DEPARTMENT OF ENERGY

Funding Highlights:

- Provides $27.2 billion in discretionary funds, a 3.2 percent increase above the 2012 enacted level. This request includes increased funding for priority areas such as clean energy, research and development to spur innovation, and advanced manufacturing. Savings and efficiencies are achieved through cuts to inefficient and outdated fossil fuel subsidies, low-priority and low-performing programs, and by concentrating resources on full utilization of existing facilities and infrastructure.

- Increases funding for applied research, development, and demonstration in the Office of Energy Efficiency and Renewable Energy. The Budget also maintains and expands funding for the Advanced Research Projects Agency-Energy. These investments in high-performing programs will help position the United States as a world leader in the clean energy economy, and create the foundation for new industries and new jobs.

- Improves the competitiveness of U.S. industries by more than doubling research and development on advanced manufacturing processes and advanced industrial materials, enabling companies to cut costs by using less energy while improving product quality.

- Works through the President's Better Building Initiative to make non-residential buildings more energy efficient by catalyzing private sector investment. Creates jobs through mandatory funding for HomeStar incentives to consumers to make their homes more energy efficient.

- Promotes basic research through $5 billion in funding to the Office of Science.

- Positions the Environmental Management program to meet its legally enforceable cleanup commitments at sites across the country.

- Continues investments to maintain a safe, secure, and effective nuclear weapons stockpile in support of the planned decrease in deployed U.S. and Russian weapons under the New Strategic Arms Reduction Treaty.

- Strengthens national security through funding for securing, disposing of, and detecting nuclear and radiological material worldwide.

- Eliminates $4 billion annually in inefficient and outdated fossil fuel subsidies.

The Department of Energy (DOE) is charged with advancing the national, economic, and energy security of the United States; promoting scientific and technological innovation in support of that mission; maintaining the Nation's nuclear weapons and reducing nuclear dangers; and ensuring the environmental cleanup of the national nuclear weapons complex. It facilitates some of the President's highest priorities: clean energy and innovation, which are critical to job creation, long-term economic stability, and national security. The President's 2013 Budget provides $27.2 billion in discretionary funds for DOE to support this mission, a 3.2 percent increase above the 2012 enacted level. In light of the tight discretionary spending caps, this increase in funding is significant and a testament to the importance of innovation and clean energy to the country's economic future. While the Budget includes funding increases in these critical areas, the Administration has identified areas for savings and efficiency, such as pursuing alternative approaches to the Pit Disassembly and Conversion project and restructuring plans for maintaining the necessary plutonium capabilities for the nuclear stockpile, transitioning the Second Line of Defense program to a sustainment phase, and concentrating funds on fully utilizing our investments in scientific facilities.

Invests in Clean Energy, Innovation, and Jobs of the Future

Funds Clean Energy Research, Development, and Deployment to Keep America Competitive. To lead in the industries of tomorrow, it is critical that we invest in research and development (R&D) today. The Budget includes $2.3 billion for the Office of Energy Efficiency and Renewable Energy (EERE). These funds are part of a broad energy strategy that emphasizes priorities in clean energy and advanced manufacturing, through grants, financing assistance, and tax incentives that accelerate fundamental research, technology development, and commercialization. Within EERE, the Budget increases funding by nearly 80 percent for energy efficiency activities to improve the energy productivity and competitiveness of our industries and businesses. It increases funding for the development of the next generation of advanced vehicles and biofuels, and it maintains crucial support for research, development, and demonstration of renewable electricity generation, including: $310 million for the SunShot Initiative to make solar energy cost-competitive nationwide without subsidies by the end of the decade; $95 million for wind energy, including off-shore wind technologies; and $65 million for geothermal energy and enhanced geothermal systems. The Budget also provides $770 million for the Office of Nuclear Energy, which includes funding for advanced small modular reactors R&D. Other priority activities include R&D on storage, transportation, and disposal of nuclear waste that supports the implementation of recommendations put forward by the Blue Ribbon Commission on America's Nuclear Future. The Budget includes funding to maintain and expand the deployment of new models of energy research pioneered in the last several years, including $350 million for the Advanced Research Projects Agency–Energy, a program that seeks to fund transformative energy research.

Supports Critical Natural Gas Research Initiative. As part of an overall investment of $421 million in fossil energy R&D, the Budget includes $12 million to fund a multi-year research initiative aimed at advancing technology and methods to safely and responsibly develop America's natural gas resources. Specifically, DOE, in collaboration with the Environmental Protection Agency and the U.S. Geological Survey, will focus on understanding and reducing the environmental, health, and safety risks of natural gas and oil production from hydraulic fracturing in shale and other geologic formations.

Saves Manufacturers Money by Improving Energy Efficiency. The President's Advanced Manufacturing Partnership invests in a national effort to develop and commercialize the emerging technologies that will create high quality manufacturing jobs and enhance our global competitiveness. By coordinating across Federal agencies and collaborating with the private sector, it will provide the platform for inventing new manufacturing technologies, speeding ideas from the drawing board to the manufacturing floor, scaling-up first-of-a-kind technologies, and developing the infrastructure and shared facilities to allow small and mid-sized manufacturers to innovate and compete. As an integral part of this initiative, the Budget provides DOE with $290 million to expand R&D on innovative manufacturing processes and advanced industrial materials that will enable U.S. companies to cut the costs of manufacturing by using less energy, while improving product quality and accelerating product development. The Budget also continues to support the development of competitive new manufacturing processes for advanced vehicles, biofuels, solar energy, and other new clean energy technology, to help ensure that the technologies invented here are manufactured here. The Budget also helps consumers save money through the continued introduction of appliance efficiency standards.

Invests in Long-Range R&D to Keep America Competitive. The Office of Science, the largest civilian source of physical sciences research funding, will receive $5 billion to continue cutting-edge R&D that is the foundation of the U.S. economic competitiveness. This also funds investments in critical national assets, such as national supercomputers, which are essential to competing in the global economy and to maintaining our national security. The Office of Science funds research grants and scientific activities in key areas of science, including physics, materials, and chemistry. In addition, the Office of Science operates U.S. light sources that are used by both biologists and physical scientists to understand the molecular structure of materials and the processes of chemical reactions.

Cuts Wasteful Spending and Improves Efficiency

Eliminates Inefficient Fossil Fuel Subsidies. As we continue to pursue clean energy technologies that will support future economic growth, we should not devote scarce resources to subsidizing the use of fossil fuels produced by some of the largest, most profitable companies in the world. That is why the Budget eliminates inefficient fossil fuel subsidies that impede investment in clean energy sources and undermine efforts to address the threat of climate change. The Budget proposes to repeal over $4 billion per year in tax subsidies to oil, gas, and other fossil fuel producers.

Reduces Buildings' Energy Use. The 80 billion square feet of non-residential building space in the United States present an opportunity to realize large gains in energy efficiency. In 2010, commercial buildings consumed roughly 20 percent of all energy in the U.S. economy. The Administration continues to call on the Congress to pass the HomeStar bill, or other mandatory funding legislation aimed at creating jobs by encouraging Americans to invest in energy saving home improvements. The Budget also supports increased R&D on innovative building efficiency technologies and the continued introduction of appliance efficiency standards that save consumers and companies' money while improving performance. Through the Federal Energy Management Program, DOE will help other Federal agencies improve the energy efficiency of all Federal buildings (representing over 3 billion square feet) with agencies' total investment to exceed $2 billion through performance-based contracts over the next two years, all at no net cost to the taxpayer. This is achieved through contracts that provide enough savings in energy to more than pay for the investments.

Protects Americans from the Threat of Nuclear Harm and Pollution

Maintains a Safe, Secure, and Effective Nuclear Deterrent. The Administration proposes $7.6 billion for Weapons Activities, an increase of $363 million or 5 percent above the 2012 enacted level, to maintain a safe, secure, and effective nuclear deterrent as described in the Administration's Nuclear Posture Review (NPR) of 2010. This Budget meets the goals of the NPR by continuing nuclear weapon life extension programs—such as upgrades to the W76 and B61 nuclear weapons—by improving and replacing aging facilities —such as increasing investments in funding for the Uranium Processing Facility—and by sustaining the existing stockpile through underlying science, surveillance, and other support programs. However, to meet the NPR goals, but still stay within the discretionary spending caps, the National Nuclear Security Administration (NNSA) and the Department of Defense are reducing and stretching out the schedule of several weapons life extension programs and are restructuring plans for maintaining plutonium capabilities. As a result, the 2013 Budget provides $372 million less for Weapons Activities than the Administration projected in last year's request and reported to the Congress in the "Section 1251 Report" on nuclear weapons plans.

The Administration also proposes $1.1 billion, a $9 million increase above the 2012 enacted level, to support work on naval reactors, including continued operational support of nuclear-powered submarines and aircraft carriers, and reactor development for a replacement to the OHIO class ballistic missile submarine.

Finally, reflecting their close partnership and shared commitment, the Budget assumes that a portion of future funding for NNSA will continue to be included in the Department of Defense's budget, with allocations made to NNSA each budget year.

Protects the Public from Harmful Exposure to Radioactive Waste and Nuclear Materials. The Budget includes $5.65 billion to ensure our Nation's legacy of nuclear wastes from the production of weapons during the Cold War are processed, secured, and safely disposed of in a timely manner. The Environmental Management program continues to clean up waste and contamination, focusing on its legally enforceable regulatory commitments. The program's cleanup actions include removing radioactive wastes from underground storage tanks, decontaminating and decommissioning old production facilities, and installing groundwater monitoring wells primarily at sites in Washington, South Carolina, Idaho, Tennessee, Kentucky, Ohio, and New Mexico.

Reduces the Proliferation of Nuclear Material and Weapons. The Budget includes $2.5 billion, a $163 million or 7 percent increase above the 2012 enacted level, which reflects completion of accelerated efforts to secure vulnerable nuclear materials within four years, the President's stated timeframe. This proposal fully funds Administration priorities to secure and dispose of nuclear material, to develop technologies to prevent, deter, or detect nuclear proliferation, and to implement international nonproliferation treaties, regulatory controls, and safeguards. DOE will have removed more than 4,300 kilograms—over 170 nuclear warheads worth—of vulnerable nuclear material from sites around the world by the end of 2013. The savings that make it possible to fund these priorities come from restructuring the Pit Disassembly and Conversion project and transitioning the Second Line of Defense (SLD) program to a sustainment phase. By the end of 2012, SLD will have exceeded its original goals, having installed radiation detection equipment at almost 500 foreign ports or crossing sites, including all 383 customs sites in Russia. SLD will continue its efforts to improve deployed capabilities and continue to provide foreign partners with mobile detection equipment.

Department of Energy
(In millions of dollars)

	Actual 2011	Estimate 2012	Estimate 2013
Spending			
Discretionary Budget Authority:			
National Defense:			
National Nuclear Security Administration	10,504	11,000	11,536
Other Defense Activities	796	823	736
Energy Resources	3,613	3,666	4,307
Science	4,897	4,874	4,992
Environmental Management	5,665	5,711	5,650
Corporate Management	134	168	166
Power Marketing Administration	107	85	85
Offsetting receipts	–23	–26	–26
Subtotal, Discretionary budget authority	25,693	26,301	27,446
Discretionary Changes in Mandatory Programs *(non-add in 2012):*[1]			
Strategic Petroleum Reserve		*–500*	–291
Northeast Home Heating Oil Reserve		*–100*	—
Subtotal, Discretionary changes in mandatory programs		*–600*	–291
Total, Discretionary budget authority	25,693	26,301	27,155
Total, Discretionary outlays	37,970	42,308	35,563
Mandatory Outlays:			
Existing law	–5,231	–1,747	–1,080
Legislative proposals:			
Ultradeep Water, Oil, and Gas Research and Development			30
Home Energy Retrofit Rebate Program (HomeStar)			300
Advanced Vehicles, Community Development Challenge			150
Total, Mandatory outlays	–5,231	–1,747	–600
Total, Outlays	32,739	40,561	34,963
Credit activity			
Direct Loan Disbursements:			
Title 17 Innovative Technology Direct Loan Financing Account [2]	1,544	8,888	10,862
Advanced Technology Vehicles Manufacturing Direct Loan Financing Account	2,452	18,713	1,368
Total, Direct loan disbursements	3,996	27,601	12,230

Department of Energy—Continued
(In millions of dollars)

	Actual 2011	Estimate 2012	Estimate 2013
Guaranteed Loan Disbursements by Private Lenders:			
Title 17 Innovative Technology Guarantee Loans Financing Account [2]	1,670	2,116	1,177
Total, Guaranteed loan disbursements by private lenders	1,670	2,116	1,177

[1] The 2012 amounts reflect OMB's scoring of the 2012 Appropriations acts (P.L. 112–55 and 112–74) as transmitted to the Congress. These amounts are displayed as non-add entries because they have been rebased as mandatory and are not included in any 2012 discretionary levels in the 2013 Budget.
[2] The commitments noted here include disbursements of loan guarantee commitments by the government, not "conditional commitments" under Title XVII which are legally contingent on the satisfaction of various conditions precedent.