

An update on the US
cement import situation

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INTERCEM Americas 28 October 2020

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INTRODUCTION

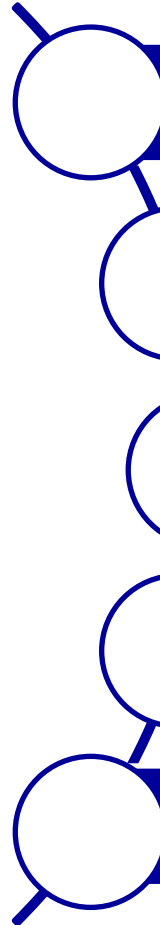


How much has the COVID-19 pandemic actually affected US cement imports? And while we are looking at the monthly figures in detail what other things can we learn from it. And is it too early or can we have a look at post COVID?

An update on the US import situation

Google Earth

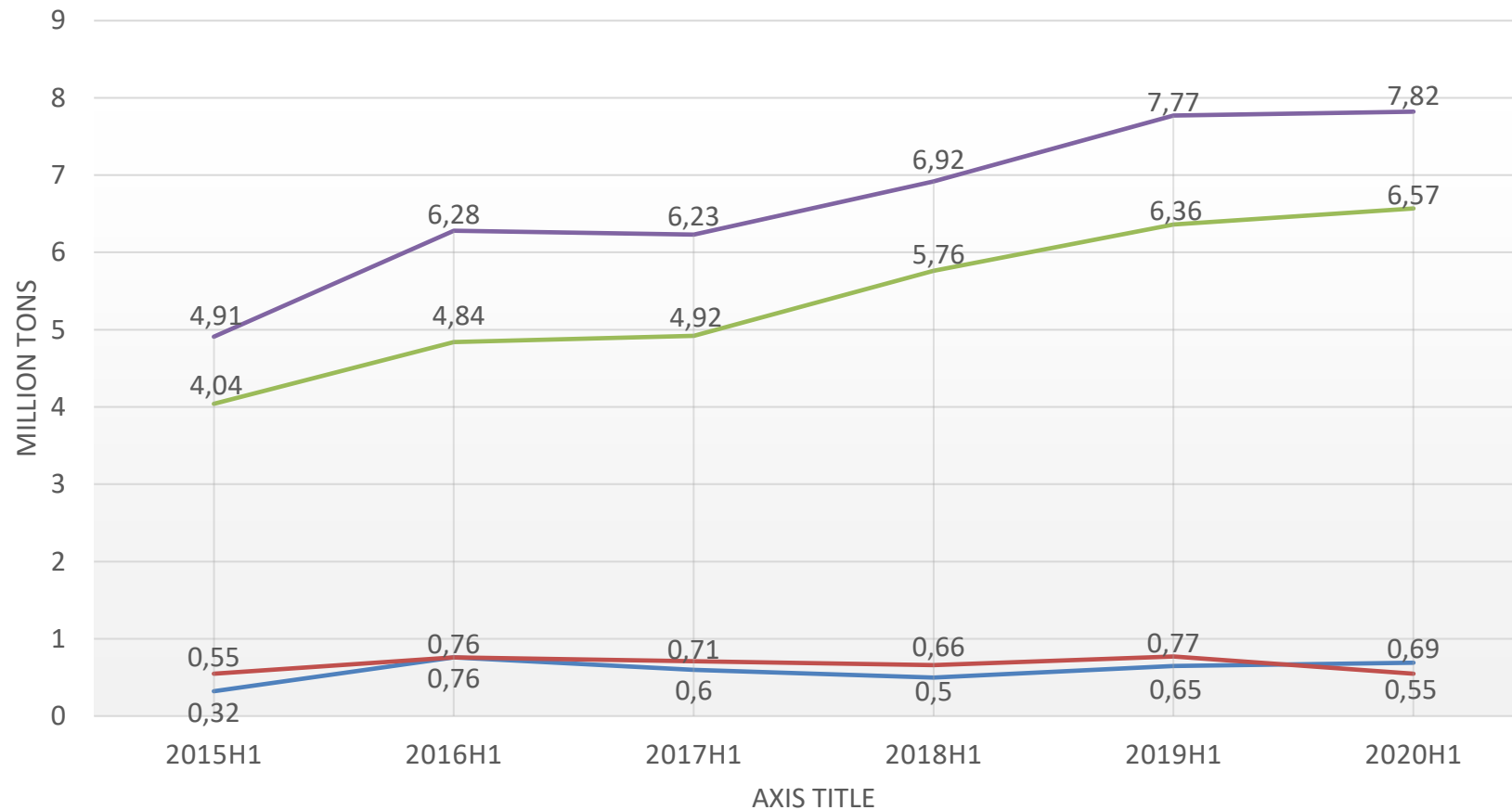
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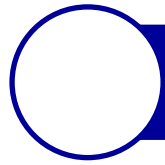


Has COVID-19 affected US cement imports?

US cement and clinker imports First 6 months of the year



— Clinker imports — White cement imports — Grey cement imports — Total imports



Has COVID-19 Affected US imports ?

In the first 6 months of 2020 US cement consumption and with it imports of cement and clinker are very much at the same level as 2019. Perhaps the only negative side is that the strong growth of 2018 and 2019 has disappeared but taking into account the global negative effects of COVID 19 on the economy and construction these results are still very good.

Due to seasonal effects the first 6 months of the year normally have about a 47% share of the full year cement consumption and imports

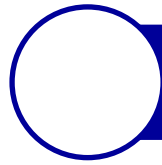
Imports of grey cement increased with about 200.000 tons compared to 2019H1

Imports of white cement dropped with about 220.000 tons (29%) compared to 2019H1. Perhaps this is due to the start of the Cimsa new grinding plant for white cement in Houston. Clinker imports in Houston are relatively higher and US customs does not make a difference between clinker for white or grey cement.

Clinker imports into the US are a bit different in nature. Part of it is clinker imports from Canada to grinding plants of the same company as the exporter into the Detroit area. Part of it is specialty clinker for aluminat cements. Part of it is imported by US manufacturers to use the extra grinding capacity at their integrated plants. And now some clinker is imported to produce white cement.



2019 Statistics



2019 General overview

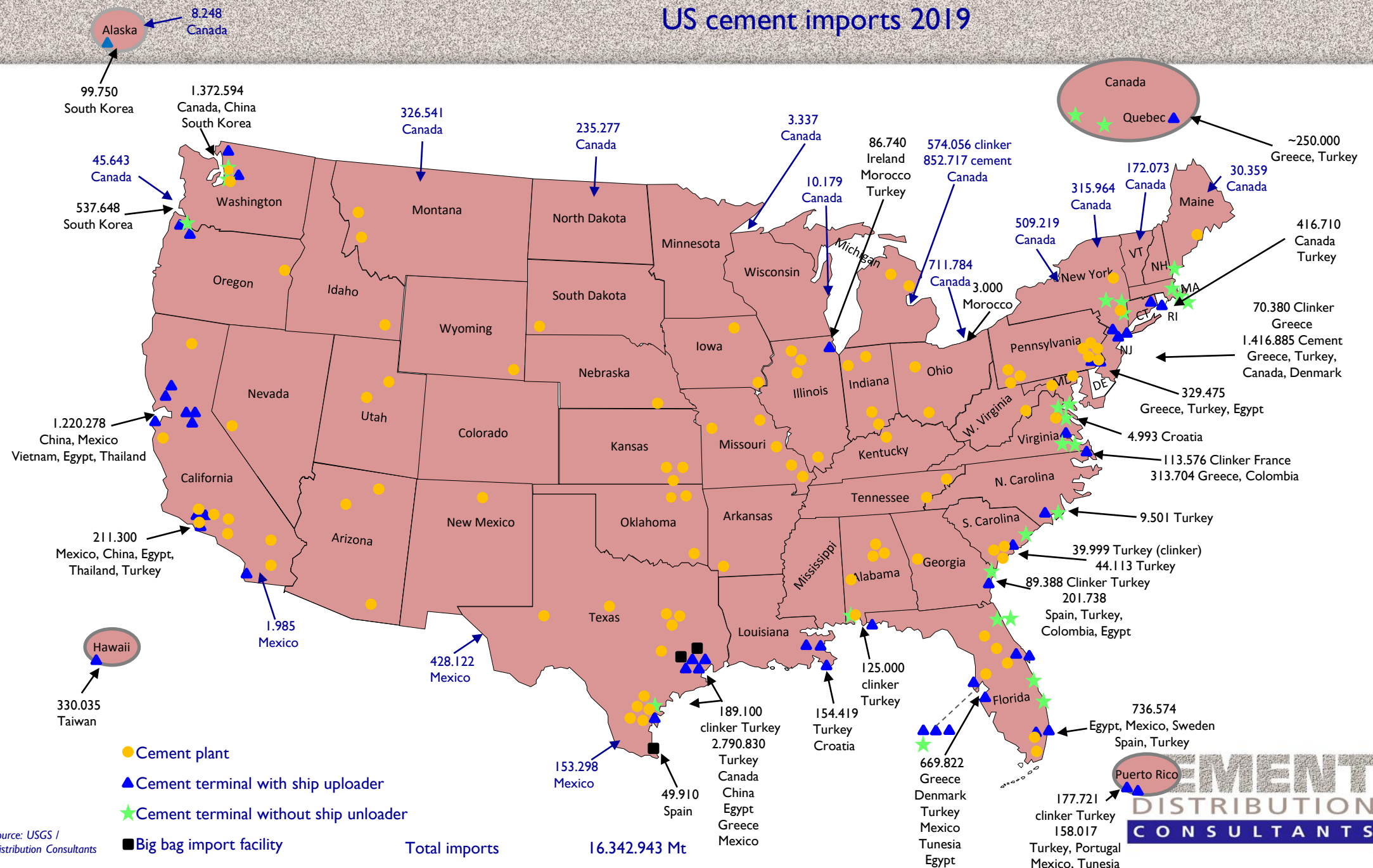
In 2019 US overall cement and clinker imports grew to 16.343 million tons from 14.981 million tons in 2018. The seaborne part of these imports in 2019 was 12.010 million tons. Compared to the seaborne imports in 2010 of 2.850 million tons this represents significant growth, compared to the 2006 peak seaborne import volume of 28.200 million ton it is still far below.

There are significant changes in the sources of US cement and clinker imports. China is significantly reducing its cement exports. It has stopped shipping to the Gulf area and is slowing down the volumes to the Westcoast. Vietnam has made a start with exports to the US but most of the replacement volume comes from Mexico and Canada. The overall supply from Asia in 2019 was 2,37 million tons. The large growth of imports on the US Gulf and East coast has been met from the Europe / Mediterranean region and to a lesser degree by Canada and Mexico. Imports from the Europe / Mediterranean region totalled 7,20 million tons in 2019 of which a stunning 3,94 million tons originated from Turkey. Cement exports from the European Union are slowing down but some initial shipments from North Africa were made.

Nearly 90.000 tons of cement was imported from Europe via the Great Lakes.

A significant volume of clinker (806.000 tons) was imported from Europe to boost grinding capacity of several US cement plants.

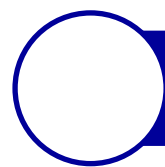
US cement imports 2019



2019 US import statistics

Imports from Mexico by rail	583.405	Tons
Imports from Mexico by sea	752.745	Tons
Total imports from Mexico	1.336.150	Tons
Imports from Canada by rail	1.088.462	Tons
Imports from Canada via Great Lakes	2.661.292	Tons
Imports from Canada by sea	1.580.972	Tons
Total imports from Canada	5.330.726	Tons
Seaborne imports from Europe / Mediterranean	7.202.469	Tons
Seaborne imports from Asia	2.370.389	Tons
Seaborn imports from South America	103.209	Tons
Total cement and clinker imports	16.342.943	Tons
Total seaborne cement and clinker imports	12.009.784	Tons

Source: USGS / Cement Distribution Consultants All volumes in metric tons



2019 US import statistics

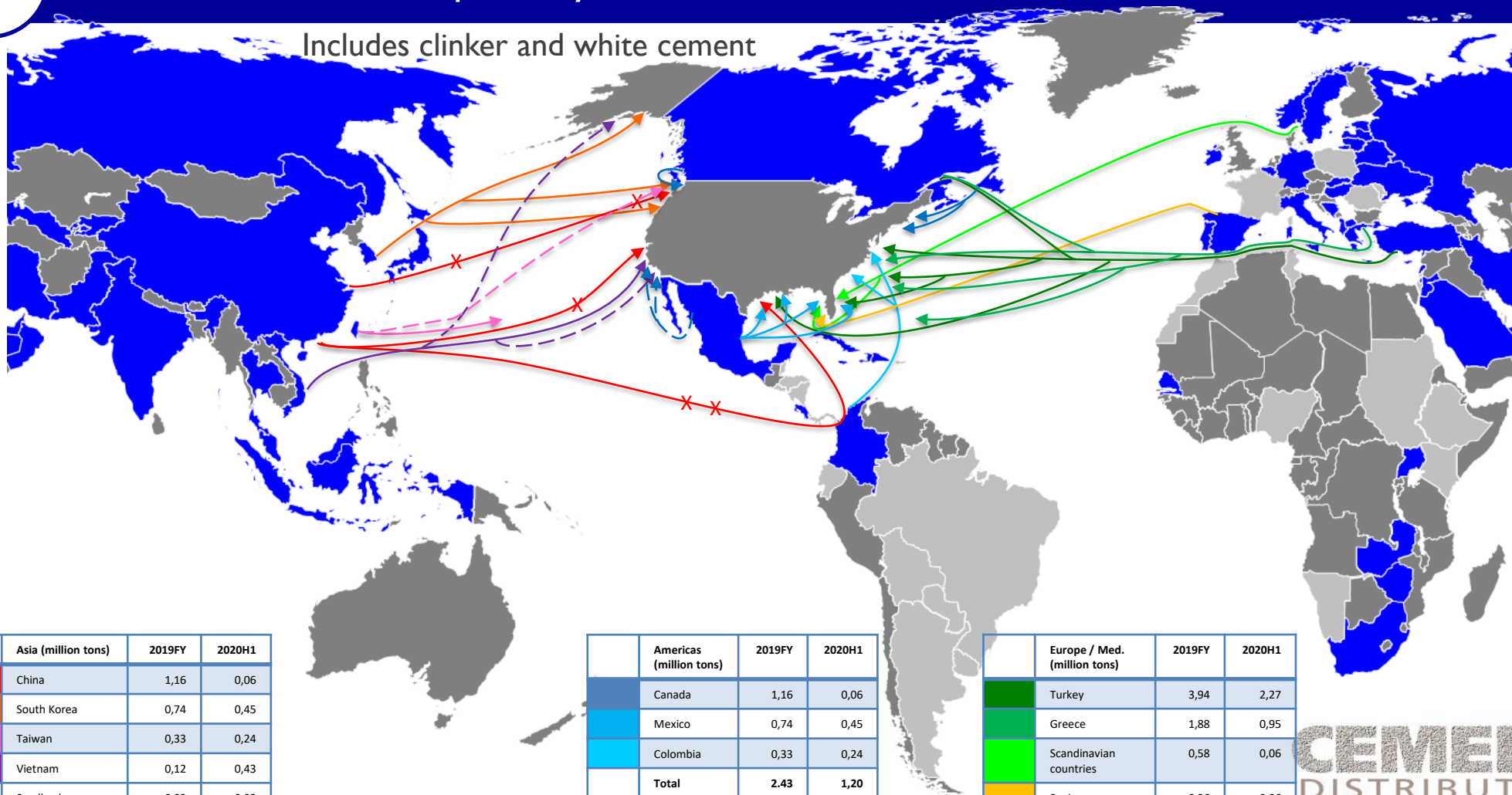
Total imports		
Total grey cement imports	13,538,611	Tons
Total white cement imports	1,424,612	Tons
Total clinker imports	1,379,720	Tons
Total cement and clinker imports	16,342,943	Tons
White cement		
From Canada (Great Lakes and rail)	334,510	Tons
From Mexico (rail)	176,406	Tons
From Mexico (Sea, self-discharging vessels)	37,184	Tons
From Asia (Big Bags in containers)	26,074	Tons
From Europe / Mediterranean (Bulk)	446,866	Tons
From Europe / Mediterranean (Big Bags)	403,572	Tons
Total	1,424,612	Tons
Clinker		
From Canada (across Great Lakes)	574,056	Tons
From Europe (Bulk carrier)	805,664	Tons
	1,379,720	Tons

Grey cement		
From Canada (Great Lakes and rail)	2,841,188	Tons
From Canada (Bulk carrier)	531,582	Tons
From Canada (Self - discharging vessel)	1,049,390	Tons
From Mexico (rail)	406,999	Tons
From Mexico (Bulk carrier)	526,459	Tons
From Mexico (Self-discharging vessel)	189,102	Tons
From Asia (Bulk carrier)	2,344,315	Tons
From South America (Self – discharging vessel)	103,202	Tons
From Europe / Mediterranean (bulk carrier)	~5,301,374	Tons
From Europe / Mediterranean (Big Bags)	~245,000	Tons
	13,538,611	Tons

Source: USGS / Cement Distribution Consultants All volumes in metric tons

US seaborne cement imports by source 2019FY and 2020H1

Includes clinker and white cement



	Asia (million tons)	2019FY	2020H1
	China	1,16	0,06
	South Korea	0,74	0,45
	Taiwan	0,33	0,24
	Vietnam	0,12	0,43
	Small volumes	0,02	0,02
	Total Americas	2.43	1,20

	Americas (million tons)	2019FY	2020H1
	Canada	1,16	0,06
	Mexico	0,74	0,45
	Colombia	0,33	0,24
	Total	2.43	1,20

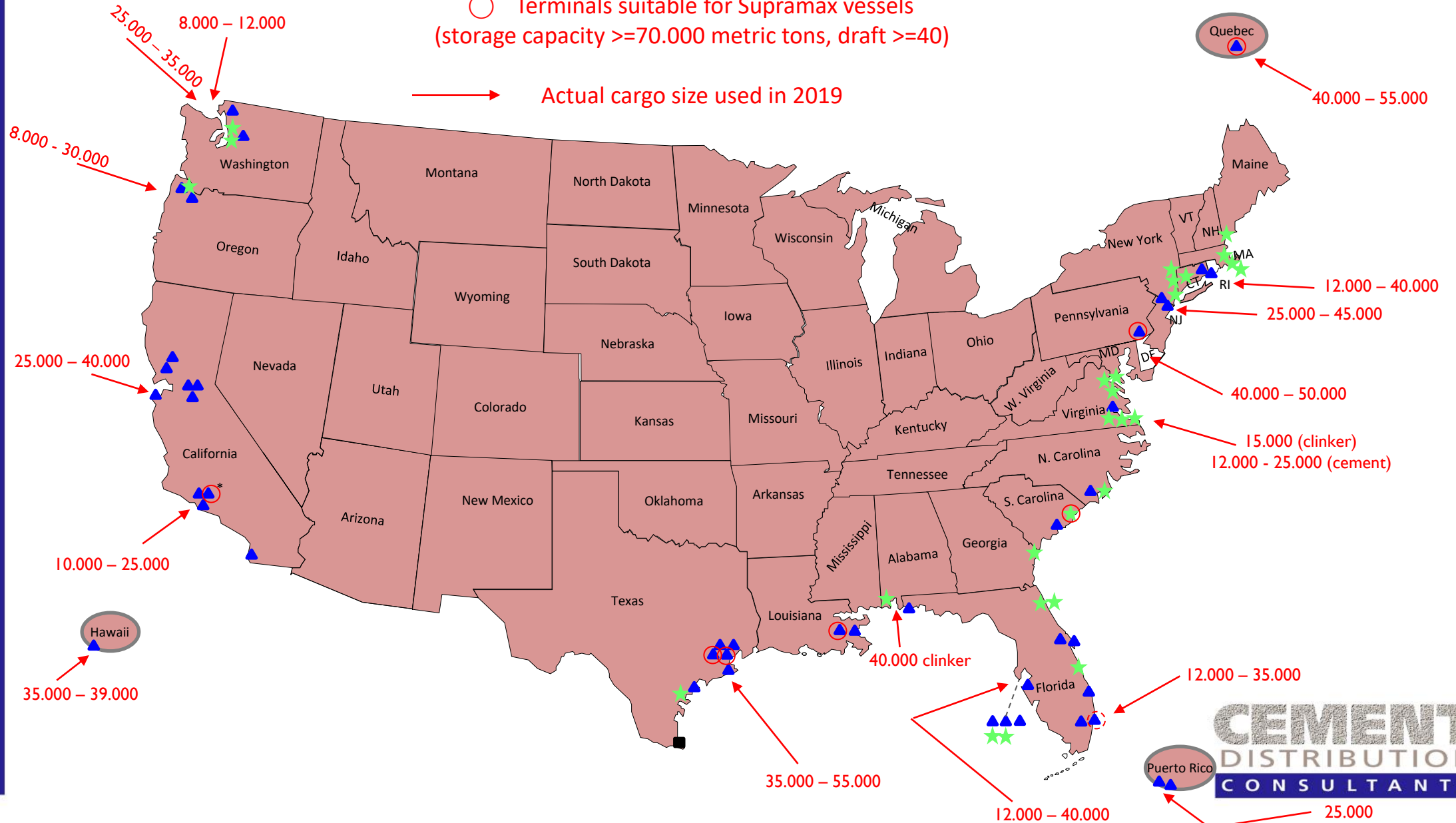
	Europe / Med. (million tons)	2019FY	2020H1
	Turkey	3,94	2,27
	Greece	1,88	0,95
	Scandinavian countries	0,58	0,06
	Spain	0,26	0,06
	Other countries	0,54	0,54
	Total	7,20	3,53

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Typical cargo sizes (Bulk only)

○ Terminals suitable for Supramax vessels
(storage capacity $\geq 70,000$ metric tons, draft ≥ 40)

→ Actual cargo size used in 2019





Characteristics of the North American cement market

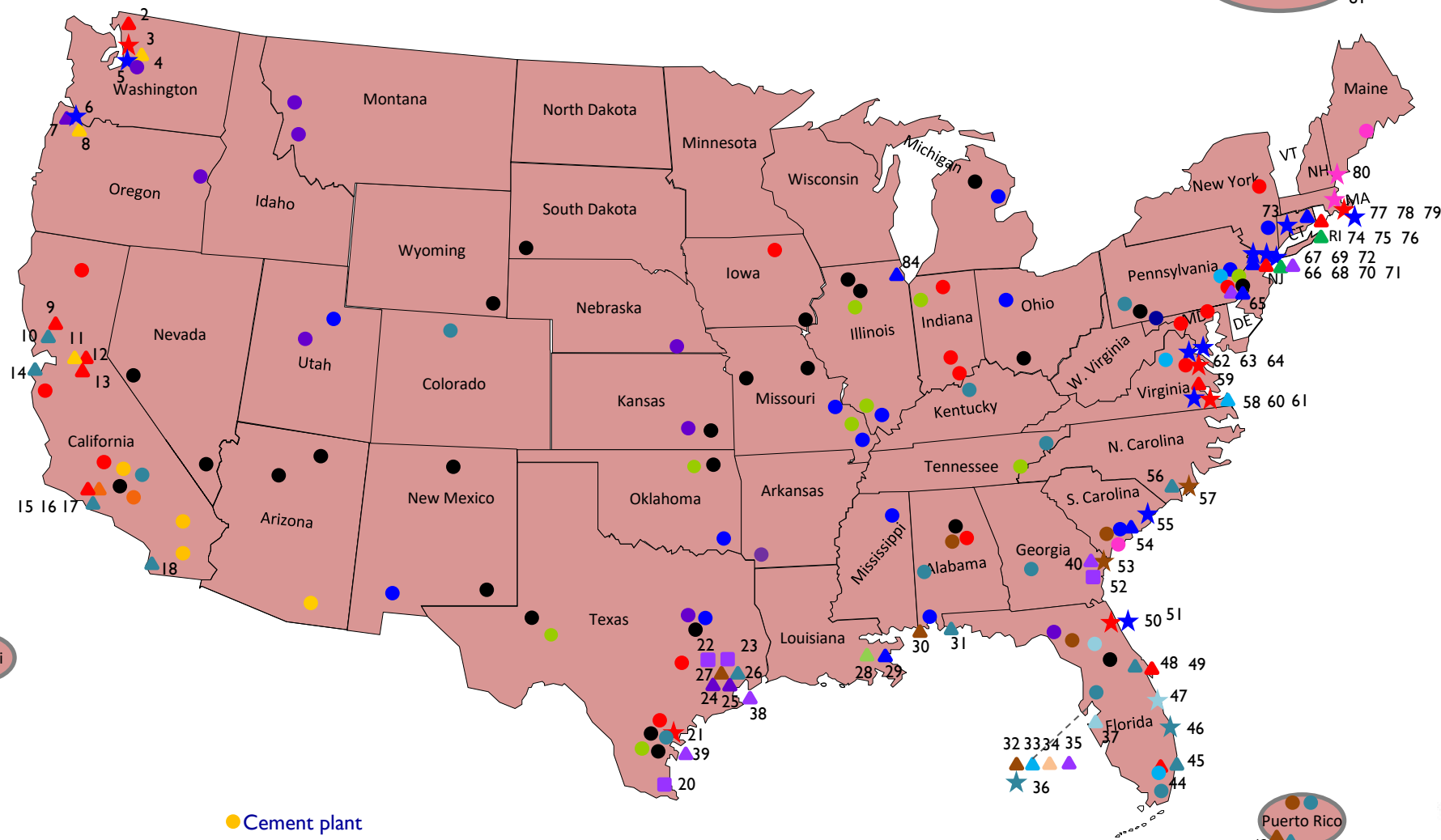
Cement plant and sea terminal ownership

Alaska
1

Hawaii
19

Canada
83
82
Quebec
81

Puerto Rico
42
43



- Cement plant
- ▲ Cement terminal with ship uploader
- ★ Cement terminal without ship unloader
- Big bag import facility

- LafargeHolcim
- Lehigh (Heidelberg)
- Cemex
- CRH (incl. Ash Grove)
- Argos
- Buzzi Unicem
- Titan
- CPC (Taiheiyo)
- Mitsubishi
- American
- Giant
- McInnis
- Independent importers
- cement manufacturers without import capability



Ownership of seaborne cement terminals

No.	Location	Owner	Type	Remarks	No.	Location	Owner	Type	Remarks
1	Anchorage AL	CPC (Taiheiyo)	▲	Active	14	Redwood City CA	Cemex	▲	Not active
2	Everett WA	Lehigh (Heidelberg)	▲	Active	15	Los Angeles CA	CPC (Taiheiyo, Lehigh)	▲	Not active
3	Seattle WA	LafargeHolcim	★	Active, cement supply from LH Canada	16	Long Beach CA	Cemex	▲	Active
4	Seattle WA	Lehigh (Heidelberg)	★	Active, cement supply from Lehigh Canada	17	Long Beach CA	Mitsubishi	▲	Not active
5	Seattle WA	CPC (Taiheiyo)	▲	Active	18	San Diego CA	Cemex	▲	Closed
6	Vancouver WA	LafargeHolcim	★	Active, cement supply from LH Canada	19	Barbers Point HI	Hawaiian (Ind)	▲	Active
7	Portland OR	Ash Grove (CRH)	▲	Not active	20	Brownsville TX	Texan Cement (Ind)	■	Active
8	Portland OR	CPC (Taiheiyo)	▲	Active	21	Corpus Christi TX	Lehigh (Heidelberg)	★	Not active
9	Sacramento CA	Two Rivers (A&A, Lehigh)	▲	Active	22	Houston TX	Sesco (Ind)	■	Active, white + grey cement
10	Sacramento CA	Cemex	▲	Active	23	Houston TX	Royal White (Ind)	■	Active, white cement
11	Stockton CA	CPC (Taiheiyo)	▲	Active	24	Houston TX	Houston Cem. East (CRH, Lehigh, Buzzi)	▲	Active
12	Stockton CA	Sunshine (Lehigh)	▲	Closed	25	Houston TX	Houston Cem. West (CRH, Lehigh, Buzzi)	▲	Active
13	Stockton	Lehigh (Heidelberg)	▲	Active (GGBFS)	26	Houston TX	Cemex	▲	Active

Ownership of seaborne cement terminals

No.	Location	Owner	Type	Remarks	No.	Location	Owner	Type	Remarks
27	Houston, TX	Argos	▲	Not active	44	Port Everglades FL	Lehigh (Heidelberg)	▲	Active
28	New Orleans LA	Buzzi	▲	Used for domestic distr.	45	Port Everglades FL	Cemex	▲	Active
29	Reserve LA	LafargeHolcim	▲	Active	46	West Palm Beach FL	Cemex	▲	Not active
30	Mobile AL	Argos	▲	Not active	47	Ft Pierce FL	Florida Sun (CRH)	▲	Not active
31	Pensacola FL	Cemex	▲	Not active	48	Port Canaveral FL	Cemex	▲	Not active
32	Tampa FL	Argos	▲	Not active. Receives GBFS for grinding	49	Port Canaveral FL	Lehigh (Heidelberg)	▲	Not Active
33	Tampa FL	Titan	▲	Active	50	Jacksonville FL	Lehigh (Heidelberg)	★	Not active
34	Tampa FL	Cemex	★	Active	51	Jacksonville FL	LafargeHolcim	★	Not active
35	Tampa FL	Cementir	▲	Active, white cement	52	Savannah GA	Argos	★	Not active
36	Tampa FL	Sesco	▲	Under construction	53	Savannah GA	Southeast (Ind)	■	Active, started 2017
37	Port Manatee FL	Eastern (CRH)	▲	Active	54	Charleston SC	LafargeHolcim	▲	Not active
38	Corpus Christi	Independent	▲	Expected mid 2020	55	Georgetown SC	LafargeHolcim	★	Domestic use
39	Houston	BBM (Sesco)	▲	Expected end 2020	56	Wilmington NC	Argos	★	Not active
40	Savannah	Independent	▲	Active	57	Wilmington NC	Cemex	▲	Not active
41	Gulf Area	Independent	▲	Expected 2021	58	Chesapeake VA	Argos	★	Active
42	San Juan PR	Argos	▲	Active	59	Chesapeake VA	Titan	▲	Active
43	San Juan PR	Cemex	▲	Active white cement	60	Norfolk VA	Lehigh (Heidelberg)	★	Domestic use

Ownership of seaborne cement terminals

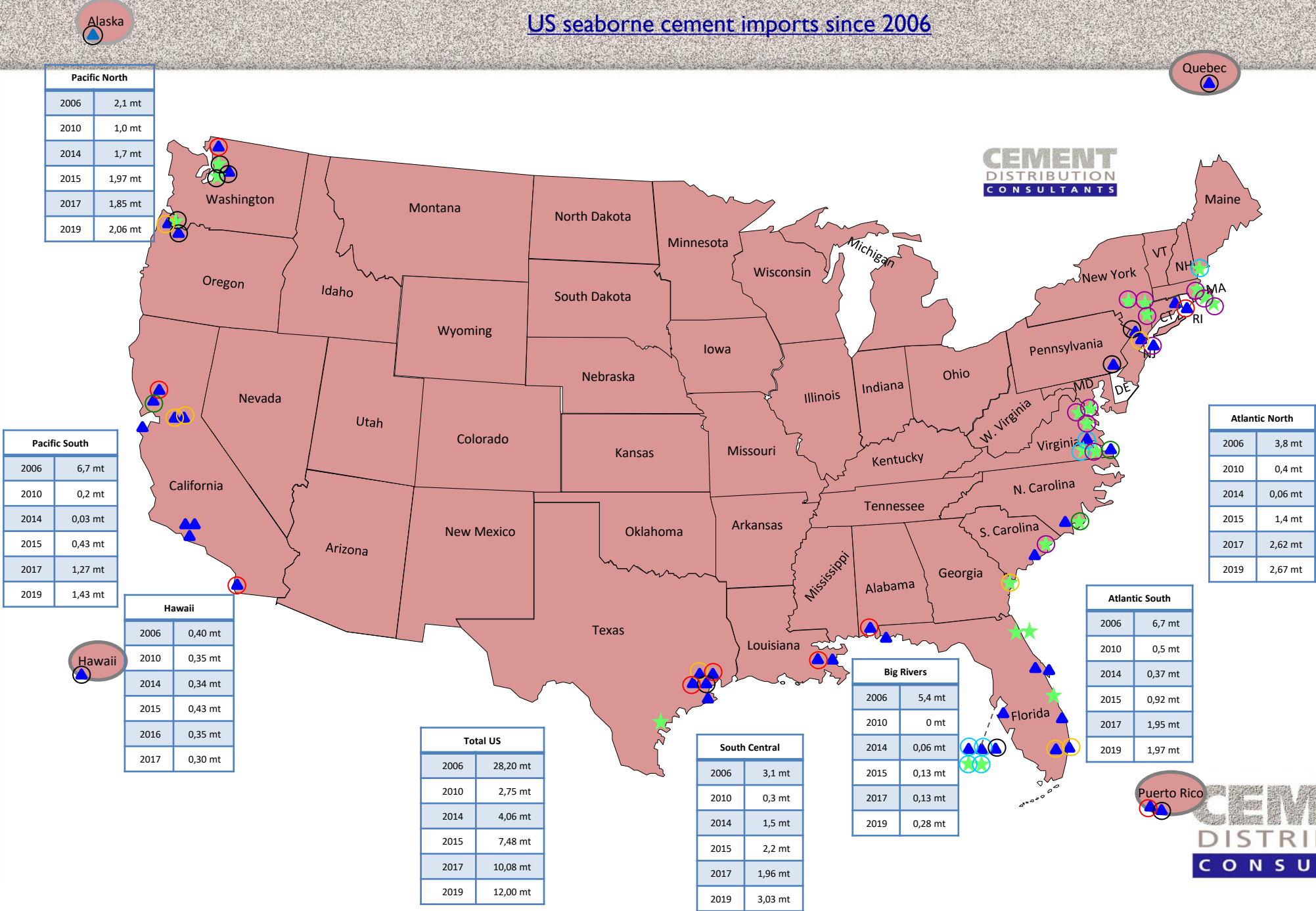
No.	Location	Owner	Type	Remarks	No.	Location	Owner	Type	Remarks
61	Newport News VA	Pier X (Lehigh)	▲	Active	73	New Haven CT	LafargeHolcim	★	Domestic
62	Baltimore Md	LafargeHolcim 1	★	Domestic	74	Providence RI	LafargeHolcim	▲	Not active
63	Baltimore MD	LafargeHolcim 2	★	Domestic	75	Providence RI	Lehigh	▲	Active
64	Baltimore MD	Lehigh	★	Domestic	76	Providence RI	McInnis (Ind)	▲	Active
65	Bristol PA	Riverside (Ind)	▲	Active	77	Boston MA	LafargeHolcim	★	Domestic
66	Newark NJ	Titan	▲	Active	78	Boston MA	Lehigh	★	Domestic
67	Brooklyn NY	LafargeHolcim	★	Domestic	79	Boston MA	Dragon	★	Domestic
68	Brooklyn NY	Lehigh	▲	Active	80	Newington NH	Dragon	★	Domestic
69	Bayonne NJ	LafargeHolcim	★	Domestic	81	Quebec QC	Beton Provincial (Ind)	▲	Active
70	Brooklyn NY	NYC (Ind)	▲	Domestic	82	St. Catharine QC	McInnis (Ind)	★	Domestic
71	Bronx NY	McInnis (Ind)	▲	Active	83	Oshawa ON	McInnis (Ind)	★	Domestic
72	Queens NY	LafargeHolcim	★	Domestic	84	Chicago IL	Chicago (Ind)	▲	Active (via New Orleans, slag)

Note: (Ind) = Independent = No cement production facility in US

Importance of imports within the domestic cement market

Year	Cons. (app.)	Imports	%		Year	Cons. (app.)	Imports	%
1992	72.124	4.548	6		2005	128.280	30.403	23
1993	79.198	5.332	7		2006	126.810	32.141	27
1994	86.370	9.072	10		2007	116.600	21.469	19
1995	86.612	11.473	11		2008	96.800	10.744	11
1996	89.400	10.700	12		2009	71.500	6.211	8
1997	96.018	14.523	14		2010	71.200	6.013	8
1998	102.457	19.878	19		2011	72.200	5.812	7
1999	108.882	24.578	21		2012	77.900	6.107	7
2000	110.048	24.561	20		2013	81.700	6.289	7
2001	112.710	23.591	21		2014	89.200	7.584	8
2002	110.020	22.198	20		2015	92.100	10.367	11
2003	114.100	21.015	20		2016	94.200	11.742	13
2004	121.980	25.396	21		2017	96.800	12.000	13
	Source: USGS Note: Imports are overall i.e. seaborne + Canada rail + Great Lakes + Mexico rail				2018	97.180	14.981	15
					2019	100.530	16.343	16

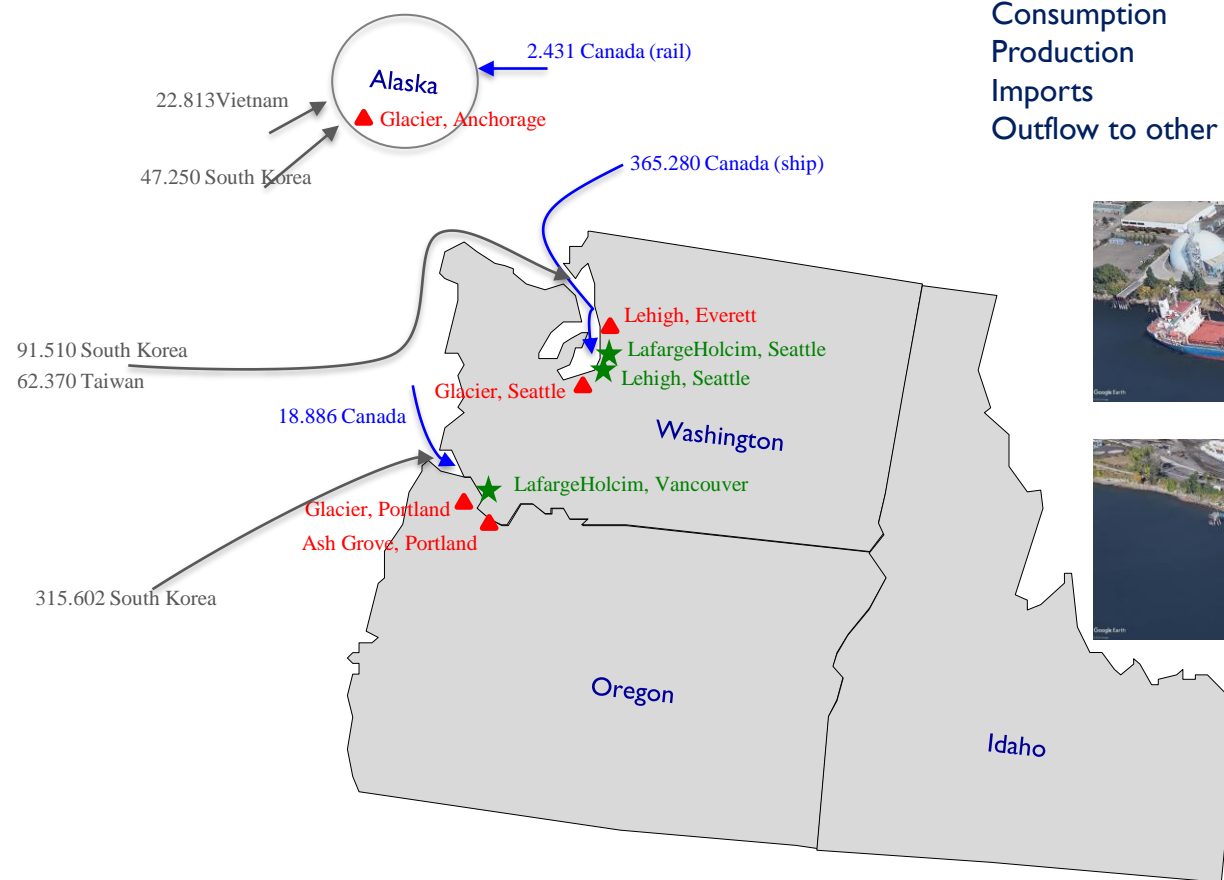
US seaborne cement imports since 2006





A look at the key regions

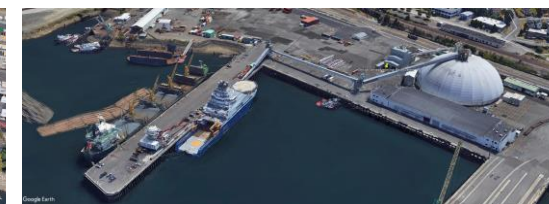
Pacific North (Alaska, Washington, Oregon, Idaho) 2020H1



Consumption	1,65 mt
Production	1,01 mt
Imports	<u>0,93 mt</u>
Outflow to other states	0,29 mt

2020 Changes

- Cement imports from mainland China have stopped
- A (one off) shipment of about 20.000 tons) with cement in big bags from Vietnam was received in Anchorage



- ▲ Terminals with ship unloader
- ★ Terminals receiving self-discharging vessels

Volumes 2020H1

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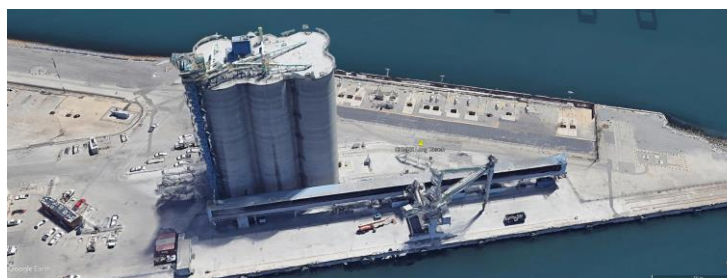
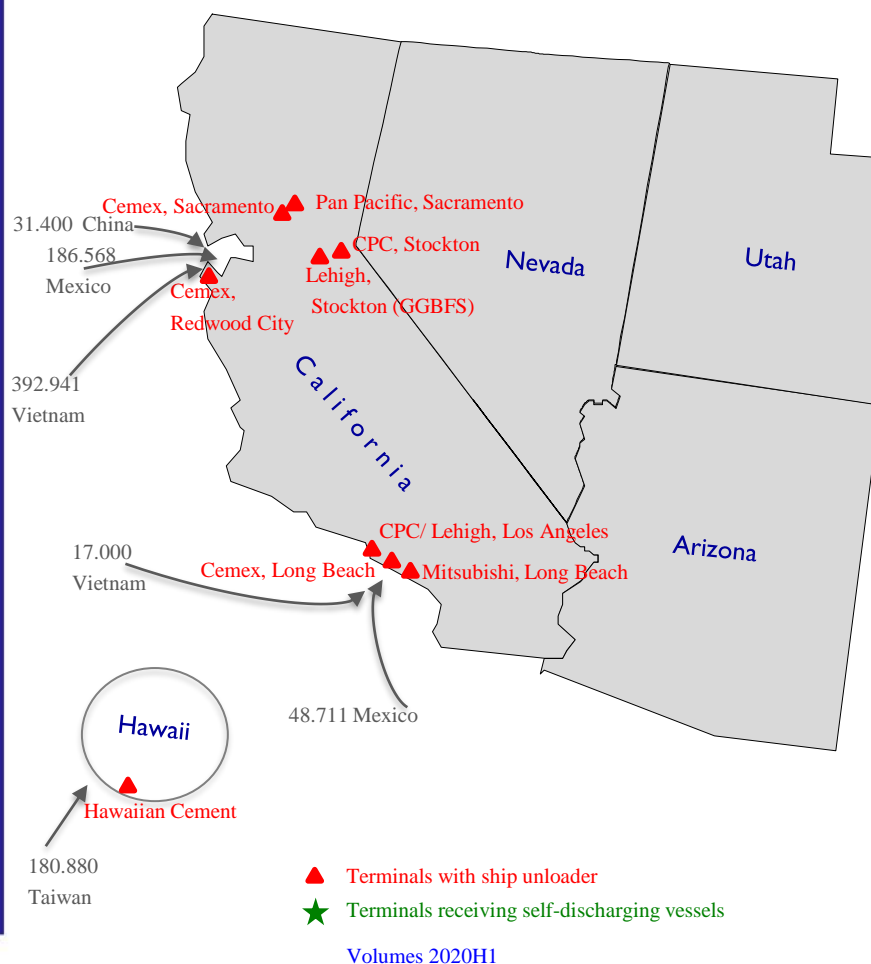
Volumes 2020H1 Source: USGS / CDC

Pacific South (California, Nevada, Utah, Arizona, Hawaii) 2020H1

Consumption	8,04 mt
Production	6,96 mt
Imports	<u>0,86 mt</u>
Outflow to other states	0,22 mt

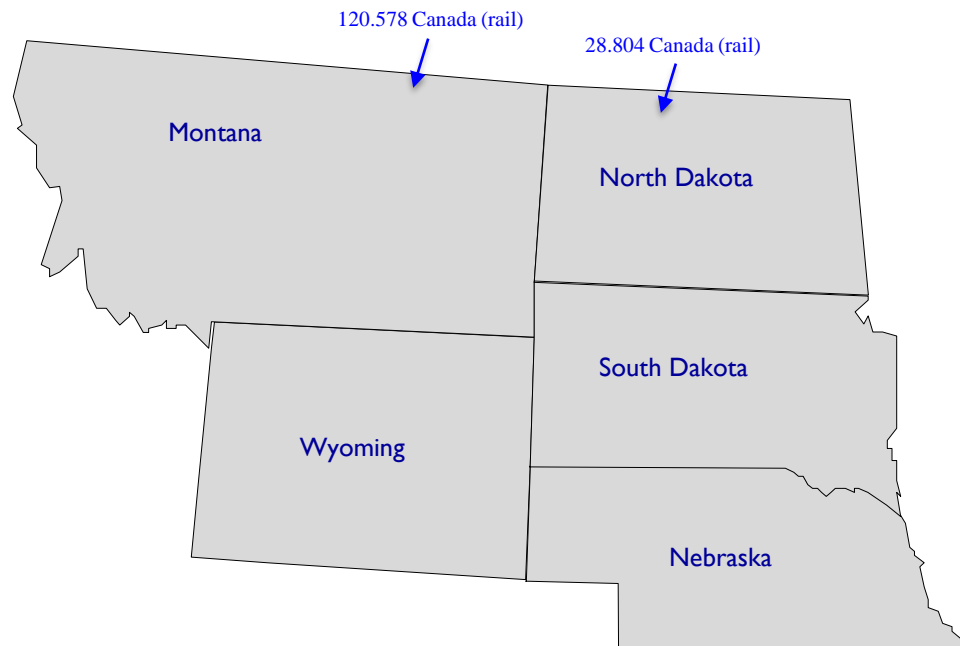
2020 Developments

- Sunshine Cement (floating terminal) , Stockton closed and removed.
- Cemex, San Diego terminal – closed
- Cement supply from China has been replaced by Vietnam.
- Some terminals in the LA / Long Beach area are re-opening.



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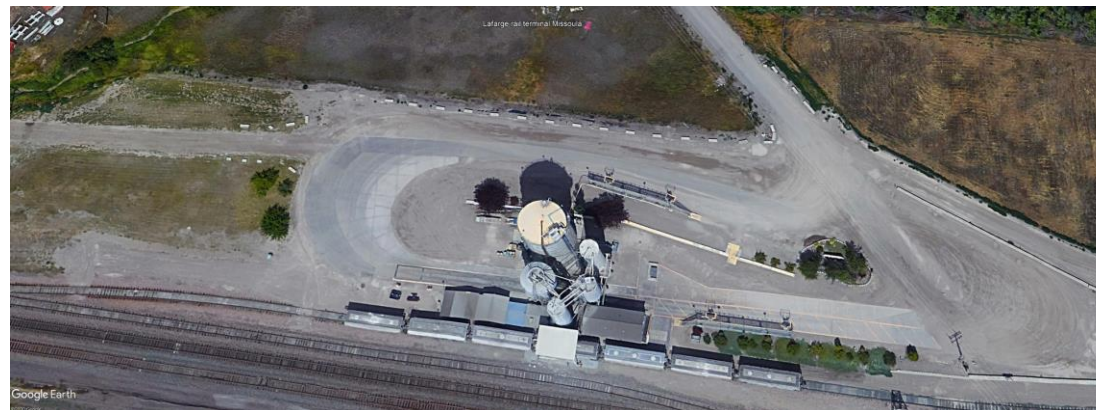
North Central (Montana, Wyoming, North Dakota, South Dakota, Nebraska) 2020H1



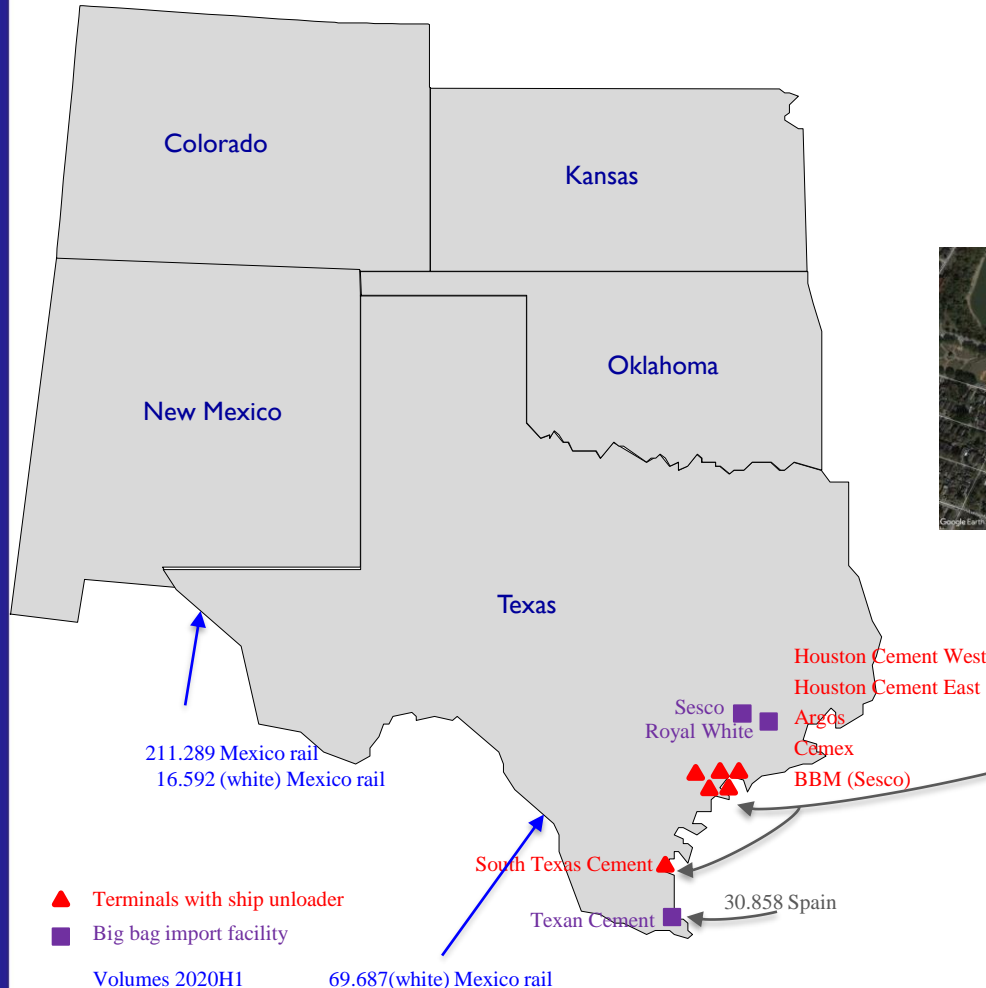
Consumption	1,11 mt
Production	2,39 mt
Imports	<u>0,15 mt</u>
Outflow to other states	1,43 mt

2020 Characteristics

- Imports from Canada and domestic distribution for a large part are by rail.



South Central (Texas, New Mexico, Colorado, Kansas, Oklahoma) 2020H1



Consumption	11,21 mt
Production	8,94 mt
Imports	<u>1,98 mt</u>
Outflow to other states	0,29 mt

- 2020 Developments**
- Strong growth of seaborne imports.
 - Two new terminals (BBM in Houston and South Texas Cement in Corpus Christi).
 - Upgrade of Texan Cement big bag facility to bulk import terminal.
 - New Cimsa white cement grinding plant in Houston
 - Turkey takes on a major role as cement supplier to Texas.

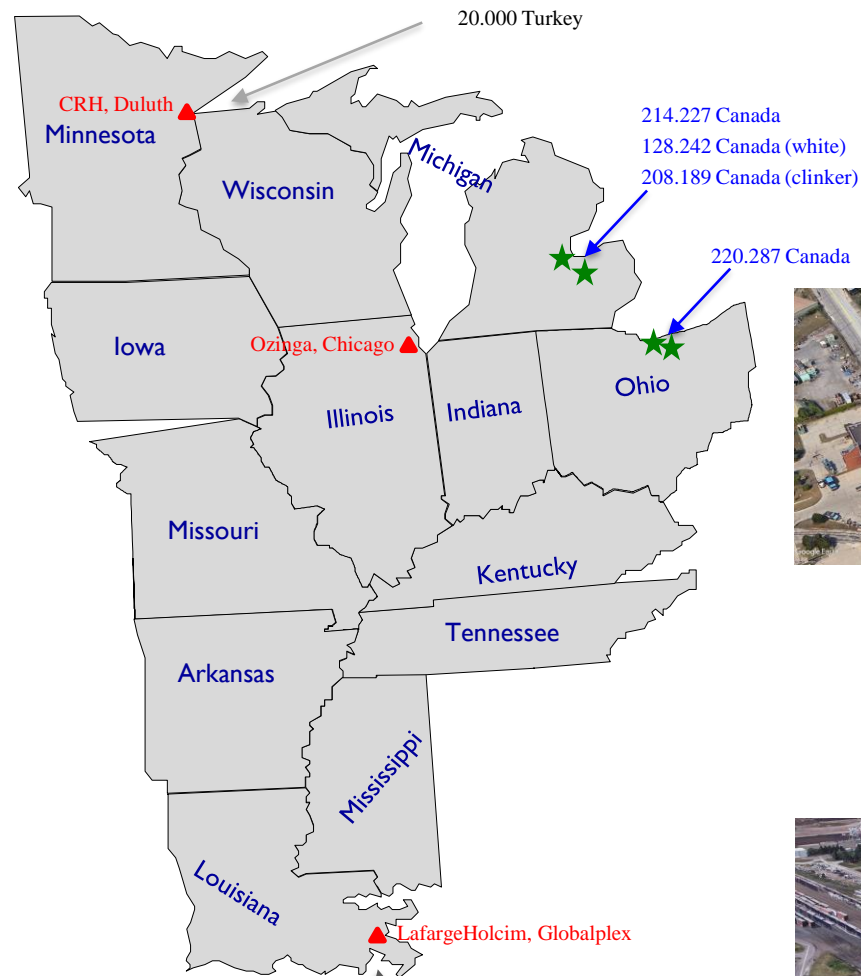


30.014 Canada	3.420 Poland
8.976 Egypte (grey)	1.778 Thailand (white)
46.174 Egypte (white)	990.229 Turkey (grey)
218.650 Greece	207.207 Turkey (clinker)
104.417 Mexico	37.717 Turkey (white)

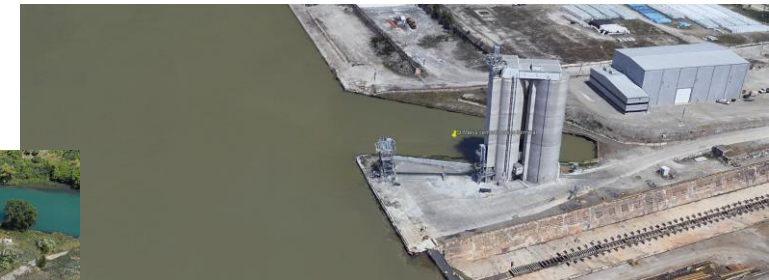


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Great Lakes & Big Rivers (Minnesota, Wisconsin, Michigan, Ohio, Indiana, Illinois, Iowa, Missouri, Arkansas, Kentucky, Tennessee, Mississippi, Louisiana) 2020H1



Consumption	10,55 mt
Production	9,67 mt
Imports (excluding clinker)	0,69 mt
Inflow from other states	0,19 mt

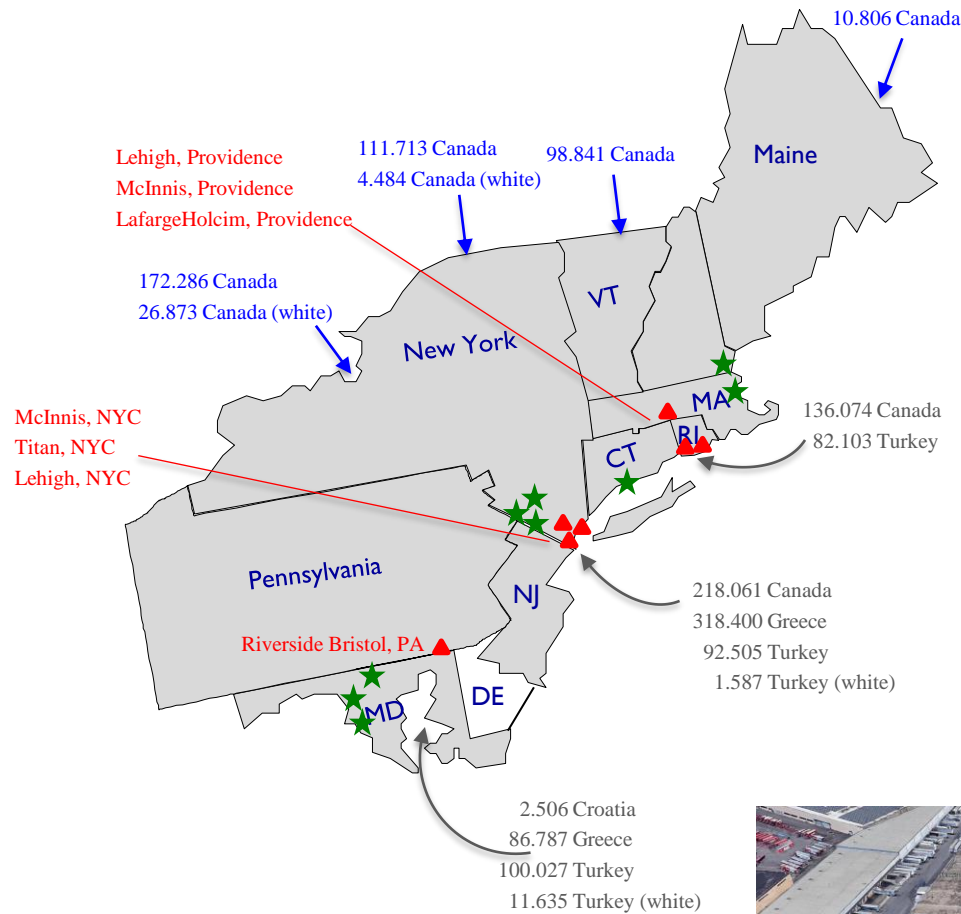


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- ▲ Terminals with ship unloader
- ★ Terminals receiving self-discharging vessels

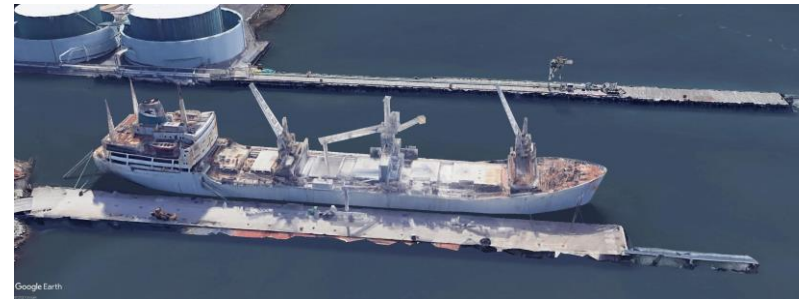
Volumes 2020H1

Atlantic North (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Maryland, Delaware)



Consumption	5,06 mt
Production	2,38 mt
Imports	<u>1,48 mt</u>
Outflow to other states	1,20 mt

2020 Developments
 McInnis in NYC and Providence is increasing its imports.
 Imports from EU countries (with the exception of Greece) have disappeared.



- ▲ Terminals with ship unloader
- ★ Terminals receiving self-discharging vessels (domestic only)

Volumes 2020H1

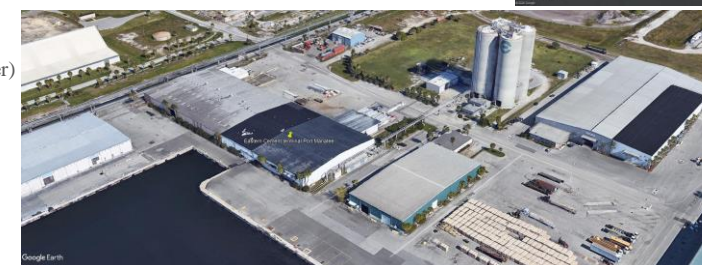
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Atlantic South (Virginia, West Virginia, North Carolina, South Carolina, Georgia, Alabama, Florida) 2020H1



Consumption	9,05 mt
Production	9,45 mt
Imports (excluding clinker)	<u>1,27 mt</u>
Outflow to other states	1,57 mt
Clinker imports	0,27 mt

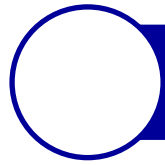
2020 Developments
 Sesco is building a new cement terminal in Port Redwing (near Tampa).
 American (CRH) is expanding its terminal in Port Manatee with a ship unloader



- ▲ Terminals with ship unloader
- ★ Terminals receiving self-discharging vessels (domestic only)



A careful forecast



A careful forecast

As yet it is difficult to see how 2020H2 and 2021 will look like.

Construction in the US is slowing down a bit. This might mean a drop of cement consumption of around 3-5% on a full year basis for 2020.

It looks that infrastructure improvement is on the agenda of both political parties. However this has been so for a long time and when it would happen it always takes time before large projects get started. This would mean that 2021 probably will be subdued and will see a further loss of cement consumption. 2022 then might see a recovery.

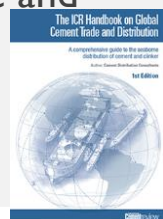
For seaborne cement imports, changes to overall cement consumption have a huge impact. Currently US cement consumption is a little over 100 million tons. Seaborne imports are at 12 million tons. When US cement consumption drops with 3% then this will mean a drop in seaborne imports of about 3 million tons which is 25%.

This applies mainly to grey cement imports. White cement and clinker imports have different dynamics.

Cement Distribution Consultants

an introduction

Market knowledge	Consulting	Project / interim management
<ul style="list-style-type: none"> The global cement industry on Google Earth. The most comprehensive global database on waterside cement plants, waterside grinding plants and terminals. www.cementdistribution.com (a free and comprehensive website on cement trade and distribution). Authors of the Handbook on Global Cement Trade and Distribution. 37 Years experience. 	<ul style="list-style-type: none"> The ability to advise customers on every aspect of cement and clinker trade and distribution including strategical, economical, logistical, technical and operational aspects as well as sourcing, shipping, facilities, handling systems, etc., etc. A clear vision on port and facility design that can adapt to changing trade and industry conditions. Projects realised on every continent. Currently consultant to the two largest cement terminals in the world, various other import facilities and self-discharging ship design. 	<ul style="list-style-type: none"> Substantial experience in realising projects and managing complete logistical chains. Examples: <ul style="list-style-type: none"> Setting up and managing the cement and fly ash supply to a large construction project including self-discharging cement carriers, floating terminal, etc. Redevelopment of a large brown field bulk terminal. Setting up a fly ash import operating Resolving operational and managerial problems of a grinding facility.



THANK YOU



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