This complex was overdue for upgrades – individual gas furnaces, hot water heaters, and lighting fixtures were original to the buildings’ 1950s construction, and a lack of gutters was causing moisture problems in all buildings. CPC assisted the ownership by financing a comprehensive energy retrofit that improved resident health and comfort while drastically lowering their utility bills.

**SAVINGS SNAPSHOT**
As a result of the extensive renovations and upgrades, the property reduced its gas bills by $450 per dwelling unit and saved 24% on the total annual utility cost.

<table>
<thead>
<tr>
<th>Utility</th>
<th>Annual Expense Before ($/Apartment)</th>
<th>Annual Expense After ($/Apartment)</th>
<th>Expense Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating (Gas)</td>
<td>$560</td>
<td>$360</td>
<td>−36%</td>
</tr>
<tr>
<td>Hot Water (Gas)</td>
<td>$430</td>
<td>$180</td>
<td>−58%</td>
</tr>
<tr>
<td>Electricity</td>
<td>$520</td>
<td>$530</td>
<td>+2%</td>
</tr>
<tr>
<td>Water &amp; Sewer</td>
<td>$440</td>
<td>$410</td>
<td>−7%</td>
</tr>
<tr>
<td>Total</td>
<td>$1,950</td>
<td>$1,480</td>
<td>−24%</td>
</tr>
</tbody>
</table>

The new hot water heaters were so efficient that only 50% of the systems needed to be replaced; the rest were removed and discontinued.
UPGRADE COST AND SAVINGS
The graphic below outlines the cost and potential savings associated with upgrading certain components to new, energy efficient models. Use this graphic to help you estimate the cost savings of installing similar upgrades in your building.

REFRIGERATORS
EXISTING CONDITION
Old refrigerators running 1200 kWh / year each
UPGRADE OPTION
ENERGY STAR refrigerators
INSTALLATION COST $500
ESTIMATED ANNUAL SAVINGS $100
SIMPLE PAYBACK (YRS) 5.0
RETURN ON INVESTMENT (ROI) 20.0%

FIXTURES
EXISTING CONDITION
Standard-flow fixtures
UPGRADE OPTION
Low-flow showerheads and faucets
INSTALLATION COST $20
ESTIMATED ANNUAL SAVINGS $3
SIMPLE PAYBACK (YRS) 6.7
RETURN ON INVESTMENT (ROI) 15.0%

VENTILATION
EXISTING CONDITION
Individual supply and return ducts for each unit, in poor condition
UPGRADE OPTION
Repair, clean, and seal ductwork
INSTALLATION COST $620
ESTIMATED ANNUAL SAVINGS $290
SIMPLE PAYBACK (YRS) 2.1
RETURN ON INVESTMENT (ROI) 46.8%

LIGHTING
EXISTING CONDITION
Antique fixtures with incandescent bulbs
UPGRADE OPTION
Efficient lightbulb replacement
INSTALLATION COST $90
ESTIMATED ANNUAL SAVINGS $70
SIMPLE PAYBACK (YRS) 1.3
RETURN ON INVESTMENT (ROI) 77.8%

HEAT & HOT WATER
EXISTING CONDITION
Original atmospheric combustion models with 75% efficiency serving each unit
UPGRADE OPTION
Sealed combustion furnaces and domestic hot water heaters
INSTALLATION COST $3,300
ESTIMATED ANNUAL SAVINGS $160
SIMPLE PAYBACK (YRS) 20.6
RETURN ON INVESTMENT (ROI) 4.8%

FEATURED UPGRADE
SEALED COMBUSTION FURNACES & WATER HEATERS
Historically, atmospheric combustion was the standard technology for fuel-fired furnaces and hot water heaters. Today, sealed combustion technology is the new standard, and even a perfectly working atmospheric system is worth replacing for energy savings, safety, and tenant comfort. Replacing an atmospheric furnace goes hand in hand with other energy efficiency improvements – eliminating the need for indoor combustion air allows the building to have a tighter envelope while meeting code requirements. Unlike older technology, sealed combustion models carry little to no risk of toxic exhaust gases entering indoors, are smaller in size, and are easier to maintain.

IS THIS UPGRADE RIGHT FOR YOU?
If any of the following apply, then yes!
✓ Old atmospheric furnaces, boilers, or hot water heaters
✓ Furnaces or hot water heaters serving individual units or larger systems serving an entire building

KEY
□ Per Apartment