy-duty trucks and buses on the road (idling).**	2				
T7.1	[New] Implement educational programs and incentives about idling targeted at commercial vehicle users.					

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
T7.2	[New] Support existing anti-idling policies.					https://grcc.us/clean-cities-coalition-brings-anti-idling-program-to-schools/; https://cleancities.energy.gov/files/u/news_events/document/document_url/93/2015_strategic_planning_idling_reduction.pdf; https://cleancities.energy.gov/files/u/news_events/document/document_url/109/2015_strategic_planning_presentation_idle_reduction.pdf
Transportation Goal 8						
T8	**Proposed New Goal: Improve Interagency Coordination, Integration, and Collaboration.**	1				
T8.1	Work with local governments to embed implementing actions in Capital Improvement Plans to secure funding.					
T8.2	Work with US Environmental Protection Agency (EPA) Border Plan 2020 and others to address lower emissions standards for vehicles from Mexico.					
T8.3	Integrate CCTF transportation goals with NM DOT plans..					
T8.4	Partner with public health departments to achieve Goal 8.					Diesel emissions from both school buses and trucks along highway corridors are leading causes of disparate air pollution and health impacts in environmental justice communities.
Transportation Goal 9						
T9	**Proposed New Goal: Community Education and Engagement**					

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CODE	Proposed Goals + Implementing Actions	Opinions	CODE	Suggested Edits	Opinions	Questions, Notes, Specific Suggestions
T9.1	Work with local communities to map transportation impacts to identify helpful solutions to GHG emissions and to collaborate in addressing public health concerns.					
T9.2	Conduct education and engagement in Spanish and appropriate indigenous languages.					
T9.3	Give communities opportunities to decide how funds will be used.					
T9.4	Conduct education campaigns: combating misinformation about CFS, especially about the drivers for the cost of fuel; about widely available lower carbon fuels (e.g. Maverick gas stations); and how they can be used in					https://www.cleanfuelwa.com/faqs/#:~:text=Will%20Clean%20Fuels%20Work%20In,running%20on%20less%20polluting%20fuels. All vehicles sold in the United States since 2001 have been certified by the EPA as clean fuel or flex-fuel capable and will have no difficulty running on less polluting fuels.[5]

[5] Claim needs to be verified.

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Natural and Working Lands (NWL) Sector

Key Areas of Support, Concern, and Opposition

In general, TAG discussions for this sector were positive, and a number of important questions were raised. The overarching question is that while the NWL draft goals and proposed actions are important on their own merit and in terms of increasing climate resiliency, some TAG members questioned their significance when it comes to emissions reductions. Several TAG members had questions about the 30 x 30 Executive Order and its relevance to emissions reduction targets.

The potential for this sector to operationalize the equity principles was a topic of conversation as well. For example, the crucial role that indigenous land and water management plays in this sector is missing, and Tribal lands and Tribal use of public lands should be included in basin-wide fire mitigation strategies.

Table of Detailed TAG Feedback

Overarching comments:

- Indigenous land and water management is really missing from this sector.

Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
NWL Goal 1						
N1	**GOAL 1: Undertake landscape scale wildfire reduction and mitigation throughout high risk and high priority areas in forests and watersheds throughout NM.**	4 3				Tribal lands and Tribal aboriginal use of public lands should be included in basin-wide fire mitigation strategies.
N1.1	[Original] Conduct landscape-scale treatment of high priority, high risk areas of watersheds, urban interface areas, and forests.					
N1.2	[Original] Mitigate fuels across boundaries/land ownership with utilization of biomass to support industry.					
N1.3	[New] Prioritize extremely vulnerable lands, such as forests with high volume of beetle-kill dead and dying.					

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
NWL Goal 2						
N2	**Goal 2: Undertake prescribed burning on private land**.	2				Add: No springtime prescribed burns.
N2.1	[Original] Establish a mechanism to provide private landowners the ability to conduct prescribed burning on private lands, with limited liability, maximization in training and providing a qualified prescribed burner network throughout the state (From NWL Brief: HB57, The Prescribed Burning Act).	1				– Given that federal efforts to conduct prescribed burns, the idea of private people doing prescribed burns seems a non-starter. – Reference legislation that passed for this in 2021.
N2.2	[Original] Provide a funding stream or mechanism and state support, including policy creation, adoption, management, and permitting processes for effective landscape scale restoration and fuel hazard reduction treatment.					
N2.3	[Original] Quantify smoke impacts from prescribed burning compared to catastrophic wildfire emissions, monitoring, and health impacts/effects.					Clarify who, how, and when this will be done. Partner with public health departments on this action, particularly near environmental justice communities.
N2.4	[New] Educate and clearly communicate with the public to differentiate between prescribed burning and burning waste in barrels.					Sanctioned prescribed burns may give the impression that the state promotes burning waste.
N2.5	[New] Identify model zoning codes that require clearing and safety from forest fire. Participate in the Fire Adapted Communities Network.					California and Washington States have examples of zoning codes that require clearing and safety from forest fire.

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
NWL Goal 3						
N3	**Goal 3: Incorporate landscape-scale restoration that supports native plant communities, carbon storage, and drought mitigation on natural and working lands**.	2 2				This is a laudable goal on its own terms. I'm more skeptical of the cost/benefit impact on emissions.
N3.1	[Original] Create reforestation policies to supplement existing programs; establish funding sources in order to formulate a planting strategy which considers future forest condition (2090) and a prioritization of planting areas across the landscape.					
N3.2	[Original] Implement workforce development, retention, and recruitment with the formulation of funding streams to include seed banks and nurseries and monitoring of the process from seed collection to planting survival.					
N3.3	[Original] Incorporate techniques that support healthy soils, carbon sequestration, and drought tolerant healthy plant communities into mined land reclamation.	1				
N3.4	[Original] Manage noxious/invasive species on grasslands to improve native plan communities and bolster natural resource resilience and carbon sequestration.	2				
N3.5	[Original] Promote watershed and soil health using best management practices and best available technology in mine and industrial reclamation plans.					

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
N3.6	[Original] Start tracking desertification in NM to identify priority areas for ecological restoration.					
N3.7	[New] Use education and marketing to promote native, drought tolerant, and carbon-sequestering plants.	1				
N3.8	[New] Integrate grey water and water catchment systems in rural and urban areas to cool soil by shading, planting, etc.	3				
N3.9	[New] Support permaculture work and climate-appropriate crops through grants.	1				Include multi-use stormwater infrastructure.
N3.10	[New] Support removal of invasive species.					This is a problem in the Four Corners area. In particular, focus on Russian olive and Siberian elm - invasive and high water use trees.
N3.11	[New] Restrict or otherwise reduce water use by businesses such as golf courses.					
N3.12	[New] Incentivize xeriscaping.	1				
N3.13	[New] Seek and cultivate partnerships – (e.g. NM Biomimicry Institute rehabilitating brownfield sites with mushrooms).	2				
N3.14	[New] Study and identify the balance/cost-balance breakdown between CCS potential on the one hand and water resilience and electricity demands on the other.	1				

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
NWL Goal 4						
N4	**Goal 4: Support implementation of healthy soil practices and other best practices to improve long-term resilience on agricultural working lands.**					This is a laudable goal on its own terms. I'm more skeptical of the cost/benefit impact on emissions.
N4.1	[Original] Increase awareness of the 5 soil health principles in agricultural communities statewide.		**N4.1.1**	Increase awareness of the 5 soil health principles in agricultural communities statewide: Maintain a living root; minimize soil disturbance, limit external inputs, maximize biodiversity, integrate animals into land management.	1	
N4.2	[Original] Encourage agricultural producers to implement practices that enhance carbon sequestration.	3	**N4.2.1**	Encourage agricultural producers to implement practices that enhance carbon sequestration and work with agricultural producers to increase buy-in to new practices.	1	The term “agricultural producers” needs to be clearly defined. There's a difference between traditional agriculture vs big agriculture. How can we lump them together?
N4.3	[Original] Establish Range Stewardship Program within NM State Land Office (NMSLO)		**N4.3.1**	Establish and fund Range Stewardship Program within NMSLO		
NWL Goal 5						
N5	**Goal 5: Identify and implement strategies for the collection and use of carbon sequestration and emission data from natural and working lands to inform improved land management practice outcomes and to contribute to the ability for NM landowners to contribute to Executive Order 2021-052 on Land Conservation Framework (30x30 EO) goals and participate in future carbon market opportunities.**	2				I support protecting ecosystems and biodiversity, but I have concerns about 30 x 30 contributing to offsetting schemes.

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
N5.1	[Original] Catalyze development of a gap assessment study.					There is a possibility of the NM Climate Network providing and/or orchestrating this
N5.2	[Original] Develop science-based inventory methods for understanding how land produces and absorbs carbon.					
N5.3	[Original] Implement inventory and monitoring methods using relevant indicators on NWLs in NM.					
N5.4	[Original] NWLs contribute to climate stabilization as defined in 30x30 EO.					
N5.5	[New] Engage with tribes to incorporate traditional ecological knowledge into land management practices.	3				This needs to be a goal in and of itself.
N5.6	[New] Broaden education and public understanding of 30x30 EO goals and the state definition of "conservation."	1				Industry should also be involved/educated.
NWL Goal 6						
N6	**Proposed New Goal: Promote economic development and regenerative/sustainable agriculture by incentivizing a new generation of climate-smart farmers.**					
N6.1	Support farm-to-table initiatives.	1				
N6.2	Incentivize agro-voltaics for dual land use of agriculture and renewable energy generation.	2				There are examples from states adopting agro-voltaic policies proactively.

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
N6.3	Leasing a mobile solar array around NMSLO could help generate funds.	1				– 25-30 year leases could accommodate dual uses. – Do not understand.
N6.4	Incorporate NM Economic Development Department draft plan into this goal. Ensure business, industry, and community input.					
N6.5	Leverage various policies and programs for multiple benefits. Coordinate with efforts by Sustainable Economies Task Force.					
N6.6	Leverage the state procurement code to elevate opportunities for local entrepreneurs of color, with incentives and goals for increased opportunities.	1				These community-based entrepreneurs otherwise often cannot compete with larger companies.
N6.7	Provide agricultural advice and support to young farmers.					

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Market Mechanisms

Key Areas of Support, Concern, and Opposition

The area with the strongest opinions for and against specific draft goals and proposed actions was focused on market mechanisms, as illustrated by the preponderance of both red and green dots. On the one hand, some TAG members remarked that this is the only proposed set of draft goals that both has the potential to achieve measurable reductions in greenhouse gas emissions - accompanied by monitoring and enforcement mechanisms - while raising significant funds that could support other climate activities across the state. Other TAG members raised significant objections and questions about potential negative economic impacts, and disproportionate negative impacts on frontline and impacted communities.

It is clear that a carbon pricing program (or cap-and-invest program) would need to be carefully designed to benefit New Mexico, direct funds to pay for climate mitigation and adaptation activities, and ensure that the program operationalizes the equity principles.

Table of Detailed TAG Feedback

Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
Market Mechanisms Goal 1						
MM1	**Goal 1: Adopt and implement a price on carbon by 2026.**	1	**MM1. A1**	**Adopt and implement a cap-and-invest program by 2026.**	2 1	– Replace all references to “carbon pricing mechanism” with “cap-and-invest program” – Concern on this one is that unless there is a federal standard, it will drive jobs in manufacturing out of NM to a state or country where this doesn't exist. – [MM1.A.1] Will the investment go towards communities that have been disproportionately impacted?
MM1.1	[Original] Evaluate the appropriate carbon pricing mechanism and sectors for NM, and ask the questions under “Notes”	2 1				– What are the advantages economically and environmental? – What are the emission abatement opportunities? – What are implementation costs and who bears them? – Who will be a net buyer or net seller?

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
MM1.2	[Original] Complete carbon pricing rulemaking by December 2024.	1				
MM1.3	[Original] Implement carbon pricing program by 2026.	1 2				
MM1.4	[New] Design a cap-and-invest program in alignment with equity principles, include a focus on emissions reductions geographically in communities where inequities exist, and prioritize benefits to frontline communities.	3				
MM1.5	[New] Design a cap-and-invest program so that revenue is used to advance CCTF equity principles and just climate policies, and directs a percentage of all revenue for overly burdened communities. In addition, penalties for not meeting standards should go to a specific equity/environment fund instead of general revenue.					Examples of equity-aligned investments include: electric vehicles for low-income residents, cleaner school buses, reforestation, just transition, etc.
MM1.6	[New] Ensure that Tribal representatives and representatives from other frontline and disadvantaged communities are part of the design and decision- making process, by establishing a body consisting of representatives from these communities to decide how to spend revenue.	2				

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Code	Proposed Goals + Implementing Actions	Opinions	Code	Suggested Edits	Opinions	Questions, Notes
MM1.7	[New] Create an independent cap-and-invest system for NM and do not join Western Climate Initiative (WCI).					This would be expensive and would be reinventing the wheel. This is probably not viable unless it combines NM efforts with regional population hubs such as El Paso and Tucson.
MM1.8	Join WCI and trade with other states.					In order to ensure benefits to NM's environment and public health, this must include co-pollutant impacts in NM communities either within a cap-and-invest program or separately. It could require that a certain percentage of emissions be offset in-state (e.g. CA). This approach provides a system for tracking and accounting and brings other benefits.
MM1.9	Join WCI for support, but remain independent from other states.					Some states (e.g. WA) are thoughtfully beginning their own self-contained program with WCI. This could be a place to start addressing hot button issues in the state, allowing NM to establish its own offsets and allowances program. It would need to address an imbalance in a NM market, with huge demand and small supply of carbon credits. The state would need a way to guarantee reduction credits, which will be politically challenging.

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Additional Recommendations from TAG

Many recommendations from TAG members applied overarchingly to the process for implementing CAPs, and were not sector-specific. Those recommendations are captured below.

Mitigation, Resilience, and Opportunities for Integration

At numerous points, TAG members questioned the relevance of certain draft goals and proposed implementing actions for meeting emissions reduction targets. TAG members reviewed draft goals and strategies with the lens of emissions reduction, and questioned the immediate relevance of the climate actions in reaching the targets set by the Governor's EO 2019-003. Concerns were raised that many proposed strategies were voluntary and not binding and enforceable, and therefore were overly optimistic.

This also speaks to the importance of considering climate mitigation and adaptation or resiliency in an integrated fashion, allowing the state to take advantage of potential synergies and co-benefits while maximizing efforts to support communities already facing climate impacts. A number of draft goals and proposed actions could be considered in conjunction with the work of the Sustainable Economy Taskforce, for example.

Public and Community Engagement

The TAG recommends that climate goals and implementing actions develop and implement a cross-cutting community and public engagement strategy that gives New Mexico residents multiple opportunities to contribute to a collective understanding of the climate challenges arising in multiple sectors, the potential solutions, and the implementation of goals and actions. TAG members at various times included the following recommendations regarding public and community engagement:

- Ensure that frontline and disproportionately impacted communities are engaged in a timely and meaningful way (see operationalizing equity principles);
- Provide materials in non-technical language for lay people to understand;
- Identify and work with trusted co-conveners in local communities;
- Utilize public education efforts to advance equity and accessibility;
- Include low-income border communities in public engagement;
- Any outreach, engagement, and education need to be done in Spanish and appropriate indigenous languages; and
- Plan for adequate time for engagement to take place in meaningful ways.

Operationalizing Equity Principles

TAG members placed a high value on implementing the state's climate goals and actions in an equitable and just way that prioritizes those bearing the largest burden of pollution and residents most impacted by GHG emissions, and increases accountability and responsibility for the entities most responsible for GHG emissions. Processes need to be designed with adequate time and space for this to take place in a meaningful way, and the TAG recommends that the state continue to provide financial and other support to stakeholder participants from frontline and disproportionately impacted communities. These processes can and should utilize resources and studies related to climate change, equity, public health, racial disparities, and environmental justice, and look to other states working to do meaningful climate equity work.

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Tribal Engagement

The TAG recommends that the state clarify when or if, the 23 Nations, Tribes, and Pueblos in New Mexico will be consulted and engaged in a collaborative way throughout the process of exploring, designing, and implementing climate mitigation strategies. TAG members acknowledge that this process may look different for the Nations, Tribes, and Pueblos. Any time there is continued or expanded activity immediately adjacent to Tribal Lands, the TAG recommends the state agencies ensure direct engagement and possible consultation with the potentially affected Nations, Tribes, and Pueblos. Agency staff should strive to integrate culturally relevant practices in meetings with tribal governments, including for example land acknowledgements.

Alternative Planning and Expanding Conversation/Bringing in Experts

Many TAG members saw the value in broadening the conversation and strategically bringing in both experts and members of impacted communities at relevant stages throughout the process. There is also ample opportunity to collaborate and coordinate efforts around securing funding with utilities, non-profit organizations, and other potential partners.

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Appendices

Appendix A: Member & Alternates Lists

TAG Member Name	Affiliation	Engagement Status
Josué De Luna Navarro	Center for Civic Policy	Invited; did not participate
Kelsey Rader	City of Albuquerque	
Beverly Idsinga	Dairy Producers of New Mexico	Went on leave
Rico Gonzales	El Paso Electric Company	
Patrick Padilla	EOG Resources	
Valinda Shirley	Executive Director Navajo Nation EPA	
Rikki Seguin	Interwest Energy Alliance	
Erin Dayl	Kit Carson Electric Cooperative	
Colin Messer	Land of Enchantment Clean Cities	
Dr. Bill Carey	LANL - Earth and Env. Sciences	
Matt Eales	Lucid Energy	
Joseph Hernandez	NAVA Education Project	
Dr. Virginia Necochea	New Mexico Environmental Law Center	Withdrew; schedule conflicts
Gerald Weseen	New Mexico Gas Co/Emera	
Dr. Owen Burney	New Mexico State University Forestry Research Center	Invited; did not participate
Julia Bernal	Pueblo Action Alliance	Withdrew at end; capacity constraints
Raymond Martinez	Pueblo of San Ildefonso	
Tammy Parker	Pueblo of Zuni Fish and Wildlife	
Camilla Feibelman	Sierra Club	
Priscilla Lucero	Southwest Council of Governor	
James Povijua	Sustainable Economy Advisory Committee	
Gabe Pacyniak	UNM Natural Resources and Environmental Law Clinic	
Cydney Beadles	Western Resources Advocates	

TAG Alternate Name	Alternate For	Affiliation
Amy Miller	Colin Messer	Land of Enchantment Clean Cities
Denise Castillo-Gonzalez	Kelsey Rader	City of Albuquerque
Eric Jantz	Virginia Necochea	New Mexico Environmental Law Center

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Jordan Kessler	Patrick Padilla	EOG Resources
Mona Blaber	Camilla Feibelman	Sierra Club
Nathan Welch	Bill Carey	Los Alamos National Lab
Pat O'Connell	Cydney Beadles	Western Resource Advocates
Kaye Whitefoot	Beverly Idsinga	Dairy Producers of New Mexico

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