

TABLE 46. Companies with domestic R&D paid for by others 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 <sup>a</sup> (number)	Amount	Companies <sup>a</sup> (number)	Amount	Companies <sup>a</sup> (number)	Amount
All industries	21-23, 31-33, 42-81	8,639	55,324	2,795	3,338	2,254	1,926
Manufacturing industries	31-33	2,545	38,021	924	1,868	724	693 i
Food	311	112	196	13	40 i	12	1 i
Chemicals	325	392	5,337	73	112	149	37
Basic chemicals	3251	149	D	27	55	121	29
Pharmaceuticals and medicines	3254	168	4,838	16	D	D	*
Other chemicals	other 325	75	D	30	D	D	9
Plastics and rubber products	326	147	307 i	45	2	37	3 i
Nonmetallic mineral products	327	13	33	5	15	4	7
Fabricated metal products	332	335	115	141	10	120	6
Machinery	333	199	1,131	125	196	52	D
Agricultural implement	33311	5	22	D	1 i	3	2 i
Semiconductor machinery	333295	14	139	8	7 i	D	D
Engine, turbine, and power transmission equipment	3336	17	693	14	D	10	D
Other machinery	other 333	163	278	D	D	D	D
Computer and electronic products	334	615	9,040	291	327	182	105
Semiconductor and other electronic components	3344	255	1,245	111	118	36	39 i
Other computer and electronic products	other 334	360	7,794	180	209	147	66
Electrical equipment, appliances, and components	335	99	178	51	66	36	24
Transportation equipment	336	172	20,605 i	74	997	63	388 i
Motor vehicles, bodies, trailers, and parts	3361, 3362, 3363	103	D	45	239	38	160
Other transportation equipment	other 336	70	D	29	758 i	25	227 i
Miscellaneous manufacturing	339	308	D	33	21	34	12
Other manufacturing	312-316, 321-324, 331, 337	153	D	73	82	34	D
Nonmanufacturing industries	21-23, 42-81	6,093	17,303	1,871	1,470	1,531	1,233
Mining, extraction, and support activities	21	41	307	41	294	11	8 i
Utilities	22	23	84	21	82	20	62 i
Wholesale trade	42	612	248	117	8	56	5
Information	51	146	851	10	7	5	D
Publishing	511	D	687	D	5	D	D
Telecommunications	517	9	117	0	0	0	0
Data processing, hosting, and related services	518	35	28	D	*	0	0
Other information	other 51	D	19	D	1	D	1
Professional, scientific, and technical services	54	3,800	14,851	1,372	1,048	1,107	638
Architectural, engineering, and related services	5413	1,152	1,966	595	321	297	74
Scientific research and development services	5417	1,357	9,131	445	561	461	431
Biotechnology research and development	541711	372	1,735	69	78	99	30
Other scientific research and development	other 5417	985	7,396	376	483	362	401
Other professional, scientific, and technical services	other 54	1,290	3,755	331	166 i	349	132
Health care services	621-23	620	183	D	5	3	5

TABLE 46. Companies with domestic R&D paid for by others 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 <sup>a</sup> (number)	Amount	Companies <sup>a</sup> (number)	Amount	Companies <sup>a</sup> (number)	Amount
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	852	779	D	25 i	329	D
All companies (number of domestic employees)	-	8,639	55,324	2,795	3,338	2,254	1,926
Small companies <sup>b</sup>							
5-499	-	8,206	10,283	2,632	1,182	2,107	652
5-99	-	6,813	6,382	2,095	924	1,527	503
5-49	-	6,198	4,525	1,837	719	1,342	385
5-9	-	2,262	1,221	659	283	442	170
10-24	-	2,384	1,872	732	237	564	115
25-49	-	1,552	1,432	445	200	336	100 i
50-99	-	615	1,857	258	205	185	119 i
100-249	-	820	2,095	186	163	236	113
250-499	-	573	1,806	351	95	344	36
Medium and large companies							
500-999	-	126	1,288	38	89	38	74
1,000-4,999	-	170	7,579	65	201	50	120 i
5,000-9,999	-	46	6,292	18	230	14	107
10,000-24,999	-	51	6,630	22	682	27	146
25,000 or more	-	40	23,253 i	20	954 i	18	826

\* = 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.

<sup>a</sup> 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.

<sup>b</sup> 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.