



DEPARTMENT OF ENERGY

Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice.

SUMMARY: In this notice, the U.S. Department of Energy (DOE) is forecasting the representative average unit costs of five residential energy sources for the year 2021 pursuant to the Energy Policy and Conservation Act (Act). The five sources are electricity, natural gas, No. 2 heating oil, propane, and kerosene.

DATES: The representative average unit costs of energy contained in this notice will become effective [*INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER*] and will remain in effect until further notice.

FOR FURTHER INFORMATION CONTACT:

Mr. John Cymbalsky, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, EE-5B, 1000 Independence Avenue, SW., Washington, DC 20585-0121, (202) 287-1692, ApplianceStandardsQuestions@ee.doe.gov.

Ms. Amelia Whiting, U.S. Department of Energy, Office of General Counsel, GC-33, 1000 Independence Avenue, SW., Washington, DC 20585-0103, (202) 586-2588, Amelia.Whiting@hq.doe.gov.

SUPPLEMENTARY INFORMATION: Section 323 of the Energy Policy and Conservation Act requires that DOE prescribe test procedures for the measurement of the estimated annual operating costs or other measures of energy consumption for certain consumer products specified in the Act. (42 U.S.C. 6293(b)(3)) These test procedures are found in Title 10 of the Code of Federal Regulations (CFR) part 430, subpart B.

Section 323(b)(3) of the Act requires that the estimated annual operating costs of a covered product be calculated from measurements of energy use in a representative average use cycle or period of use and from representative average unit costs of the energy needed to operate such product during such cycle. (42 U.S.C. 6293(b)(3)) The section further requires that DOE provide information to manufacturers regarding the representative average unit costs of energy. (42 U.S.C. 6293(b)(4)) This cost information should be used by manufacturers to meet their obligations under section 323(c) of the Act. Most notably, these costs are used to comply with Federal Trade Commission (FTC) requirements for labeling. Manufacturers are required to use the revised DOE representative average unit costs when the FTC publishes new ranges of comparability for specific covered products, 16 CFR part 305. Interested parties can also find information covering the FTC labeling requirements at <https://www.ftc.gov/appliances>.

DOE last published representative average unit costs of residential energy in a *Federal Register* notice entitled, “Energy Conservation Program for Consumer Products: Representative Average Unit Costs of Energy”, dated March 17, 2021, 86 FR 14618.

On **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the cost figures published in this notice will become effective and supersede those cost figures published on March 17, 2021. The cost figures set forth in this notice will be effective until further notice.

DOE's Energy Information Administration (EIA) has developed the 2021 representative average unit after-tax residential costs found in this notice. These costs for electricity, natural gas, No. 2 heating oil, and propane are based on simulations used to produce the August 2021, EIA *Short-Term Energy Outlook* (EIA releases the *Outlook* monthly). The representative

average unit after-tax cost for kerosene is derived from its price relative to that of heating oil, based on the 2010 to 2013 averages of the U.S. refiner price to end users, which include all the major energy-consuming sectors in the U.S. for these fuels. The source for these price data is the July 2021, *Monthly Energy Review* DOE/EIA-0035(2021/7). The representative average unit after-tax cost for propane is derived from its price relative to that of heating oil, based on the 2021 averages of the U.S. residential sector prices found in the *Annual Energy Outlook 2021*, AEO2021) (February 3, 2021). The *Short-Term Energy Outlook*, the *Monthly Energy Review*, and the *Annual Energy Outlook* are available on the EIA website at <https://www.eia.doe.gov>. For more information on the data sources used in this Notice, contact the National Energy Information Center, Forrestal Building, EI-30, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-8800, email: infoctr@eia.doe.gov.

The 2021 representative average unit costs under section 323(b)(4) of the Act are set forth in Table 1, and will become effective [*INSERT DATE 30 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER*]. They will remain in effect until further notice.

Signing Authority

This document of the Department of Energy was signed on August 20, 2021, by Kelly Speakes-Backman, Principal Deputy Assistant Secretary and Acting Assistant Secretary for Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, DC, on August 20, 2021.

Trenea V. Garrett,
Federal Register Liaison Officer,
U.S. Department of Energy.

Table 1 -- Representative Average Unit Costs of Energy for Five Residential Energy Sources (2021)

Type of energy	Per million Btu ¹	In commonly used terms	As required by test procedure
Electricity	\$39.83	13.59¢/kWh ^{2,3}	\$0.136/kWh
Natural Gas	\$10.93	\$1.093/therm ⁴ or \$11.36/MCF ^{5,6}	\$0.00001093/Btu
No. 2 Heating Oil	\$21.62	\$2.97/gallon ⁷	\$0.00002162/Btu
Propane	\$21.06	\$1.92/gallon ⁸	\$0.00002106/Btu
Kerosene	\$25.59	\$3.45/gallon ⁹	\$0.00002559/Btu

Sources: U.S. Energy Information Administration, *Short-Term Energy Outlook* (August 10, 2021), *Annual Energy Outlook* (February 3, 2021), and *Monthly Energy Review* (July 27, 2021).

Notes: Prices include taxes.

1. Btu stands for British thermal units.

2. kWh stands for kilowatt hour.

3. 1 kWh = 3,412 Btu.

4. 1 therm = 100,000 Btu.

5. MCF stands for 1,000 cubic feet.

6. For the purposes of this table, one cubic foot of natural gas has an energy equivalence of 1,039 Btu.

7. For the purposes of this table, one gallon of No. 2 heating oil has an energy equivalence of 13,738 Btu.

8. For the purposes of this table, one gallon of liquid propane has an energy equivalence of 91,333 Btu.

9. For the purposes of this table, one gallon of kerosene has an energy equivalence of 135,000 Btu.