



## Keep your facility's energy costs comfortable.

Upgrading to a high-efficiency cooling unit helps lower your summer energy costs without compromising comfort.

### TIME TO UPGRADE

There's no need to compromise between comfort and efficiency each summer. Modern high-efficiency unitary HVAC units use nearly 30 percent less energy at full load than existing end-of-life equipment. During part-load conditions, the savings can increase by more than 50 percent.

With generous KCP&L incentives available to help offset your investment, there's never been a better time to upgrade.

### INVEST IN THE BEST

When it comes to cooling systems, investing in quality pays off. As shown in the example, upgrading to the most efficient option will save this customer an estimated \$20,343 over the 20-year lifespan of the unit—effectively paying back \$1.66 for every dollar spent.

#### SUCCESS EXAMPLE

By choosing the most efficient option, this customer spent an extra \$4,274 in the first year. In return, that customer will save nearly five times that amount over the next 20 years.

Incremental upgrade cost	<b>(\$7,250)</b>
— First-year energy savings over end-of-life unit	(\$1,717)
— KCP&L incentive	(\$1,259)
<b>=</b> First-year equipment premium	<b>(\$4,274)</b>

*Utility bill savings calculated with a blended average commercial rate of \$0.10/kWh and \$4.00/kW.*

	<b>BEST</b> Most efficient option	<b>BETTER</b> More efficient option	<b>GOOD</b> Code compliant unit	<b>EXISTING</b> End of life
Capacity (tons)	<b>20</b>	20	20	20
EER	<b>12.0</b>	12.0	10.8	8.5
IEER	<b>20.0</b>	14.5	12.2	9.5
Annual Energy Consumption (kWh)	<b>14,310</b>	19,739	23,460	30,127
Coincident Peak Demand (kW)	<b>20.60</b>	20.60	22.89	29.08
Equipment Cost	<b>\$18,860</b>	\$15,370	\$11,610	
First-Year Energy Savings (kWh)	<b>15,817</b>	10,389	6,668	
First-Year Demand Savings (kW)	<b>8.48</b>	8.48	6.19	
First-Year Savings	<b>\$1,717</b>	\$1,175	\$766	
Incremental Equipment Cost Over Code Minimum	<b>\$7,250</b>	\$3,760		
Incremental Cost (\$) After Incentive	<b>\$5,991</b>	\$2,501		
Incremental Energy Savings (kWh)	<b>9,149</b>	3,721		
Incremental Coincident Peak Demand Savings (kW)	<b>2.29</b>	2.29		
Simple Payback (years)	<b>6</b>	6		
Estimated Incentive	<b>\$1,259</b>	\$1,259		
<b>Total Cost of Ownership</b>	<b>\$66,169</b>	<b>\$77,265</b>	<b>\$84,488</b>	

## See how cool it is to save.

Get started at [kcp.com/mybusiness](http://kcp.com/mybusiness) or call (866) 847-5228 for more information.

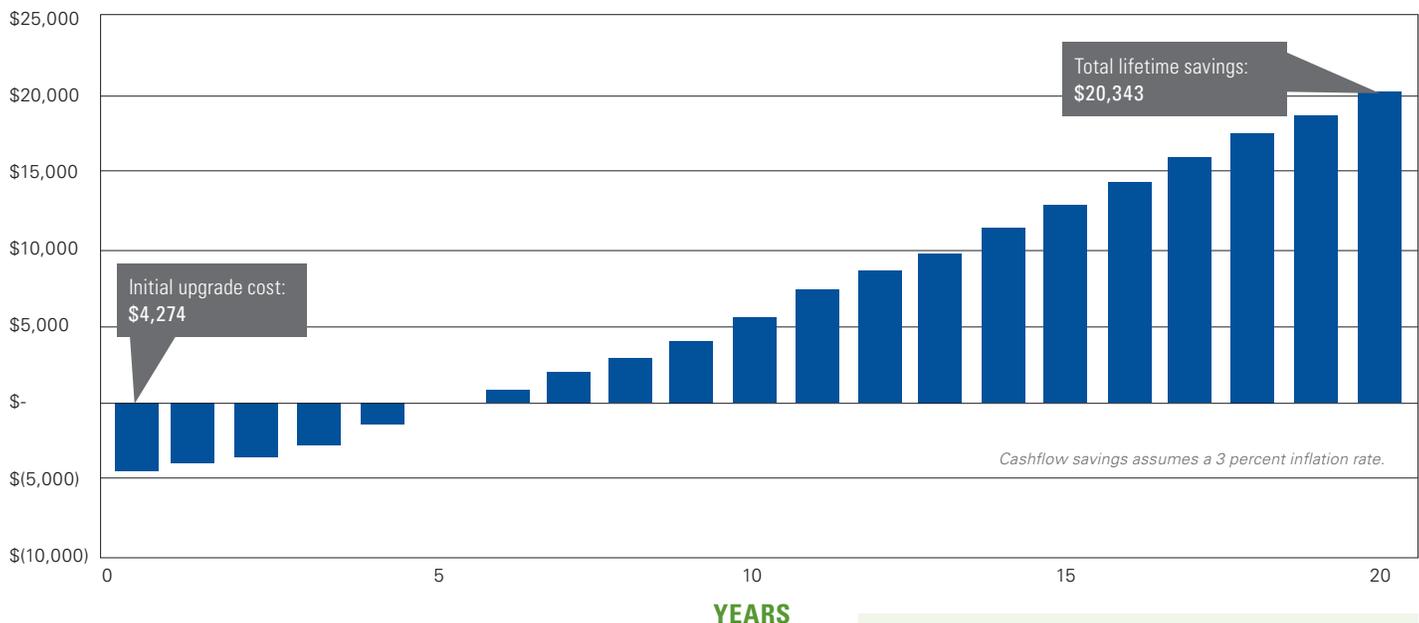
## Types of unitary HVAC equipment

- ▶ **Heat pumps** provide year-round heating and cooling by moving heat out of your building during summer, and moving it in each winter.
- ▶ **Direct expansion (DX)** systems use refrigerant to directly cool the air supplied to the building.
  - ▶ **Packaged systems** are typically kept outdoors in one self-contained package.
  - ▶ **Split systems** consist of an indoor air-handling unit and an outdoor condensing unit.
- ▶ **Rooftop units** can be configured either as air conditioners or as heat pumps.

## Higher ratings mean higher efficiency

- ▶ **Seasonal Energy Efficiency Ratio (SEER)** measures a unit's cooling output over the course of a typical cooling season, divided by its total energy use during that period (applicable only to units 5 tons or less).
- ▶ **Energy Efficiency Ratio (EER)** is a unit's cooling capacity (in BTUs per hour) divided by its power (in watts) measured at 95 degrees or full load.
- ▶ **Integrated Energy Efficiency Ratio (IEER)** measures a unit's EER at different load capacities over the course of a typical cooling season. Previously referred to as Integrated Part Load Value (IPLV).

## Savings over time: cumulative cashflow



## Opportunities to save

- ▶ *Modern unitary HVAC units use nearly 30–50 percent less energy than existing end-of-life units*
- ▶ *Advanced technology optimizes your unit's energy use and cooling output*
- ▶ *Lower energy and maintenance costs*
- ▶ *Greater employee comfort and productivity*
- ▶ *Older systems may use phased-out refrigerants*

### **DON'T WAIT TO START SAVING.**

Every year this customer delays upgrading to a high-efficiency cooling unit costs them an extra \$1,717.

**See how cool it is to save.**

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