



Efficiency Navigator

Making multi-family housing affordable and resilient
A partnership with Sustain Dane and Elevate



Building Case Studies Completed: 2022/2023

Helping small to medium-size multi-family housing become more efficient and resilient while reducing operating costs to remain affordable.

 Location: **Madison, Wisconsin**

 10-year cost savings: **\$5,520**

 10-year avoided CO2 emissions: **18,060 Kg**

 10-year CO2 equivalent vehicle miles traveled: **44,850**

 Total project cost: **\$31,000**



Completed Improvements:

- Air sealing
- Boiler replacement
- Refrigerator replacement
- Lighting upgrade
- Attic insulation
- Rim joist air sealing and insulation

 Location: **Madison, Wisconsin**

 10-year cost saving: **\$13,640**

 10-year avoided CO2 emissions: **99,570 Kg**

 10-year CO2 equivalent vehicle miles traveled: **246,960**

 Total project cost: **\$25,228**



Completed Improvements:

- New water heater
- Sidewall insulation
- Installed chimney liner
- Installed boiler outdoor reset control
- New bath fans
- Lighting upgrade
- Air sealing
- Attic insulation
- Boiler tune up

Funding for these projects was granted to the City of Madison by the WI PSC Energy Innovation Grant Program.



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Location:
Madison, WI



10-year cost savings: **\$25,125**



10-year avoided CO2 emissions:
32,450 Kg



10-year CO2 equivalent vehicle miles traveled:
128,375



Total project cost:
\$85,215



Completed Improvements:

- Four air-source heat pumps
- Air sealing
- Attic insulation
- Lighting upgrade
- Efficient air conditioning addition
- Bath fans
- Refrigerator replacement



Location:
Madison, WI



10-year cost savings: **\$3,380**



10-year avoided CO2 emissions:
42,610 Kg



10-year CO2 equivalent vehicle miles traveled:
60,900



Total project cost:
\$27,055



Completed Improvements:

- Dual fuel furnace with air-source heat pump
- Air sealing
- Attic insulation
- Bath fans
- Air conditioning efficiency upgrade
- Chimney liner



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Middleton Building Case Studies Completed: 2023 & 2024

Helping small to medium-size multi-family housing become more efficient and resilient while reducing operating costs to remain affordable.



- 2 units
- Built in 1970
- 2,176 ft²

Adler

10-year cost savings:
\$7,190

10-year avoided CO₂ emissions:
42,200 Kg

10-year CO₂ equivalent vehicle miles traveled:
99,350

Total project cost:
\$26,450

Completed Improvements:

- Furnace upgrade
- Air sealing
- Rim joist insulation
- Attic insulation



- 4 units
- Built in 1979
- 4,312 ft²

Northbrook

10-year cost savings:
\$5,220

10-year avoided CO₂ emissions:
28,893 Kg

10-year CO₂ equivalent vehicle miles traveled:
66,930

Total project cost:
\$39,984

Completed Improvements:

- Rim joist insulation
- Air sealing
- Boiler upgrade
- Attic insulation
- Bath fans



- 2 units
- Built in 1945
- 2,592 ft²

Oakwood

10-year cost savings:
\$4,772

10-year avoided CO₂ emissions:
26,500 Kg

10-year CO₂ equivalent vehicle miles traveled:
58,640

Total project cost:
\$43,534

Completed Improvements:

- Rim joist insulation
- Air sealing
- Bath Fans
- Wall insulation
- Dual Fuel ASHP
- Attic insulation