

# ***The NC Carbon Plan: Points to Consider for Environmental Advocates***

## **Overview**

HB 951 requires the NC Utilities Commission to develop a Carbon Plan by the end of 2022 that would reduce carbon dioxide emissions to 70% below 2005 levels by 2030 and achieve carbon neutrality by 2050. On May 16<sup>th</sup> Duke Energy submitted a [draft Carbon Plan](#) for public review.

## **Climate Goals and Risks:**

- The draft Carbon Plan submitted by Duke Energy is a good starting point to build on. Unfortunately Duke's proposed plan ultimately falls short of the carbon reduction targets set by HB951.
- Duke Energy offered four pathways to net-zero carbon emissions by 2050 in their draft Carbon Plan. Only one of those options hits the 2030 benchmark required by HB951, and Duke Energy's analysis lists it as the most costly of the four.
  - Duke Energy's cost analyses are based on several faulty assumptions.
  - The cost of renewable energy has dropped substantially, a trend that will only continue. That means Duke Energy is significantly overestimating the cost of the pathway that would hit the 70% benchmark in 2030 with robust solar energy investments.
  - Joining the Regional Greenhouse Gas Initiative (RGGI) would help drive the price of renewables down even further in North Carolina. Under RGGI, the added cost of carbon emissions will help price in the external costs of fossil pollution and help ensure we meet carbon reduction targets. The NC Department of Environmental Quality (DEQ) is currently developing a regulatory action to join RGGI.
- The world is currently on track to see a [6.5 degree Fahrenheit increase in global temperatures](#) and [30 inches in sea-level rise](#) by 2100. There is no time to waste cutting emissions.
  - Several of Duke Energy's proposed pathways continue to rely on the use and development of methane gas for energy. This continued reliance on methane gas will cripple our ability to drive those numbers down.
  - The lack of transparency in Duke Energy's carbon emission baseline and accounting leaves ratepayers in the dark about Duke's ownership stakes and the carbon content of the electricity the company purchases from small power producers.
    - If Duke is going to voluntarily cut emissions of the other greenhouse gasses they are directly or indirectly responsible for, ratepayers should have a full picture of what they may be on the hook for.

- Duke Energy requested the NC Utilities Commission (NCUC) approve all four pathways, essentially requesting a blank check for the strategies they'll employ and infrastructure they want to build. At the same time, Duke Energy admits their less-robust decarbonization pathways rely on potentially unrealistic future technology developments.
  - Additional decarbonization pathways will, and must be considered before the Commission makes a final decision. The Commission should consider alternative plans that minimize risk and cost, and should only approve a plan that meets the 2030 benchmark set by HB951.
  - Duke wants to blend hydrogen with methane to lower its gas emissions. However, only a limited amount of hydrogen can be blended with methane gas before needing upgraded pipeline infrastructure.
    - If hydrogen leaks, it has a warming effect that is multiple times worse than carbon dioxide.
    - Duke Energy should be transparent about their plans to site hydrogen production, its pipeline infrastructure needs, and generation plans. The NCUC should require this information for the public's knowledge.
  - Several of Duke Energy's proposed pathways are heavily reliant on advanced nuclear energy development. Yet, next-generation nuclear reactors are completely unproven technologies. Current cost assumptions of next-generation nuclear facilities do not compete with utility scale solar. As costs continue to decline for solar, the price discrepancy for electricity between these two technologies will likely widen.
    - Major safety questions about storing nuclear waste remain. Until sufficient technological advancements in nuclear waste recycling have been made, the commission should be hesitant to consider advanced nuclear energy as a significant driver for carbon reduction in North Carolina.

***Costs to ratepayers:***

- National and international economic conditions continue to shift, and the price of fossil fuels has become increasingly unstable. In light of these shifts, Duke Energy may have underestimated the cost of methane gas in their analysis.
- Transmission and distribution costs for fossil fuels are not fully accounted for in Duke Energy's draft Carbon Plan. This could make the total cost to ratepayers much higher.
- The draft Carbon Plan should specify whether Duke Energy intends to use securitization as a tool to save ratepayers money on advanced depreciation of coal plants. The longer Duke Energy waits to retire unnecessary coal plants, the more it will cost ratepayers.

- Duke Energy and the NCUC should work together to develop opportunities for communities that have borne the brunt of environmental impacts, or that are economically depressed to ensure that those places benefit from the energy transition.
- More must be included in the final NCUC's Carbon Plan to protect low- and middle-income ratepayers from increases to their utility bills.
  - Funding generated by pricing carbon emissions through RGGI should be used to protect ratepayers from higher bills, protect against the changing climate, and in pro-economic growth ways such as investing in energy efficiency measures.
- The energy efficiency targets that Duke has set are barely an improvement on the status quo. Energy efficiency targets are the low-hanging fruit that help drive job growth, cut emissions, and make utility bills more affordable.
  - [In 2020](#), the states in RGGI that reinvested in energy efficiency measures saved ratepayers an estimated \$1.2 billion for 56,000 households and prevented the release of 4.2 million short tons of CO<sub>2</sub>. Duke Energy's energy efficiency targets should be much higher, and North Carolina should use revenue from RGGI to help ensure we hit that target.
- Industrial consumers of electricity have historically been given an option to opt-out of energy efficiency programs. The Utilities Commission should utilize its authority to ensure the North Carolina electric grid is as efficient and sustainable as possible for all rate classes.

### ***Transparency***

- Duke Energy should be transparent about costs for transmission and distribution for all energy sources.
  - Duke has drastically underinvested in electricity transmission over the years; if they now want to make those investments, clean energy sources should be prioritized.
- Duke Energy said they "recognize and understand the importance of both the impact of Duke Energy's work on communities and early engagement with those impacted." They then clarify that they had one meeting with ten unidentified stakeholders on May 3rd, nine business days before its draft plan was released.
  - The NCUC must independently ensure that the Carbon Plan is least-cost.