



No. 4 Oil Phaseout: How Fuel Choice Changes a Building's Local Law 97 Emissions Profile

For buildings still using No. 4 oil, the July 1, 2027 phaseout is more than a fuel replacement decision. It is also an emissions profile decision.

EAST COAST ENERGY GROUP | NEW YORK CITY

After July 1, 2027, No. 4 fuel oil may no longer be burned in NYC boilers subject to the phaseout. For owners evaluating No. 2 oil, natural gas, district steam, Truburn® Renewable Heating Oil and other viable pathways, the right comparison is not fuel price alone. The analysis should normalize each option on an energy basis and evaluate emissions penalties, equipment compatibility, infrastructure, conversion scope and operating economics together.

Under Local Law 97, a covered building's annual emissions limit is set based on its floor area and applicable occupancy classifications. A building's reported emissions profile is then established using its annual consumption of each energy source, multiplied by each energy source's assigned emissions coefficient. The combined results form a building's total annual emissions and reported emissions above its set threshold.

HOW FUEL SELECTION AFFECTS LOCAL LAW 97

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HOW LOCAL LAW 97 PENALTIES ARE CALCULATED

A building pays only for the carbon it emits above its limit.

CARBON TONS OVER THE LIMIT

Your building's yearly carbon total minus the limit the law sets for it.

×

\$268 PER CARBON TON

The fixed rate set by Local Law 97.

=

ANNUAL PENALTY

Charged again every year the building stays over its limit.

LOCAL LAW 97 | ANNUAL PENALTY EXPOSURE

That distinction is critical: the building’s allowable limit does not change simply because the heating fuel changes, but its reported emissions can. Fuel oil, natural gas, electricity, district steam and other reportable energy sources are converted to metric tons of CO₂e and aggregated against the building’s annual limit. A limit which becomes increasingly more stringent in later compliance periods. Total emissions above the limit can carry a civil penalty of up to \$268 per metric ton of CO₂e produced. Fuel selection is therefore part of the compliance equation, not just an operating decision.

DIFFERENT FUELS, DIFFERENT EMISSIONS

Local Law 97 does not treat all delivered energy as carbon-equivalent. Each energy source is assigned an emissions coefficient. Two systems serving the same useful heating demand can produce materially different reported emissions depending on the fuel pathway, total energy consumed and coefficient applied.

ENERGY SOURCE	LL97 EMISSIONS COEFFICIENT
No. 4 Fuel Oil	0.00007529 tCO ₂ e/kBtu
No. 2 Fuel Oil	0.00007421 tCO ₂ e/kBtu
Natural Gas	0.00005311 tCO ₂ e/kBtu
District Steam	0.00004493 tCO ₂ e/kBtu
Truburn® Renewable Heating Oil	0.00001902 tCO ₂ e/kBtu

LOCAL LAW 97 | FUEL PATHWAY ANALYSIS

“The building’s limit stays the same. Its emissions profile does not.”

WHAT THIS MEANS FOR NO. 4 OIL BUILDINGS

The first point owners should understand is that eliminating No. 4 oil and materially improving the LL97 profile are not necessarily the same outcome. The 2024-2029 coefficients for No. 4 and No. 2 fuel oil are 0.00007529 and 0.00007421 tCO₂e/kBtu, respectively. On an equivalent-energy basis, moving from No. 4 to No. 2 produces only a modest change in reported heating emissions. It resolves the fuel-grade phaseout, but it should not be mistaken for a comprehensive carbon reduction strategy.

Natural gas, district steam and Truburn® Renewable Heating Oil produce different LL97 outcomes because each carries a different emissions coefficient. Truburn® Renewable Heating Oil has a NYC DOB custom coefficient of 0.00001902 tCO₂e/kBtu among the lowest emission pathways—approximately 74% below the No. 2 fuel-oil coefficient. For a building with a substantial oil-fired load, that coefficient difference can materially change annual reported emissions and projected penalty exposure, subject to the building’s actual consumption and applicable LL97 limit.

EFFICIENCY STILL MATTERS

The coefficient determines the carbon intensity assigned to each unit of energy; operating performance determines how many units the building consumes. Burner setup, combustion efficiency, controls, distribution, cycling, domestic hot-water load and deferred mechanical work can all affect annual consumption. For owners, the takeaway is simple: fuel options like Truburn® can reduce penalty exposure for entire compliance periods while efficiency improvements can help protect that position in the periods that follow.



A fuel-pathway decision should account for emissions, equipment compatibility, infrastructure and operating cost.