## Energy Affordability by the Numbers

States Where Energy is Least and Most Affordable

n average, across all the households in a state, in 2023, residential energy in Mississippi took up a larger percentage share of consumer expenditures, 2.42 percent, than in any other state. At the other end of the scale, residential energy in Washington State took up a smaller average percentage share, 1.25 percent, than in any other state. Figure 1 shows the average residential energy share for every state.

For this analysis, we total what households spend for both electric utility service and natural gas utility service to make the percentages more comparable. States vary considerably in how much their residents

Excluding the District of Columbia, where the average residential energy share was even lower. The all-urban District is understandably an outlier.

GUSTS. TUTAL GUNS	GUSTS. TUTAL GUNSUMPTION 70 BY	GUSTS. TUTAL GUNSUMPTIUN % BY STATE NANKE
State	Residential Electricity as % State Expenditures	Residential Residential Electricity Natural as % Gas as % State Expenditures Expenditures
Illinois	Illinois 1.05%	Illinois 1.05% 0.63%
New York	New York 1.22%	New York 1.22% 0.46%
Maine	Maine 1.25%	Maine 1.25% 0.43%
Texas	Texas 1.44%	Texas 1.44% 0.23%
Wyoming	Wyoming 1.07%	Wyoming 1.07% 0.59%
Vermont	Vermont 1.01%	Vermont 1.01% 0.63%
Maryland	Maryland 1.30%	Maryland 1.30% 0.33%
Montana	Montana 1.16%	Montana 1.16% 0.46%
North Carolina	North Carolina 1.30%	North Carolina 1.30% 0.30%
Virginia	Virginia 1.25%	Virginia 1.25% 0.32%
Massachusetts	Massachusetts 1.10%	Massachusetts 1.10% 0.47%
Arizona	Arizona 1.32%	Arizona 1.32% 0.21%
Idaho	Idaho 1.14%	Idaho 1.14% 0.38%
Delaware	Delaware 1.18%	Delaware 1.18% 0.32%
Hawaii	Hawaii 1.41%	Hawaii 1.41% 0.09%
New Jersey	New Jersey 1.09%	New Jersey 1.09% 0.41%
Nevada	Nevada 1.15%	Nevada 1.15% 0.34%
Alaska	Alaska 0.98%	Alaska 0.98% 0.42%
Florida	Florida 1.31%	Florida 1.31% 0.06%
Colorado	Colorado 1.00%	Colorado 1.00% 0.35%
California	California 1.05%	California 1.05% 0.28%
Oregon	Oregon 1.04%	Oregon 1.04% 0.25%
Utah	Utah 0.85%	Utah 0.85% 0.41%
Washington	Washington 1.04%	Washington 1.04% 0.21%
District of	District of 0.62%	District of 0.62% 0.28%
Columbia	Columbia	Columbia
	Numerican     Residential Electricity as %     Expenditures     1.05%     1.22%     1.25%     1.44%     1.07%     1.44%     1.07%     1.44%     1.07%     1.16%     1.30%     1.16%     1.30%     1.16%     1.30%     1.15%     0.98%     1.31%     1.00%     1.05%     1.00%     1.15%     0.98%     1.31%     1.00%     1.04%     0.85%     1.04%	Residential Electricity as %   Residential Natural Gas as %     1.05%   0.63%     1.22%   0.46%     1.25%   0.43%     1.44%   0.23%     1.01%   0.63%     1.30%   0.33%     1.16%   0.46%     1.30%   0.33%     1.16%   0.46%     1.30%   0.33%     1.16%   0.46%     1.30%   0.33%     1.16%   0.46%     1.30%   0.32%     1.16%   0.46%     1.30%   0.32%     1.16%   0.47%     1.32%   0.21%     1.14%   0.38%     1.18%   0.32%     1.41%   0.09%     1.09%   0.41%     1.15%   0.34%     0.98%   0.42%     1.31%   0.06%     1.04%   0.25%     0.85%   0.41%     0.41%   0.21%     0.62%   0.28%

use electricity or natural gas for space heating particularly.

The states with the largest average residential energy share tend to be in the South and Midwest, where average income is below the national average, where the proportion of households in rural and singlefamily houses is above the national average, and where the climate calls for more air conditioning in the summer or heating in the winter. On the other hand, the states with the smallest average residential energy share tend to be in the Northeast and West, where average income is above the national average, where the proportion of households in rural and single-family houses is below the national average, and where the climate calls for less air conditioning in the summer or heating in the winter.

Of course, these numbers are state averages. The averages mask the wide differences within a state, especially between households with low incomes and those with high incomes.

For example, in that same year of 2023, the twenty-seven million U.S. households with the lowest incomes spent as much as 4.7 percent of their consumer expenditures on residential energy, on average. But for the twenty-seven million households with the highest incomes, they spent just 2.1 percent of their consumer expenditures on residential energy, on average.

Back to the state averages, which have been decreasing over the years. In other words, on average, without respect to income and other differences within a state, residential energy has been trending to be more affordable.

Figure 2 shows the change in average residential energy share for every state from 1997, when this data became available, to 2023.

All but two states saw a decrease, and generally saw a substantial decrease, in the average residential share over the last quarter century. For instance, the average residential energy share in Louisiana fell from 3.43 percent in 1997 to 2.13 percent in 2023.

This means that on average, residential energy became more affordable in the Pelican State. Though, undoubtedly, there are many low- and moderate-income households there that are struggling with making ends meet.

Residential Energy as % Expenditures, State   Residential Energy as % Expenditures, Percent Decrease   Residential Energy as % Percent Decrease   Residential Energy as % Percent Decrease   Residential Energy as % Percent Decrease   Residential Energy as % Percent Decrease   Percent Decrease     Alabama   3.18%   2.20%   0.98%   Missouri   2.73%   1.73%   0.98     Alaska   1.58%   1.40%   0.18%   Montana   2.15%   1.61%   0.54     Arkansas   3.46%   2.26%   1.20%   Newlaska   2.61%   1.76%   0.88     Colorado   1.83%   1.35%   0.48%   Newl Ampshire   1.77%   1.73%   0.66%     Delaware   2.00%   1.50%   0.50%   North Carolina   2.70%   1.66%   0.66     North Carolina   2.73%   1.73%   0.00%   North Carolina   2.70%   1.60%   0.10     North Carolina   2.66%   1.87%   0.02%   0regon   1.75%   0.266     Ilinois   2.49%   1.68%   0.63%   0.66%   1.66%   0.26% </th <th>FIG. 2</th> <th>RESIDENTIA</th> <th>AL ELECTRIC &amp;</th> <th>NATURAL GAS CO</th> <th>ISTS: TOTAL CONSU</th> <th>mption %, 1</th> <th><b>J97-2023</b> %</th> <th>DECREAS</th>	FIG. 2	RESIDENTIA	AL ELECTRIC &	NATURAL GAS CO	ISTS: TOTAL CONSU	mption %, 1	<b>J97-2023</b> %	DECREAS
Alabama   3.18%   2.20%   0.98%     Alaska   1.58%   1.40%   0.18%     Alaska   1.58%   1.40%   0.18%     Arizona   2.11%   1.53%   0.58%     Arkansas   3.46%   2.26%   1.20%     California   1.69%   1.33%   0.36%     Conracto   1.83%   1.35%   0.48%     Connecticut   1.69%   1.75%   -0.06%     Delaware   2.00%   1.50%   0.50%     Delaware   2.00%   1.50%   0.57%     Delaware   2.00%   1.37%   0.69%     Octumbia   1.47%   0.90%   0.57%     Florida   2.06%   1.37%   0.69%     Ohio   2.66%   1.86%   0.80     Okato   2.05%   0.27%   0.51%     Illinois   2.49%   0.47%   Pennsylvania   2.33%   1.71%   0.62     Illinois   2.49%   0.64%   Pennsylvania   2.33%   1.71% <th>State</th> <th>Residential Energy as % Expenditures, 1997</th> <th>Residential Energy as % Expenditures, 2023</th> <th>1997 to 2023 Percent Decrease</th> <th>State</th> <th>Residential Energy as % Expenditures, 1997</th> <th>Residential Energy as % Expenditures, 2023</th> <th>1997 to 2 Perce Decrea</th>	State	Residential Energy as % Expenditures, 1997	Residential Energy as % Expenditures, 2023	1997 to 2023 Percent Decrease	State	Residential Energy as % Expenditures, 1997	Residential Energy as % Expenditures, 2023	1997 to 2 Perce Decrea
Alaska 1.58% 1.40% 0.18%   Arizona 2.11% 1.53% 0.58%   Arizona 2.11% 1.53% 0.58%   Arizona 2.11% 1.53% 0.58%   Arizona 2.11% 1.53% 0.58%   Arizona 1.69% 1.20% Newada 1.99% 1.49% 0.50   California 1.69% 1.33% 0.36% New Hampshire 1.77% 1.73% 0.04   Colorado 1.83% 1.35% 0.48% New Hampshire 1.77% 1.73% 0.04   Delaware 2.00% 1.50% 0.50% New York 2.31% 1.66% 0.63   District of 1.47% 0.90% 0.57% North Carolina 2.70% 1.60% 1.10   North Dakota 2.31% 2.05% 0.266 0hio 2.66% 1.86% 0.80   Georgia 2.73% 1.73% 0.02% 0regon 1.75% 1.29% 0.46   Indiana 2.58% 2.07% 0.51% South Carolina 2.77% 1.72%	Alabama	3.18%	2.20%	0.98%	Missouri	2.73%	1.79%	0.949
Arizona   2.11%   1.53%   0.58%   Nebraska   2.61%   1.76%   0.85     Arkansas   3.46%   2.26%   1.20%   Nevada   1.99%   1.49%   0.50     California   1.69%   1.33%   0.36%   New Hampshire   1.77%   1.73%   0.04     Colorado   1.83%   1.35%   0.48%   New Hampshire   1.77%   1.73%   0.04     Colorado   1.83%   1.50%   0.50%   New Hampshire   1.77%   1.73%   0.68     Delaware   2.00%   1.50%   0.50%   North Carolina   2.70%   1.66%   0.63     District of   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   0.10     Florida   2.06%   1.37%   0.69%   0hio   2.66%   1.86%   0.80     Indiana   2.49%   1.68%   0.81%   Penns/vania   2.23%   1.71%   0.62     Marasa   2.87%   2.08%   0.79%   Tennessee   2.59%	Alaska	1.58%	1.40%	0.18%	Montana	2.15%	1.61%	0.549
Arkansas   3.46%   2.26%   1.20%   Nevada   1.99%   1.49%   0.50     California   1.69%   1.33%   0.36%   New Hampshire   1.77%   1.73%   0.04     Colorado   1.83%   1.35%   0.48%   New Hampshire   1.77%   1.73%   0.04     Connecticut   1.69%   1.75%   -0.06%   New Mexico   2.19%   1.83%   0.36     Delaware   2.00%   1.50%   0.50%   New Mexico   2.19%   1.83%   0.36     District of   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   1.10     North Carolina   2.06%   1.37%   0.69%   Ohio   2.66%   1.86%   0.80     Georgia   2.73%   1.73%   1.00%   Oregon   1.75%   1.29%   0.46     Idaho   2.00%   1.53%   0.47%   Pennsylvania   2.33%   1.71%   0.62     Illinois   2.49%   1.68%   0.81%   Tennessee   2.	Arizona	2.11%	1.53%	0.58%	Nebraska	2.61%	1.76%	0.859
California   1.69%   1.33%   0.36%   New Hampshire   1.77%   1.73%   0.04     Colorado   1.83%   1.35%   0.48%   New Jersey   2.08%   1.50%   0.58     Connecticut   1.69%   1.75%   -0.06%   New Mexico   2.19%   1.83%   0.36     Delaware   2.00%   1.50%   0.50%   New Mexico   2.19%   1.68%   0.63     District of   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   1.10     Columbia   1.47%   0.90%   0.57%   Ohio   2.66%   1.86%   0.80     Georgia   2.73%   1.73%   0.09%   Ohio   2.66%   1.86%   0.80     Illinois   2.49%   1.68%   0.81%   Pennsylvania   2.33%   1.71%   0.62     Illinois   2.49%   1.68%   0.81%   Pennsylvania   2.33%   1.71%   0.62     Illinois   2.49%   1.68%   0.81%   Pennsylvania   2	Arkansas	3.46%	2.26%	1.20%	Nevada	1.99%	1.49%	0.50%
Colorado   1.83%   1.35%   0.48%   New Jersey   2.08%   1.50%   0.58     Connecticut   1.69%   1.75%   -0.06%   New Mexico   2.19%   1.83%   0.36     Delaware   2.00%   1.50%   0.50%   New York   2.31%   1.68%   0.63     District of   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   1.10     Columbia   2.06%   1.37%   0.69%   Ohio   2.66%   1.86%   0.80     Georgia   2.73%   1.73%   1.00%   Oklahoma   3.22%   2.28%   0.94     Hawaii   1.48%   1.50%   -0.02%   Oregon   1.75%   1.29%   0.46     Pennsylvania   2.33%   1.71%   0.62   North Carolina   2.77%   1.72%   1.05     Indiana   2.58%   2.07%   0.51%   South Carolina   2.77%   1.72%   1.05     Iowa   3.07%   2.04%   0.10%   Yermont   2.00%	California	1.69%	1.33%	0.36%	New Hampshire	1.77%	1.73%	0.049
Connecticut   1.69%   1.75%   -0.06%   New Mexico   2.19%   1.83%   0.36     Delaware   2.00%   1.50%   0.50%   New York   2.31%   1.68%   0.63     District of Columbia   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   1.10     North Dakota   2.31%   2.05%   0.26     Florida   2.06%   1.37%   0.69%   Ohio   2.66%   1.86%   0.80     Georgia   2.73%   1.73%   1.00%   Oklahoma   3.22%   2.28%   0.94     Hawaii   1.48%   1.50%   -0.02%   Oregon   1.75%   1.29%   0.46     Idaho   2.00%   1.53%   0.47%   Pennsylvania   2.33%   1.71%   0.62     Ilinois   2.49%   1.68%   0.81%   Rhode Island   2.02%   1.81%   0.21     Indiana   2.58%   2.07%   0.51%   South Carolina   2.77%   1.72%   1.05     Louislana<	Colorado	1.83%	1.35%	0.48%	New Jersey	2.08%	1.50%	0.58%
Delaware   2.00%   1.50%   0.50%   New York   2.31%   1.68%   0.63     District of Columbia   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   1.10     North Dakota   2.31%   2.05%   0.26     Florida   2.06%   1.37%   0.69%   Ohio   2.66%   1.86%   0.80     Georgia   2.73%   1.73%   1.00%   Ohio   2.66%   1.86%   0.80     Idaho   2.00%   1.53%   0.47%   Oregon   1.75%   1.29%   0.46     Indiaa   2.58%   2.07%   0.51%   South Carolina   2.77%   1.71%   0.62     Indiaa   2.58%   2.07%   0.51%   South Carolina   2.77%   1.72%   1.05     Iowa   3.07%   2.04%   1.03%   South Carolina   2.77%   1.77%   0.83     Kansas   2.87%   2.08%   0.79%   Tennessee   2.59%   1.90%   0.69     Maine <td< td=""><td>Connecticut</td><td>1.69%</td><td>1.75%</td><td>-0.06%</td><td>New Mexico</td><td>2.19%</td><td>1.83%</td><td>0.369</td></td<>	Connecticut	1.69%	1.75%	-0.06%	New Mexico	2.19%	1.83%	0.369
District of Columbia   1.47%   0.90%   0.57%   North Carolina   2.70%   1.60%   1.10     North Dakota   2.31%   2.05%   0.26%   0.86%	Delaware	2.00%	1.50%	0.50%	New York	2.31%	1.68%	0.63%
Normalian   Normalian <t< td=""><td>District of Columbia</td><td>1.47%</td><td>0.90%</td><td>0.57%</td><td>North Carolina</td><td>2.70%</td><td>1.60%</td><td>1.10%</td></t<>	District of Columbia	1.47%	0.90%	0.57%	North Carolina	2.70%	1.60%	1.10%
Number   Normal   Normal<	Florida	2.06%	1.37%	0.69%	Obio	2.31%	1.00%	0.207
No. or gas   N. or gas   Orgon   N. or gas   Orsa   Orgon   N. or gas   O. or gas   N. or gas   Orgon   N. or gas   Orgon   N. or gas   Orgon   Orgon	Georgia	2.73%	1.73%	1.00%	Oklahoma	2.00%	2.28%	0.007
Indiana 1.10.0 1.00.0 0.00.0 0.00.0 0.00.0 0.000	Hawaii	1.48%	1.50%	-0.02%	Orogon	1 75%	1 20%	0.947
Lindiana 2.49% 1.68% 0.81% Rhode Island 2.03% 1.71% 0.022   Illinois 2.49% 1.68% 0.81% Rhode Island 2.02% 1.81% 0.21   Indiana 2.58% 2.07% 0.51% South Carolina 2.77% 1.72% 1.05   Iowa 3.07% 2.04% 1.03% South Carolina 2.77% 1.72% 1.05   Kansas 2.87% 2.08% 0.79% Tennessee 2.59% 1.90% 0.69   Kentucky 2.46% 2.11% 0.35% Texas 2.67% 1.67% 1.00   Louisiana 3.43% 2.13% 1.30% Utah 1.81% 1.26% 0.55   Maine 1.77% 1.67% 0.10% Vermont 2.00% 1.64% 0.36   Massachusetts 1.81% 1.56% 0.25% Washington 1.82% 1.25% 0.57   Michigan 2.18% 1.80% 0.38% Wisconsin 2.27% 1.86% 0.41   Mississippi 3.49% 2.42% 1.07%	Idaho	2.00%	1.53%	0.47%	Pennsylvania	2 3 3 %	1.23%	0.407
Indiana 2.58% 2.07% 0.51% South Carolina 2.77% 1.72% 1.05   Iowa 3.07% 2.04% 1.03% South Carolina 2.77% 1.72% 1.05   Iowa 3.07% 2.04% 1.03% South Dakota 2.60% 1.77% 0.83   Kansas 2.87% 2.08% 0.79% Tennessee 2.59% 1.90% 0.69   Louisiana 3.43% 2.13% 1.30% Utah 1.81% 1.26% 0.55   Maine 1.77% 1.67% 0.10% Vermont 2.00% 1.64% 0.36   Massachusetts 1.81% 1.56% 0.25% Washington 1.82% 1.25% 0.57   Michigan 2.07% 1.98% 0.09% West Virginia 2.59% 2.04% 0.55   Mississippi 3.49% 2.42% 1.07% Wyoming 2.19% 1.66% 0.53	Illinois	2.49%	1.68%	0.81%	Rhode Island	2.03%	1.71%	0.027
Invariant   Invariant <thinvariant< th="">   Invariant   <thinvariant< th="">   Invariant   <thi< td=""><td>Indiana</td><td>2.58%</td><td>2.07%</td><td>0.51%</td><td>South Carolina</td><td>2.02%</td><td>1.72%</td><td>1.059</td></thi<></thinvariant<></thinvariant<>	Indiana	2.58%	2.07%	0.51%	South Carolina	2.02%	1.72%	1.059
Kansas 2.87% 2.08% 0.79%   Kansas 2.87% 2.08% 0.79%   Kentucky 2.46% 2.11% 0.35%   Louisiana 3.43% 2.13% 1.30%   Maine 1.77% 1.67% 0.10%   Maryland 2.20% 1.63% 0.57%   Michigan 2.07% 1.98% 0.09%   Minesota 2.18% 1.80% 0.38%   Mississippi 3.49% 2.42% 1.07%	Iowa	3.07%	2.04%	1.03%	South Dakota	2.60%	1.72%	0.839
Kentucky   2.46%   2.11%   0.35%   Texas   2.67%   1.67%   1.00     Louisiana   3.43%   2.13%   1.30%   Utah   1.81%   1.26%   0.55     Maine   1.77%   1.67%   0.10%   Vermont   2.00%   1.64%   0.36     Maryland   2.20%   1.63%   0.57%   Virginia   2.35%   1.57%   0.78     Michigan   2.07%   1.98%   0.09%   West Virginia   2.59%   2.04%   0.55     Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Kansas	2.87%	2.08%	0.79%	Tennessee	2.59%	1.90%	0.69%
Louisiana   3.43%   2.13%   1.30%   Utah   1.81%   1.26%   0.55     Maine   1.77%   1.67%   0.10%   Vermont   2.00%   1.64%   0.36     Maryland   2.20%   1.63%   0.57%   Virginia   2.35%   1.57%   0.78     Massachusetts   1.81%   1.56%   0.25%   Washington   1.82%   1.25%   0.57     Michigan   2.07%   1.98%   0.09%   West Virginia   2.59%   2.04%   0.55     Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Kentucky	2.46%	2.11%	0.35%	Texas	2.67%	1.67%	1.00%
Maine   1.77%   1.67%   0.10%   Vermont   2.00%   1.64%   0.36     Maryland   2.20%   1.63%   0.57%   Virginia   2.35%   1.57%   0.78     Massachusetts   1.81%   1.56%   0.25%   Washington   1.82%   1.25%   0.57     Michigan   2.07%   1.98%   0.09%   West Virginia   2.59%   2.04%   0.55     Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Louisiana	3.43%	2.13%	1.30%	Utah	1.81%	1.26%	0.55%
Maryland   2.20%   1.63%   0.57%   Virginia   2.35%   1.57%   0.78     Massachusetts   1.81%   1.56%   0.25%   Washington   1.82%   1.25%   0.57     Michigan   2.07%   1.98%   0.09%   West Virginia   2.59%   2.04%   0.55     Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Maine	1.77%	1.67%	0.10%	Vermont	2.00%	1.64%	0,369
Massachusetts   1.81%   1.56%   0.25%   Washington   1.82%   1.25%   0.57     Michigan   2.07%   1.98%   0.09%   West Virginia   2.59%   2.04%   0.55     Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Maryland	2.20%	1.63%	0.57%	Virginia	2,35%	1.57%	0.789
Michigan   2.07%   1.98%   0.09%   West Virginia   2.59%   2.04%   0.55     Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Massachusetts	1.81%	1.56%	0.25%	Washington	1.82%	1.25%	0.57%
Minnesota   2.18%   1.80%   0.38%   Wisconsin   2.27%   1.86%   0.41     Mississippi   3.49%   2.42%   1.07%   Wyoming   2.19%   1.66%   0.53	Michigan	2.07%	1.98%	0.09%	West Virginia	2.59%	2.04%	0.55%
Mississippi 3.49% 2.42% 1.07% Wyoming 2.19% 1.66% 0.53	Minnesota	2.18%	1.80%	0.38%	Wisconsin	2.27%	1.86%	0.419
	Mississippi	3.49%	2.42%	1.07%	Wyoming	2.19%	1.66%	0.53%