

COMMITTEE ON SCIENCE AND TECHNOLOGY

LEGISLATIVE AGENDA

111th Congress – 2nd Session

In the 1st Session of the 111th Congress, the Science and Technology Committee held 69 hearings, successfully passed 37 pieces of legislation in the House of Representatives, and had 2 bills enacted into law. During the 2nd Session, the Committee will continue to pursue policies that foster innovation, an essential element of our economic security, by reauthorizing the landmark *America COMPETES Act*. The Committee will prioritize job creation through the development of new technologies and will focus on preparing the workforce with the technical skills needed to fill those jobs. The Committee will also continue to support the development of technologies that increase energy independence, ensure the safety of our communities, and address growing global environmental challenges.

FOSTERING INNOVATION

The economic security of the United States will be strengthened by innovation, investments in research, and the development of new products and technologies. The Committee plans to -

- ❖ Ensure that the National Science Foundation continues to fund the basic scientific research required to spur innovation and drive economic growth
- ❖ Reinforce the role of the National Institute of Standards and Technology in promoting technological innovation and strengthening industrial competitiveness
- ❖ Make certain that the National Aeronautics and Space Administration continues to create new markets and innovative technologies, and foster the technological advancement of the U.S. commercial space industry
- ❖ Encourage the development of a comprehensive, government-wide innovation agenda

SPURRING JOB CREATION AND DEVELOPING A MORE SKILLED WORKFORCE

The development of new products and technologies will lead to new jobs and increase the demand for a skilled workforce. The Committee plans to -

- ❖ Boost the Manufacturing Extension Partnership's ability to meet the changing needs of manufacturers, and refocus manufacturing research and development to deliver the greatest economic benefit
- ❖ Expand, bolster, and strengthen coordination of STEM education programs to ensure that our nation will continue to produce the world's leading innovators and have the skilled workforce needed for the technical jobs of the future
- ❖ Focus resources on increasing the participation of women and underrepresented minorities in STEM fields

SECURING ENERGY INDEPENDENCE

A reliable supply of energy is crucial to our economic security. The Committee is dedicated to identifying new energy sources and promoting the development of transformative energy technologies. The Committee plans to -

- ❖ Reinforce the role of the Advanced Research Projects Agency for Energy (ARPA-E) in revolutionizing how the U.S. develops new energy technologies
- ❖ Support the Department of Energy's Office of Science, which funds basic research and world-class facilities that play an integral role in maintaining technological competitiveness
- ❖ Expand research and development of alternative energy technologies that will help us achieve energy security and grow new sectors of the economy
- ❖ Explore the development of a comprehensive research and development program to guide the future of nuclear energy, including generation, enrichment, reprocessing, and storage of spent fuel
- ❖ Strengthen research and development focused on increasing energy efficiency

PROVIDING SAFETY AND SECURITY

New and emerging technologies can improve the safety and security of our communities. The Committee plans to -

- ❖ Complete work on legislation to support research, development and technology transfer activities that mitigate against potential damage caused by earthquakes and severe windstorms
- ❖ Make federal investments in cybersecurity more focused and effective, and support research into transformative technologies to secure cyberspace
- ❖ Align Department of Homeland Security research priorities with the most critical threats and needs, and ensure that the technology developed meets reliable testing and evaluation standards
- ❖ Guide research and development to increase the safety, cleanliness, and reliability of the nation's pipeline system
- ❖ Focus surface transportation research and development programs to increase safety, boost efficiency, and reduce congestion

ADDRESSING ENVIRONMENTAL CHALLENGES

New technologies can help mitigate growing environmental challenges in ways that are economically viable. The Committee plans to -

- ❖ Address the need for accurate and reliable technologies to monitor and verify greenhouse gas emissions
- ❖ Ensure that the National Oceanic and Atmospheric Administration continues to support important atmospheric and ocean research
- ❖ Align research and development activities at the Environmental Protection Agency with the agency's current missions and anticipated needs
- ❖ Continue to provide careful consideration and review of geoengineering and climate engineering proposals

COMMITTEE ON SCIENCE AND TECHNOLOGY

Expected Legislation

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AMERICA COMPETES REAUTHORIZATION

The America COMPETES Act was enacted in 2007. This bipartisan, landmark legislation demonstrated the Committee's commitment to ensuring the economic security and competitiveness of the United States by spurring innovation, making needed investments in research, and encouraging the development and commercialization of new products and technologies.

The COMPETES Act expires at the end of Fiscal Year 2010. The Committee will undertake an aggressive hearing and markup schedule in early 2010 in order to get a multi-year COMPETES reauthorization bill drafted and through the House by Memorial Day. The comprehensive reauthorization bill will include authorizations for the National Science Foundation (NSF) and the National Institute for Standards and Technology (NIST), and will likely include reauthorizations for the activities of the Department of Energy's Office of Science and the Advanced Research Projects Agency – Energy. The bill is also likely to include new programs and policy direction at NSF, NIST, and other agencies relating to transformative research, STEM education, innovation, commercialization, and manufacturing.

NASA REAUTHORIZATION

The Committee expects to draft and report out a multi-year reauthorization of the National Aeronautics and Space Administration by the end of May. The comprehensive reauthorization will include provisions relating to human space flight and exploration, space and Earth/climate science, aeronautics and aviation research and development, and education and outreach.

NUCLEAR ENERGY RESEARCH AND DEVELOPMENT

In an effort to ensure that the United States has a comprehensive and inclusive portfolio to meet its growing need for energy and to reduce greenhouse gas emissions, the Committee intends to draft legislation to authorize a broad research and development program on nuclear energy at the Department of Energy. The new program will likely address enrichment,

reprocessing, generation, and the storage of spent fuel.

NEW ENERGY TECHNOLOGIES

The Committee will continue its work to spur the development of new energy technologies through targeted, stand-alone bills. Based on hearings held in the 1st session, the Committee is already working on bills relating to research and development of marine energy and energy efficiency.

NOAA ORGANIC ACT

The National Oceanic and Atmospheric Administration was created by executive order in 1970, but does not have an organic act. The Committee intends to produce legislation that would codify the agency's authorities and responsibilities to ensure that the agency will continue to support important atmospheric and ocean research in the future.

COMMERCIAL SPACE

The Committee expects to draft legislation to reauthorize the Federal Aviation Administration's Office of Commercial Space Transportation and the Department of Commerce's Office of Space Commercialization.

DEPARTMENT OF HOMELAND SECURITY SCIENCE AND TECHNOLOGY REAUTHORIZATION

This bill will reauthorize research and development activities at the Department of Homeland Security's Science and Technology Directorate to ensure that the Department's priorities are aligned with the most critical threats and needs, and that the technology developed meets reliable testing and evaluation standards.

SURFACE TRANSPORTATION RESEARCH AND DEVELOPMENT

During the 1st Session, the Committee drafted legislation to reauthorize surface transportation research, development, and technology transfer activities. The legislation, H.R. 2569, has already been marked up by the Technology and Innovation Subcommittee. The Committee expects to complete its work on H.R. 2569 in time to incorporate the research and development provisions into a broader surface transportation reauthorization package.