

HR 3585

Solar Technology Roadmap Act

Congress: 111 (2009–2011, Ended)

Chamber: House

Policy Area: Energy

Introduced: Sep 16, 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/3585>

Sponsor

Name: Rep. Giffords, Gabrielle [D-AZ-8]

Party: Democratic • **State:** AZ • **Chamber:** House

Cosponsors (32 total)

Cosponsor	Party / State	Role	Date Joined
Rep. Chandler, Ben [D-KY-6]	D · KY		Sep 25, 2009
Rep. Gordon, Bart [D-TN-6]	D · TN		Sep 25, 2009
Rep. Honda, Michael M. [D-CA-15]	D · CA		Sep 25, 2009
Rep. Lujan, Ben Ray [D-NM-3]	D · NM		Sep 25, 2009
Rep. Tonko, Paul [D-NY-21]	D · NY		Sep 25, 2009
Rep. Baird, Brian [D-WA-3]	D · WA		Sep 29, 2009
Rep. Cooper, Jim [D-TN-5]	D · TN		Sep 29, 2009
Rep. Inslee, Jay [D-WA-1]	D · WA		Sep 29, 2009
Rep. Lipinski, Daniel [D-IL-3]	D · IL		Sep 29, 2009
Rep. McCaul, Michael T. [R-TX-10]	R · TX		Sep 29, 2009
Rep. Bono Mack, Mary [R-CA-45]	R · CA		Oct 6, 2009
Rep. Heinrich, Martin [D-NM-1]	D · NM		Oct 6, 2009
Rep. Peters, Gary C. [D-MI-9]	D · MI		Oct 13, 2009
Rep. Bartlett, Roscoe G. [R-MD-6]	R · MD		Oct 15, 2009
Rep. Bishop, Timothy H. [D-NY-1]	D · NY		Oct 15, 2009
Rep. Carnahan, Russ [D-MO-3]	D · MO		Oct 15, 2009
Rep. Davis, Susan A. [D-CA-53]	D · CA		Oct 15, 2009
Rep. Hall, John J. [D-NY-19]	D · NY		Oct 15, 2009
Rep. Halvorson, Deborah L. [D-IL-11]	D · IL		Oct 15, 2009
Rep. Higgins, Brian [D-NY-27]	D · NY		Oct 15, 2009
Rep. Himes, James A. [D-CT-4]	D · CT		Oct 15, 2009
Rep. Klein, Ron [D-FL-22]	D · FL		Oct 15, 2009
Rep. Miller, Candice S. [R-MI-10]	R · MI		Oct 15, 2009
Rep. Moran, James P. [D-VA-8]	D · VA		Oct 15, 2009
Rep. Polis, Jared [D-CO-2]	D · CO		Oct 15, 2009
Rep. Rodriguez, Ciro D. [D-TX-23]	D · TX		Oct 15, 2009
Rep. Rothman, Steven R. [D-NJ-9]	D · NJ		Oct 15, 2009
Rep. Slaughter, Louise McIntosh [D-NY-28]	D · NY		Oct 15, 2009
Rep. Thompson, Mike [D-CA-1]	D · CA		Oct 15, 2009
Rep. Wamp, Zach [R-TN-3]	R · TN		Oct 15, 2009
Rep. Welch, Peter [D-VT-At Large]	D · VT		Oct 15, 2009
Rep. Young, C. W. Bill [R-FL-10]	R · FL		Oct 15, 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	Sep 30, 2009

Subjects & Policy Tags

Policy Area:

Energy

Related Bills

Bill	Relationship	Last Action
111 HRES 846	Procedurally related	Oct 22, 2009: Motion to reconsider laid on the table Agreed to without objection.

Solar Technology Roadmap Act - Title I: Solar Technology Research, Development, and Demonstration - (Sec. 101)
Directs the Secretary of Energy to conduct a program of research, development, and demonstration for solar technology, including: (1) photovoltaics and related electronic components; (2) solar hot water and solar space heating and cooling; (3) concentrating solar power; (4) lighting systems that integrate sunlight and electrical lighting in complement to each other in common lighting fixtures for the purpose of improving energy efficiency; (5) manufacturability of low cost, high-quality solar energy systems; (6) development of solar technology products that can be easily integrated into new and existing buildings or that are water efficient; and (7) development of storage technologies that can be used to increase the usefulness and value of such technologies.

Requires the Secretary to provide awards on a merit-reviewed, competitive basis to promote a diversity of research, development, and demonstration activities for solar technology to: (1) academic institutions, national laboratories, federally-funded research and development centers, government research agencies, nonprofit organizations, industrial entities, or consortia thereof for research, development, and demonstration activities; and (2) industry-led consortia for research, development, and demonstration of advanced techniques for manufacturing a variety of solar energy products. Directs the Secretary, in making awards, to consider areas with high unemployment. Requires the Department of Energy (DOE) to provide awards to projects for research, development, and demonstration of solar technologies and solar manufacturing in the United States.

Calls for at least 75% of funding for such activities conducted by DOE after FY2014 to support a diversity of activities identified by and recommended under a Solar Technology Roadmap.

(Sec. 102) Directs the Secretary to establish and provide support for a Solar Technology Roadmap Committee, which shall develop a Solar Technology Roadmap that: (1) presents the best current estimate of the near-, mid-, and long-term research, development, and demonstration needs in solar technology; and (2) provides guidance to the solar technology research, development, and demonstration activities supported by the federal government for meeting national priorities in energy security, U.S. competitiveness, mitigation of adverse environmental impacts, and energy diversification. Requires at least a third and no more than a half of the Committee members to be individuals from sectors of the domestic solar technology industry.

Requires the Roadmap to: (1) identify research, development, and demonstration needs for a diversity of solar technologies; (2) identify opportunities for coordination with partner industries such as those for semiconductors, lighting, energy storage, Smart Grid, and wind that can benefit from similar advances; (3) establish research, development, and demonstration goals with recommended timeframes with respect to solar technologies for improving performance, decreasing the cost of electricity generated and the negative environmental impacts, improving reliability, and maximizing the environmental benefits of solar technologies, improving the cost effectiveness and quality control of domestic manufacturing of implements and devices used in the production of solar energy; (4) identify best practices for DOE national laboratories in their collaborations with institutions of higher education and private industry to more efficiently and effectively bring new solar technologies to the marketplace; (5) include recommendations to guide solar technology research, development, and demonstration activities; (6) provide recommendations on the necessary steps required to strengthen the link between solar technology research and the commercialization of those technologies into full scale manufacturing; (7) provide recommendations to federal agencies on corresponding strategies to accelerate domestic commercialization of newly developed solar technologies; and (8) outline various technologies and practices considered by the Committee and the benefits and shortcomings of each.

Requires the Committee to: (1) release a draft Roadmap to the public at least one month prior to publication in order to receive input from the public; (2) conduct a comprehensive review and revision of the Roadmap every three years and to update it annually as necessary; (3) consult with the Department of the Interior, the National Park Service, the Department of Defense (DOD), and the General Services Administration (GSA) on the potential for solar demonstration projects on federal lands; and (4) report annually to the Secretary and Congress on its activities. Prohibits the Committee from recommending or selecting specific recipients of funds.

(Sec. 104) Requires the Director of the Office of Science and Technology Policy to review and coordinate federal interagency activities identified in and related to the Roadmap.

(Sec. 105) Directs the Secretary to: (1) establish a program to provide grants on a merit-reviewed, competitive basis for demonstration projects to support the development of solar energy production, consistent with the Roadmap; and (2) transmit to Congress and the Committee the results of a study that analyzes the performance of photovoltaic installations in the United States and identifies opportunities to improve the energy productivity of the installations.

(Sec. 107) Requires the Secretary to commence a study evaluating potential applications of micro power stations using solar power technology in underserved communities lacking in basic electric or traditional power infrastructure and make recommendations to Congress for increasing access to and implementation of solar energy technology in such underserved communities.

(Sec. 108) Authorizes appropriations for FY2011-FY2015. Reauthorizes appropriations for solar research activities established in the Energy Independence and Security Act of 2007.

(Sec. 109) Declares that this Act supersedes any duplicative DOE solar, research, development, and demonstration programs.

(Sec. 110) Repeals the Solar Energy Research, Development, and Demonstration Act of 1974, the Solar Photovoltaic Energy Research, Development, and Demonstration Act of 1978, and provisions concerning goals and multiyear funding for photovoltaics and solar thermal programs.

(Sec. 111) Requires the Secretary to establish and report to Congress on a pilot program to make grants for projects to protect against solar technology equipment theft.

Title II: Photovoltaic Recycling - (Sec. 201) Requires the Secretary to award multiyear grants on a merit-reviewed, competitive basis for research, development, and demonstration activities to create innovative and practical approaches to increase reuse and recycling of photovoltaic devices and contribute to the professional development of scientists, engineers, and technicians in the fields of photovoltaic and electronic device manufacturing, design, refurbishing, and recycling. Requires such activities to address: (1) technology to increase the efficiency of photovoltaic device recycling and maximize the recovery of valuable raw materials for use in new products while minimizing the life-cycle environmental impacts; (2) expanded uses for materials from recycled photovoltaic devices; (3) development and demonstration of environmentally responsible alternatives to the use of hazardous materials in photovoltaic devices and the production of such devices; (4) development of methods to separate and remove hazardous materials from photovoltaic devices and recycling or disposing of those materials in a safe manner; (5) product design and construction to facilitate disassembly and recycling of photovoltaic devices; (6) tools and methods to aid in assessing the environmental impacts of the production, recycling, and disposal of photovoltaic devices; (7) product design and construction and other tools and techniques to extend the life cycle of photovoltaic devices (8) strategies to increase consumer acceptance and practice of recycling of photovoltaic devices; and (9) processes to reduce the costs and

environmental impact of disposal of toxic materials used in photovoltaic devices.

Requires the results of such activities to be made publicly available.

Requires the Secretary to: (1) establish a comprehensive physical property database of materials for use in photovoltaic devices; (2) develop, with private industry, a plan to establish priorities and requirements for the database; and (3) coordinate with the Director of the National Institute of Standards and Technology and the Administrator of the Environmental Protection Agency (EPA) to facilitate the incorporation of the database with any existing database for electronic manufacturing and recycling.

Actions Timeline

- **Dec 8, 2009:** Committee on Energy and Natural Resources Subcommittee on Energy. Hearings held.
- **Oct 26, 2009:** Received in the Senate and Read twice and referred to the Committee on Energy and Natural Resources.
- **Oct 22, 2009:** Rule H. Res. 846 passed House.
- **Oct 22, 2009:** Considered under the provisions of rule H. Res. 846. (consideration: CR H11596-11616)
- **Oct 22, 2009:** Rule provides for consideration of H.R. 3585 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. The amendment in the nature of a substitute recommended by the Committee on Science and Technology shall be considered as an original bill for the purpose of amendment. All points of order against consideration of the bill are waived except those arising under clause 9 or 10 of rule XXI.
- **Oct 22, 2009:** House resolved itself into the Committee of the Whole House on the state of the Union pursuant to H. Res. 846 and Rule XVIII.
- **Oct 22, 2009:** The Speaker designated the Honorable Gregorio Sablan to act as Chairman of the Committee.
- **Oct 22, 2009:** GENERAL DEBATE - The Committee of the Whole proceeded with one hour of general debate on H.R. 3585.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 30 minutes of debate on the Gordon amendment.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Broun (GA) amendment.
- **Oct 22, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Broun (GA) amendment, the Chair put the question on adoption of the amendment and announced by voice vote that the noes had prevailed. Mr Broun (GA) demanded a recorded vote and the Chair postponed further proceedings on adoption of the amendment until later in the legislative day.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Hastings (FL) amendment.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Cardoza amendment.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Kaptur amendment.
- **Oct 22, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Kaptur amendment, the Chair put the question on adoption of the amendment and announced by voice vote that the ayes had prevailed. Mr Gordon demanded a recorded vote and the Chair postponed further proceedings on adoption of the amendment until later in the legislative day.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Marshall amendment.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Klein (FL) amendment.
- **Oct 22, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Klein (FL) amendment, the Chair put the question on adoption of the amendment and announced by voice vote that the ayes had prevailed. Mr Klein (FL) demanded a recorded vote and the Chair postponed further proceedings on adoption of the amendment until later in the legislative day.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Titus amendment.
- **Oct 22, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Titus amendment, the Chair put the question on adoption of the amendment and announced by voice vote that the ayes had prevailed. Mrs. Titus demanded a recorded vote and the Chair postponed further proceedings on adoption of the amendment until later in the legislative day.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Heinrich amendment.
- **Oct 22, 2009:** POSTPONED PROCEEDINGS - At the conclusion of debate on the Heinrich amendment, the Chair put the question on adoption of the amendment and announced by voice vote that the ayes had prevailed. Mr. Heinrich demanded a recorded vote and the Chair postponed further proceedings on adoption of the amendment until later in the legislative day.
- **Oct 22, 2009:** DEBATE - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10

minutes of debate on the Himes amendment.

- **Oct 22, 2009: POSTPONED PROCEEDINGS** - At the conclusion of debate on the Himes amendment, the Chair put the question on adoption of the amendment and announced by voice vote that the ayes had prevailed. Mr. Himes demanded a recorded vote and the Chair postponed further proceedings on adoption of the amendment until later in the legislative day.
- **Oct 22, 2009: DEBATE** - Pursuant to the provisions of H.Res. 846, the Committee of the Whole proceeded with 10 minutes of debate on the Murphy (NY) amendment.
- **Oct 22, 2009:** Mr. Gordon (TN) moved that the Committee rise.
- **Oct 22, 2009:** On motion that the Committee rise Agreed to by voice vote.
- **Oct 22, 2009:** Committee of the Whole House on the state of the Union rises leaving H.R. 3585 as unfinished business.
- **Oct 22, 2009:** Considered as unfinished business. (consideration: CR H11617-11621)
- **Oct 22, 2009:** The House resolved into Committee of the Whole House on the state of the Union for further consideration.
- **Oct 22, 2009:** The House rose from the Committee of the Whole House on the state of the Union to report H.R. 3585.
- **Oct 22, 2009:** The previous question was ordered pursuant to the rule. (consideration: CR H11621)
- **Oct 22, 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 H11602-11604)
- **Oct 22, 2009:** Passed/agreed to in House: On passage Passed by the Yeas and Nays: 310 - 106 (Roll no. 807).
- **Oct 22, 2009:** On passage Passed by the Yeas and Nays: 310 - 106 (Roll no. 807).
- **Oct 22, 2009:** Motion to reconsider laid on the table Agreed to without objection.
- **Oct 20, 2009:** Rules Committee Resolution H. Res. 846 Reported to House. Rule provides for consideration of H.R. 3585 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. The amendment in the nature of a substitute recommended by the Committee on Science and Technology shall be considered as an original bill for the purpose of amendment. All points of order against consideration of the bill are waived except those arising under clause 9 or 10 of rule XXI.
- **Oct 15, 2009:** Reported (Amended) by the Committee on Science and Technology. H. Rept. 111-302.
- **Oct 15, 2009:** Placed on the Union Calendar, Calendar No. 169.
- **Oct 7, 2009:** Committee Consideration and Mark-up Session Held.
- **Oct 7, 2009:** Ordered to be Reported (Amended) by Voice Vote.
- **Sep 30, 2009:** Subcommittee Consideration and Mark-up Session Held.
- **Sep 30, 2009:** Forwarded by Subcommittee to Full Committee (Amended) by Voice Vote .
- **Sep 21, 2009:** Referred to the Subcommittee on Energy and Environment.
- **Sep 16, 2009:** Introduced in House
- **Sep 16, 2009:** Referred to the House Committee on Science and Technology.