In an article from June of last year, CEO of Clean Energy Technologies, Kam Madhi, stated that he had originally wanted to construct this project in Massachusetts. However, the location had to be changed because Massachusetts chose to remove all financial incentives for waste-based energy systems—making the project economically unviable. [1] Why would the Massachusetts legislature choose to do this? In short, the scientific literature has shown for the last decade that burning wood-based biomass can create just as much, if not more, carbon pollution than burning fossil fuels. [2] However, the Massachusetts State Department found that the environmental impacts pale in comparison to the rampant health concerns associated with these facilities. For example, a Harvard study from 2021 found that burning the wood-based biomass proposed in this project has more negative health impacts than burning coal. [3] This is why communities that have biomass plants in them have higher rates of respiratory disease, asthma, neurogenerative diseases, cancer, and birth defects. [4] In fact, biomass is now responsible for the fastest-growing share of early deaths from stationary fuel sources in the United States. [5] From 2008 to 2017, the share of early deaths attributed to burning biomass and wood increased from 14–17% to 39–47%. [6] This is particularly concerning considering this facility is going to be built in the same area as a childcare facility that serves 150 children.

As a result, many citizens across the U.S. have refused to allow these facilities to be built in their communities. For this reason, biomass plants have been historically constructed in low-income areas, where the local population has limited economic power to fight back against these projects. [7] This proposed facility in in the St. Johnsbury/Lyndon Industrial Park is no different. Lyndonville has a rate of poverty that is double the national average. According to the U.S. Census Bureau, in 2021, the median household income in Lyndonville was not even half of the median income for the rest of state of Vermont. Additionally, the largest share of Lyndonville households made as little as $10,000 to $15,000 annually. [8] The same can be said of St. Johnsbury, especially given the current crisis of affordability. [9] Given these shocking statistics, it's not difficult to believe that this area was intentionally targeted— just as thousands of vulnerable communities across the country are.

Additionally, according to this project's air pollution control permit, this facility will emit large concentrations of several criteria air pollutants—in particular, Particulate Matter (PM). The EPA has stated that PM "is one of the most dangerous forms of air pollution, and an extensive body of science links it to a range of serious and sometimes deadly illnesses." [10] Particulate Matter is a known carcinogen that has been proven to cause lung cancer and is now associated with the increasing rise in breast cancer. [11] While the permits indicate the project emissions are within the legal limit, this does not indicate that the amount is safe. It is a common misconception that pollution control limits are capped at a level that does not negatively impact human health. Unfortunately, this is not the case. The EPA and American Lung Association have stated for decades that the only safe level of PM in the air is 0. [12] However, this project would be allowed to emit over 6.2 tons annually. [13] Given that there is no safe amount of PM, how will this level of air pollution be reasonably expected to impact the communities nearby? Why do you believe this is justifiable?

Also, the U.S. Fish and Wildlife Service has flagged this project as within the known range of an endangered species: the Northern Long Eared Bat. [14] Although the testimony of Maura Hawkins asserts that “there are no known occurrences of northern long-eared bat summer habitat or winter hibernacula at the Project site” no information was provided on how this test was conducted. Given that this testimony was taken on August 26th of this year, and the bats are known to travel throughout the year, it is highly plausible that the bats were simply not present. How and when was this test conducted? How many times did someone check the site? Where can reports from this inspection be found? Without this critical analysis proving that there will be no substantial impact on the lives of the Northern Long Eared Bat, construction of this project would violate the federal Endangered Species Act.

Furthermore, I want to acknowledge that one of the primary purposes of this facility is to advance renewable energy in the state. However, the company responsible for this project, Clean Energy Technology, has a misleading name. Unfortunately, this company is also a proponent of the oil and gas industry. [15] While their work claims to minimize waste and keep the industry operating more efficiently, we cannot turn a blind eye to the fact that Clean Energy Technology is financially incentivized to keep the fossil fuel industry alive and well. We cannot continue to allow greenwashing in the state of Vermont, and we must remain diligently aware of all potential conflicts of interest for these projects in our state. If we have any hope of mitigating the damage of climate change, we must make fossil fuels a tool of the past.

Finally, I want to again highlight that long-standing evidence has shown burning wood-based biomass creates just as much, if not more, carbon pollution than burning actual fossil fuels—which keeps Vermont far away from our legally mandated climate goals. [16] For this reason, many nations across the globe are now refusing to consider woody biomass a form of renewable energy. [17] Shockingly, this project claims that it will reduce CO2 emissions by 6,512 tons annually. [18] However, this is only because the ”carbon dioxide from electricity generated through biomass combustion is not included in the emissions inventory.” [19]. If this carbon was in fact included, there would be no emissions reduction at all. However, this is only permissible because the state of Vermont assumes the carbon emitted will be “re-sequestered by the re-growth of biogenetic material.” [20] Although the project will create biochar that can be used in farming, this project provides no evidence of how biogenetic material will be used to offset the carbon emissions it is creating. It is noted that the biochar produced at the facility will sequester between 2,700 and 3,450 tonnes of CO2 equivalent annually, yet no number is provided for how much will be produced. Where is the proof that suggests enough new biogenetic material will sequester all the carbon produced from this facility? What are the exact numbers? How much of it will need to be grown? Where is it growing? Without this crucial evidence, there is no reason to believe that this project is carbon neutral.

Perhaps most importantly, the emissions benefit analysis for this project claims that if energy were not produced at this facility, it would have to be purchased from ISO New England. [21] The

emissions calculations are based on ISO's 2022 report, even though a 2023 report is currently available. [21] This report shows that all reported emissions, including CO2, have dropped since the 2022 report (some by as much as 48%)—making emissions estimates based on the 2022 report inaccurate. [22] Why did no one think to update this? The emissions benefit analysis also makes the claim that "130,248 tons of CO2 emissions will be avoided" over the lifetime of the 20 year Power Purchase Agreement if "the marginal emissions rate [of ISO] stays the same." [23] However, according to ISO New England itself, the marginal emissions rate will not stay the same. [24] Currently, only 14% of the energy from the grid comes from renewables, yet by 2040 it will be 56% based on the updated requirements from states' renewable energy portfolios. [25] Shifting from a predominantly gas-based energy profile to a predominantly renewable one would drastically change ISO emissions, and thus, the emissions benefit analysis is grossly inaccurate. As a concerned citizen, I am shocked that Innovative Natural Resource Solutions did not take this into account. This highlights significant negligence in calculating the emissions associated with this project and shows that a comprehensive environmental review needs to be conducted.

Also, the emissions benefit analysis mentions nothing of methane—the carbon-based gas that is 28 times more potent than CO2 at trapping heat in the atmosphere. [26] Where is the calculation for methane, and why did you not believe it would be relevant to include in the emissions analysis? Is the reason the assessment is based on "carbon dioxide emissions" instead of purely "carbon" emissions because if methane was included we would see no emissions reduction since the project emit significant amounts?

With all this considered, I ask that you please address these concerns, and do not expedite this project's environmental review process.

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