North Carolina’s Clean Energy Plan – The Power Sector

Fact Sheet: Cleaner Power for North Carolina

Q: What is the Clean Energy Plan?
The North Carolina Clean Energy Plan is our state’s plan to reduce the amount of carbon pollution from the electricity we generate and use. The plan carries out Governor Cooper’s 2018 Executive Order 80 to cut carbon pollution in North Carolina and transition to a clean energy economy. The Clean Energy Plan was the result of a yearlong process led by the North Carolina Department of Environmental Quality (DEQ) that involved facilitated workshops, regional listening sessions, state-wide events and online input from the public.

![Figure 1. Clean Energy Plan Electric Sector Emission Goals](image)

The Clean Energy Plan calls for cutting carbon pollution from the electricity we generate and use in North Carolina by 70% compared to 2005 carbon pollution levels by 2030, and to be “carbon neutral” by 2050. The Clean Energy Plan recommends almost 40 different actions and policies to achieve these goals.

The first recommendation (A-1) in the Plan is to produce a report that evaluates carbon-reduction policies for the power sector on core values such as pollution reduction, electricity affordability, equity, and reliability. The report is due to the Governor by Dec. 31, 2020.

Q: Who is producing the report?
DEQ asked researchers at the Duke University Nicholas Institute for Environmental Policy Solutions and the University of North Carolina at Chapel Hill Center on Climate, Energy, Environment & Economics (CE3) to develop the report identified in the Clean Energy Plan.

The Nicholas Institute and CE3 convened working groups that include representatives from environmental advocates, industrial customers, low-income advocates, renewable energy developers, state agencies, universities, and utilities to inform the process. A broader community of interested stakeholders meets every other month to receive updates and provide input. Staff from the Nicholas Institute and CE3 will write the report.

Q: How far along in the process are the working groups?
So far, the working groups have focused on researching and understanding the policy options listed in the Clean Energy Plan, as well as collecting data necessary for building computer models of NC’s energy systems. The modeling is highly technical and is still in progress. In the fall, the working groups will begin reviewing model outputs, which will be used to compare the carbon policies against

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1 The Clean Energy Plan does not provide a definition for carbon neutrality. However, generally, carbon neutrality refers the process of balancing carbon pollutions with activities that remove an equal amount of carbon from the atmosphere to what is emitted. It can also mean the elimination of all carbon pollution.
one another in terms of their impact on carbon pollution, the cost of electricity, and the state’s electricity generation mix (for example, natural gas, wind, solar, or coal). The final report to Governor Cooper will describe these results, accompanied by stakeholder feedback.

**Q: What are the policies this group is analyzing?**
The working groups are focusing on policy options identified by stakeholders and listed in the Clean Energy Plan. There are many ways to think about these different types of policies; the descriptions in the table below describe what the working groups have asked the modelers to analyze initially:

<table>
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<tr>
<th>Policy</th>
<th>What the Policy would do</th>
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<tr>
<td>Accelerated Coal Retirement</td>
<td>Require or encourage some or all of NC’s coal-burning power plants to retire before their end of life—in one case, all by 2030.</td>
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<tr>
<td>Carbon Adder</td>
<td>Require utilities to add in the cost of pollution when making decisions on which power plants to run and what types of new power plants to invest in. The policy has the effect of making fossil plants seem more “expensive” in comparison to lower- or zero-emitting generators and could change what a utility decides to build or run. No actual revenues are generated from this policy, however.</td>
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<tr>
<td>Declining Carbon Cap/Carbon Market</td>
<td>Set a declining annual budget or “cap” on the carbon pollution that the electricity sector can emit each year. The owner of a power plant would be required to hold one “allowance” for each ton of CO2 the plant emits. DEQ could hand out allowances or sell them through an auction. (We are modeling both scenarios.) Power plant owners could then buy or sell allowances to each other for use at any plant so long as the total amount of pollution does not exceed the cap.</td>
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<tr>
<td>Clean Energy Standard (CES)</td>
<td>Require a percentage of total electric power sales to be met through “clean” resources each year, which can be defined as zero-emitting or low-emitting generation, or that the overall rate of carbon pollution of electricity generated in the state must drop by a certain amount each year.</td>
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<tr>
<td>Other Clean Energy Policies</td>
<td>We might model policies that require the construction of offshore wind power or battery storage in North Carolina.</td>
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**Q: What are the objectives for this public forum?**
The objective of the public forum meetings is to update the public about the process, provide information about the policies, and receive feedback. We are hoping to reach people who have not been as involved in the Clean Energy Plan up to now.

**Q: How can I get involved, and how will my feedback be used?**
Please join one of two virtual public forums being offered (Sept. 9, 1–3 p.m. or Sept. 16, 6–8 p.m.). Anyone can register to attend. We will send connection information to registered participants. In addition, a recording of the first session will be posted on our website on Sept. 10. Please submit feedback via the survey on the Nicholas Institute website by Sept. 30, 2020. The feedback will inform the structure and analysis of the final report to DEQ.