

IMPLEMENT GREEN NEW DEAL PROGRAMS IN DURHAM

To: Carina Barnett-Loro, Co-Lead, Environmental and Climate Justice Action Team, Durham People's Alliance

From: Cassidy Connett, Clara Love, and Nina Brockelman

Re: Research Support to Build Green New Deal Policy Platform in Durham

Date: November 1, 2020

Climate policy reform for Durham is an urgent matter. Durham residents are plagued by extreme heat and poor air quality in the midst of a respiratory disease-related pandemic. Durham citizens and political leaders support climate reform measures. The Durham People's Alliance should advocate for policies that directly address the most urgent climate concerns.

Experts agree that climate change in North Carolina is an urgent matter.

Professors and environmental experts agree that climate change is a major issue facing North Carolina. Studies show that climate change leads to increased sea levels, which have a negative impact on the coastal real-estate market, recreation and tourism, and the business activity of the area (1). Further, climate change has detrimental impacts on disadvantaged populations in North Carolina, who's health is jeopardized by unpredictable consequences of climate change (2). Climate change has a multitude of consequences that directly affect the people of North Carolina, which is why it is imperative that Durham implement climate policy reform.

Durham is most burdened by low air quality and extreme heat.

The most pressing climate impacts on Durham are low air quality and extreme heat. The air quality index in Durham stands at the most extreme end of vulnerability, with a rating of "Very High- 5." Poor air quality spans the state of North Carolina, causing the higher rates of children with asthma than the national average—9.4% compared to 7.7%. Poor air quality is especially threatening during the Coronavirus, a highly contagious respiratory disease. Durham's average temperature is gradually increasing and continues to set records for most days above 90 degrees (3). More than 300,000 people in North Carolina are especially vulnerable to the effects of extreme heat. This population includes low-income, disabled, elderly, and otherwise vulnerable people.

Durham residents and political leaders support climate policy reform.

The demographic majorities of Durham generally support policies addressing climate change. Durham is relatively young (median age 35 (4)), majority-minority (58% non-white (5)), and liberal (78% registered Democrats (6)). Not surprisingly, 64% of Durham residents feel that their local government should do more about global warming (7). Democratic Representative David Price (NC-4) supports policies addressing climate change, and he “has consistently supported bold policies to reduce our dependence on fossil fuels, invest in clean energy, and combat global climate change” (8). Durham Mayor Steve Schewel has stated that, “right here in Durham, climate change means that more homes are flooding and more people are taking trips to the hospital from heatstroke and dehydration” (9). Both residents and political leaders of Durham understand the urgent need for climate policy reform.

Republican opposition and increased political polarization are major barriers to action.

The Green New Deal is a legislative proposal that addresses the relationship between climate change and economic inequality. There has been consistently high support for this proposal among Democrats, but it has faced severe opposition among Republicans. Research has shown that, although voters favor the Green New Deal in theory, people tend to evaluate related policies more negatively when they are told it is backed by politicians from an opposing political party. Thus, Republican sentiment and the threat of increased political polarization on the issue are the largest obstacles to getting such legislation to pass.

Conservatives' self-assessed understanding of climate change is unrelated to knowledge.

Regarding constituents' understanding, a 2018 study found the political pattern for self-assessed understanding of climate change follows a U-shape (10). The highest self-assessed understanding ratings are among liberals and the most conservative, but lowest among moderate conservatives. For liberal and middle-of-the-road respondents, self-assessed understanding of climate change is positively related to knowledge. Among the most conservative, however, understanding was found unrelated or even negatively related to knowledge. For that group in particular, high self-assessed understanding reflects confidence in political views, rather than knowledge about the physical world.

Policy Recommendation

The Green New Deal should address extreme heat and poor air quality in Durham.

As previously stated, extreme heat and poor air quality are the most urgent climate-related matters facing Durham. Implementation of the Green New Deal should include measures to address these climate concerns. We suggest the addition of the following policy options to the Green New Deal for Durham.

1. Implement cool roofing technology in Durham.

Cool roofing technology will help combat heat-related illnesses and deaths in Durham. Adding energy efficiency retrofits to public housing is already included in Durham's Green New Deal plan (11). Cool roofing materials transfer less than 35% of the sun's heat into their buildings. By contrast, conventional roofs average about an 80% to 90% heat transfer (12). The benefits of such technology include reduced energy consumption by buildings (as they can reduce air conditioning usage), and improvement of public health by lessening heat-related illnesses. In 2010, Philadelphia added cool roofs and insulation to city-owned residential buildings that lacked air-conditioning. A study showed that the daily maximum indoor air temperature dropped by 1.3 degrees. Models show that even a minor reduction in degrees can greatly reduce heat-related deaths (13). Although cool roofs cost slightly more than conventional ones, Philadelphia ultimately experienced net savings from the implementation of cool roofs (14).

2. Increase green construction jobs in Durham.

While Durham faces a global warming issue, it also faces an unemployment crisis (15). The implementation of green construction jobs has the potential to tackle both of these issues simultaneously. Training locals for green construction jobs and apprenticeships increases the likelihood that Durham becomes a greener city, not only in gentrified areas, but also in lower income suburbs.

3. Advocate for Mayor Schewel to join the Global Covenant of Mayors for Climate and Energy.

Joining the Global Covenant of Mayors for Climate Energy (GCoM) will be an asset to support Mayor Schewel in his plan to implement a "Green New Durham." This network will provide him access to tools, materials, and a dedicated regional/national help desk. GCoM will also aid in mobilizing critical financing and technical assistance Durham requires to access investment (16). By joining, Mayor Schewel will gain an alliance of like-minded cities and local governments from which to learn and problem-solve.

Endnotes

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