

The Honorable Roy A. Cooper III
North Carolina Office of the Governor
20301 Mail Service Center
Raleigh, NC 27699-0301

Dear Governor Cooper,

We, the undersigned scientists who study climate change, forests, wetlands, ecology and energy, are concerned with the expansion of the wood pellet industry in North Carolina and throughout the U.S. South. We are writing in our individual capacities to urge you to integrate forest conservation and restoration into your climate action plan and to swiftly address the threat that the wood pellet industry poses to meeting climate mitigation goals.

Forests are one of our most powerful tools to sequester carbon, but deforestation and degradation also account for a significant amount of global greenhouse gas emissions. A recent study showed that tropical forests have become a source instead of a sink of carbon after continued disturbance and deforestation.¹ Although the global focus is on tropical forests, we cannot ignore forests in the U.S. South, which are logged at a rate four times that of South American rainforests.² A 2016 study showed that logging reduced the potential of the U.S. forest carbon sink by approximately 35 percent.³ Increasing carbon sinks by way of forest conservation and restoration plays a significant role in emissions reduction.

Healthy native forest ecosystems are also vital for climate change adaptation and disaster readiness. As we pass the one-year anniversary of Hurricane Matthew, and as recent hurricanes have brought tragedy and tremendous cost to the U.S. and our neighbors, it is more important than ever that we invest in standing forests to prepare for increasing frequency and severity of extreme weather events. Natural forests increase the resiliency of low-lying and flood-prone areas, whereas forest degradation, clearcut logging, and conversion of natural forests to pine plantations significantly decrease flood protection benefits to surrounding communities.⁴

Of all the threats to forests, the expansion of the wood pellet industry is one of the most urgent and relevant to your administration. The world's largest producer of wood pellets, Enviva, owns and operates three wood pellet facilities, as well as a Virginia facility near the North Carolina border. The company's permit is being challenged in the courts regarding a proposed fourth facility in Hamlet, North Carolina.

Combined, the four existing facilities have an annual production capacity of approximately 1.89 million metric tons of wood pellets. Meeting this production capacity requires logging, conservatively, approximately 135 acres of forest each day.⁵ Recent reports backed up by industry data, have documented

¹ Popkin, G. Tropical forests may be carbon sources, not sinks. *Nature*. doi:10.1038/nature.2017.22692. (2017).

² Hansen, J. et al. Young People's Burden: Requirement of Negative CO2 Emissions. doi:10.5194/esd-2016-42. (2016).

³ Harris, N. L. et al. Attribution of net carbon change by disturbance type across forest lands of the conterminous United States. *Carbon Balance Manag.* 11, 24. (2016).

⁴ Bradshaw, C. J. A., Sodhi, N. S., Peh, K. S.-H. & Brook, B. W. Global evidence that deforestation amplifies flood risk and severity in the developing world. *Glob. Chang. Biol.* 13, 2379–2395 (2007).

⁵ Dogwood Alliance. Destroying Southern Forests for International Export. Available at: <https://www.dogwoodalliance.org/wp-content/uploads/2017/08/Acres-of-Pellets-Fact-Sheet.pdf>. (Accessed: 9th October 2017).

that Enviva sources whole trees from primarily native hardwood forests, in the Mid-Atlantic Coastal Ecoregion, which are ecologically important and sensitive ecosystems.^{6,7}

Heavy subsidies for wood pellets in Europe are driven by misguided energy policies and under the false assumption that burning trees for electricity will lower carbon emissions. Industry and other proponents of industrial-scale biomass have claimed that burning wood is carbon neutral simply because the source will eventually grow back. However, biomass plants emit more carbon dioxide emissions per unit of electricity than coal or gas plants.⁸ In addition to carbon dioxide, burning wood at biomass plants releases harmful particulate matter and smog precursors that are damaging to the health of nearby residents, and disproportionately impact already vulnerable populations.^{9,10}

Further, claims of carbon neutrality or carbon benefits do not endure on a meaningful time frame. Removing the carbon dioxide emitted from burning trees for electricity requires waiting decades to a century for trees to regrow. Not only are those offsets not verifiable nor enforceable, we cannot afford to wait that long: to stave off the worst effects of climate change, it is imperative that we reduce emissions and increase our forest carbon sinks now.

Already you have demonstrated your climate leadership by pledging to uphold the goals of the Paris Climate Accord. Now, your climate leadership is needed to swiftly address the expansion of the wood pellet industry in North Carolina and to elevate the importance of forests in policy conversations and outcomes. We urge you to take prompt action to protect Southeastern forests and reconsider the policies—including sustainability criteria, air quality and pollution controls, incentives and subsidies—that facilitate the growth of this industry.

Thank you for your leadership on climate change and concern for the well-being of all North Carolinians. Please do not hesitate to contact us if you have further questions.

CC: Secretary Michael Regan at the NC Department of Environmental Quality

Sincerely,

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⁶ Justin Scheck and Ianthe Jeanne Dugan, "Europe's Green Fuel Search Turns to America's Forests", Wall Street Journal. (2013).

⁷ Natural Resources Defense Council. European Imports of Wood Pellets for "Green Energy" Devastating US Forests. (2017). Available at: https://www.dogwoodalliance.org/wp-content/uploads/2017/05/NRDC_2014-2017Booklet_DigitalVersion-resize.pdf. (Accessed: 9th October 2017).

⁸ Booth, M. Webinar slides: Bioenergy Loopholes in the Clean Power Plan, and How to Avoid Them | Partnership for Policy Integrity. (2015). Available at: <http://www.pfpi.net/webinar-today-12-pm-est-bioenergy-loopholes-in-the-clean-power-plan-and-how-to-avoid-them>. (Accessed: 27th April 2017)

⁹ Ibid.

¹⁰ American Lung Association Energy Policy Development: Electricity Generation Background Document. (2011). Available at: <http://www.lung.org/assets/documents/healthy-air/electricity-generation.pdf>.

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