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FISCAL IMPACT REPORT

SPONSOR	Rodefer	ORIGINAL DATE LAST UPDATED	2-22-09	HB	653
SHORT TITI	E Environmental Bo	oard Greenhouse Gas Rul	les	SB	
			ANAL	YST	Aubrl

<u>REVENUE</u> (dollars in thousands)

	Recurring or Non-Rec	Fund Affected		
FY09	FY10	FY11		
Credit Auction	\$7,400\$50,400.0*	\$7,400\$50,400.0*	Recurring	General Fund
Penalties	Indeterminate	Indeterminate	N/A	General Fund

(Parenthesis () Indicate Revenue Decreases)

*Estimated range base on assumptions detailed by NMED below.

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY09	FY10	FY11	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
Total		.01*	.01*	.01*	Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases) *See Fiscal Impact

SOURCES OF INFORMATION

LFC Files

<u>Responses Received From</u> Department of Finance and Administration (DFA) New Mexico Environment Department (NMED) New Mexico Association of Commerce and Industry (ACI) New Mexico Department of Transportation (DOT) Energy, Minerals and Natural Resources Department (EMNRD)

SUMMARY

Synopsis of Bill

House Bill 653 enacts a new section of the Air Quality Control Act as enabling legislation to implement a greenhouse (GHG) emission reduction program in New Mexico pursuant to the

House Bill 653 – Page 2

Western Climate Exchange Initiative. The bill provides the Environmental Improvement Board (EIB) additional authority to adopt rules that require affected greenhouse gas sources to reduce GHG emissions and establish a GHG cap and trade program to accomplish the following:

- an emission cap on GHG gases in order to meet the projected goal reductions;
- specific required emissions reduction;
- an emission trading and banking system;
- a method for allocating emission allowances—including the free distribution of allowances to electricity providers;
- emissions and allowance monitoring and record-keeping;
- methods and allowances for auctioning allowances—including a minimum annual auction of 10 percent of the state's total allowance cap;
- a process of granting early reduction allowances; and
- an offset program.

HB 653 specifies several parameters guiding the EIB in this rulemaking. The bill authorizes NMED to implement the rules adopted by the EIB and requires the agency to coordinate and participate with other states, regional organizations and the federal government. NMED is required to report annually to the appropriate interim legislative committee on the status of program implementation.

Sources that emit the equivalent of 10 thousand metric toms or more of carbon dioxide equivalent, directly or indirectly, will be subject to mandatory emissions reporting requirements. "Affected sources" emitting 25 thousand metric tons or more of carbon dioxide equivalents, directly or indirectly, are required to be part of the cap and trade program. Compliance periods would begin in 2012.

HB 653 includes civil penalties up to \$15 thousand per day for noncompliance, enforced by the Environment Department.

The effective date is June 30, 2009. The bill includes a delayed repeal provision should the federal government enact a national program at least as stringent as the state program.

FISCAL IMPLICATIONS

NMED provides the following analysis regarding the fiscal impact of HB 653 on revenues:

HB 653 requires a minimum of 10 percent of the state allowance budget be auctioned by the state, excluding allowances for electricity providers. The department estimates that sources traditionally regulated under the Act will emit about 21 million metric tons in 2012, excluding electricity providers. A regional economic analysis conducted by the Western Climate Initiative (WCI) predicts that carbon allowances will cost about \$24/ton by 2020 under a regional cap-and-trade program. The cost of carbon allowances is currently about \$3.50 per ton on the Regional Greenhouse Gas Initiative market, a mandatory GHG cap-and-trade program affecting electricity generators in the Northeastern states. Considering the wide range of carbon allowance prices, and an auction level of 10 percent, the agency estimates that beginning in 2012, the auction would generate between \$7.4 million (at \$3.50 per ton) and \$50.4 million (at \$24 per ton) annually in revenues. In 2015, if residential, commercial, industrial and

transportation fuels are brought into the program, the affected sources, excluding electricity providers, will emit approximately 46 million metric tons of GHGs in New Mexico. Using the same auction level and price estimates for allowances, the auction would generate annual revenues from \$16 to \$110 million annually, which would be deposited directly in the general fund rather than a special fund.

Penalties assessed under the Air Quality Act flow to the general fund. The number of those found noncompliant, the amount assessed according to the market rice of carbon allowances, and the length of time not in compliance are all unknown variables; therefore, the increase in revenue attributable to fines in indeterminate.

NMED explains the fiscal impact to the agency's operating budget, as follows:

The Environment Department will require additional funding to manage the program. Those expenses include enhancement of the Department's greenhouse gas reporting requirements with measures to ensure the verification of emissions; management of aspects of the trading program, including participation on the regional level in decision making to ensure New Mexico's interests are protected; ensuring enforcement and compliance with the regulations; providing technical assistance to affected sources; promulgation of rulemaking to ensure a robust cap and trade program that works for New Mexico; and financial tracking of allowance revenues.

The agency did not provide an estimate of these costs and no appropriation is made to cover such expenses. However, to implement and maintain the program would most likely require a substantial recurring investment of resources.

Affected industries would generate the revenues. The Association of Industry and Commerce provides the following discussion on additional fiscal impacts implied by the bill:

The bill requires the EIB to adopt greenhouse gas rules before the development of a federal program and could well mandate emissions reductions (and result in increased costs) from industry sectors in New Mexico. While the bill purports to implement a regional cap-and-trade program, there is no guarantee that the surrounding states (or other WCI states) will implement the program and allow for sufficient trading to make New Mexico industry reductions cost effective. Additionally, the WCI program has been developed with limited economic analysis of the most widely impacted economic sectors in New Mexico (i.e., coal mining, electric generation and oil & gas production and processing). In fact, no macroeconomic analysis on New Mexico's economy has been done to date. The affect of the bill will certainly be higher electric rates and higher fuel costs. No analysis has been done on how those higher rates will affect consumer prices or how they will affect New Mexico business competitiveness. It doesn't appear that surrounding states (Arizona, Texas, Colorado, Oklahoma and Utah) will be implementing similar legislation in advance of a federal program.

ACI expects that the rules adopted under this bill will negatively impact New Mexico's competitiveness and ability to attract and recruit new high-wage jobs. In fact, the rules may adversely affect New Mexico's ability to retain those jobs in this economy.

SIGNIFICANT ISSUES

Recent studies have indicated that a trend of warmer temperatures in New Mexico is underway, with simulations predicting varying degrees of temperature change and rates of change. All predict similar impacts, including:

- Less snow pack
- Drier soil
- Increased evaporation from reservoirs and rivers
- Reduced surface water in the face of increased demand
- Increased friction over water compact deliverables
- Increased friction over water use between agriculture and other uses
- Increased mega-weather events, from drought to flooding and subsequent stress to current infrastructure (such as levees)
- Reduced income from agriculture and water-related recreation

Thus, future public policy issues range from challenges in water management to preserving the quality of life in the state. The primary issue today is how much and how fast this projected climate change can be lessened though proactive measures taken by state and local government – particularly in the absence of aggressive action taken at the federal level – and at what cost to industry, consumers, and tax payers.

Policies addressing climate change have primarily targeted reducing greenhouse gas (GHG) emissions. This GHG-focused approach is based on research that links GHG emissions to global warming and the concept that many such emissions, because they are human-caused rather than natural phenomena, represent a viable avenue to slow or reduce the projected warming by their reduction.

One method of meeting caps, or reductions in emissions, has been the evolution of markets that trade the credits based on a certain amount of emissions—also known as a "cap-and-trade" program. Credits are created by entities that reduce more than their target. Given a certain price for the credit, other emitters may choose to purchase those credits because it is cheaper than reducing emissions themselves. The theory is that the overall price for reducing emissions will be less expensive than requiring every source to meet regulatory reduction standards.

Credits can also be generated by projects aimed at emission reduction, such as planting a tree farm. Because carbon emissions become globally distributed regardless of origination, companies purchasing these "offsetting" credits fund the projects elsewhere in a "right to pollute" trade. These are known as "offset" credits. The lack of credibility for some of these programs has emerged as an issue in recent years.

HB 653 would establish a cap and trade program, with an offset component, in New Mexico, with the overall goal of reducing statewide GHG emissions by 10 percent below the 2000 level by 2020. Caps would be set on the "affected sources," would could reduce emissions or purchase credits to meet their allotments that will be set annually. Compliance will be assessed every three years.

An auction design will be established by the EIB as well as the other components of the bill. In adopting the rules, the EIB shall adhere to the following requirements:

- Design rules that are equitable, minimize costs, including costs to end-user energy consumers, maximize total benefits to the state, and recognize early action to reduce GHG emissions;
- Ensure that activities undertaken to comply with the rules do not substantially adversely affect low-income communities;
- Ensure that affected sources that have voluntarily reduced their GHG emission prior to implementing the program receive appropriate credit;
- Consider cost-effectiveness of the rules;
- Consider overall societal benefits, including reductions in other air pollutants, diversification of energy sources;
- Minimize the administrative burden of compliance and minimize the affect of outside sources of GHG emissions and the competitive disadvantages to New Mexico industries; and
- Consider whether the allowance market is sufficiently large enough to promote liquidity and reduce costs.

The bill allows the governor to adjust the applicable deadlines for individual regulations or for the state in aggregate in the event of extraordinary circumstances, catastrophic events or threat of significant economic harm. Unless approved by the Legislature, the adjustment period shall not exceed one year.

PERFORMANCE IMPLICATIONS

According to NMED, "NMED's Air Quality Bureau has a legislative performance measure to reduce annual statewide greenhouse gas emissions to a target level. Similarly, the Governor's Accountability and Performance Contract contains goals for reduction of greenhouse gas emissions. Finally, the Governor's Executive Order on Climate Change also contains goals for reduction of greenhouse gas emissions to 2000 levels by 2012, 10 percent below that by 2020 and 75 percent below 2000 levels by 2050. HB 653 would provide a mechanism for achieving these performance goals."

ADMINISTRATIVE IMPLICATIONS

As the ACI points out, the bill mandates substantial EIB rulemaking and NMED participation without any funding necessary to carry out those mandates. Additionally, the EIB relies on staff support from NMED. ACI questions whether the EIB has the technical/scientific expertise or support and is concerned that implementation of the bill may not result in a searching, in-depth analysis of the science and policy decisions required. The ACI also questions whether the EIB has the time to consider the rulemaking fully given its other duties and monthly meeting schedule. EIB concludes "that even though the economic and fiscal impact of the rules will be enormous and extensive, there is little or no policy role for the Legislature, and no oversight of the regulatory process or its results."

TECHNICAL ISSUES

ACI points to a possible conflict, as follows:

The bill appears to allow the Board authority over greenhouse gas emissions, including those from electric generation, outside New Mexico. As such, any rules adopted to implement those provisions could violate the Commerce Clause of the U.S. Constitution.

In addition, the bill seeks to implement the WCI, a regional group of states and Mexican and Canadian governmental entities. As such, the WCI could be construed as an interstate compact, which requires Congressional approval. Since no such approval was obtained, there is a question whether implementation of the WCI program would be contrary to the Compact and Treaty Clauses of the U.S. Constitution.

OTHER SUBSTANTIVE ISSUES

NMED provides the following background information:

In New Mexico, the "affected sources" that would come into the program in 2012 and according to the WCI design would include electricity generators, large combustion sources, and process (non-combustion) emissions, including emissions from oil and gas processing. The agency estimates that approximately 120 sources within the state's jurisdiction would be affected. Affected sources would also include those entities that import electricity from out of state. Entities that first receive the electricity in New Mexico would have to hold sufficient allowances to cover the emissions attributable to generating that power. The inclusion of imported power will help to minimize leakage (sales into the state from unregulated sources outside the state). In 2015, if emissions related to residential, commercial, and industrial, fuel use are brought into the program these fuels would most likely be regulated at the distribution centers in New Mexico. There are approximately 19 of these entities in the state's jurisdiction. They would be required to carry allowances sufficient to cover the GHG emissions resulting from combustion of the fuels they sell. If transportation fuels are brought into the program in 2015, those fuels would be regulated at the fuel importers and high-level suppliers in New Mexico. There are approximately 20 of these entities in the state and they too would be required to hold sufficient allowances to cover the GHG emission attributable the fuels they sell.

Economic Impacts: The WCI program was carefully designed to reduce costs to industry and consumers. Credit for early emissions reductions will be granted, emissions sources will be able to bank allowances, the compliance period is three years and the design calls for a robust offset program. Offsets are emission reductions that occur at sources not regulated under the cap and may be sold on the market. In New Mexico, examples of WCI offset projects include emissions reductions from agricultural sources and landfills. Another cost containment mechanism is the option to allocate most emissions allowances free of charge. Free distribution of allowances to electricity providers will minimize the cost impacts to electricity consumers. Regional WCI economic modeling suggests that the program can achieve reductions from capped sectors with modest economic benefits. Savings from reduced fuel expenditures under a cap-and-trade program with complementary policies could exceed the cost of additional investments in energy efficiency. Those findings are consistent with other modeling in the U.S/ and Canada. Regional modeling that assumes 100 percent allowance auction to all affected sources (including utilities) predicts a small increase in electricity costs above the business as usual scenario (1 percent for residential, .02 percent for commercial and 6.6 percent for industrial consumers). We can assume even less of an increase if allowances are freely distributed to regulated utilities as proposed in HB 653. The price of gasoline is predicted to increase 6.6 percent or about 12 cents/gallon at current prices by 2020 under the WCI program, according to the economic modeling.

Other Cap and Trade Initiatives: There are two other regional cap-and-trade initiatives in the U.S. The Regional Greenhouse Gas Initiative (RGGI) was established in December 2005 and has ten members from the Northeastern and Mid-Atlantic states. It was the first mandatory U.S. cap-and-trade program to set a cap on emissions of carbon dioxide from power plants, about 28 percent of the emissions in the participating states. The program will begin by capping emissions at current levels in 2009, and then reducing emissions 10 percent by 2019. RGGI held its first allowance auction on September 25, 2008. RGGI expects to auction nearly 100 percent of the region's allowances. On November 15, 2007, six states and one Canadian province established the Midwestern Regional Greenhouse Gas Reduction Accord (MGGRA). The MGGRA is in the design phase of its program.

One of the most prominent programs, and the first to address carbon dioxide emissions, is the European Union's Emission Trading Scheme (EU-ETS). The EU-ETS covers carbon dioxide emissions from power generation, some industrial process emissions, and all large industrial combustion facilities. It covers about 40 percent of all GHG emissions in the participating countries. A maximum of 10 percent of the allowances will be auctioned during the program's second phase.

In the last several years there have been many bills introduced in Congress that would implement a national GHG cap- and-trade program. While it is unknown when a federal program will be implemented, it is unlikely that a federal program for GHG cap-and-trade could be implemented until 2014 at the earliest. Participating in a regional organization like the WCI will bolster the state's ability to influence the federal design, as historically, the federal government has used state programs and initiatives as a model for national program design. In addition, HB 653 will prepare New Mexico businesses for a federal program, which may include credits and incentives for early reductions. HB 653 contains a sunset provision in case a federal program of equal or greater stringency is implemented so that the state does not duplicate or differ from federal action.

ALTERNATIVES

ACI maintains an option it to wait to adopt the designs for a state program until Congress has specified the outline of the federal program. The organization expects a federal program within 18 months to two years. In the meantime, the ACI proposes that the state can continue to implement measures to establish incentives for businesses and individuals to reduce greenhouse gas emissions.

One such incentive could be a discounted price on the auctioned credits. Presumably, a national program would increase the price of credits through increased demand, although the market equilibrium for carbon credits is an unknown. As an alternative, the state could allocate all the credits for free until a national program is implemented.

NMED provides another scenario that may unfold:

The New Mexico Air Quality Control Act gives the EIB broad authority to regulate GHG emissions, but does not provide for the specific authorities needed to implement the WCI cap-and-trade design. In January, a petition was filed with the board by the New Energy Economy to set a statewide GHG emissions cap and to regulate GHG emissions in air

quality permits. The cap proposed in the petition is 25 percent below 1990 GHG levels by 2020, which is much more stringent than the cap proposed in HB 653 (10 percent below 2000 levels by 2020). The petition does not propose to allow affected facilities to trade or buy allowances to meet their regulatory obligation. It is possible that the board would approve the petition to cap GHG emissions but without the trading component. That scenario could greatly increase the cost of compliance beyond what would be required if the WCI design were implemented, negatively impacting the state's economy. A market-based trade system reduces the total costs to affected facilities because it allows an affected facility to satisfy its obligations under the cap either through emission reductions at the facility, or through the purchase of credits generated by emission reductions at other facilities which can achieve those reductions at a lower cost.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

NMED specifies the following:

If HB 653 is not enacted, it would be difficult to meet the state's GHG emissions reduction target. New Mexico could not fully participate in a regional greenhouse gas cap-and-trade program and would not be as well positioned to influence the design of a federal cap-and-trade program.

If the board adopts the aggressive cap in the New Energy Economy petition without a trading and offsets provisions as proposed in HB 653, there could be negative economic impacts to the industries trying to comply with the cap and consequently negative economic impacts to the state.

ACI indicates that there will be a delay in implementing emissions reductions without the expected economic disruption.

QUESTIONS

- 1. What are the estimated recurring operating cots for NMED?
- 2. Are speculators needed to create a sufficient market in credits?
- 3. Will speculation in credits drive up the cost to industry?
- 4. Will credits be limited only to those affected sources?
- 5. How will the secondary market for credits be established and what oversight provided?
- 6. How will the legitimacy of the offset programs be established?

MA/mc