IOWA



Residential Energy Efficiency Potential



Energy used by lowa singlefamily homes that can be saved through costeffective improvements



lowa jobs in energy efficiency (2016)¹

\$20

\$40

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

\$ 50 m

584.2 million

dollars per year utility bill savings



24.6 trillion

Btu per year gas, propane, and fuel oil



2.4 billion

kWh per year electricity savings



Statewide Annual Consumer Savings

Millions

\$60

714,896

\$100

\$120

cars of pollution reduction

\$140

Average Annual Savings

per Household

Iowa Top 10 Improvements

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

* Pays back in less than 5 years for most households

Enclosure



R-10 basement wall insulation

Enclosure



Drill-and-fill wall cavity insulation

HVAC



Smart thermostat

HVAC



High-efficiency heat pump (replace electric furnace at wear out)

Enclosure



Low-E storm windows (DIY install)

Enclosure



R-5 insulated wall sheathing (at siding replacement)

Enclosure



Air sealing

Lighting



LED lighting (replace incandescents)

Enclosure



Insulate attic to R-38/49/60

HVAC



Duct sealing & insulating

\$208 \$453 \$93 \$1,380 \$150 \$236 \$83 \$114 \$109

¹U.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, Grin. Boyd, Grin.

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



National Renewable Energy Laboratory