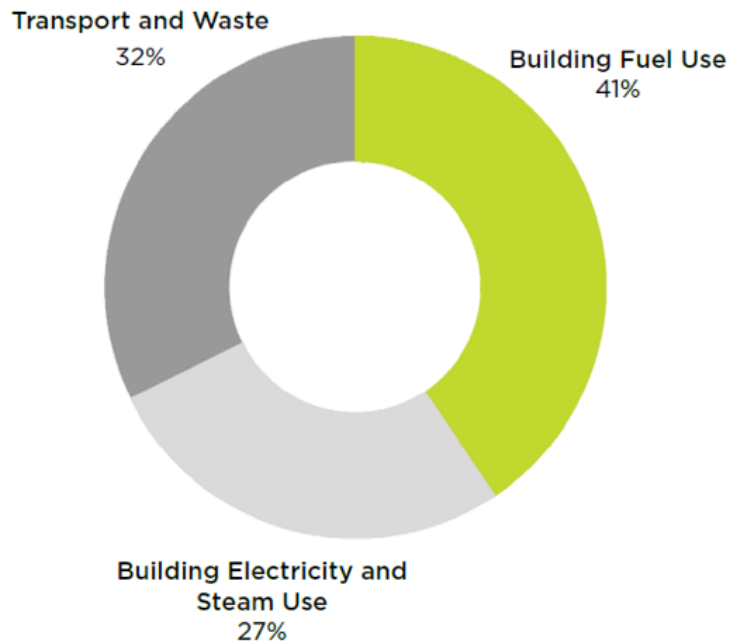


Your Guide to Local Law 154



A Guide to Local Law 154

Starting in 2024 new buildings in NYC will not be allowed to utilize fossil fuel burning systems. On December 22nd 2021, NYC Mayor Bill de Blasio signed Intro. 2317, better known as Local Law 154, into law which sets CO₂ limits for new construction and gut renovations of existing buildings which essentially prohibit the use of fossil fuel burning systems. The requirements will be phased in starting with low rise buildings in 2024 and taller buildings in 2027 to accommodate their longer design times. Buildings with 50% or more affordable housing will also be given longer to comply, 2026 for low rise buildings and 2028 for taller buildings.



Source: 2019 NYC GHG Inventory

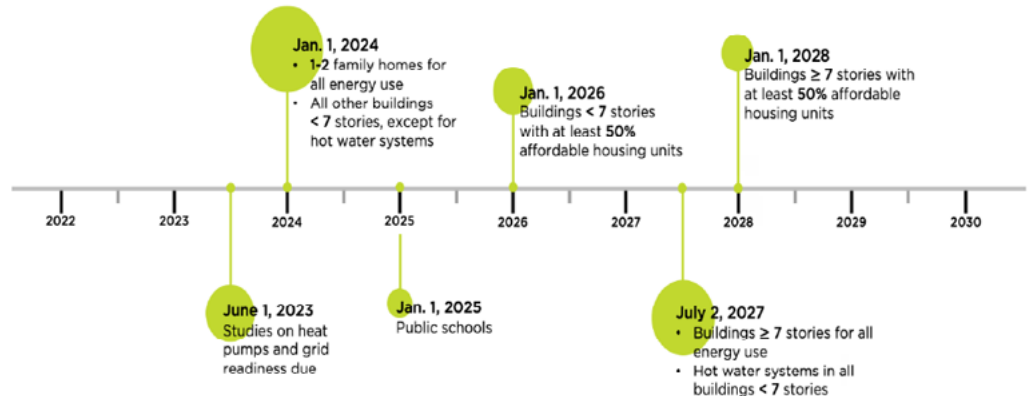
Almost half of all NYC carbon emissions come from fossil fuel furnaces, boilers and hot water heaters – more than electricity and district steam combined.

By requiring new buildings to be all electric there will be significant savings of carbon emissions in future years. Technologies already exist that allow the design of buildings to move forward from ones which use fossil fuel burning systems – such as induction stoves for cooking and heat pumps for heating, cooling and domestic hot water.

Given that gas and oil fired appliances have expected lifespans approaching 20 years, mandating the use of electric appliances instead will lead to lower emissions that will increasingly decline as the electric grid continues to become greener.

Over the past decade approximately 1,000 to 3,000 new buildings are constructed in NYC each year. According to the REBNY Quarterly New Building Construction Pipeline Report's analysis of DOB job application filings between 2008 and 2020, that equates to about 35 to 45 million square feet each year of new buildings.

Most of those new buildings are one and two family homes with around 200 buildings each year which are taller than seven stories.



The requirements will be phased over five and a half years with smaller buildings being required to comply first and taller buildings later.

Requirements:

- Prohibits combustion emitting more than 25 kg of CO₂ per million British thermal units (MMBtu) of energy within a building, well below emissions for natural gas (53kg) and fuel oil (74kg) – figures obtained from the US Energy Information Administration.
- Applies when buildings submit an application for approval of construction documents.
- Expressly covers new buildings, but also applies to gut renovations that meet the Department of Buildings threshold for alterations which need to comply with all new building requirements.

Exceptions:

- Spaces where combustion is required for manufacturing or laboratories, laundromats, hospitals, crematoriums or commercial kitchens – but only to the extent necessary and only for the spaces used for those specific purposes.
- Fuels occasionally burned in appliances not connected to gas or fuel lines and not used for heating or hot water (e.g. Propane grills)
- Buildings used by utilities to generate electricity or steam.
- Buildings used to treat sewage or food waste.

Contact Us

To ensure that your building is in full compliance with the requirements of NYC Local Law 154 or you need discuss further how we can assist you with the design please do not hesitate to reach out to our office.

Ryan Soames Engineering can help



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Dr. William Shoard has 30 years' experience in the HVAC industry with over 20 years in New York City. Will performs and oversees the energy audits carried out by Ryan Soames Engineering. Being passionate about low energy buildings, Will has a wealth of engineering knowledge having performed more than 200 energy related studies for buildings in New York City. In addition, Will has designed MEP systems for some of the most prestigious low energy buildings globally.

As a licensed Professional Engineer (PE), a LEED Accredited Professional (LEED AP), a Certified Energy Manager (CEM) and a PhD in low energy buildings from the University of Manchester, Will's knowledge extends beyond New York City. He was a member of the UAE Green Building Council when debating a LEED system for the Middle East and sits on a panel at the National Academies in Washington DC evaluating renewable energy options as future revenue generation streams.

Qualifications:

- PhD in Thermal Modeling of Buildings
- Professional Engineer (P.E.)
- Chartered Engineer in the UK (CEng).
- LEED Accredited Professional (LEED AP)
- WELL Buildings Accredited Professional (WELL AP)
- Certified Energy Manager (CEM)