

North Carolina Comprehensive Climate Action Plan



The **North Carolina Comprehensive Climate Action Plan**, developed by the North Carolina Department of Environmental Quality, **identifies resilience and carbon reduction measures to meet Executive Order 246's goal to reduce greenhouse gas emissions by 50 percent below 2005 levels by 2030.** Reaching this carbon reduction goal is driven by specific strategies such as increasing options for renewable electricity, improving energy efficiency in buildings, and expanding the use of electric vehicles and land-based carbon sequestration. The identified measures represent more than \$1 billion in investments, with the majority of measures already funded or anticipate funding.



Key Takeaways

The plan addresses six core sectors: electricity generation, industry, transportation, buildings, waste management and natural and working lands.

1. Transportation

\$214 million to replace medium- and heavy-duty diesel vehicles with electric vehicles, expand the electric vehicle charging network and improve freight efficiency at ports and transportation corridors. The investment will result in more than 64,000 metric tons of CO₂-equivalent (MTCO₂e) reductions by 2030 and more than 1.16 million MTCO₂e by 2050.

2. Electricity

\$389.8 million to increase the amount of electricity generated and distributed by renewable resources such as solar, geothermal and onshore wind and the deployment of microgrids for community resilience. The investment will reduce emissions by more than 1.47 million MTCO₂e by 2030 and more than 7.37 million MTCO₂e by 2050.

3. Buildings

\$242 million to retrofit homes with insulation, HVAC upgrades and whole-home energy efficiency strategies and to improve energy efficiency in state-owned buildings. The investment will reduce emissions by more than 668,000 MTCO₂e by 2030 and more than 5.2 million MTCO₂e by 2050.



4. Industry

Industrial stakeholders in NC have emphasized that capital investments in electrification, low-carbon fuels and process improvements are unlikely to occur unless they result in near-term cost savings or are offset by financial incentives. DEQ identified this sector as needing future attention and analysis.

5. Waste

Diverting food waste can result in more than 1.27 million MTCO₂e emission reductions by 2030. Installing gas collection systems and landfill covers could reduce landfill gas emissions by more than 36,000 MTCO₂e by 2030 and more than 781 MTCO₂e by 2025. However, DEQ identified this sector as needing funding to implement these potential reduction measures.

6. Natural and working lands

The Atlantic Conservation Coalition's investment of \$421 million to restore coastal habitats and peatlands, promote sustainable forestry and restore agricultural lands will offset emissions by more than 3.36 million MTCO₂e by 2030 and more than 28 million MTCO₂e by 2050.

Key Objectives

- 1. Strengthen Resiliency and Reduce Climate Pollution:** Support resiliency by modernizing energy infrastructure and investing in more reliable energy systems, including microgrids. Lower household and business energy costs through efficiency upgrades such as weatherization, appliance replacements, and building improvements.
- 2. Support Economic Development and Workforce Readiness:** Ensure that communities and industries benefit from the transition by creating opportunities for local jobs, technical training, and workforce development tied to clean energy and decarbonization.
- 3. Deliver Cleaner Air and Healthier Communities:** Reduce harmful co-emitted air copollutants (e.g., NO_x, SO₂, and PM_{2.5}) in residential, work, and recreational areas, improving quality of life while supporting long-term climate and health goals.



Learn more

The full CCAP is available at deq.nc.gov/ccap



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Climate Pollution
REDUCTION GRANT