

Collaborative Group Project Statement

A lot goes into “thinking new about energy”, to borrow Laura Nader’s phrase (Nader 1981). While conducting research about biomass operations in Eastern North Carolina and their effects on marginalized Southern communities, we have had to reevaluate what we think of as energy. The goal of this project is to illuminate the problems associated with biomass development in Eastern North Carolina and understand the many facets of environmental injustice. In doing so, we have considered the timeline of when, how, and why wood pellets produced by biomass plants became the solution to our world’s energy crisis; human and nonhuman stakeholders being affected by biomass operations both locally and globally; different types of biomass, ie. wood pellets and poultry waste; and community responses to injustice in the public record as transcripts of interviews.

Biomass, specifically the burning of “waste wood” from trees in the form of pellets, has been hailed by international and local governments as a renewable energy solution to the climate crisis. In reality, burning wood pellets on an industrial scale puts more carbon into the atmosphere than coal, which it is supposed to replace. Corporate scientists, industry officials, and government representatives on the state and national level in the U.S. have consequently pushed a rhetoric of “green energy” that exploits marginalized Southern communities in the name of climate salvation (Grunwald 2021). We know from our research that this system is problematic, and it is even more dangerous to believe that biomass, which is a polluting energy resource, is part of the salvation. This project’s aim is to illustrate the realities of the biomass industry and how many sectors of life toxic biomass plants and global interests are demolishing.

Our collaborative framework is centered around a timeline of biomass in North Carolina, from the founding of NorthStar Clean Energy in Craven County to the 2007 North Carolina

Energy Efficiency Portfolio Standards (REPS). Also listed in the timeline are important dates from 2007-2012 when North Carolina was setting goals and selling biomass as a “renewable” energy source, when in reality it was and is not. Using the timeline as a guide, we collaborated to discuss resistance to biomass across different events and efforts, including case studies of public hearings and questions concerning poultry litter such as the “Farm Bill” in Lumberton, North Carolina. In order to illustrate how impactful biomass is on nonhuman environmental actors, we also addressed issues of biodiversity related to deforestation and air and noise pollution.

Replanting forests with the same kinds of trees demolishes ecosystems and the natural plant and animal biodiversity of North Carolina’s forests, making this subject crucial to discussions about biomass. Lastly, we also worked with the ten EIJ Structured Analytics on the Disaster-STS platform to answer biomass questions that arose in news articles and online resources. Using these questions as guides to respond to the many different issues we have addressed here, we built a collaborative understanding of how to interpret a variety of research materials in an online archive.

Popular reporting on the environmental threats biomass operations face have outlined how international systems of economics and development place these communities at risk. Analyses of biomass have to include research at local and global levels to place the issues at hand within a system of industrialization and capital gain. Dominic Boyer’s book *Energopolitics* sheds some light on how we can do this and why it is important for studies of energy. His work is grounded in ethnographic research conducted in Mexico, where he interviewed activists, local people, policy-makers, bureaucrats, and corporate employees to gain a sense of the political implications of creating renewable energy infrastructures on an industrial scale. His work draws connections between renewable energy projects, of which biomass is an example, and political

power, stressing the importance of combining localized resistance with criticisms of the international systems that exacerbate social tensions.

Boyer's work shows how even within renewable energy projects, economic incentives and political aspirations work against the goals of clean energy plans, which makes it necessary to engage with and develop renewable energy based on "local particularities" (Boyer 2019). These local particularities include the daily experience of air, noise, light, and water pollution that residents of counties in Eastern NC are actively opposing. Industrial-scale biomass operations rely on a complex system of extracting "waste wood" from forests in Eastern North Carolina to be burnt as clean energy in the United Kingdom which develops an international institutionalized energy practice that primarily targets marginalized communities. This means localized issues are implicated in a broader system which must be criticized and opposed at every level (Boyer 2019).

Part of thinking new about energy requires analysis of how infrastructure and institutionalized practices contribute to our individual understandings of types of energy and how they affect our society's energy needs. Myles Lennon's piece "Decolonizing Energy: Black Lives Matter and technoscientific expertise amid solar transitions" discusses how colonial apparatuses transformed energy into commodified forms that made certain people's lives not matter. In analyzing why energy studies can inform the Black Lives Matter movement, Lennon unravels the ways in which energy, like the concept of "mattering", is an abstraction that different societies give shape to in discourse and practice. In doing so, the energy needs of society as a collective are assessed in institutions along these lines and consequently cannot be equitably distributed and developed on a large scale.

Lennon instead advocates for a type of energy democracy in which community members are innovators, planners, and decision makers on how to use and create energy that is locally produced and renewable. “Decolonizing Energy” adds to the thinking of energy a kind of conceptual framework that asks us to question what concepts form the basis for our practices and energy use. It can also be applied to the type of energy being considered for use, such as the waste wood biomass operations claim to use. In the process of deciding what parts of a tree are “waste”, energy planners and corporations employ socially constructed ideas of what matters in terms of economic gain and easily accessible resources (Lennon 2017). This indicates that the processes of conceptualizing about energy happen on individual, community, and institutional levels, necessitating studies of renewable energy more in line with Dominic Boyer’s (2019) work.

Signed,

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References

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