

# Technology Policy International

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### John Kerry's Science and Technology Policies

#### ABSTRACT

Senator John Kerry, like many other leaders in the Democratic Party, believes that new science and technology (S&T) are important to America's economy, energy supplies, and national security. If elected president, he will support expanded federal civilian research and development (R&D) programs, targeted tax credits for new technologies, and pro-entrepreneur policies. However, two factors will hinder these efforts: the very large federal budget deficit created during the presidency of George W. Bush, and a Congress that probably will still have Republican majorities.

#### SENATOR KERRY'S BACKGROUND AND INTERESTS

John Kerry was first elected to the United States Senate in 1984, and has served there ever since. Before joining the Senate, he served as a Navy officer during the Vietnam War, as a local prosecutor, and then as Lieutenant Governor in Massachusetts.

Senator Kerry has been called a "Massachusetts liberal," and in fact his views on so-called "social issues" (such as abortion rights and rights for homosexuals) are liberal, in the way that Americans use that term. But in most other respects Senator Kerry is a moderate, pro-business Democrat, very much in the same centrist tradition as Bill Clinton. These are some examples:

- He has been a strong supporter of Massachusetts industries, not only both high-tech firms in information technology, telecommunications, and biotechnology but also older sectors such as traditional manufacturing and fishing. Jobs and economic growth are important issues for him. He has a particular interest in helping small businesses, and serves as the Ranking Democrat (senior Democrat) on the Senate's Committee on Small Business and Entrepreneurship. He also believes in reforming public education and

improving training programs so that Americans can compete successfully in the global economy.

- He has a strong interest in protecting the environment, reducing America's dependence on oil from the Middle East, and ratifying the Kyoto Protocol on Climate Change. But he prefers to use new technology and tax incentives and not just regulations to change energy patterns.
- As a former local prosecuting attorney in Massachusetts, he has taken a tough stance on crime and has supported federal programs that help local governments hire more police.
- In foreign policy, he is an interesting example of an American leader from the Vietnam generation. His father was a foreign-service officer in the U.S. Department of State, and Mr. Kerry is very much an internationalist who believes in working actively with other countries. He volunteered to join the U.S. Navy during the Vietnam War, believes in maintaining a strong U.S. military, and several times has supported the use of U.S. military force overseas. But he also has a deep skepticism about war and unilateralism, as can be seen in his criticism of the Bush Administration's strategy in Iraq. Senator Kerry has a particular interest in Asian issues, and serves as the Ranking Democrat on the Senate Foreign Relations Committee's Subcommittee on East Asian and Pacific Affairs.

## TECHNOLOGY AND THREE POLICY

## AREAS OF PARTICULAR INTEREST TO SENATOR KERRY

During his years in the Senate, Mr. Kerry has not been one of Congress' leaders on S&T policy. For example, he has not led any of the major subcommittees that decide R&D budgets, and he has shown less interest in R&D issues than Al Gore did when he was a Senator. However, Senator Kerry does have a strong belief in the ability of technology to help achieve important policy goals. He has supported both R&D programs to develop new technologies and tax credits to encourage companies and individuals to develop and adopt new technologies.

The next three sections of this paper discuss his specific views on three topics: economic growth and technology; the environment, energy, and technology; and national security and technology. He sees these three topics as closely linked together.

## ECONOMIC GROWTH AND TECHNOLOGY

Since the 1980s, many moderate Democrats in the United States have worked to develop policies that will help U.S. companies and workers succeed in an increasingly global economy. John Kerry is one such Democrat. Like Bill Clinton, Mr. Kerry has long advocated a three-part economic strategy for the United States. Technology policy is an important part of this overall economic strategy.

- *Federal budget.* Mr. Kerry believes in a balanced federal budget – that is, he does not want the government to run large annual budget deficits. Heavy federal borrowing reduces the amount of

capital available for private investment and drives up interest rates. In 1985, in his first year in the U.S. Senate, Mr. Kerry was one of only a few Democrats who co-sponsored the Gramm-Rudman-Hollings legislation to force a balanced budget. In 1993, he strongly supported President Clinton's proposal to balance the federal budget. In his current presidential campaign, Mr. Kerry has said that if elected he will try to cut the current annual federal budget deficit (\$370 billion or more in fiscal year 2004) by half within four years.

- *Free trade.* Senator Kerry generally supports free-trade agreements, including WTO membership for China. Many trade-union leaders and other Democrats oppose trade agreements. He argues that the U.S. must open up foreign markets in order to boost exports and create new U.S. jobs. Recently, however, he has criticized U.S. companies that move production offshore or move their headquarters to low-tax locations such as Bermuda. He called these companies "Benedict Arnolds," after the infamous American general who betrayed his country and helped the British during the American Revolution. This comment upset many of Mr. Kerry's supporters in industry. However, because he is essentially pro-business, not hostile to it, his proposed solution to this problem is not to try to ban companies from moving operations offshore, but rather to offer new tax incentives to encourage companies to keep jobs here in the United States.<sup>1</sup>

- *Investments in technology and training.* Expanded trade is good, but only if the United States can compete successfully in global commerce. Mr. Kerry (again, as with Mr. Clinton) strongly believes that the U.S. Government should invest heavily in science, technology, education, and training in order to help make American industry and American workers as competitive as possible. He specifically supports the following: increasing support for basic research in the physical sciences and engineering, increasing energy R&D, expanding stem-cell research, keeping the Commerce Department's Advanced Technology Program (ATP), encouraging broadband Internet connections, doubling funding for the Manufacturing Extension Partnership (MEP), keeping other programs that help small businesses, creating a new National Education Trust Fund to help improve schools, and providing more opportunities for students to attend college. He also supports strong intellectual property protection for U.S. technology products.<sup>2</sup>

This three-part economic strategy holds great appeal for Senator Kerry and other moderate Democrats. In their view, the United States cannot compete with China or India on the basis of low wages. Under these circumstances, the U.S. can only prosper if it stays a leader in innovative, high-paying industries. Moreover, America's economy will grow only if the government works with U.S. industry, not against it. So government's role is to help keep America technologically advanced and

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1. See "John Kerry's Plan to Create 10 Million Jobs," <http://www.johnkerry.com/issues/economy/10million.html>.

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2. See "Technology Plan to Create Jobs and Empower Americans to Lead in the 21<sup>st</sup> Century," <http://www.johnkerry.com/issues/tech>.

well trained, while at the same time maintaining a good macroeconomic environment (through a balanced federal budget) and open but fair trade rules.

Mr. Kerry's Senate Web pages offer this summary of his economic philosophy and the role of science and technology in it:

As a United States Senator, John Kerry has advocated market-based solutions [i.e., policies that work with business] aimed at maintaining a high level of economic growth, job creation, and technological advancement. In Senator Kerry's view, keeping America strong and competitive requires an economic agenda based on education and training, investments in key priorities such as research and development, and a commitment to fiscal discipline.... The 1990s demonstrated that a national commitment in favor of fiscal discipline; productive investments in education, business, and technology; and modest and targeted tax cuts can serve as an effective engine of economic growth.<sup>3</sup>

## THE ENVIRONMENT, ENERGY, AND TECHNOLOGY

Since 1970, the United States has had an annual event called "Earth Day," a set of political rallies calling for environmental protection. In 1970, a young John Kerry spoke at Massachusetts' very first Earth Day event.

Today, he continues to be an environmentalist. As mentioned, he is a strong supporter of the Kyoto Protocol. He

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3. See "Kerry's Record on the Economy," [http://kerry.senate.gov/bandwidth/issue/economy\\_record.html](http://kerry.senate.gov/bandwidth/issue/economy_record.html).

opposes President Bush's proposal to allow oil exploration in the Arctic National Wildlife Refuge. As the top Democrat on the Senate Commerce Committee's Subcommittee on Oceans, Fisheries, and the Environment, he has expressed concern about both global warming and over-fishing. If elected president, he would continue these policies.

In addition, Mr. Kerry recently proposed an ambitious new national energy initiative.<sup>4</sup> It illustrates how his policy goals connect to each other, and how he sees R&D investments, regulation, and tax incentives as important tools to advance his goals.<sup>5</sup>

His energy proposal connects three of his top policy concerns: environmental protection, foreign policy, and job creation. He proposes to improve energy efficiency, use renewable energy to generate 20 percent of U.S. electricity by 2020, and use more natural gas, bio-fuels, and hydrogen – all in order to reduce energy costs, reduce pollution, and reduce U.S. dependence on foreign oil from unstable parts of the world.

To reach his goals, Senator Kerry proposes to use three kinds of policy tools: a limited amount of regulation (particularly to require more fuel-efficient vehicles); federal R&D to help develop new technologies; and tax incentives to encourage automobile manufacturers to produce energy-efficient

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4. See "Energy Plan," <http://www.johnkerry.com/issues/energy/plan.html>, and "Kerry Outlines Plan to Help Communities Struggling to Keep Up with the Rising Cost of Gas," [http://www.johnkerry.com/pressroom/releases/pr\\_2004\\_0525.htm](http://www.johnkerry.com/pressroom/releases/pr_2004_0525.htm).

5. Senator Kerry is a member of the Senate's powerful Finance Committee, which writes tax laws and trade laws. He has a long interest in using tax credits to change social behavior.

advanced vehicles in the United States and tax credits to encourage consumers to buy these new vehicles.

A statement from one of his Senate Web pages summarizes the connections he sees between energy, the environment, jobs, and national security. It also illustrates his views about technology.

I feel ... strongly that America must promote a balanced energy policy that transitions the nation from our heavy dependence on polluting, and sometimes insecure, fossil fuels to more efficient, clean and reliable energy. The key to this transition is technology....

I believe that such a national strategy would strengthen America. It would reduce the pollution connected with asthma, lung cancer and heart disease. It would reduce the pollution associated with global warming. It would strengthen our national security by lessening our dependence on oil and our vulnerability to imported oil. Instead of sending American dollars overseas, we'd be investing in American farmers producing bio-diesel, American workers building more efficient cars. There are hundreds of thousands, if not millions, of jobs to be created in the design, manufacture, refining and distribution of domestic, renewable energy.<sup>6</sup>

In addition to his own long-standing interest in the environment and energy, Senator Kerry also has one of the most extraordinary spouses in U.S. public life: Teresa Heinz Kerry, a woman who is very active on environmental issues. She is the widow of

Senator John Heinz, who was a Republican from Pennsylvania and a member of a very wealthy family; he died in an airplane accident. Ms. Heinz Kerry is heir to his immense fortune and has retained her role as chief administrator for the Heinz family charities – a role she pledges to keep if she becomes First Lady (wife of the president). Environmental causes have a prominent place in the Heinz family charities, and Ms. Heinz Kerry has become an ardent critic of the Bush Administration's environmental policies. Also, having been born abroad and speaking five languages, she strongly believes that the U.S. should constructively engage with other countries.

#### NATIONAL SECURITY AND TECHNOLOGY

Senator Kerry is an internationalist who believes in working with other nations and building alliances. He argues that President Bush's policies of unilateralism and preemptive war have damaged U.S. security, and that the U.S. must create a new era of international alliances to meet the current challenge of global terrorism.

Most of this debate has little to do with technology policy. But the fight against terrorism does have implications for the type of military the U.S. needs today, and in his view that point has implications for military technology. He argues that America's military needs improved equipment: "A modern military means smarter, more versatile equipment; better intelligence; advanced communications; long-range air power; and highly-mobile ground forces."<sup>7</sup> He has therefore supported funding for defense R&D programs.

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6. See "Energy," <http://kerry.senate.gov/bandwidth/issues/energy.html>.

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7. See "Foreign Policy," <http://www.johnkerry.com/issues/foreignpolicy/>.

He has also taken positions on several specific S&T issues in the fields of national security and homeland security. He believes that small high-tech firms have valuable contributions to make to U.S. defense. He opposes rushing to deploy a National Missile Defense (NMD) system that has not been fully tested. He wants a strong U.S. policy against the proliferation of nuclear weapons. He wants the U.S. to be a leader in fighting the global spread of AIDS, tuberculosis, and malaria.<sup>8</sup>

#### TWO CONSTRAINTS THAT WOULD LIMIT WHAT MR. KERRY COULD ACCOMPLISH AS PRESIDENT

Although Mr. Kerry has strong views about science and technology policy, if elected president he will face two important factors that will constrain his ability to enact that agenda.

*The huge new federal budget deficit.* When President Clinton left office in January 2001, the U.S. Government enjoyed a budget surplus. Since then, the government has experienced large deficits. These deficits result from three main factors: the recession reduced federal revenues, spending for the military and homeland security jumped, and President Bush and Congress enacted large tax cuts. In fiscal year (FY) 2003 (October 1, 2002, until September 30, 2003), the federal government's deficit was \$375 billion. Estimates for the FY 2004 deficit range from \$370-521 billion.<sup>9</sup> If elected, Senator

Kerry pledges to cut this deficit in half over four years, largely by rescinding Bush tax cuts for the wealthiest Americans. But even if Congress agrees to this change – a very big “if” – money for new initiatives will be very limited.

If the Bush tax cuts are not changed, then the most recent policy statement from the Bush White House shows how bad the budget situation may be. That statement recommends severe cuts in domestic programs in FY 2006, including cuts at the National Science Foundation (NSF) and other R&D agencies.<sup>10</sup>

*A Republican-controlled Congress.* Even if Mr. Kerry is elected president, Republicans under the very conservative Tom DeLay of Texas are likely to retain control of the U.S. House of Representatives. While Republicans now hold only a modest majority in the U.S. Senate, they may also control the Senate after the November elections.

This is bad news for Mr. Kerry. Aside from any differences in political philosophy, Mr. DeLay is a highly partisan Republican who will do his best to block the new president's agenda and deny him any political victories. Unless Mr. Kerry can appeal successfully to a small and dwindling group of moderate Republicans in Congress, he will have difficulty winning votes in the national legislature and enacting new initiatives – especially if they involve additional spending.

#### CONCLUSION

*Street Journal*, April 30, 2004.

10. Jonathan Weisman, “2006 Cuts in Domestic Spending on Table,” *Washington Post*, May 27, 2004.

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8. See “Kerry's Record on American Foreign Policy,” [http://kerry.senate.gov/bandwidth/issues/foreign\\_reco rd.html](http://kerry.senate.gov/bandwidth/issues/foreign_reco rd.html).

9. Dow Jones Newswires, “Citigroup Economists Lower US FY04 Deficit Call to \$370B,” *The Wall*

So what is the outlook for U.S. science and technology policy if Mr. Kerry is elected president?

Mr. Kerry seems more interested in S&T as a means towards policy ends than in the details of S&T policy itself. Therefore, if elected he is not likely to show as much interest in the specifics of S&T policy as Al Gore did as Vice President or even as much interest as President Clinton did. (Mr. Clinton seemed genuinely interested in the details of fields such as computing, genomics, and nanotechnology.)

However, based on the policy positions he has taken during the presidential campaign, we can expect that Mr. Kerry will propose ambitious R&D and tax initiatives related to economic growth and energy and possibly additional R&D for defense. He also will try to slow down one major technology-related initiative from the Bush years: National Missile Defense.

Republican leaders in Congress are likely to oppose Mr. Kerry's proposals related to economic growth and energy. They may agree to some new spending for defense R&D, although even here the federal budget deficit will limit how much Congress spends.

Note: An Appendix to this paper provides some basic facts about Senator Kerry.

## **APPENDIX: SOME FACTS ABOUT SENATOR JOHN KERRY**

### ***Current Committee Assignments in the U.S. Senate***

Committee on Small Business and Entrepreneurship (Ranking Democrat)

Committee on Commerce, Science, and Transportation

    Subcommittee on Oceans, Fisheries, and the Environment (Ranking Democrat)

    Subcommittee on Communications

    Subcommittee on Surface Transportation

Committee on Finance

    Subcommittee on Health Care

    Subcommittee on International Trade

    Subcommittee on Social Security and Family Policy

Committee on Foreign Relations

    Subcommittee on East Asian and Pacific Affairs (Ranking Democrat)

    Subcommittee on European Affairs

    Subcommittee on Western Hemisphere, Peace Corps, and Narcotics Affairs

### ***Hometown***

Boston, Massachusetts

### ***Born***

December 11, 1943, Denver, Colorado

### ***Religion***

Roman Catholic

### ***Family***

Wife, Teresa Heinz Kerry; two children from a previous marriage; three stepchildren

### ***Education***

Yale University, B.A. 1966 (political science)

Boston College, J.D. (law degree), 1976

### ***Military Service***

United States Navy, 1966-70; service in Vietnam

### ***Career***

Assistant county prosecutor, Middlesex County, Massachusetts

Lawyer in private practice

Lieutenant Governor, State of Massachusetts, 1983-1985

United States Senator, 1985-present



**Web Sites**

[www.kerry.senate.gov](http://www.kerry.senate.gov) (Senate Web site)

[www.johnkerry.com](http://www.johnkerry.com) (Presidential campaign Web site)

**Sources:**

Senator Kerry's Senate Web site, <http://kerry.senate.gov/bandwidth/about/biography.html>

David Hawkings and Brian Nutting, *Politics in America 2004: The 108<sup>th</sup> Congress* (Washington, DC: Congressional Quarterly Press, 2004)