

TABLE 30
Companies with domestic R&D paid for and performed by the company in energy and environmental protection application areas, by industry and company size: 2017

(Millions of U.S. dollars)

Industry and company size	NAICS code	Domestic R&D		Energy		Environmental protection	
		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount
All industries	21–23, 31–33, 42–81	19,514	339,036	3,276	i 20,981	2,252	i 6,976
Manufacturing industries	31–33	11,581	216,155	2,387	i 16,667	1,712	i 6,194
Food	311	554	4,453	i 10	14	70	i 47
Chemicals	325	1,730	63,285	227	i 524	290	i 418
Basic chemicals	3251	253	2,393	85	i 344	107	i 258
Pharmaceuticals and medicines	3254	755	55,229	3	18	4	11
Other chemicals	other 325	723	5,664	140	i 162	179	i 149
Plastics and rubber products	326	624	3,637	126	i 235	89	i 145
Nonmetallic mineral products	327	175	1,303	57	i 173	i 53	i 166
Fabricated metal products	332	1,168	2,099	315	i 274	212	i 150
Machinery	333	1,662	12,257	458	i 2,066	364	i 995
Agricultural implement	33311	181	1,511	35	i 42	30	i 104
Semiconductor machinery	333242	33	3,228	6	86	i 0	0
Engine, turbine, and power transmission equipment	3336	97	1,921	68	i 730	51	i 502
Other machinery	other 333	1,352	5,596	350	i 1,209	283	i 389
Computer and electronic products	334	1,726	69,942	369	i 6,421	i 226	i 769
Semiconductor and other electronic components	3344	422	27,859	96	i 4,127	i 41	i 331
Other electronic products	other 334	1,304	42,083	273	i 2,294	i 184	i 439
Electrical equipment, appliances, and components	335	709	4,110	433	i 1,213	120	i 130
Transportation equipment	336	807	34,629	190	i 5,383	90	3,090
Automobiles, bodies, trailers, and parts	3361–63	367	21,137	77	4,459	73	3,023
Other transportation	other 336	441	13,492	113	i 925	17	67
Miscellaneous manufacturing	339	1,386	15,410	29	92	22	52
Other manufacturing	312–16, 321–24, 331, 337	1,050	5,029	172	i 272	177	i 232
Nonmanufacturing industries	21–23, 42–81	7,935	122,881	888	i 4,314	i 540	i 781
Mining, extraction, and support activities	21	104	2,841	51	i 1,935	i 38	200
Utilities	22	36	281	34	261	13	80
Wholesale trade	42	662	503	51	i 86	i 39	i 16
Information	51	2,486	78,898	118	908	i 40	124
Publishing	511	1,056	33,276	66	i 813	i D	81
Telecommunications	517	101	3,643	D	1	D	*
Data processing, hosting, and related services	518	1,114	16,037	39	80	18	39
Other information	other 51	216	25,943	D	14	D	3

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		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount
Professional, scientific, and technical services	54	3,679	18,972	598	i 1,017	385	i 324
Architectural, engineering, and related services	5413	1,124	1,561	401	i 459	309	i 191
Scientific research and development services	5417	689	2,817	131	i 354	53	i 113
Biotechnology research and development	541711	160	795	3	i *	D	*
Other scientific research and development	other 5417	529	2,022	128	i 353	D	113
Other professional, scientific, and technical services	other 54	1,865	14,594	66	204	i 23	20
Health care services	621-23	108	958	i D	9	0	0
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	863	20,429	D	100	25	38
All companies (number of domestic employees)	-	19,514	339,036	3,276	i 20,981	2,252	i 6,976
Small companies							
10-19 ^c	-	3,283	2,402	521	i 215	i 341	i 118
20-49	-	6,001	7,593	931	i 508	i 612	i 186
Medium companies							
50-99	-	3,569	8,070	556	i 621	399	i 229
100-249	-	2,986	13,514	514	i 935	332	i 259
Large companies							
250-499	-	1,390	11,773	258	532	169	184
500-999	-	887	16,295	157	822	114	250
1,000-4,999	-	947	52,341	205	3,023	177	985
5,000-9,999	-	198	32,701	56	1,862	i 46	541
10,000-24,999	-	149	63,415	48	3,886	i 42	1,151
25,000 or more	-	105	130,931	28	8,579	20	3,072

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

NAICS = 2012 North American Industry Classification System.

^a Statistics for the 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. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^b Statistics for the 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. These company count estimates reflect a new imputation process implemented for survey year 2014. This change has affected the comparability of these company count estimates with estimates published for years prior to 2014. A company having multiple reporting parts for data collection may contribute to the statistics for multiple industries, so the detail may not add to the total for the number of companies.

^c Business Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s)

Detail may not add to total because of rounding. Industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed or funded R&D. Companies could report R&D in one, more than one, or no application area.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.