

Biomass Cannot Be Part of a Renewable Energy Future in Los Angeles

Los Angeles is exploring a transition to 100 percent renewable energy, but this laudable goal is marred by considering biomass as renewable energy. The word biomass may suggest sustainable energy, but it includes archaic, polluting energy sources like burning wood, which spews greenhouse gases — especially near socially and economically disadvantaged areas. Burning wood and other biomass should have no place in Los Angeles' plan for 100 percent renewable energy. Only wind and solar power can deliver the clean energy future Los Angelenos deserve.

In 2016, the Los Angeles City Council directed the Los Angeles Department of Water and Power (LADWP) to explore a 100 percent renewable energy plan for the city.¹ Proposed plans have included biomass, like burning wood, as a potential renewable energy source.² Biomass includes material derived from living matter; it can include not only wood but also municipal solid waste (really, garbage), which the California Energy Commission (CEC) counts as biomass renewable energy.³

Burning wood and other biomass spews greenhouse gases that contribute to climate chaos. Climate change has worsened California wildfires — 231,000 acres burned in the first half of 2018 alone, releasing even more greenhouse gases.⁴ Biomass is not clean energy and has no place in any LADWP 100 percent renewable energy plan.

Burning wood is not carbon-neutral or zero-emissions

In California, some biomass facilities burn forest, agricultural waste and urban waste wood to generate energy.⁵ Forestry companies manufacture wood pellets for power plants from waste wood, but some have been clearcutting forests to supply biomass.⁶ Harvesting whole, healthy trees increases net carbon emissions more than burning fossil fuels.⁷ Proponents claim that biomass is carbon-neutral because it avoids combusting fossil fuels or sending biomass to landfills, and because trees can be replanted to sequester wood-fired emissions.⁸ But processing, transporting and burning wood all produce greenhouse gas emissions, and burning wood can release more emissions than coal.⁹

In 2018, California had 22 wood-burning power plants, and several had histories of significant air and water pollution violations.¹⁰ Many emit nitrogen oxides, particulate matter,



sulfur dioxide, carbon monoxide and volatile organic compounds.¹¹ Exposure to these air pollutants has been linked to respiratory irritation and infection, increased blood pressure, heart attacks and heart disease, as well as to reduced life expectancy in humans.¹² The 2016 combined greenhouse gas emissions from most of California's wood-fired facilities were the same as those from an average coal-fired plant, but produced just over half the electricity — on average the wood-fired plants produced three times the carbon dioxide per megawatt as an average coal plant.¹³

For example, the DTE Stockton Biomass plant was converted from a former coal-fired power plant.¹⁴ By the end of 2016, the plant was producing 48 percent more carbon dioxide, 65 percent more nitrogen oxides and 83 percent more particulate matter emissions than when it was a coal-fired plant in 2008.¹⁵ The DTE plant is located in an overwhelm-

ingly Latino, African-American and Asian community with high rates of poverty and unemployment that faces one of the highest pollution burdens in California.¹⁶

Waste incineration has no place in renewable energy

LADWP has not clearly defined biomass for its 100 percent renewable energy initiative. But the CEC includes municipal waste (garbage) incineration in its biomass definition. The Stanislaus Covanta waste incinerator was even grandfathered in to California's renewable portfolio standard and qualifies as biomass renewable energy.¹⁷

Incinerating trash produces toxic air emissions and contributes to climate change. In 2011, the New York Department of Environmental Conservation found that incinerators emit

nearly 14 times more mercury than coal per megawatt.¹⁸ Garbage incineration may produce more greenhouse gas emissions per megawatt than some fossil fuels.¹⁹

California's three waste incinerators burned as much as 2 billion pounds of garbage annually since the late 1980s.²⁰ All of these facilities are located near communities of color and lower-income areas that have experienced high pollution burdens for decades.²¹

Los Angeles must reject dirty biomass in its 100 percent renewable energy plan

Including dirty biomass in Los Angeles' 100 percent renewable energy plan would be a giant step backward. Contact City Council today and urge them to reject dirty biomass in the 100 percent renewable energy plan: fwwat.ch/CA-No-Biomass

Endnotes

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