

NEADA Summer Electricity Outlook: Background

Electricity prices are expected to increase significantly this summer as result of rapidly rising natural gas prices, a primary feeder fuel for electricity and a warmer summer creating additional demand for electricity. According to the CPI data, electric prices are up by 12 percent in the last year and the National Weather Service has projected above average temperatures for this summer, similar to 2011 which was the “hottest summer on record.” As such we are projecting that summer cooling costs will increase to \$540 up from \$450 last year.

According to the [Census Household Pulse Survey](#), covering April 27 – May 9, 2022:

- 20.5% of all households reported that they were unable to pay an energy bill or unable to pay the full bill amount, at least one month in the last year. These numbers were even higher for low-income households (making less than \$35k) at 37.8%, moderate-income households (making between \$35k and \$50k) at 27.2%, households of color at 30.6%, and households with children at 29%.
- 30.9% of all households reported that they reduced or forewent expenses for basic household necessities, such as medicine or food, in order to pay an energy bill, at least one month in the last year. These numbers were even higher for low-income households at 51.9%, moderate income households at 39.7%, households of color at 42.4%, and households with children at 38.7%.
- 19.9% of all households reported that they kept their home at a temperature that felt unsafe or unhealthy, at least one month in the last year. These numbers were even higher for low-income households at 32.1%, moderate-income households at 25.3%, households of color at 25.5%, and households with children at 20.4%.

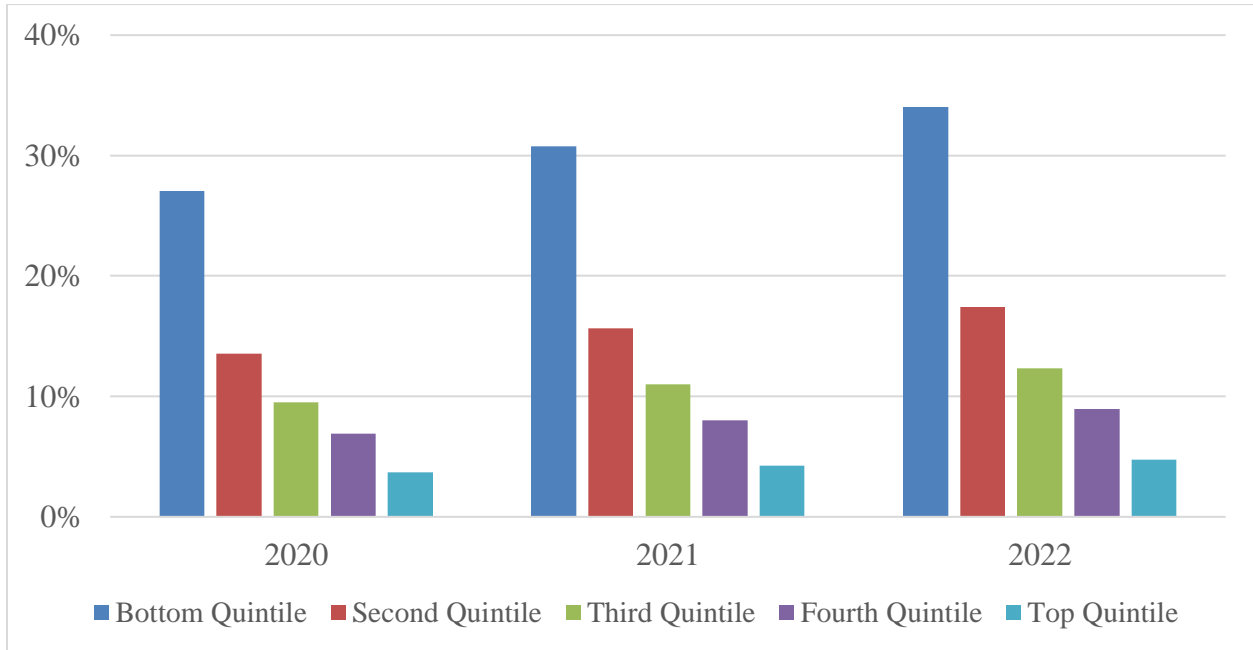
Estimated Energy Expenditures and Burdens – BLS CES & CPI Data

For 2020, income and expenditure data come from the BLS Consumer Expenditure Survey. Data are not yet available from the Consumer Expenditure Survey for the years 2021 and 2022. A household’s or income quintile’s energy burden is calculated by dividing energy expenditures—combined spending on gasoline and utilities—by income.

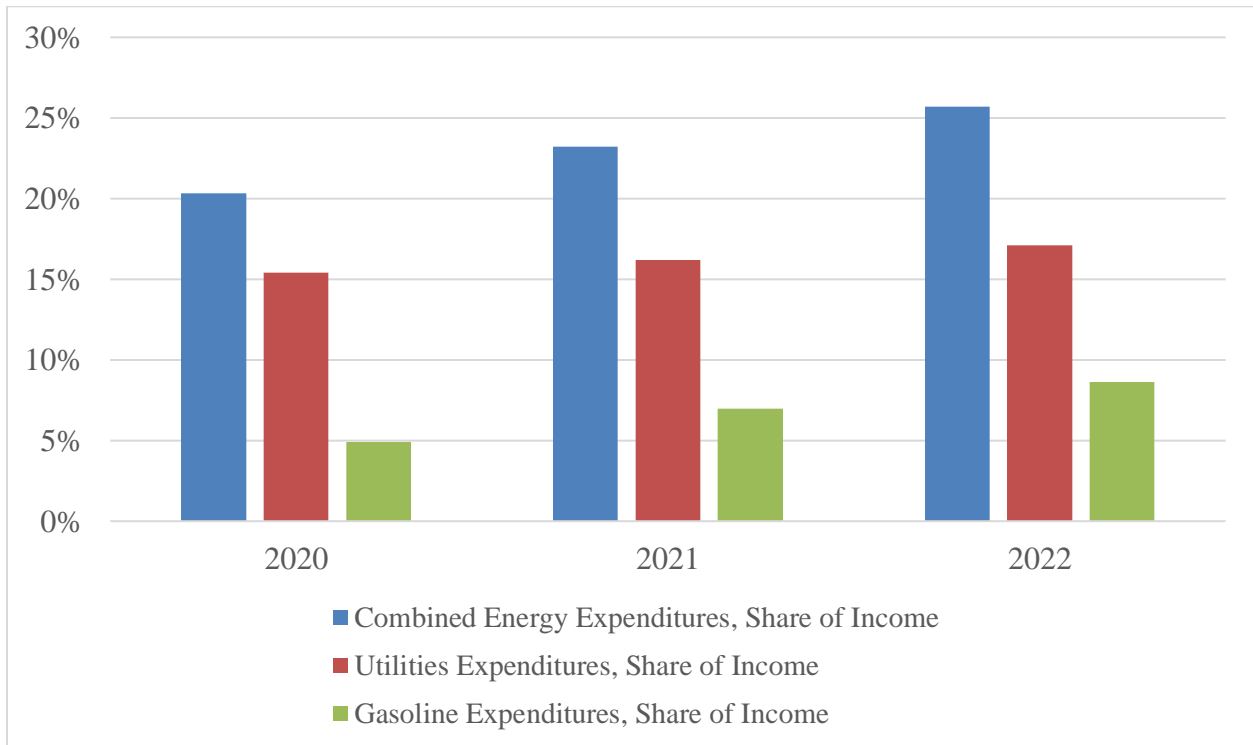
To estimate roughly the increases in income for each quintile, we assumed all quintiles increased their income by the same amount, using EPI’s Nominal Wage Tracker. For 2021, we used year-over-year nominal wage inflation through December 2021. For 2022, we used year-over-year nominal wage inflation through April 2022.

To estimate price increases for gasoline and utilities, we used the BLS Consumer Price Index. For 2021, we used year-over-year inflation in prices for energy to estimate expenditures, assuming consumption stays constant. For 2022, we estimate that gasoline expenditures will increase by 30% and that utility expenditures will increase by 11.2%.

Share of Household Income Spent on Gasoline and Utilities by Income Quintile



Energy Burdens Among the Bottom Two Income Quintiles



Energy Expenditures – All Consumers

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2018	\$6,158	\$2,109	\$4,049	\$1,496	\$78,635
2019	\$6,149	\$2,094	\$4,055	\$1,472	\$82,852
2020	\$5,726	\$1,568	\$4,158	\$1,516	\$84,352
Average 2018 - 20	\$6,011	\$1,924	\$4,087	\$1,495	\$81,946
2021	\$6,936	\$2,346	\$4,590	\$1,612	\$88,468
2022	\$8,154	\$3,049	\$5,105	\$1,757	\$93,299

Energy Burdens – All Consumers

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2018	7.8%	2.7%	5.1%	1.9%
2019	7.4%	2.5%	4.9%	1.8%
2020	6.8%	1.9%	4.9%	1.8%
Average 2018 - 20	7.3%	2.3%	5.0%	1.8%
2021	7.8%	2.7%	5.2%	1.8%
2022	8.7%	3.3%	5.5%	1.9%

Energy Expenditures – Lowest Income Quintile

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2018	\$3,401	\$986	\$2,415	\$1,051	\$11,285
2019	\$3,509	\$998	\$2,511	\$1,049	\$12,029
2020	\$3,574	\$817	\$2,757	\$1,166	\$13,219
Average 2018 - 20	\$3,495	\$934	\$2,561	\$1,089	\$12,178
2021	\$4,266	\$1,222	\$3,044	\$1,239	\$13,864
2022	\$4,974	\$1,589	\$3,385	\$1,351	\$14,621

Energy Burdens – Lowest Income Quintile

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2018	30.1%	8.7%	21.4%	9.3%
2019	29.2%	8.3%	20.9%	8.7%
2020	27.0%	6.2%	20.9%	8.8%
Average 2018 - 20	28.8%	7.7%	21.0%	8.9%
2021	30.8%	8.8%	22.0%	8.9%
2022	34.0%	10.9%	23.1%	9.2%

Energy Expenditures – Second Income Quintile

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2018	\$4,975	\$1,571	\$3,404	\$1,363	\$31,237
2019	\$5,024	\$1,601	\$3,423	\$1,351	\$32,768
2020	\$4,691	\$1,253	\$3,438	\$1,344	\$34,550
Average 2018 - 20	\$4,897	\$1,475	\$3,422	\$1,353	\$32,852
2021	\$5,670	\$1,874	\$3,796	\$1,429	\$36,236
2022	\$6,657	\$2,437	\$4,221	\$1,557	\$38,215

Energy Burdens – Second Income Quintile

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2018	15.9%	5.0%	10.9%	4.4%
2019	15.3%	4.9%	10.4%	4.1%
2020	13.6%	3.6%	10.0%	3.9%
Average 2018 - 20	14.9%	4.5%	10.4%	4.1%
2021	15.6%	5.2%	10.5%	3.9%
2022	17.4%	6.4%	11.0%	4.1%

Energy Expenditures – Middle Income Quintile

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2018	\$6,027	\$2,072	\$3,955	\$1,479	\$54,900
2019	\$5,969	\$2,079	\$3,890	\$1,446	\$56,773
2020	\$5,642	\$1,624	\$4,018	\$1,479	\$59,422
Average 2018 - 20	\$5,879	\$1,925	\$3,954	\$1,468	\$57,032
2021	\$6,865	\$2,430	\$4,436	\$1,572	\$62,322
2022	\$8,091	\$3,158	\$4,933	\$1,714	\$65,725

Energy Burdens – Middle Income Quintile

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2018	11.0%	3.8%	7.2%	2.7%
2019	10.5%	3.7%	6.9%	2.5%
2020	9.5%	2.7%	6.8%	2.5%
Average 2018 - 20	10.3%	3.4%	6.9%	2.6%
2021	11.0%	3.9%	7.1%	2.5%
2022	12.3%	4.8%	7.5%	2.6%

Energy Expenditures – Fourth Income Quintile

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2018	\$7,243	\$2,610	\$4,633	\$1,627	\$90,478
2019	\$7,206	\$2,593	\$4,613	\$1,587	\$93,390
2020	\$6,692	\$1,953	\$4,739	\$1,642	\$97,221
Average 2018 - 20	\$7,047	\$2,385	\$4,662	\$1,619	\$93,696
2021	\$8,154	\$2,922	\$5,232	\$1,745	\$101,965
2022	\$9,616	\$3,798	\$5,818	\$1,903	\$107,533

Energy Burdens – Fourth Income Quintile

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2018	8.0%	2.9%	5.1%	1.8%
2019	7.7%	2.8%	4.9%	1.7%
2020	6.9%	2.0%	4.9%	1.7%
Average 2018 - 20	7.5%	2.5%	5.0%	1.7%
2021	8.0%	2.9%	5.1%	1.7%
2022	8.9%	3.5%	5.4%	1.8%

Energy Expenditures – Top Income Quintile

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2018	\$9,140	\$3,304	\$5,836	\$1,961	\$204,975
2019	\$9,021	\$3,193	\$5,828	\$1,924	\$218,670
2020	\$8,047	\$2,199	\$5,848	\$1,952	\$218,191
Average 2018 - 20	\$8,736	\$2,899	\$5,837	\$1,946	\$213,945
2021	\$9,746	\$3,290	\$6,456	\$2,075	\$228,839
2022	\$11,456	\$4,277	\$7,179	\$2,262	\$241,333

Energy Burdens – Top Income Quintile

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2018	4.5%	1.6%	2.8%	1.0%
2019	4.1%	1.5%	2.7%	0.9%
2020	3.7%	1.0%	2.7%	0.9%
Average 2018 - 20	4.1%	1.4%	2.7%	0.9%
2021	4.3%	1.4%	2.8%	0.9%
2022	4.7%	1.8%	3.0%	0.9%

Energy Expenditures – Lowest Two Income Quintiles

Year	Combined Gas & Utilities	Gasoline	Utilities	Electricity	Income Before Taxes
2020	\$4,133	\$1,035	\$3,098	\$1,255	\$23,885
Average 2018 - 20	\$4,196	\$1,204	\$2,991	\$1,221	\$22,515
2021	\$4,968	\$1,548	\$3,420	\$1,334	\$25,050
2022	\$5,816	\$2,013	\$3,803	\$1,454	\$26,418

Energy Burdens – Lowest Two Income Quintiles

Year	Combined Energy % of Income	Gasoline % of Income	Utilities % of Income	Electricity % of Income
2020	20.3%	4.9%	15.4%	6.4%
Average 2018 - 20	21.9%	6.1%	15.7%	6.5%
2021	23.2%	7.0%	16.2%	6.4%
2022	25.7%	8.6%	17.1%	6.7%