2022 TAG Meeting: Market Mechanisms

April 20, 2022; 1:00 – 4:00 pm MT

Join by Zoom

https://cbuilding.zoom.us/j/95190047848 | Meeting ID: 951 9004 7848

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Materials

- Climate Equity Guiding Principles
- RMI Slides from Kickoff Meeting
- CAT Slides from Kickoff Meetings
- Overview of Key Program Design Elements – State Cap & Invest Programs
- Market Mechanisms Brief

Agenda

Part 1: Quick Review & Prioritize Discussions

1:00 Welcome, Opening

- Ground in Climate Equity Guiding Principles
- Announcements and Updates

1:15 Review: Market Mechanism Goals & Implementing Actions, ask questions

Patrick Cummins, Colorado State University; Franz Litz, Litz Strategies

Part 2: Small Group Work

2:15 Small Group Work: In Depth Discussion of Market Mechanism Goals and Implementing Actions

- Reminder: purpose & outcomes for conversations, equity principles
- Walk through conversations – ask for alternates to let me know who they are sub'ing for
- Each small group will decide when to take a break

Part 3: Debrief & Wrap Up

3:40 Report Back, Debrief

3:55 Wrap Up, Next Meeting

Carbon Pricing Goal

New Mexico Climate Change Task Force

Technical Advisory Group

Prepared by:
Patrick Cummins, Senior Policy Advisor
Center for the New Energy Economy at Colorado State University

The text and questions in bold below were taken from the TAG's PowerPoint titled "Draft Goal Market Mechanisms." The responses below are offered for discussion with the group at the April 20 meeting.

Carbon Price Goal 1: Adopt and implement a price on carbon by 2026.

EMISSIONS IMPACT

Carbon pricing can be implemented in any number of ways and is impactful as a funding resource for other programs.

ECONOMIC IMPACT

Carbon pricing provides flexibility in compliance, which results in low-cost alternatives that drives innovation and jobs.

EQUITY ALIGNMENT

This policy can invest funding into programs that address climate change and equity.

Summary
The overarching goal is to adopt and implement a price on carbon by 2026. The goal represents a way to establish enforceable limits on GHG emissions across all sectors of the economy while at the same time: 1) providing flexibility to achieve those reductions in the most cost effective manner possible; and 2) creating a revenue stream the state can use to invest in the clean energy transition and to address environmental and economic impacts on disproportionately impacted communities.

The Governor's 2019-003 Executive Order directs staff to include market mechanisms to address climate change. Through previous rulemaking, NM joined the Western Climate Initiative in 2010, which did not include legislative action. Current statute limits the ability to auction allowances, which is the typical mechanism for states to distribute allowances and generate revenue for reinvestment.

Discussion Questions:

Which type of carbon pricing mechanism is appropriate for NM?

- The primary carbon pricing mechanism that has been adopted to date by US states is cap-and-invest. This includes the Regional Greenhouse Gas Initiative (RGGI) in the Northeast (11 states, power sector only) and the Western Climate Initiative (WCI - California and Quebec, economy wide). The State of Washington also has adopted an economy-wide cap-and-invest program that starts next year. Washington has joined WCI, Inc. and is evaluating linkage with California and Quebec.

- In addition, the West Coast states have adopted a low-carbon fuel standard which is an approach to regulating emissions and pricing carbon for the transportation sector.

- There were two unsuccessful efforts to establish a carbon tax by ballot in the State of Washington.

Which Western states are also interested?

- Nevada is currently evaluating carbon pricing policies as part of their climate planning process.

Does NM currently have statutory authority to put a price on carbon?

- This question is a matter of law. As a matter of policy, a clear legislative mandate, including authority to auction allowances, is critical to the long-term success of an economy-wide, cap-and-invest program.

Milestone 1: Evaluate the appropriate carbon pricing mechanism and sectors for NM.

What is the economic impact?

Economic costs and benefits will have to be evaluated through well designed modeling studies based on the carbon pricing scenarios New Mexico is interested in exploring.

What is the right carbon pricing mechanism for NM?

See above.

Who will join NM?

While NM has the option of adopting its own cap-and-invest program, linkage with other jurisdictions may have both environmental and economic benefits for the state. The question can also be turned around to ask, "With whom can NM join?" The most likely answer to that question is WCI (CA, QC, and WA).

Milestone 2: Complete carbon pricing rulemaking by December 2024

Is legislative authority needed?
See above.

How long will this take?
If comprehensive authorizing legislation is passed in 2023, it is reasonable to assume the rulemaking process can be completed by December 2024. This is similar to the timeframe the State of Washington is operating under. States like Washington (and New Mexico) benefit greatly from the work that has been done by RGGI and WCI over the past 15 years to design the policy and adopt the necessary statutes and regulations to implement the program. This can reduce the time needed to adopt your state specific rules. As a founding member of WCI from 2007-2010, NM was a significant contributor to the original program design. As noted in the slides, some of the regulations to implement the program were adopted by NM in 2010. That experience may help shorten the time needed to stand up the program over the next few years.

How do you create a market to minimize market manipulation?
The implementing laws and regulations should include the necessary procedures and safeguards to prevent (not minimize) market manipulation. This includes such features as allowance purchase limits and allowance holding limits. Allowances would be held in a tracking system controlled by the state where all transactions between covered sources and other market participants can be monitored to ensure all applicable restrictions are enforced. Also, auction results would be reviewed by a market monitor prior to finalizing the auction. These services (allowance tracking, auction services, and market monitoring) are provided to the RGGI and WCI states by RGGI, Inc. and WCI, Inc., respectively.

Milestone 3: Implement carbon pricing program by 2026

Is this a realistic implementation schedule?
Yes, if comprehensive authorizing legislation is passed in 2023 or 2024.

Are these enough resources?
The staffing (FTE) and contracting (dollars) resources needed to implement the program should be evaluated in consultation with other states that have such programs. Generally, the administrative costs for the state are a small fraction of the total revenue the program will generate.

Who would manage the trading platform?
As described above, these services could be provided to NM by WCI, Inc. Otherwise, the state would need to establish its own system which would be much more expensive and time consuming.

An Overview of Key Program Design Elements for State Cap-and-Invest Programs

Patrick Cummins, Senior Policy Advisor*
Center for the New Energy Economy
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April 8, 2022

*Note: The author relied heavily on the synopsis of Washington State's 2021 Climate Commitment Act – Senate Bill 5126 in drafting this report. Also, a number of my colleagues assisted with this report by providing informal peer review and comment.

Executive Summary

This executive summary highlights six key program design elements for state economy-wide cap-and-invest programs. Additional detail for these and other key program design elements is contained in the remainder of the report starting on page 4.

Cap-and-invest is a market-based approach to reduce climate pollution, comprised of two key components: 1) a limit (cap) on total greenhouse gas (GHG) emissions from covered sources, and 2) tradeable allowances that are mostly sold at auction by the state with auction proceeds invested in communities to advance clean energy, climate resilience, and environmental justice.

This approach offers the state several advantages, including: greater certainty that it will meet ambitious emission reduction targets; flexibility for businesses to most efficiently achieve the required emission reductions; and new revenues for investment in community projects that will accelerate the energy transition, increase climate resilience and support environmental justice priorities. A cap-and-invest program can be implemented after obtaining authorization for key program elements from the legislature, as necessary.

The six program components summarized below should be addressed by the legislation, along with a directive to periodically analyze program outcomes, including costs, emissions reductions and benefits for low-income households and overburdened communities.

Program Cap. A binding, declining limit on total greenhouse gas emissions (the cap) is the most essential part of the cap-and-invest program. It should be set to decline from current emission levels to science-based greenhouse gas reduction targets set by the state. Annual allowance budgets must be issued by the state to ensure the cap declines in line with emission reduction targets for 2030, 2040 and 2050 as established in authorizing legislation. The state must track, verify, and enforce compliance through the use of allowances issued by the state. Most allowances will be distributed through quarterly auctions with auction proceeds invested in communities to advance clean energy, climate resilience, environmental justice, and provide energy assistance to low-income households.

Program Coverage. Inclusion of all major emitting sectors is critical to meet economy-wide GHG reduction targets. Entities in the industrial, transportation, and energy sectors that emit at least 25,000 metric tons of carbon dioxide annually will be covered. Examples of covered entities include industrial manufacturing facilities, in-state electric generating facilities, distributers of electricity imported to the state, oil and gas systems, transportation fuel suppliers, and natural gas suppliers.

Allocation & Auction of Allowances. Legislation should clearly establish the state's authority to auction allowances and raise and expend auction proceeds subject to program rules and appropriation by the state legislature. Establishing rules for allowance auctions, including their frequency, allowance purchase limits, rules to prevent market manipulation, and no-cost

allowance allocation for certain entities are all necessary to ensure a functioning and efficient market that protects consumers.

The state would distribute allowances through (a maximum of) four quarterly auctions each year, at which allowances from the current compliance period would be sold along with allowances for future compliance periods.

The state/legislature may decide that some covered entities should be eligible to receive no-cost allowances, such as: a) energy-intensive, trade-exposed facilities, to avoid potential risk of emissions leakage; b) electric utilities, to mitigate cost burdens for consumers, particularly low-income consumers; and c) natural gas utilities, also to mitigate cost burdens for consumers. Electric and natural gas utilities should be required to consign their no-cost allowances for sale at auction with the auction proceeds dedicated to benefit their customers.

Offset Credits. Allowing a portion of a covered entity's compliance obligation to be met through offset credits increases flexibility and creates opportunities for investment in projects that can benefit communities—such as in natural and working lands. In developing policies for offset credits, the state must ensure all offsets are generated from projects that result in GHG reductions or removals that are real, permanent, quantifiable, verifiable, enforceable, and provide GHG reductions that are additional to those already required by law. The state may decide to prioritize offset credits that are developed by and benefit tribal communities. The state should also establish limits on the number of offset credits covered entities may use to meet their compliance obligations.

Climate Investment Account. State revenue from allowance auctions should be placed in a Climate Investment Account created in the state treasury and subject to appropriation. Rules and decisions regarding the use of these funds should be developed in consultation with residents, businesses, tribes and key interest groups. Use of funds should focus on projects that reduce GHG and co-pollutants, prioritize environmental improvement in overburdened communities; increase climate resiliency, deploy clean energy resources; invest in workforce development; improve energy affordability; and advance natural climate solutions. The state should establish minimum investment requirements for environmental justice communities, with a recommended minimum of 35% of auction revenue designated for projects led by and directly benefitting low-income and overburdened communities, with an additional percentage of auction revenue invested in programs and projects led by and directly benefitting tribal communities.

Environmental Justice Protections. The cap-and-invest program must be designed to deliver reductions in global greenhouse gas emissions and address locally harmful air pollution in overburdened communities. This should include the identification of overburdened communities and the pollution sources impacting their air quality, the deployment of air pollution monitoring networks, and the establishment of policies to limit emissions in overburdened communities.

Key Program Design Elements for a State Cap-and-Invest Program

Cap-and-invest is a market-based approach to reduce climate pollution which is comprised of two key component - (1) a declining limit (cap) on total greenhouse gas (GHG) emissions for covered sources, and (2) tradable allowances that are mostly sold at auction by the state with auction proceeds invested in communities to advance clean energy, climate resilience, and environmental justice.

In the United States, eleven Northeast and Mid-Atlantic states participate in the Regional Greenhouse Gas Initiative (RGGI), a cap-and-invest program for the electric power sector established in 2009. California began operating an economy-wide cap-and-invest program in 2013. California is linked with the Province of Quebec's cap-and-invest program through the Western Climate Initiative (WCI). The European Union Emissions Trading System has been in place since 2005. In 2021, the Washington State Legislature passed cap-and-invest legislation. Washington will launch their economy-wide cap-and-invest program in January 2023.

Greenhouse Gases

The United States Environmental Protection Agency (EPA) identifies carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride as GHGs as a result of their capacity to trap heat in the earth's atmosphere and contribute to climate change.

Cap-and-Invest Program

The state should seek a legislative directive to implement a cap-and-invest program to reduce GHG emissions, including emission reduction targets for 2030, 2040 and 2050. The state must set emissions budgets consistent these goals and track, verify, and enforce compliance through the use of allowances issued by the State. Allowances will mostly be auctioned by the State with auction proceeds invested to advance clean energy, climate resilience, and environmental justice. The authorizing legislation should firmly establish the state's authority to auction allowances and apply the allowance proceeds, subject to appropriation, to achieve the programs objectives.

Greenhouse Gas Reporting and Verification

The state must adopt rules requiring entities to report emissions of GHGs where those emissions from a single facility, or from electricity or fossil fuels sold in the state by a single supplier or local distribution company, meet or exceed 10,000 metric tons of carbon dioxide equivalent annually. Annual reports should include emissions data for the preceding calendar year and be submitted to the state by March 31st of the year in which the report is due. The reporting rules must support implementation of the cap-and-invest program.

The state must establish by rule the methods for verifying the accuracy of emissions reports, including by third-party verifiers certified by the state. Verification requirements apply at a minimum to: