

Sources of Massive Expansion of the Carbon-Based Energy Economy in NC Published by the Economos Institute

While both public officials and Duke Energy officials speak of their commitment to a low carbon future and to renewable energy, industry plans are to massively expand the use of carbon-based energy sources in NC.

In order to lead North Carolina's transition to a clean energy economy, to protect North Carolina's environment while growing clean energy technologies, and to stabilize the climate, the first step must be to de-carbonize the energy economy of our State. Without action to de-carbonize the energy economy, all public and private efforts to expand clean, renewable energy sources and resources will not only be undermined, but also negated by the massive rise in carbon emissions that is now underway and planned in North Carolina.

At least 10 carbon-based energy production processes and proposals that expand carbon emissions are presently utilized, under construction, or in some phase of development in North Carolina. When the number of Duke's potential, new and transitioned natural gas-based, facilities are included, this number more than doubles. If these plans, projects, and proposals proceed, North Carolina will become one of the largest, if not the largest producer of carbon-based energy in the United States. Even if only one of these projects proceeds – the Atlantic Coast Pipeline – it alone will not only undermine, but also negate all public and private efforts to lower carbon emissions in North Carolina.

Broad-based scientific evidence from both public and private research and published studies now document that the spike in global warming is due to the use of hydraulically fractured, natural gas. Fracked gas is *not* considered natural, clean, green, safe, or cheap source of energy, particularly when the full cost and impact of its production and use on the climate is taken into account. For Duke Energy to continue to label natural gas as "clean" and for public officials and policy to support such a determination is a clear denial and misrepresentation of methane gas as a carbon compound. Natural gas is 90% methane and needs to be called what it is: carbon-based, methane gas (CH₄). It is the most potent and harmful, greenhouse gas over the first 20 years of its release, up to 80 -100 times more harmful than the release of CO₂ from burning coal in the same span of time. In spite of this knowledge, neither Duke Energy's new IRP's acknowledge this fact nor does Governor Cooper's new Executive Order No.80 to reduce statewide Greenhouse Gas Emissions and support the expansion of Clean Energy Businesses.

We in North Carolina *cannot and will never move* toward a smarter energy future, provide reliable, affordable, and increasingly clean sources of energy *as long as* methane gas is a part of public and private energy policy. Secondly, we will never be able to lower carbon emissions in North Carolina at all if Duke and Dominion Energy proceed with the Atlantic Coast Pipeline, the proposed LNG facility in Robeson County, development of new, methane gas-operated facilities, and the use of 50-80% of its resources between 2019 – 2033 to develop the use of fracked, methane gas as reported in its IRP's. Combined with these plans by Duke Energy are additional plans by other industries to expand carbon emissions in North Carolina. These existing and proposed projects and processes include bio-gas and bio-mass production that are also major carbon emitters. The designation of

their products as “natural, clean, and green”, similar to that of Duke Energy with methane gas, are claims made by industry and repeated by public officials in neglect and contradiction of their status as major carbon emitters. When all of the present and proposed sources of carbon emissions in this state are taken into account, no public official or private industry official can honestly claim that North Carolina is on any path to comprehensively, reduce carbon emissions by any significant amount in the near or distant future. We are on the opposite trajectory and to deny this reality is, at a minimum, a dis-service to the public, and at a maximum, a deceitful and fraudulent misrepresentation of the carbon-emitting products that are rapidly becoming the #1 sources of energy production in our state.

10 Carbon-based Energy Projects and Proposals Being Advanced in North Carolina

1. Piedmont Gas Pipeline - Under Construction in Robeson, Scotland, and Richmond Counties
2. Atlantic Coast Pipeline – Proposed in 8 Counties in Eastern NC
3. Mountain Valley Pipeline – Proposed in Rockingham and Alamance Counties in North Central, NC
4. Duke Energy LNG Facility – Proposed in Robeson County
5. Green Energy Sustainable Solutions (GESS) Bio-Gas Facility – Proposed in Robeson County
6. Hydraulic Fracturing – Authorized by the NC General Assembly – Proposed in Designated Counties – Test Drilling has occurred in Walnut Cove, NC
7. Bio-Mass – In Practice - exportation of wood pellets to Europe – Production in Multiple Counties by Enviva.
8. Duke Energy Carolinas’ proposed Natural Gas-Powered Energy Centers – actual number and locations unknown
9. Unknown and Un-Announced ACP-Related Facility - Proposed in Robeson County (Location is on a map on the last page of the ACP’s “Additional Information” provided to the NC Dept. of Environmental Quality on 12/20/17)
10. Offshore Drilling – Proposed along the NC Coast

In the coming months, scientists will assess the individual and comprehensive impact of each of these projects on carbon emissions in North Carolina. Their findings will then be compared and balanced with the proposed reductions in carbon emissions publicly stated by public and industry officials.

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