

**SUPPORTING STATEMENT FOR FORM EIA-886**  
*Annual Survey of Alternative Fueled Vehicle Suppliers & Users*  
*OMB No. 1905-0191*

## **INTRODUCTION**

The Energy Information Administration (EIA) of the U.S. Department of Energy (DOE) requests approval for a revision and 3-year extension to the *Annual Survey of Alternative Fueled Vehicle Suppliers and Users, Form EIA-886 (OMB No. 1905-0191)*.

Form EIA-886 is an annual survey that collects information on:

- The number and type of Alternative Fueled Vehicles (AFVs) and other advanced technology vehicles that vehicle suppliers made available in the previous calendar year and plan to make available in the following calendar year;
- The number, type and geographic distribution of AFVs in use in the previous calendar year;
- The amount and distribution of each type of Alternative Transportation Fuel (ATF) consumed in the previous calendar year.

EIA-886 data are collected from suppliers and users of AFVs. EIA uses data from these groups as a basis for estimating total AFV and ATF use in the U.S.

The objectives of the *Annual Survey of Alternative Fueled Vehicle Suppliers and Users* are to:

1. Comply with Section 503 of the Energy Policy Act of 1992 (EPACT92) that requires EIA to report on specific aspects of alternative fueled vehicles and alternative transportation fuels.
2. Satisfy public requests for information on AFVs and ATFs; and
3. Provide Congress with a measure of the extent to which the objectives of EPACT92 are being achieved.

Revisions from the previously approved Form EIA-886 are:

1. The title of the survey is changed to *Annual Survey of Alternative Fueled Vehicles* for simplification.
2. Section 1 Identification requests an additional level of supervisory contact information for more effective respondent follow up.

The information collection proposed in this supporting statement has been reviewed in light of applicable information quality guidelines. It has been determined that the information would be collected, maintained, and used in a manner consistent with the OMB, DOE, and EIA information quality guidelines.

## A. JUSTIFICATION

### A-1. Legal Authority

The legal authority for this data collection effort is provided by the following provisions:

Section 13(b) of the Federal Energy Administration Act of 1974, Pub. L. No. 93-275, (FEA Act), (15 U.S.C. § 772 (b)) states:

"All persons owning or operating facilities on business premises who are engaged in any phase of energy supply or major energy consumption shall make available to the [Secretary] such information and periodic reports, records, documents, and other data relating to the purposes of this Act, including full identification of all data and projections as to source, time, and methodology of development, as the [Secretary] may prescribe by regulation or order as necessary or appropriate for the proper exercise of functions under this Act."

The functions of the FEA Act are set forth in Section 5(b) of same, (15 U.S.C. § 764 (b)), which states that the [Secretary] shall, to the extent authorized by Section 5(a) of the FEA Act:

"...(2) assess the adequacy of energy resources to meet demands in the immediate and longer range future for all sectors of the economy and for the general public;...

(4) develop plans and programs for dealing with energy production shortages;

(5) promote stability in energy prices to the consumer, promote free and open competition in all aspects of the energy field, prevent unreasonable profits within the various segments of the energy industry, and promote free enterprise;

(6) assure that energy programs are designed and implemented in a fair and efficient manner so as to minimize hardship and inequity while assuring that the priority needs of the Nation are met;... "

As the authority for invoking Section 5(b) above, subsection 5(a) of the FEA Act (15 U.S.C. § 764 (a)) states:

"Subject to the provisions and procedures set forth in this Act, the [Secretary] shall be responsible for such actions as are taken to assure that adequate provision is made to meet the energy needs of the Nation. To that end, he shall make such plans and direct and conduct such programs related to the production, conservation, use, control, distribution, rationing, and allocation of all forms of energy as are appropriate in connection with only those authorities or functions ...

(3) otherwise specifically vested in the [Secretary] by the Congress."

Authority for invoking Section 5(a)(3) of the FEA Act is provided in turn by Section 503(b)(2) of the Energy Policy Act of 1992, Pub. L. No. 102-486 (EPACT92), (42 U.S.C. § 13253) which charges the Secretary with responsibilities to estimate:

- (1) the number of each type of alternative fueled vehicle likely to be in use in the United States;
- (2) the probable geographic distribution of such vehicles;
- (3) the amount and distribution of each type of replacement fuel; and
- (4) the greenhouse gas emissions likely to result from replacement fuel use.

## **A-2. Needs for and Uses of the Data**

Section 503 of EPACT92 requires DOE/EIA to collect information on the supply of AFVs; the geographic distribution of these vehicles; the amounts and types of replacement fuels consumed; and the greenhouse gas emissions likely to result from replacement fuel usage. These data are needed to determine if sufficient quantities of AFVs are available for purchase by Federal and State agencies and fuel suppliers, and to provide Congress with a measure of the extent to which the objectives of EPACT92 are being achieved. The data will serve as a market analysis tool for Congress, Federal/State agencies, AFV suppliers, vehicle fleet managers, and other interested organizations and persons. These data are also needed to satisfy vast public requests for detailed information on AFVs and ATFs (in particular, the number of AFVs distributed by State as well as the amount and location of the ATFs being consumed).

EIA publishes summary information from the Form EIA-886 database in an annual report on EIA's website ([www.eia.doe.gov](http://www.eia.doe.gov)). This report covers historical and projected supplies of AFVs as well as AFV usage by selected user groups and estimates of total U.S. AFV counts and U.S. consumption of ATFs. These data provide baseline data for DOE's transportation sector energy models. They also provide the energy consumption measures for alternative transportation fuels in EIA's State Energy Data System. For example, EIA's National Energy Modeling System (NEMS) has a component model that forecasts transportation sector energy consumption and provides a framework for AFV policy and technology analysis. The data obtained from Form EIA-886 are used to improve the explanatory power of the NEMS Transportation Demand Model by allowing for greater detail in AFV type and characteristics representation.

## **A-3. Efforts to Reduce Burden on Respondents**

EIA has instituted a web-based data collection system for the Form EIA-886 that allows respondents to submit data electronically. This reduces the respondents' burden of completing and mailing paper survey forms. A significant feature of the web-based system is that a respondent's form is pre-filled with data from the previous year, so that the respondent needs only to verify and make updates, rather than keying in new data. The electronic system also provides online instructions, drop-down menus, edits, and auto-populate features that significantly reduce the time needed to complete the form. In addition, the system offers a bulk data upload option which allows the respondent to download an Excel spreadsheet that is formatted to EIA-886 data requirements, populate the spreadsheet easily, and upload the spreadsheet directly as their electronic submission. The web-based system then transfers that data electronically to populate the data entry screens without the need to key data. This is especially useful to respondents with large fleets in multiple states.

EIA encourages all its EIA-886 respondents to use the electronic system. To date, 80% of respondents use it to report. The remainder of respondents do not have internet access and/or prefer to use the paper form.

EIA has merged its data collection for Federal AFVs with that of other agencies. Federal Agencies now report their EIA-886 data via the Federal Automotive Statistical Tool (FAST), a multi-agency funded electronic reporting system developed to collect multiple data requirements under EPACT92 and Executive Order 13149. FAST is a web-based system with many features that reduce reporting time. FAST collapses three related data collections into one to significantly reduce the burden on agencies. While Federal Agencies do not comprise a large number of respondents, their reports take more time, on average, because of the large numbers of AFVs and the scattering of data across agencies. Data from over 5,000 sub-agencies are submitted to the FAST system and compiled to totals for the approximately 40 responding agencies.

#### **A-4A. Efforts to Identify Duplication**

This duplication review indicates that while a few other surveys of AFVs are conducted, including some under support from other parts of DOE, no other survey collects complete historical or short-term forecasts of the types and quantities of AFVs made available by AFV suppliers, nor collects the number, type, and geographical location of the AFVs along with the consumption of alternative fuels by these vehicles. Many of the other surveys conducted are for either a single geographic area or specific target audience such as Federal agencies. Furthermore, response rates for these surveys are typically well below 50 percent. In contrast, the current Form EIA-886 response rate for the 2006 survey year was 94 percent. There are many reasons for the differences in response rates, but a principal one is the fact that EIA-886 is the only mandatory survey of AFVs.

#### **A-4B. Comparisons with Similar Data**

Executive Order 13149 requires federal agencies with fleets of 20 or more vehicles to report to the Department of Energy information on “acquisitions of AFVs and conventional vehicles, consumption of alternative and petroleum fuels, and the average EPA combined fuel economy rating of annual light-duty vehicle acquisitions.” The Department of Energy and the General Services Administration developed FAST, an on-line tracking system for these data as well as entire inventory counts, planned and projected acquisitions, and mileage details. In 2001, EIA merged its data collection for Federal AFVs with this online system and Federal agencies now report their EIA-886 data through this system.

The DOE rulemaking, Alternative Fuel Transportation Program [10 CFR Part 490], requires that fuel providers and State government (or State agency) fleets gradually acquire AFVs in certain increasing percentages over time. The rulemaking also sets forth a credit program, establishes reporting procedures and sets forth enforcement procedures and provisions. In 2004, DOE announced that, although potentially allowed by EPACT92, the rule would not apply to local government and private fleets. The requirements apply only if a State government or fuel provider: 1) owns, operates, leases, or controls at least 50 light duty vehicles (LDVs) within the United States (excluding law enforcement vehicles, emergency motor vehicles and nonroad motor vehicles) and; 2) 20 of those LDVs are used primarily

within any Consolidated/Metropolitan Statistical Area and; 3) those same 20 LDVs are centrally fueled, or capable to be centrally fueled. The term “centrally fueled” means that a refueling infrastructure exists within reasonable traveling distance from the fleet. The void left by those organizations that are not required to report to the DOE or whose vehicles are exempted would make it very cumbersome, expensive, and detrimental to the overall quality of the data to use the rulemaking data and supplement it from other sources as a way to fulfill EPACT92’s mandates. Data on fleets exempt from the rulemaking are needed to accurately estimate total AFVs in use and ATF consumption and to satisfy vast public requests for detailed information on AFVs and ATFs , e.g., in determining where to locate a refueling facility. The Rulemaking only requires reporting of vehicle acquisitions. It is difficult to determine vehicle inventory, as needed by EIA, from acquisitions data. However, to reduce respondent burden, EIA’s electronic reporting system allows those subject to the rulemaking to submit the same data for EIA-886 as long as it fits EIA criteria.

DOE’s Clean Cities program tracks usage of AFVs through an annual survey of the activities of its designated coalitions. Designated coalitions cover only a portion of the U.S. In addition, response rates are typically low and accuracy is not verifiable because respondents frequently work on a voluntary basis.

#### **A-5. Provisions for Reducing Burden on Small Business**

The *Annual Survey of Alternative Fueled Vehicles* collects data from AFV suppliers and users of AFVs. Most conversion companies (from the AFV suppliers) would be classified as small businesses, but the number of conversion companies has declined in recent years. Also, since the AFV and ATF information will be collected from fleet operators, EIA does not expect many to be categorized as small business.

The small business response burden for this survey is minimal since most of the data requested are reported for vehicle certification, warranty, and insurance purposes. Respondents are given wide latitude concerning how Form EIA-886 data are to be submitted to EIA. Small businesses can use the new electronic data submission system that reduces reporting burden. For reporting planned AFV supply amounts in the "following calendar year," respondents are instructed to provide estimates based on available information at the time of report completion. This instruction will reduce the small business’ reporting burden by not requiring it to apply the rigorous forecasting methods that large businesses typically have at their disposal.

#### **A-6. Results of Collecting Data Less Frequently**

Section 503(b)(2) of EPACT92 mandates the annual collection of the data. Due to the volatility and rapidly changing nature of the AFV/ATF industry, it is important to monitor the progress of AFV manufacturing and ATF consumption on an annual basis.

#### **A-7. Special Circumstances**

There are no special circumstances that would require the *Annual Survey of Alternative Fueled Vehicles* to be conducted in a manner inconsistent with the guidelines in 5 CFR 1320.5.

## **A-8. Summary of Consultations Outside the Agency**

The EIA received one response to the February 21, 2007, (72 FR 7869) notice soliciting comments on AFV data collection requirements mandated by the EPACT92.

**Comment # 1:** the American Petroleum Institute (API), a national trade association involved in all aspects of the oil and natural gas industry, commented on April 23, 2007, that EIA should (1) collect data on the refueling behavior of operators of flexible fueled vehicles, (2) collect data on the location (county and state) where the AFV is most frequently used, (3) categorize annual fuel use by fuel type breaking down gasoline and alternative fuel, (4) ask the respondent why alternative fuel is not used in the AFV when no data are reported, and (5) update the vehicle type codes to reflect weight and size and align them to match the Vehicle Inventory and Use Survey (VIUS) conducted by the US Census Bureau.

**EIA Response:** Many of the items raised by API are in fact already covered by the current Form EIA-886, as explained below in the order addressed in their letter.

1. The Form EIA-886 currently collects data on the consumption of alternative fuel by requesting information on the fuel type, amount of fuel consumed and the unit of measurements (e.g., gallons, gasoline equivalent gallons, etc.). This includes flexible fueled vehicles.
2. Respondents that are users of AFVs are required to file geographic inventory data at the State level. In previous years, EIA attempted to collect data at a more detailed zip code level as a basis to aggregate data up to the county level; however, EIA found it too burdensome for respondents to report at a level lower than State.
3. In focus group studies conducted in 2001, EIA concluded that a majority of respondents could not track the breakdown between consumption of gasoline versus the alternative fuel when flexible or bi-fueled engine configurations were utilized.
4. Currently, when respondents cannot provide fuel consumption data to the survey's specifications, an explanation is required to complete submission of the form. In most circumstances, missing fuel consumption data was the result of unavailability of fuel in the respondent's area of operation.
5. The Form EIA-886 vehicle type codes do reflect weight class and size. For example, the vehicle type category "Trucks" contains three subcategories which denote light duty, medium duty, and heavy duty weight classes. Similarly, pickup trucks are categorized as light duty pickups and medium duty pickups. Since the Census Bureau ceased fielding VIUS in 2007, matching vehicle types between VIUS and the EIA-886 is a moot point.

**A-9. Remuneration:** No payment or gift will be given to respondents for completing the survey.

## **A-10. Provisions for Confidentiality of Information**

The information reported on Form EIA-886 will be protected and not disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), 5 U.S.C. §552, the DOE regulations, 10 C.F.R. §1004.11, implementing the FOIA, and the Trade Secrets Act, 18 U.S.C. §1905.

The Federal Energy Administration Act requires EIA to provide company-specific data to other Federal agencies when requested for official use. The information reported on this form may also be made available, upon request, to another component of the Department of Energy (DOE); to any Committee of Congress, the Government Accountability Office, or other Federal agencies authorized by law to receive such information. A court of competent jurisdiction may obtain this information in response to an order. The information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

Disclosure limitation procedures are applied to the statistical data published from EIA-886 survey regarding alternative fuel vehicles "planned to be made available in the following calendar year." This ensures that the risk of disclosure of identifiable information is very small.

For all other data published from the Form EIA-886, disclosure limitation procedures are not applied. Thus, there may be some statistics that are based on data from fewer than three respondents, or that are dominated by data from one or two large respondents. In these cases, it may be possible for a knowledgeable person to estimate the information reported by a specific respondent.

#### **A-11. Justification for Sensitive Questions**

No sensitive questions are asked on the *Annual Survey of Alternative Fueled Vehicles*.

#### **A-12. Estimate of Respondent Burden Hours and Cost**

The average annual respondent burden for Form EIA-886 is approximately 5.2 hours, calculated as follows:

50 Original Equipment Manufacturers x 3.0 hours = 150 hours  
25 AFV converters x 2.5 hours = 62.5 hours  
100 Users of AFVs and ATFs (complex fleets) x 30 hours = 3000 hours  
1900 Users of AFVs and ATFs (simple fleets) x 4 hours = 7600 hours

Total Burden = 10,812.5 hours for 2,075 respondents

#### **Total Annual Respondent Cost:**

The average annual respondent cost for Form EIA-886 is approximately \$307, calculated as follows:

Original Equipment Manufacturers (\$59 per hour x 150 hours = \$8,850)  
Conversion Companies (\$59 per hour x 62.5 hours = \$3,687.50)  
Users of AFVs and ATFs (\$59 per hour x 10,600 hours = \$625,400)

Total Cost = \$637,937.50

\*An average cost per hour of \$59 is used because that is the average loaded (salary plus benefits) cost for an EIA employee. EIA assumes that the survey respondent workforce completing surveys for EIA is comparable with the EIA workforce.

**A-13. Annual Reporting and Record keeping - Cost Burden to Respondents**

There are no additional (a) total capital and start-up costs; (b) total operation and maintenance and purchase of services components associated with this collection. EIA believes that the only cost to the respondent is for the time to retrieve the requested information from existing information systems and to then report that information to EIA.

**A-14. Estimate of Costs to the Federal Government**

The annual cost to the Government for Form EIA-886 is estimated at \$375,000. This cost estimate includes funds for data collection, follow-up data processing, nonresponse adjustment, variance estimation, survey documentation, data analysis, and preparation of data reports.

**A-15. Changes in Respondent Burden**

The estimate of respondent burden has changed from the current OMB inventory for 1905-0191.

		<u><b>Burden Hours</b></u>	<u><b>Respondents</b></u>
Current OMB Inventory	=	10,853 hours	2,091 respondents
Proposed		<u>10,812.5 hours</u>	<u>2,075 respondents</u>
Changes		- 40.5 hours	- 16 respondents

	<b>Old Inventory</b>	<b>Proposed</b>	<b>Change</b>
1. Original Equipment Manufacturers	150 hours	150 hours	not applicable
2. AFV Converters	102.5 hours	62.5 hours	- 40 hours
3. Users of AFVs and ATFs	10,600 hours	10,600 hours	not applicable
Total			- 40 hours

The frame of on-road AFV suppliers decreased primarily due to a reduction in the number of vehicle converters. Many have gone out of business due to the stringent requirements imposed under the EPA’s Memorandum 1A with regard to emission standards on conversion kits. The decrease in the frame of on-road AFV suppliers results in an adjustment decrease of 40 hours for AFV suppliers.

**A-16. Schedule for Collecting and Publishing Data**

The results of the *Annual Survey of Alternative Fueled Vehicles* will be published by EIA in reports along with additional data obtained through other EPACT92 data collection programs. EIA expects to publish an annual report that will incorporate Form EIA-886 data. The time schedule for data collection and related analysis activities for the 2007 Report is summarized below. (Similar schedules will be followed in subsequent years.)



## **Schedule for Data Collection and Analysis**

<u>Activity</u>	<u>Estimated Completion Date</u>
Mail Form EIA-886 Survey for 2007 Report Year	January 1, 2008
Survey Due Back	March 1, 2008
Begin Follow-up Contact with Respondents	March 1, 2008
End Follow-up Contact with Respondents	May 1, 2008
Complete Data Collection	July 1, 2008
Data Analysis and Preliminary Data Report	October 1, 2008
Publish Survey Results	December 31, 2008

### **A-17. Expiration Date**

The expiration date will be displayed on the form.

### **A-18. Certification Statement**

There are no exceptions to the Certification Statement requirement.

## B. STATISTICAL METHODS

### B-1. Description of Survey Design

The respondent universe for the *Annual Survey of Alternative Fueled Vehicles* include: 1) companies that are known to either have supplied AFVs and other advanced technology vehicles or that made plans to supply AFVs and other advanced technology vehicles in the United States<sup>1</sup>; and 2) fleet administrators that are known to have used AFVs during the previous year.

The survey frame consists of AFV and advanced technology vehicle suppliers and AFV users identified through other EIA surveys, published vehicle production plans, trade associations, trade press articles, and AFV industry mailing lists. The frame consists of both company-level and establishment-level contact information. Although the majority of survey responses are expected to come from a single reporting entity, there may be cases where manufacturing companies or conversion facilities are independently operated, and, therefore, report vehicle data independently. The survey frame captures such facilities. To maintain an up-to-date survey frame, Form EIA-886 also requests information on respondent ownership and operating status (i.e., company was sold or merged, went out of business or changed its product line, etc.)

To develop a comprehensive inventory of AFVs made available, planned to be made available, and in use, the *Annual Survey of Alternative Fueled Vehicles* will collect aggregated vehicle data and categorize the vehicles using a standard set of vehicle and fuel type codes. Respondents can group their vehicles by similar classifications, as bulleted below; however, respondents can submit individual vehicle data by VIN or other internal identifier if they so choose. Respondents are also asked to report the geographic location (State) where the AFVs are typically operated and the amount of ATFs that their vehicles consumed. If the amount of ATF consumed is unknown, respondents are asked to provide their best estimate. The amount of ATFs and the alternative fueled vehicles will be distinguished by the following characteristics:

- Vehicle Type
- Primary Application
- Alternative Fuel Type
- Vehicle Configuration

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<sup>1</sup>For the purpose of the Form EIA-886, the United States includes the 50 States, the District of Columbia, the Commonwealth of Puerto Rico and the Virgin Islands.

## **B-2. Sampling Methodology, Estimation Procedures, and Data Collection Procedures**

### **B-2a. Sampling Methodology**

Form EIA-886 attempts to canvass all entities that “make vehicles available,” i.e., original equipment manufacturers and converters. In the case of onroad AFV users, the survey attempts to cover all State government and transit bus fleets that use AFVs, all electric and natural gas utilities that use AFVs, and all known municipal and private fleets that use AFVs. Form EIA-861, which is completed by all electric utilities, asks whether the utility uses AFVs. Form EIA-886 uses as its basic frame of electric utilities all utilities that answer “yes” to this question. Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition,” serves as the basic frame of natural gas utilities. These natural gas utilities are canvassed by EIA employees to determine if they use AFVs. Any other utilities known to use AFVs are also included. For propane fuel providers, EIA-886 is sent to a sample of companies who identify themselves as propane providers on Form EIA-863, “Petroleum Providers Identification Survey,” and who also indicate on that survey that they use alternative fueled vehicles. The sample is drawn via a “probability proportional to size” method, using the latest year’s annual sales from Form EIA-863 as the size measure. Form EIA-863 is executed every 4 years.

### **B-2b. Estimation Procedures**

Published statistics from the *Annual Survey of Alternative Fueled Vehicles* will represent the sum of actual counts reported by respondents, except for propane vehicle users. For propane vehicle users, the Horwitz-Thompson method will be used. The actual counts will be stratified by reporting region and various characteristics. Nonresponse will be handled by follow-up telephone and email data requests to the respondents, as well as data element imputation where data requests are unsuccessful.

### **B-2c. Data Collection Procedures**

All of the data will be obtained from respondents reporting via electronic submission or mail. Respondents are encouraged to respond by electronic submission using an interactive, web-based survey form. Instructions and guidelines on submitting the data electronically are provided with the initial data call. Respondents are instructed to contact the EIA survey program manager if they have further questions. Respondents are given approximately two months from the initial data call to submit electronically or to return the form to EIA. Respondents not using electronic submission have the choice of submitting the original form or a computer printout, or submitting data via facsimile, floppy diskette or computer-to-computer data transfer.

### **B-3. Maximizing the Response Rate**

After the deadline for submitting the completed form, companies that did not respond, or failed to complete the survey form, will be contacted by email or telephone and instructed to provide the requested information. For respondents that use electronic submission (approximately 80% of respondents in 2006), the system will automatically generate a list of non-respondents and notify any respondent who has not reported after the deadline. Nonrespondents are contacted for a period of approximately 45 days in a prioritized fashion based on prior year inventory/production. The response rate for the 2006 EIA-886 was 94%.

#### **B-4. Tests of Procedures**

In the past, EIA has conducted a number of one-on-one discussions at AFV-related conferences, trade shows, and fleet organization meetings with representatives of groups using AFVs to discuss user reporting issues. Since no significant changes were made to the Form EIA-886, no pretests were conducted.

#### **B-5. Name and Telephone Number**

Questions or comments on Form EIA-886 can be directed to Cynthia Sirk, (202) 586-1658. Questions regarding the clearance request overall may be directed to Grace Sutherland, (202) 586-6264.