



DEPARTMENT OF ENERGY

Energy Information Administration

Agency Information Collection

AGENCY: U.S. Energy Information Administration (EIA), U.S. Department of Energy (DOE).

ACTION: Notice and request for OMB review and comment.

SUMMARY: EIA invites public comment on the reinstatement with changes to the Residential Energy Consumption Survey (RECS) Forms EIA 457-A, D, E, F, and G under OMB Control Number 1905-0092, as required under the Paperwork Reduction Act of 1995. RECS collects data on energy characteristics, consumption, and expenditures for the residential sector of the United States and is comprised of five forms including: Form EIA 457-A Household Survey, Form EIA 457-D Energy Supplier Survey: Household Propane Usage, Form EIA 457-E Energy Supplier Survey: Household Electricity Usage, Form EIA 457-F, Energy Supplier Survey: Household Natural Gas Usage, Form EIA 457-G Energy Supplier Survey: Household Fuel Oil or Kerosene Usage. These forms will be used to collect information in calendar years 2024 and 2025 and will be used to produce household energy usage estimates for the reference year 2024.

DATES: EIA must receive all comments on this proposed information collection no later than **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. If you anticipate that you will be submitting comments but find it difficult to do so within the period allowed by this notice, please advise the OMB Desk Officer of your intention to make a submission as soon as possible. The Desk Officer may be telephoned at (202) 881-8585.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to

www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under 30-day Review - Open for Public Comments" or by using the search function.

FOR FURTHER INFORMATION CONTACT: Chip Berry, U.S. Energy Information Administration, by telephone at (202) 586-5543, or by email at chip.berry@eia.gov. The proposed forms and instructions are available on EIA's website at www.eia.gov/survey/#eia-457.

SUPPLEMENTARY INFORMATION:

This information collection request contains:

- (1) *OMB No.*: 1905-0092;
- (2) *Information Collection Request Title*: Residential Energy Consumption Survey;
- (3) *Type of Request*: Reinstatement with changes;
- (4) *Purpose*: The RECS is a nationwide study of energy use in housing units and includes a series of data collections from households and household energy suppliers. RECS results include official statistics about the energy characteristics, consumption, and expenditures of U.S. homes. In addition to statistics produced directly from surveys of households and energy suppliers, EIA leverages the RECS survey information to model and produce energy end-use estimates (e.g., natural gas water heating consumption). EIA has conducted the RECS periodically since 1978 and the 2024 RECS will be the 16th data collection for the program.

Form EIA 457-A: Household Survey collects information on the presence and characteristics of a wide range of energy-consuming devices in homes, including space heating and cooling equipment, appliances, and electronics. The Household Survey also asks respondents about key structural features and demographic characteristics that impact energy usage. Forms EIA 457-D, E, F, and G: Energy Supplier Surveys collect monthly electricity and natural gas billing data from energy suppliers (e.g., utilities), and

periodic propane and fuel oil delivery data from bulk fuel suppliers provided by Household Survey respondents.

RECS is integral to EIA's mandate to collect and publish energy end-use consumption data. RECS estimates represent the most comprehensive national and state-level results available on energy consumption in homes. RECS is a key, benchmark data series that allows policy makers and program implementers in both public and private organizations to analyze trends in energy consumption for the residential sector. RECS fulfills planning, analyses, and decision-making needs of DOE, other Federal agencies, state governments, utilities, researchers, and energy analysts in the private sector.

In addition to the annualized RECS estimates that EIA has produced for all prior RECS studies, EIA intends to release sub-annual (e.g., monthly) energy consumption and expenditures estimates from the 2024 RECS. These estimates would be derived from monthly energy bills collected on the Energy Supplier Survey forms and modeled energy end-use outputs.

(4a) Proposed Changes to Information Collection: For the 2024 RECS, EIA intends to field a series of local-area samples in select metropolitan statistical areas around the country. These additional samples in 10 local areas will support EIA's efforts to expand its demand-side energy data program to produce energy-use results for more granular geographic and demographic communities.

EIA proposes to update the Household Survey to improve response quality and update questions to reflect current energy trends. EIA is proposing the following questionnaire updates based on data quality analysis of the prior RECS, changes in the residential housing market, and stakeholder feedback. Proposed new questions reflect EIA's effort to collect the most relevant information necessary to estimate household energy use and to inform energy end-use estimation. Proposed question revisions should improve response quality, minimize reporting burden, and reflect changes in technology.

EIA proposes deleting questions with poor response quality from the last collection or where data are now available from alternative sources.

Household Survey (EIA 457-A)

Question additions and reinstatements (sections in parentheses):

- (Your Home) Added a question asking how many months a respondent's pool is heated. Pool heating can account for considerable energy use for a home and this question will improve EIA's ability to model pool energy end-use consumption and expenditures.
- (Appliances) Added a question asking about the presence of air fryers to the small kitchen appliances section.
- (Electronics) Added a question asking about the presence of external computer monitors.
- (Space Heating) Added a set of questions asking about third heating sources used in the home.
- (Space Heating) Added a question asking respondents if they use their heat pump for cooling as well as heating. This should improve our estimates of heat pumps used for both heating and cooling.
- (Space Heating and Air Conditioning) Added a question to each section about how people use their heating and cooling equipment. RECS asked this question in the 2009 survey about air conditioning only, but it would be useful to reinstate this for heating, as well, to understand how often respondents use their equipment. This is useful for modeling energy consumption for space heating and space cooling, which are the largest end uses in the household.

- (Water Heating) Added a question about the presence of heat pump/hybrid water heaters. Heat pump/hybrid water heaters are an emerging technology and can result in significant energy savings for a household if installed.
- (Water Heating) Added a question about the fuel for solar water heater backups. RECS asks about the presence of solar water heaters, but no information is currently collected about the fuel used to supplement or backup the solar water heaters. This will improve EIA's modeling of water heating end-use consumption.
- (Energy Bills) Reinstated a series of questions for bulk fuels asking respondents to estimate the amount that had been delivered in the past year. These questions are used for validating and imputing bulk fuel consumption.
- (Other Energy Uses) Added a question about the number of solar panels if a respondent indicates that they have solar panels.
- (Other Energy Uses) Added a question about battery storage for solar.
- (Other Energy Uses) Added a question asking about the number of electric vehicles owned or leased. This replaces the question from the 2020 RECS that asked only if a respondent had an electric vehicle.
- (Energy Assistance) Added a question related to inability to pay an energy bill in part or in full. While the RECS gathers information about people forgoing expenses to help pay for energy bills and information about the receipt of disconnection notices, there is a gap in knowledge about people who still face difficulties with energy bills but pay enough to not receive a notice.
- (Final Questions) Added a question asking respondents for their inverter company if they have solar generation. To improve our electricity consumption estimates

for homes with solar, EIA will pilot a data collection from those companies concurrent with the Energy Supplier Survey data collection.

Revisions:

- (Your Home) Changed questions asking how many months your pool and hot tub were “in use” to how many months the pool pump/hot tub were “turned on.” This change should better capture when pool equipment is running.
- (Appliances) Changed the phrasing of a question option for the location of the second refrigerator. “Main living area” was confusing and unclear. The option will be reworded as “anywhere/somewhere else in the house.”
- (Appliances) Provided an option for dual-fuel ranges to have fuels other than natural gas. Propane dual-fuel ranges are common enough to warrant this change.
- (Appliances) Removed the word “rare” from the induction cooktop question.
- (Appliances) Revised wording on the question asking about the number of microwaves from “have” to “use.” This change will better capture microwaves that are actively drawing power.
- (Electronics) Collapsed TV type categories into fewer options to reflect current technologies.
- (Space Heating) Added fireplace as a response option for main heating equipment. Similarly, added more response options to secondary heating equipment so that it is consistent with main heating equipment options.
- (Space Heating) Allow respondents to indicate using both wood cords and wood pellets.

- (Energy Bills) Adjusted the question focused on energy use for “non-household purposes.”
- (Other Energy Uses) Revised the generator question to separately capture presence of whole-home or portable generators.
- (Household Characteristics) Revised the gender question as per guidance in OMB Executive Order 14075 (June 2022).
- (Household Characteristics) Adjusted the response categories for the household income question to reflect current income levels.

Deletions:

- (Your Home) Removed a question asking respondents if they have natural gas available in their neighborhood. Our evaluation of missing rates and overall response quality indicates that many respondents who do not use natural gas are not aware if they have natural gas available to them.
- (Appliances) Removed a question about the number of months a respondent used a secondary refrigerator. Responses have been inconsistent, and 2020 RECS data indicate that nearly all households with a second refrigerator use them all year.
- (Electronics) Removed a series of questions about the purpose of TV usage. This series was added to the 2020 RECS, but EIA determined there is little analytical value of this information with regard to energy usage in homes.
- (Electronics) Removed a question asking about VCRs. Few respondents have them and they do not consume a lot of energy.

- (Electronics) Removed a series of questions about the use of equipment for teleworking. These questions were added at the beginning of the COVID-19 pandemic to assess a potential change in household behavior due to the pandemic.
- (Thermostats and Temperatures) Removed a series of questions asking how respondents control their thermostats. This information was not used in modeling end-use energy consumption. RECS plans to replace this question with the above addition about how people use their heating and cooling equipment.
- (Water Heating) Removed a question about whether respondents use a blanket for their water heater.
- (Other Energy Uses) Removed a series of questions about non-solar renewable energy. On-site residential wind energy generation and combined heat and power systems are rare. We have retained a question about presence of on-site solar.
- (Household Characteristics) Removed a question asking about the total number of household members. RECS already asks questions about how many adults and how many children live in the household and gives those questions primacy.
- (Final Questions) Removed a series of questions asking respondents in large apartment buildings about their landlord information. This was used in the 2020 RECS to conduct a Multifamily Buildings Study, which has been discontinued.

Energy Supplier Surveys (EIA 457 D-G)

EIA proposes to reduce the number of months of bills or fuel deliveries collected on the Energy Supplier Survey forms from 24 months to 20 months. Collecting 24 months of bills for the 2020 RECS was necessary to evaluate impacts of the COVID-19 pandemic on energy use for households. The additional four months of bills are no

longer needed, and 20 months of billing and fuel delivery data is sufficient for 2024 RECS estimation.

(5) *Annual Estimated Number of Respondents: 5,641;*

(6) *Annual Estimated Number of Total Responses: 5,641;*

(7) *Annual Estimated Number of Burden Hours: 3,909;*

(8) *Annual Estimated Reporting and Recordkeeping Cost Burden:* The annualized cost of the burden hours is estimated to be \$356,344 (3,909 hours times \$91.16 per hour). The burden estimates are annualized over the four-year project cycle. EIA estimates that respondents will have no additional costs associated with the surveys other than the burden hours and the maintenance of the information during the normal course of business.

Comments are invited on whether or not: (a) The proposed collection of information is necessary for the proper performance of agency functions, including whether the information will have a practical utility; (b) EIA's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used, is accurate; (c) EIA can improve the quality, utility, and clarity of the information it will collect; and (d) EIA can minimize the burden of the collection of information on respondents, such as automated collection techniques or other forms of information technology.

Statutory Authority: 15 U.S.C. 772(b) and 42 U.S.C. 7101 *et seq.* Section 13(b) of the Federal Energy Administration Act of 1974, Pub. L. 93-275, codified as 15 U.S.C. 772(b) and the DOE Organization Act of 1977, Pub. L. 95-91, codified at 42 U.S.C. 7101 *et seq.*

Signed in Washington, DC, on May 22, 2024.

Samson A. Adeshiyan,

*Director,
Office of Statistical Methods and Research,
U. S. Energy Information Administration.*

