



DEPARTMENT OF ENERGY

U.S. Energy Information Administration

Agency Information Collection Proposed Extension

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

ACTION: Notice and request for comments.

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 produce household energy usage estimates for calendar year 2024.

DATES: EIA must receive all comments on this proposed information collection no later than **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]**. If you anticipate any difficulties in submitting your comments by the deadline, contact the person listed in the **ADDRESSES** section of this notice as soon as possible.

ADDRESSES: Submit comments electronically to Chip Berry by email at chip.berry@eia.gov.

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 Household Survey-respondent energy suppliers (*e.g.*, utilities), and periodic propane and fuel oil delivery data from bulk fuel suppliers.

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 annual RECS estimates produced for all prior 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 and county areas around the country. These additional samples in approximately 8-10 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 reduce respondent burden, 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:

- (Your Home) Add a question asking how many months a respondent's pool is heated. Heating pools can use a significant amount of energy, so knowing the

- extent of heating will facilitate better pool energy consumption and expenditures estimation.
- (Space Heating) Reinstate a follow-up question for respondents using heat pumps for space heating that asks if the equipment is also used for air conditioning. This question allows EIA to better capture heat pumps used for both space heating and air conditioning.
 - (Space Heating and Air Conditioning) Reinstate a question in the air-conditioning section that asks how much respondents use their cooling equipment, as well as add a similar question in the space heating section. These behavioral questions are important for EIA to gauge the use of energy-intensive equipment relative to similar homes, especially in temperate climates or climates where heating or cooling may not be used often.
 - (Water Heating) Add a question about the presence of heat pump water heaters. Heat pump water heaters are an emerging technology that can significantly impact consumption and expenditures in a home.
 - (Water Heating) Add a question about the backup fuel for solar thermal water heaters. EIA asks about the presence of solar thermal water heaters, but no information is currently collected about backup fuels for that equipment. This question will support more accurate estimates of household water heating consumption and expenditures.
 - (Energy Bills) Add a question about the number of solar panels if a respondent indicates that they have on-site solar generation. Expanding the series of questions to better capture the size of a home's solar array will improve EIA's estimates of on-site solar generation and related consumption.
 - (Electric Vehicles) Add a question asking about the number of electric vehicles owned.

- (Energy Insecurity) Add a question about a respondent's inability to pay the full amount of energy bills. While EIA gathers information about people forgoing expenses to help pay for energy bills and information about the receipt of disconnection notices, there's a gap in knowledge about people who still face difficulties with energy bills but pay enough to not receive a notice.
- (Final Questions) Reinstate a series of questions on the consumption of propane and fuel oil. This reinstated series will supplement information collected from energy suppliers, filling in gaps in the data collection and allowing for additional quality checks for bulk fuel consumption and expenditures.
- (Final Questions) Ask respondents for their solar company, also known as an inverter company or third-party operator, if they have on-site solar generation. This question may be used to capture solar capacity and generation directly from the data source and improve EIA's estimates of consumption and expenditures for homes with solar panels.

Revisions:

- (Appliances) Add an option to all appliance-usage questions for "rarely used/used less than once a week." This additional response option will allow EIA to differentiate between low, but consistent usage (*e.g.*, "once a week") and near-zero or infrequent usage of clothes dryers, dishwashers, and cooking equipment.
- (Appliances) Add a response option to the range fuel question. Propane dual-fuel ranges are common enough to warrant this change and should be differentiated from natural gas dual-fuel ranges.
- (Electronics) Convert the question about external monitors to a numeric response question. In the 2020 RECS, EIA included a question about use of external monitors as part of the series of questions related to teleworking. This question

will be moved from that series and added to the list of questions about computers.

We will also modify the question to ask for a numeric response.

- (Space Heating) Reinstate questions that capture third sources of space heating. These questions were removed for the 2020 self-administered questionnaire to conserve space on the paper instrument. However, there were respondents in the 2020 RECS who indicated using more than two types of equipment. Space heating is the most energy-intensive end-use in homes and capturing these additional heating sources will improve EIA's estimates of heating consumption and expenditures.
- (Space Heating) Reinstate a response option for a fireplace as a main heating equipment source. For the 2020 RECS, enough respondents indicated this as a main heating source in open-ended responses to warrant adding this option to the response list.
- (Space Heating) Reinstate a more comprehensive response option list for secondary heating equipment. For 2020 RECS, enough respondents indicated additional equipment in open-ended responses to warrant adding these options to the response list. This equipment included furnaces and heat pumps as secondary space heating sources.
- (Space Heating) Allow respondents to indicate using both wood cords and wood pellets.
- (Energy Bills) Rephrase the question on whether respondents have an outlet that is accessible by a car. Currently, the question asks about outlets in range of where a respondent parks their car, but if the respondent doesn't have a car, then they might have difficulty answering.
- (Energy Bills) Reinstate a series of questions about miscellaneous devices that typically consume large amounts of energy if used by a household. These devices

- include air purifiers, water softeners, sump pumps, well pumps, power tools, large aquariums, and engine block heaters.
- (Electric Vehicles) Revise the detailed list of response options about where the respondent charges an electric vehicle. EIA intends to implement the more limited response options suggested as part of EIA's testing of EV-owning households.
 - (Household Characteristics) Revise household income response options to reflect more current distributions of income ranges.

Deletions:

- (Your Home) Remove the question asking about the total number of household members. This question is redundant, because EIA already asks questions about how many adults and how many children live in the home. We give these detailed questions primacy when there are inconsistencies in responses.
- (Your Home) Remove the question asking respondents if they had natural gas available in their neighborhood. This question is only relevant to respondents who did not already report using natural gas. Response quality issues, including high missing rates and inconsistent responses, warrant removal.
- (Appliances) Remove a question about the number of months a respondent used a secondary refrigerator. Responses were inconsistent and it is unlikely that respondents only use refrigerators for part of the year.
- (Appliances) Remove a series of questions about smaller kitchen appliances. For most households, toasters, blenders, slow cookers, and similar food-preparation devices do not constitute a significant portion of energy consumption and expenditures. EIA intends to use the space in the questionnaire occupied by these questions for ones about more energy-intensive devices.
- (Electronics) Remove a series of questions about the use of equipment for teleworking and online education. These questions were added at the beginning of

the COVID-19 pandemic to only assess a potential change in household consumption due to the pandemic. We will retain the question about external monitors, with modifications.

- (Electronics) Remove the VCR question. This technology is no longer used by a significant number of households and their energy consumption accounts for very little of the total energy use in homes.
- (Electronics) Remove questions about how TVs are used. These questions were added for the 2020 RECS but were not used by EIA to estimate TV and TV peripheral energy use. The questions about the number of hours of use of each TV are sufficient for EIA's energy-use estimation.
- (Water Heating) Remove a question about whether respondents use a water-heater blanket. This question has had repeated data quality issues, included a high missing rate in the 2020 RECS.
- (Energy Bills) Remove a series of questions about non-solar renewable energy. On-site residential wind energy generation and combined heat and power systems are rare. EIA will continue to consider these questions in the future.
- (Household Characteristics) Remove the question asking about the sex of the respondent. Analysis has shown that the sex of the respondent is not predictive of differences in household energy use. Additionally, the question as currently worded is measuring an outdated binary gender construct.

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 16 months. Collecting 24 months of bills for the 2020 RECS was necessary to evaluate impacts of the COVID-19 pandemic on energy use in households. The additional eight months

of bills are no longer needed, and 16 months of billing and fuel delivery data is sufficient for 2024 RECS estimation.

Pretesting Interviews

- EIA would like to conduct up to 100 pretesting interviews to assess the clarity of the RECS questions and instructions. This will help improve the next iteration of RECS by obtaining respondent feedback regarding their experience completing RECS.

(5) *Annual Estimated Number of Respondents:* 6,390;

(6) *Annual Estimated Number of Total Responses:* 6,390;

(7) *Annual Estimated Number of Burden Hours:* 4,443;

(8) *Annual Estimated Reporting and Recordkeeping Cost Burden:* The annualized cost of the burden hours is estimated to be \$388,140 (4,443 hours times \$87.36 per hour). 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 October 26, 2023.

Samson A. Adeshiyan,
Director,
Office of Statistical Methods and Research,
U. S. Energy Information Administration.

[FR Doc. 2023-23999 Filed: 10/30/2023 8:45 am; Publication Date: 10/31/2023]