**Credit Values for Clean Heat Measures**

Ken Jones, 25 November 2024

**Installed measures - residential**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Measure** | **Measure detail** | **Fuel replaced** | **Lifetime credit** | **First year credit** | **Measure life time** |
| ASHP -ductless part home | 18,000 BTU/h | Unknown (inc.wood) | 14.7 | **.92** | 16 |
| ASHP -ductless part home | 18,000 BTU/h | Fuel oil | 17.85 | **1.12** | 16 |
| ASHP -ductless part home | 18,000 BTU/h | Propane | 15.75 | **.98** | 16 |
| ASHP -ductless part home | 18,000 BTU/h | Natural gas | 13.2 | **.825** | 16 |
| ASHP -ducted full home | 36,000 BTU / hr | oil | 104.4 | **6.525** | 16 |
| ASHP -ducted full home | 36,000 BTU / hr | unknown | 86.1 | **5.38** | 16 |
| Air to water heat pump | 36,000 BTU / h | unknown | 87.6 | **5.475** | 16 |
| GSHP | 36,000 BTU / hr | unknown | 140.1 | **5.6** | 25 |
|  |  |  |  |  |  |
| Advanced thermostat | Retrofit | Fuel oil | 3.9 | **.39** | 10 years |
| Cord wood stove |  |  | 66.4 | **3.69** | 18 years |
| Pellet stove |  |  | 26.3 | **1.46** | 18 years |
| AWH Central Pellet | MOP 55k BTU/h |  | 3.1 | **.17** | 18 years |
| AWH Central Pellet | Retrofit 55k BTU/h |  | 7.4 | **.41** | 18 years |
| Heat Pump water heater | Tier I | Replace oil (and oil heat) | 9 | **.75** | 12 years |
| Heat Pump water heater | Tier I | Unknown (includes replacing electric HWH | 3.4 | **.28** | 12 years |
| Low Flow Shower head | Installed | unknown | 0.4 | **.04** | 10 years |
| Induction cook top |  | Propane | 2.2 | **.147** | 15 years |
| Induction cook top |  | Nat gas | 1.9 | **.127** | 15 years |
| Induction cook top |  | Unk (inc. electric) | 1.1 | **.073** | 15 years |
| **Measure** | **Measure detail** | **Fuel replaced** | **Lifetime credit** | **First year credit** | **Measure life time** |
| Air infiltration | Low (0-800 cfm red’n) | Oil boiler | 3.3 | **.165** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Propane boiler | 2.7 | **.135** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Nat gas boiler | 2.5 | **.125** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Oil furnace | 3.4 | **.17** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Propane furnace | 2.75 | **.125** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Nat gas furnace | 2.3 | **.115** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Pellet stove | 2.7 | **.135** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Heat pump | 0.2 | **.01** | 20 years |
| Air infiltration | Low (0-800 cfm red’n) | Unknown | 2.7 | **.135** | 20 years |
| Air infiltration | Medium (800-1600) | Oil boiler | 9.8 | **.49** | 20 years |
| Air infiltration | Medium (800-1600) | Propane boiler | 8.2 | **.41** | 20 years |
| Air infiltration | Medium (800-1600) | Nat gas boiler | 7.5 | **.375** | 20 years |
| Air infiltration | Medium (800-1600) | Pellet stove | 4.0 | **.2** | 20 years |
| Air infiltration | Medium (800-1600) | Unknown | 8.2 | **.41** | 20 years |
| Air infiltration | Hi (>1600) | Oil boiler | 16.5 | **.825** | 20 years |
| Air infiltration | Hi (>1600) | Propane boiler | 13.7 | **.685** | 20 years |
| Air infiltration | Hi (>1600) | Nat gas boiler | 12.6 | **.63** | 20 years |
| Air infiltration | Hi (>1600) | Pellet stove | 6.6 | **.33** | 20 years |
| Air infiltration | Hi (>1600) | Unknown | 13.6 | **.68** | 20 years |
|  |  |  |  |  |  |
| Insulation (R0->R49) | 1000 sf attic | Oil boiler | 114.6 | **3.82** | 30 years |
| Insulation  (R0->R15) | 1000 sf ext. wall | Oil boiler | 45.8 | **1.53** | 30 years |

**Delivered measures**

**100 gallons B-20**

0.17 credits

**100 gallons B-100 (using OD Ci for Canola = 25.5 g/MJ or 26.9 Kg/MMBTU)**

0.85 credits

**100 gallons R-100 (OD Ci for Canola = 31.9 g/MJ or 33.7 Kg/MMBTU)**

0.76 credits

**100 Therms RNG landfill (Ci = 6.8 g/MJ))**

0.6 credits

**100 Therms RNG wastewater (Ci = 37.6 g/MJ)**

0.28 credits

*(Fossil Natural Gas Ci = 63.7 g/MJ)*