

HR 3246

Advanced Vehicle Technology Act of 2009

Congress: 111 (2009–2011, Ended)

Chamber: House

Policy Area: Energy

Introduced: Jul 17, 2009

Current Status: Committee on Energy and Natural Resources Subcommittee on Energy. Hearings held.

Latest Action: Committee on Energy and Natural Resources Subcommittee on Energy. Hearings held. (Dec 8, 2009)

Official Text: <https://www.congress.gov/bill/111th-congress/house-bill/3246>

Sponsor

Name: Rep. Peters, Gary C. [D-MI-9]

Party: Democratic • State: MI • Chamber: Senate

Cosponsors (16 total)

| Cosponsor                        | Party / State | Role | Date Joined  |
|----------------------------------|---------------|------|--------------|
| Rep. Biggert, Judy [R-IL-13]     | R · IL        |      | Jul 17, 2009 |
| Rep. Davis, Artur [D-AL-7]       | D · AL        |      | Jul 22, 2009 |
| Rep. Kildee, Dale E. [D-MI-5]    | D · MI        |      | Jul 22, 2009 |
| Rep. Levin, Sander M. [D-MI-12]  | D · MI        |      | Jul 27, 2009 |
| Rep. Lipinski, Daniel [D-IL-3]   | D · IL        |      | Jul 28, 2009 |
| Rep. Massa, Eric J. J. [D-NY-29] | D · NY        |      | Jul 30, 2009 |
| Rep. Foster, Bill [D-IL-14]      | D · IL        |      | Jul 31, 2009 |
| Rep. Dingell, John D. [D-MI-15]  | D · MI        |      | Sep 8, 2009  |
| Rep. Larson, John B. [D-CT-1]    | D · CT        |      | Sep 8, 2009  |
| Rep. Schauer, Mark H. [D-MI-7]   | D · MI        |      | Sep 8, 2009  |
| Rep. Boren, Dan [D-OK-2]         | D · OK        |      | Sep 10, 2009 |
| Rep. Gordon, Bart [D-TN-6]       | D · TN        |      | Sep 10, 2009 |
| Rep. McDermott, Jim [D-WA-7]     | D · WA        |      | Sep 10, 2009 |
| Rep. Quigley, Mike [D-IL-5]      | D · IL        |      | Sep 10, 2009 |
| Rep. Sutton, Betty [D-OH-13]     | D · OH        |      | Sep 10, 2009 |
| Rep. Wexler, Robert [D-FL-19]    | D · FL        |      | Sep 10, 2009 |

Committee Activity

| Committee                                | Chamber | Activity                   | Date         |
|--|---------|----------------------------|--------------|
| Energy and Natural Resources Committee   | Senate  | Hearings By (subcommittee) | Dec 8, 2009  |
| Science, Space, and Technology Committee | House   | Reported by                | Jul 21, 2009 |

Subjects & Policy Tags

Policy Area:

Energy

Related Bills

| Bill         | Relationship         | Last Action   |
|--------------|----------------------|---|
| 111 S 2843   | Related bill         | Sep 28, 2010: Placed on Senate Legislative Calendar under General Orders. Calendar No. 622. |
| 111 HRES 745 | Procedurally related | Sep 16, 2009: Motion to reconsider laid on the table Agreed to without objection.           |

Advanced Vehicle Technology Act of 2009 - (Sec. 5) Authorizes appropriations to the Secretary of Energy for research, development, demonstration, and commercial application of vehicles and related technologies for FY2010-FY2014.

**Title I: Vehicle Research and Development** - (Sec. 101) Directs the Secretary to conduct a program of basic and applied research, development, demonstration, and commercial application activities on materials, technologies, and processes with the potential to substantially reduce or eliminate petroleum use and emissions of the nation's passenger and commercial vehicles, including activities in the areas of: (1) hybridization or full electrification of vehicle systems; (2) batteries and other energy storage devices, (3) power electronics; (4) engine efficiency and combustion optimization; (5) waste heat recovery; (6) hydrogen vehicle technologies; (7) reduction of vehicle weight, friction, and wear; (8) innovative propulsion systems; (9) hydraulic hybrid technologies; (10) engine compatibility with and optimization for a variety of transportation fuels; (11) infrastructure for alternative fueled and electric or plug-in electric hybrid vehicles, including the unique challenges facing rural areas; (12) gaseous fuels storage system integration and optimization; (13) efficient use and recycling of rare earth materials and reduction of precious metals and other high-cost materials in vehicles; and (14) retrofitting advanced vehicle technologies to existing vehicles.

Directs the Secretary to ensure that the Department of Energy (DOE) continues to support activities and maintains competency in mid- to long-term transformational vehicle technologies with potential to achieve deep reductions in petroleum use and emissions, including activities in the areas of: (1) hydrogen vehicle technology; (2) multiple battery chemistries and novel energy storage devices; and (3) communication and connectivity amount vehicles, infrastructure, and the electrical grid.

Requires activities under this Act to be carried out in collaboration with automotive manufacturers, heavy commercial and transit vehicle manufacturers, qualified plug-in electric vehicle manufacturers, vehicle and engine equipment and component manufacturers, manufacturing equipment manufacturers, advanced vehicle service providers, fuel producers and energy suppliers, electric utilities, universities, national laboratories, and independent research laboratories.

Requires the Secretary to: (1) determine whether a wide range of companies that manufacture or assemble vehicles or components in the United States are represented in ongoing public private partnership activities; (2) formalize partnerships with industry-led stakeholder organizations, nonprofit organizations, industry consortia, and trade associations with expertise in advanced automotive and commercial vehicle technologies; (3) develop more efficient processes for transferring research findings and technologies to industry; (4) give consideration to conversion of existing or former vehicle technology manufacturing facilities for researching and developing advanced vehicle technologies and support public-private partnerships dedicated to overcoming barriers in commercial application of transformational vehicle technologies that utilize such industry-led facilities; (5) promote the domestic production of such technologies; (6) coordinate activities between relevant DOE programs and offices and other federal agencies; (7) inform other agencies of the potential for demonstrating technologies funded by this Act; and (8) support and utilize state and local government initiatives in advanced vehicle technology development.

(Sec. 102) Requires the Secretary to conduct research, development, and demonstration activities on connectivity of vehicle and transportation systems, including technologies for: (1) onboard vehicle, engine, and component sensing and actuation; (2) vehicle-to-vehicle sensing and communication; (3) vehicle-to-infrastructure sensing and communication; and (4) vehicle integration with the electrical grid.

(Sec. 103) Requires the Secretary to carry out a research, development, demonstration, and commercial application

program of advanced vehicle manufacturing technologies and practices, including innovative processes to: (1) increase the production rate and decrease the cost of advanced battery manufacturing; (2) vary the capability of individual manufacturing facilities to accommodate different battery chemistries and configurations; (3) reduce waste streams, emissions, and energy-intensity of vehicle, engine, advanced battery, and component manufacturing processes; (4) recycle and remanufacture used batteries and other vehicle components for reuse in vehicles or stationary applications; (5) produce cost-effective lightweight materials such as advanced metal alloys, polymeric composites, and carbon fiber; (6) produce lightweight high pressure storage systems for gaseous fuels; (7) design and manufacture purpose-built hydrogen and fuel cell vehicles and components; (8) improve the calendar life and cycle life of advanced batteries; and (9) produce permanent magnets for advanced vehicles.

(Sec. 104) Authorizes activities under this Act to include construction, expansion, or modification of new and existing vehicle, engine, and component research and testing facilities for: (1) testing or simulating interoperability of a variety of vehicle components and systems; (2) subjecting vehicle platforms to fully representative duty cycles and operating conditions; and (3) developing and demonstrating a range of chemistries and configurations for advanced vehicle battery manufacturing and test cycles for new and alternative fuels and other advanced vehicle technologies.

(Sec. 105) Requires the Secretary to report to Congress: (1) annually through 2015 on the technologies developed as a result of this Act, with emphasis on technologies that were successfully adopted for commercial applications and whether those technologies are manufactured in the United States; and (2) annually on activities undertaken, active industry participants, efforts to recruit new participants, progress of the program in meeting goals and timelines, and a strategic plan for funding of activities across agencies.

(Sec. 107) Requires the Secretary to establish an Innovative Automotive Demonstration Program, within the existing Vehicle Technologies Program, to encourage the introduction of new vehicles into the marketplace that are designed in their entirety to achieve very high energy efficiency but still provide the capabilities required by the American consumer. Requires awards to be made under such Program on a competitive basis for demonstration of vehicles that: (1) carry at least four passengers; (2) meet safety requirements; (3) achieve at least 70 miles per gallon or the equivalent on the Environmental Protection Agency (EPA) drive cycle; (4) provide vehicle performance that is acceptable to the consumer; (5) are affordable; (6) use materials and manufacturing processes that minimize environmental impacts; (7) meet all federal and state emission requirements; and (8) provide new high technology engineering and production employment opportunities.

**Title II: Medium and Heavy Duty Commercial and Transit Vehicles** - (Sec. 201) Requires the Secretary, in partnership with relevant research and development programs in other federal agencies and industry stakeholders, to carry out a program of cooperative research, development, demonstration, and commercial application activities on advanced technologies for medium- to heavy-duty commercial, recreational, and transit vehicles, including activities in the areas of: (1) engine efficiency and combustion research; (2) on board storage technologies for compressed and liquefied natural gas; (3) development and integration of engine technologies designed for natural gas operation of a variety of vehicle platforms; (4) waste heat recovery; (5) heavy hybrid, hybrid hydraulic, plug-in hybrid, and electric platforms and energy storage technologies; (6) reduction of friction, wear, and engine idle and parasitic energy loss; (7) advanced lightweighting materials and vehicle designs; (8) increasing load capacity per vehicle; (9) recharging infrastructure; (10) hydrogen vehicle technologies; and (11) retrofitting advanced technologies onto existing truck fleets and integration of advanced systems onto a single truck and trailer platform.

Requires the Secretary to: (1) appoint a Director to coordinate such activities in such vehicles; and (2) report annually to

Congress on activities, active industry participants, efforts to recruit new participants, progress of the program in meeting goals and timelines, and a strategic plan for funding of activities across agencies.

(Sec. 202) Requires the Secretary to: (1) conduct a competitive grant program to demonstrate the integration of multiple advanced technologies on Class 8 truck and trailer platforms with a goal of improving overall freight efficiency by 50%; (2) develop standard testing procedures and technologies for evaluating the performance of advanced heavy vehicle technologies under a range of representative duty cycles and operating conditions; (3) evaluate heavy vehicle performance; and (4) undertake a pilot program of research, development, demonstration, and commercial applications of technologies to improve total machine or system efficiency for nonroad mobile equipment, including agriculture and construction equipment, and seek opportunities to transfer relevant research findings and technologies between the nonroad and on-highway equipment and vehicle sectors.

Authorizes the Secretary to construct heavy duty truck and bus testing facilities.

## Actions Timeline

---

- **Dec 8, 2009:** Committee on Energy and Natural Resources Subcommittee on Energy. Hearings held.
- **Sep 17, 2009:** Received in the Senate and Read twice and referred to the Committee on Energy and Natural Resources.
- **Sep 16, 2009:** Rule H. Res. 745 passed House.
- **Sep 16, 2009:** Considered under the provisions of rule H. Res. 745. (consideration: CR H9570-9588, H9588-9591)
- **Sep 16, 2009:** Rule provides for consideration of H.R. 3246 with 1 hour of general debate. Previous question shall be considered as ordered without intervening motions except motion to recommit with or without instructions. Measure will be considered read. Specified amendments are in order. All points of order against consideration of the bill are waived except those arising under clause 9 or 10 of rule XXI. It shall be in order to consider as an original bill for the purpose of amendment, the amendment in the nature of a substitute recommended by the Committee on Science and Technology now printed in the bill. The Chair may entertain a motion that the Committee rise only if offered by the chair of the Committee on Science and Technology or his designee. The Chair may not entertain a motion to strike out the enacting words of the bill.
- **Sep 16, 2009:** House resolved itself into the Committee of the Whole House on the state of the Union pursuant to H. Res. 745 and Rule XVIII.
- **Sep 16, 2009:** The Speaker designated the Honorable Pedro R. Pierluisi to act as Chairman of the Committee.
- **Sep 16, 2009:** GENERAL DEBATE - The Committee of the Whole proceeded with one hour of general debate on H.R. 3246.
- **Sep 16, 2009:** Pursuant to the provisions of H.Res. 745, an amendment in the nature of substitute printed in the bill shall be considered as an original bill for the purpose of amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H.Res. 745, the Committee of the Whole proceeded with 20 minutes of debate on the Gordon (TN) amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H.Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Hall (TX) amendment.
- **Sep 16, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Hall (TX) amendment, the Chair put the question on adoption of the amendment and by voice vote announced that the noes had prevailed. Mr. Broun (GA) demanded a recorded vote and the Chair postponed further proceedings on the question of adoption of the amendment until later in the legislative day.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H.Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Broun (GA) amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H.Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Peters amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H.Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Posey ammendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H.Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Gordon (TN) amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H. Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Gordon amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H. Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Marshall amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H. Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Cohen amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H. Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Donnelly amendment.
- **Sep 16, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Donnelly amendment, the Chair put the question on adoption of the amendment and by voice vote announced that the ayes had prevailed. Mrs. Biggert demanded a recorded vote and the Chair postponed further proceedings on the question of adoption of the amendment until later in the legislative day.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H. Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Altmire amendment.
- **Sep 16, 2009:** DEBATE - Pursuant to the provisions of H. Res. 745, the Committee of the Whole proceeded with 10 minutes of debate on the Massa amendment.
- **Sep 16, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Massa amendment, the Chair put the question on adoption of the amendment and by voice vote announced that the ayes had prevailed. Mr. Massa

demanding a recorded vote and the Chair postponed further proceedings on the question of adoption of the amendment until later in the legislative day.

- **Sep 16, 2009:** UNFINISHED BUSINESS - The Chair announced that the unfinished business was the question of adoption of amendments which had been debated earlier and on which further proceedings had been postponed.
- **Sep 16, 2009:** The House rose from the Committee of the Whole House on the state of the Union to report H.R. 3246.
- **Sep 16, 2009:** The previous question was ordered pursuant to the rule. (consideration: CR H9589)
- **Sep 16, 2009:** The House adopted the amendment in the nature of a substitute as agreed to by the Committee of the Whole House on the state of the Union. (text: CR H9575-9577)
- **Sep 16, 2009:** Mr. Broun (GA) moved to recommit with instructions to Science and Technology. (consideration: CR H9589-9591; text: CR H9589)
- **Sep 16, 2009:** DEBATE - The House proceeded with 10 minutes of debate on the Broun (GA) motion to recommit with instructions. The instructions contained in the motion seek to require the bill to be reported back to the House with an amendment providing a limitation on future authorizations to the extent that no authorizations for programs contained in the bill may be made unless they follow a year in which the annual Federal budget deficit did not exceed \$500,000,000.
- **Sep 16, 2009:** The previous question on the motion to recommit with instructions was ordered without objection. (consideration: CR H9590)
- **Sep 16, 2009:** On motion to recommit with instructions Failed by recorded vote: 180 - 245 (Roll no. 708).
- **Sep 16, 2009:** Passed/agreed to in House: On passage Passed by the Yeas and Nays: 312 - 114 (Roll no. 709).
- **Sep 16, 2009:** On passage Passed by the Yeas and Nays: 312 - 114 (Roll no. 709).
- **Sep 16, 2009:** Motion to reconsider laid on the table Agreed to without objection.
- **Sep 15, 2009:** Rules Committee Resolution H. Res. 745 Reported to House. Rule provides for consideration of H.R. 3246 with 1 hour of general debate. Previous question shall be considered as ordered without intervening motions except motion to recommit with or without instructions. Measure will be considered read. Specified amendments are in order. All points of order against consideration of the bill are waived except those arising under clause 9 or 10 of rule XXI. It shall be in order to consider as an original bill for the purpose of amendment, the amendment in the nature of a substitute recommended by the Committee on Science and Technology now printed in the bill. The Chair may entertain a motion that the Committee rise only if offered by the chair of the Committee on Science and Technology or his designee. The Chair may not entertain a motion to strike out the enacting words of the bill.
- **Sep 11, 2009:** Reported (Amended) by the Committee on Science and Technology. H. Rept. 111-254.
- **Sep 11, 2009:** Placed on the Union Calendar, Calendar No. 142.
- **Sep 10, 2009:** Ms. Woolsey asked unanimous consent that the Committee on Science, Space and Technology have until 11:59 p.m. on Sept. 11 to file a report on H.R. 3246. Agreed to without objection.
- **Jul 29, 2009:** Committee Consideration and Mark-up Session Held.
- **Jul 29, 2009:** Ordered to be Reported (Amended) by Voice Vote.
- **Jul 21, 2009:** Subcommittee Consideration and Mark-up Session Held.
- **Jul 21, 2009:** Forwarded by Subcommittee to Full Committee by Voice Vote .
- **Jul 20, 2009:** Referred to the Subcommittee on Energy and Environment.
- **Jul 17, 2009:** Introduced in House
- **Jul 17, 2009:** Referred to the House Committee on Science and Technology.