

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:
 2018**

(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	24,698	377,806	3,439	23,275	2,541	7,994
Manufacturing industries	31-33	14,727	234,682	2,567	19,367	1,953	7,076
Food	311	802	4,412	47	51	84	82
Chemicals	325	2,631	73,584	284	481	364	440
Basic chemicals	3251	321	2,251	145	299	147	176
Pharmaceuticals and medicines	3254	1,285	64,800	5	3	9	16
Other chemicals	other 325	1,026	6,533	133	179	208	248
Plastics and rubber products	326	899	2,667	179	161	181	162
Nonmetallic mineral products	327	227	1,361	90	397	60	53
Fabricated metal products	332	1,427	2,222	161	323	96	44
Machinery	333	2,020	13,765	566	2,695	369	1,165
Agricultural implement	33311	237	1,862	45	63	32	136
Semiconductor machinery	333242	44	3,623	D	0 - 1,347	D	1
Engine, turbine, and power transmission equipment	3336	70	2,310	35	1,287	29	630
Other machinery	other 333	1,672	5,970	D	0 - 1,347	D	398
Computer and electronic products	334	2,218	73,922	452	8,074	273	771
Semiconductor and other electronic components	3344	595	28,642	178	6,217	46	286
Other electronic products	other 334	1,623	45,280	273	1,857	227	486
Electrical equipment, appliances, and components	335	750	4,222	389	1,178	157	362
Transportation equipment	336	1,065	35,894	118	5,244	111	3,679
Motor vehicles, bodies, trailers, and parts	3361-63	636	23,080	72	4,660	75	3,595
Other transportation	other 336	430	12,814	46	584	37	84
Miscellaneous	339	1,220	16,807	81	222	56	64
Other manufacturing	312-16, 321-24, 331, 337	1,487	5,826	201	541	202	254
Nonmanufacturing industries	21-23, 42-81	9,978	143,123	872	3,908	588	918
Mining, quarrying, oil and gas extraction, and support activities	21	149	1,775	62	1,462	30	73
Utilities	22	61	224	56	211	23	68
Wholesale trade	42	768	881	80	59	62	21
Information	51	2,626	93,487	123	992	27	131
Publishing	511	975	32,281	67	434	15	98
Telecommunications	517	177	3,631	D	7	D	2
Data processing, hosting, and related services	518	1,192	23,115	45	541	D	28
Other information	other 51	284	34,459	D	10	D	4

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		Companies ^a (number)	Amount	Companies ^b (number)	Amount	Companies ^b (number)	Amount				
Professional, scientific, and technical services	54	5,204	22,374	489	i	1,038	412	i	606	i	
Architectural, engineering, and related services	5413	1,150	2,277	307	i	506	i	310	i	373	i
Scientific research and development services	5417	785	2,424	122	i	326	61	i	100		
Research and development in biotechnology	541711	202	820	0		0	D		1		
Other scientific research and development	other 5417	583	1,603	122	i	326	D		99		
Other professional, scientific, and technical services	other 54	3,269	17,673	60		206	41		133		
Health care services	621-23	178	1,401	D		9	i	0	0		
Other nonmanufacturing	23, 44-45, 48-49, 52-53, 55-56, 624, 71-72, 81	998	22,982	i	D	137	34		19	i	
All companies (number of domestic employees)	-	24,698	377,806	3,439	i	23,275	i	2,541	i	7,994	i
Small companies											
10-19 ^c	-	3,948	3,340	408	i	172	i	280	i	91	i
20-49	-	6,950	9,556	976	i	637	704	i	282		
Medium companies											
50-99	-	4,406	10,446	540	i	547	419	i	313		
100-249	-	4,562	14,626	634	i	876	460	i	263		
Large companies											
250-499	-	1,967	16,604	281	i	989	214	i	193		
500-999	-	1,098	15,561	199		877	144		337		
1,000-4,999	-	1,221	58,509	240		3,526	189		1,074	i	
5,000-9,999	-	231	36,274	69		2,247	56		666		
10,000-24,999	-	201	74,423	64		4,873	55		1,454	i	
25,000 or more	-	114	138,465	28		8,532	i	20	3,320		

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 Beginning in survey year 2018, these statistics 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 Beginning in survey year 2018, these statistics include an adjustment to the weight to account for unit nonresponse. These company count estimates reflect an 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. Companies could report R&D in one, more than one, or no application area. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.