## Clean Heating & Cooling Solutions



Heat Pumps for Multifamily & Mixed-Use Buildings



#### **REDUCE**

energy and operating costs

#### **INCREASE**

tenant comfort and satisfaction

AVOID
unexpected
maintenance issues

call: **1-866-NYSERDA** 

visit:

nyserda.ny.gov/NYSCleanHeat

# A healthier, cleaner, more affordable way to heat and cool

Heat pump systems can help multifamily building owners create a comfortable environment for their tenants by enhancing temperature control and improving indoor air-quality. Installing a heat pump can also help reduce your tenants' monthly energy costs, decrease your building's HVAC maintenance, and improve comfort year-round by acting as a heating system in the winter and cooling system in the summer. Additionally, heat pump systems heat and cool without burning fossil fuels, mitigating the need for on-site combustion and reducing the risk of dangerous carbon monoxide fumes.

#### When should you consider a heat pump?

A heat pump may be an option for your business if you are:

- receiving regular service calls from tenants who are finding it difficult to keep a comfortable temperature in their units—heat pumps are an ideal solution for challenges with zoned temperature control, increasing tenant comfort and satisfaction.
- looking to reduce interruptions to your operations due to HVAC maintenance—heat pumps generally require minimal maintenance compared to traditional HVAC equipment, helping to avoid unexpected issues and reduce tenant complaints.
- currently using oil, propane, or electric resistance for heating and looking to reduce your energy costs—a heat pump can reduce your energy costs compared to these heating fuels and sources while eliminating the on-site burning of fossil fuels.
- using natural gas for heating and are looking to switch to a single solution system that heats and cools.
- planning capital improvements to your building—incorporating a heat pump system into your project can provide long-term value and savings.
- trying to comply with local laws or energy code—heat pump systems can significantly decrease your building's carbon footprint.



#### What are they and how do they work?

There are two primary types of heat pumps—air source and ground source.

#### **Ground source heat pumps**

Ground source heat pumps (also known as geothermal heat pumps) are a natural, viable heating and cooling option that use significantly less energy than conventional systems. They can also supply your business with hot water.

How they work – A ground source heat pump uses the Earth's year-round, stable ground temperature as a heating and cooling source. During the winter, heat is extracted from the ground through an underground pipe system and distributed throughout the building. In the summer, the process is reversed. A minimal amount of energy is used during the process to power the compressor and circulation pumps.

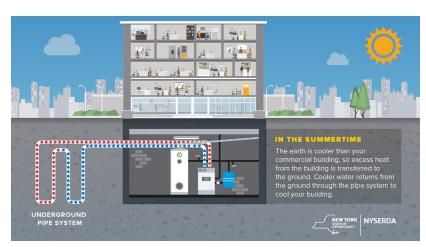
**Benefits** – Ground source heat pumps are a particularly good option for standalone buildings with surrounding property. They are quiet, efficient, and regulate temperature in different zones simultaneously. Systems can lower energy costs up to 50% and last approximately 25 years, greatly increasing return on investment.

#### Air source heat pumps

Air source heat pumps can be installed in spaces with ductwork (central systems) or spaces without ductwork (ductless mini-split systems) making them a great solution for any space.

How they work — Air source heat pumps extract heat from the air outside and distribute it inside your building. During warmer months, the process is reversed to provide cooling by pulling heat out of your interior space. These systems are highly efficient, and when paired with improved insulation and air sealing, the benefits are even greater.

**Benefits** – Air source heat pumps are two to three times more efficient than traditional HVAC systems, potentially saving hundreds of dollars annually in energy costs. Additionally, they can be installed in a single room or heat and cool only the rooms you want via zone control and dehumidify more effectively than traditional HVAC systems.





#### Incentives and financing

Electric utility companies offer rebates on both air and ground source heat pumps, and low-interest financing options are available through NYSERDA.

### **Ready to get started?**

Visit nyserda.ny.gov/NYSCleanHeat to learn more about heat pump options, incentives available from your electric utility, and to find a qualified contractor.

