

Table SINV-68

USPTO utility patents granted in environmental technology, by region, country, or economy: 1998–2020

(Number)

Region, country, or economy	Economy by income status	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
World	na	1,750	1,750	1,737	1,767	1,686	1,643	1,524	1,342	1,455	1,437	1,509	1,548	2,056	2,007	2,260	2,630	2,740	2,679	2,547	2,861	2,686	3,102	2,949
North America	na	1,089	1,081	1,084	1,032	997	947	864	758	883	849	905	895	1,167	1,141	1,270	1,404	1,483	1,375	1,338	1,436	1,313	1,504	1,479
Canada	High	42	58	77	75	70	60	56	51	58	46	55	51	64	54	69	72	69	75	63	68	80	82	93
Mexico	Upper middle	0	0	0	2	1	3	1	1	2	0	3	0	0	1	3	4	2	4	3	5	3	3	3
United States	High	1,047	1,023	1,007	955	926	884	807	707	823	803	848	844	1,103	1,086	1,198	1,329	1,413	1,297	1,272	1,363	1,230	1,419	1,383
Central America and Caribbean	na	1	0	1	0	0	0	0	1	0	0	0	2	0	0	1	1	1	0	1	2	3	3	1
Puerto Rico	High	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	2	3	1
South America	na	3	1	1	1	4	3	3	1	1	3	5	4	3	10	4	8	5	9	7	7	6	8	10
Argentina	Upper middle	1	0	0	0	1	2	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0
Brazil	Upper middle	1	1	0	0	2	2	1	1	1	2	1	1	2	4	0	2	2	1	3	3	3	2	8
Europe	na	311	331	315	391	329	315	274	243	244	259	262	281	382	383	423	553	558	589	524	625	549	664	578
EU-27 + UK ^a	na	287	309	294	357	314	298	259	227	231	247	248	265	362	364	406	524	528	555	497	593	519	626	547
United Kingdom	High	39	40	27	29	37	39	36	29	42	26	34	33	45	44	58	62	82	72	68	69	61	82	68
EU-27 ^b	na	248	269	267	327	277	259	223	198	189	221	214	232	316	320	348	462	446	483	429	524	458	545	480
Austria	High	6	5	3	9	6	4	4	2	3	8	4	5	6	5	6	10	8	14	13	12	10	12	10
Belgium	High	7	10	8	9	13	7	4	4	7	3	5	8	14	9	9	23	14	16	16	23	13	23	21
Denmark	High	3	12	7	15	7	7	2	6	4	6	7	8	4	6	7	8	11	7	9	9	11	13	16
Finland	High	16	14	10	14	8	11	8	9	7	7	5	5	9	8	6	9	13	11	11	12	10	17	13
France	High	50	51	51	78	48	40	32	30	30	45	38	36	54	52	47	76	59	55	70	77	73	80	68
Germany	High	118	125	140	145	134	141	120	116	106	114	119	130	174	173	216	258	248	281	230	273	215	241	229
Hungary	High	1	0	0	0	0	0	1	0	0	0	2	0	2	2	2	1	2	0	2	0	4	1	1
Ireland	High	0	2	2	0	1	1	1	1	0	1	1	1	1	3	0	2	3	4	2	4	2	3	4
Italy	High	13	8	11	12	17	11	13	4	8	9	5	8	10	16	16	21	24	26	20	25	42	48	31
Netherlands	High	7	18	12	18	21	16	12	7	7	8	11	14	19	17	13	25	23	22	16	32	23	32	26
Spain	High	2	1	2	4	3	1	4	3	1	4	2	3	4	3	4	4	6	6	3	8	6	9	7
Sweden	High	23	20	19	21	19	20	19	13	17	13	14	12	17	23	15	21	25	34	29	36	35	49	40
Other Europe	na	24	23	21	35	15	17	15	16	14	12	13	16	21	19	18	29	30	34	27	32	30	37	31
Other Europe-2020 ^b	na	63	62	48	64	51	56	51	45	55	38	47	49	66	62	75	92	112	106	95	102	91	119	99
Belarus	Upper middle	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	1	0	0	0	0	0	1	1
Moldova	Lower middle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	High	6	4	3	7	3	6	6	7	2	7	4	8	8	6	4	8	9	13	12	11	9	7	9
Russia	Upper middle	6	8	6	13	3	4	3	5	3	1	4	3	3	3	3	8	5	3	4	2	6	6	5
Switzerland	High	9	9	12	13	8	6	7	5	6	3	2	5	8	8	9	10	16	17	10	18	14	21	15

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Ukraine	Lower middle	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0
Asia	na	326	310	313	311	336	353	357	308	302	300	314	333	463	440	517	590	629	631	613	721	725	829	788
China	Upper middle	3	2	4	5	3	6	7	2	5	5	5	12	25	24	32	28	52	45	63	91	100	146	146
India	Lower middle	1	0	1	1	2	6	3	6	3	3	3	3	4	6	9	11	16	12	16	22	21	22	27
Japan	High	280	259	261	252	264	282	285	250	253	242	252	251	360	342	379	427	441	452	416	442	424	480	429
Malaysia	Upper middle	0	0	0	0	1	0	1	0	0	0	0	1	1	0	1	1	1	2	1	1	1	0	1
Singapore	High	0	1	0	1	0	3	2	3	0	0	2	2	3	2	2	4	3	3	3	5	5	6	9
South Korea	High	20	19	20	21	31	28	26	18	21	23	23	36	45	38	51	78	87	94	87	116	145	137	142
Taiwan	High	21	29	26	29	34	27	32	26	20	26	28	28	23	25	43	39	26	23	26	41	26	36	33
Middle East	na	7	12	9	14	12	13	9	11	11	17	12	21	21	19	28	45	34	48	48	51	68	68	63
Israel	High	5	12	7	13	10	12	9	10	11	14	10	19	18	15	15	24	22	25	25	26	31	25	26
Africa	na	2	3	5	8	3	4	3	3	8	3	2	1	1	2	2	5	2	3	2	2	3	4	4
South Africa	Upper middle	2	3	4	8	3	4	2	3	7	3	1	1	1	2	2	4	2	2	2	2	2	3	4
Australia and Oceania	na	11	11	10	10	7	8	15	17	4	7	10	12	19	12	16	24	27	24	13	17	19	24	25
Australia	High	10	10	8	9	7	7	14	17	3	6	8	11	15	12	15	22	24	22	12	16	16	23	24
New Zealand	High	1	1	2	1	0	1	1	0	0	1	2	1	4	1	1	2	3	3	1	2	4	1	1
Unclassified	na	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0

na = not applicable, metric not calculated at this level.

EU = European Union; UK = United Kingdom; USPTO = U.S. Patent and Trademark Office.

^a The United Kingdom was a part of the EU for data purposes from 1973 to 2019.^b Beginning in 2020, the United Kingdom was no longer a member of the EU.**Note(s):**

USPTO patents are allocated according to patent inventorship information. USPTO patents are fractionally allocated among regions, countries, or economies based on the proportion of residences of all named inventors. Patents are classified under the World Intellectual Property Organization (WIPO) classification of patents, which classifies International Patent Classification (IPC) codes under 35 technical fields. IPC reformed codes take into account changes that were made to the WIPO classification in 2006 under the eighth version of the classification and were used to prepare these data. However, because PatentsView only provides the original IPC codes as they appeared on patents and not the IPC reformed codes, current Cooperative Patent Classification codes on patents were converted back to the most recent IPC classification to prepare these statistics. Fractional counts of patents were assigned to each technological field on patents to assign the proper weight of a patent to the corresponding technological fields under the classification. China includes Hong Kong.

Source(s):

National Center for Science and Engineering Statistics; Science-Metrix; PatentsView, USPTO, accessed June 2021.

Science and Engineering Indicators