



UNITED STATES ECONOMIC AND TECHNOLOGY POLICY

Technological innovation has driven impressive job creation and economic growth, and with it has come increased productivity, low inflation and an unprecedented economic expansion. These trends have been nurtured by industry and government actions over the past 30 years, including the deregulation of industries, globalization of markets, a strong venture capital market, and a renewed entrepreneurial spirit. Innovation and growth, supported by increasing government and industry investment in R&D, have helped to sustain the United States as the most competitive nation in the world for many years. America is currently experiencing a revolution in energy, information, bio- and nano-technology that requires increased commitment to investments in education, science and technology in order to maintain the gains realized in the past and maintain American competitiveness in the future.

There was strong bipartisan support in Congress for the authorizing legislation, America COMPETES, which builds on the National Academies' recommendations in the *Gathering Storm* report. We support the programs authorized in America COMPETES. Furthermore,

The Industrial Research Institute (RTM's publisher) is an organization of some 200 industrial and service companies having common interest in effective management of technological innovation. IRI member companies invest over \$100 billion annually in R&D, representing more than 70 percent of the nation's privately funded effort. These companies, spanning diverse industries, compete in the global marketplace and provide jobs for more than 10 million of America's workers. Together they generate some \$3 trillion in annual sales, representing one-third of U.S. gross domestic product. IRI welcomes the opportunity to discuss its views on the recommendations in this position statement. For additional information, contact Edward Bernstein, president, Industrial Research Institute, 2200 Clarendon Blvd., Suite 1102, Arlington, VA 22201.

www.iriinc.org

Congress has established a plan to double, over 10 years, investment in innovation-enabling research at three Federal agencies: the National Science Foundation (NSF), the Department of Energy's Office of Science (DOE SC), and the Department of Commerce's National Institute of Standards and Technology (NIST). In FY 2008, \$11.42 billion total was budgeted for NSF, DOE SC, and NIST, an overall funding increase of \$764 million, or 7.2 percent, above the 2007 research budget of \$10.66 billion, although the final allocation was much less. To achieve a doubling in 10 years, overall annual increases will need to average roughly seven percent. IRI strongly supports such an investment stream.

A Message to the Presidential and Congressional Candidates

While the private sector has primary responsibility for implementing technological innovation, the economic climate created by government's fiscal, monetary and regulatory policies greatly influences the pace of commercialization. In the past two decades, a new, global innovation focus has emerged in the United States based on productive industry, university and government collaborations. This system begins with government support of basic research in universities and ends with industry commercializing new products, processes and services on a global basis. A marketplace desire for high-valued products is the engine that has propelled this remarkable growth. Recognizing the critical importance of appropriate government economic and technology policies to maintain this economic growth and competitiveness, IRI recommends that the President and Congress act together to:

1. Continue the critical role of government in funding fundamental research in universities aimed at advancing knowledge in science and engineering.

While education must be our universities' top priority, both high-quality, ground-breaking academic research and well-trained graduates are key elements of our innovation infrastructure. Thus, we urge you to:

- Provide reliable and increasing funding for fundamental university research and the infrastructure needed to maintain global leadership in key science and engineering areas for our industry's future workforce.
- Promote strong collaboration between universities and industry to enhance the commercialization of new technologies.
- Support education programs in grades K–12 that promote science, technology, engineering, and math (STEM).
- Encourage industry-university consortia on discovery science and engineering.
- Update our immigration policies to facilitate foreign science and engineering students attending U.S. universities and remaining here in cutting-edge, private-sector positions.

2. Promote economic and regulatory policies that will stimulate continued strong investment in R&D. Innovation requires long-term investment, dedication and risk tolerance. Thus, we urge you to:

- Further reduce tax rates on capital gains to favor longer-term, productive investment, such as elimination of any capital-gains tax on investments held 10 years or more. Also, make the R&E tax credit permanent at current or increased levels, as well as simplify the related accounting practices to eliminate dual record keeping.
- Strengthen our system of intellectual-property protection, and allow market forces and the rapid pace of technological change to determine fair competition.
- Eliminate legal and regulatory barriers that discourage business investments, e.g., reform tort laws to rationalize the level of damages awarded in liability suits.
- Provide incentives to increase private-sector training and knowledge building for an increasingly diverse work force.

- Continue and strengthen incentives such as the SBIR/STTR program to incentivize innovation in small business.

3. Develop new technology policies that reflect the global nature of the marketplace and an accelerating knowledge-based economy. Federal government policies need to recognize shorter product cycles and the availability of technology from many global centers. Effective collaboration among industry, universities and government laboratories must be fostered to sustain U.S. competitiveness. Thus, we urge you to:

- Develop new public/private-sector cooperative programs to help American industry develop high-risk technology that *would not* otherwise be funded. Focus federal R&D funding on strategically critical science and technology developments that no single industry or company group would be able to fund.
- Ensure effective funding and management of federal R&D laboratories and projects, and streamline the process of R&D collaboration with industry.
- Work closely with industry to create economically viable initiatives to improve the global environment and decrease non-renewable energy consumption.
- Streamline export control laws and their implementation to foster global collaborative R&D.

Our future standard of living, quality of life and economic growth depend on a renewed science and technology agenda appropriate for the rapidly changing global marketplace. The President and the Congress should work together, as they did in adopting the recommendations from the *Gathering Storm* report into the President's American Competitiveness Initiative and subsequently into the America COMPETES Act, to further develop this new agenda and forge closer linkages between our nation's economic and technology policies to carry out the agenda. ☉

Reprints

FINDING AND NURTURING GOOD IDEAS

Forty-six RESEARCH • TECHNOLOGY MANAGEMENT articles on this subject are now available in paperback. To order, see inside back cover.

Managing Invention and Innovation
Creativity in the 2000s and Beyond
Seeing Differently: A Role for Pioneering Research
The Tao of Innovation
Keeping Innovation Alive
How 3M Innovates for Long-Term Growth

Fostering Creativity and Innovation in an
Industrial R&D Laboratory
Stimulating Innovative Thinking
Innovation Mentoring at Whirlpool
Finding Creativity in a Technical Organization
... AND MORE

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.