

# Energy-Saving Technology: Heat Pumps

NIPSCO ENERGY EFFICIENCY PROGRAMS FOR BUSINESSES



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## Heat pumps: A great solution for heating and cooling needs of commercial buildings

Heating and cooling commercial buildings can be costly, especially for businesses with older systems. Do you want better temperature control, air quality and cost savings year-round? If your answer is “yes” to these questions, it may be time to consider installing heat pumps in your commercial building.

No matter the size, heat pumps are a great upgrade for landmark building retrofits, mixed-use properties, apartment buildings, hotels, school buildings and other commercial properties.

### How do they work?

Heat pumps are an energy efficient heating technology because they transfer heat instead of generating it. They extract and amplify heat from a nearby source — such as the surrounding air, geothermal energy stored in the ground, or close by water or waste heat from a manufacturing facility — and transfer it to where it is needed.

*According to the International Energy Association, heat pumps currently available on the market are three to five times more energy efficient than natural gas boilers.*

Source: [www.iea.org/reports/the-future-of-heat-pumps](http://www.iea.org/reports/the-future-of-heat-pumps)



## What are the benefits of heat pumps?



Save money with lower monthly energy usage.



Increase control and flexibility of temperature settings. Includes zone setting capabilities.



Provides indoor air quality and comfort levels.



Grow value with your rentals with lower tenant operational costs.



Become a cutting-edge environmental leader and reduce the building's carbon footprint.



Enjoy reduced noise output with low- and multi-speed fans and compressors.



Gain air conditioning options with no added equipment.



Reduce heating, ventilation and air conditioning maintenance visits and expenses.



## Crichfield Elementary School Improves their Educational Environment




### La Porte, Indiana

- Incentives Earned: **\$13,870**
- Total kWh Saved: **126,091 kWh**
- Final Project Cost\*: **\$51,130**
- 1st Year ROI\*: **76%**
- Payback\*: **1.31 Years**

\*With incentive

**Upgrades included:** New fluid cooler and WSHP Dedicated Outdoor Air System (DOAS) units WITH controls providing 126,091 kWh of annual kWh savings. This super-efficient system effectively conditions 100% outdoor air — on the coldest winter day or the most humid summer day.

### Saving 126,091 kWh, is equal to:

-  **21 vehicles** removed from the road
-  **176 homes** powered for one month
-  **34.1 tons** of landfill CO<sub>2</sub> emissions eliminated

## Get started saving!

Now that you know more about what to upgrade, visit [trcsavesenergy.com/TradeAlly/TradeAllySearch](https://trcsavesenergy.com/TradeAlly/TradeAllySearch) to find an experienced contractor or contact a TRC Field Engineer in your area by visiting [trcsavesenergy.com/Home/ContactUs](https://trcsavesenergy.com/Home/ContactUs) or calling TRC at **1-800-299-2501**.

## Local Hampton Inn Improves Overall Comfort with Heat Pumps




### Crown Point, Indiana

- Incentives Earned: **\$12,091**
- Total kWh Saved: **171,615 kWh**
- Final Project Cost\*: **\$44,865**
- 1st Year ROI\*: **61%**
- Payback\*: **1.63 Years**

\*With incentive

**Upgrades included:** Installation of interior LED lighting and Heating, Ventilation and Air Conditioning (HVAC) Variable Refrigerant Flow (VRF) heat pump. The project installed ENERGY STAR® rated equipment with inverter technology, allowing for consistent, accurate temperature control without overshooting or short-cycling.

### Saving 171,615 kWh, is equal to:

-  **28.5 vehicles** removed from the road
-  **239.5 homes** powered for one month
-  **46.4 tons** of landfill CO<sub>2</sub> emissions eliminated

## Local Manufacturing Facility Recovers Big Savings




### Northwest, Indiana

- Incentives Earned: **\$23,003**
- Total kWh Saved: **243,656 kWh**
- Final Project Cost\*: **\$189,625**
- 1st Year ROI\*: **15%**
- Payback\*: **1.17 Years**

\*With incentive

**Upgrades included:** Interior LED lighting, lighting controls and Heating, Ventilation and Air Conditioning (HVAC) Variable Refrigerant Flow (VRF) heat pump installation. Eighty-two tons of refrigerant cooling was installed amounting to an impressive 108,334 kWh saved. The VRF system included a combination of five outside SSC scroll-type condensing units and interior fan coil units. These provide both heat recovery and zoned temperature control for occupancy comfort.

### Saving 243,656 kWh is equal to:

-  **40.5 vehicles** removed from the road
-  **150.7 homes** powered for one month
-  **29.2 tons** of landfill CO<sub>2</sub> emissions eliminated