

Developing Visual Tools for Carbon Policy

May 24, 2021

NC DEQ Environmental Justice and Equity Board



Background on the proposed mapping tool

Project: Develop a public-facing, interactive map that overlays the state's power plants with local community demographics and pollution burden data. It could serve as a visual tool for the public and policymakers as carbon and clean energy-focused policies are being considered.

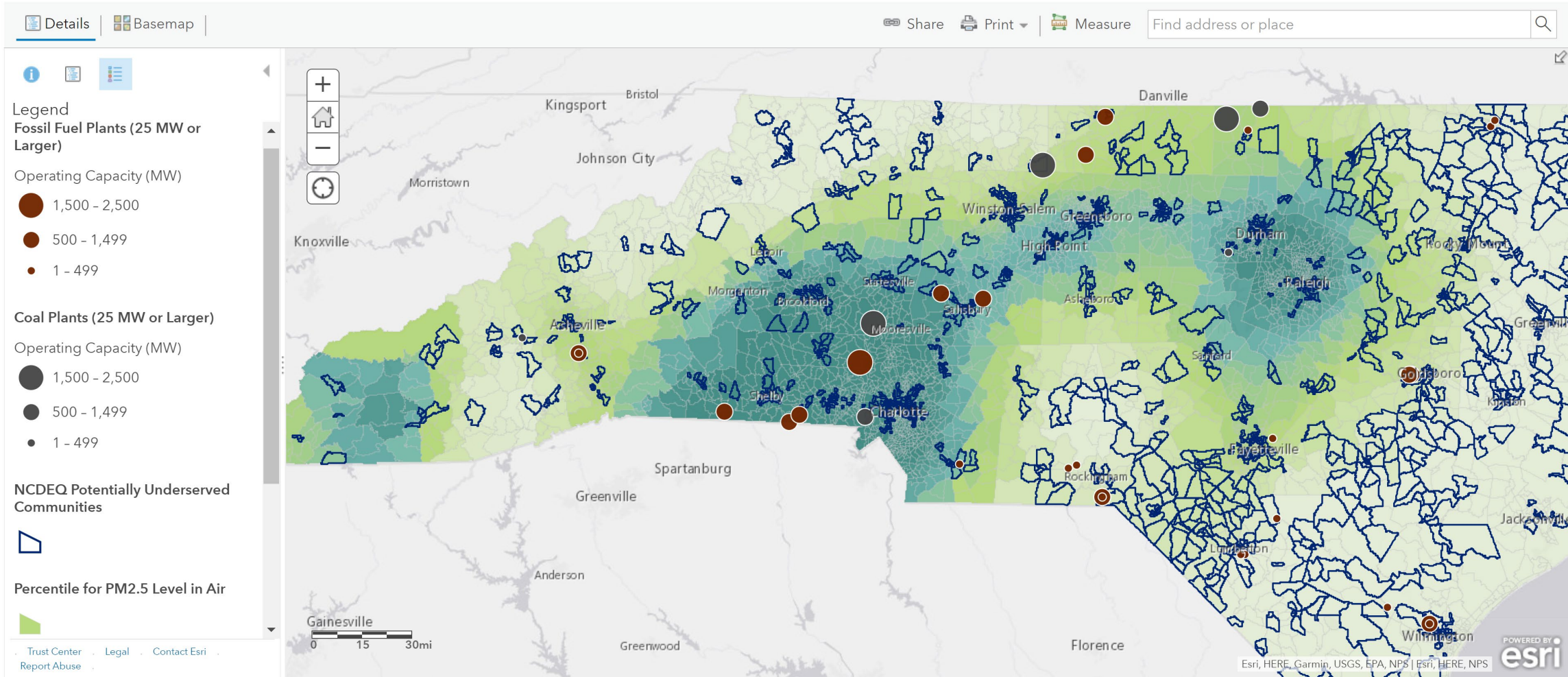
What is the Value?

- Provides individuals, community groups, and other stakeholders with information to understand how power plants and pollution impacts their community and communities across the state.
- Can be used to help understand the demographics of communities around power plants today, and how carbon or clean energy policies (e.g., RGGI) could impact certain communities in the future.

Designed to complement the NC DEQ's existing Community Mapping System. It is both narrower in scope – focused only on power plants – while also providing more data on local community demographics, pollution levels and burdens, and power plant details.



Phase I: A Snapshot of the Draft Map – PM2.5 & Power Plants



[Link to interactive map](#)



Phase II: Illustrative Local Impacts Analysis

- Overlay power plants on top of demographic and pollution burden community data.
- Determine definition of “community of interest,” such as DEQ’s “Potentially Under-resourced Populations.”
- Model a “no-action” business-as-usual (BAU) and carbon policy (e.g. NC joins RGGI) scenario with forecasted annual generation and emissions at the plant-level.
- Include variables on location, community demographics, age, fuel, etc.
- Determine the change in emissions under the policy for each facility.
- Determine what variables (e.g., in a “potentially under-resourced community”) have a significant impact on outcomes.

What the Board Can Provide

Feedback, thoughts, or suggestions on the draft map:

- How could this tool be more useful to you and local community members?
 - For example, is there any information not included in the draft map that is important when thinking about the equity implications of power sector policies?

Analyzing local impacts of RGGI:

- Any initial comments or requests about the potential for follow-up modeling to assess local pollution impacts of North Carolina joining RGGI?