

## 4 New York State Energy Prices

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This section presents data on retail energy prices for the 15-year period from 2007 through 2021. Energy prices are provided by fuel type in nominal dollars per physical unit and per British thermal units for the residential, commercial, industrial, and transportation sectors.

The section includes a column in the price tables displaying gross domestic product (GDP) price deflators for converting nominal (current year) dollars into constant 2021 (real) dollars. To convert energy prices from nominal to constant 2021 dollars, divide the nominal energy price by the GDP price deflator for that particular year.

Historical petroleum, electricity, coal, and natural gas prices were compiled primarily from various reports from the DOE's Energy Information Administration.

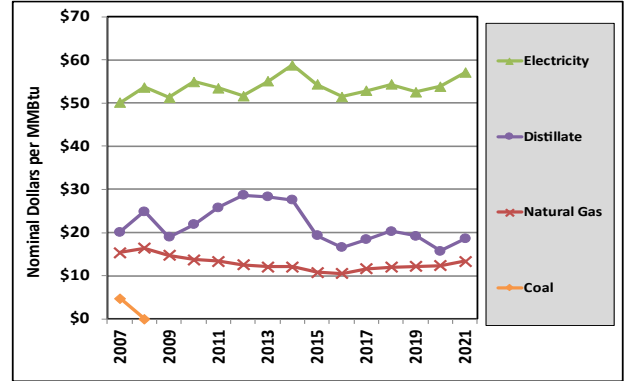
### 4.1 Key Observations about 2021 New York State Energy Price Data

- Residential sector statewide average nominal fuel prices:
  - Home heating oil prices increased 18.0% from an average \$2.16 per gallon in 2020 to \$2.55 per gallon in 2021.
  - Natural gas prices increased by 7.8% from an average \$12.86 per thousand cubic feet in 2020 to \$13.87 per thousand cubic feet in 2021.
  - Electricity prices increased by 6.1% from 18.4¢ per kWh in 2020 to 19.5¢ in 2021.
- Commercial sector statewide average nominal fuel prices:
  - Distillate fuel prices averaged \$2.34 per gallon in 2021, which was a 60.5% increase from 2020 prices.
  - Residual oil prices averaged \$72.24 per barrel in 2021, which was a 48.8% increase from 2020 prices.
  - Electricity prices averaged 16.1¢ per kWh, which was a 10.4% increase from 2020 prices.
  - Natural gas prices averaged \$7.96 per thousand cubic feet, which was a 15.0% increase from 2019 prices.

- Industrial sector statewide average nominal fuel prices:
  - Residual oil prices averaged \$72.23 per barrel in 2021, which was a 48.8% increase from 2020 prices.
  - Natural gas prices averaged \$8.44 per thousand cubic feet, which was an 19.9% increase from 2020 prices.
  - Electricity prices averaged 6.3¢ per kWh, which was a 14.4% increase from 2020 prices.
- The 2021 average retail price for all grades of gasoline was \$2.87 per gallon, an increase of \$0.72 per gallon (33.6%) from the average price in 2020.
- The combination of increases in fuel and energy prices observed with these 2021 data along with the increases in consumption, described in section 2, were responsible for the increasing expenditures (total and leaving the State) described in detail within section 5.

**New York State  
Residential Energy Prices  
in Nominal Dollars  
2007–2021**

**Figure 4-1.**



**Table 4-1a. (In Physical Units)**

Year	Coal	Distillate <sup>1</sup>	Kerosene	Propane	Natural Gas	Electricity	Wood	GDP Deflator <sup>2</sup>
	\$/Ton	Cents/Gal.	Cents/Gal.	Cents/Gal.	\$/Mcf	Cents/kWh	\$/Cord	2020=1
2007	\$105.05	278.05	289.85	243.95	\$15.77	170.98	\$139.40	0.765
2008	\$0.00	342.53	365.31	285.69	\$16.86	183.09	\$171.80	0.795
2009	\$0.00	260.56	281.21	259.02	\$15.10	175.00	\$129.00	0.792
2010	\$0.00	301.14	320.90	274.73	\$14.04	187.42	\$152.20	0.805
2011	\$0.00	355.22	379.76	308.52	\$13.64	182.61	\$183.00	0.830
2012	\$0.00	394.69	399.87	288.07	\$12.87	176.16	\$203.80	0.847
2013	\$0.00	388.78	400.68	285.42	\$12.41	187.93	\$199.60	0.860
2014	\$0.00	379.23	402.84	315.01	\$12.53	200.73	\$194.60	0.874
2015	\$0.00	264.87	224.78	251.44	\$11.25	185.37	\$134.20	0.875
2016	\$0.00	227.64	179.15	246.97	\$10.92	175.75	\$114.60	0.886
2017	\$0.00	252.62	224.10	293.10	\$12.09	180.29	\$128.20	0.905
2018	\$0.00	278.88	316.85	318.99	\$12.44	185.20	\$141.80	0.927
2019	\$0.00	264.46	302.27	274.36	\$12.71	179.40	\$136.40	0.943
2020	\$0.00	216.38	196.29	239.42	\$12.86	183.63	\$112.80	0.955
2021	\$0.00	255.39	309.56	290.27	\$13.87	194.83	\$0.00	1.000

**Table 4-1b. (In \$/Million Btu)**

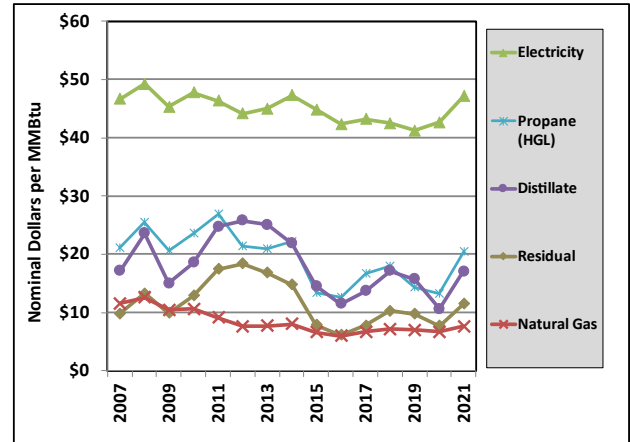
Year	Coal	Distillate <sup>1</sup>	Kerosene	Propane	Natural Gas	Electricity	Wood	GDP Deflator <sup>2</sup>
	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	2020=1
2007	\$4.76	\$20.19	\$21.47	\$26.71	\$15.36	\$50.11	\$6.97	0.765
2008	\$0.00	\$24.89	\$27.06	\$31.28	\$16.42	\$53.66	\$8.59	0.795
2009	\$0.00	\$18.93	\$20.83	\$28.36	\$14.73	\$51.29	\$6.45	0.792
2010	\$0.00	\$21.89	\$23.77	\$30.08	\$13.72	\$54.93	\$7.61	0.805
2011	\$0.00	\$25.83	\$28.13	\$33.78	\$13.35	\$53.52	\$9.15	0.830
2012	\$0.00	\$28.71	\$29.62	\$31.54	\$12.56	\$51.63	\$10.19	0.847
2013	\$0.00	\$28.28	\$29.68	\$31.25	\$12.07	\$55.08	\$9.98	0.860
2014	\$0.00	\$27.59	\$29.84	\$34.49	\$12.13	\$58.83	\$9.73	0.874
2015	\$0.00	\$19.28	\$16.65	\$27.53	\$10.84	\$54.33	\$6.71	0.875
2016	\$0.00	\$16.57	\$13.27	\$27.04	\$10.51	\$51.51	\$5.73	0.886
2017	\$0.00	\$18.43	\$16.60	\$32.05	\$11.66	\$52.84	\$6.41	0.905
2018	\$0.00	\$20.30	\$23.47	\$34.88	\$11.98	\$54.28	\$7.09	0.927
2019	\$0.00	\$19.25	\$22.39	\$30.00	\$12.22	\$52.58	\$6.82	0.943
2020	\$0.00	\$15.75	\$14.54	\$26.18	\$12.38	\$53.82	\$5.64	0.955
2021	\$0.00	\$18.59	\$22.93	\$31.74	\$13.35	\$57.10	\$0.00	1.000

<sup>1</sup> Home heating oil.

<sup>2</sup> To convert prices to 2021 dollars, divide the selected price by the deflator factor in the same row.

**New York State  
Commercial Energy Prices  
in Nominal Dollars  
2007–2021**

**Figure 4-2.**



**Table 4-2a. (In Physical Units)**

Year	Coal	Distillate <sup>1</sup>	Residual	Kerosene	Propane (HGL)	Natural Gas	Electricity	GDP Deflator <sup>2</sup>
	\$/Ton	Cents/Gal.	\$/bbl	Cents/Gal.	Cents/Gal.	\$/Mcf	Cents/kWh	2020=1
2007	\$60.91	236.32	\$61.74	289.85	193.17	\$11.85	159.17	0.765
2008	\$103.43	324.51	\$83.43	365.31	233.08	\$12.93	167.94	0.795
2009	\$132.54	206.88	\$62.49	281.21	188.06	\$10.75	154.77	0.792
2010	\$133.63	254.64	\$81.10	320.90	215.46	\$10.87	163.06	0.805
2011	\$127.73	340.37	\$109.46	379.76	245.69	\$9.28	158.08	0.830
2012	\$0.00	354.69	\$115.43	399.87	194.81	\$7.79	150.57	0.847
2013	\$0.00	344.38	\$105.87	400.68	191.89	\$7.95	153.54	0.860
2014	\$0.00	299.78	\$92.73	402.84	202.94	\$8.31	161.22	0.874
2015	\$0.00	199.34	\$49.23	224.78	122.39	\$6.89	153.06	0.875
2016	\$0.00	157.58	\$38.35	179.15	115.08	\$6.23	144.50	0.886
2017	\$0.00	187.24	\$49.04	224.10	152.18	\$6.90	147.50	0.905
2018	\$0.00	234.78	\$64.50	316.85	164.43	\$7.40	145.01	0.927
2019	\$0.00	216.24	\$61.49	302.27	130.78	\$7.26	140.57	0.943
2020	\$0.00	145.76	\$48.54	196.29	121.08	\$6.92	145.59	0.955
2021	\$0.00	233.96	\$72.24	309.56	187.29	\$7.96	160.74	1.000

**Table 4-2b. (In \$/Million Btu)**

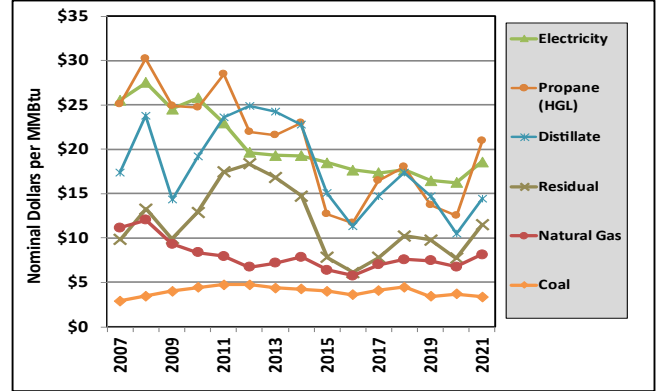
Year	Coal	Distillate <sup>1</sup>	Residual	Kerosene	Propane (HGL)	Natural Gas	Electricity	GDP Deflator <sup>2</sup>
	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	2020=1
2007	\$2.76	\$17.16	\$9.82	\$21.47	\$21.15	\$11.54	\$46.65	0.765
2008	\$4.49	\$23.58	\$13.27	\$27.06	\$25.52	\$12.59	\$49.22	0.795
2009	\$5.80	\$15.03	\$9.94	\$20.83	\$20.59	\$10.49	\$45.36	0.792
2010	\$5.91	\$18.51	\$12.90	\$23.77	\$23.59	\$10.63	\$47.79	0.805
2011	\$5.78	\$24.75	\$17.41	\$28.13	\$26.90	\$9.08	\$46.33	0.830
2012	\$0.00	\$25.80	\$18.36	\$29.62	\$21.33	\$7.60	\$44.13	0.847
2013	\$0.00	\$25.05	\$16.84	\$29.68	\$21.01	\$7.73	\$45.00	0.860
2014	\$0.00	\$21.81	\$14.75	\$29.84	\$22.22	\$8.04	\$47.25	0.874
2015	\$0.00	\$14.51	\$7.83	\$16.65	\$13.40	\$6.64	\$44.86	0.875
2016	\$0.00	\$11.47	\$6.10	\$13.27	\$12.60	\$6.00	\$42.35	0.886
2017	\$0.00	\$13.66	\$7.80	\$16.60	\$16.64	\$6.65	\$43.23	0.905
2018	\$0.00	\$17.09	\$10.26	\$23.47	\$17.98	\$7.13	\$42.50	0.927
2019	\$0.00	\$15.74	\$9.78	\$22.39	\$14.30	\$6.98	\$41.20	0.943
2020	\$0.00	\$10.61	\$7.72	\$14.54	\$13.24	\$6.66	\$42.67	0.955
2021	\$0.00	\$17.03	\$11.49	\$22.93	\$20.48	\$7.66	\$47.11	1.000

<sup>1</sup> Home heating oil.

<sup>2</sup> To convert prices to 2021 dollars, divide the selected price by the deflator factor in the same row.

**New York State  
Industrial Energy Prices  
in Nominal Dollars  
2007–2021**

**Figure 4-3.**



**Table 4-3a. (In Physical Units)**

Year	Coal	Distillate <sup>1</sup>	Residual	Kerosene	Propane (HGL)	Natural Gas	Electricity	GDP Deflator <sup>2</sup>
	\$/Ton	Cents/Gal.	\$/bbl	Cents/Gal.	Cents/Gal.	\$/Mcf	Cents/kWh	2020=1
2007	\$70.86	238.52	\$61.74	243.27	229.25	\$11.46	8.71	0.765
2008	\$83.57	327.12	\$83.43	306.86	275.46	\$12.37	9.39	0.795
2009	\$96.55	197.79	\$62.49	204.39	227.51	\$9.55	8.37	0.792
2010	\$106.87	263.72	\$81.10	251.24	225.23	\$8.54	8.79	0.805
2011	\$113.44	324.69	\$109.46	331.56	260.03	\$8.15	7.83	0.830
2012	\$118.45	342.18	\$115.43	346.55	200.48	\$6.87	6.69	0.847
2013	\$109.92	332.69	\$105.87	351.41	197.01	\$7.39	6.59	0.860
2014	\$105.96	313.25	\$92.73	332.64	209.98	\$8.13	6.58	0.874
2015	\$100.07	206.76	\$49.23	194.54	115.54	\$6.65	6.31	0.875
2016	\$89.39	154.97	\$38.35	152.28	106.95	\$5.96	6.03	0.886
2017	\$100.93	201.63	\$49.04	192.92	150.44	\$7.24	5.92	0.905
2018	\$110.54	238.08	\$64.50	241.92	164.80	\$7.87	6.02	0.927
2019	\$84.39	201.54	\$61.49	228.96	125.38	\$7.76	5.61	0.943
2020	\$90.18	143.84	\$48.54	169.16	114.04	\$7.03	5.54	0.955
2021	\$82.73	197.69	\$72.24	224.24	191.59	\$8.44	6.34	1.000

**Table 4-3b. (In \$/Million Btu)**

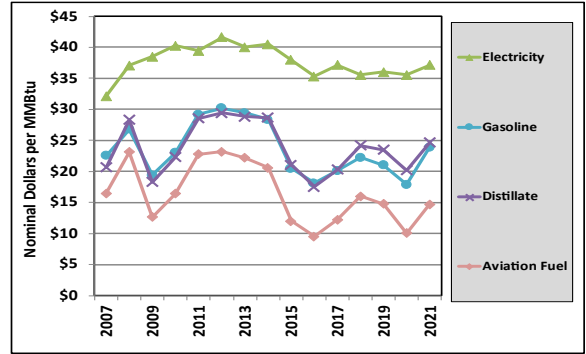
Year	Coal	Distillate <sup>1</sup>	Residual	Kerosene	Propane (HGL)	Natural Gas	Electricity	GDP Deflator <sup>2</sup>
	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	2020=1
2007	\$2.91	\$17.32	\$9.82	\$18.02	\$25.10	\$11.16	\$25.53	0.765
2008	\$3.44	\$23.77	\$13.27	\$22.73	\$30.16	\$12.04	\$27.53	0.795
2009	\$4.01	\$14.37	\$9.94	\$15.14	\$24.91	\$9.32	\$24.54	0.792
2010	\$4.44	\$19.17	\$12.90	\$18.61	\$24.66	\$8.35	\$25.76	0.805
2011	\$4.74	\$23.61	\$17.41	\$24.56	\$28.47	\$7.97	\$22.96	0.830
2012	\$4.73	\$24.89	\$18.36	\$25.67	\$21.95	\$6.70	\$19.62	0.847
2013	\$4.37	\$24.20	\$16.84	\$26.03	\$21.57	\$7.19	\$19.30	0.860
2014	\$4.24	\$22.79	\$14.75	\$24.64	\$22.99	\$7.87	\$19.28	0.874
2015	\$4.02	\$15.05	\$7.83	\$14.41	\$12.65	\$6.41	\$18.49	0.875
2016	\$3.60	\$11.28	\$6.10	\$11.28	\$11.71	\$5.74	\$17.67	0.886
2017	\$4.08	\$14.71	\$7.80	\$14.29	\$16.45	\$6.98	\$17.36	0.905
2018	\$4.48	\$17.33	\$10.26	\$17.92	\$18.02	\$7.58	\$17.64	0.927
2019	\$3.42	\$14.67	\$9.78	\$16.96	\$13.71	\$7.46	\$16.45	0.943
2020	\$3.67	\$10.47	\$7.72	\$12.53	\$12.47	\$6.77	\$16.25	0.955
2021	\$3.36	\$14.39	\$11.49	\$16.61	\$20.95	\$8.12	\$18.59	1.000

<sup>1</sup> Home heating oil.

<sup>2</sup> To convert prices to 2021 dollars, divide the selected price by the deflator factor in the same row.

**New York State  
Transportation Energy Prices  
in Nominal Dollars  
2007–2021**

**Figure 4-4.**



**Table 4-4a. (In Physical Units)**

Year	Motor Gasoline	Distillate <sup>1</sup>	Aviation Fuel <sup>2</sup>	Residual <sup>3</sup>	Electricity <sup>4</sup>	GDP Deflator <sup>5</sup>
	Cents/Gal.	Cents/Gal.	Cents/Gal.	\$/bbl	Cents/kWh	2020=1
2007	276.65	284.38	222.21	\$49.35	10.97	0.765
2008	326.97	389.19	312.26	\$75.95	12.64	0.795
2009	235.74	251.47	170.64	\$51.80	13.13	0.792
2010	277.84	307.06	221.81	\$68.28	13.74	0.805
2011	351.86	392.22	307.40	\$93.11	13.45	0.830
2012	364.05	404.87	312.66	\$96.82	14.20	0.847
2013	354.70	396.34	299.03	\$97.57	13.65	0.860
2014	341.79	393.94	278.24	\$82.93	13.82	0.874
2015	246.61	289.05	161.87	\$46.90	12.96	0.875
2016	218.38	240.97	128.12	\$35.21	12.05	0.886
2017	242.06	278.39	164.84	\$47.47	12.67	0.905
2018	267.50	332.19	216.00	\$62.81	12.14	0.927
2019	252.24	322.85	199.40	\$62.87	12.28	0.943
2020	214.83	277.51	135.54	\$45.83	12.14	0.955
2021	287.01	338.78	198.45	\$68.97	12.67	1.000

**Table 4-4b. (In \$/Million Btu)**

Year	Motor Gasoline	Distillate <sup>1</sup>	Aviation Fuel <sup>2</sup>	Residual <sup>3</sup>	Electricity <sup>4</sup>	GDP Deflator <sup>5</sup>
	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	2020=1
2007	\$22.54	\$20.65	\$16.46	\$7.85	\$32.14	0.765
2008	\$26.79	\$28.28	\$23.13	\$12.08	\$37.05	0.795
2009	\$19.41	\$18.27	\$12.64	\$8.24	\$38.49	0.792
2010	\$22.98	\$22.32	\$16.43	\$10.86	\$40.28	0.805
2011	\$29.16	\$28.52	\$22.77	\$14.81	\$39.41	0.830
2012	\$30.20	\$29.45	\$23.16	\$15.40	\$41.63	0.847
2013	\$29.43	\$28.83	\$22.15	\$15.52	\$40.01	0.860
2014	\$28.37	\$28.66	\$20.61	\$13.19	\$40.49	0.874
2015	\$20.47	\$21.04	\$11.99	\$7.46	\$37.97	0.875
2016	\$18.13	\$17.54	\$9.49	\$5.60	\$35.33	0.886
2017	\$20.12	\$20.31	\$12.21	\$7.55	\$37.12	0.905
2018	\$22.23	\$24.18	\$16.00	\$9.99	\$35.57	0.927
2019	\$20.97	\$23.50	\$14.77	\$10.00	\$36.00	0.943
2020	\$17.86	\$20.20	\$10.04	\$7.29	\$35.57	0.955
2021	\$23.87	\$24.66	\$14.70	\$10.97	\$37.13	1.000

1 Diesel  
 2 Summation of kerosene-based jet fuel and aviation gasoline.  
 3 Bunker fuel  
 4 Railroad use  
 5 To convert prices to 2021 dollars, divide the selected price by the deflator factor in the same row.