

Home MVP example projects*

*these examples are based on actual projects in the Home MVP program as of 5/9/19. These projects are not to be considered typical projects. All cost, incentive, and savings information are estimates.

Example 1: Replace Oil with 2x Ductless Heatpumps, electric hot-water, and Solar PV

Existing conditions

- 2,000 sq ft, 4-bedroom home
- Prior Heating system: 1980 Oil boiler (90,000 BTUs) providing heat and oil tank hot water
- Prior Cooling system: Window AC unit (12,000 BTUs)
- Energy use: 147 MMBTUs

Improvements: 147 MMBTUs to 40 MMBTUs (73% savings); \$13,190 MVP incentive

- New heating & cooling system: 2 x Mitsubishi ductless heat pumps (30,000 BTUs + 45,000 BTUs)
- Remove oil boiler and oil tank water heater – saving 950 gallons oil/year, and window AC unit
- New Electric tank water heater
- Insulate crawl space – From R8 to R30
- New Solar PV system: 6.7 kW system – producing about 5,000 kWh/year
- Energy use: 40 MMBTUs (73% energy use savings)

Costs/Savings:

- Project Cost: \$36,310 (before other rebates, incentives, tax credits)
- MVP incentive: \$13,190 MVP incentive
- Annual energy savings: Estimated \$2000/year

Example 2: Replace Oil boiler and Central A/C with Ducted Heat Pump

Existing conditions

- 1,800 Sq ft, 4-bedroom home
- Prior Heating system: Oil boiler (100,000 BTUs) (Keep as backup heat - save 440 gallons/year)
- Prior Cooling system: York Central A/C (36,000 BTUs) (Replace entirely)
- Energy use: 119 MMBTUs

Improvements: 119 to 73 MMBTUs (39% savings); \$6,300 MVP incentive

- New heating and cooling system: Mitsubishi 36,000 central ducted heat pump (covers most heating but also relies on oil boiler on coldest days)
- Energy use: 73 MMBTUs (39% savings)

Cost/Savings

- Project Cost: \$14,900 (before other rebates and MVP incentive)
- MVP incentive: \$6300
- Annual energy savings: \$290/year

Example 3: Offset Oil Furnace and replace Central A/C with Ducted Heat Pump

Existing conditions

- 3,800 Sq ft, 3 bedroom home
- Prior Heating system: 1990 Oil furnace (100,000 BTUs) (Keep as backup heat - save 525 gallons/year)
- Prior Cooling system: Lennox Central A/C (36,000 BTUs) (Replace entirely)
- Energy use: 96 MMBTUs

Improvements: 148 to 96 MMBTUs (35% energy use savings); \$7,050 MVP incentive

- New heating and cooling system: Mitsubishi 36,000 central ducted heat pump (covers most heating but also relies on oil boiler on coldest days)
- Energy use: 96 MMBTUs (35% energy use savings)

Cost/savings

- Cost: \$17,950 (before other rebates/incentives)
- MVP incentive: \$7,050
- Annual energy savings: \$713/year

Example 4: Replace Oil Boiler and Central A/C with a Ground Source Heat Pump

Existing conditions

- 2890 Sq ft, 4 bedroom home
- Prior Heating system: Oil boiler (151,000 BTUs) (replace entirely)
- Prior Cooling system: Carrier Central AC (24,000BTUs) (replace entirely)
- Energy use: 286 MMBTUs

Improvements: 286 to 98 MMBTUs (65% energy savings); \$27,500 MVP incentive

- New heating and cooling system: ground source heat pump (central heat pump w/shared ducts, heating capacity 81,000 BTU, cooling capacity 60,000 BTU) to cover 100% of heating and cooling load
- Insulate attic, vault, crawl space, and basement
- Air sealing
- Upgrade water heater
- Energy use: 98 MMBTUs (65% savings)

Costs/Savings:

- Cost: \$111,000 (before other rebates/incentives)
- MVP incentive: \$27,500
- Annual energy savings: \$3,366/year

