

types of domestic hot water (DHW) systems

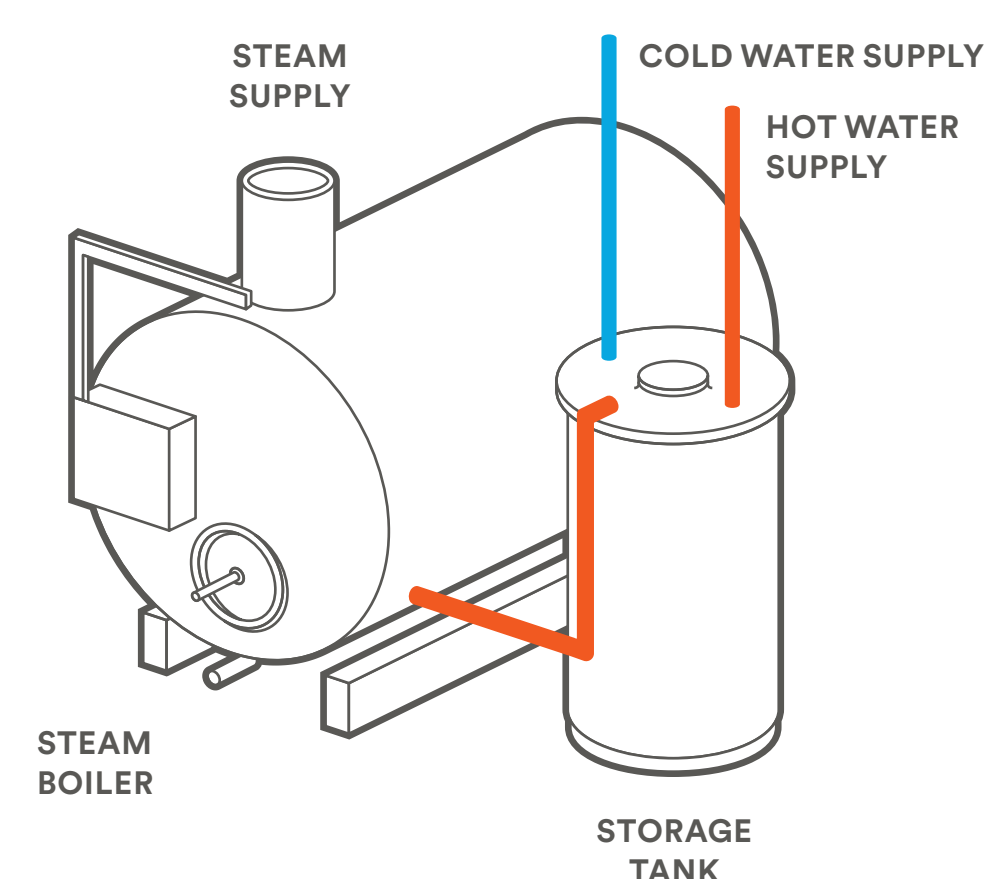
Inefficient DHW systems drive up energy costs and produce significant greenhouse gas emissions. Converting to dedicated hot water systems, insulating pipes and storage tanks, and installing low-flow fixtures minimizes costs and improves energy efficiency.

DHW demand is highest in multifamily buildings, where hot water is used for cooking, cleaning, and bathing. Many DHW systems rely on a building's steam or hydronic boiler to heat water. **1**

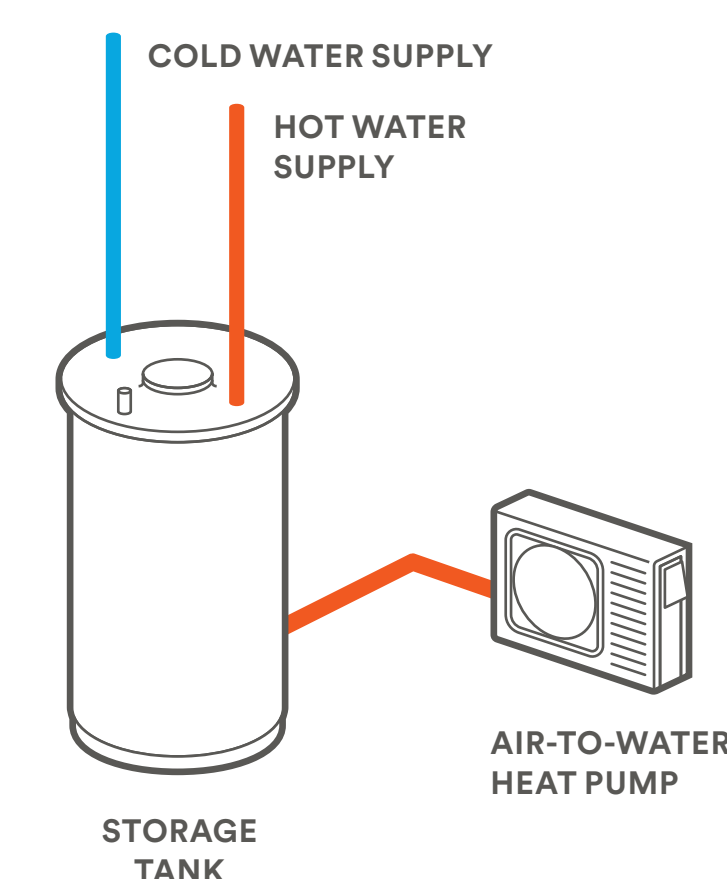
This inefficient setup requires boilers to run year-round and consumes 20% more fuel than buildings with separate, dedicated DHW systems!

Dedicated hot water systems use separate heating equipment and are sized appropriately to meet a building's hot water demands. Many types of systems exist, including those with storage tanks, such as heat pump water heaters, **2** and those that generate hot water on demand, such as point-of-use and tankless water heaters. **3**

1 Integrated Domestic Hot Water Systems

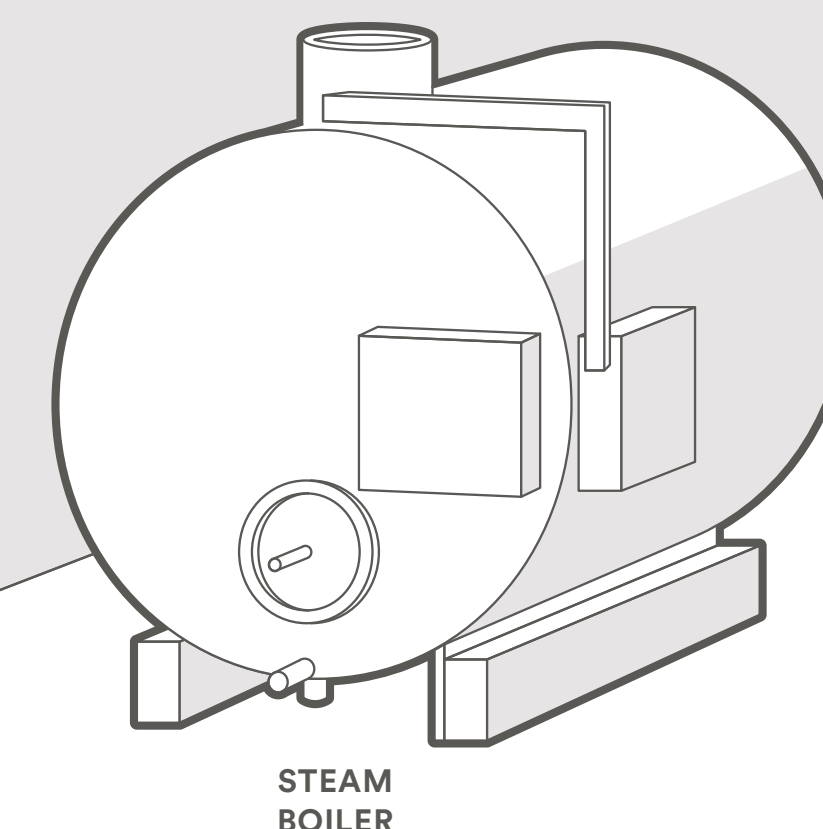


2 Dedicated Domestic Hot Water Systems



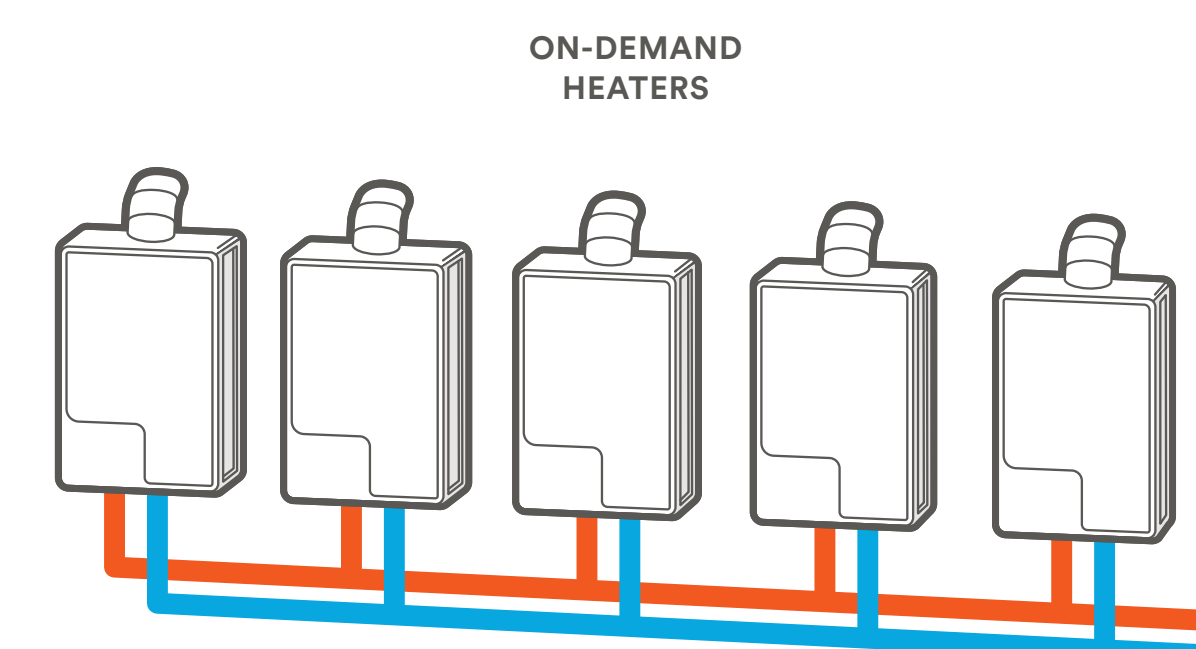
Steam Heating System

Installation of a dedicated hot water system, as identified in illustrations 2 and 3, allows for boilers to be used exclusively to provide heating, offering significant savings during the warmer months.



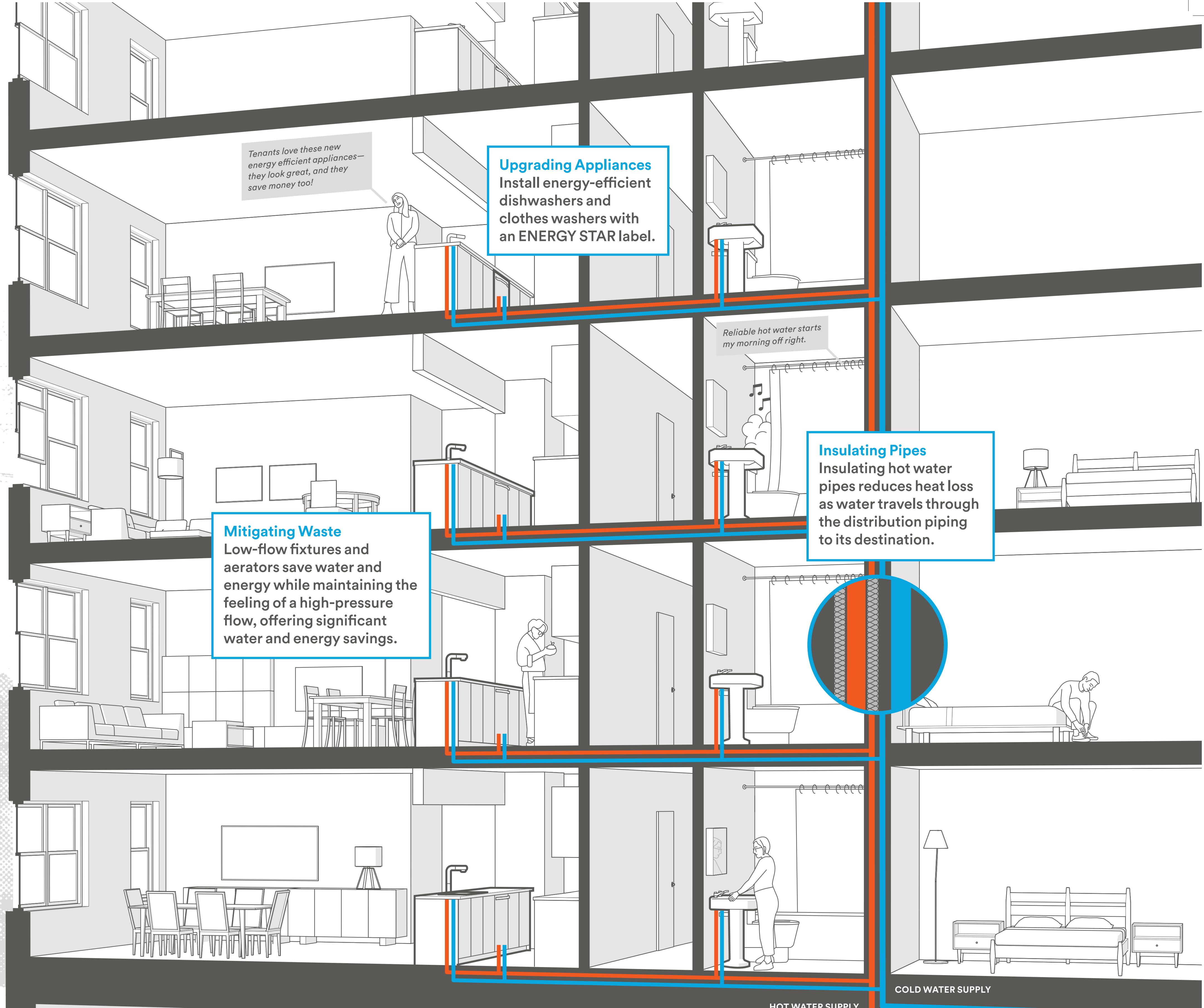
Leak Detection

Sensors detect leaks as they happen, turning off water automatically to prevent water damage and limit energy loss.



3 Tankless Water Heaters

Electric or gas-fueled tankless hot water heaters heat water only when needed, eliminating storage tanks and standby heating losses—the energy waste associated with keeping stored water hot.



90%

Almost 90% of audited multifamily buildings in NYC use the same boiler for space heating and domestic hot water.¹

¹ New York City's Energy and Water Use 2014 and 2015 Report, Urban Green Council, 2017, p. 4.