

The Regional Greenhouse Gas Initiative in North Carolina

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I. Introduction

Over the past few years, North Carolina, along with the rest of the world, has begun to see the destructive impacts of climate change.¹ Severe weather events have become increasingly common, but no less harmful to ecosystems and communities.² With the threat of climate change palpably increasing, many states have begun to reduce their greenhouse gas emissions (GHGs). One such effort began in the early 2000s and became known as the Regional Greenhouse Gas Initiative (RGGI). RGGI, a regional emissions trading program, has seen significant success since its creation.³ As of 2017, RGGI members reduced carbon dioxide (CO₂) pollution from the power sector by over fifty percent.⁴ Moreover, participating households, businesses, and direct bill assistance recipients benefited from an estimated \$1.4 billion in energy bill savings.⁵ Currently, eleven states participate in RGGI and benefit from this energy use reduction.⁶

Soon this number may increase, thanks to a petition submitted by the Southern Environmental Law Center (SELC).⁷ In response to this petition, the North Carolina Department of Environmental Quality (NCDEQ) began the rulemaking process to determine if, and how, North Carolina will become RGGI's twelfth member state.⁸ Although the process is far from over, the petition suggests North Carolina join via action by an administrative agency, rather than

¹ See KENNETH E. KUNKEL ET AL., NORTH CAROLINA CLIMATE SCIENCE REPORT, 5-8 (2020).

² See *id.*

³ See REGIONAL GREENHOUSE GAS INITIATIVE, INC., THE INVESTMENT OF RGGI PROCEEDS IN 2017 6, (Oct. 2019), https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI_Proceeds_Report_2017.pdf.

⁴ *Id.* at 3.

⁵ *Id.*

⁶ See *Elements of RGGI*, THE REGIONAL GREENHOUSE GAS INITIATIVE, <https://www.rggi.org/program-overview-and-design/elements> (last visited Jan. 10, 2022).

⁷ Southern Environmental Law Center, *Petition for Rulemaking Pursuant to N.C.G.S. § 150b-20 and 15a NCA 02I .0501 to Adopt Rules to Limit CO₂ Pollution from the Electric Power Sector*, 3, (2021).

⁸ Luis Martinez, *North Carolina Is Moving Forward with Climate Regulations*, NRDC, (Jul. 13, 2021), <https://www.nrdc.org/experts/luis-martinez/north-carolina-moving-forward-climate-regulations>.

legislative action. Should North Carolina take this approach, it may pose an interesting challenge. This paper explores both the laws the SELC used to support its petition, as well as how North Carolina’s approach to joining RGGI could differ from other member states. While North Carolina would take an important step in climate change mitigation by joining RGGI, this different method of joining may ultimately impede its ability to benefit from revenues created by RGGI auctions.

II. Background of RGGI and Auctioning Under the Program

In 2005, seven states formed RGGI to limit CO₂ emissions from the power sector.⁹ The RGGI states signed a Memorandum of Understanding that outlined the rules and goals of the program, which later became the RGGI Model Rule.¹⁰ The RGGI Model rule is “a regulatory blueprint for each member state” in that it provides the language and program details each state will adopt to officially join RGGI.¹¹ With the model rule providing the recommended language to be used in legislation, each state creates its own CO₂ Budget Trading Program, which issues CO₂ allowances and manages the participation in the allowance auction.¹² In short, RGGI sets a regional carbon cap on power plants, which is individually implemented by each member state.

RGGI approaches emissions trading differently than other emissions trading programs. Traditionally, emissions trading programs utilize a process known as “grandfathering” where regulators allot free allowances to participating emitters based on their historical emissions.¹³

⁹ The original member states were Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont. Maryland, Massachusetts, Rhode Island, and Virginia have joined since its founding. CTR. FOR CLIMATE AND ENERGY SOL.’S, *Regional Greenhouse Gas Initiative (RGGI)*, Building Common Ground for Practical Climate Solutions, (last visited Dec. 25, 2021), <https://www.c2es.org/content/regional-greenhouse-gas-initiative-rggi/>.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ Bruce R. Huber, *How Did RGGI Do It? Political Economy and Emissions Auctions*, 40 *ECOLOGY L. Q.*, 59, 66 (2013).

This approach has been criticized for a variety of reasons, ranging from claims that it affects competition by unfairly advantaging existing sources over new sources, to concerns that it allows older (potentially more polluting) sources to remain active longer than necessary.¹⁴ Under RGGI, states sell allowances to emitters through an auction. Moreover, although RGGI’s initial “Model Rule” required states auction at least twenty-five percent their allowances, most states auction off “nearly 100 percent of their allowances[.]”¹⁵ This approach is what sets RGGI apart from other emissions programs.

Because emitters in RGGI states do not receive free allocations, RGGI auctions generate revenue that states can use to further their emissions program reduction goals.¹⁶ RGGI requires that “regulated sources,” fossil-fuel based electric power generators with a 25 megawatt or greater capacity, have enough allowances to equal their CO₂ emissions over a three-year control period.¹⁷ Each allowance covers one short ton, or 2,000 pounds, of CO₂ emissions and can be purchased through the RGGI auctions or secondary markets.¹⁸ Emissions regulated by RGGI have dropped twice as fast as the nationwide average, while auction revenues have exceeded \$4 billion.¹⁹ Each state can designate how its revenue will be allocated, with many choosing to reinvest the money in clean energy programs.²⁰ Generally, current RGGI members’ auction revenue is reinvested into four main areas: energy efficiency, clean and renewable energy, GHG abatement and direct bill assistance.²¹ RGGI’s auctioning program, and thus its revenues, make

¹⁴ *Id.* at 71-75.

¹⁵ *Id.* at 83.

¹⁶ *See id.* at 77-80.

¹⁷ *Id.*

¹⁸ *Compliance*, REGIONAL GREENHOUSE GAS INITIATIVE, <https://www.rggi.org/allowance-tracking/compliance> (last visited Jan. 1, 2022)

¹⁹ Huber, *supra* note 13, at 77-80.

²⁰ *Id.*

²¹ REGIONAL GREENHOUSE GAS INITIATIVE, INC., *supra* note 3, at 3.

the program especially effective in reducing emissions as it is the first “cap-and-invest” rather than cap-and-trade program, in the United States.²²

III. Legal Authority for NC’s Joining RGGI

Most states join RGGI through a legislative process.²³ The process of joining RGGI is divided into three general phases: first, working with current RGGI member states and state agencies to “understand key areas of compatibility, develop a timeline for participation, and propose a CO₂ budget that maintains the program’s stringency.”²⁴ Next, potential members must “identify legislation and/or executive action needed to authorize participation” as well as begin to write the legislation necessary to create their own CO₂ budget trading program and auction procedures.²⁵ After this drafting is complete, the state must then follow its rulemaking procedures, including “propos[ing] draft regulation(s) for public comment” and finally, completing the rulemaking process unique to that state’s laws.²⁶ Once this process is complete, the state signs a contract with RGGI, selects agency heads to onboard to RGGI’s board of directors, and then gains access to RGGI’s allowance tracking system.²⁷

Rather than following this process, North Carolina’s approach more closely resembles how Virginia initially attempted to join RGGI in 2019.²⁸ The 2019 Virginia legislature passed a budget that prohibited the allocation of state funds towards “membership or participation in the Regional Greenhouse Gas Initiative (RGGI),” while also forbidding use of any RGGI revenue.²⁹

²² *Elements of RGGI*, *supra* note 6.

²³ See CTR. FOR CLIMATE AND ENERGY SOL.’S, *supra* note 9.

²⁴ RGGI, NEW STATE PARTICIPATION IN RGGI, MATERIALS ON NEW PARTICIPATION 2 (2021), https://www.rggi.org/sites/default/files/Uploads/Participation/RGGI_New_State_Participation_Overview.pdf.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ Kaylee Cornelius, *Virginia Joins the Regional Greenhouse Gas Initiative, Finally*, CLIMATEXCHANGE, (Aug. 12, 2020), <https://climate-xchange.org/2020/08/12/virginia-joins-the-regional-greenhouse-gas-initiative-finally/>.

²⁹ *Id.*

Because of this, Virginia’s Governor directed Virginia’s DEQ to find an alternative route to implementing RGGI.³⁰ As a result, Virginia’s DEQ came up with a plan of using a consignment auction, “where utilities are granted allowances for free, and can then sell them to other companies that exceed their pollution cap.”³¹ Ultimately, before this plan could be implemented, the budget forbidding Virginia’s joining of RGGI expired and Virginia passed the Virginia Clean Economy Act, which “instructs Virginia to join RGGI” and allows for Virginia to follow the regular RGGI auction model.³²

North Carolina’s method of joining resembles Virginia’s initial efforts, as the state is seeking to join RGGI by having the NCDEQ adopt a rule to limit CO₂ pollution from the electric power sector in North Carolina. The petition to adopt this rule was submitted by the SELC, on behalf of Clean Air Carolina and the North Carolina Coastal Federation.³³

Such a petition is regulated by North Carolina General Statute § 150B-20³⁴ and 15A North Carolina Administrative Code 02I.0501,³⁵ which require the petition to state both why a rule should be adopted and to provide evidence that the NCDEQ has the authority to adopt such a rule. As far as why North Carolina should join RGGI, the SELC petition cites the devastating effects climate change has recently had, and will continue to have, as the reason for needing to limit CO₂ emissions.³⁶ Additionally, the petition references Executive Order 80 (EO 80), which Governor Cooper signed in October 2018.³⁷ EO 80 created the Clean Energy Plan, calling for a

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ Southern Environmental Law Center, *supra* note 7, at 3.

³⁴ N.C. Gen. Stat. § 150B-20(a).

³⁵ See 15A N.C. Admin. Code 02I.0501(b)(2) (requiring statement of reasons for adopting proposed rule).

³⁶ See KUNKEL, *supra* note 1.

³⁷ Exec. Order No. 80, (Oct. 29, 2018), <https://files.nc.gov/ncdeq/climate-change/EO80--NC-s-Commitment-to-Address-Climate-Change---Transition-to-a-Clean-Energy-Economy.pdf>.

70% reduction in CO₂ emissions from the electric power sector by 2030, and carbon neutrality by 2050.³⁸ Joining RGGI, the petition argues, is the best way to achieve this goal.³⁹

In the past, the requirement to show authority to adopt the rule has proven a burden for North Carolina's joining of RGGI. In 2018, the NC Environmental Management Commission rejected a somewhat similar petition for lack of regulatory authority.⁴⁰ The North Carolina Administrative Procedure Act (APA), Chapter §150B of North Carolina's General Statutes, prohibits imposing "a more restrictive standard, limitation, or requirement than those imposed by federal law or rule if a federal law or rule pertaining to the same subject matter has been adopted."⁴¹ The Commission in 2018 reasoned that because the Clean Power Plan already regulated GHG emissions, including CO₂, the commission could not institute a stricter standard in North Carolina than was being enforced federally.⁴² The political landscape the SELC petition faces differs in two significant ways. First, the Clean Power Plan was repealed under the Trump administration.⁴³ Moreover, the Supreme Court has agreed to hear an appeal "to limit the Environmental Protection Agency's power to regulate carbon emissions under the Clean Air Act" which may potentially greatly affect future environmental policy.⁴⁴ Second, the membership of the Environmental Commission has changed since 2018,⁴⁵ which may affect the Commission's conclusion.

³⁸ N.C. DEP'T OF ENV'TL QUAL., N.C. CLEAN ENERGY PLAN: TRANSITIONING TO A 21ST CENTURY ELECTRICITY SYSTEM 58-60 (2019), https://files.nc.gov/ncdeq/climate-change/clean-energy-plan/NC_Clean_Energy_Plan_OCT_2019_.pdf.

³⁹ Southern Environmental Law Center, *supra*, at 7.

⁴⁰ Environmental Management Commission, Order Denying Petition for Rulemaking (May 7, 2018).

⁴¹ N.C. Gen. Stat. § 150B-20(a).

⁴² EMC, *supra* note 40.

⁴³ See Adam Liptak, *Supreme Court to Hear Case on E.P.A.'s Power to Limit Carbon Emissions*, N.Y. TIMES, (Oct. 29, 2021), <https://www.nytimes.com/2021/10/29/us/politics/epa-carbon-emissions-supreme-court.html>.

⁴⁴ *Id.*

⁴⁵ See Ford Porter, *Governor Announces Boards and Commissions Appointments*, NC GOVERNOR ROY COOPER, (Jul. 2, 2019), <https://governor.nc.gov/news/governor-announces-boards-and-commissions-appointments>.

SELC makes three arguments to support its claim that NCDEQ has authority to join RGGI. As a preliminary matter, the petition notes that the Commission is not bound by its prior rejection of the 2018 petition and can evaluate this proposed rule without needing to adhere to its previous interpretation of the APA rule.⁴⁶ Additionally, SELC argues that the Commission’s rejection of the original petition was erroneous because no federal law actually covers how GHG emissions should be limited.⁴⁷ North Carolina law forbids an environmental agency from “impos[ing] a more restrictive standard, limitation, or requirement than those imposed by federal law” if there is “a federal law or rule pertaining to the same subject matter.”⁴⁸ The petition reasons that the restriction of prohibiting a stricter regulation of the “same subject matter” cannot apply when there is no specific federal cap and trade program.⁴⁹ Any broader interpretation of “same subject matter”, the petition argues, would hinder a state from enacting many of the laws that exist today.⁵⁰ Essentially, because there is no federal cap-and-trade program regulating carbon emissions, no federal law of the same subject matter applies to invoke this APA rule.⁵¹

Alternatively, the petition argues that even if the commission does adhere to its previous interpretation of the APA, the agency could still allow the petition’s proposed rule if it invokes the “serious and unforeseen threat to the public health, safety, or welfare”⁵² exception clause built into the same statute.⁵³ The petition argues that climate change is a large enough threat to invoke the exception clause.⁵⁴ Every region of the globe will feel the effects of climate change.⁵⁵

⁴⁶ Southern Environmental Law Center, *supra* note 7, at 19.

⁴⁷ *Id.*

⁴⁸ N.C. Gen. Stat. § 150B-19.3(a)

⁴⁹ Southern Environmental Law Center, *supra* note 7, at 16.

⁵⁰ *Id.* at 17.

⁵¹ *Id.* at 16.

⁵² N.C. Gen. Stat. § 150B-19.3(a)(1).

⁵³ Southern Environmental Law Center, *supra* note 7, at 20.

⁵⁴ *Id.*

⁵⁵ *Id.*

The effects of climate change are “unprecedented” and “irreversible”, and include increasingly frequent and serious instances of flooding, droughts, ocean acidification, and the loss of polar ice caps.⁵⁶ The petition argues that these consequences and more will affect North Carolina to a severe enough degree that this exception clause can be invoked.⁵⁷

The authority to adopt this rule, the petition argues, stems from the North Carolina Constitution as well as the North Carolina Air Pollution Control Act. First, the North Carolina Constitution states that it is the state’s policy “to control and limit the pollution of our air and water . . . and in every other appropriate way to preserve as a part of the common heritage of this State its forests, wetlands, estuaries, beaches, historical sites, openlands, and places of beauty.”⁵⁸ This broad mandate is further delineated in the Air Pollution Control Act (APCA). The APCA allows the Commission “to develop and adopt, after proper study, air quality standards applicable to the State as a whole or to any designated area of the State as the Commission deems proper,”⁵⁹ to “develop and adopt emission control standards as . . . may be necessary to prohibit, abate, or control air pollution commensurate with established air quality standards,”⁶⁰ and “to develop and adopt a program of incentives to promote voluntary reductions of emissions of air contaminants, including, but not limited to, emissions banking and trading and credit for voluntary early reduction of emissions.”⁶¹ Because the APCA defines “air contaminants” to include gases, gaseous CO₂ emissions are covered.⁶² This does not conflict with the petition’s previous argument about a lack of federal law covering GHG emissions, as that argument

⁵⁶ IPCC, *Climate Change Widespread, Rapid, and Intensifying*, (Aug. 9, 2021), <https://www.ipcc.ch/2021/08/09/ar6-wg1-20210809-pr/>.

⁵⁷ See Southern Environmental Law Center, *supra* note 7, at 20.

⁵⁸ N.C. Const. art. XIV, § 5.

⁵⁹ N.C. Gen. Stat. § 143-215.107(a)(3)

⁶⁰ *Id.* § 143-215.107(a)(5).

⁶¹ *Id.* § 143-215.107(a)(12).

⁶² *Id.* § 143-213(2).

centered on the fact that there was no federal cap-and-trade program that governed carbon emissions, which differs from the Commission having the authority to govern gas emissions.

Ultimately, these arguments proved persuasive enough for the NCDEQ to begin the rulemaking process for North Carolina to join RGGI.⁶³ Although the final text of the rule, and how RGGI will work within North Carolina, will ultimately be determined by the North Carolina Utilities Commission, the text of the proposed rule provides some key differences that can be explored.

IV. North Carolina's Administrative Approach to RGGI Approach

North Carolina's approach differs from other member states in two significant ways. First, its rule would cover all industrial sources of CO₂ emission, rather than just emissions from the power sector. Next, North Carolina's choice to join through an administrative agency rule, rather than through legislative action, would result in the state choosing a consignment auction approach to emission allowances rather than a direct auction approach. The former could broaden North Carolina's capacity to limit CO₂ emissions, while the latter may prevent the state from receiving all of RGGI's benefits.

A. The Scope of RGGI in North Carolina

The SELC petition's proposed rule states that North Carolina shall regulate "any unit that, at any time on or after January 1, 2005, serves an electricity generator with a nameplate capacity equal to or greater than 25 MWe."⁶⁴ The proposed rule mirrors the RGGI standard because the limit is placed at 25MWe, which is in accordance with the RGGI model rule.⁶⁵ However, the RGGI was designed to regulate only electric power plants,⁶⁶ whereas this rule

⁶³ Martinez, *supra* note 8.

⁶⁴ Southern Environmental Law Center, *supra* note 7, at 37.

⁶⁵ *Elements of RGGI*, *supra* note 6.

⁶⁶ *Id.*

would also cover any industrial source of CO₂. This language indicates a much broader scope of regulation, and possibly much greater emissions reduction. As of 2019, the electric sector accounted for twenty-five percent of all U.S. GHG emissions, with “the vast majority of greenhouse gas emissions” comprised of carbon dioxide.⁶⁷ The U.S. generates twenty-four percent of its electric power from burning coal, with another thirty-seven percent generated through natural gas.⁶⁸ While coal only represents twenty-four percent of electricity production, it releases approximately sixty-one percent of emissions from the electricity sector.⁶⁹ Industry, on the other hand, accounts for twenty-three percent of U.S. GHG emissions.⁷⁰ Thus, broadening this definition from fossil-fueled power plants to any industrial source of greenhouse gas emissions would likely affect a more significantly portion of CO₂ emitters in North Carolina.

B. Direct Auction Model versus Consignment Auction Model

How North Carolina joins RGGI, if it joins at all, would profoundly affect how the State could use auction revenue. Generally, states join RGGI through legislative action. Legislative action allows a direct auction process because legislatures determine how state funds can be used. For example, Virginia included in its rule that “45% of RGGI profits will go to the Virginia Community Flood Preparedness Fund.”⁷¹ Under the direct auction approach, RGGI states earn revenues to reinvest in emission reduction strategies.⁷² In its 2017 report, RGGI reported on four categories of investments (while noting that investments are different in each participating state).⁷³ Energy efficiency represented fifty-one percent of investments, with an expected \$879.3

⁶⁷ EPA, *Sources of Greenhouse Gas Emissions*, (Jul. 27, 2021), <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#electricity>.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Sources of Greenhouse Gas Emissions*, *supra* note 67.

⁷¹ Cornelius, *supra* note 28.

⁷² *See* 40 ECGLQ at 78.

⁷³ REGIONAL GREENHOUSE GAS INITIATIVE, INC., *supra* note 3, at 3.

million in lifetime energy bill savings.⁷⁴ Clean and renewable energy represented fourteen percent, with an expected return of \$329 million in lifetime energy bill savings.⁷⁵ GHG abatement represented fourteen percent of RGGI investments, with an expected reduction of 431,000 short tons of CO₂ pollution.⁷⁶ Direct bill assistance represented sixteen percent of RGGI investments, resulting in forty-nine million in bill credit to customers.⁷⁷ In Connecticut, approximately seven million dollars of its RGGI auction proceeds went to “resolve fiscal budget shortfalls” while the other six and a half million dollars were reinvested in “energy efficiency programs” and “renewable energy deployment” programs.⁷⁸

In contrast, the SELC petition proposes a consignment process: North Carolina would allocate emissions for free, then requiring emitters to consign their allowances on a quarterly basis.⁷⁹ Like Virginia’s first attempt at joining RGGI, North Carolina’s approach to joining RGGI is through a DEQ rule, rather than through legislative action. Without legislation determining how the funds can be reinvested, it would be up to the North Carolina Utilities Commission to determine how to allocate any RGGI revenue.⁸⁰ Just as Virginia needed a consignment auction because its legislature would not allow the investment of RGGI funds, North Carolina will rely on a consignment auction because there is no legislation determining how RGGI revenues can be reinvested.⁸¹ Thus, a consignment approach certainly differs from the approaches of other member states. Without direct revenue from auctions, North Carolina

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ REGIONAL GREENHOUSE GAS INITIATIVE, INC., THE INVESTMENT OF RGGI PROCEEDS IN 2017 15, (Oct. 2019), https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI_Proceeds_Report_2017.pdf.

⁷⁹ *North Carolina Starts Rulemaking Process for RGGI Participation*, International Carbon Action Partnership (Oct. 15, 2021), <https://icapcarbonaction.com/en/news-archive/790-north-carolina-starts-rulemaking-process-for-rggi-participation>.

⁸⁰ Southern Environmental Law Center, *supra* note 7, at 8.

⁸¹ *See* Cornelius, *supra* note 8.

could be unable to reinvest in energy efficiency, clean energy, and greenhouse gas abatement and may not reap the full benefits of RGGI.

V. Conclusion

North Carolina is at a pivotal junction in its climate change policy. With the looming threat of climate change, action is necessary.⁸² As the first “cap-and-invest” program, RGGI provides the dual benefits of reducing CO2 emissions and producing new revenue through allowance auctions.⁸³ Joining RGGI is a significant step forward for North Carolina’s greenhouse gas emission reduction goals.⁸⁴ North Carolina’s proposed RGGI plan regulates a broader scope of emitters by addressing all industrial sources rather than just power plants.⁸⁵ However, North Carolina’s method of joining RGGI would prevent the State from receiving a new source of revenue from RGGI allowance auctions, as other member states do.⁸⁶ While the exact structure of the consignment auction remains to be determined, it may preclude North Carolina from garnering the same benefits that other member states are privy to as RGGI participants. With North Carolina’s climate future hanging in the balance, it remains to be seen if the proposed rule to join RGGI will make the difference that is so desperately needed.

⁸² See IPCC, *supra* note 56.

⁸³ See REGIONAL GREENHOUSE GAS INITIATIVE, INC., *supra* note 78, at 5.

⁸⁴ See Martinez, *supra* note 8.

⁸⁵ Southern Environmental Law Center, *supra* note 7, at 39.

⁸⁶ See *North Carolina Starts Rulemaking Process for RGGI Participation*, *supra* note 79.