June 16, 2020

To: Mayor Jacob Bundsgaard
Mayors Department, City Hall, 8000 Aarhus, DK – Denmark
E-mail: borgmester@aarhus.dk

Dear Lord Mayor Bundsgaard,

We are writing to you as American NGOs working to protect forests and communities in the Southern United States. Enviva, the world's largest wood pellet producer, operates in our region and supplies facilities including the Studstrup plant, operated by Ørsted. A fifth of Denmark's demand for imported wood pellets comes from our region. The evidence is clear: producing wood pellet biomass for utilities such as Ørsted is bad for our forests, communities, and the climate. The city of Aarhus can continue its leadership in the climate movement by moving away from district heating that comes from Enviva's destruction of forests in the Southern U.S.

Aarhus' district heating, supplied by Ørsted's Studstrup power station, generates climate pollution in two places: (a) at the smokestack[1]; and (b) from the land[2]. For proof, one must look no further than Ørsted's supplier, Enviva, who operates in the US South.[3]

Forests in the US South are suffering under a logging regime that is degrading our forests at a rate 4x that of South American rainforests.[4] The constant expansion of wood product markets has come at the expense of the ecological health of our forests. Furthermore, natural forests are being replaced with plantations which hold little value for ecosystem services, ecological function, or carbon storage. In the last 60 years, we've lost 33 millions acres of natural forest and gained 40 millions acres of pine plantations in the US South. The forest products industry, including wood pellet companies, celebrate this growth as a victory but, if those natural forests had been left to grow instead, we would have 25 million more acres of forests in the South.[5]

In the last decade, wood pellet production in the US has led to clearcutting over 360,000 hectares of forests[6]-- more than half the size of Danish forests. The majority of wood used by Enviva is "whole trees," as identified by forest type in their own data.[7] The systematic

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[1] https://www.chathamhouse.org/publication/impacts-demand-woody-biomass-power-and-heat-climate-and-forests

[2] https://www.wri.org/publication/avoiding-bioenergy-competition-food-crops-and-land

[3] https://www.newsobserver.com/news/business/article238395173.html

[4] High-resolution global maps 21st-century forest cover change, M.C. Hansen et al, Science, Nov. 15, 2013, Vol 342 #6160

[5] https://www.fs.fed.us/research/publications/gtr/gtr_wo97.pdf

[6] https://www.dogwoodalliance.org/wp-content/uploads/2017/08/Acres-of-Pellets-Fact-Sheet.pdf

[7] Track & Trace. In: Enviva [Internet]. 2017 [cited 20 Jun 2019]. Available: http://www.envivabiomass.com/sustainability/track-and-trace/

over-extraction of forests in the US has significant impacts on species composition, water quality, and resilience against extreme events. We extract so much from our forests that forest harvest accounts for 85% of carbon emissions from US forests, more than insects, drought, disease, wind, and conversion combined.[8]

The impacts wrought by the wood pellet industry, produced by Enviva and consumed by Ørsted at power stations such as Studstrup, are historically well-documented. Years of on-the-ground investigations have shined a spotlight on the realities of biomass supply chains, including sourcing biomass from clearcuts of mature hardwood forests, to the vast quantities of whole trees getting ground up into pellets to be shipped around the world and burned in power plants. It's hard to look at the images from these investigations and conclude that burning forest biomass for energy is in any way good for the environment.[9] Last August, a team of reporters from TV 2 Denmark were also able to expose the control errors in Enviva's biomass sourcing: showing the near-impossibility of controlling an industry that's operating an ocean away.[10]

*Enviva pellet sourcing in Sampson County for Ørsted (August 2019)*

[8] Harris NL, Hagen SC, Saatchi SS, Pearson TRH, Woodall CW, Domke GM, et al. Attribution of net carbon change by disturbance type across forest lands of the conterminous United States. Carbon Balance Manag. 2016;11: 24.
[9] https://www.nrdc.org/sites/default/files/global-markets-biomass-energy-06172019.pdf
[10] https://nyheder.tv2.dk/samfund/2019-09-09-tv-2-afsloerer-fejl-i-klimakontrol-helt-sort-siger-ekspert

Danish policies that promote burning wood increases the incentive to harvest existing forests—with all the carbon emissions that entails — today. Any new planting will take many decades to remove and store significant carbon from the atmosphere and that carbon will be released at the next harvest. Carbon stocks in forests will be smaller than if the forests had continued growing. Aarhus can implement renewable energy policies locally that avoid this scenario by moving away from district heating with biomass from Enviva.

Letting forests grow is the single best way we currently have to remove carbon dioxide from the atmosphere.[11] Standing forests keep growing, storing more carbon and helping to limit the growth of atmospheric carbon dioxide arising from sectors of the economy that are difficult to decarbonize.

Instead of burning wood we would encourage you to continue investing in energy efficiency and developing and deploying energy sources which are truly carbon-free. Some of these (geothermal and heat pumps, for example) are mature enough now to be implemented at much larger scales than they presently are. We also need to develop new solutions for sectors that are difficult to electrify or otherwise decarbonize. Finally, we need to do everything possible to move carbon out of the atmosphere and back into natural reservoirs like forests, soils and wetlands. While we know Aarhus does this to a large extent locally, Aarhus' usage of Enviva biomass threatens forests in the Southern U.S. and lessens forests' ability to play this role in our backyard.

Stopping climate change will be difficult at best, but we will never succeed if we allow ourselves to be deceived into investing in non-solutions or half-measures. We are encouraged by Aarhus' statements that express desire to be a $CO_2$-neutral city by 2030. We call on Aarhus to phase-out district heating that is created by burning forests from the Southern United States,and phase-in truly renewable alternatives such as green heat pumps and geothermal energy. Our organizations are interested in exploring what meaningful steps the City of Aarhus could take to make this happen and welcome the opportunity to meet to discuss these issues further in-step with the Danish government's creation of new and ambitious climate change legislation.

Respectfully,

Dogwood Alliance
Natural Resources Defense Council
Greenpeace USA
Southern Forests Conservation Coalition

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[11] Moomaw WR, Masino SA, Faison EK. Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good. Frontiers in Forests and Global Change. 2019; https://www.frontiersin.org/articles/10.3389/ffgc.2019.00027/full

Rachel Carson Council
John Muir Project
Coastal Plain Conservation Coalition
Southwings
Green Belt Movement
The Concerned Citizens of Northampton County
Spruill Farm Conservation Project
Biofuelwatch
Pivot Point
The Enviro Show
Women's International League for Peace & Freedom, Triangle Chapter
350.org, Triangle Chapter
Chatham Research Group