

## Meeting No 4 Fuel Oil Phase Out (LL38) and LL97 Requirements

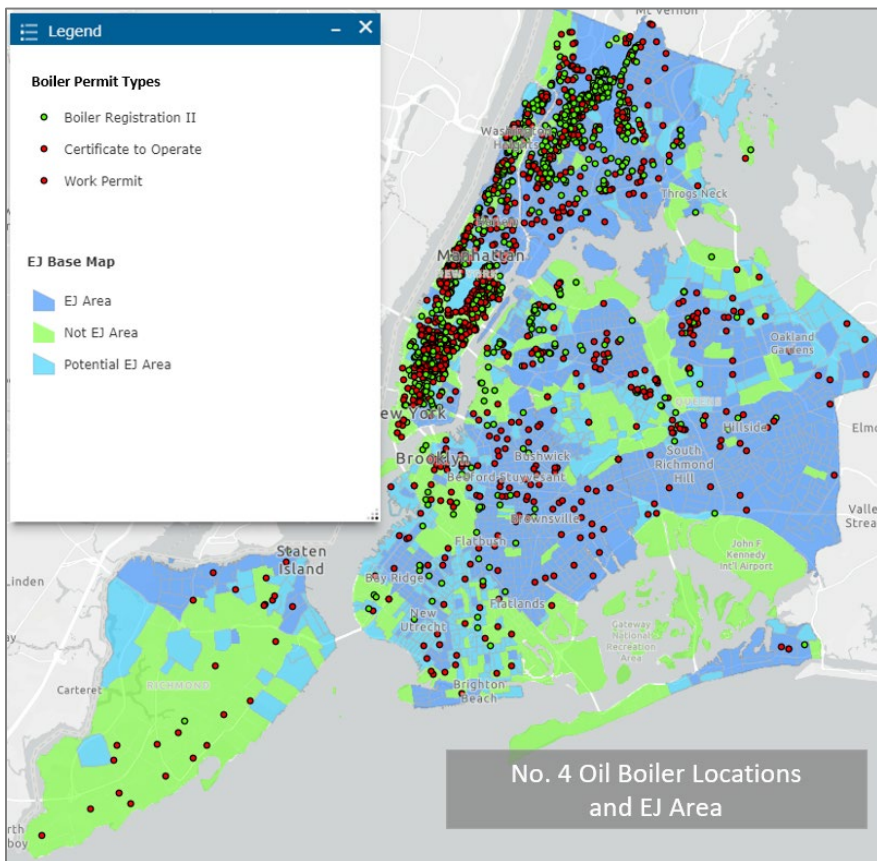
### LL97 Overview and Time Frames

LL97 will require most buildings over 25,000 square feet to meet new energy efficiency and greenhouse gas emissions limits by 2024, with stricter limits starting in 2030. Properties covered: buildings greater than 25,000 gross square feet; two or more buildings on the same tax lot that together exceed 50,000 square feet; two or more buildings that together exceed 50,000 square feet and are owned by a co-op or condo association.

### Fuel Oil Requirements

The City and DEP completely phased out No. 6 fuel oil (FO) between 2011 and 2015 which removed approximately 6,000 of the dirties boilers from the city and helped bring the city's air quality to the best it has been in over 50 years. No new No. 4 FO boilers have been permitted as of 2015 and No. 4 FO boilers will be phased out by 2030.

Approximately 3,200 buildings continue to use No. 4. Of that, approximately 1,650 strictly use No. 4 FO (see map and table below). Other boilers use a combination of natural gas or No. 2 FO and No. 4 FO.



#### No. 4 Fuel Oil Boilers Citywide

	EJ Area	Potential EJ Area	Not EJ Area	Total	Percent in EJ or PEJ
Registration II	495	96	251	842	70%
Certificate to Operate	315	104	398	817	51%
Total	810	200	649	1659	61%

Notes:

Certificate to Operate (CO) boilers are over 4.5MBTU

Registration (Reg) II boilers are 2.8MBTU to 4.5MBT

#### Boiler Triennial Permitting

Boilers that produce emissions (use fossil fuels) require approval from DEP to operate. This approval is currently given for a three-year period and requires triennial renewals which require inspection by DEP. This necessary interaction with this building population provides an opportunity for outreach to encourage shifting directly to electrification from fossil fuels. DEP can use this renewal process as an opportunity to communicate a pathway for owners seeking permit renewal and electrification financing and implementation organizations.

#### Challenge

Incentivize buildings to move off of No. 4 FO Incentivize these buildings to move away from fossil fuels and go straight to electrification to sooner reap the air quality benefits. Buildings that only use No. 4 FO present the greatest opportunity for electrification because dual fuel systems have the lowest financial barriers to move off No. 4 FO. Approximately 95% of buildings that use No 4 boilers fall under LL97 due to building size. Avoid decades more of GHG and air emissions by these buildings moving to No. 2 and/or natural gas and the cost of multiple equipment changes.

Electrifying this group of existing residential poses several challenges, including:

- Replacing No. 4 boilers with No. 2 and/or natural gas boilers is less expensive than electrification
  - This is especially true for No 4 boilers that are within their useful life
- Building owner and managers of multifamily buildings largely pay heat and hot water, but not cooling, which can reduce the incentives for building owners/managers to bear the cost of electrification
- Tenants are accustomed to having heating included in their rents/maintenance fees and may push back against paying directly for their heating

#### Opportunity

There is an opportunity for the DEP and the City to partner with organizations that can help electrify residential properties currently on No. 4 FO at a break even point that will make sense for buildings. To meet this goal the City and DEP can pursue multiple strategies to help fill funding gaps, including through providing low and no-interest loans from the City, working with NYSEDA fill funding gaps, seeking EPA and Bipartisan Infrastructure Law funding, and helping connect philanthropy funding.