

HR 906

Global Change Research and Data Management Act of 2007

Congress: 110 (2007–2009, Ended)

Chamber: House

Policy Area: Science, Technology, Communications

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Sponsor

Name: Rep. Udall, Mark [D-CO-2]

Party: Democratic • State: CO • Chamber: Senate

Cosponsors (12 total)

Cosponsor	Party / State	Role	Date Joined
Rep. Inglis, Bob [R-SC-4]	R · SC		Feb 7, 2007
Rep. Giffords, Gabrielle [D-AZ-8]	D · AZ		May 2, 2007
Rep. Gilchrest, Wayne T. [R-MD-1]	R · MD		May 3, 2007
Rep. Inslee, Jay [D-WA-1]	D · WA		May 3, 2007
Rep. Jones, Walter B., Jr. [R-NC-3]	R · NC		May 3, 2007
Rep. Lantos, Tom [D-CA-12]	D · CA		May 3, 2007
Rep. Gordon, Bart [D-TN-6]	D · TN		Jun 5, 2007
Rep. Bartlett, Roscoe G. [R-MD-6]	R · MD		Jun 12, 2007
Rep. Ehlers, Vernon J. [R-MI-3]	R · MI		Jun 25, 2007
Rep. Miller, Brad [D-NC-13]	D · NC		Jun 25, 2007
Rep. Johnson, Eddie Bernice [D-TX-30]	D · TX		Jul 19, 2007
Rep. Wu, David [D-OR-1]	D · OR		Jul 19, 2007

Committee Activity

Committee	Chamber	Activity	Date
Foreign Affairs Committee	House	Discharged From	Apr 24, 2008
Science, Space, and Technology Committee	House	Reported by	Jun 6, 2007

Subjects & Policy Tags

Policy Area:

Science, Technology, Communications

Related Bills

Bill	Relationship	Last Action
110 HR 3221	Text similarities	Jul 30, 2008: Became Public Law No: 110-289.

Global Change Research and Data Management Act of 2007 - **Title I: Global Change Research** - (Sec. 103) Directs the President to establish or designate an interagency committee to ensure cooperation and coordination of federal research activities pertaining to processes of global change. Requires the committee to: (1) include representatives of agencies conducting global change research and agencies with authority over resources likely to be affected by global change; (2) serve as the forum for developing the National Global Change Research and Assessment Plan (NGCRA Plan) and a vulnerability assessment; (3) ensure cooperation among federal agencies with respect to global change research activities; (4) work with groups conducting such research to provide for periodic public and peer review of the United States Global Change Research Program (USGCR Program); (5) cooperate with the Secretary of State in providing representation at international meetings on global change research and coordinating federal activities with other nations' programs and international global change research activities; (6) work with authorities to ensure that the USGCR Program is designed to produce information needed to develop policies to reduce the vulnerability of the United States and other regions to global change; (7) facilitate ongoing information exchange with regional, state, and local governments and other user communities; and (8) identify additional decision making groups that may use information generated through the USGCR Program.

(Sec. 104) Directs the President to establish the interagency USGCR Program to improve understanding of global change, to respond to the information needs of communities and decision makers, and to provide periodic assessments of the vulnerability of the United States and other regions to global and regional climate change. Requires the Office of Science and Technology Policy to be the lead agency for the Program. Requires the Office's Director to identify interagency activities included in the NGCRA Plan that do not fall within participating agencies' current fiscal year budgets and to allocate funds to agencies to conduct such activities. Authorizes such activities to include: (1) developing scenarios for climate, land-cover change, population growth, and socioeconomic development; (2) calibrating and testing alternative regional and global climate models; (3) identifying economic sectors and regional climatic zones; and (4) convening regional workshops to facilitate information exchange and involvement of stakeholder groups in the activities of the Program.

Requires the Director to ensure that at least one workshop is held per year in specified regions to facilitate information exchange and outreach to stakeholders. Authorizes appropriations for FY2008-FY2013.

(Sec. 105) Directs the President to develop the NGCRA Plan to implement the USGCR Program, including recommendations for global change research and assessment. Requires the President to submit a completed Plan to Congress within three years and at least every five years thereafter.

Sets forth provisions concerning Plan contents. Requires the Plan to set research goals and priorities and to include: (1) global measurements, establishing worldwide to regional scale observations prioritized to understand global change and to meet the information needs of decision makers on all relevant spatial and time scales; (2) information on economic, demographic, and technological trends that contribute to changes in the Earth system and that influence society's vulnerability to global and regional climate change; (3) development of indicators and baseline databases to document global change, including changes in species distribution and behavior, extent of glaciations, and changes in sea level; (4) studies of historical changes in the Earth system, using evidence from the geological and fossil record; (5) assessments of predictability using quantitative models of the Earth system to simulate global and regional environmental processes and trends; (6) focused research initiatives to understand the nature of and interaction among physical, chemical, biological, land use, and social processes related to global and regional climate change; and (7) focused research

initiatives to determine and meet the information needs of governmental decision makers. Requires the Plan to incorporate the recommendations relating to data acquisition, management, integration, and archiving made by the interagency climate and other global change data management working groups established under this Act.

Requires the President to enter into an agreement with: (1) the National Academy of Sciences (NAS) to evaluate the scientific content of the Plan and recommend priorities for future global and regional climate change research and assessment; and (2) the National Governors Association Center for Best Practices to evaluate the utility to state, local, and regional decision makers of each Plan and of the information outputs of the Program for development of policies to reduce vulnerability to global change and recommend priorities for future global and regional climate change research and assessment.

Requires the President to publish the Plan for public comment before submitting it to Congress.

(Sec. 106) Requires the President to provide general guidance to each federal agency participating in the Program with respect to the preparation of requests for appropriations for Program activities.

(Sec. 107) Requires the President to submit a vulnerability assessment to Congress within a year and every five years thereafter. Requires such assessment to: (1) integrate, evaluate, and interpret the findings of the Program and discuss the scientific uncertainties associated with such findings; (2) analyze current trends in global change and project major trends for the subsequent 25 to 100 years; (3) analyze changes to the natural environment, land and water resources, and biological diversity in major geographic regions of the United States and other continents; (4) analyze the effects of global change on food and fiber production, energy production and use, transportation, human health and welfare, water availability and coastal infrastructure, and human social and economic systems; and (5) summarize the vulnerability of different geographic regions of the world to global change and analyze the implications of global change for the United States, including for international assistance, population displacement, food and resource availability, and national security.

(Sec. 108) Requires the President to enter into a joint agreement with the National Academy of Public Administration and NAS within a year and every four years thereafter to: (1) document current policy options being implemented by governments to mitigate or adapt to the effects of global and regional climate change; (2) evaluate the effectiveness of those current policy options; (3) identify and evaluate a range of additional policy options and infrastructure for mitigating or adapting to such effects; (4) analyze the adoption rates of policies and technologies available to reduce the vulnerability of society to global change, with an evaluation of the market and policy obstacles in the United States; and (5) evaluate the distribution of economic costs and benefits of these policy options across different U.S. economic sectors.

(Sec. 109) Requires the President to submit with the budget request each year a report on the global change research activities conducted pursuant to this Act.

(Sec. 110) Requires the President to: (1) ensure that National Climate Program's research, assessment, and outreach activities are considered in developing national global and regional climate change research and assessment efforts; and (2) facilitate ongoing information exchange with governments and other user communities through programs authorized in the National Climate Program Act.

(Sec. 111) Repeals the Global Change Research Act of 1990.

(Sec. 112) Requires the President to establish or designate a Global Change Research Information Exchange to make

scientific research and other information produced through or utilized by the USGCR Program, which would be useful in preventing, mitigating, or adapting to the effects of global change, accessible through electronic means.

(Sec. 113) Requires the Director of the National Science Foundation (NSF) and the Administrator of the National Oceanic and Atmospheric Administration (NOAA) to enter into an arrangement with NAS to study and report to Congress on the current status of ice sheet melt, as caused by climate change, with implications for global sea level rise.

(Sec. 114) Requires the Administrator of NOAA and the Director of NSF to enter into an arrangement with NAS to study and report to Congress on the current state of the science on the potential impacts of climate change on patterns of hurricane and typhoon development and the implications for affected regions.

**Title II: Climate and Other Global Change Data Management** - (Sec. 203) Directs the President to establish or designate an interagency climate and other global change data management working group to make recommendations for coordinating federal climate and other global change data management and archiving activities. Requires the working group to report to Congress within a year and every four years thereafter on: (1) recommendations for the establishment, maintenance, and accessibility of a catalog identifying all available climate and other global change data sets; (2) climate and other global change data collections in danger of being lost and recommendations to prevent such loss; (3) gaps in climate and other global change data and recommendations to fill those gaps; (4) procedures for climate and other global change data collection, management, and retention and recommendations for ensuring their use by federal agencies and other entities; (5) a coordinated strategy for funding and allocating responsibilities among federal agencies for climate and other global change data collection, management, and retention; (6) recommendations for ensuring that particular attention is paid to the collection, management, and archiving of metadata; (7) recommendations for ensuring a unified and coordinated federal capital investment strategy with respect to climate and other global change data collection, management, and archiving; (8) evaluation of the data record from each observing system and recommendations to ensure that delivered data are free from time-dependent biases and random errors before they are transferred to long-term archives; and (9) an evaluation of an optimal design of observation system components to ensure a cost-effective, adequate set of observations detecting and tracking global change.

**Title III: International Cooperation in Global Change Research** - (Sec. 302) Requires the President to direct the Secretary of State to initiate discussions with other nations leading toward international protocols and other agreements to coordinate global climate change research activities. Provides that such discussions should include the following issues: (1) allocation of costs in global change research programs; (2) coordination of global change research plans with those developed by international organizations; (3) establishment of global change research centers and training programs for scientists, especially those from developing nations; (4) development of innovative methods for management of international global change research; and (5) establishment of international offices to disseminate information useful in identifying, preventing, mitigating, or adapting to the possible effects of global change.

Requires the President to direct the Secretary of State to initiate discussions with other nations leading toward an international research protocol for cooperation on the development of energy technologies that have minimally adverse effects on the environment. Requires such discussions to include the following issues: (1) creation of an international cooperative program to fund research related to energy efficiency and conservation, solar and other renewable energy sources, and passively safe and diversion-resistant nuclear reactors; (2) creation of an international cooperative program to develop low-cost energy technologies that are appropriate to the environmental, economic, and social needs of developing nations; and (3) exchange of information concerning environmentally safe energy technologies and practices.

## Actions Timeline

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- **Apr 24, 2008:** Reported (Amended) by the Committee on Science and Technology. H. Rept. 110-605, Part I.
- **Apr 24, 2008:** Committee on Foreign Affairs discharged.
- **Apr 24, 2008:** Placed on the Union Calendar, Calendar No. 376.
- **Jun 28, 2007:** Sponsor introductory remarks on measure. (CR E1431-1432)
- **Jun 27, 2007:** Committee Consideration and Mark-up Session Held.
- **Jun 27, 2007:** Ordered to be Reported (Amended).
- **Jun 6, 2007:** Subcommittee Consideration and Mark-up Session Held.
- **Jun 6, 2007:** Forwarded by Subcommittee to Full Committee (Amended) by Voice Vote .
- **May 3, 2007:** Subcommittee Hearings Held.
- **Feb 13, 2007:** Referred to the Subcommittee on Energy and Environment.
- **Feb 7, 2007:** Introduced in House
- **Feb 7, 2007:** Sponsor introductory remarks on measure. (CR E282-283)
- **Feb 7, 2007:** Referred to the Committee on Science and Technology, and in addition to the Committee on Foreign Affairs, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned.