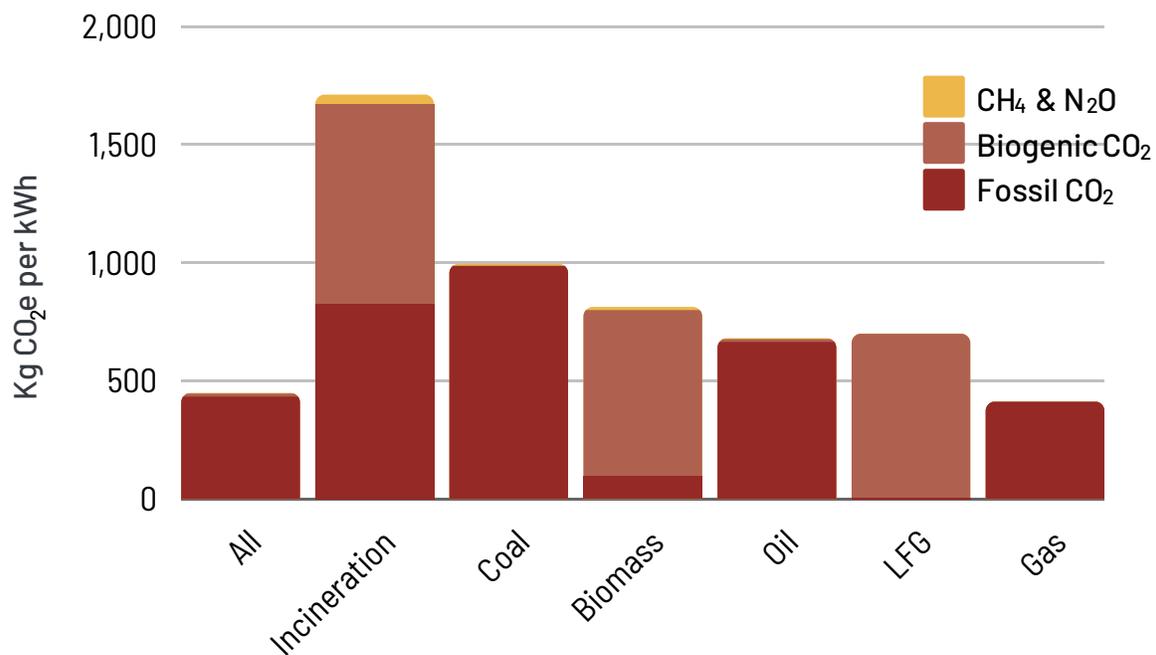


# WASTE INCINERATORS UNDERMINE CLEAN ENERGY GOALS



Renewable energy is defined as energy produced by natural resources – such as sunlight, wind, and geothermal heat – that are naturally replenished within a certain time span. Municipal solid waste is derived from finite natural resources and burning these materials for energy significantly hinders resource conservation, while burdening communities with pollution and climate impacts.

A new study reaffirms that waste incineration is neither a renewable nor clean source of energy through a thorough comparison with other energy sources. Waste incinerators, the dirtiest source of energy on the grid today, must not be part of national or state climate plans.



**Incinerators are dirtier than the rest of the grid:** per unit of electricity generated, they emit **3.8 times** as much GHGs (1.9 times as much fossil CO<sub>2</sub>, **15 times** as much N<sub>2</sub>O & CH<sub>4</sub>, and **66 times** as much biogenic CO<sub>2</sub>) as the grid average. They also emit **14 times** as much NO<sub>x</sub> and **1.3 times** as much SO<sub>2</sub>.



**79% of incinerators are located in environmental justice communities:** WTE facilities add to the cumulative burden of pollution on low-income, and Black, Brown, and Indigenous communities that causes long-term, multi-generational health impacts from toxic air pollution.

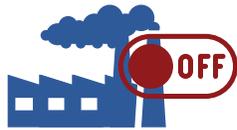


Waste incinerators stand out as the only generation source that emits large quantities of both fossil and biogenic emissions – in fact, **incinerators emit more biogenic than biomass plants!**

42 US states & territories have Renewable Portfolio Standards; 26 of them include incineration as a form of “renewable” energy. In 2018, incinerators earned \$41-44 million in subsidies as “renewable energy.”



Arizona, Colorado, Connecticut, Hawaii, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New Hampshire, New Jersey, Oklahoma, Oregon, Pennsylvania, South Dakota, Utah, Virginia, Wisconsin



The average age of the US incinerator fleet is 32 years – in other words, they are rapidly nearing retirement.

Without renewable energy subsidies, most incinerators will probably close in the next few years. But if these subsidies are extended, or if incinerators are subsidized through a new federal Clean Energy Standard, they could continue polluting for another 20 or more years.

If all US incinerators retire at 35 years old, they would still put an extra 157 million tonnes CO<sub>2</sub>e, 16.8 million tonnes NO<sub>x</sub> and 39,700 tonnes SO<sub>2</sub> into the air, which is equivalent to:



emissions from 40 coal power plants per year or 34 million cars on the road for one year, or 18 million homes' energy use for one year.



637.7 MMT CO<sub>2</sub>e

If their lives are extended another 20 years, these excess emissions would go up to 637.7 million tonnes CO<sub>2</sub>e, 61.9 million tonnes NO<sub>x</sub> and 161,200 tonnes SO<sub>2</sub>.



Both NO<sub>x</sub> and SO<sub>2</sub> cause harm to human health, including increased asthma risks, reduced lung function, and greater likelihood of hospital admissions, especially among children and people with respiratory conditions.

157 MMT CO<sub>2</sub>e