



NORTH CAROLINA

Department of Transportation



ZEV Plan – State of the State

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September 16, 2020

Executive Order No. 80

North Carolina's Commitment to Address Climate Change and Transition to Clean Energy



State of North Carolina

ROY COOPER
GOVERNOR

October 29, 2018

EXECUTIVE ORDER NO. 80

NORTH CAROLINA'S COMMITMENT TO ADDRESS CLIMATE CHANGE AND TRANSITION TO A CLEAN ENERGY ECONOMY

WHEREAS, North Carolina residents deserve to be better educated, healthier, and more financially secure so that they may live purposeful and abundant lives; and

WHEREAS, N.C. Const. art. XIV, § 5 requires the conservation, protection, and preservation of state lands and waters in public trust; and

WHEREAS, North Carolina is well positioned to take advantage of its technology and research and development sectors, along with its skilled workforce, to promote clean energy technology solutions and a modernized electric grid; and

WHEREAS, public-private partnerships in North Carolina foster market innovations and develop clean energy technology solutions that grow the state's economy; and

WHEREAS, the effects of more frequent and intense hurricanes, flooding, extreme temperatures, drought, saltwater intrusion, and beach erosion have already impacted and will continue to impact North Carolina's economy; and

WHEREAS, climate-related environmental disruptions pose significant health risks to North Carolinians, including waterborne disease outbreaks, compromised drinking water, and increases in disease-spreading organisms, and exposure to air pollution, among other issues; and

WHEREAS, to maintain economic growth and development and to provide responsible environmental stewardship, we must build resilient communities and develop strategies to mitigate the effects of climate-related impacts in North Carolina.

NOW, THEREFORE, by the authority vested in me as Governor by the Constitution and the laws of the State of North Carolina, **IT IS ORDERED**:

1. The State of North Carolina will support the 2015 Paris Agreement goals and honor the state's commitments to the United States Climate Alliance.

The State of North Carolina will strive to accomplish the following by 2025:

- a. Reduce statewide greenhouse gas emissions to 40% below 2005 levels;
- b. Increase the number of registered, zero-emission vehicles ("ZEVs") individually, "ZEV" and fleet, to at least 80,000;
- c. Reduce energy consumption per square foot in state-owned buildings by at least 40% from fiscal year 2002-2003 levels.

2. Cabinet agencies shall evaluate the impacts of climate change on their programs, operations, and services, and integrate climate change mitigation and adaptation practices into their planning, budgeting, and other North Carolina entities are encouraged to address climate change mitigation and adaptation measures developed and implemented by this Executive Order. Consistent with applicable law, cabinet agencies shall support such actions.

3. The Secretary or designee of each cabinet agency and a representative from the Office shall serve on the North Carolina Climate Change Interagency Council, which shall be established. The Secretary of the North Carolina Department of Environment and Natural Resources shall serve as the Council Chair. The North Carolina Department of Transportation shall serve as the Council Vice Chair. The Council shall facilitate stakeholder engagement, and assist in the implementation of actions to achieve the goals provided in Section 1 of this Executive Order.

The duties of the Council shall include the following:

- a. Recommend new and updated goals and actions to meaningfully address climate change;
- b. Develop, implement, and evaluate programs and activities that support statewide climate change mitigation and adaptation practices;
- c. Establish workgroups, as appropriate, to assist the Council in its duties;
- d. Consider stakeholder input when developing recommendations, programs, and other actions and activities;
- e. Schedule, monitor, and provide input on the preparation and development of the plans and assessments required by this Executive Order;
- f. Review and submit to the Governor the plans and assessments required by this Executive Order.

The North Carolina Department of Environmental Quality ("DEQ") shall develop a North Carolina Clean Energy Plan ("Clean Energy Plan") that focuses and encourages the utilization of innovative technologies in the public and private sectors, and the integration of those resources into the development of a modern and resilient electric grid. DEQ shall collaborate with utilities, energy efficiency measures, and clean transportation solutions. DEQ shall submit the Clean Energy Plan for the Council to submit to the Governor by October 1, 2019.

The North Carolina Department of Transportation ("DOT"), in coordination with DEQ, shall submit a North Carolina ZEV Plan ("ZEV Plan") designed to increase the number of ZEVs in the state to at least 80,000 by 2025. The ZEV Plan shall help establish and incorporate, where appropriate, additional best practices for increasing ZEV adoption. The ZEV Plan shall include the following:

- 1. Department of Commerce ("DOC") and other cabinet agencies shall take the expansion of clean energy businesses and service providers, clean energy and clean transportation to procuring renewable energy, and work force demands by October 1, 2019. These assessments shall evaluate the skills and education required for employment in those sectors, and help North Carolinians develop such skills and education.
- 2. Nine ZEVs in the purchase or lease of new vehicles and shall use such vehicles when feasible. When ZEV use is not feasible, cabinet agencies shall explore low-emission alternatives. To support implementation of this Executive Order, the Department of Administration ("DOA") shall develop a North Carolina Motor Fleet ZEV Plan ("Motor Fleet ZEV Plan") that identifies the types of trips for which a ZEV is feasible, recommends infrastructure necessary to support ZEV use, develops procurement options and strategies to increase the purchase and utilization of ZEVs, and addresses other key topics. DOA shall complete the Motor Fleet ZEV Plan and provide an address of each agency's ZEVs and miles driven by vehicle type for the Council to submit to the Governor by October 1, 2019, and annually thereafter.
- 3. Building on the energy, water, and utility use conservation measures taken pursuant to N.C. Gen. Stat. § 143-64.12(a), DEQ shall update and amend, where applicable, a Comprehensive Energy, Water, and Utility Use Conservation Program ("Comprehensive Program") by February 1, 2019, and biennially beginning December 1, 2019, to further reduce energy consumption per gross square foot in state buildings consistent with Section 1 of this Executive Order. The Comprehensive Program shall include best practices for state government building energy efficiency, training for agency staff, cost estimation methodologies, financing options, and reporting requirements for cabinet agencies. DEQ and cabinet agencies shall encourage energy efficiency requirements for education institutions, K-12 schools, and local governments and assist, as requested, higher education institutions, K-12 schools, and local governments in reducing energy consumption. To achieve the required energy consumption reductions:

Carolina Motor Fleet ZEV Plan ("Motor Fleet ZEV Plan") that identifies the types of trips for which a ZEV is feasible, recommends infrastructure necessary to support ZEV use, develops procurement options and strategies to increase the purchase and utilization of ZEVs, and addresses other key topics. DOA shall complete the Motor Fleet ZEV Plan and provide an address of each agency's ZEVs and miles driven by vehicle type for the Council to submit to the Governor by October 1, 2019, and annually thereafter.

3. Building on the energy, water, and utility use conservation measures taken pursuant to N.C. Gen. Stat. § 143-64.12(a), DEQ shall update and amend, where applicable, a Comprehensive Energy, Water, and Utility Use Conservation Program ("Comprehensive Program") by February 1, 2019, and biennially beginning December 1, 2019, to further reduce energy consumption per gross square foot in state buildings consistent with Section 1 of this Executive Order. The Comprehensive Program shall include best practices for state government building energy efficiency, training for agency staff, cost estimation methodologies, financing options, and reporting requirements for cabinet agencies. DEQ and cabinet agencies shall encourage energy efficiency requirements for education institutions, K-12 schools, and local governments and assist, as requested, higher education institutions, K-12 schools, and local governments in reducing energy consumption. To achieve the required energy consumption reductions:

- a. By January 15, 2019, each cabinet agency shall designate an Agency Energy Manager, who shall serve as the agency point of contact.
- b. Each cabinet agency shall develop and submit an Agency Utility Management Plan to DEQ by March 1, 2019, and biennially thereafter, and implement strategies to support the energy consumption reduction goal set forth in Section 1 of this Executive Order. DEQ shall assess the adequacy of these plans and their compliance with this Executive Order.
- c. By September 1, 2019, and annually thereafter, each cabinet agency shall submit to DEQ an Agency Utility Report detailing its utility consumption, utility costs, and achieved progress in reducing energy consumption.
- d. DEQ shall develop an annual report that describes the Comprehensive Program and summarizes each cabinet agency's utility consumption, utility costs, and achieved progress in reducing energy consumption. DEQ shall complete this report for publication on its website and for the Council to submit to the Governor by February 1, 2019, and annually thereafter beginning December 1, 2019.
- 9. Cabinet agencies shall integrate climate adaptation and resiliency planning into their policies, programs, and operations (i) to support communities and sectors of the economy that are vulnerable to the effects of climate change and (ii) to enhance the agencies' ability to protect human life and health, property, natural and built infrastructure, cultural resources, and other public and private assets of value to North Carolinians.
 - a. DEQ, with the support of cabinet agencies and informed by stakeholder engagement, shall prepare a North Carolina Climate Risk Assessment and Resiliency Plan for the Council to submit to the Governor by March 1, 2020.
 - b. The Council shall support communities that are interested in assessing risks and vulnerabilities to natural and built infrastructure and in developing community-level adaptation and resiliency plans.
- 10. DEQ shall prepare and manage a publicly accessible Web-based portal detailing the Council's actions and the steps taken to address and mitigate climate-related impacts in North Carolina. Cabinet agencies shall submit data, information, and status reports as specified by the Council to be published on the portal. Additionally, DEQ shall develop, publish on the portal, and periodically update an inventory of the state's greenhouse gas emissions that, among other things, tracks emissions trends statewide by sector and identifies opportunities for additional emissions reductions.
- 11. By October 15, 2019, and annually thereafter, the Council shall provide to the Governor a status report on the implementation of this Executive Order.
- 12. This Executive Order is consistent with and does not otherwise abrogate existing state law.

This Order is effective October 29, 2018 and shall remain in effect until rescinded or superseded by another applicable Executive Order.

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the Great Seal of the State of North Carolina at the Capitol in the City of Raleigh, this the 29th day of October, in our Lord two thousand eighteen.

Roy Cooper
Governor



Mark Maddox
Secretary of State

Executive Order No. 80

- Issued October 2018
- Focuses on climate and clean energy
- Set goals for reducing emissions, increasing zero-emission vehicles (ZEVs), reducing energy consumption in state-owned buildings by 2025

North Carolina ZEV Plan

NCDOT Tasked with Developing Strategic Plan to Achieve the Following:

1. Establish interstate and intrastate ZEV (Zero Emission Vehicles) corridors
2. Increase the installation of ZEV infrastructure, such as charging stations
3. Launch educational campaigns about the benefits of ZEVs and dispelling myths about them

ZEV Registration Goal

- **Goal:** to have 80,000 ZEVs registered by 2025
- As of August 2020
 - 13,312 Electric
 - 8,432 Plug-in Hybrid
 - 21,744



The End Goal is to show that clean energy, and low and zero emission transportation is economically viable and is a critical part of preserving the high quality of life in North Carolina

Progress to date

- Reduced energy consumption by 33%, water consumption by 52% since 2002-03 baseline
- Started identifying the most suitable locations statewide for ZEV charging stations
- Conducted statewide outreach to stakeholders through public meetings



Progress ongoing

- Pursuit of ZEVs
 - Coordinated with Department of Administration to identify fleet vehicles that can be converted to ZEV
 - Division of Aviation encouraging airports to transition to electric vehicles and equipment at airports
 - Integrated Mobility Division is helping facilitate moving toward all electric fleets in Asheville, Greensboro, Go Triangle and Chapel Hill
 - Working to develop appropriate signage for ZEV corridors

House Bill 329

- Passed last year, House Bill 329 exempts electric vehicle charging stations from regulation as a public utility



Challenges

- COVID-19 has delayed many
 - 2020 was to be focused on educational outreaches through ride-and-drive events and conferences
 - Century Center's (NCDOT facility) fleet conversion to ZEVs delayed

Opportunities

Electric Vehicles are leading the way to CAV and North Carolina already has legislation enabling these vehicles.

What are the Synergies of Electric Conected Autonomous Vehicles?

Opportunities

Reduces cost of transportation — Transportation cost affects the cost of EVERYTHING.

Expands service to underserved — Allows everyone to continue participate in the world.

Saves Lives — Reduced motor vehicle crashes, injuries and fatalities.

Improved Quality of Life — Reduces emissions and pollution, reduces loss of loved ones, reduces human impact on climate

Opportunities

Those who want to talk about the job disruption that these technologies will bring?

North Carolina has gone through job disruptions in the past and continues to be one of the fastest growing states, producing new jobs and opportunities.

(Textiles, Furniture, Tobacco)



Questions?