

Table INV-A

USPTO patents granted to selected regions or countries in environmental sustainability technologies: 2022

(Number)

Technology area	World	China	EU-27	Japan	South Korea	United States
Environmental management	5,288	295	873	890	268	2,321
CCMT in energy generation, transmission, or distribution	7,943	757	1,103	1,622	1,154	2,544
CCMT in capture, storage, sequestration, or disposal of greenhouse gases	199	7	25	25	11	98
CCMT in transportation	5,170	172	983	1,105	353	2,035
CCMT in buildings	2,317	258	341	325	156	996
CCMT in wastewater treatment or waste management	557	42	88	51	17	262
CCMT in the production or processing of goods	3,975	306	635	710	286	1,542
CCMT in information and communication	3,428	447	260	304	410	1,532
CCAT	2,974	140	364	198	87	1,722
Sustainable ocean economy	280	18	45	19	15	131
Addendum						
CCAT in agriculture, forestry, livestock, or agroalimentary production	442	36	38	20	14	262
CCMT in agriculture, livestock, or agroalimentary industries	245	24	31	7	11	134

CCAT = climate change adaptation technology; CCMT = climate change mitigation technology; EU-27 = European Union; USPTO = Patent and Trademark Office.

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. Beginning in 2020, the United Kingdom was no longer a member of the EU. China includes Hong Kong. See File USPTO environmental and critical technology patent data.

Source(s):

National Center for Science and Engineering Statistics; Science-Metrix; USPTO data hosted by Reed Tech (LexisNexis), accessed June 2023.

Science and Engineering Indicators