

Role of Turkish Cement in Global Cement Industry

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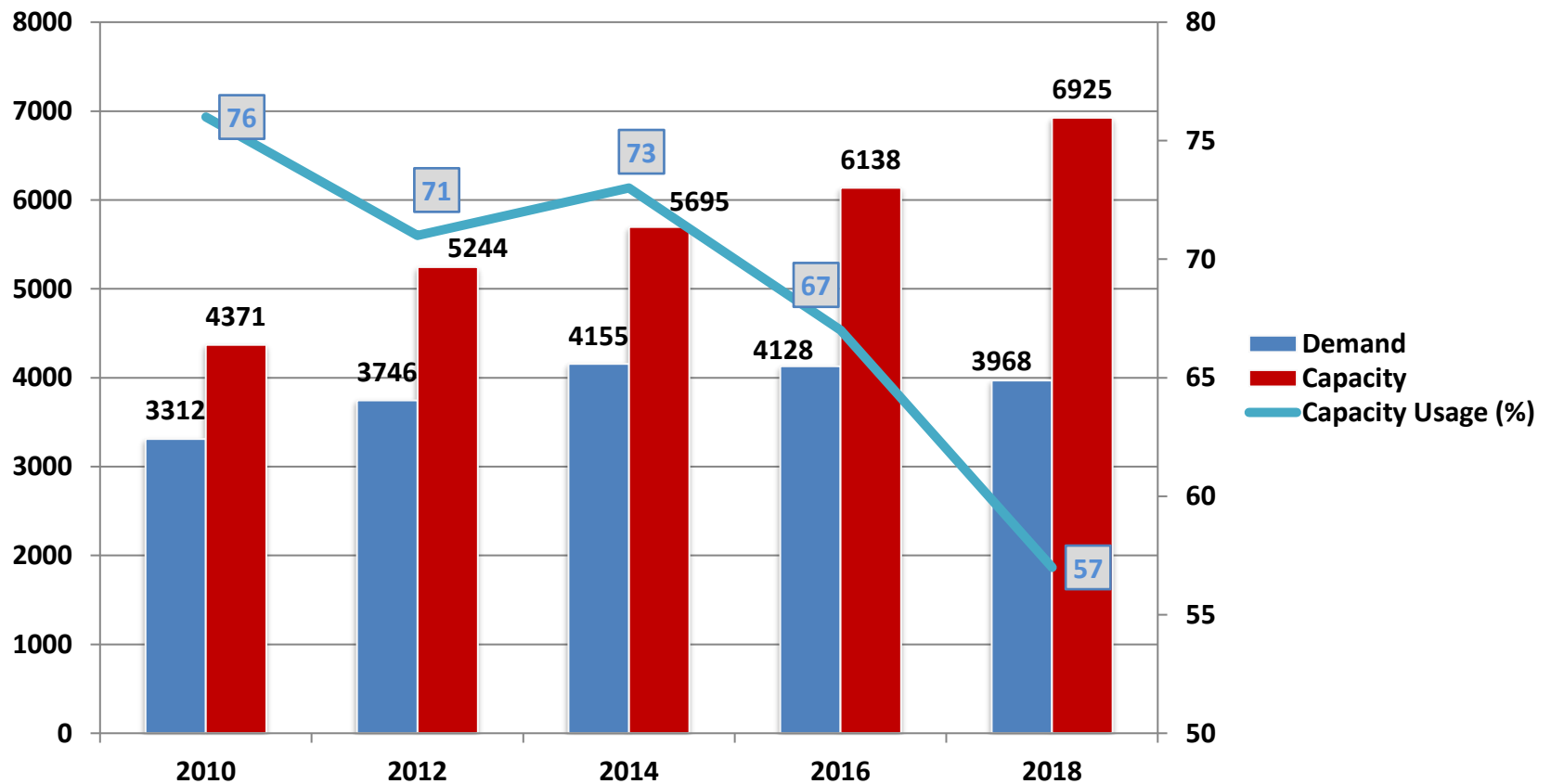
Batiçim Executive Member of the Board

Agenda

- 1 WORLD CEMENT INDUSTRY CURRENT INDICATORS
- 2 TURKISH CEMENT INDUSTRY CURRENT INDICATORS AND QUALIFICATIONS
- 3 WORLD CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE
- 4 TURKISH CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE
- 5 OPPORTUNITIES FOR TURKISH CEMENT IN GLOBAL CEMENT INDUSTRY

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT DEMAND, CAPACITY AND CAPACITY USAGE (Mt)



In 2018, world cement demand decreased by 4% and capacity increased by 13% while capacity usage fell to the level of 57%

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT INDUSTRY CURRENT INDICATORS BY CONTINENT

	2018				2019 (est.)			
	Consumption (Mt)	Production (Mt)	Export (Mt)	Import (Mt)	Consumption (Mt)	Production (Mt)	Export (Mt)	Import (Mt)
South Asia	231,460	236,610	53,390	16,500	233,810	241,230	57,960	15,360
Middle East	160,740	161,850	28,670	22,410	158,970	161,740	33,010	22,100
Eastern Europe	171,350	177,770	22,470	8,870	155,370	166,120	30,370	6,450
Western Europe	131,600	140,520	34,310	19,990	133,440	142,330	32,940	20,100
North Asia	2288,480	2308,900	28,110	23,460	2390,990	2411,910	24,700	21,270
Indian Sub-continent	425,620	424,100	10,750	32,440	440,250	442,620	11,790	33,450
North Africa	104,440	103,870	6,250	2,360	101,980	104,380	8,680	1,530
Central Europe	51,440	52,760	9,360	7,600	53,430	54,580	9,350	7,570
West Africa	49,780	47,280	5,300	17,420	52,470	50,480	5,030	18,250
North America	108,330	101,090	5,640	14,670	110,280	100,840	5,580	15,070
Central America	61,830	62,590	3,770	3,140	62,190	63,210	3,890	3,050
South America	109,940	109,510	1,900	6,980	111,630	111,170	1,880	6,600
East Africa	35,380	32,000	1,740	9,310	37,330	34,690	2,000	8,780
Central Africa	10,590	9,050	0,700	4,740	11,270	9,990	0,830	4,890
Southern Africa	14,180	13,310	0,780	1,780	14,330	13,230	0,650	1,900
Australasia	13,110	11,000	0,150	5,340	13,450	11,940	0,130	6,260

Source: The Global Cement Report, Tradeship Publications Ltd (UK), www.CemNet.com

In 2019, South Asia ranked 1st in world total cement exports; Indian Sub-continent ranked 1st in world total cement imports; North Asia ranked 1st in world total cement consumption and production.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

Top 20 Countries by Cement Consumption				
		2016	2017	2018
		Consumption(Mt)	Consumption(Mt)	Consumption(Mt)
1	China	2.395,08	2.307,71	2.168,13
2	India	288,33	283,97	326,83
3	U.S.A	94,48	96,73	98,85
4	Indonesia	61,50	66,35	69,57
5	Turkey	68,20	74,90	66,90
6	Vietnam	59,35	60,27	63,95
7	Russia	55,59	55,10	54,06
8	Brasil	57,78	53,70	52,85
9	S.Korea	55,76	56,71	52,00
10	Egypt	56,48	53,80	49,04
11	Iran	47,73	48,97	48,93
12	Japan	41,60	42,20	42,00
13	Mexico	41,42	41,63	41,16
14	Pakistan	34,69	38,71	41,12
15	Saudi Arabia	54,79	47,07	40,91
16	Philippines	26,30	29,90	33,00
17	Bangladesh	25,00	27,00	29,90
18	Tailand	28,73	28,88	29,83
19	Germany	27,49	28,87	28,99
20	Algeria	26,07	25,42	24,48

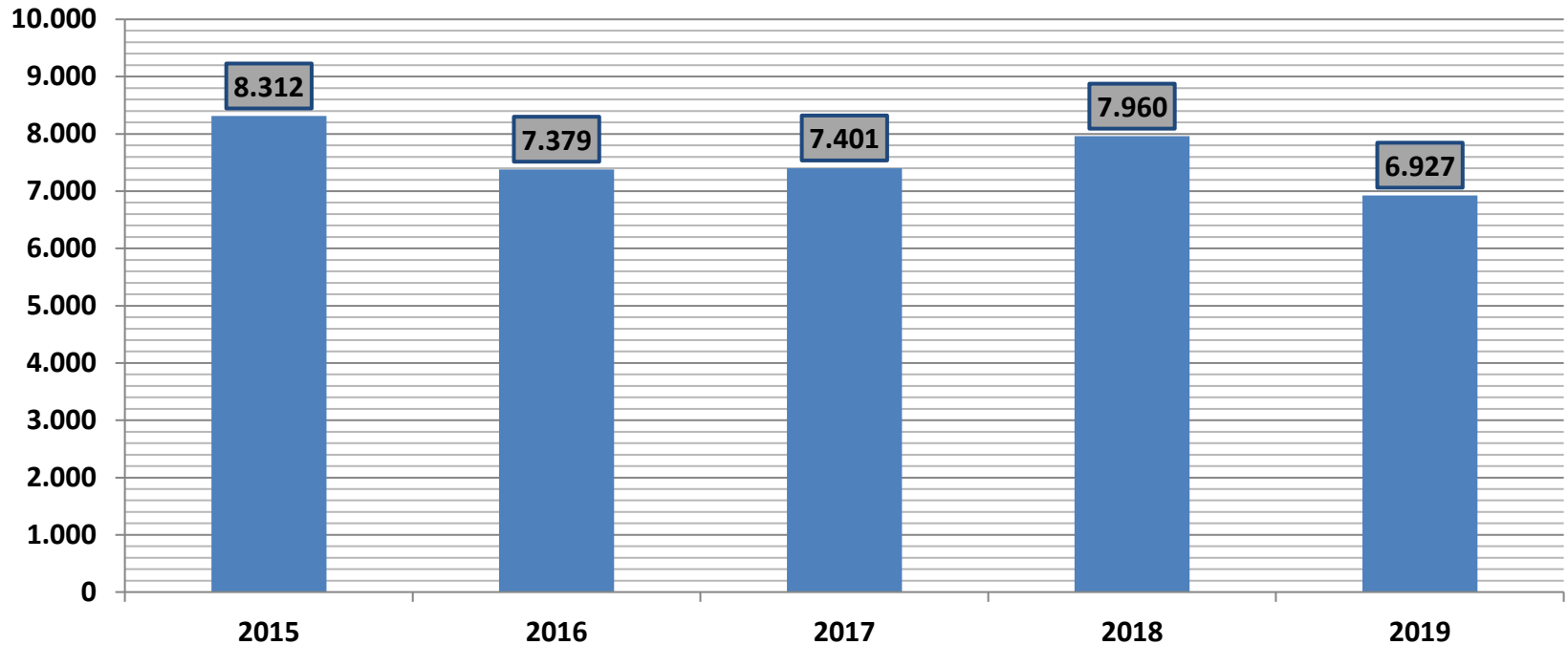
Global Cement Report, 13th Edition, ICR Research

In 2018, top 20 countries comprised 85% of the world's total consumption, which was 3.363 mt

WORLD CEMENT EXPORT AND IMPORT

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT EXPORT (MILLION \$)



In 2019, world cement export decreased by 13% and valued as 6.9 billion \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT EXPORT BY COUNTRY (MILLION \$)

		2015	2016	2017	2018	2019	18/19 Ch%	Share %
1	Germany	497	467	482	524	525	0,2	7,6
2	Vietnam	228	235	214	397	517	30,2	7,5
3	Turkey	427	367	377	399	513	28,6	7,4
4	Canada	337	338	392	486	498	2,5	7,2
5	Thailand	503	425	343	290	340	17,2	4,9
6	China	535	408	450	427	318	-25,5	4,6
7	Spain	278	273	264	281	264	-6,2	3,8
8	Ireland	145	155	154	174	208	19,7	3,0
9	Japan	236	220	208	192	191	-1,0	2,8
10	Belgium	133	121	177	153	187	21,9	2,7
	Others	4.993	4.369	4.341	4.635	3.366	-27,4	48,6
	Total	8.312	7.379	7.401	7.960	6.927	-13,0	100,0

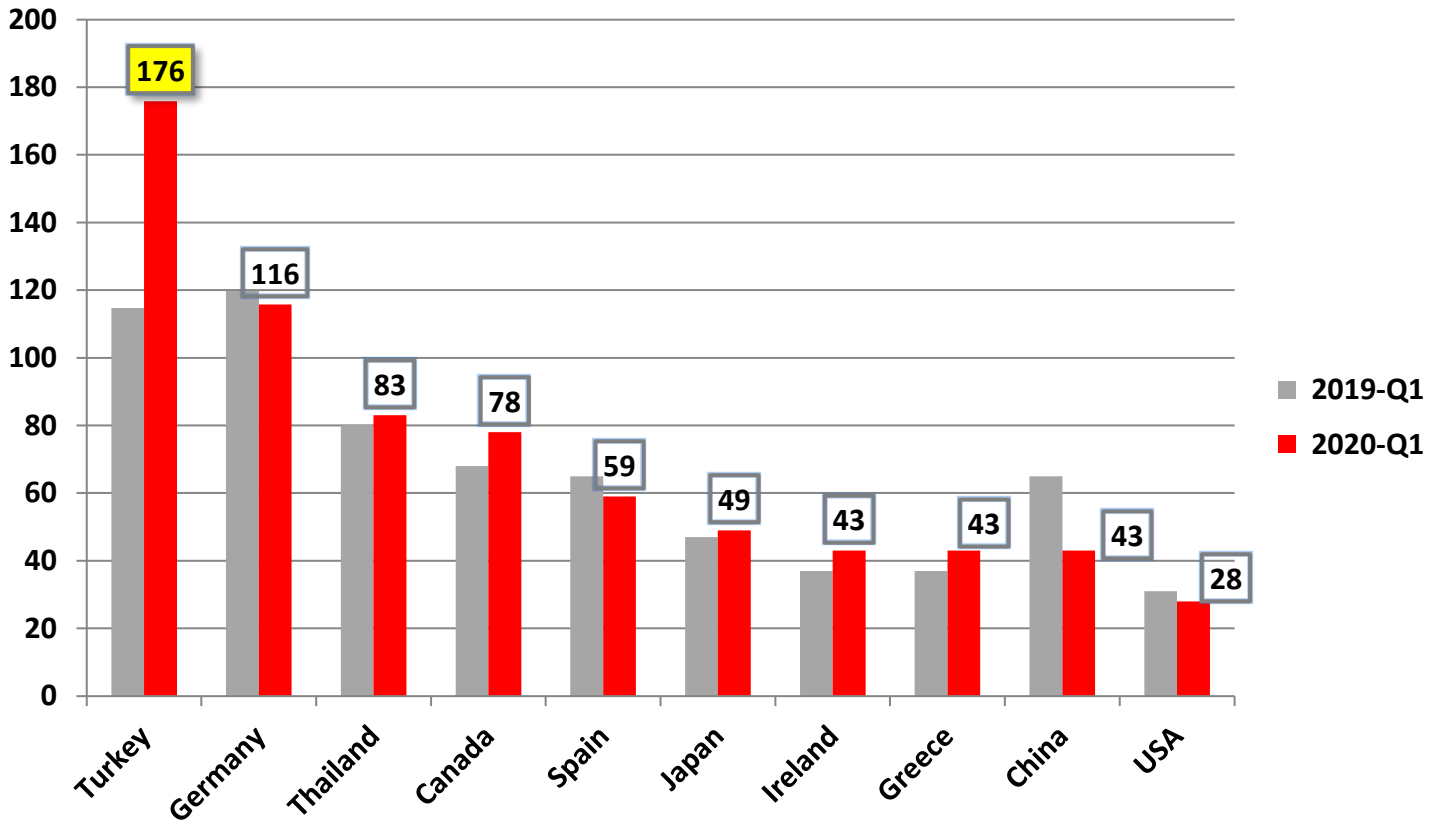
Source: Trademap

In 2019, Turkey ranked 3rd in the world, in terms of value.

Top 10 countries comprised 51% of world's total cement export, which was 3.5 billion \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT EXPORT IN Q1 (MILLION \$)

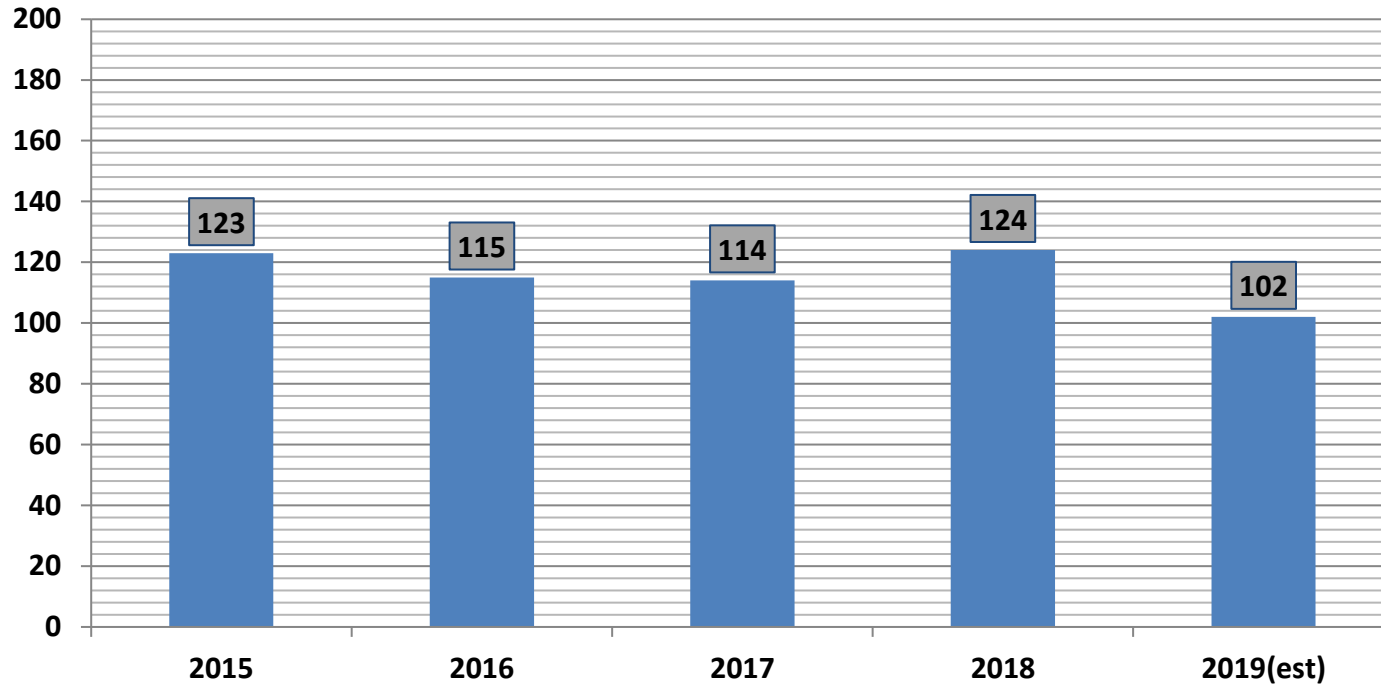


Source: Trademap

In 2020 Q1, Turkey ranks as the 1st in world cement export.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT EXPORT (MILLION TON)



In 2019, world cement export decreased by 18%

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT EXPORT BY COUNTRY (MILLION TON)

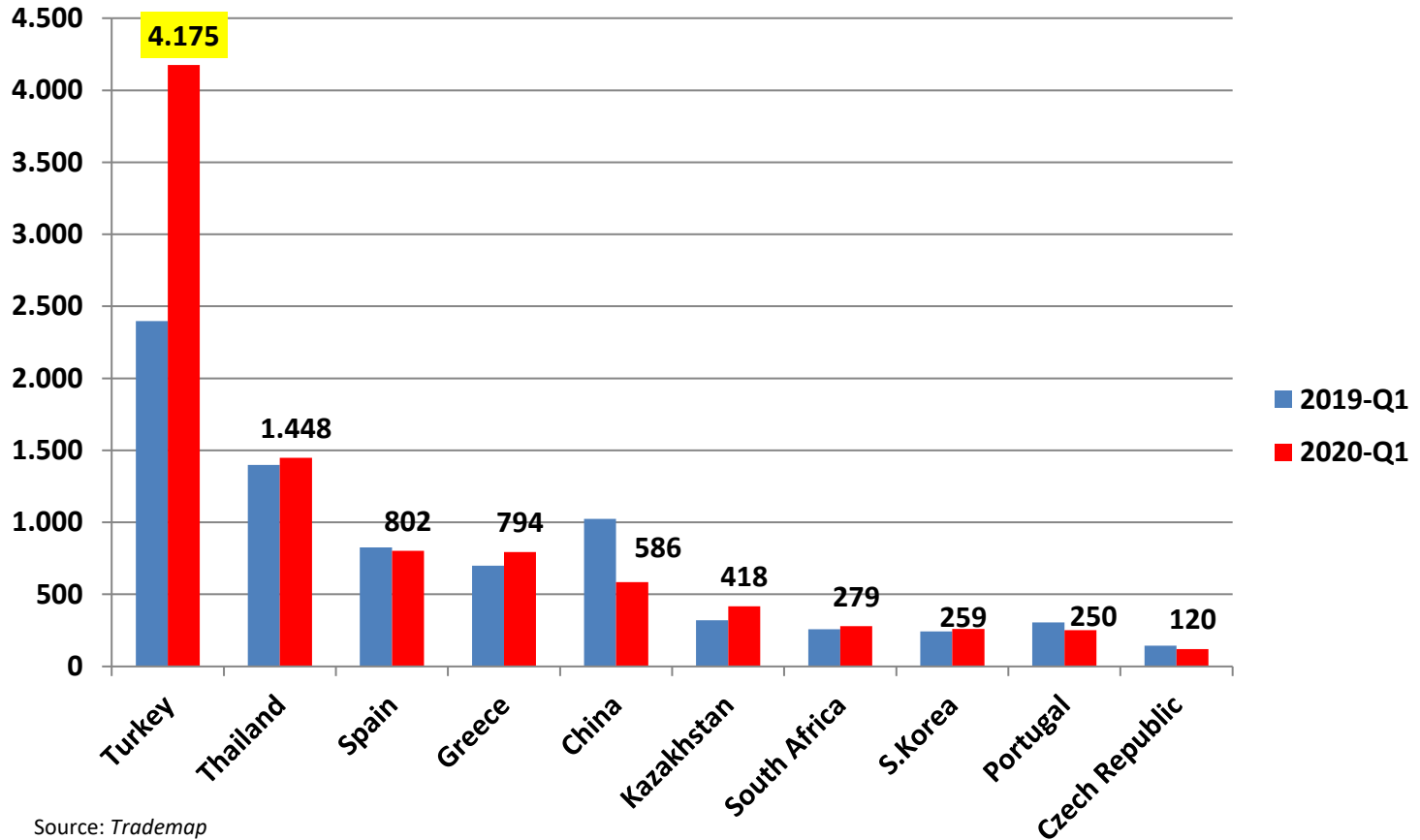
		2015	2016	2017	2018	2019(est)	18/19 Ch%	Share %
1	Turkey	7.8	7.6	7.9	7.6	11.4	50,1	11,3
2	Vietnam	No Quantity	3.7	3.4	6.4	8.9	38,9	8,7
3	Germany	6.3	6.1	6.2	6.3	6.5	2,3	6,4
4	Thailand	8.6	7.5	6.2	5.1	6.0	16,1	5,9
5	Japan	5.8	6.0	6.7	6.2	5.9	-5,9	5,8
6	China	9.1	8.2	8.8	7.5	5.0	-32,5	5,0
7	Canada	3.8	3.9	3.7	4.7	4.7	-0,1	4,6
8	Spain	4.0	4.0	3.8	3.7	3.3	-12,1	3,2
9	Greece	2.9	4.0	3.9	4.0	3.2	-21,1	3,1
10	Taiwan	3.2	3.2	2.5	2.3	2.2	-1,2	2,2
	Others	71.0	60.9	60.9	69.6	44.5	-36,0	43,8
	Total	122.6	115.2	114.2	123.6	101.6	-17,8	100,0

Source: Trademap

At the end of 2019, Turkey ranked as 1st in world cement export in terms of quantity.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT EXPORT BY COUNTRY IN Q1 (1000 TON)

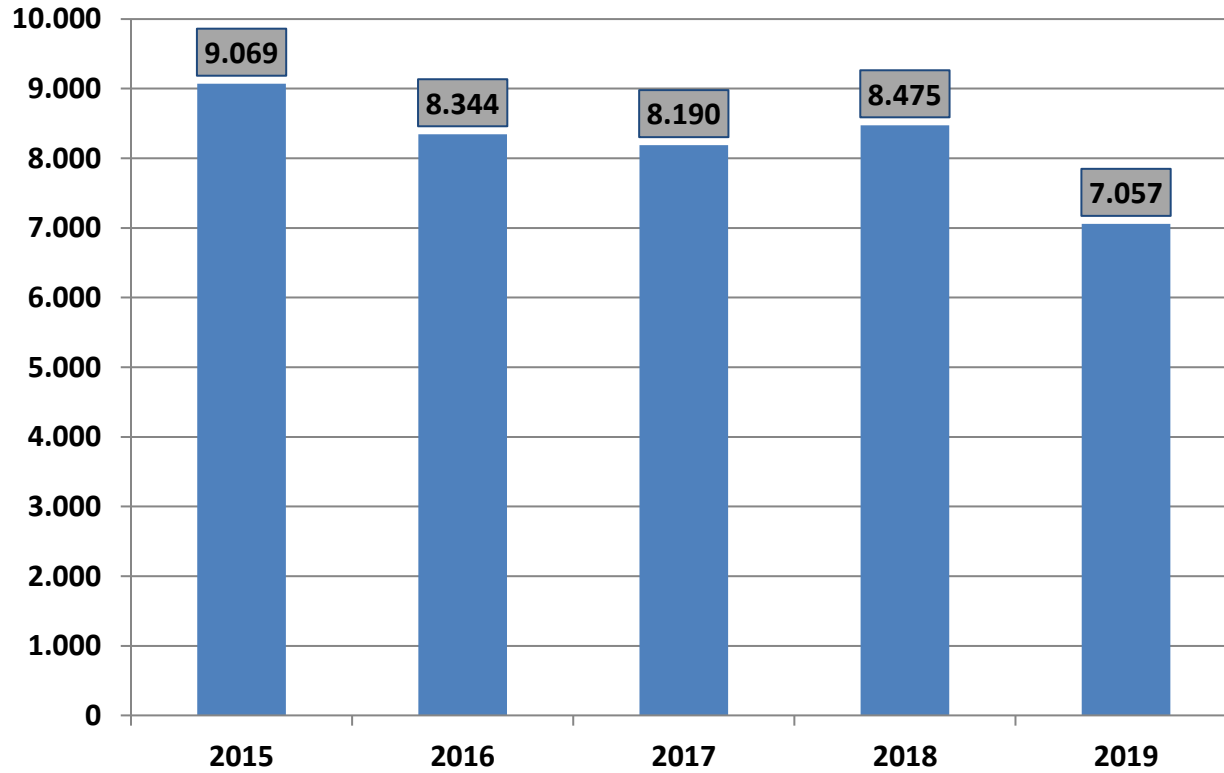


Source: Trademap

In 2020 Q1, Turkey ranks as 1st in world cement export.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT IMPORT (MILLION \$)



In 2019, world cement import decreased by 17% and valued as 7 billion \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT IMPORT BY COUNTRY (MILLION \$)

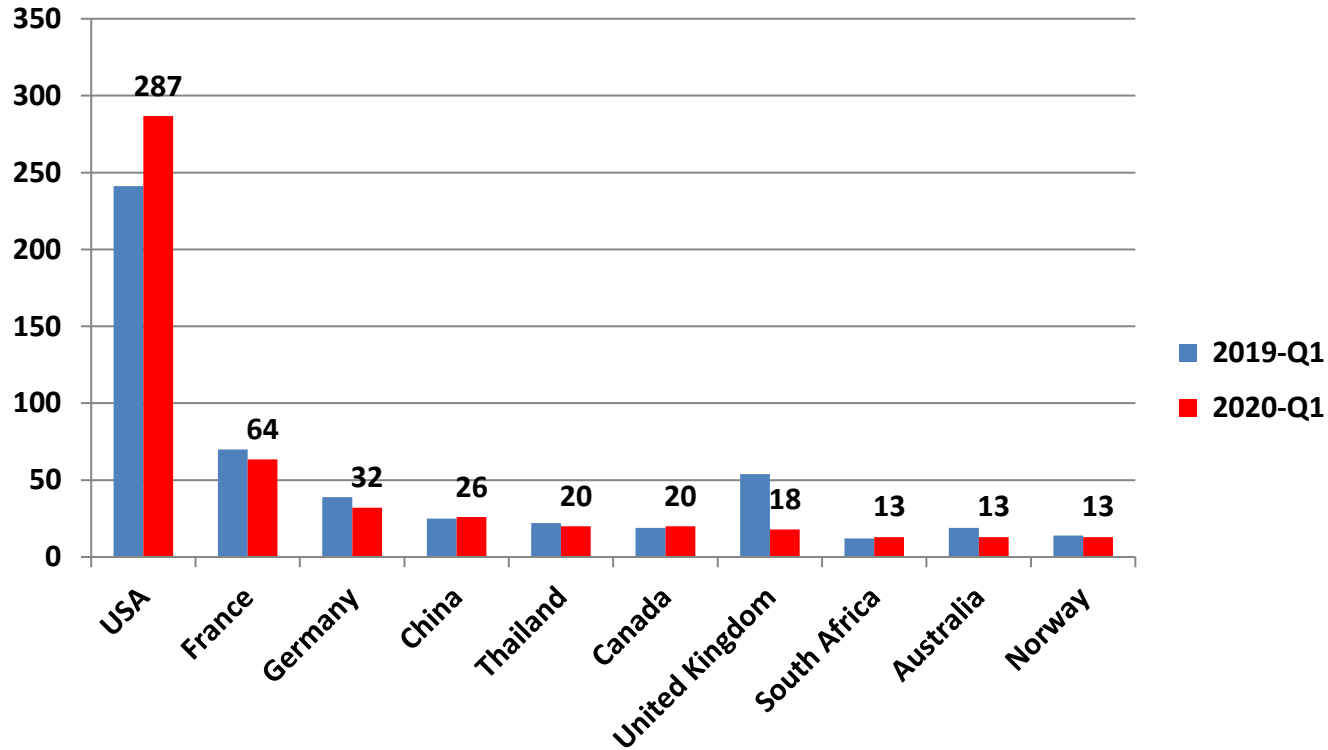
		2015	2016	2017	2018	2019	18/19 Ch%	Share %
1	USA	896	969	1.055	1.241	1.294	4,3	18,3
2	Philippines	52	225	231	314	356	13,4	5,0
3	France	281	278	307	317	319	0,7	4,5
4	Netherlands	184	239	279	305	294	-3,6	4,2
5	Singapore	343	244	189	196	216	10,5	3,1
6	Israel	78	100	162	206	204	-0,8	2,9
7	Germany	177	181	197	210	167	-20,7	2,4
8	Cambodia	109	85	89	87	163	88,3	2,3
9	China	136	118	243	291	158	-45,7	2,2
10	Italy	81	88	90	123	125	2,0	1,8
	Others	6.732	5.816	5.348	5.188	3.761	-27,5	53,3
	Total	9.069	8.344	8.190	8.475	7.057	-16,7	100,0

Source: Trademap

**In 2019; USA, Philippines and France became top 3 cement importer countries.
Top 10 countries comprised 47% of the world's total cement import, which is 3.2 billion \$**

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT IMPORT BY COUNTRY IN Q1 (MILLION \$)

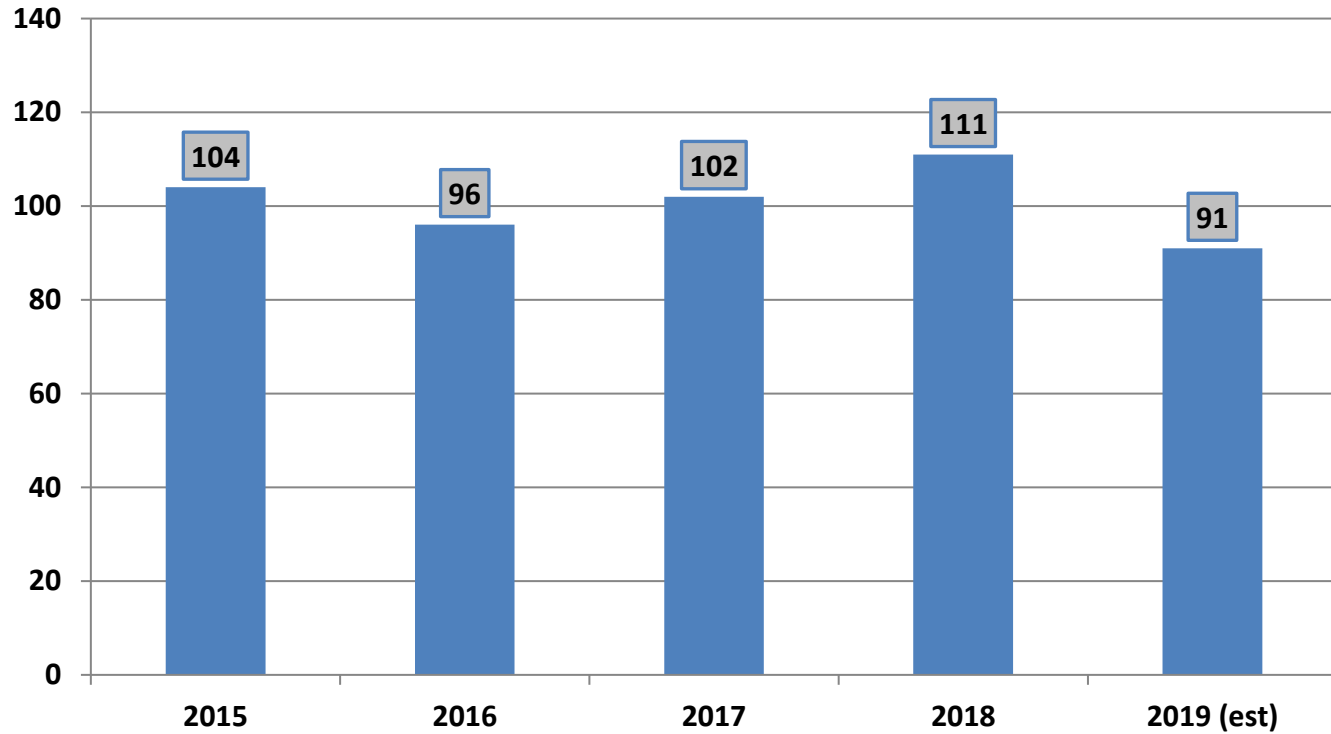


Source: Trademap

In 2020 Q1, USA's cement import increased by 18%

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT IMPORT (MILLION TON)



Source: Trademap

In 2019, world cement import decreased by 18%

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT IMPORT BY COUNTRY (MILLION TON)

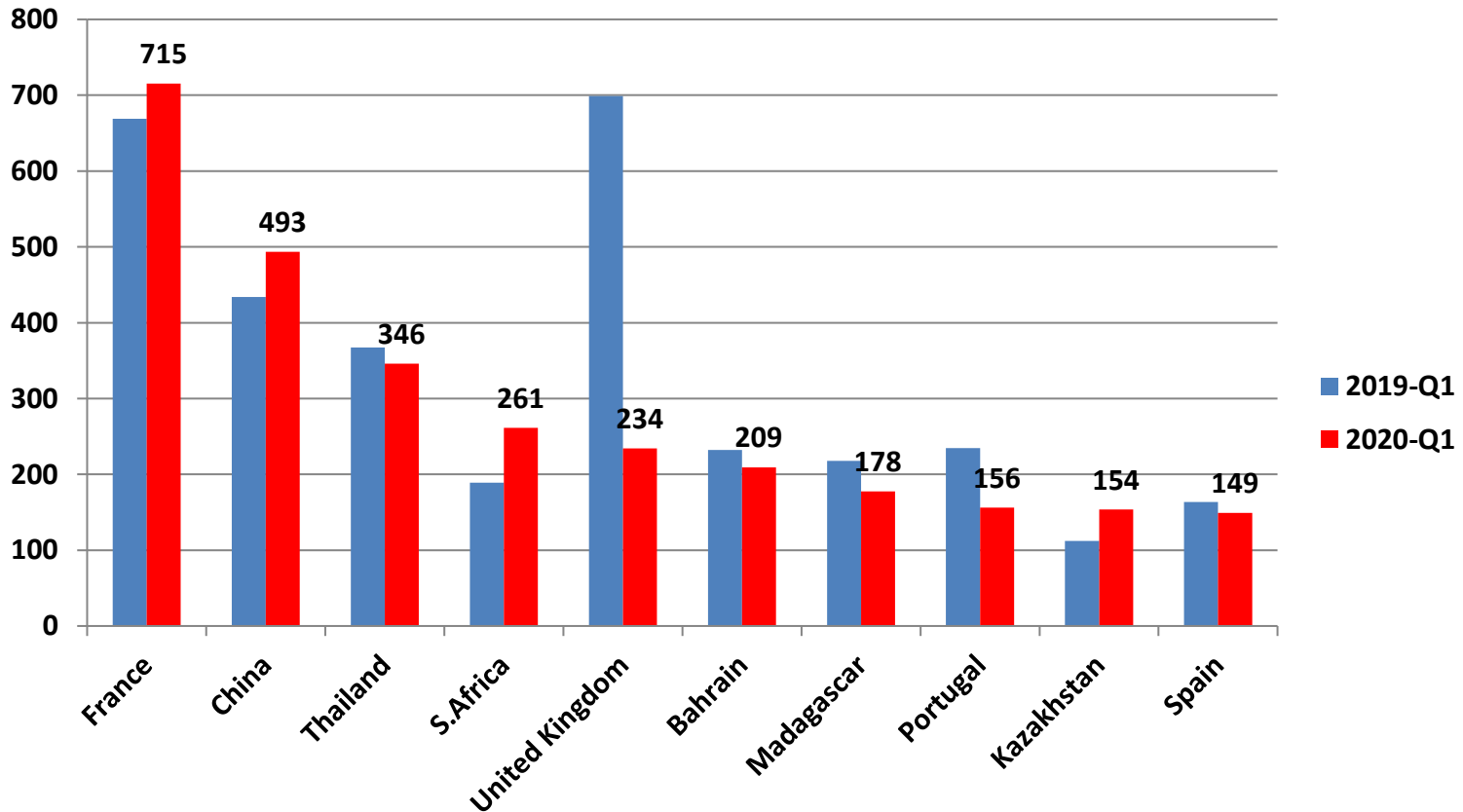
		2015	2016	2017	2018	2019 (est)	18/19 Ch%	Share %
1	USA	10.3	11.9	12.4	13.9	14.8	6,8	16,3
2	Philippines	0,6	3.5	3.5	4.8	5.7	19,8	6,3
3	Singapore	5.9	5.0	4.5	4.3	4.5	2,5	5,0
4	Cambodia	1.5	1.2	1.3	1.3	3.3	153,8	3,6
5	France	2.9	2.8	3.0	3.0	3.3	8,5	3,6
6	China	2.1	2.0	4.7	5.4	3.0	-44,6	3,3
7	Netherlands	2.0	2.6	2.6	2.5	2.6	4,4	2,9
8	Uzbekistan	0	0	0.5	3.5	2.5	-26,5	2,8
9	China	0,1	0.03	0.03	0,1	2.0	108,1	2,2
10	Sri Lanka	4.0	No Quantity	5.6	3.5	1.9	-45,9	2,1
	Others	74.5	66.9	63.4	67.4	47.0	-30,3	51,8
	Total	104.3	96.0	101.5	110.6	90.6	-18,0	100,0

Source: Trademap

**In 2019; USA, Philippines and Singapore became top 3 cement importer.
Top 10 countries comprised 48% of world's total cement import.**

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CEMENT IMPORT BY COUNTRY IN Q1 (1000 TON)



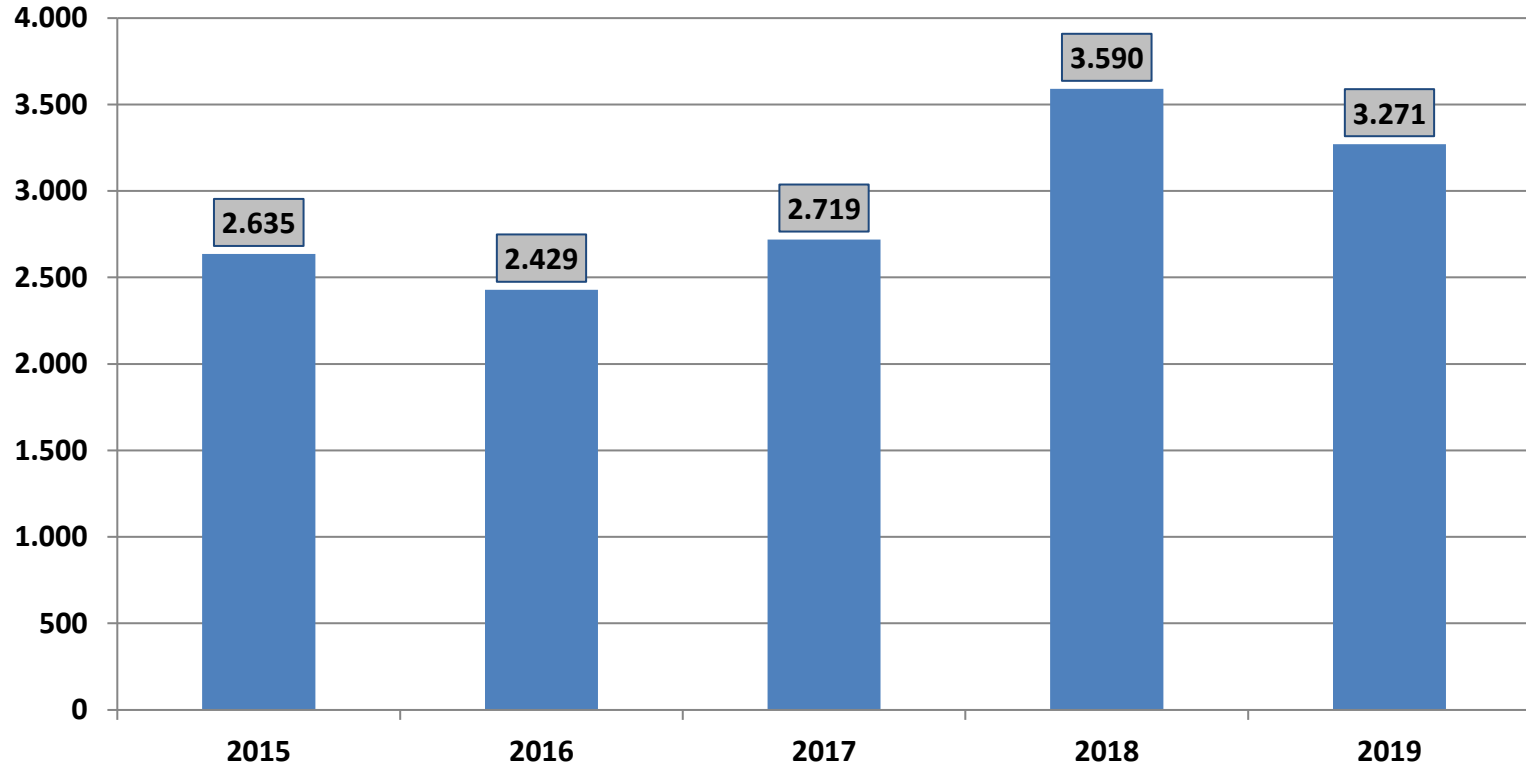
Source: Trademap

In 2020 Q1, France's cement import increased by 7% and, France ranked as 1st in world cement import.

WORLD CLINKER EXPORT AND IMPORT

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER EXPORT (MILLION \$)



In 2019, world clinker export decreased by 9%

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER EXPORT BY COUNTRY (MILLION \$)

		2015	2016	2017	2018	2019	18/19 Ch%	Share %
1	Vietnam	440	325	493	762	838	10,0	25,6
2	Turkey	122	127	153	215	363	68,8	11,1
3	Thailand	154	188	208	344	337	-2,0	10,3
4	South Korea	156	91	59	137	197	43,1	6,0
5	Saudi Arabia	0	0	2	99	176	78,2	5,4
6	Japan	160	171	151	135	151	11,9	4,6
7	Indonesia	22	44	69	163	133	-18,1	4,1
8	Spain	213	206	181	157	111	-29,2	3,4
9	UAE	127	95	157	223	106	-52,6	3,2
10	France	65	60	69	70	70	1,2	2,2
	Others	1.176	1.123	1.176	1.286	789	-38,7	24,1
	Total	2.635	2.429	2.719	3.590	3.271	-8,9	100,0

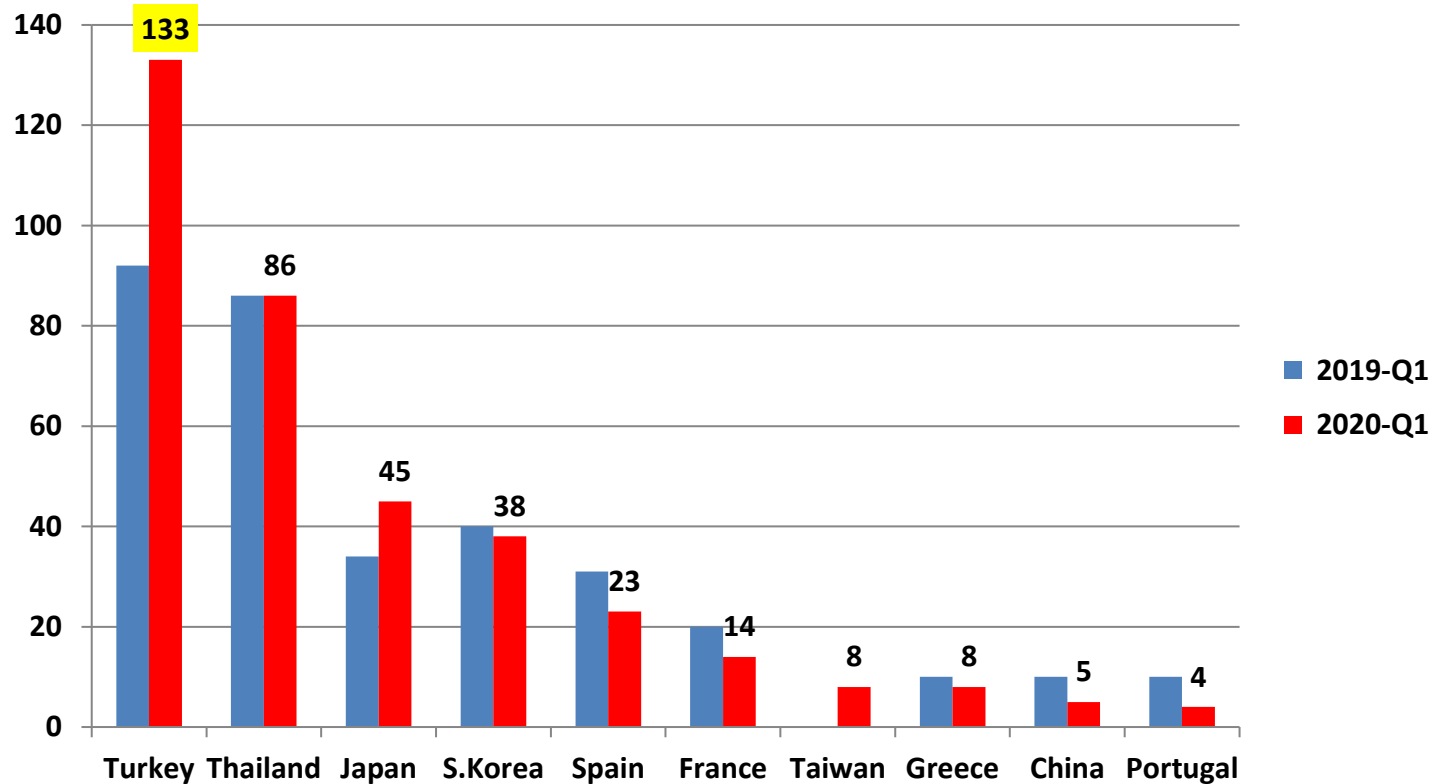
Source: Trademap

In 2019, Turkey ranked as 2nd in world clinker export.

Top 10 countries comprised 51% of world's total cement export, which was 2.5 billion \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER EXPORT BY COUNTRY IN Q1 (MILLION \$)

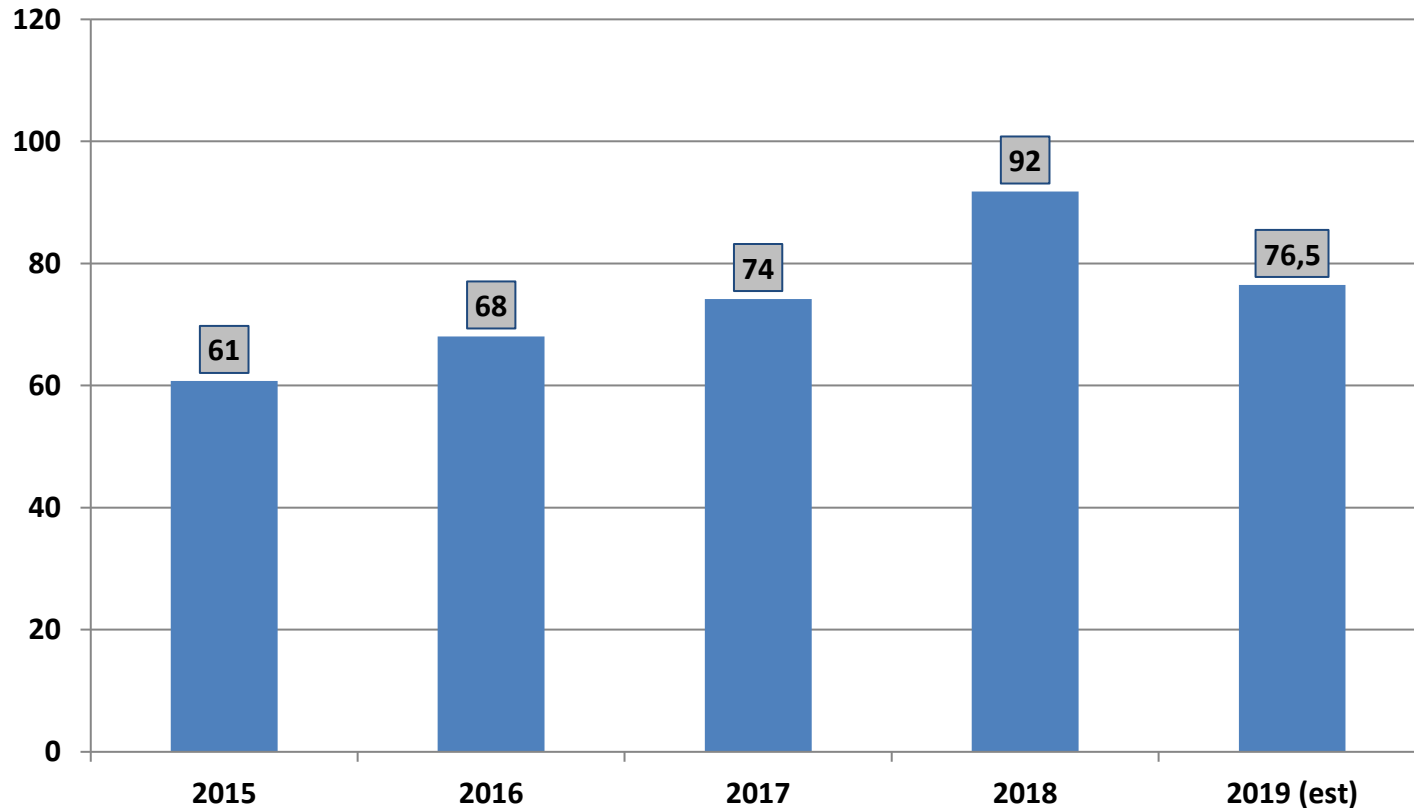


Source: Trademap

In 2020 Q1, Turkey's clinker export increased by 44% and Turkey became 1st in world clinker export.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER EXPORT (MILLION TON)



In 2019, world clinker export decreased by 17% and reached a total of 76.5 million ton

WORLD CEMENT INDUSTRY CURRENT INDICATORS

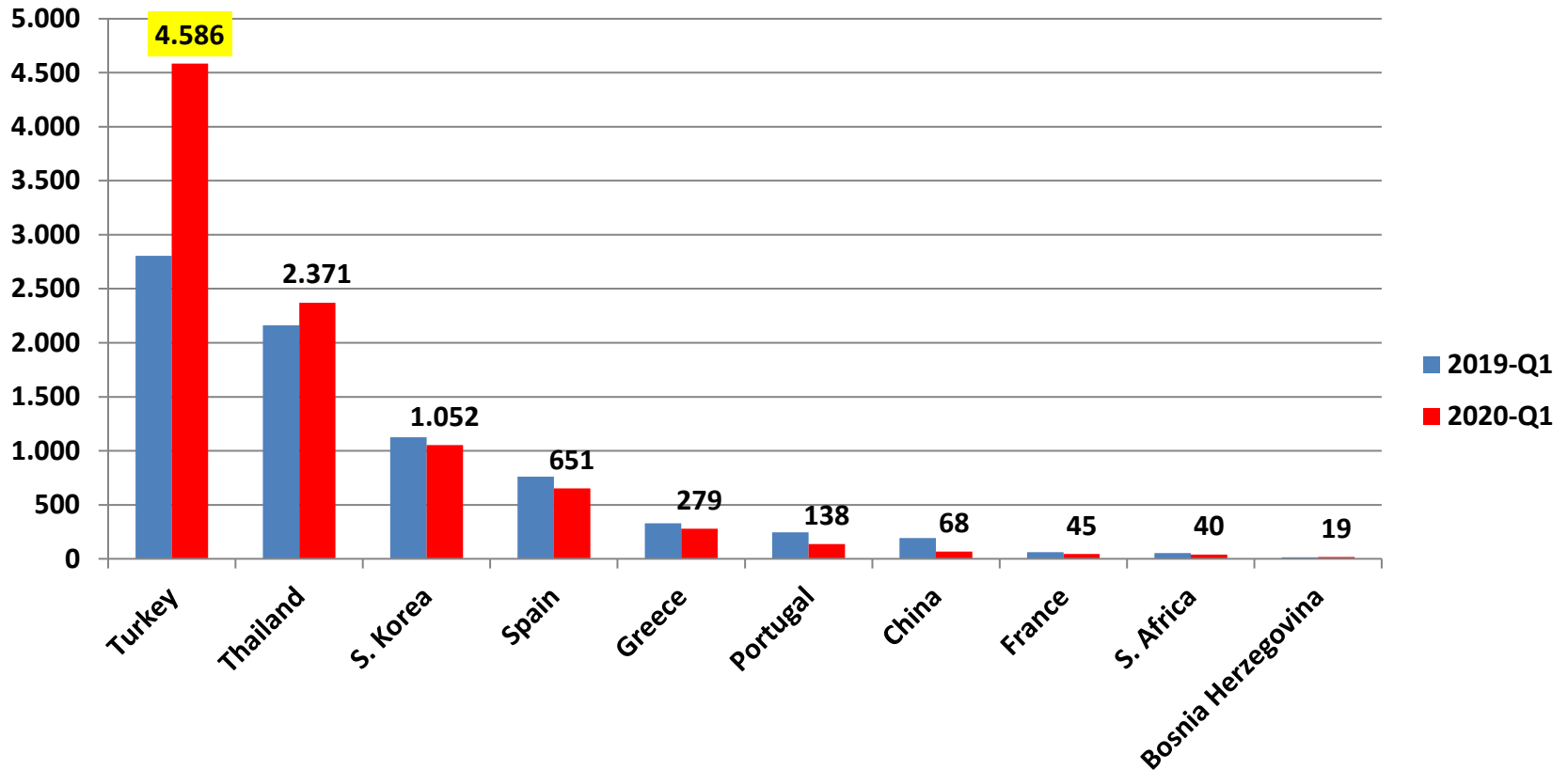
WORLD CLINKER EXPORT BY COUNTRY (MILLION TON)

		2015	2016	2017	2018	2019 (est)	18/19 Ch%	Share %
1	Vietnam	9.9	9.5	15.1	21.8	17.9	-17,7	23,4
2	Turkey	2.9	3.7	4.9	6.1	11.6	89,0	15,2
3	Thailand	4.0	6.1	6.8	9.8	8.5	-12,4	11,2
4	South Korea	4.5	3.2	2.2	4.2	5.4	28,3	7,1
5	Saudi Arabia	0	0	0.04	2.6	5.0	93,3	6,6
6	Japan	4.4	5.5	5.2	4.4	4.5	0,9	5,8
7	Indonesia	0.5	1.4	2.1	4.7	3.0	-35,6	4,0
8	Spain	4.9	5.4	5.0	4.1	2.7	-34,3	3,5
9	UAE	3.0	2.5	2.5	3.7	2.2	-40,8	2,9
10	Malaysia	0.2	0.2	0.8	1.2	1.6	36,5	2,2
	Others	26.2	30.3	29.1	28.9	13.7	-52,5	18,0
	Total	60.7	68.0	74.1	91.770	76.4	-16,7	100,0

In 2019, world clinker export decreased by 17% and reached a total of 76.4 million ton

WORLD CEMENT INDUSTRY CURRENT INDICATORS

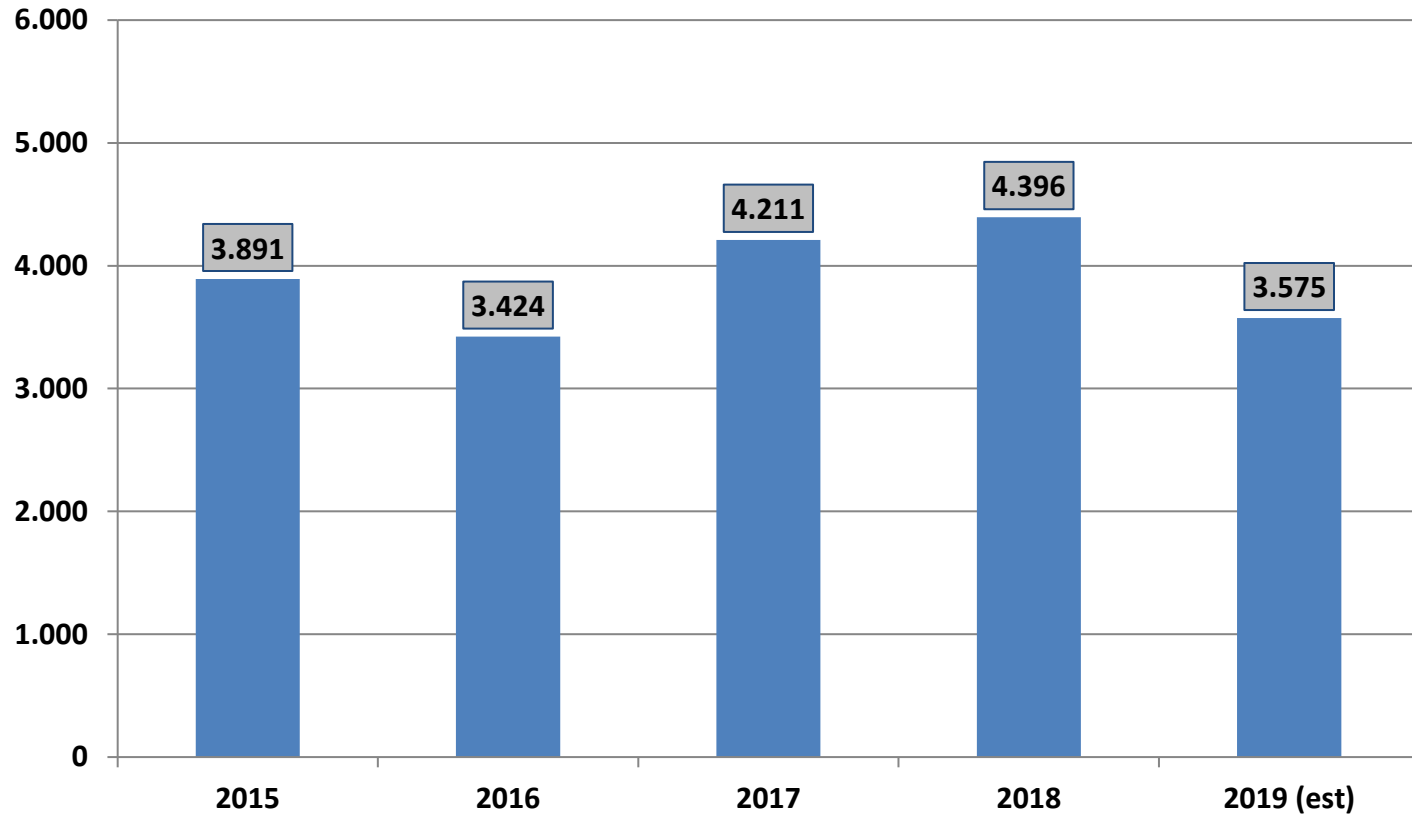
WORLD CLINKER EXPORT BY COUNTRY IN Q1 (1000 TON)



In 2020 Q1, Turkey's clinker export increased by 65% and it became 1st in world clinker export.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER IMPORT (MILLION \$)



In 2019, world clinker import decreased by 19% and valued as 3.5 billion \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER IMPORT BY COUNTRY (MILLION \$)

		2015	2016	2017	2018	2019 (est)	18/19 Ch%	Share %
1	China	0	1	35	588	1.041	77,1	29,1
2	Bangladesh	752	430	465	600	261	-56,6	7,3
3	Philippines	121	111	165	227	188	-17,0	5,3
4	Australia	130	121	114	138	144	4,2	4,0
5	USA	44	70	104	120	123	2,9	3,4
6	France	72	65	81	96	102	6,5	2,8
7	Chile	73	60	65	101	99	-1,9	2,8
8	Ghana	No Quantity	238	748	219	93	-57,5	2,6
9	Taiwan	51	44	51	67	92	37,2	2,6
10	Mozambique	47	56	60	57	83	47,4	2,3
	Others	2.600	2.228	2.323	2.184	1.348	-38,3	37,7
	Total	3.891	3.424	4.211	4.396	3.575	-18,7	100,0

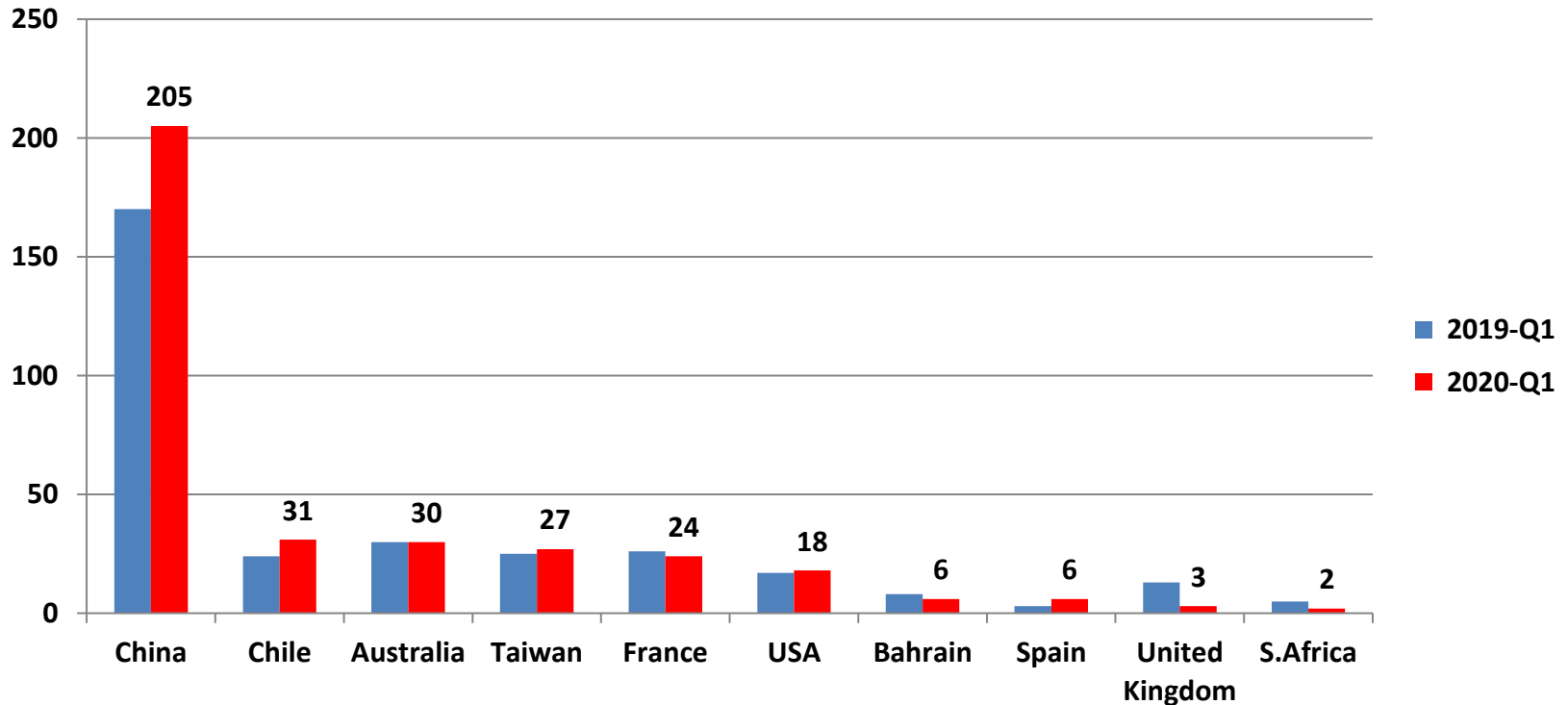
Source: Trademap

In 2019; China's market share reached 29%.

Top 10 countries comprised 62% of world's total clinker import, which was 2.2 billion \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER IMPORT BY COUNTRY IN Q1 (1000 \$)

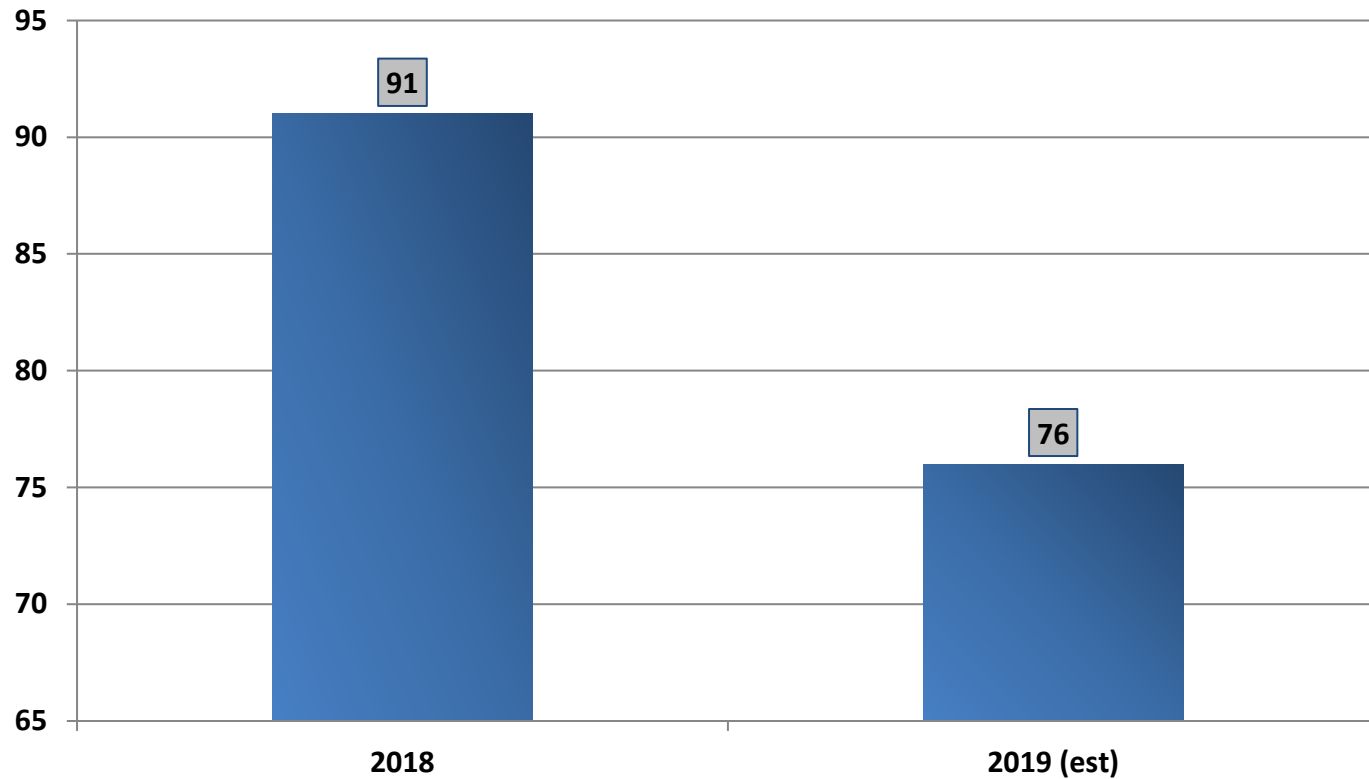


Source: Trademap

In 2020 Q1, China's clinker import increased by 21% and now China is the 1st in world clinker import.

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER IMPORT (MILLION TON)



In 2019, world clinker import decreased by 16% and valued as 76 million \$

WORLD CEMENT INDUSTRY CURRENT INDICATORS

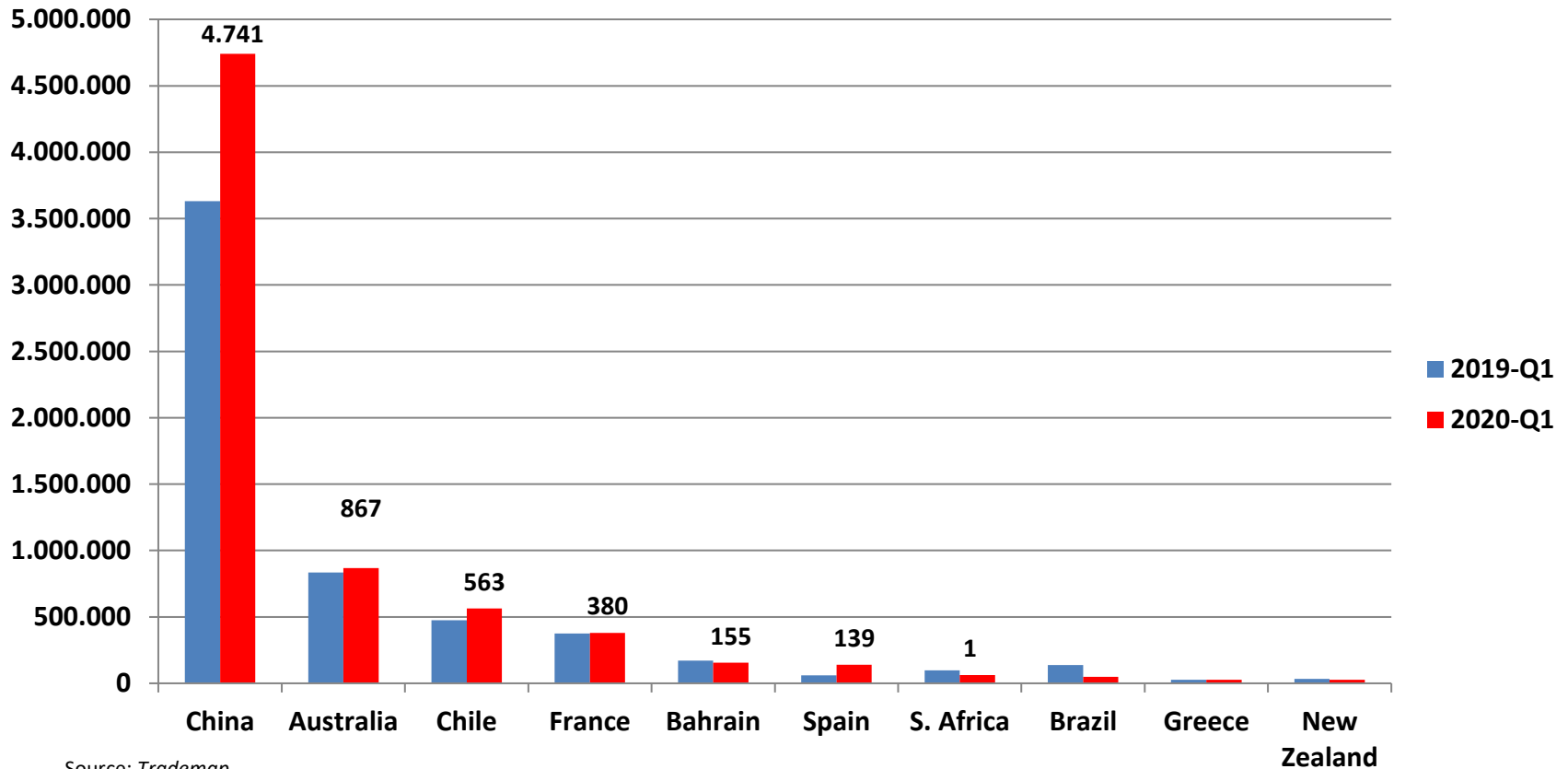
WORLD CLINKER IMPORT BY COUNTRY (1000 TON)

		2018	2019 (est)	18/19 Ch%	Share %
1	China	12.669	22.743	79,5	30,0
2	Bangladesh	17.086	6.975	-59,2	9,2
3	Philippines	4.976	3.961	-20,4	5,2
4	Australia	4.176	3.940	-5,7	5,2
5	Ghana	3.688	3.029	-17,9	4,0
6	Côte d'Ivoire	3.141	2.604	-17,1	3,4
7	Cameroon	1.902	1.969	3,5	2,6
8	Taiwan	1.577	1.914	21,4	2,5
9	Chile	2.143	1.850	-13,7	2,4
10	France	1.406	1.481	5,3	2,0
	Others	2.184	1.348	-38,3	1,8
	Total	90.492	75.831	-16,2	100,0

In 2019, top 10 countries comprised 66% of world's total clinker import, which is 50.5 million ton

WORLD CEMENT INDUSTRY CURRENT INDICATORS

WORLD CLINKER IMPORT BY COUNTRY IN Q1 (1000 TON)



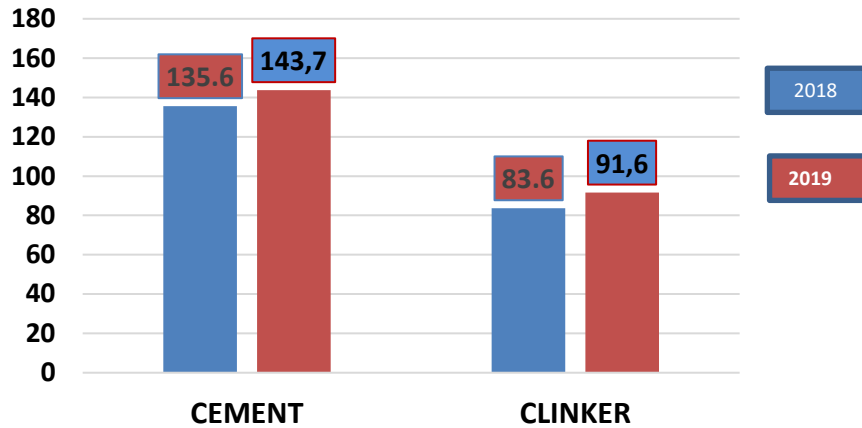
Source: Trademap

In 2020 Q1, China's clinker import increased by 31% and China became 1st in world clinker import.

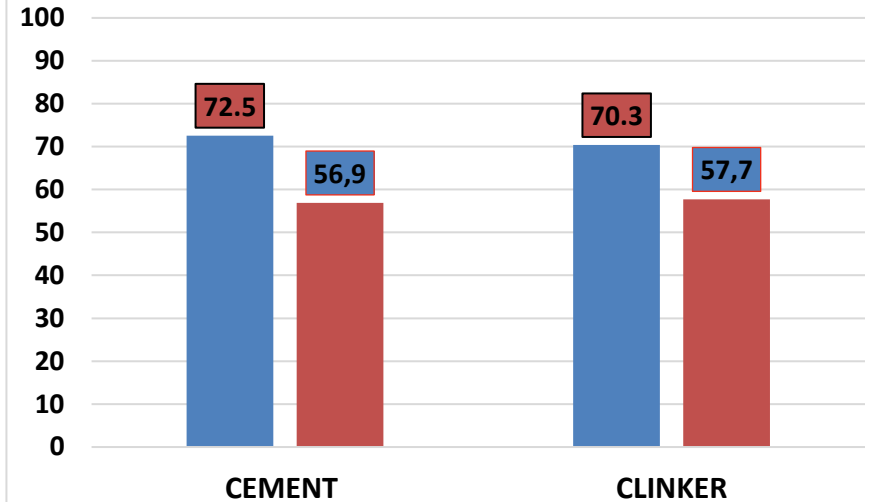
TURKISH CEMENT INDUSTRY CURRENT INDICATORS AND QUALIFICATIONS

TURKISH CEMENT INDUSTRY CURRENT INDICATORS AND QUALIFICATIONS

PRODUCTION CAPACITY



PRODUCTION (Mt)



EMPLOYEES 19,5 THOUSANDS



55 INTEGRATED – 22 GRINDING PLANTS



As of 2020

**In Europe
in total cement
production**



**In Europe
in total cement
export**

**In world total
cement and clinker export**

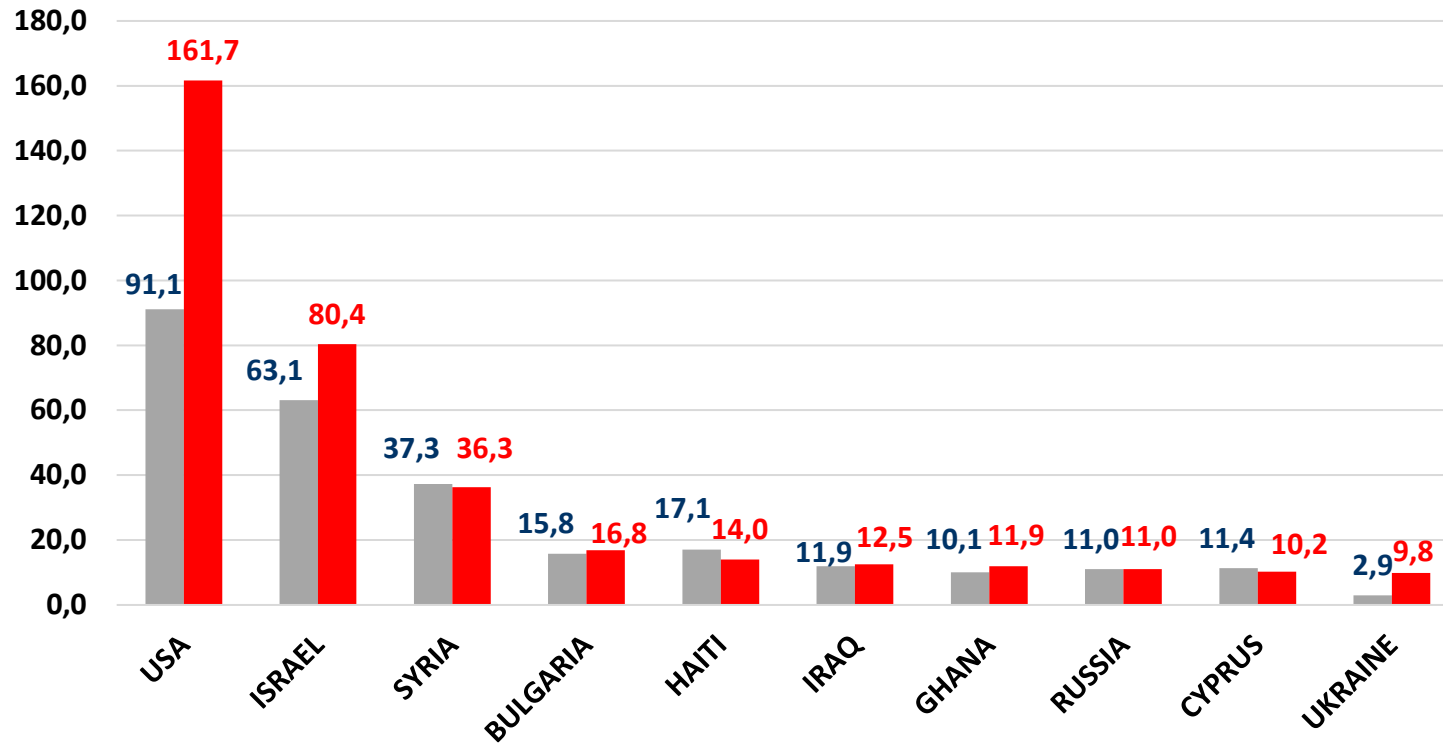
TURKISH CEMENT INDUSTRY CURRENT INDICATORS AND QUALIFICATIONS

CEMENT EXPORT OF TURKEY BY COUNTRY

(MILLION \$)

■ 2018 VALUE

■ 2019 VALUE



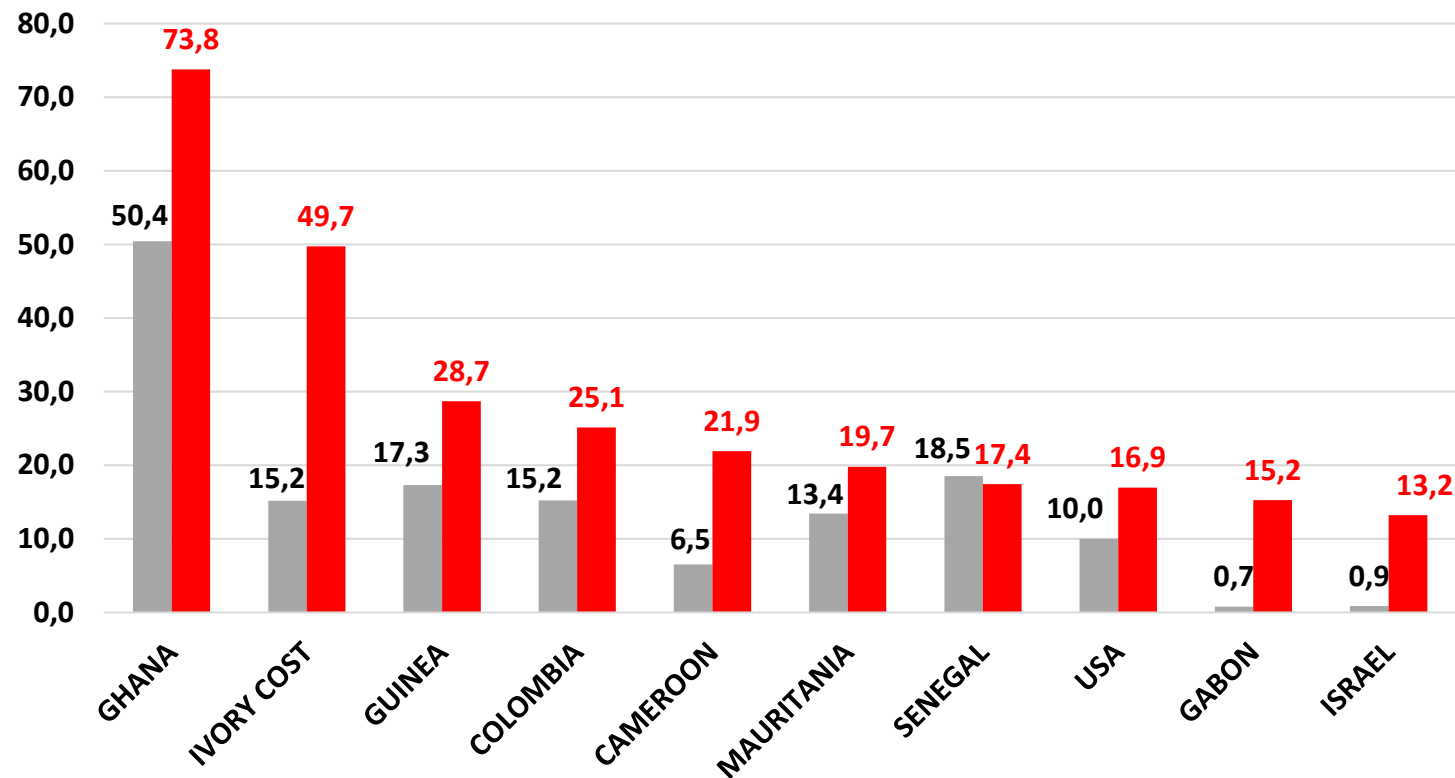
TURKISH CEMENT INDUSTRY CURRENT INDICATORS AND QUALIFICATIONS

CLINKER EXPORT OF TURKEY BY COUNTRY

(MILLION \$)

■ 2018 VALUE

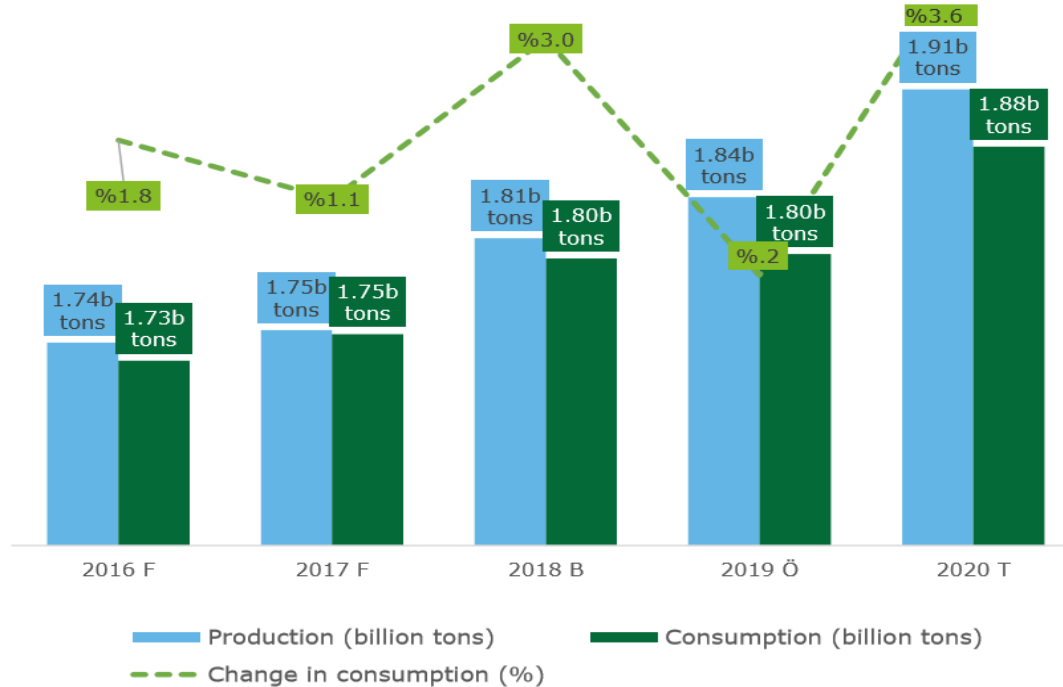
■ 2019 VALUE



WORLD CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE

WORLD CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE

Growth of global cement supply and demand (excluding China)



Note: F= Actual, B= Expected, Ö= Predicted, T= Estimated

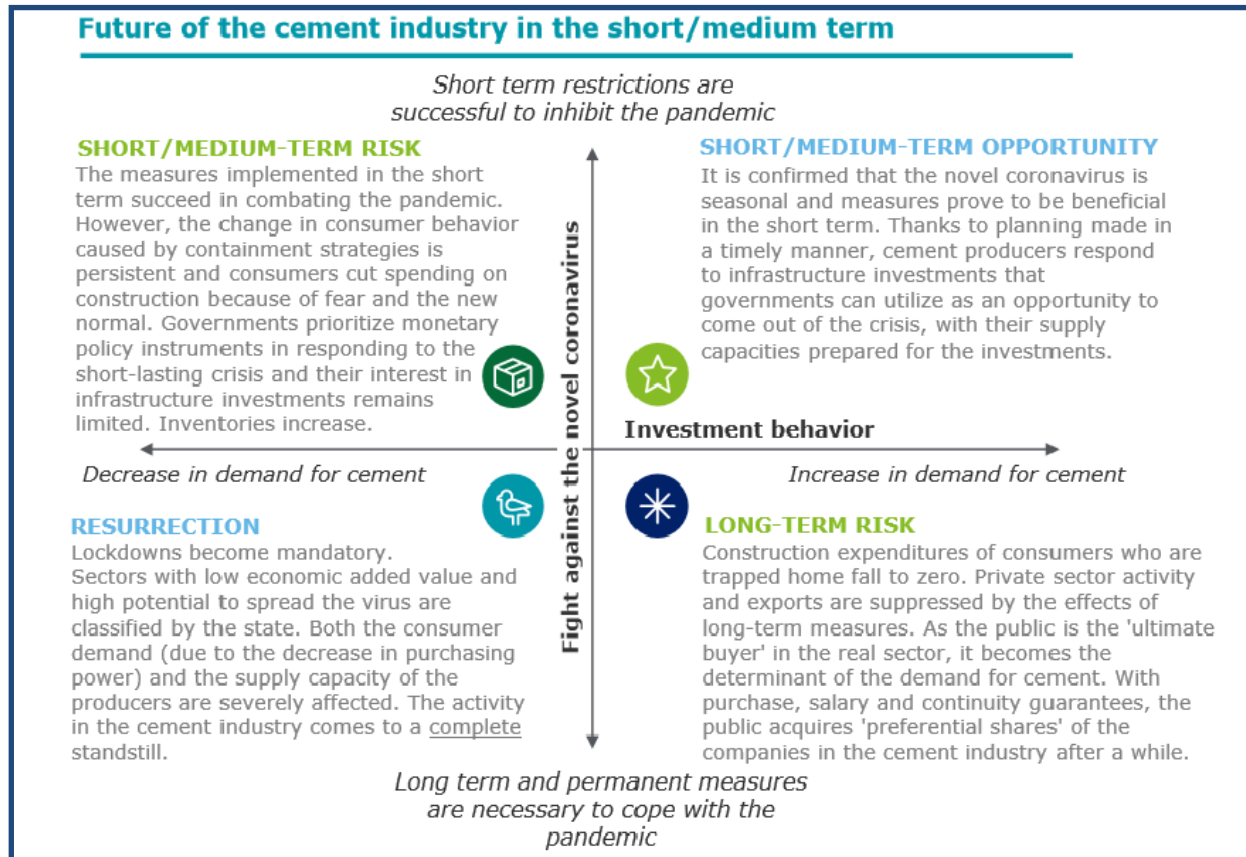
Source: Deloitte, Novel Coronavirus: Impacts on the Turkish Cement Industry Opportunities, Threats and Recommended Actions ,2020

It is predicted that the industry's consumption will not grow in 2020 and the global cement consumption will remain at 4 billion tons with a limited contraction of 0.1 percent annually. It is estimated that global cement demand, excluding China, will reach 1.9 billion tons with an annual increase of 3.6 percent.

WORLD CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE

1	<p>As of 2019, cement is produced in 9 out of every 10 countries. In parallel with consumption, global cement production has reached 4 billion tons in 2019 with a 3.2 percent growth in 2018, following an annual contraction of approximately 2 percent in 2018.</p>
2	<p>While the global cement production capacity has increased by approx. 60% in the last 10 years, the increase in the global demand for cement demand has been limited to 20%. Global average cement capacity utilization rates, which approached 80 percent 10 years ago, are below 60 percent today.</p>
3	<p>Capacity disposals, mergers and acquisitions aimed at improving return on investments and overall financial indicators have become global industry trends in the cement industry.</p>
4	<p>During the period between 2017-2019, global cement and clinker exports increased by an average of 6.8% annually, reaching approximately 211 million tons. The top 20 exporting countries alone account for 87% of total global cement and clinker exports.</p>

WORLD CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE



Source: Deloitte, Novel Coronavirus: Impacts on the Turkish Cement Industry Opportunities, Threats and Recommended Actions ,2020

The definitive business outcome of COVID 19 can not be known. However, we can come up with short but detailed narratives describing plausible outcomes and impacts. Long term and permanent measures are necessary to cope with the pandemic.

TURKISH CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE

OPPORTUNITIES FOR TURKISH CEMENT IN GLOBAL CEMENT INDUSTRY

DATAS OF TURKISH CEMENT INDUSTRY

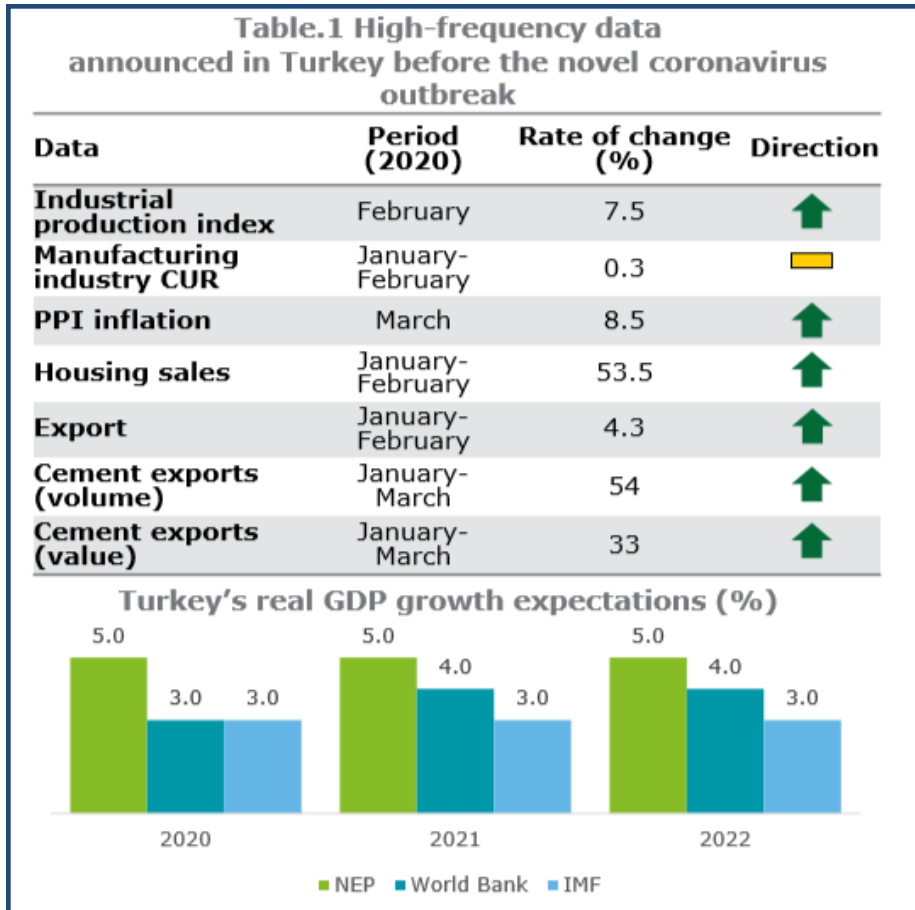
1	132 MILLION TONNES; RAW MATERIAL CONSUMPTION
2	8 MILLION TONNES; USING ALTERNATIVE WASTE
3	7 MILLION TPE; ENERGY CONSUMPTION
4	120 MW; WASTE HEATING RECYCLE CAPACITY
5	32%; SHARE OF ADDITIVE (PORTLAND AND OTHERS) CEMENT IN SALES

OPPORTUNITIES FOR TURKISH CEMENT IN GLOBAL CEMENT INDUSTRY

1	ALL CEMENT PLANTS MEET ASTM STANDARD FOR US MARKET AND EN STANDARD FOR EU MARKET
2	SOME CEMENT PLANTS ARE ABLE TO PRODUCE LOW ALCALI CEMENT
3	THE FASTEST LOADING AND HIGH QUALITY SERVICES
4	COMPETITIVE BAGGED CEMENT CAPACITY
5	AMONG THE LARGEST WHITE CEMENT PROCUDERS
6	FLEXIBLE PRODUCTION AND DELIVERY CAPACITY

TURKISH CEMENT INDUSTRY OUTLOOK FOR THE NEAR FUTURE

WHAT IF THERE WERE NO NOVEL CORONAVIRUS OUTBREAK?



- Expected annual global economic growth rate of 3.6%,
- Expected positive economic growth in Turkey consistent with the forecast in the NEP,
- Positive growth expectations in the construction industry after two years,
- Expected increase in the domestic demand for cement in 2020 based on the PEP forecasts.

Source: Deloitte, Novel Coronavirus: Impacts on the Turkish Cement Industry Opportunities, Threats and Recommended Actions ,2020

OPPORTUNITIES FOR TURKISH CEMENT IN GLOBAL CEMENT INDUSTRY

THINGS TO CONSIDER IN RELATION TO THE FOREIGN SALES

1	MODERN COST SHARING PLATFORMS
2	STRATEGIC TARGET MARKET MODEL
3	LOCAL PLAYER AT THE GLOBAL SCALE (INCREASING DEMAND IN WEST AFRICA, SYRIA AND NORTH AMERICA)
4	COMPETITION POLICY
5	IMPROVING HUMAN CAPITAL

THANK YOU

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Turkish Cement Exporters Vice Chairman of the Board

Batiçim Executive Member of the Board