

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
Title III	Subtitle B – Disposition of Allowances	
	(Section 782; pgs 561-563) Domestic Adaptation • <u>State Programs</u> - 2012-2021- .9% - 2022-2026 – 1.9% - 2027-2050 – 3.9% Allowances to be distributed to States in accordance with section 453- <i>State Programs to Build Resilience to Climate Change Impacts</i>. Proceeds to be deposited in the State Energy and Environment Development (SEED) Fund established by the bill. • <u>Public Health</u> .1% annually with proceeds deposited in the Climate Change Health Protection and Promotion Fund established by the bill. • <u>Wildlife and Natural Resources</u> - 2012-2021- 1.0% (.385% / .615%) - 2022-2026 – 2.0% (.77% / 1.23%) - 2027-2050 – 4.0% (1.54% / 2.46%) Proceeds from the sale of allowances are split between allocations to States and auction proceeds deposited in the Natural Resources Climate Change Adaptation Fund, established in the bill, for federal agencies. International Adaptation - 2012-2021- 1.0% - 2022-2026 – 2.0% - 2027-2050 – 4.0%	(Section 705; pgs 876-879) Unless specifically noted, all provisions remained the same. Domestic Adaptation • <u>State Programs</u> The SEED account is for the express purpose of State Energy Efficiency and Renewable Energy programs. There is no longer a provision to deposit proceeds from adaptation allowances into a SEED account for states.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
Subtitle E	Part 1 -Domestic Adaptation	
Subpart A – National Climate Change Adaptation Program		
Funding	Allowance allocation to States for section 453 only.	Allowance allocation to States for section 453 only.
Governance	Sec. 451. Established a National Climate Change Adaptation Program in the U.S. Global Change Research Program. Removed the National Climate Change Adaptation Council and associated provisions from the prior version (Discussion Draft).	No National Climate Change Adaptation Program is established.
Research		Sec. 451. <i>Global Change Research and Data Management</i> • Directs the President to establish and Interagency Committee to ensure coordination and cooperation of Federal research activities, including working with states. • Establishes an Interagency U.S. Global Change Research Program led by OSTP. • Directs the President to create a National Global Change Research and Assessment Plan for the Program that addresses information needs of Federal, State, regional and local authorities. • Requires a Policy Assessment every 4 years by the National Academy of Public Administration (NAPA) and the National Academy of Sciences (NAS) focused on identifying and evaluating policy options used at Federal, State and local levels to adapt to climate change. • Establishes a Global Change Research Information Exchange for the purpose of making research and information accessible to states and others electronically.
Vulnerability Assessments	Sec. 451. Removed requirement for NOAA to conduct vulnerability assessments. No requirement for vulnerability assessments is included in this version.	Sec. 451. Requires USGCRP to complete vulnerability assessments every 5 years.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
Climate Services	Sec. 452. <i>National Climate Service</i> Established a National Climate Service within NOAA to provide climate information, data, forecasts, and warnings at national and regional scales, and to distribute information related to climate impacts to State, Local and tribal governments and the public. • All other provisions from the Discussion Draft were removed to allow Committee consideration.	Sec. 452. <i>National Climate Service</i> Directs the President to initiate a 3-year process to evaluate options for and to create a National Climate Service, to support 1) collaborative interagency research (USGCRP program created in Section 451) and 2) an operational program to meet the needs of decision makers in federal agencies, state, local and tribal governments, regional entities, and other stakeholders and users (which would include the Climate Service Program created in this same section). The process is to be conducted by the National Science and Technology Council and led by the Director of OSTP. Establishes a Climate Service Program within NOAA to advance understanding of climate change, provide information to the public, and to support development of adaptation and response plans. • Analyze the effects of weather and climate on sectors; provide technical support for State, tribal and local governments; manage and disseminate information; and facilitate the use of climate information by users. • Establishes 6 Regional Climate Centers to work with State Climate Offices to facilitate the collection and exchange of data and information between States and the Federal government and to support State and local adaptation and response planning. • Expands and clarifies the role of RISAs to include working with State Climate Offices, users and stakeholders on models, tools and other climate products, to facilitate development of regional and local adaptation plans. • Other provisions included.
Federal Agency Adaptation Plans	Unlike the Discussion Draft version of this bill, there is no longer a requirement for federal agency adaptation plans (except as defined in Subpart C for Natural Resources).	There is no requirement for federal agency adaptation plans (except as defined in Subpart C for Natural Resources)

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
State Programs to Build Resilience	Sec. 453 - Distributes allowances to State Governments, where amounts are determined on population and per capita income relative to the U.S. Distribution of allowances must begin no later than September 30 of 2012 and annually thereafter through 2050. Calculation: the product of each State's population and the State's "allocation factor" (Allocation Factor = Per capita income of all individuals in the U.S. divided by the per capita income of all individuals in the State, with minimum of .8 and max of 1.2). Requires deposit of funds into State Energy and Environment Development (SEED) Funds (established in sect 131) or else forfeit the allowances back to the Administrator. Requires States to create, and have approved, a State Adaptation Plan every 5 years in order to receive allowances for projects. Funding must be used for the implementation of projects, programs or measures to build resilience to climate change impacts including: extreme weather, water scarcity, decreased water quality, heat waves, droughts, sea level rise, increased air pollution, effects on public health, and ecosystem disruption. States should consider prioritizing projects that reduce flood events.³ Funds are intended to supplement, not replace, existing sources of funding for climate change adaptation.⁴ Requirements for State and tribal adaptation plans include: • Assessment and prioritization of vulnerabilities; • Assessment of potential for carbon reduction through changes to land management policies;⁵	Sec. 453 - Distributes allowances to State Governments, where amounts are determined on population and per capita income relative to the U.S. Distribution of allowances must begin no later than September 30 of each of calendar years 2011 through 2049. 1% of these allowances are reserved for distribution to Indian tribes. Calculation: the product of each State's population and the State's "allocation factor" (Allocation Factor = Per capita income of all individuals in the U.S. divided by the per capita income of all individuals in the State, with minimum of .8 and max of 1.2). The bill removed the provision to deposit proceeds from adaptation allowances into a SEED account for states. The bill adds a provision under State Programs (Sec 453) to account for revenues provided to states resulting from a Presidentially declared major disaster, to eliminate the risk of excess funds from multiple sources that can be attributable to the need for climate change adaptation. Requires States to create, and have approved, a State Adaptation Plan every 5 years in order to receive allowances for projects. Funding must be used for the implementation of projects, programs or measures to build resilience to climate change impacts including: extreme weather, water scarcity, decreased water quality, heat waves, droughts, sea level rise, increased air pollution, effects on public health, and ecosystem disruption. States should consider prioritizing projects that reduce flood events. Funds are intended to supplement, not replace, existing sources of funding for climate change adaptation. Beginning in 2015, distribution of allowances to a State is contingent on approval of the State's climate adaptation plan. Requirements for State and tribal adaptation plans include: • Assessment and prioritization of vulnerabilities • Assessment of potential for carbon reduction through changes to land management policies

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
Subpart B – Public Health and Climate Change		
Funding	Sec. 467. Creates a Climate Change Health Protection and Promotion Fund in the Treasury to carry out this subpart. Funds made available are intended to supplement existing sources of funds for public health. Part H, Sec 782 provides for the proceeds from .1% of total allowances to be deposited in this fund annually.	Sec. 467. No changes.
Intent of Federal Government	Sec. 461. States that it is the sense of the Congress that the Federal Government, in cooperation with international, State, tribal and local governments, should use all practical means and measures – • to assist efforts of public health and health care professionals, first responders, States, tribes, municipalities, and local communities to...prepare health systems to respond to impacts • to ensure: - Nation's health professionals have sufficient information to prepare for and respond to adverse health impacts of climate change - The utility and value of scientific research for health impacts and for strategies to prepare for and respond to impacts - Identification of vulnerable communities and development of response plans - Improvement of health status and health equity - Inclusion of health policy in development of climate change responses. • to encourage further research, interdisciplinary partnership, and collaboration between stakeholders - to understand and monitor health impacts - improve public health knowledge and response strategies - to enhance preparedness activities and public health infrastructure - to encourage Americans to learn about impacts of climate	Sec. 461. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
	change on health. • to assist efforts of developing nations to prepare to respond to impacts of climate change.	
Relationship to Other Laws	Sec. 462. Clarifies that nothing in subpart B limits authorities or responsibilities conferred by other laws.	Sec. 462. No changes.
National Strategy / Plan	Sec. 463. Requires the Sect of HHS to issue a national strategic action plan to assist health professionals in preparing for and responding to the impacts of climate change on public health in the U.S. and other nations, particularly developing countries. Requires consultation with relevant federal agencies, Indian tribes, State and local governments, public health organizations, scientists and other stakeholders, and opportunity for public comment. Detailed provisions for the contents of the plan are provided. Some of the topic areas include: • Disease surveillance and monitoring • Creating predicting and monitoring tools for international, national, regional, state and local levels • Developing communication strategies and interventions for extreme weather and disaster response • Identifying and prioritizing vulnerable communities and populations • Assessing international, national, regional, state and local preparedness and response strategies • Providing State, regional and tribal planning and implementation support Requires updates to the plan every 4 years. Calls for HHS and CDC to incorporate the goals and measures of the national action plan into the operations of the agency and center respectfully.	Sec. 463. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
Reports	Sec. 465. Calls for the submission of new reports: Needs Assessment Report – by the National Research Council and the Institute of Medicine to assess the needs for health professionals to prepare for and respond to climate change impacts on public health and recommendations. Climate Change Health Protection and Promotion Reports – requires the Sect to ensure issuance of reports to help health professionals in preparing for and responding to adverse health effects of climate change. Report objectives are provided in the bill. Updates are required every 4 years.	Sec. 465. No changes.
Sub-part C – Natural Resources Adaptation		
Adaptation Policy	Sec. 472. It is the policy of the Federal Government, in cooperation with State and local governments, Indian tribes, and other interested stakeholders to use all practical means and measures to protect, restore and conserve natural resources to enable them to become more resilient, adapt to, and withstand the impacts of climate change and ocean acidification.	Sec. 472. No changes.
CEQ	Sec. 474. Assigns CEQ the oversight role of: • Advising the President on the Natural Resources Climate Change Adaptation Strategy and Federal agency natural resources adaptation plans • Chairing the Natural Resources Climate Change Adaptation Panel; and • Coordinating Federal agency strategies, plans, programs, etc. as it pertains to natural resources adaptation.	Sec. 474. No changes.
Adaptation Panel	Sec. 475. Establishes a Natural Resources Climate Change Adaptation Panel, chaired by CEQ, with members from: • NOAA • Forest Service	Sec. 475. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
	• National Park Service • U.S. F&W • BLM • USGS • Bureau of Reclamation • Bureau of Indian Affairs • EPA • Army Corp of Engineers • Others as appropriate	
Adaptation Strategy	Sec. 476. Requires the Panel to create a Natural Resources Climate Change Adaptation Strategy: • based in best available science; • in close cooperation with States and Indian tribes; • consulting with local governments, conservation organizations, scientists and other interested stakeholders; and • provide public notice and opportunity for comment. Review and revise every 5 years. Detailed provisions for the content of the Strategy are provided in the following topic areas in the bill: • Vulnerability Assessments • Current research, observation, and monitoring activities at Federal, State, tribal and local levels • Identification of natural resources with the greatest need for protection, restoration and conservation • Protocols for integrating adaptation strategies and activities into conservation and management of natural resources by Federal departments and agencies to ensure consistency across jurisdictions and resources • Actions Federal departments and agencies shall take and timelines for actions. • Mechanisms for communication and coordination among	Sec. 476. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
	Federal departments and agencies, between Federal departments and agencies and State agencies, U.S. territories, Indian Tribes, private landowners, conservation organizations, and other nations that share jurisdiction over natural resources with the United States • Natural Resources inventory and monitoring protocols through interagency coordination and collaboration • Process for the development of agency and department adaptation plans. Federal departments or agencies with representation on the Panel shall consider the impacts of climate change and ocean acidification and integrate the elements of the Strategy into agency plans, environmental reviews, programs, and activities related to conservation, restoration, and management of natural resources.	
Adaptation Science and Information Program	Sec. 477. Directs NOAA and USGS to establish a coordinated process (within 90 days of enactment) for developing and providing science and information needed to assess and address the impacts of climate change and ocean acidification on natural resources. The process shall be led by the National Climate Change and Wildlife Science Center, established within the USGS and the National Climate Service of NOAA. Detailed provisions of the Functions NOAA and USGS shall provide are prescribed in the following topic areas in the bill: • Providing technical assistance to Federal departments and agencies, State and local governments, Indian tribes and interested private landowners in their efforts to assess and address impacts of climate change; • Conducting and sponsoring research and providing Federal departments and agencies, State and local governments, Indian tribes and interested private landowners with research products, decision and monitoring tools and information to develop strategies for assisting natural resources; and	Sec. 477. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
	Assisting Federal departments and agencies in the development of adaptation plans. Climate Change Impacts Survey required every 5 years. Establishes a National Climate Change and Wildlife Science Center within the USGS to perform specified functions, in collaboration with Federal and State natural resources agencies and departments, Indian tribes, universities and other partner organizations.	
Federal Agency Adaptation Plans	Sec. 478. Requires Federal departments and agencies with representation on the Panel to create an adaptation plan within 1 year of enactment that implement the Strategy under Sec. 476 and consistent with the Policy in Sec. 472. Numerous requirements for the content of the plans are detailed in the bill, some of which include: - Descriptions of current and proposed mechanisms to enhance cooperation and coordination of natural resources adaptation efforts with State and local government, Indian tribes and non-governmental stakeholders; - Specific guidance to resource managers on how to address effects of climate change and ocean acidification, how to obtain site-specific information, and to reflect best practices shared among agencies, and to identify and assess data and information gaps and needs. As it pertains to the implementation of adaptation plans and the consideration of impacts: "To the maximum extent practicable and consistent with applicable law, every natural resource management decision made by the department or agency shall consider the impacts of climate change and ocean acidification on those natural resources." CEQ is required to issue guidance for Federal departments and agencies for considering those impacts.	Sec. 478. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
State Adaptation Plans	Sec. 479. In order to be eligible for state adaptation funds, within 1 year of the development of the Natural Resources Climate Change Adaptation Strategy, states must create a State natural resource adaptation plan for review by the Secretary of Interior and, if applicable, the Secretary of Commerce. Plans must include a strategy for addressing impacts of climate change and ocean acidification on fish, wildlife, plants, habitats, ecosystems, wildlife health, and ecological processes Detailed provisions for what the plans must include are provided in the bill and include: • Description of the impacts • Establishes impact monitoring programs • Describe and prioritize proposed conservation actions • Include strategies, conservation actions and timeframes for implementing actions • Establish methods for assessing the effectiveness of, and for updating, strategies and actions • Incorporate the plan into a revision of the State's wildlife action plan • Parties who should participate in the planning effort (e.g. State coastal agency) • Parties with whom the plan should be coordinated, including the Sect of the Interior, and where applicable, the Sect of Commerce and other States that share jurisdiction over natural resources with the State. For coastal states, plans must also include a strategy to address impacts to the coastal zone that: • Identifies natural resources likely to be impacted; • Identifies continuing research and data needs to address those impacts; • Identifies adaptation strategies; • Establishes monitoring programs;	Sec. 479. No changes.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
	- Establishes performance measures to assess effectiveness of adaptation strategies; and - Is developed with State coastal and other agencies. Plans must consider the research and information that already exists in other plans (e.g. plans approved under the Coastal Zone Management Act). See bill for details. Plans must be updated no less than every 5 years.	
Funding	Sec. 479. Provides conditions under which funding established in Sec. 480 may be provided to States prior to the approval of a State Plan. Sec. 480.⁹ Allocates to states amounts from the sale of allowances on an annual basis, to be distributed as follows: - States 100% - 84.4% to state wildlife agencies - 15.6% to state coastal agencies Establishes the Natural Resources Climate Change Adaptation Fund in the Treasury for the deposit of auction proceeds established in Part H, Sec. 782. Congress must appropriate to federal agencies at least as much as the estimated annual deposits into the Fund. Appropriations are offset by the amounts deposited in the Fund. Allocation to Federal Agencies - Dept of Interior 40.6% - 27.6% for agency adaptation activities(departments added in the language include National Park Service, Bureau of Indian Affairs and Bureau of Land Management) - 8.1 % for cooperative grant programs - 4.9% for Indian tribe financial assistance - Land and Water Conservation Fund – 19.5% for acquisition of lands and land interests	Sec. 479. No changes. Sec. 480. No changes from the Manager's Amendments dated May 21. 2009 which modified this section.

GEORGETOWN CLIMATE CENTER

Georgetown State-Federal Climate Resource Center

Comparison of Adaptation Provisions, America's Clean Energy and Security Act of 2009 (HR 2454)

Bill as passed out of Committee May 21, 2009 and by the U.S. House of Representatives, June 26, 2009 (*summary updated July 6, 2009*)

Topic	HR 2454 as of 5.21.09 ¹	HR 2454 Final Bill ²
	• Forest Service – 8.1% • Dept of Commerce – 11.5% • EPA – 12.2% • Corp of Engineers – 8.1% 10% cost sharing provision for States. Federal departments and agencies must use funds only for activities consistent with their approved adaptation plans.	
Habitat and Corridors Information Program	Sec. 481. Requires the Sect of Interior in coordination with States and Indian tribes to establish a National Fish and Wildlife Habitat and Corridors Information Program. Funds the development and support of a Geographic Information System database of fish and wildlife habitats and corridors to enhance and improve state and federal plans that affect fish and wildlife including adaptation plans, land management plans, and so on. Detailed provisions for the GIS database and its use are provided in the bill.	Sec. 481. No changes.

¹ HR 2454 American Clean Energy and Security Act of 2009, as passed out of Committee May 21, 2009.

² HR 2454 America's Clean Energy and Security Act of 2009, as passed by the House of Representatives June 26, 2009.

³ Added by Manager's amendment on May 21, 2009.

⁴ Added by Manager's amendment on May 21, 2009.

⁵ Added by Manager's amendment on May 21, 2009.

⁶ Added by Manager's amendment on May 21, 2009.

⁷ Added by Manager's amendment on May 21, 2009.

⁸ Added by Manager's amendment on May 21, 2009.

⁹ Amended by Manager's amendment on May 21, 2009. The Manager's amendment separated out allocations for natural resources adaptation to states from allocation for federal agencies for natural resources adaptation. The amendment preserved the allocation disposition amounts, however, with States receiving 0.385% of the total natural resources allocation and federal agencies receiving the remaining portion through the Natural Resources Climate Change Adaptation Fund.