



FYI: The AIP Bulletin of Science Policy News

State of the Union: Innovation, Energy, Climate Change, Spending, Education, and Nuclear Policy

[Richard M. Jones](#)

Number 9 - January 28, 2010

Last night President Barack Obama touched on many matters of considerable interest to the physics and science education communities in his State of the Union address: innovation, basic research funding, clean energy production, climate change, education, and nuclear weapons policy. When the President sends his FY 2011 budget request to Congress next Monday, February 1, his specific intentions for many of these matters will be made clearer. Of note will be the Administration's request for science funding, which is a component of the total discretionary budget that the President announced he was prepared not seek an increase in for Fiscal Years 2011, 2012, and 2013 (with some specific exemptions.) This declaration does not necessarily mean that the Administration will not seek budget increases for some programs. As an example, although President George Bush announced his intention to hold overall non-security discretionary spending increases to less than one percent in FY 2009, his [State of the Union address in 2008](#) called on Congress to continue his plan to, over ten years, "double federal support for critical basic research in the physical sciences."

Selections from the President Obama's remarks follow:

Innovation, Basic Research, Energy, Climate Change:

"You see, Washington has been telling us to wait for decades, even as the problems have grown worse. Meanwhile, China is not waiting to revamp its economy. Germany is not waiting. India is not waiting. These nations -- they're not standing still. These nations aren't playing for second place. They're putting more emphasis on math and science. They're rebuilding their infrastructure. They're making serious investments in clean energy because they want those jobs. Well, I do not accept second place for the United States of America."

". . . we need to encourage American innovation. Last year, we made the largest investment in basic research funding in history -- an investment that could lead to the world's cheapest solar cells or treatment that kills cancer cells but leaves healthy ones untouched. And no area is more ripe for such innovation than energy. You can see the results of last year's investments in clean energy -- in the North Carolina company that

will create 1,200 jobs nationwide helping to make advanced batteries; or in the California business that will put a thousand people to work making solar panels.

“But to create more of these clean energy jobs, we need more production, more efficiency, more incentives. And that means building a new generation of safe, clean nuclear power plants in this country. It means making tough decisions about opening new offshore areas for oil and gas development. It means continued investment in advanced biofuels and clean coal technologies. And, yes, it means passing a comprehensive energy and climate bill with incentives that will finally make clean energy the profitable kind of energy in America.

“I am grateful to the House for passing such a bill last year. And this year I'm eager to help advance the bipartisan effort in the Senate.

“I know there have been questions about whether we can afford such changes in a tough economy. I know that there are those who disagree with the overwhelming scientific evidence on climate change. But here's the thing - even if you doubt the evidence, providing incentives for energy-efficiency and clean energy are the right thing to do for our future - because the nation that leads the clean energy economy will be the nation that leads the global economy. And America must be that nation.”

Education:

“ . . . we need to invest in the skills and education of our people.

“Now, this year, we've broken through the stalemate between left and right by launching a national competition to improve our schools. And the idea here is simple: Instead of rewarding failure, we only reward success. Instead of funding the status quo, we only invest in reform -- reform that raises student achievement; inspires students to excel in math and science; and turns around failing schools that steal the future of too many young Americans, from rural communities to the inner city. In the 21st century, the best anti-poverty program around is a world-class education. And in this country, the success of our children cannot depend more on where they live than on their potential.

“When we renew the Elementary and Secondary Education Act, we will work with Congress to expand these reforms to all 50 states. Still, in this economy, a high school diploma no longer guarantees a good job. That's why I urge the Senate to follow the House and pass a bill that will revitalize our community colleges, which are a career pathway to the children of so many working families.

“To make college more affordable, this bill will finally end the unwarranted taxpayer subsidies that go to banks for student loans. Instead, let's take that money and give families a \$10,000 tax credit for four years of college and increase Pell Grants. And let's tell another one million students that when they graduate, they will be required to pay only 10 percent of their income on student loans, and all of their debt will be forgiven after 20 years -- and forgiven after 10 years if they choose a career in public service, because in the United States of America, no one should go broke because they chose to go to college.

“And by the way, it's time for colleges and universities to get serious about cutting their own costs -- because they, too, have a responsibility to help solve this problem.”

Spending:

“Starting in 2011, we are prepared to freeze government spending for three years. Spending related to our national security, Medicare, Medicaid, and Social Security will not be affected. But all other discretionary government programs will. Like any cash-strapped family, we will work within a budget to invest in what we need and sacrifice what we don't. And if I have to enforce this discipline by veto, I will.”

Nuclear Weapons Policy:

“Now, even as we prosecute two wars, we're also confronting perhaps the greatest danger to the American people – the threat of nuclear weapons. I've embraced the vision of John F. Kennedy and Ronald Reagan through a strategy that reverses the spread of these weapons and seeks a world without them. To reduce our stockpiles and launchers, while ensuring our deterrent, the United States and Russia are completing negotiations on the farthest-reaching arms control treaty in nearly two decades. And at April's Nuclear Security Summit, we will bring 44 nations together here in Washington, D.C. behind a clear goal: securing all vulnerable nuclear materials around the world in four years, so that they never fall into the hands of terrorists.

“Now, these diplomatic efforts have also strengthened our hand in dealing with those nations that insist on violating international agreements in pursuit of nuclear weapons. That's why North Korea now faces increased isolation, and stronger sanctions -- sanctions that are being vigorously enforced. That's why the international community is more united, and the Islamic Republic of Iran is more isolated. And as Iran's leaders continue to ignore their obligations, there should be no doubt: They, too, will face growing consequences. That is a promise.

“That's the leadership that we are providing -- engagement that advances the common security and prosperity of all people. We're working through the G20 to sustain a lasting global recovery. We're working with Muslim communities around the world to promote science and education and innovation. We have gone from a bystander to a leader in the fight against climate change. We're helping developing countries to feed themselves, and continuing the fight against HIV/AIDS. And we are launching a new initiative that will give us the capacity to respond faster and more effectively to bioterrorism or an infectious disease – a plan that will counter threats at home and strengthen public health abroad.”

Richard M. Jones
Media and Government Relations Division
American Institute of Physics
rjones@aip.org
301-209-3095