

LIGHTING THE PATH

MEETING NORTH CAROLINA'S COMING ENERGY NEEDS

WHAT'S THE IMPACT?

2021: North Carolina passed legislation mandating significant reduction targets for carbon dioxide emissions from generating electricity.

- Meeting these targets requires costly energy solutions that will increase utility bills for businesses and homes and require the largest expansion of electric infrastructure since the 1920s

How utilities choose to meet these targets will determine the prices consumers pay for energy. It will also set the limits for North Carolina's economic growth and development and influence the amount of infrastructure needed to serve electricity customers reliably.

OVERVIEW OF ENERGY SCENARIOS

“**Lighting the Path**” conducts an in-depth analysis of North Carolina's current energy infrastructure, comparing two carbon neutrality scenarios designed to meet our state's growing energy needs by 2050.

The “**Renewable Scenario**” would **require a nearly tenfold increase in energy infrastructure** and consume much more land than the current electric grid does.

By contrast, the “**Nuclear Scenario**” would ensure reliable, affordable energy through the

construction of new nuclear power plants. This plan will allow existing coal and natural gas plants to remain online as needed until the transition to zero-emission nuclear is complete.

IMPLICATIONS



The Nuclear Scenario would produce more electricity with far less energy infrastructure. **The land required for new nuclear power would amount to just 38% of the land currently consumed by all of North Carolina's existing solar facilities.**

EO 246 COSTS NORTH CAROLINIANS BILLIONS



Locke's Lighting the Path report also estimates the cost to North Carolinians of reaching former Governor Cooper zero-emissions vehicle (ZEV) goals stated in Executive Order (EO) 246:

Meeting these ZEV goals would cost between \$16.5B and \$30.5B to provide the needed infrastructure.



Over the next seven years, EO 246 would result in North Carolina drivers spending an **extra \$17.0B to \$18.5B to purchase the pricier ZEVs**, instead of conventional, gasoline-powered cars and diesel trucks.