

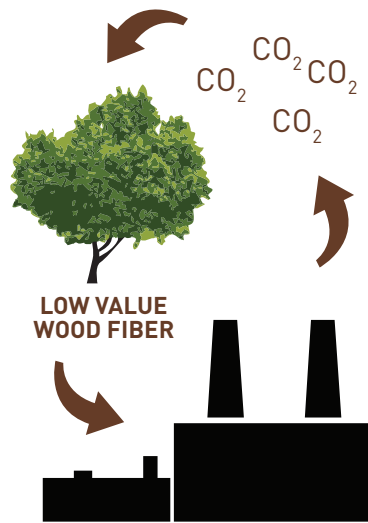
Accounting for Biogenic Carbon

Unlike emissions from fossil fuel-powered sources, greenhouse gas emissions (GHG) from biomass power facilities are not regulated under the Clean Power Plan.

Even though biogenic emissions generate CO₂ on a gross basis, the U.S. Environmental Protection Agency has concluded that, when the lifecycle benefits of biomass are calculated, the net emissions from biomass are considered negligible, “neutral” or even “negative,” depending upon the type of biomass.

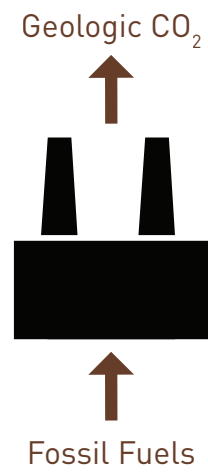
This distinguishes biomass from fossil-based carbon emissions from coal or natural gas plants, both of which must now comply with Section 111(d) of the Clean Air Act, also known as the “Clean Power Plan.” Not only is biomass power exempt from regulation under the Clean Power Plan, but – like solar and wind – “qualified biomass” can now be used as a method of compliance for states to develop strategies to lower existing levels of greenhouse gas emissions from fossil sources.

EPA recognizes the wide range of environmental benefits from converting biomass to electricity. Some biomass feedstocks, like wood from pallets or other waste material, are considered by definition to provide favorable greenhouse gas benefits, since their use avoids the release of methane caused by decomposition. Other forms of biomass—such as logging residues, thinnings, and non-merchantable wood—also provide what EPA calls “carbon benefits,” provided the biomass is sourced sustainably.



BIOMASS: A CARBON CYCLE

Bioenergy fuels recycle carbon that is already part of the atmosphere in a three step cycle: Biomass absorbs carbon dioxide as it grows. When biomass burns for heat or power, it simply releases the same CO₂ it absorbed in the forest. The basic cycle of growth, combustion and regrowth is carbon neutral.



GEOLOGIC CARBON

Burning fossil fuels releases geologic carbon into the atmosphere that has been trapped under the Earth’s surface for millions of years. Unlike using biomass for energy, burning fossil fuels adds additional carbon to the atmosphere.