RACHEL CARSON COUNCIL

# Environmental Justice and Biomass

*Factsheet*

The industrial wood pellet industry, concentrated in the U.S. Southeast, releases harmful air pollutants and weakens forest ecosystems while disproportionately impacting marginalized communities. Facilities are sited in areas with long histories of industrial burden, weak zoning laws, and limited political power. In places like eastern North Carolina, Mississippi, Alabama, and Louisiana, pellet mills mirror the environmental injustice patterns of "Cancer Alley," worsening health outcomes and reducing quality of life for nearby residents.

## Key Facts

### Location

Wood pellet production facilities in the U.S. Southeast are 50% more likely to be located in "Environmental Justice" (EJ) communities, defined as counties where poverty is above the state median and at least 25% of the population is non-white.[1]

### Poverty Rates

The Ahoskie pellet plant is in a census tract that is nearly 70% Black, and Enviva's Northampton and Sampson County plants are also sited in communities of color with high poverty rates.[2]

### Emissions

Pellet plants emit PM2.5, VOCs, nitrogen oxides, and wood dust, pollutants linked to asthma, heart disease, and cancer.[3]

### Permitting

NC facilities have documented permit violations, including excess VOC emissions and uncontrolled particulate releases.[4]

## Actions for Policymakers

- Co-sponsor legislation removing biomass from federal renewable energy subsidies and renewable portfolio definitions.
- Request EPA rulemaking to update MACT standards for pellet facilities.
- Urge state and federal agencies to deny new permits in overburdened EJ communities based on cumulative impacts.

## Our Recommendation

Congress should direct EPA to remove the "carbon-neutral" classification for woody biomass, enforce stronger emissions standards for pellet mills, and require the use of updated federal environmental justice screening tools and cumulative impact analyses in all siting and permit reviews.

## Results

Taking these actions would: Reduce PM2.5 exposure for thousands of residents in eastern North Carolina and the Gulf South; Prevent new polluting facilities from being sited in communities already burdened by CAFOs, petrochemical plants, and industrial waste; Cut lifecycle greenhouse gas emissions compared to continued biomass expansion; and redirect federal funding toward cleaner, community-owned energy solutions.

## Footnotes

1. Rachel Carson Council, Drax: Destroyer of Forests (Rachel Carson Council, 2025).
2. North Carolina Department of Environmental Quality (NC DEQ), Enviva Ahoskie Environmental Justice Report (Raleigh, NC: NC DEQ, 2023).
3. Tran, H., Juno, E., & Arunachalam, S., “Emissions of wood pelletization and bioenergy use in the United States,” Renewable Energy 219 (2023).
4. Southern Environmental Law Center, Pellet-Mill Violations in the South (updated June 20, 2025).