

Department of Energy Congressional Action on R&D in the FY 2010 Budget
(budget authority in millions of dollars)



	FY 2009 Estimate ‡	FY 2010 Request	FY 2010 House	FY 2010 Senate	FY2010 Conf	Change FY 09-10 Amount	Change FY 09-10 Percent
Energy Efficiency & Renew Energy	851	950	1,011	1,072	1,109	258	30.4%
Electricity Delivery & Reliability	85	174	166	139	125	40	46.9%
Nuclear Energy	651	562	608	553	594	-57	-8.8%
Fossil Energy R&D	491	469	444	477	405	-86	-17.5%
Science	4,326	4,468	4,470	4,429	4,431	105	2.4%
Atomic Energy Defense Activities							
National Nuclear Security Administration (NNSA)							
Weapons Activities	2,636	2,653	2,626	2,688	2,653	17	0.6%
Defense Nuclear Nonproliferation	285	277	277	314	296	11	3.7%
Naval Reactors	794	966	968	937	910	116	14.6%
Total NNSA	3,715	3,896	3,871	3,939	3,859	144	3.9%
Defense Environmental Cleanup	32	105	85	105	70	38	118.8%
Other Defense Activities	3	3	3	3	3	0	0.0%
Total Atomic Energy Defense	3,750	4,004	3,959	4,047	3,932	182	4.8%
Mandatory Funding	9	44	44	44	44	35	388.9%
Total DOE R&D	10,163	10,671	10,702	10,762	10,640	477	4.7%
DOE R&D by Budget Function							
Defense	3,750	4,004	3,959	4,047	3,932	182	4.8%
General Science	4,326	4,468	4,470	4,429	4,431	105	2.4%
Energy	2,087	2,199	2,273	2,285	2,277	190	9.1%

Source: Agency budget justification, agency budget documents, and FY 2010 appropriations bills and reports.

Figures are rounded to the nearest million. Changes calculated from unrounded figures.

‡ FY 2009 figures do not include \$38.725 billion in ARRA recovery funds appropriated to the Department of Energy.

October 5, 2009

Department of Energy Discretionary Budget Detail
(budget authority in millions of dollars)



	FY 2009 Estimate ‡	FY 2010 Request	FY 2010 House	FY 2010 Senate	FY 2010 Conf	Change FY 09-10 Amount	Change FY 09-10 Percent
Energy Efficiency & Renew Energy 4/	2,179	2,319	2,250	2,234	2,243	64	2.9%
<i>Hydrogen Tech</i>	169	0	0	190	174	5	3.0%
<i>Fuel Cell</i>	0	68	68	0	0	0	--
<i>Biomass and Biorefinery Sys</i>	217	235	235	235	220	3	1.4%
<i>Solar Energy</i>	175	320	259	255	225	50	28.6%
<i>Wind Energy</i>	55	75	70	85	80	25	45.5%
<i>Geothermal Tech</i>	44	50	50	50	44	0	0.0%
<i>Water Power</i>	40	30	30	60	50	10	25.0%
<i>Vehicle Tech</i>	273	333	373	323	311	38	14.0%
<i>Building Tech</i>	140	238	210	203	200	60	42.9%
<i>Industrial Tech</i>	90	100	100	100	96	6	6.7%
<i>Energy Educ (RE-ENERGYSE)</i>	0	115	8	0	0	0	--
<i>Facilities and Infrastructure</i>	76	63	63	63	63	-13	-17.1%
<i>Energy Assistance Programs</i>	516	301	305	265	270	-246	-47.7%
<i>Program Direction</i>	128	238	188	153	140	12	9.7%
<i>Program Support</i>	18	120	101	72	45	27	147.8%
<i>Congressional Projects</i>	229	0	154	148	292	63	27.7%
Electricity Delivery & Reliability	137	208	208	179	172	35	25.5%
<i>Research and Development</i>	85	174	166	139	125	40	47.4%
<i>Congressional Projects</i>	20	0	8	6	13	-7	-33.5%
Nuclear Energy 4/	792	777	812	761	787	-5	-0.7%
<i>Research and Development</i>	515	418	473	413	466	-49	-9.5%
- <i>Nuclear Power 2010</i>	178	20	71	120	105	-73	-40.8%
- <i>Generation IV</i>	180	206	272	143	220	40	22.3%
- <i>Fuel Cycle R&D</i>	145	192	129	145	136	-9	-6.2%
<i>Infrastructure</i>	285	364	344	357	245	-40	-14.0%
<i>Program Direction</i>	73	78	78	73	73	0	0.0%
<i>Congressional Projects</i>	3	0	1	2	3	0	-12.4%
Fossil Energy R&D	876	618	618	699	672	-204	-23.3%
<i>Fuels and Power Systems</i>	404	404	394	428	404	0	-0.1%
- <i>Integrated Gasification Cycle</i>	65	55	55	65	63	-2	-3.4%
- <i>Advanced Turbines</i>	28	31	31	32	32	4	14.3%
- <i>Carbon Sequestration</i>	150	180	145	160	154	4	2.7%
- <i>Fuels</i>	25	15	40	25	25	0	0.0%
- <i>Advanced Research</i>	28	28	28	30	28	0	0.0%
<i>Natural Gas Technology</i>	20	25	25	25	18	-2	-10.8%
<i>Unconven Fossil Energy Tech 1/</i>	5	0	0	25	20	15	300.0%
<i>Program Direction</i>	152	158	158	158	158	6	3.9%
<i>Plant & Capital</i>	18	20	20	20	20	2	11.1%
<i>Cooperative R&D</i>	5	0	0	5	5	0	0.0%
<i>Congressionally Directed Projects</i>	44	0	8	27	37	-7	-16.0%

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Science 2/	4,773	4,942	4,944	4,899	4,904	131	2.7%
<i>High Energy Physics</i>	796	819	819	813	810	15	1.9%
<i>Nuclear Physics</i>	512	552	536	540	535	23	4.5%
<i>Fusion Energy Sciences</i>	403	421	441	416	426	23	5.8%
<i>Basic Energy Sciences</i>	1,572	1,686	1,675	1,654	1,637	65	4.1%
<i>Adv Scientific Computing Res</i>	369	409	409	399	394	25	6.8%
<i>Biological and Environmental Res</i>	602	604	597	604	604	3	0.4%
<i>Science Laboratories Infrastructure</i>	145	134	134	134	128	-18	-12.2%
<i>Science Program Direction</i>	187	214	191	195	189	3	1.4%
<i>Congressional Projects</i>	94	0	38	41	77	-17	-17.9%
Energy Trans Accel Fund (ARPA-E) 2/	15	10	15	0	0	-15	-100.0%
Other Energy Programs 3/	9,004	2,846	1,523	1,597	1,547	-7,457	-82.8%
<i>Adv Tech Vehicle Manuf Loan</i>	7,510	20	20	20	20	-7,490	-99.7%
Atomic Energy Defense Activities							
National Nuclear Security Administration (NNSA)							
Weapons Activities	6,380	6,384	6,320	6,468	6,384	4	0.1%
<i>Science Campaign</i>	317	317	296	320	296	-21	-6.6%
<i>Engineering Campaign</i>	150	150	174	150	150	0	0.0%
<i>Inertial Conf Fusion Campaign</i>	437	437	462	453	458	21	4.8%
<i>Adv Sim and Comp Campaign</i>	556	556	561	566	568	12	2.1%
<i>Facilities and Infrastructure</i>	147	155	94	155	94	-54	-36.3%
<i>Congressional Projects</i>	23	0	3	0	3	-20	-86.9%
Nonproliferation & Verification R&D	1,482	2,122	1,471	2,137	2,137	654	44.1%
<i>Research and Development</i>	364	297	297	337	317	-46	-12.8%
<i>Congressional Projects</i>	2	0	0	0	0	-2	-86.9%
Naval Reactors	828	1,003	1,003	973	945	117	14.1%
Office of Administrator	439	421	421	421	421	-18	-4.2%
<i>Congressional Projects</i>	23	0	13	0	13	-10	-44.2%
Total NNSA	9,130	9,930	9,215	9,999	9,887	869	9.5%
Defense Environmental Cleanup 3/	5,657	5,496	5,382	5,764	5,642	-15	-0.3%
<i>Technology Devel and Deploy</i>	32	55	35	55	20	-12	-38.1%
<i>Congressional Projects</i>	18	0	0	4	4	-14	-77.7%
Other Defense Activities	1,314	852	1,518	854	847	-467	-35.5%
<i>Congressional Projects</i>	18	0	2	2	3	-15	-83.2%
Defense Nuclear Waste Disposal	143	98	98	98	98	-45	-31.2%
Total Atomic Energy Def Activities	16,244	16,377	16,213	16,716	16,475	231	1.4%
Power Marketing Administrations	267	312	312	313	312	45	16.7%
Total DOE Discretionary Budget	34,287	28,407	26,894	27,398	27,111	-7,175	-20.9%
minus Adv Tech Vehicle Manuf Loan	26,777	28,387	26,874	27,378	27,091	315	1.2%

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1/ Replaces Petroleum - Oil Technologies program.

2/ The Office of Science is to transfer \$15 million to ARPA-E.

3/ Defense Environmental Cleanup is to transfer \$463 million to Uranium D&D.

4/ Three of the eight proposed Energy Innovation Hubs were funded at \$22 million each: Modeling and Simulation under Nuclear Energy, Fuels from Sunlight under EERE, and Energy Efficient Building Systems Design under EERE

October 5, 2009