

TABLE 11

## State government expenditures for environment and natural resources-related R&amp;D, by state: FYs 2009–23

(Dollars)

State	2009 <sup>a</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
United States <sup>b</sup>	328,102,718	356,603,823	380,376,738	357,528,082	380,245,106	369,242,699	416,120,534	411,765,467	450,709,184	418,889,511	440,269,973	448,489,450	444,593,349	556,643,092	591,276,952
Alabama	7,694,078	8,922,103	13,521,133	12,879,773	9,984,291	4,106,869	5,718,986	12,848,739	14,685,442	13,608,231	9,403,795	5,930,160	6,080,232	70,126,266	53,882,774
Alaska	6,449,300	5,833,600	6,767,900	3,702,011	3,662,664	9,001,900	8,987,200	7,617,940	5,324,200	7,104,800	8,392,100	8,878,600	9,713,200	10,015,251	12,740,515
Arizona	6,356,155	6,023,906	5,743,162	5,327,071	6,689,903	6,184,876	7,012,194	4,253,582	2,220,204	1,755,221	1,077,891	1,849,760	1,682,113	1,140,215	1,552,790
Arkansas	345,832	658,590	680,971	707,557	942,106	0	303,087	530,436	0	2,249,406	2,426,103	2,455,409	1,143,026	1,558,599	2,270,144
California	48,172,325	30,914,302	43,443,294	26,096,846	30,615,059	28,842,415	30,382,163	30,970,439	34,984,578	41,221,163	40,709,827	46,017,594	46,696,431	64,903,411	63,966,691
Colorado	8,317,796	7,142,396	7,185,567	6,957,024	6,576,449	8,449,733	8,630,632	7,187,484	9,718,770	9,097,135	10,798,678	11,609,704	11,287,126	7,762,275	10,539,540
Connecticut	5,814,050	13,081,012	12,517,073	12,661,538	13,780,616	10,592,603	10,303,327	10,527,008	9,545,714	10,218,069	10,599,160	11,473,607	11,706,792	11,877,203	12,908,890
Delaware	1,433,562	2,139,720	2,359,902	2,231,693	2,754,545	1,988,655	2,048,014	1,849,169	1,973,153	2,686,413	2,701,302	2,241,188	2,125,080	2,229,910	2,096,191
District of Columbia	0	0	0	0	0	1,740,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,920,000	1,821,400	1,976,600	1,848,077
Florida	17,934,886	50,262,488	47,437,237	48,709,314	47,462,678	51,191,986	57,934,383	51,313,340	52,812,260	50,929,717	52,486,202	56,851,522	57,586,211	57,744,843	66,897,373
Georgia	0	0	0	2,607,843	3,999,505	2,584,180	3,062,308	2,027,695	2,221,630	0	3,871,745	1,164,256	3,132,706	12,722,663	2,927,411
Hawaii	4,497,068	5,229,835	5,607,794	4,533,302	4,484,602	6,929,035	7,849,438	6,483,585	4,975,227	1,363,167	895,592	385,278	320,500	632,000	513,210
Idaho	5,881,390	6,123,012	6,064,901	8,072,165	8,059,032	7,827,527	8,164,676	7,991,169	8,495,485	8,049,677	8,364,544	10,831,981	9,473,386	9,482,216	9,232,224
Illinois	56,800	0	0	0	0	0	0	0	0	0	0	0	18,525,888	17,723,231	32,327,079
Indiana	1,821,645	1,700,000	1,700,000	15,000	2,500	37,694	124,964	790,356	309,601	100,000	0	141,764	720,153	352,281	3,866,329
Iowa	0	7,074,696	3,640,397	3,278,552	3,517,000	4,135,147	4,279,253	3,981,402	3,892,642	3,669,395	3,797,923	4,170,756	2,994,029	3,688,099	1,945,868
Kansas	365,000	365,000	465,000	0	0	166,000	258,099	747,974	3,190,713	4,145,270	3,645,223	4,840,882	7,217,311	8,280,611	1,716,521
Kentucky	2,874,829	2,005,156	2,137,523	5,902,607	6,074,737	688,300	768,100	2,021,103	3,610,436	2,897,000	2,531,000	2,237,368	2,406,089	7,261,361	7,622,379
Louisiana	1,567,596	2,522,697	8,005,483	10,305,857	8,174,868	7,750,826	21,166,032	18,265,666	16,653,861	12,451,900	11,751,729	12,455,929	10,483,689	10,092,683	11,664,250
Maine	1,969,352	2,527,524	3,728,729	1,615,411	1,434,954	2,127,448	3,129,609	4,737,000	4,913,480	3,399,559	12,055,909	7,070,173	7,542,075	7,605,622	7,640,976
Maryland	6,853,050	390,000	616,000	963,777	947,472	1,191,164	3,070,807	790,790	2,328,795	1,680,353	1,625,725	1,184,063	900,754	410,466	439,038
Massachusetts	1,082,161	1,116,916	842,629	928,129	1,031,320	11,503,702	12,416,317	13,432,781	9,621,224	8,926,019	8,938,925	10,052,872	2,752,268	3,522,905	3,317,234
Michigan	2,320,826	4,792,530	4,595,080	3,164,059	4,582,027	3,561,675	4,025,524	7,519,042	8,548,682	471,572	1,555,898	1,265,405	1,690,204	880,828	702,204
Minnesota	1,566,712	1,813,748	794,167	673,544	1,662,951	2,678,015	3,562,237	3,499,210	3,446,554	3,790,153	5,356,934	3,365,930	3,612,375	4,929,165	4,711,365
Mississippi	2,105,823	3,634,374	3,295,081	1,458,268	1,562,376	917,631	566,320	1,025,908	2,162,824	6,216,398	5,579,050	4,637,046	4,036,645	6,374,191	7,059,347
Missouri	10,133,435	9,482,088	8,530,764	9,502,232	9,297,498	10,347,414	11,728,858	12,524,705	12,672,628	13,159,754	11,968,316	11,624,124	10,111,070	7,213,438	7,666,807
Montana	1,871,061	2,185,884	2,343,724	2,920,932	2,479,271	3,247,491	3,688,918	3,336,125	4,888,356	4,140,091	4,146,533	7,753,095	3,873,284	4,371,611	4,658,143
Nebraska	2,048,838	2,214,924	1,902,385	1,818,917	2,040,414	219,783	529,071	928,291	400,154	679,369	4,757,681	6,941,251	5,465,378	4,079,403	2,068,739
Nevada	0	32,942	47,582	46,905	45,408	170,494	192,802	83,663	4,967	100,000	128,914	222,553	439,233	474,700	920,333
New Hampshire	155,000	100,000	111,000	0	0	262,850	331,476	744,520	642,613	74,981	101,215	113,525	593,070	1,406,171	1,641,411
New Jersey	2,974,000	4,305,318	1,988,395	2,837,940	3,192,669	3,162,639	2,721,846	2,591,814	2,487,857	1,823,000	2,192,254	2,206,594	2,940,457	5,608,633	7,057,203
New Mexico	0	0	0	312,918	502,068	1,274,000	1,156,279	1,595,891	1,283,998	1,727,331	2,108,672	2,147,277	1,550,674	1,950,400	1,566,851
New York	36,911,399	29,002,576	19,416,212	25,121,628	23,232,954	24,029,807	21,834,761	21,338,549	25,507,577	23,271,335	33,457,115	30,312,324	31,482,716	21,860,827	30,403,179
North Carolina	20,919,615	5,076,664	6,817,285	3,011,692	3,136,983	2,864,841	2,901,909	5,490,244	6,354,160	7,534,575	7,935,915	7,263,072	5,733,496	6,263,664	2,906,002
North Dakota	587,710	22,500	15,000	0	0	825,000	825,000	432,220	1,339,067	1,150,015	1,546,256	789,902	918,049	624,754	659,780

TABLE 11

## State government expenditures for environment and natural resources-related R&amp;D, by state: FYs 2009–23

(Dollars)

State	2009 <sup>a</sup>	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Ohio	6,306,109	38,137,758	38,596,214	15,477,600	38,073,964	36,843,569	42,606,559	46,302,620	61,383,778	50,609,867	46,098,202	50,405,927	31,774,578	49,888,407	49,445,763
Oklahoma	2,552,285	1,631,015	2,505,761	2,248,062	4,765,208	5,921,730	5,465,000	5,201,284	5,714,953	3,041,465	3,697,616	2,281,991	2,291,905	3,000,003	2,389,244
Oregon	8,279,562	14,867,136	16,924,664	19,780,040	20,153,209	17,070,483	18,412,322	11,208,431	16,722,907	14,527,986	19,896,508	16,706,262	17,198,988	18,199,863	22,483,060
Pennsylvania	9,395,553	7,891,207	7,749,253	8,058,329	9,069,833	8,792,509	9,129,370	9,043,493	7,739,820	8,326,030	8,385,384	8,868,958	10,393,255	13,890,852	18,896,798
Rhode Island	446,347	401,045	590,282	927,489	1,059,308	861,501	869,042	1,342,772	1,320,932	2,476,653	3,507,663	3,868,806	9,014,506	6,658,944	2,199,338
South Carolina	25,183,342	34,711,576	45,163,028	46,038,125	36,316,203	17,608,196	23,516,239	24,859,330	26,168,247	29,097,570	28,245,560	27,721,566	27,217,435	29,745,041	31,915,915
South Dakota	2,311,292	1,638,739	1,628,888	1,894,989	1,774,517	45,000	20,000	0	62,998	0	0	50,000	0	0	34,950
Tennessee	0	0	320,000	856,000	866,500	583,092	571,871	1,085,874	863,020	901,162	906,097	919,243	233,025	314,273	0
Texas	24,750,247	6,351,022	4,805,152	5,492,140	6,428,787	13,206,103	14,491,269	13,099,100	16,408,555	9,895,119	9,797,876	7,456,321	11,309,543	6,661,241	11,126,708
Utah	6,149,899	6,329,203	7,943,186	17,978,580	18,312,681	17,125,000	18,245,765	17,814,501	18,126,510	17,282,000	4,537,659	5,558,311	4,995,663	5,847,503	7,388,968
Vermont	0	75,000	75,000	115,469	102,379	252,928	90,683	153,931	50,195	49,859	308,227	282,511	274,477	63,773	79,783
Virginia	4,005,964	3,947,713	3,829,525	4,874,529	5,709,773	9,017,423	9,630,219	7,583,316	5,564,985	6,068,610	7,210,949	5,985,898	7,597,646	10,742,492	18,131,290
Washington	6,993,436	10,782,537	11,087,560	10,712,941	10,953,130	9,118,095	9,698,425	11,991,928	14,779,468	12,726,589	16,415,784	23,572,042	20,929,359	22,916,358	28,731,394
West Virginia	1,804,769	1,818,077	1,873,514	1,501,719	1,611,130	279,478	305,196	1,709,742	3,335,151	2,967,206	4,141,682	3,939,496	3,183,300	2,433,225	3,460,082
Wisconsin	15,201,270	6,717,528	10,197,725	9,081,222	8,894,211	7,183,900	7,569,100	6,503,000	7,237,000	7,206,044	6,060,492	5,423,223	6,879,700	7,047,780	7,574,828
Wyoming	3,641,349	4,607,766	4,765,616	4,126,343	4,225,353	4,731,992	3,824,884	2,388,305	2,013,813	2,022,282	2,152,148	2,043,931	2,542,859	2,086,841	3,481,963
Puerto Rico <sup>c</sup>	136,021	100,000	100,000	201,685	244,845	205,623	150,000	na	na	na	na	na	na	796,996	276,257

na = not applicable; did not report to survey.

<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 the other category and in the environment and natural resources category.<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&amp;D expenditures by function were surveyed beginning with the FY 2009 survey. State R&amp;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&amp;D.

**Source(s):**

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