

TABLE 45. Companies with domestic R&D paid for and performed by the company in energy and environmental protection application areas, by industry and company size: 2011
(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Energy		Environmental protection	
		Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount
All industries	21–23, 31–33, 42–81	47,662	238,768	11,227	18,413	9,186	7,677
Manufacturing industries	31–33	22,195	163,340	5,062	14,045	4,701	5,895
Food	311	1,541	4,204	177	183 i	204	76 i
Chemicals	325	2,488	49,988	439	546	711	505
Basic chemicals	3251	499	3,674	85	304	218	261
Pharmaceuticals and medicines	3254	610	41,111	23	20 i	18	19 i
Other chemicals	other 325	1,379	5,202	332	222	475	224
Plastics and rubber products	326	1,416	1,973	200	68	238	61
Nonmetallic mineral products	327	D	1,145	99	81	97	88 i
Fabricated metal products	332	2,422	1,738	620	161	540	93
Machinery	333	D	13,578	1,291	2,344	1,143	1,835
Agricultural implement	33311	171	1,255	23	54	30	125
Semiconductor machinery	333295	51	2,220	18	50	7	3
Engine, turbine, and power transmission equipment	3336	196	3,599	77	1,081	52	644
Other machinery	other 333	D	6,503	1,173	1,159	1,054	1,063
Computer and electronic products	334	3,098	53,664	881	4,729	439	1,109 i
Semiconductor and other electronic components	3344	777	22,855	241	2,769	124	354 i
Other computer and electronic products	other 334	2,321	30,809	640	1,960	315	754
Electrical equipment, appliances, and components	335	1,277	3,417	400	908	221	225 i
Transportation equipment	336	1,382	20,275	242	4,013	340	1,325
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	729	11,737	137	3,601	125	1,029
Other transportation equipment	other 336	653	8,538	105	412	214	296
Miscellaneous manufacturing	339	2,275	8,442	256	128	297	205
Other manufacturing	312–316, 321–324, 331, 337	2,583	4,918	458	885 i	471	374
Nonmanufacturing industries	21–23, 42–81	25,467	75,428	6,166	4,368	4,485	1,782
Mining, extraction, and support activities	21	185	2,425	124	1,492	112	424
Utilities	22	74	302	50	267	36	94 i
Wholesale trade	42	3,605	1,419 i	710	91	698	101 i
Information	51	4,022	41,014	496	576	65	91
Publishing	511	2,038	27,748	237	276	22	73
Telecommunications	517	D	2,040	61	D	D	*
Data processing, hosting, and related services	518	D	4,257	102	48	12	D
Other information	other 51	761	6,969	97	D	D	D
Professional, scientific, and technical services	54	10,670	23,368	3,561	1,760 i	2,712	1,002
Architectural, engineering, and related services	5413	2,150	1,808	1,088	595	745	343 i
Scientific research and development services	5417	1,534	6,170	443	362	364	221
Biotechnology research and development	541711	671	4,283	143	112 i	145	69
Other scientific research and development	other 5417	863	1,888	301	250	219	152
Other professional, scientific, and technical services	other 54	6,987	15,389	2,030	804 i	1,603	439
Health care services	621–23	1,009	558	D	*	0	0

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		Companies ^a (number)	Amount	Companies ^a (number)	Amount	Companies ^a (number)	Amount
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	5,902	6,342	D	181 i	863	70
All companies (number of domestic employees)	-	47,662	238,768	11,227	18,413	9,186	7,677
Small companies ^b							
5-499	-	45,120	46,509	10,479	3,536	8,584	1,902
5-99	-	38,331	24,928	9,015	2,015	7,388	1,203
5-49	-	33,145	17,317	7,715	1,277	6,151	865
5-9	-	11,510	2,981	2,008	168	1,866	100
10-24	-	12,931	4,907	3,194	370	2,258	278
25-49	-	8,704	9,429	2,513	740	2,027	486
50-99	-	5,186	7,611	1,300	738	1,237	338
100-249	-	4,568	10,433	1,050	898	923	415
250-499	-	2,220	11,149	414	623	273	283
Medium and large companies							
500-999	-	D	8,739	199	714	156	237
1,000-4,999	-	1,232	42,905	308	2,689	232	1,114
5,000-9,999	-	235	18,659	128	1,351	120	987 i
10,000-24,999	-	138	42,585	60	2,516	54	1,230
25,000 or more	-	D	79,370	53	7,608	40	2,208

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = value > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

^a Statistics for number of companies are based only on companies in the United States that reported to the survey. These statistics do not include an adjustment to the weight to account for unit nonresponse.

^b Upper bound based on U.S. Small Business Administration's definition of a small business; Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey, 2011.