

TABLE 10

## State government expenditures for energy-related R&amp;D, by state: FYs 2009–21

(Dollars)

State	2009 <sup>a</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
United States <sup>b</sup>	NA	227,404,238	265,645,943	238,545,588	192,380,008	157,200,057	383,145,992	368,028,147	307,574,426	397,036,953	323,076,738	390,847,851	410,687,147
Alabama	NA	988,806	1,279,672	788,212	509,974	386,692	688,913	134,432	206,926	282,748	255,807	117,181	178,809
Alaska	NA	1,359,100	1,301,000	1,438,817	1,799,951	35,860	53,202	1,020,450	1,002,160	2,120,127	1,102,206	500,000	500,000
Arizona	NA	267,174	1,702,776	6,243,529	7,630,643	1,547,000	658,000	216,988	0	0	0	0	0
Arkansas	NA	1,736,657	3,156,213	2,913,191	3,620,296	4,800,000	5,243,216	1,548,704	1,444,227	2,304,745	852,718	502,762	50,000
California	NA	105,072,000	95,975,000	75,756,774	55,577,129	52,593,000	263,254,000	251,116,066	184,568,270	243,987,483	202,262,559	256,532,543	267,900,000
Colorado	NA	1,464,536	409,252	313,762	254,860	1,934,715	2,241,216	1,839,587	2,304,024	1,099,099	3,184,039	3,347,250	2,846,991
Connecticut	NA	358,778	553,640	571,414	588,724	1,714,724	1,944,337	240,000	0	0	0	4,083,058	3,627,099
Delaware	NA	0	0	0	0	0	10,000	0	0	13,683	24,256	20,800	46,054
District of Columbia	NA	0	0	0	0	0	75,000	0	0	29,500	0	520,000	0
Florida	NA	3,571,447	4,158,768	8,476,266	990,320	355,629	1,117,124	2,371,453	716,664	585,190	557,060	784,693	554,984
Georgia	NA	1,000,000	1,200,000	800,000	0	3,096,465	3,148,268	5,976,273	6,235,488	9,382,400	6,335,903	5,825,649	9,067,079
Hawaii	NA	5,825,028	6,020,023	4,024,303	5,674,072	4,300,000	1,500,000	7,500,000	4,108,496	6,004,495	2,510,732	6,466,637	4,216,265
Idaho	NA	0	0	0	0	401,783	274,051	178,178	260,435	237,898	0	0	206,624
Illinois	NA	190,000	0	21,110	225,000	5,885,366	4,333,344	390,473	66,300	0	0	0	0
Indiana	NA	0	0	0	383,432	657,307	354,693	125,478	0	2,298,615	268,086	95,000	24,787
Iowa	NA	0	26,590,826	5,207,302	6,340,014	1,117,561	710,522	1,181,136	164,157	0	0	0	0
Kansas	NA	0	0	0	0	0	0	0	0	0	0	0	0
Kentucky	NA	4,256,458	3,372,112	4,809,927	5,976,089	2,403,100	2,443,000	774,052	296,900	301,357	2,020,000	171,000	386,000
Louisiana	NA	0	0	0	0	0	0	0	790,430	756,017	2,875,376	2,613,811	1,936,715
Maine	NA	5,000	5,000	821,675	480,594	415,000	986,000	1,311,000	0	0	0	0	31,830
Maryland	NA	40,000	25,000	300,000	300,000	200,000	200,000	200,000	189,999	646,989	1,181,872	1,168,566	0
Massachusetts	NA	0	0	0	0	2,640,446	4,998,471	3,982,930	6,660,272	3,906,259	5,049,247	4,183,011	5,044,038
Michigan	NA	0	0	0	0	0	0	0	0	0	0	0	0
Minnesota	NA	1,243,965	249,201	1,702,500	122,084	327,995	897,117	387,372	0	0	0	0	0
Mississippi	NA	1,550,000	1,250,000	0	0	22,914	1,739	0	0	0	0	0	0
Missouri	NA	0	0	0	0	0	0	0	0	0	0	500,000	0
Montana	NA	835,942	405,260	187,163	1,200	332,678	0	0	178,300	0	0	0	0
Nebraska	NA	5,000	10,000	196,427	236,100	100,000	0	266,783	177,207	495,519	4,000	0	350,000
Nevada	NA	0	0	0	0	0	0	0	0	0	0	0	0
New Hampshire	NA	0	0	0	0	0	0	19,920	86,235	0	8,938	0	15,000
New Jersey	NA	500,000	0	437,685	0	0	0	0	0	0	0	0	0
New Mexico	NA	0	0	0	57,083	0	0	0	0	83,198	82,970	169,166	79,323
New York	NA	29,744,916	45,608,891	41,789,076	27,061,407	36,809,190	45,627,241	50,958,594	55,855,216	86,541,730	51,407,945	65,977,562	60,426,855
North Carolina	NA	100,000	105,000	0	0	1,322,052	1,652,847	1,969,629	0	0	1,656,680	1,500,000	1,574,989

TABLE 10

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(Dollars)

State	2009 <sup>a</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
North Dakota	NA	4,153,800	5,200,850	2,778,935	3,931,762	6,858,556	5,705,731	3,826,839	8,098,449	9,031,575	6,229,265	10,111,495	24,409,679
Ohio	NA	41,236,142	47,150,392	62,348,681	52,267,399	6,472,561	11,048,550	14,930,905	15,281,674	15,071,024	14,557,578	11,929,919	8,291,260
Oklahoma	NA	387,401	149,201	330,000	323,800	1,246,000	1,625,000	2,733,540	1,390,000	977,210	684,211	599,094	550,284
Oregon	NA	175,000	50,000	0	0	7,099,464	7,467,172	3,774,000	3,000,000	2,250,000	4,550,000	1,590,000	2,400,000
Pennsylvania	NA	0	0	2,070,343	1,699,984	2,580,520	2,156,564	2,603,817	100,000	0	5,323,743	837,000	1,009,207
Rhode Island	NA	0	0	0	0	2,000	1,200	104,121	131,554	48,106	0	0	0
South Carolina	NA	863,890	871,078	484,124	251,410	56,129	163,885	213,958	206,826	92,280	86,506	125,624	474,350
South Dakota	NA	0	0	0	0	3,779	26,862	11,135	22,447	181,466	39,853	16,021	1,968
Tennessee	NA	0	35,764	6,553	0	0	0	213,026	0	106,514	106,514	106,514	0
Texas	NA	0	0	374,013	447,132	0	0	0	0	0	0	0	0
Utah	NA	7,375,546	7,209,348	4,125,214	4,558,744	2,076,936	4,835,743	1,213,403	2,525,845	1,909,139	0	500,540	0
Vermont	NA	300,000	300,000	167,769	179,391	223,802	239,382	0	0	0	0	0	0
Virginia	NA	10,301,835	8,564,304	8,321,652	10,400,000	5,789,258	6,263,600	549,281	528,160	360,108	350,000	179,664	409,898
Washington	NA	0	0	0	0	148,000	0	1,916,700	8,197,974	3,309,037	7,621,218	6,731,672	11,573,426
West Virginia	NA	2,495,817	2,737,372	102,719	159,332	857,387	820,450	1,689,433	1,456,024	2,486,309	1,703,058	1,390,229	872,617
Wisconsin	NA	0	0	250,000	150,000	30,000	30,000	0	0	66,000	0	0	0
Wyoming	NA	0	0	386,452	182,082	356,188	349,552	538,491	1,323,767	71,133	184,398	1,651,390	1,631,016
Puerto Rico <sup>c</sup>	NA	100,000	100,000	106,470	220,000	422,494	400,000	na	na	na	na	na	na

na = not applicable; did not report to survey. NA = not available; not collected as a separate R&D function for FY 2009.

<sup>a</sup> Energy category was introduced with the FY 2010 and FY 2011 Survey of State Government Research and Development. Previously, energy-related R&D was reported primarily in Other and Environment and natural resources categories.

<sup>b</sup> U.S. total reflects all 50 states and the District of Columbia.

<sup>c</sup> Puerto Rico is not included in U.S. total due to its classification as a U.S. territory.

**Note(s):**

State R&D expenditures by function were surveyed beginning with the FY 2009 survey. State R&D totals can display considerable volatility between survey years due to several national and state-specific factors. Large changes are not unusual, especially for discretionary spending items such as R&D.

**Source(s):**

National Center for Science and Engineering Statistics, Survey of State Government Research and Development.