

Table SKTI-5

Value added of KTI industries, by region, country, or economy: 2002–19

(Millions of current dollars)

Region, country, or economy	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
World	3,406,829	3,808,291	4,238,871	4,495,366	4,863,257	5,476,675	5,923,813	5,515,989	6,281,367	7,007,796	7,132,815	7,382,920	7,719,493	7,577,690	7,836,128	8,443,668	9,142,475	9,220,040
North America	1,176,378	1,220,952	1,283,585	1,343,229	1,450,805	1,515,863	1,540,119	1,492,324	1,648,153	1,752,332	1,817,755	1,907,556	1,982,823	2,075,154	2,145,937	2,255,915	2,416,098	2,548,477
Canada	61,696	69,031	73,846	79,299	85,502	92,073	88,842	79,476	93,719	105,631	109,030	108,638	106,558	96,457	95,704	101,256	105,579	106,698
Mexico	62,089	55,365	56,930	61,333	70,649	73,515	75,045	56,251	70,341	76,568	86,124	89,773	94,050	95,152	90,220	96,697	101,316	105,611
United States	1,052,593	1,096,557	1,152,809	1,202,597	1,294,654	1,350,275	1,376,232	1,356,596	1,484,094	1,570,133	1,622,602	1,709,144	1,782,215	1,883,545	1,960,012	2,057,962	2,209,203	2,336,168
Central and South America	67,788	72,766	90,967	111,403	133,005	169,657	211,527	194,792	243,337	280,463	265,521	267,392	243,270	197,445	176,494	208,738	195,417	184,303
Argentina	6,267	7,835	10,004	12,410	15,021	19,113	24,593	23,805	28,101	31,891	32,433	32,643	25,079	26,010	24,401	28,542	24,428	21,210
Brazil	42,151	45,782	58,509	72,081	87,687	114,204	143,195	124,659	169,438	196,121	173,052	173,671	160,541	111,958	107,586	130,061	115,770	113,737
Chile	2,624	3,124	3,819	4,894	5,249	5,685	6,151	5,918	6,919	8,628	9,574	9,692	8,345	7,843	8,086	8,361	8,780	7,902
Colombia	5,057	4,944	6,077	7,515	8,489	10,771	12,304	11,938	14,483	15,904	17,635	17,970	17,925	14,429	13,705	14,432	15,283	14,471
Peru	2,385	2,485	2,686	3,017	3,428	4,060	4,979	5,065	5,805	6,489	7,489	7,916	7,744	7,105	7,168	7,701	8,011	7,949
Other Central and South America	9,304	8,595	9,873	11,486	13,131	15,825	20,304	23,407	18,592	21,430	25,338	25,500	23,635	30,100	15,549	19,640	23,145	19,034
Europe	1,031,376	1,230,526	1,412,474	1,471,475	1,588,999	1,861,509	2,009,293	1,681,827	1,796,918	2,020,187	1,921,252	2,030,357	2,108,709	1,900,432	1,947,506	2,066,614	2,246,564	2,175,012
EU	795,126	957,997	1,091,518	1,123,828	1,209,369	1,416,654	1,528,153	1,303,882	1,373,141	1,529,246	1,426,234	1,513,895	1,585,450	1,448,503	1,512,169	1,611,839	1,757,716	1,673,822
France	140,823	166,137	185,411	187,047	195,849	222,046	240,014	216,099	212,048	227,227	215,292	228,178	235,149	204,963	209,763	221,126	236,747	230,245
Germany	284,268	346,736	394,449	402,153	435,122	513,637	543,749	444,945	499,686	576,710	544,391	578,676	619,645	540,298	570,154	606,793	655,962	593,723
Italy	107,478	128,425	145,619	147,259	156,962	181,523	195,654	168,429	172,258	183,486	166,539	173,836	174,481	155,024	163,615	173,925	184,823	174,193
Spain	47,718	59,205	67,360	69,360	75,374	86,138	95,392	84,698	77,083	81,772	72,983	79,093	82,442	70,541	72,398	78,106	85,808	82,379
Other EU	214,838	257,494	298,678	318,009	346,061	413,310	453,343	389,711	412,065	460,052	427,029	454,113	473,732	477,677	496,239	531,889	594,376	593,283
Non-EU	236,250	272,529	320,957	347,648	379,631	444,855	481,140	377,945	423,778	490,942	495,018	516,462	523,259	451,928	435,337	454,775	488,848	501,189
United Kingdom	149,557	170,057	195,096	201,833	212,062	238,354	227,070	180,149	195,329	211,897	210,363	214,607	236,796	228,401	211,633	216,078	238,649	240,755
Russia	22,362	26,002	37,228	47,419	59,821	79,587	104,859	66,800	83,694	108,645	118,015	124,589	111,060	61,512	60,373	69,912	73,316	78,565
Switzerland	43,510	50,142	56,715	60,187	64,846	72,693	84,338	79,455	85,919	103,207	98,315	103,229	106,178	101,153	102,612	104,171	111,687	112,912
Other non-EU	20,822	26,327	31,918	38,209	42,902	54,221	64,873	51,541	58,837	67,192	68,325	74,037	69,224	60,863	60,719	64,615	65,195	68,958
Middle East	40,131	44,571	51,211	57,606	68,628	88,976	104,987	106,156	117,257	140,161	131,830	133,104	147,468	144,504	148,260	161,613	164,096	162,812
Iran	8,873	10,807	13,117	14,477	18,976	24,660	28,358	33,460	36,063	47,567	25,438	22,537	29,348	29,226	34,133	37,725	29,395	26,949
Israel	15,057	15,726	16,432	17,869	19,773	22,870	26,757	27,146	29,172	31,804	35,455	37,794	41,209	42,078	42,212	46,361	49,474	53,419
Saudi Arabia	7,183	7,742	8,866	10,044	11,516	15,970	18,568	19,291	22,952	25,206	28,893	31,459	34,009	36,583	36,607	39,765	46,553	41,197
United Arab Emirates	5,485	6,195	7,359	8,813	11,270	13,768	16,017	12,853	13,763	14,829	16,530	17,459	18,521	18,174	18,215	19,501	19,136	21,971
Other Middle East	3,533	4,101	5,437	6,403	7,092	11,708	15,287	13,405	15,308	20,755	25,514	23,855	24,380	18,443	17,093	18,262	19,537	19,275
Africa	18,605	23,840	29,815	35,024	36,035	40,729	47,046	46,171	52,796	55,526	58,705	59,666	60,691	56,881	54,745	54,585	60,138	66,674
Egypt	2,402	1,965	2,439	2,919	3,279	4,047	5,068	5,659	6,448	8,289	9,759	9,106	8,860	9,839	9,560	8,848	10,463	13,213
Nigeria	1,451	1,637	2,965	4,949	6,056	7,580	12,249	11,336	12,518	12,205	14,337	16,526	17,980	16,391	13,465	11,637	12,882	15,525
South Africa	8,820	13,167	16,534	18,128	16,705	17,507	16,670	16,618	20,052	20,299	20,178	18,621	18,027	16,669	16,133	17,252	18,266	18,448
Other Africa	5,932	7,072	7,877	9,028	9,995	11,595	13,060	12,558	13,777	14,733	14,430	15,413	15,823	13,982	15,586	16,848	18,527	19,489
Asia	1,042,899	1,177,461	1,325,451	1,427,346	1,533,261	1,735,204	1,942,578	1,928,440	2,340,753	2,661,731	2,837,379	2,890,590	3,085,565	3,126,217	3,282,924	3,607,296	3,973,771	4,000,860

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(Millions of current dollars)

Region, country, or economy	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
China	223,183	264,874	298,430	353,666	429,605	548,489	710,399	767,923	947,452	1,156,069	1,298,708	1,458,553	1,602,356	1,676,009	1,730,058	1,946,541	2,225,535	2,267,431
India	30,006	35,578	43,825	52,621	59,993	76,369	82,877	90,285	111,275	133,794	125,525	127,899	142,357	159,926	169,292	193,747	209,861	220,838
Indonesia	14,879	18,488	19,879	19,735	21,849	27,647	34,867	34,533	43,455	50,621	52,241	57,098	56,146	56,654	59,310	63,526	61,371	64,395
Japan	566,695	625,109	683,130	688,609	665,739	683,719	736,620	680,676	788,281	819,298	838,763	690,239	669,474	637,889	707,981	706,840	720,063	730,292
Malaysia	14,306	16,222	18,937	18,012	20,839	22,419	23,682	18,897	24,936	28,244	31,314	32,381	33,418	32,280	32,912	33,741	37,659	39,059
Philippines	5,661	5,266	5,923	6,329	7,280	9,449	8,914	9,681	10,421	11,518	12,763	11,158	12,569	12,422	13,647	14,316	15,235	15,138
Singapore	16,329	17,245	22,393	24,153	29,101	32,222	28,726	29,114	38,495	43,674	44,804	43,988	46,179	44,940	46,079	53,186	71,408	66,172
South Korea	102,269	114,248	139,708	161,398	184,571	209,277	184,571	174,568	227,534	260,083	268,372	291,021	317,216	297,340	304,320	350,462	376,836	341,172
Taiwan	49,260	56,284	64,532	70,039	74,816	80,484	81,207	74,737	93,921	100,798	104,146	112,462	128,137	130,135	134,784	149,555	152,402	148,262
Thailand	13,494	16,172	18,802	20,983	24,518	29,247	32,899	28,914	33,301	32,914	34,066	35,489	36,265	37,220	38,431	40,932	44,279	45,722
Vietnam	1,563	1,774	2,170	2,659	3,426	4,511	5,581	7,057	7,721	8,521	10,281	13,038	22,209	20,694	23,765	29,333	33,624	37,056
Other Asia	5,253	6,203	7,720	9,140	11,525	11,372	12,234	12,054	13,961	16,196	16,394	17,263	19,240	20,708	22,345	25,118	25,499	25,325
Oceania	29,652	38,174	45,368	49,282	52,523	64,738	68,265	66,280	82,152	97,396	100,373	94,254	90,968	77,058	80,262	88,907	86,390	81,902
Australia	26,877	34,672	41,197	44,685	48,312	59,291	63,454	61,671	76,733	91,262	93,945	87,368	83,762	70,660	73,494	81,588	79,113	74,797
New Zealand	2,775	3,502	4,170	4,597	4,212	5,446	4,810	4,609	5,419	6,135	6,427	6,886	7,206	6,397	6,767	7,320	7,277	7,105

EU = European Union; KTI = knowledge and technology intensive; nec = not elsewhere classified.

Note(s):

Value added is the amount contributed by a country, an industry, or other entity to the value of a good or service and excludes purchases of domestic and imported materials and inputs. KTI industries include high R&D intensive and medium-high R&D intensive industries based on a classification by the Organisation for Economic Co-operation and Development. High R&D intensive industries include air and spacecraft and related machinery; pharmaceuticals; computer, electronic, and optical products; scientific research and development; and software publishing. Medium-high R&D intensive industries include motor vehicles, trailers, and semi-trailers; medical and dental instruments; machinery and equipment nec; chemicals and chemical products; electrical equipment; railroad, military vehicles, and transport nec; and information technology and other information services. Detail may not add to total because of rounding. The world total and regional totals do not include all countries and economies due to limitations in data availability. See Table SKTI-4 for a full list of countries and economies in each region for which data are available. China includes Hong Kong. The EU total excludes the United Kingdom (UK) to reflect the new EU country composition following the UK's withdrawal on 1 February 2020. In order to maintain consistency over time, the EU aggregate excludes the UK for the entire time series.

Source(s):

U.S. Bureau of Economic Analysis, Value Added by Industry, accessed 5 October 2021; IHS Markit, special tabulations (2021) of the Comparative Industry Service.

Science and Engineering Indicators