



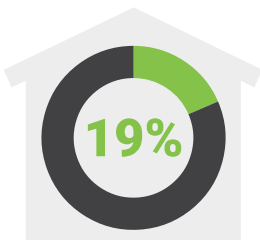


# Residential Energy Efficiency Potential

Cost-effective package savings potential in Colorado single-family homes

-  **511.2** million dollars per year utility bill savings
-  **22.9** trillion Btu per year gas, propane, and fuel oil savings
-  **2.5** billion kWh per year electricity savings
-  **685,994** cars of pollution reduction



Energy used by Colorado single-family homes that can be saved through cost-effective improvements













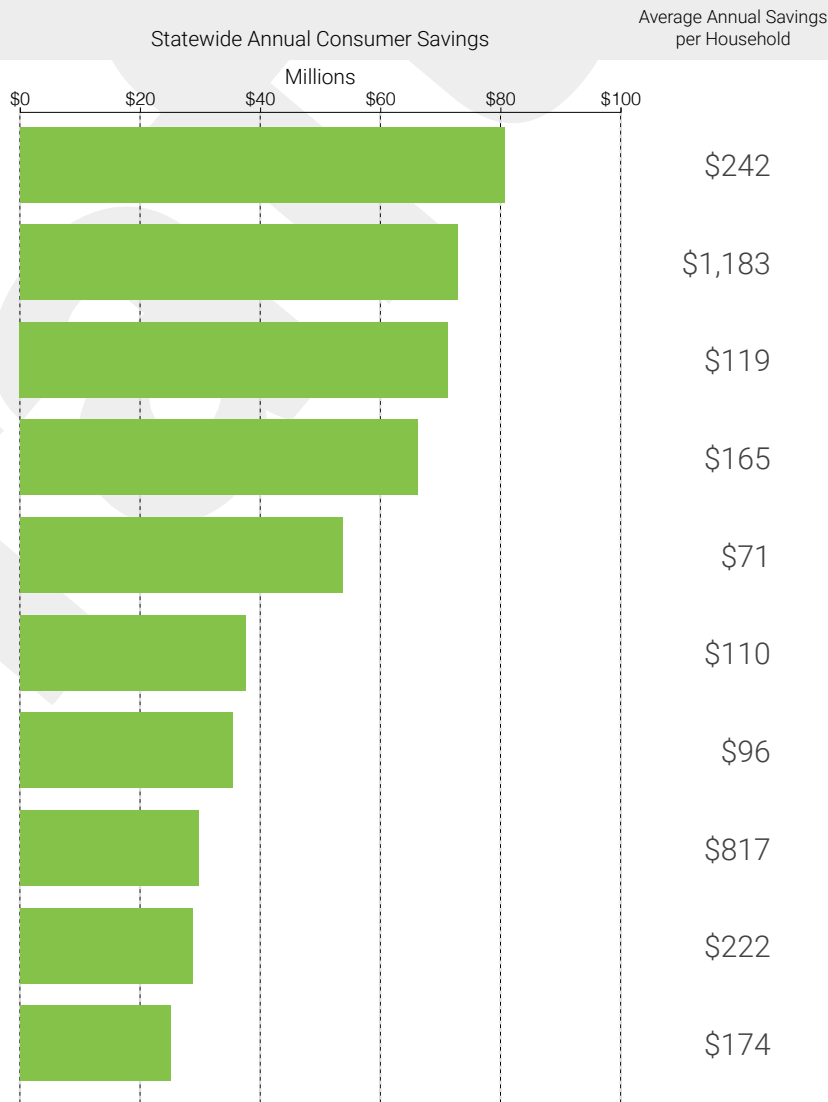
Colorado jobs in energy efficiency (2016)<sup>1</sup>

## Colorado Top 10 Improvements

## Colorado Utility Bill Savings (electricity, gas, propane, and fuel oil)

\* Pays back in less than 5 years for most households

- Enclosure**  Drill-and-fill wall cavity insulation
- HVAC**  \* High-efficiency heat pump (replace electric furnace at wear out)
- Lighting**  LED lighting (replace incandescents)
- Enclosure**  R-10 basement wall insulation
- HVAC**  \* Smart thermostat
- HVAC**  Duct sealing & insulating
- Enclosure**  Insulate attic to R-38/49/60
- HVAC**  Ductless heat pump (displaces electric baseboard)
- Enclosure**  R-10 crawlspace walls
- Enclosure**  R-5 insulated wall sheathing (at siding replacement)



<sup>1</sup>U.S. Department of Energy. January 2017. *U.S. Energy and Employment Report*

Economic potential savings estimates were produced using **ResStock**, a highly granular model of the U.S. single-family housing stock. Visit <http://www.nrel.gov/buildings/resstock.html> for more information. Economic potential is based on improvements with positive net present value for building owners, assuming full turnover of the stock of equipment and appliances over a 30 year period.

This work was supported by the U.S. Department of Energy Building Technologies Office and the Office of Energy Policy and Systems Analysis. Point of contact: [Erin Boyd, Erin.Boyd@hq.doe.gov](mailto:Erin.Boyd@hq.doe.gov)

**Technical Reference:** Wilson, E., Christensen, C., Horowitz, S., Robertson, J., Maguire, J. *Electric End-Use Energy Efficiency Potential in the U.S. Single-Family Housing Stock*. NREL/TP-5500-65667. National Renewable Energy Laboratory (NREL), 2016. <http://www.nrel.gov/docs/fy17osti/65667.pdf>