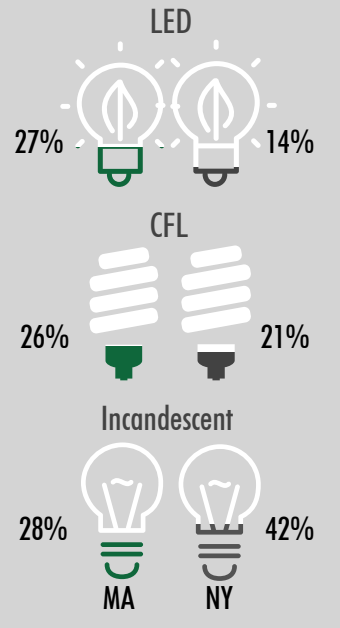
Massachusetts Residential Lighting Market Assessment

As the results of this study show, the Massachusetts programs have had a strong impact on the saturation and penetration of LED bulbs. LED saturation and penetration rates in the comparison area (New York) continue to lag behind the rates measured in Massachusetts. In addition, ENERGY STAR LEDs (the only LEDs supported by the programs) account for the majority of the difference in LED saturation between the two states - with more than three times as many ENERGY STAR LEDs found in use in Massachusetts compared to New York.

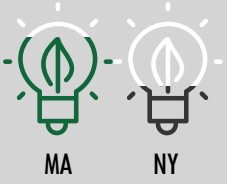
2018 Saturation Rates



In 2018, LED saturation (the percentage of sockets filled with these bulbs) was significantly higher in Massachusetts than in New York.

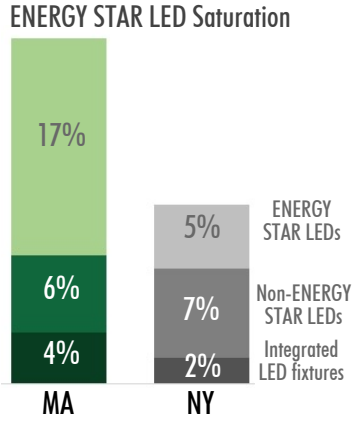
Incandescent saturation was significantly lower in Massachusetts.

In Massachusetts, 74% of LEDs obtained in the previous year were ENERGY STAR, compared to 37% in New York.



Saturation of ENERGY STAR LEDs in Massachusetts (17%) was more than three times the rate observed in New York (5%).

This is strong evidence that the Massachusetts programs (which exclusively support ENERGY STAR products - including LEDs) are driving increased adoption of LEDs.

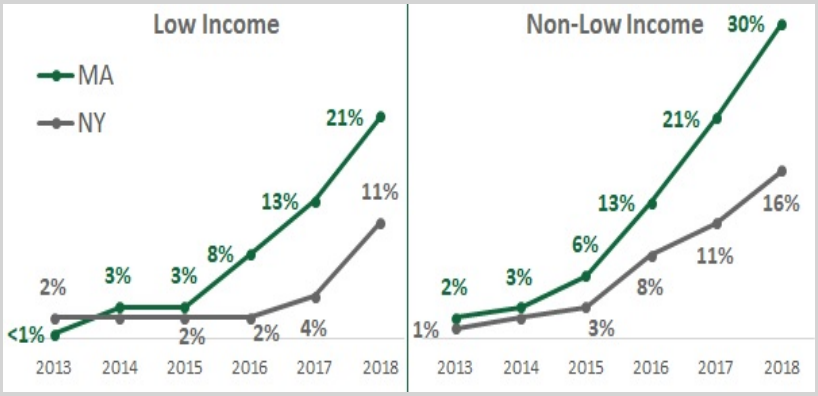


LED Saturation by Demographics

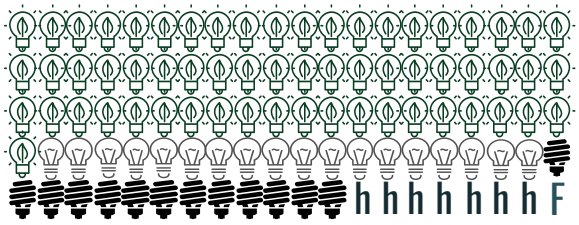
In 2018, LED saturation among both non-low-income and low-income households in Massachusetts was significantly higher compared to counterpart households in New York.

LED saturation was also significantly higher in Massachusetts in multifamily households, single-family households, owned homes, and homes where the highest level of education was "some college, Associate's degree" or "Bachelor's degree or higher."

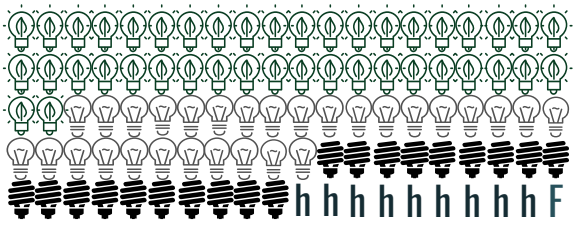
LED Saturation by Income 2012-2018



Newly Installed Replacement Bulbs (%) 2017-2018



LED bulbs (61%) were the most common replacement bulb installed in Massachusetts households, followed by incandescent bulbs (18%), CFLs (13%), halogen bulbs (7%), and linear fluorescents (1%); empty sockets excluded.



LED bulbs (42%) were also the most common replacement bulb installed in New York households, followed by incandescents (29%), CFLs (19%), halogen bulbs (9%), and linear fluorescents (1%); empty sockets excluded.