Department of Energy

FY 2011 Budget Overview

February 1, 2010

Department of Energy's FY2011 Budget

Supporting the President's goals

Energy

"The nation that leads the clean energy economy will be the nation that leads the global economy. And America must be that nation."

Innovation

"We need to encourage innovation… And no area is more ripe for such innovation than energy."

Security

"…a clear goal: securing all vulnerable nuclear materials around the world in four years, so that they never fall into the hands of terrorists."

- State of the Union, January 27, 2010

DOE Strategic Objectives and High Priority Goals

Renewable energy: Double our electricity generation capacity from clean, renewable sources by 2012

Electric vehicles: Support advanced battery manufacturing capacity to deploy 500,000 plug-in hybrids a year by 2015

Energy efficiency: Accelerate an aggressive, self-sustaining home energy efficiency effort that will save energy and money for America's families

Nuclear: Provide technical and financial support to restart the American nuclear power industry

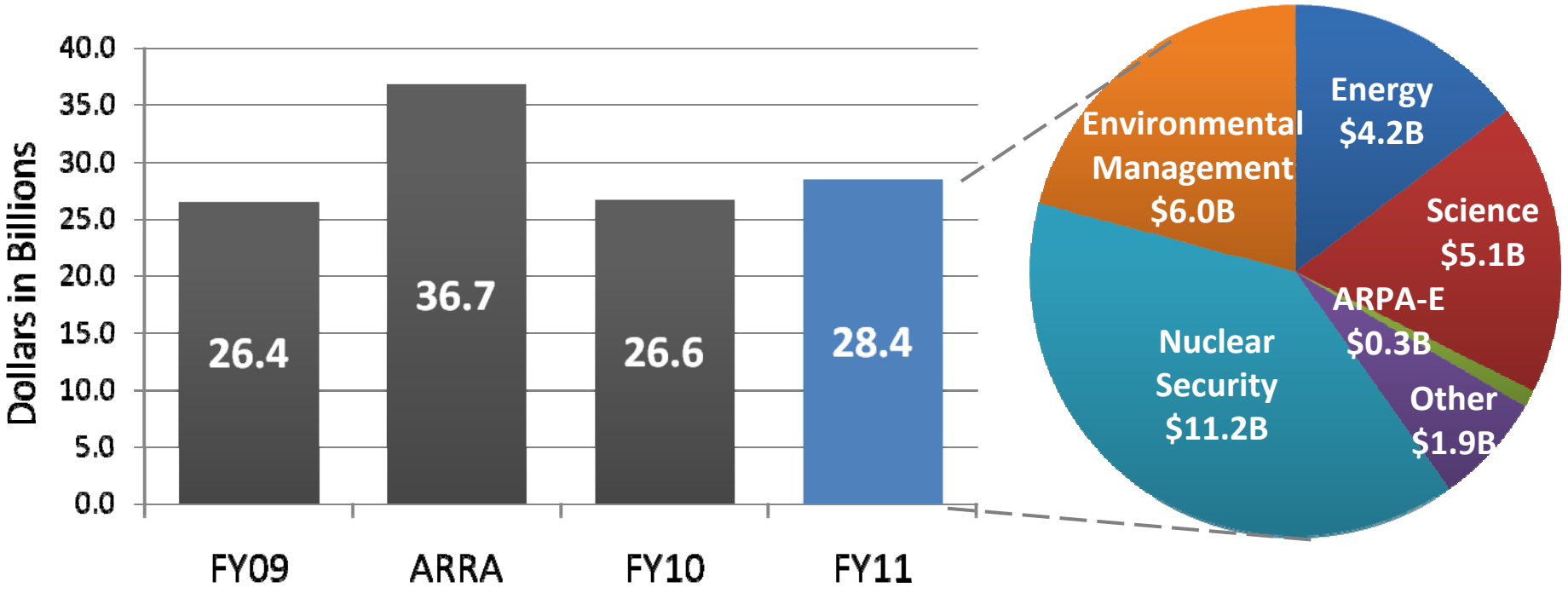
DOE Strategic Objectives and High Priority Goals

Non-proliferation: Secure vulnerable nuclear materials worldwide within four years

Nuclear security: Maintain the safety, security, and effectiveness of the US nuclear deterrent without underground nuclear testing

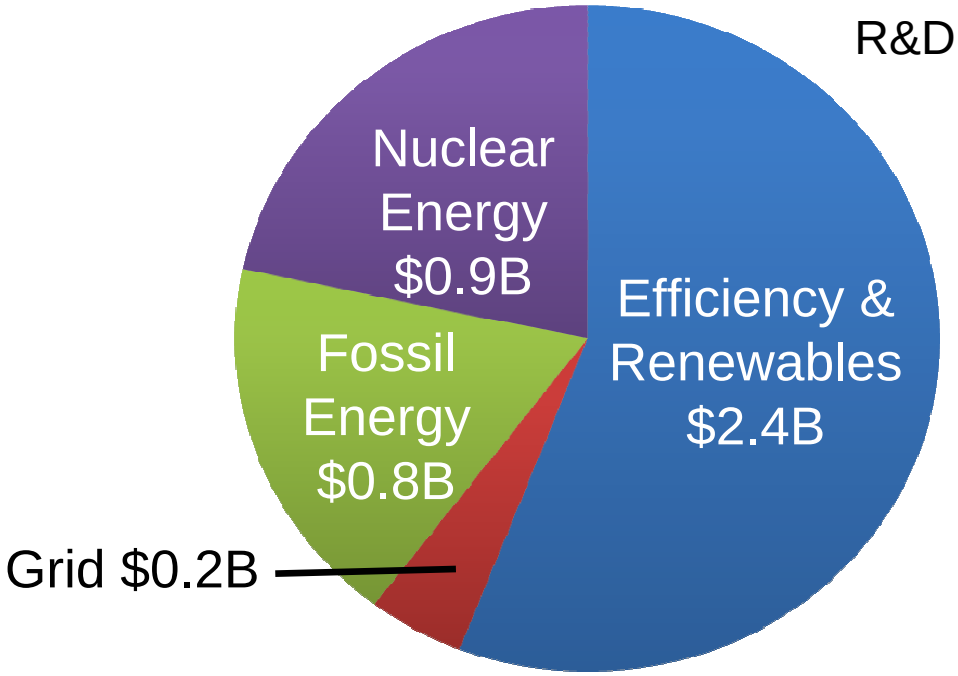
Environmental clean-up: Reduce Cold War legacy footprint by 40 percent by 2011

FY2011 Budget Request -- $28.4 billion



Non-NNSA programs increase 2.8 percent above FY10

President's budget invests in clean energy priorities



R&D, Demonstration, and Deployment of:

Solar energy: $302m – a 22.4% increase

Wind energy: $123m – a 53% increase

Geothermal energy: $55m – a 25% increase

Sparking New Clean Energy Projects

Restarting the American nuclear power industry with an additional $36 billion in loan guarantee authority

Promoting renewable energy and energy efficiency projects with $500 million in credit subsidy to support $3 to $5 billion in projects

The President's budget also expands the Advanced Energy Manufacturing Tax Credit by $5 billion

Supporting Science and Energy Innovation

Energy Innovation Hubs:
$107 million

Assembling a robust group of the best scientists and engineers to achieve a specific goal – and giving them the resources and authority to get the job done

Hubs in:

- Fuels from sunlight
- Energy efficiency in buildings
- Nuclear simulation and modeling
- Batteries and Energy Storage

Advanced Research Projects Agency – Energy: $300 million

Funding the development of potentially game-changing energy technologies that no one else will fund

Energy Frontier Research Centers:
$140 million

Linking together small groups of researchers to clear scientific roadblocks that prevent energy breakthroughs

On a Path to Double Funding for Science

The Next Generation of Scientists and Engineers

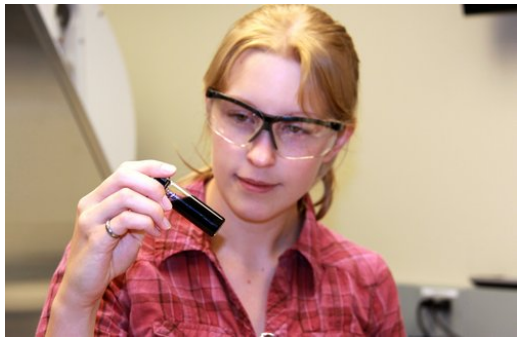
Regaining our Energy Science and Engineering Edge

(RE-ENERGYSE) - $55 million

For higher education fellowships, development of an energy-focused, interdisciplinary Master's program, and K-12 education and outreach

Workforce Development

$36 million – a 72% increase for students and educators in scientific disciplines



Supporting the President's Nuclear Security Agenda

"Today, the Cold War has disappeared but thousands of those weapons have not. In a strange turn of history, the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up."

President Barack Obama
Prague, Czech Republic, April 5, 2009

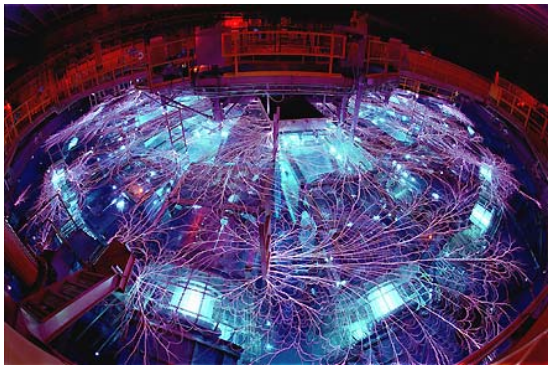
$11.2 billion for the National Nuclear Security Administration

National Nuclear Security Administration

Reducing nuclear dangers and environmental risks

Reduce the Risk of Proliferation
$2.7B: +26%
To support the President's goal of securing vulnerable nuclear materials worldwide in four years

Invest in our Nuclear Security Enterprise
$7.0B: +9.8%
To promote stockpile management, infrastructure, science technology & engineering



Accelerate Environmental Clean-up
$6.0B
To clean up the Cold War legacy sites

Commitment to Fiscal Responsibility

The President's budget eliminates more than $2.7 billion in tax subsidies for oil, coal, and gas industries – expected to generate more than $38.8 billion in revenue over the next 10 years

Terminates Ultra-Deepwater exploration program, saving $50 million

Cancels planned expansion of the Strategic Petroleum Reserve, saving $71 million

Withdrawal of Yucca Mountain Repository License

FY11 budget instructs DOE to discontinue license application for a high-level nuclear waste repository at Yucca Mountain

DOE filing a motion today to “stay” all proceedings for 30 days. Within this period, DOE will move to withdraw the application

The Office of Nuclear Energy will lead used fuel activities previously performed by the Office of Civilian Radioactive Waste Management

On Friday, we announced a Blue Ribbon Commission for a new strategy for used nuclear fuel and nuclear waste management and disposal

New Management Reform Effort

Transforming the way Americans generate and use energy means transforming the Department of Energy itself

As part of the Obama Administration's reform agenda, this new effort will provide strategic direction, coordination and oversight of reform initiatives

This is an extension of reforms made under Recovery Act implementation, and the goal is to institutionalize changes

U.S. DEPARTMENT OF ENERGY

FY2011 Budget Submission

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Energy Efficiency and Renewable Energy...	2,157	16,772	2,243	2,355	+113	5%
Electricity Delivery and Energy Reliability....	135	4,496	172	186	+14	8%
Fossil Energy.....	1,097	3,399	951	760	-191	-20%
Nuclear Energy.....	1,357	----	870	912	+42	5%
Science.....	4,807	1,633	4,904	5,121	+218	4%
ARPA-E.....	15	389	----	300	+300	N/A
NNSA.....	9,222	----	9,877	11,215	+1,338	14%
Environmental Management.....	5,991	6,000	6,008	6,047	+39	1%
Other.....	1,576	4,037	1,572	1,507	-65	-4%
Total, Discretionary Funding.....	**26,356**	**36,725**	**26,597**	**28,404**	**+1,808**	**6.8%**
Total, non-NNSA	**17,134**	**36,725**	**16,720**	**17,190**	**+470**	**2.8%**

Energy Efficiency and Renewable Energy

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Solar energy.....	172	116	247	302	+55	22%
Wind energy.....	54	107	80	123	+43	53%
Geothermal technology.....	43	393	44	55	+11	25%
Biomass and biorefinery systems R&D..	214	777	220	220	----	0%
Hydrogen technology.....	165	43	174	137	-37	-21%
Vehicle technologies.....	267	109	311	325	+14	5%
Building technologies.....	138	319	222	231	+9	4%
RE-ENERGYSE.....	----	----	----	50	+50	N/A
Federal energy assistance.....	516	11,545	270	385	+115	43%
Other.....	587	3,363	674	528	-147	-22%
Total	**2,157**	**16,772**	**2,243**	**2,355**	**+113**	**5%**

Electricity Delivery & Energy Reliability

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Research and development.....	83		125	144	+19	16%
Permitting, siting and analysis.....	----	----	6	6	----	0%
Infrastructure security & energy restoration	----	----	6	6	+0	0%
Other.....	52	4,496	34	29	-5	-16%
Total	**135**	**4,496**	**172**	**186**	**+14**	**8%**

Fossil Energy

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Fuels & Power Systems.....	393	2,589	404	404	-0	0%
*Innovations for Existing Plants.....	*49*		*52*	*65*	*+13*	*25%*
*Advanced Research.....	*27*		*28*	*48*	*+20*	*71%*
Natural gas technologies.....	19	----	18	----	-18	-100%
Strategic Petroleum Reserve & SPR Petroleum Account....	205	----	244	139	-105	-43%
Other.....	479	810	285	218	-68	-24%
Total	**1,097**	**3,399**	**951**	**760**	**-191**	**-20%**

Nuclear Energy

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Nuclear Energy Enabling Technologies.....	----	----	----	99	+99	N/A
Nuclear Power 2010.....	178	----	105	----	-105	-100%
Reactor Concepts R&D.....	----	----	----	195	+195	N/A
Generation IV Nuclear Energy Systems Initiative....	179	----	220	----	-220	-100%
Advanced Fuel Cycle Initiative.....	143	----	----	----	----	N/A
Fuel Cycle R&D	----	----	136	201	+65	48%
RE-ENERGYSE.....	----	----	----	5	+5	N/A
Other.....	858	----	409	412	+3	1%
Total	**1,357**	**----**	**870**	**912**	**+42**	**5%**

Science

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Advanced scientific computing research.....	359	162	394	426	+32	8%
Basic energy sciences.....	1,536	555	1,637	1,835	+199	12%
Biological and environmental research.....	585	166	604	627	+23	4%
Fusion energy sciences program.....	395	91	426	380	-46	-11%
High energy physics.....	776	232	810	829	+19	2%
Nuclear physics.....	500	155	535	562	+27	5%
Workforce development for teachers and scientists..	14	13	21	36	+15	72%
Other.....	643	259	477	427	-50	-10%
Total	**4,807**	**1,633**	**4,904**	**5,121**	**+218**	**4%**

Advanced Research Projects Agency-Energy

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Energy Transformation Acceleration Fund (ARPA-E)....	**15**	**389**	**----**	**300**	+300	N/A

National Nuclear Security Administration

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Weapons Activities.....	6,410	----	6,384	7,009	+624	10%
Defense Nuclear Nonproliferation..	1,545	----	2,137	2,687	+550	26%
Naval Reactors.....	828	----	945	1,070	+125	13%
Office of the Administrator.....	439	----	411	448	+38	9%
Total	**9,222**	**----**	**9,877**	**11,215**	**+1,338**	**14%**

NOTE: Total includes $10m transfer of balances between FY10/11.

Environmental Management

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010	
					$	%
Richland.....	1,057	1,635	1,081	1,042	-39	-4%
River Protection.....	1,010	326	1,098	1,158	+60	5%
Idaho.....	489	468	469	412	-57	-12%
Oak Ridge.....	499	755	436	450	+14	3%
Paducah.....	170	79	172	145	-27	-16%
Portsmouth.....	241	118	303	479	+176	58%
Savannah River.....	1,361	1,615	1,342	1,350	+8	1%
Carlsbad/WIPP.....	237	172	235	225	-10	-4%
Los Alamos.....	225	212	197	200	+4	2%
TD&D.....	31	----	20	32	+12	62%
Other.....	670	620	655	554	-101	-15%
Total	**5,991**	**6,000**	**6,008**	**6,047**	**+39**	**1%**

Loan Programs

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Advanced Technology Vehicles Manufacturing Loan Program.	7,510	10	20	10	-10	-50%
Innovative Technology Loan Guarantee.....	----	3,960	----	500	+500	N/A
Total, Loan Programs.....	**7,510**	**3,970**	**20**	**510**	+490	2450%

Energy Information Administration

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010	
					$	%
Energy Information Administration.....	111	----	111	129	+18	16%

Corporate Management and Other Activities

Program ($ in Millions)	FY 2009 Current Approp.	FY 2009 Current Recovery	FY 2010 Enacted	FY 2011 Request	FY 2011 vs FY 2010 $	FY 2011 vs FY 2010 %
Corporate Management.....	322	57	350	349	-1	0%
Health, Safety And Security.....	447	----	444	464	+20	5%
Power Marketing Administrations.....	234	10	99	95	-4	-4%
Federal Energy Regulatory Commission....	-23	----	-29	-29	-0	1%

Additional Budget Information

Additional budget information can be found at:

http://www.energy.gov/about/budget.htm