A wave of new terminals

The impact of terminal ownership on cement imports into North America

Ad Ligthart
INTERCEM Shipping Americas 21st May 2018
## Cement Distribution Consultants
### an introduction

<table>
<thead>
<tr>
<th>Market knowledge</th>
<th>Consulting</th>
<th>Project / interim management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The global cement industry on Google Earth.</td>
<td>• 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.</td>
<td>• Substantial experience in realising projects and managing complete logistical chains.</td>
</tr>
<tr>
<td>• The most comprehensive global database on waterside cement plants, waterside grinding plants and terminals.</td>
<td>• A clear vision on port and facility design that can adapt to changing trade and industry conditions.</td>
<td>• Examples:</td>
</tr>
<tr>
<td>• <a href="http://www.cementdistribution.com">www.cementdistribution.com</a> (a free and comprehensive website on cement trade and distribution).</td>
<td>• Projects realised on every continent.</td>
<td>• Setting up and managing the cement and fly ash supply to a large construction project including self-discharging cement carriers, floating terminal, etc.</td>
</tr>
<tr>
<td>• Authors of the Handbook on Global Cement Trade and Distribution.</td>
<td>• Currently consultant to 5 terminal projects in North America of which the two largest cement terminals in the world.</td>
<td>• Redevelopment of a large brown field bulk terminal.</td>
</tr>
<tr>
<td>• 35 Years experience.</td>
<td></td>
<td>• Setting up a fly ash import operating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Resolving operational and managerial problems of a grinding facility.</td>
</tr>
</tbody>
</table>
INTRODUCTION

Even though a substantial number of existing terminals is still mothballed there are 18 new projects (4 terminal expansions, 4 big bag operations with the capability to grow to bulk imports and 10 new facilities) on their way since 2014 and several more are being considered. These are almost all by independents (i.e. companies without cement production facilities in the US). What are the reasons for this? How will this affect US cement imports where (in 2014) almost all terminals were controlled by only ten US producers? To give an answer to these questions it is required to have a look at the relationship between US cement production facilities and terminal ownership.

What are the consequences of the wave of new cement terminals on US cement imports?
Contents of presentation

- Global cement trade developments
- US seaborne cement imports during and after the crisis
- The current US cement import situation
- The economic mechanisms behind cement trade
- A wave of new terminals
- The relationship between US cement plant and import terminal ownership
- Final considerations
Global cement trade developments
Global cement trade developments

• A glut of exportable clinker and cement volumes has developed in the past few years with a downward pressure on F.O.B prices. This glut will stay for quite some time.
  
  • Long-term very substantial overcapacity in China
  • Iran, Saudi Arabia, Indonesia (re) enter the market
  • Turkey, Vietnam, Pakistan keep adding capacity larger than their consumption growth
  • Structural cement surpluses in South Europe, UAE, Thailand, etc.

• Shipping prices are slowly but steadily rising but remain very low compared to pre-crisis levels

• Trade in cementitious materials is growing and becomes more global

Developments in cement and clinker trade
Global cement trade developments

Global seaborne trade in cement and clinker in 2016 reached approx. 117 mt. In addition another 94 mt was distributed by sea domestically. Inland water domestic transport totalled approx. 21 mt. (excl. China).

Especially seaborne clinker trade increased reaching approx. 49 mt. Bulk cement seaborne trade grew to close to 52 mt and bagged cement shipments dropped slightly to 16 mt.

Seaborne domestic distribution in 2016 consisted of approx. 10 mt clinker 73 mt bulk cement and 11 mt of bagged cement.

Of all seaborne transport of cement and clinker in 2016 about 80 mt was transported by bulk carriers (Handysize and larger), 34 mt by coastal cargo vessels and about 97 mt by self-discharging cement carriers.
Global cement trade developments

- Key growth markets are cement imports into the US and clinker imports into Africa but regional trade around Europe and within Asia are increasing too.

- The long-term export availability of low priced cement and (especially) clinker, in combination with low shipping prices makes it uneconomical to build integrated cement plants in coastal areas wherever in the world. It is more economical to import. New coastal cement production facilities will be grinding plants.

- The very large difference between the CIF costs of imported cement (or clinker) and domestic cement prices makes importing highly attractive.

- With the growth of bulk cement imports in the US and related cement type and quality issues it is getting more difficult to source bulk cement for the US and FOB prices are creeping up. Also shipping costs are increasing steadily.

Developments in cement and clinker trade
US seaborne cement imports during and after the crisis
**US cement terminals during the crisis (2010)**

**Total seaborne imports 2.75 mt**

<table>
<thead>
<tr>
<th>Region</th>
<th>2006 (mt)</th>
<th>2010 (mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific North</td>
<td>2.3</td>
<td>1.9</td>
</tr>
<tr>
<td>Pacific South</td>
<td>6.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Hawaii</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>South Central</td>
<td>5.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Atlantic North</td>
<td>3.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Atlantic South</td>
<td>6.7</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**Terminals with ship unloading system**
- 2006: 46, 2010: 13

**Terminals receiving self-discharging vessels**
- 2006: 38, 2010: 13

**South Coast Cement terminal switched over from cement to fertilizer**

Giant closes and sells terminal in Chesapeake
US cement terminals in 2014

Total seaborne imports 4.6 mt

<table>
<thead>
<tr>
<th>Region</th>
<th>2006</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific North</td>
<td>2.3</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Atlantic North</td>
<td>3.8</td>
<td>0.4</td>
<td>0.05</td>
</tr>
<tr>
<td>Atlantic South</td>
<td>6.7</td>
<td>0.5</td>
<td>0.37</td>
</tr>
<tr>
<td>Pacific South</td>
<td>6.7</td>
<td>0.2</td>
<td>0.03</td>
</tr>
<tr>
<td>South Central</td>
<td>5.4</td>
<td>0.0</td>
<td>0.06</td>
</tr>
<tr>
<td>Big Rivers</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Terminals with ship unloading system
- Total: 72
- Mothballed: 41
- Domestic use: 13
- Importing cement during crisis: 11
- Started importing again in 2014: 7
Total seaborne imports 7.48 mt

- Pacific North
  - 2006: 3.1 mt
  - 2010: 0.3 mt
  - 2014: 0.3 mt
  - 2015: 1.8 mt

- Pacific South
  - 2006: 6.7 mt
  - 2010: 0.2 mt
  - 2014: 0.03 mt
  - 2015: 0.43 mt

- Atlantic North
  - 2006: 3.8 mt
  - 2010: 0.4 mt
  - 2014: 0.06 mt
  - 2015: 1.4 mt

- Atlantic South
  - 2006: 6.7 mt
  - 2010: 0.5 mt
  - 2014: 0.37 mt
  - 2015: 0.92 mt

- South Central
  - 2006: 5.4 mt
  - 2010: 0 mt
  - 2014: 0.06 mt
  - 2015: 0.13 mt

- Big Rivers
  - 2006: 5.4 mt
  - 2010: 0.3 mt
  - 2014: 0.06 mt
  - 2015: 0.13 mt

- Total
  - 2006: 5.4 mt
  - 2010: 0.3 mt
  - 2014: 0.06 mt
  - 2015: 0.13 mt

- Total Terminals with ship unloading system: 45
  - 2014: 21
  - 2015: 24

- Total Terminals receiving self-discharging vessels: 25
  - 2014: 8
  - 2015: 9

- NYCEMCO opens again and receives domestic cement

- Cemex closes terminal and acquires Holcim terminal

- Argos adds ship unloader to Houston terminal

US cement terminals in 2015
Total seaborne imports 9,6 mt

US cement terminals in 2016

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific North</td>
<td>3,8</td>
<td>0,4</td>
<td>0,06</td>
<td>1,4</td>
<td>2,61</td>
</tr>
<tr>
<td>Pacific South</td>
<td>6,7</td>
<td>0,2</td>
<td>0,06</td>
<td>0,92</td>
<td>1,78</td>
</tr>
<tr>
<td>Hawaii</td>
<td>0,40</td>
<td>0,35</td>
<td>0,35</td>
<td>0,88</td>
<td></td>
</tr>
<tr>
<td>Atlantic North</td>
<td>3,8</td>
<td>0,4</td>
<td>0,06</td>
<td>1,4</td>
<td>2,61</td>
</tr>
<tr>
<td>Atlantic South</td>
<td>6,7</td>
<td>0,2</td>
<td>0,06</td>
<td>0,92</td>
<td>1,78</td>
</tr>
<tr>
<td>Big Rivers</td>
<td>0,13</td>
<td>0,06</td>
<td>0,65</td>
<td>0,85</td>
<td></td>
</tr>
<tr>
<td>South Central</td>
<td>3,1</td>
<td>0,3</td>
<td>1,5</td>
<td>1,82</td>
<td></td>
</tr>
</tbody>
</table>

Terminals with ship unloading system:
- Pacific North: 45
- Pacific South: 25
- Atlantic North: 25
- Atlantic South: 25
- Big Rivers: 25
- South Central: 25

Terminals receiving self-discharging vessels:
- Pacific North: 17
- Pacific South: 7
- Atlantic North: 10
- Atlantic South: 10
- Big Rivers: 10
- South Central: 10

Total terminals: 70

Started importing cement during crisis:
- 2014: 3
- 2015: 4
- 2016: 7
US cement terminals in 2017

**Total seaborne imports 9,8 mt (est.)**

- **South Central**
  - 2006: 5,4 mt
  - 2015: 0,13 mt
  - 2017: 0,13 mt

- **Big Rivers**
  - 2006: 5,4 mt
  - 2015: 0,13 mt
  - 2017: 0,13 mt

- **Pacific South**
  - 2006: 3,8 mt
  - 2010: 0,4 mt
  - 2015: 1,4 mt
  - 2017: 2,62 mt

- **Pacific North**
  - 2006: 2,1 mt
  - 2010: 1,0 mt
  - 2015: 1,97 mt
  - 2017: 1,85 mt

- **Atlantic South**
  - 2006: 6,7 mt
  - 2010: 0,2 mt
  - 2014: 0,03 mt
  - 2015: 0,43 mt
  - 2016: 0,65 mt
  - 2017: 0,13 mt

- **Atlantic North**
  - 2006: 3,8 mt
  - 2010: 0,4 mt
  - 2014: 0,06 mt
  - 2015: 1,4 mt
  - 2016: 2,61 mt
  - 2017: 2,62 mt

- **Pacific**
  - South Central
    - 2006: 6,7 mt
    - 2010: 0,2 mt
    - 2014: 0,03 mt
    - 2015: 0,43 mt
    - 2016: 0,88 mt
    - 2017: 1,27 mt
  - South Central
    - 2006: 3,1 mt
    - 2010: 0,3 mt
    - 2014: 1,5 mt
    - 2015: 2,2 mt
    - 2016: 1,82 mt
    - 2017: 1,96 mt

- **Total**
  - Mothballed
    - 2006: 24
t  - 2010: 5
t  - 2014: 10
t  - 2015: 3
t  - 2016: 4
t  - 2017: 3
t
  - Domestic use
    - 2014: 1
t  - 2015: 9
t  - 2016: 7
t  - 2017: 3
t
  - Importing cement during crisis
    - 2014: 8
t  - 2015: 3
t  - 2016: 1
t  - 2017: 1
t
  - Started importing again in
    - 2014: 0
t  - 2015: 0
t  - 2016: 0
t  - 2017: 0
t
- **Terminals with ship unloading system**
  - 2006: 45
t  - 2010: 14
t  - 2014: 8
t  - 2015: 7
t  - 2016: 3
t  - 2017: 3
t
- **Terminals receiving self-discharging vessels**
  - 2006: 24
t  - 2010: 5
t  - 2014: 10
t  - 2015: 3
t  - 2016: 4
t  - 2017: 1
t
- **Total**
  - 2006: 69
t  - 2010: 19
t  - 2014: 11
t  - 2015: 11
t  - 2016: 7
t  - 2017: 3
t
- **Lehigh acquires CTI and will scrap floating terminal**
- **Titan moves floating ship unloader to Norfolk**

- **Puerto Rico**
  - 2006: 6,7 mt
  - 2010: 0,4 mt
  - 2014: 0,06 mt
  - 2015: 1,4 mt
  - 2016: 2,61 mt
  - 2017: 2,62 mt
The current US cement import situation
The current US cement import situation

- US seaborne cement imports which rapidly increased in 2014, 2015 and 2016 slowed down in 2017 with estimated cement imports staying about level with 2016 with a total of about 9.8 million tons. The slowdown in growth is a bit against expectations. The regions that have slowed down most are the Northwest and Gulf area. The Southwest and Northeast are still growing more strongly.

- Generally though expectations for the coming years are quite good with hopes that the figure of over 30 million tons of seaborne imports will be reached again in 6-8 years and might be even surpassed after that. The level of new terminal expansions and new buildings is a good indication of this.

- In 2006 US seaborne imports were about 30 million tons. In 2010 this dropped to less than 3 million tons. During the crisis most cement import terminals were mothballed. Since 2014 seaborne imports are increasing again and terminals are gradually reopening. However, with many terminals still mothballed a wave of new terminal projects is on its way.
The current US cement import situation

A bit of history of US cement imports

Source: Global Cement Report
### Importance of imports within the domestic cement market

<table>
<thead>
<tr>
<th>Year</th>
<th>Cons. (app.)</th>
<th>Imports</th>
<th>%</th>
<th>Year</th>
<th>Cons. (app.)</th>
<th>Imports</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>79.198</td>
<td>5.332</td>
<td>7</td>
<td>2006</td>
<td>126.810</td>
<td>32.141</td>
<td>27</td>
</tr>
<tr>
<td>1995</td>
<td>86.612</td>
<td>11.473</td>
<td>11</td>
<td>2008</td>
<td>96.800</td>
<td>10.744</td>
<td>11</td>
</tr>
<tr>
<td>1996</td>
<td>89.400</td>
<td>10.700</td>
<td>12</td>
<td>2009</td>
<td>71.500</td>
<td>6.211</td>
<td>8</td>
</tr>
<tr>
<td>2001</td>
<td>112.710</td>
<td>23.591</td>
<td>21</td>
<td>2014</td>
<td>89.200</td>
<td>7.584</td>
<td>8</td>
</tr>
<tr>
<td>2002</td>
<td>110.020</td>
<td>22.198</td>
<td>20</td>
<td>2015</td>
<td>92.100</td>
<td>10.367</td>
<td>11</td>
</tr>
<tr>
<td>2003</td>
<td>114.100</td>
<td>21.015</td>
<td>20</td>
<td>2016</td>
<td>94.200</td>
<td>11.742</td>
<td>13</td>
</tr>
<tr>
<td>2004</td>
<td>121.980</td>
<td>25.396</td>
<td>21</td>
<td>2017</td>
<td>96.800</td>
<td>12.000</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: USGS
Cement surplus – shortage situation in the US 2016
(OPC, white and blended cements)

Exports to Canada

South Central
-2,952,425

Great Lakes
-5,081,156

North Central
965,579

Atlantic North
-2,967,210

Atlantic South
-241,757

Pacific North
-1,671,618

Pacific South
-1,227,358

Region
Shortage/surplus

Interregional cement flow

Imports from Canada and Mexico

Seaborne imports

Exports

Cement plant

Notes:
• States with a higher cement production than cement consumption are shown in shades from light grey to black.
• States with a higher cement consumption than cement production are shown in shades from light blue to dark blue.
• Figures are based on USGS consumption and production figures. Where production figures were given per group of states, the production figure per state has been estimated by Cement Distribution Consultants.
• Seaborne import shipments of less than 500 tons have not been taken into account.

Total seaborne imports 8,521,056 tons (excl. Canada & Mexico)
Total seaborne imports 9,719,189 (incl. Canada & Mexico)
The current US cement import situation

Total 2016 US seaborne imports 9.6 MT

- South Korea: 0.76 MT
- China: 1.71 MT
- Taiwan: 0.34 MT
- Canada: 1.01 MT
- Mexico: 0.13 MT
- France: 0.13 MT
- Spain: 0.67 MT
- Scandinavian countries: 0.47 MT
- Bulgaria: 0.16 MT
- Greece: 2.16 MT
- Turkey: 1.51 MT

Total Asia 2.81 MT  Total Canada + Mexico 1.14 MT  Total Europe 5.08 MT  Total small volumes 0.67 MT (incl. South America.)
Are US terminals able to handle bigger vessels

- Terminals suitable for Supramax vessels (storage capacity >= 70,000 metric tons, draft >= 40)

**Actual cargo size used in 2016 / 2017**

<table>
<thead>
<tr>
<th>Terminal Type</th>
<th>Capacity Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminals with ship unloading system</td>
<td>Total 72</td>
</tr>
<tr>
<td>Terminals without ship unloading system</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
</tr>
</tbody>
</table>

- From Asia: 42,000 – 48,000
- From Europe: 25,000 – 40,000
- 10,000 (clinker) 25,000 (cement)
The current US cement import situation

Total seaborne import volume 2016 is 9.6 million tons

Of which
- 20% in cargo sizes <20,000 tons
- 45% in cargos size between 20,000 and 40,000 tons
- 35% in cargo sizes > 40,000 tons

The largest cargo size was 52,000 tons

The current combination of low F.O.B. prices for exported cement and low shipping costs allows for this far from optimal shipping situation. This likely will continue for the next few years. But shipping prices are already improving and there will be times coming that the transport cost difference between Handysize, Handymax, Supramax and Ultramax vessels will be decisive for the viability of US cement imports.
The economical mechanisms behind cement trade
Economical mechanisms

Production cost per ton
(Energy, labour, maintenance, raw materials)

Assumptions:
- Plant capacity 1.5 mtpa
- Ex works price domestic € 85
- Ex works price exports € 40

Example 1
Domestic sales 1.050.000 tons (70%)
Export sales 0

Income domestic sales 89.250.000
Income export sales 0
Total income 89.250.000
Production costs (@70%) 33.316.500
Contribution to financial costs and profit 55.933.500

Example 2
Domestic sales 1.050.000 tons (70%)
Export sales 300.000 tons (20%)
Total sales 1.350.000 tons (90%)

Income domestic sales 89.250.000
Income export sales 12.000.000
Total income 101.250.000
Production costs (@90%) 38.353.500
Contribution to financial costs and profit 62.896.500

Example only!
Maximizing plant utilisation
Economical mechanisms

- Cement sold in other markets than the local one has to have a lower Ex Works price to allow for the higher cost of transportation.

- The margin on the additional cement sold into other markets provides and additional contribution which largely goes directly to the bottom line.

- The key benefit of the additional cement sold into other markets is the higher utilisation of the plant resulting in a substantial lower production cost per ton over the entire production of the plant!
### The effect of ownership on overall trade margins (Example only!!)

<table>
<thead>
<tr>
<th>Plant ownership 100%</th>
<th>Terminal ownership 100%</th>
<th>Plant ownership 100%</th>
<th>Terminal ownership 50%</th>
<th>Plant ownership 100%</th>
<th>Terminal ownership 0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same (multinational) owner owns 100% of export plant and 100% of import terminal</td>
<td>Same (multinational) owner owns 100% of export plant and 50% of import terminal</td>
<td>Export plant owner has no ownership in import terminal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved total margin per ton is $B + C + F (20 + 6 + 50 = US$76)</td>
<td>Achieved total margin per ton is $B + C + 0.5F (20 + 6 + 25 = US$51)</td>
<td>Achieved total margin per ton is $B + C (20 + 6 + 50 = US$26)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Export plant</th>
<th>Shipping</th>
<th>Terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td><strong>B</strong></td>
<td><strong>C</strong></td>
</tr>
<tr>
<td>Pure production and loading cost</td>
<td>Improved prod. cost by exports</td>
<td>Marging (contribution) towards capital cost and profit</td>
</tr>
<tr>
<td><strong>$36</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>D</strong></th>
<th><strong>E</strong></th>
<th><strong>F</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping cost</td>
<td>Pure terminal operating cost</td>
<td>Marging Contribution towards capital cost and profit</td>
</tr>
<tr>
<td><strong>F.O.B</strong></td>
<td><strong>CIF</strong></td>
<td><strong>Ex. terminal</strong></td>
</tr>
<tr>
<td><strong>$42</strong></td>
<td><strong>$60</strong></td>
<td><strong>$70</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>$120</strong></td>
</tr>
</tbody>
</table>

All figures assumed and indicative only and in US$/metric ton

B is the improved production cost over the full production of the export plant. When the production of a plant increases with 25% because of exports and production, cost savings are $5 m/ton. As a result the contribution to the margin of the lower production cost per exported ton is $20.
A single plant supplying a single local market at first glance seems to be in the most profitable situation.

However, this is only the case when this plant can reach (near) full utilisation rates. When company A can only sell 70% of its capacity in its home market and has no means to reach other markets it is far worse off than company B or C that might be able to sell 70% in their home markets plus 20% to other markets, even at a reduced ex works price.
The effect of ship size and shipping distance on shipping cost and achievable F.O.B. price

Asian supplier 1
FOB $36

Asian supplier 2
FOB $42

US Westcoast terminal
CIF cost $60

US Eastcoast terminal
CIF cost $60

European supplier 1
FOB $42

European supplier 2
FOB $46

50,000 Dwt
Shipping cost $18

30,000 Dwt
Shipping cost $14

50,000 Dwt
Shipping cost $26

FOB $34

FOB $42

All figures assumed and indicative only and in US$/metric ton
## Reducing shipping cost

### Shipping cost structure

1. Cost of vessel, crew and maintenance per day

2. Duration of trip
   - Loading time
   - Sailing time
   - Waiting time
   - Unloading time
   - Repositioning time

3. Fuel costs
   - HFO during sailing
   - MGO during port or waiting days

4. Route effects
   - General shipping situation
   - Availability of return cargo

### Methods to reduce shipping cost

A. The larger the vessel the lower the transportation cost per ton.

B. Exporters can reduce shipping cost by increasing port draft, increasing buffer storage and increasing size and capacity of loading equipment.

C. Importers can reduce shipping cost by increasing port draft, increasing buffer storage and increasing size and capacity of unloading equipment.

D. Shipping cost can be reduced (or fixed for a longer period) by buying ton * miles forward for a certain route, by investing in the shipping industry and by arranging guaranteed return cargo.
The large importance of networks

Market areas and cement flows in over supply situation.

Market areas and cement flows in a shortage situation.

The ownership of cement terminals matters a lot. Cement terminals work best in a network with cement plants and allow plants to have maximum possible utilisation in both surplus and shortage periods and to keep market share.
Vertical integration of the cement industry into the ready mix concrete products, sand and aggregate industries has the effect that for cement supply the market share and pricing become more stable.

This allows for long-term investments in distribution facilities and transport methods and with that a lower distribution cost per ton.

However, vertical integration means that independent ready mix and concrete products companies have to buy their cement from their competitors and gives a strong incentive for them to realize their own cement supply by imports.
A wave of new terminals
A wave of new terminals

1) The US is back to a cement shortage situation and seaborne imports are required again. These imports are forecasted to double in the next three years and grow to about 30 mtpa in the coming 6-8 years.

2) With the current low F.O.B. prices for cement globally and still very low shipping costs, importing cement in the US is highly attractive. US independent ready-mix companies, trading companies and foreign cement producers are interested to participate.

3) As long as import volumes are kept within the “shortage volume” there is little risk for anti-dumping suits which makes imports possible for non US producers.

4) The US will need to import substantial volumes of cementitious materials. More terminals need to be created with multiple material capability.

What are the reasons for all this new terminal activity?
A wave of new terminals

5) The expected growth in cost difference between shipping in Handymax and Supramax / Ultramax vessels means a growing incentive to expand current terminal facilities.

6) The current high margin between imported cement costs and local ex. works prices makes less than optimal import methods (such as in big bags) possible. As F.O.B. cement prices for cement meeting US requirements as well as shipping costs are expected to rise, such import operations will have to change to bulk import terminals over time.

What are the reasons for all this new terminal activity?
### Terminal projects 2014 - 2018

**2014 - 2018 Beton Provincial Expansion**
- McInnis, Montreal New terminal
- McInnis, Toronto New terminal
- Ozinga New terminal

**2015 - 2017 Riverside Construction Materials Expansion**
- Riverside Construction Materials Expansion

**2017 - 2018 McInnis, New terminal**
- McInnis, Toronto New terminal
- McInnis, Montreal New terminal
- McInnis, New terminal

**2018 - 2020 McInnis, New terminal**
- McInnis, New terminal
- McInnis, Toronto New terminal
- McInnis, Montreal New terminal
- McInnis, New terminal

**2020 Cemex Terminal closes**
- New terminal to be built
- Owner not yet decided

**2020 Mitsubishi Expansion**
- Mitsubishi Expansion

**2020 Texan Cement Big bag import operation**
- Texan Cement Big bag import operation

**2020 Mitsubishi Expansion**
- Mitsubishi Expansion

**2020 Cemex Terminal closes**
- New terminal to be built
- Owner not yet decided

**2018 Caribbean Cement Terminal**
- Big bag import facility
- Cement plant
- Cement terminal with ship uploader
- Cement terminal without ship unloader
- Big bag import facility
The relationship between US cement plant and import terminal ownership
Seaborne cement terminal ownership

- Cement plant
- Cement terminal with ship uploader
- Cement terminal without ship unloader
- Big bag import facility
## Ownership of seaborne cement terminals

<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>Owner</th>
<th>Type</th>
<th>Remarks</th>
<th>No.</th>
<th>Location</th>
<th>Owner</th>
<th>Type</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anchorage</td>
<td>CPC (Taiheiyo)</td>
<td>Active</td>
<td></td>
<td>14</td>
<td>Redwood City</td>
<td>Cemex</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Everett</td>
<td>Lehigh (Heidelberg)</td>
<td>Active</td>
<td></td>
<td>15</td>
<td>Los Angeles</td>
<td>CPC (Taiheiyo, Lehigh)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Seattle</td>
<td>LafargeHolcim</td>
<td>Active</td>
<td></td>
<td>16</td>
<td>Long Beach</td>
<td>Cemex</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Seattle</td>
<td>Lehigh (Heidelberg)</td>
<td>Active,</td>
<td>Cement supply from LH Canada</td>
<td>17</td>
<td>Long Beach</td>
<td>Mitsubishi</td>
<td>Active</td>
<td>Not active, preparing for expansions</td>
</tr>
<tr>
<td>5</td>
<td>Seattle</td>
<td>CPC (Taiheiyo)</td>
<td>Active</td>
<td></td>
<td>18</td>
<td>San Diego</td>
<td>Cemex</td>
<td>Active</td>
<td>Received some white cement shipments from Mexico</td>
</tr>
<tr>
<td>6</td>
<td>Vancouver</td>
<td>LafargeHolcim</td>
<td>Active</td>
<td>Cement supply from LH Canada</td>
<td>19</td>
<td>Barbers Point</td>
<td>Hawaiian (Ind)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Portland</td>
<td>Ash Grove (CRH)</td>
<td>Active</td>
<td></td>
<td>20</td>
<td>Brownsville</td>
<td>Texan Cement (Ind)</td>
<td>Active</td>
<td>started 2017</td>
</tr>
<tr>
<td>8</td>
<td>Portland</td>
<td>CPC (Taiheiyo)</td>
<td>Active</td>
<td></td>
<td>21</td>
<td>Corpus Christi</td>
<td>Lehigh (Heidelberg)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Sacramento</td>
<td>Two Rivers (A&amp;A, Lehigh)</td>
<td>Active</td>
<td></td>
<td>22</td>
<td>Houston</td>
<td>Sesco (Ind)</td>
<td>Active,</td>
<td>white + grey cement</td>
</tr>
<tr>
<td>10</td>
<td>Sacramento</td>
<td>Cemex</td>
<td>Active</td>
<td></td>
<td>23</td>
<td>Houston</td>
<td>Royal White (Ind)</td>
<td>Active,</td>
<td>white cement</td>
</tr>
<tr>
<td>11</td>
<td>Stockton</td>
<td>CPC (Taiheiyo)</td>
<td>Active</td>
<td></td>
<td>24</td>
<td>Houston</td>
<td>Houston Cem. East (CRH, Lehigh, Buzzi)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Stockton</td>
<td>Sunshine (Lehigh)</td>
<td>Closed</td>
<td></td>
<td>25</td>
<td>Houston</td>
<td>Houston Cem. West (CRH, Lehigh, Buzzi)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Stockton</td>
<td>Lehigh (Heidelberg)</td>
<td>Active (GGBFS)</td>
<td></td>
<td>26</td>
<td>Houston</td>
<td>Cemex</td>
<td>Active</td>
<td></td>
</tr>
</tbody>
</table>
## Ownership of Seaborne Cement Terminals

<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>Owner</th>
<th>Type</th>
<th>Remarks</th>
<th>No.</th>
<th>Location</th>
<th>Owner</th>
<th>Type</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Houston, TX</td>
<td>Argos</td>
<td>▲</td>
<td>Not active</td>
<td>44</td>
<td>Port Everglades FL</td>
<td>Lehigh (Heidelberg)</td>
<td>▲</td>
<td>Active</td>
</tr>
<tr>
<td>28</td>
<td>New Orleans LA</td>
<td>Buzzi</td>
<td>▲</td>
<td>Used for domestic distr.</td>
<td>45</td>
<td>Port Everglades FL</td>
<td>Cemex</td>
<td>▲</td>
<td>Active, white cement shipments from Mexico</td>
</tr>
<tr>
<td>29</td>
<td>Reserve LA</td>
<td>LafargeHolcim</td>
<td>▲</td>
<td>Used for domestic distr.</td>
<td>46</td>
<td>West Palm Beach FL</td>
<td>Cemex</td>
<td>▲</td>
<td>Not active</td>
</tr>
<tr>
<td>30</td>
<td>Mobile AL</td>
<td>Argos</td>
<td>▲</td>
<td>Active</td>
<td>47</td>
<td>Ft Pierce FL</td>
<td>Florida Sun (American)</td>
<td>▲</td>
<td>Not active</td>
</tr>
<tr>
<td>31</td>
<td>Pensacola FL</td>
<td>Cemex</td>
<td>▲</td>
<td>Not active</td>
<td>48</td>
<td>Port Canaveral FL</td>
<td>Cemex</td>
<td>▲</td>
<td>Not active</td>
</tr>
<tr>
<td>32</td>
<td>Tampa FL</td>
<td>Argos</td>
<td>▲</td>
<td>Not active, domestic supply by trucks</td>
<td>49</td>
<td>Port Canaveral FL</td>
<td>Lehigh (Heidelberg)</td>
<td>▲</td>
<td>Not active</td>
</tr>
<tr>
<td>33</td>
<td>Tampa FL</td>
<td>Titan</td>
<td>▲</td>
<td>Active</td>
<td>50</td>
<td>Jacksonville FL</td>
<td>Lehigh (Heidelberg)</td>
<td>★</td>
<td>Not active (receives cement by road)</td>
</tr>
<tr>
<td>34</td>
<td>Tampa FL</td>
<td>Cemex</td>
<td>★</td>
<td>Active</td>
<td>51</td>
<td>Jacksonville FL</td>
<td>LafargeHolcim</td>
<td>★</td>
<td>Not active</td>
</tr>
<tr>
<td>35</td>
<td>Tampa FL</td>
<td>Cementir</td>
<td>▲</td>
<td>Active, white cement</td>
<td>52</td>
<td>Savannah GA</td>
<td>Argos</td>
<td>★</td>
<td>Not active</td>
</tr>
<tr>
<td>36</td>
<td>Tampa FL</td>
<td>Unknown</td>
<td>?</td>
<td>Under construction</td>
<td>53</td>
<td>Savannah GA</td>
<td>Southeast (Ind)</td>
<td>★</td>
<td>Active, started 2017</td>
</tr>
<tr>
<td>37</td>
<td>Port Manatee FL</td>
<td>Eastern (American)</td>
<td>▲</td>
<td>Not active</td>
<td>54</td>
<td>Charleston SC</td>
<td>LafargeHolcim</td>
<td>▲</td>
<td>Not active</td>
</tr>
<tr>
<td>38</td>
<td>Gulf Area</td>
<td>Independent</td>
<td>▲</td>
<td>Expected 2018-2019</td>
<td>55</td>
<td>Georgetown SC</td>
<td>LafargeHolcim</td>
<td>★</td>
<td>Domestic use</td>
</tr>
<tr>
<td>39</td>
<td>Gulf Area</td>
<td>Independent</td>
<td>▲</td>
<td>Expected 2018-2019</td>
<td>56</td>
<td>Wilmington NC</td>
<td>Argos</td>
<td>★</td>
<td>Not active</td>
</tr>
<tr>
<td>40</td>
<td>Gulf Area</td>
<td>Independent</td>
<td>▲</td>
<td>Expected 2018-2019</td>
<td>57</td>
<td>Wilmington NC</td>
<td>Cemex</td>
<td>▲</td>
<td>Not active</td>
</tr>
<tr>
<td>41</td>
<td>Gulf Area</td>
<td>Independent</td>
<td>▲</td>
<td>Expected 2018-2019</td>
<td>58</td>
<td>Chesapeake VA</td>
<td>LafargeHolcim</td>
<td>★</td>
<td>Domestic use</td>
</tr>
<tr>
<td>42</td>
<td>San Juan PR</td>
<td>Argos</td>
<td>▲</td>
<td>Active</td>
<td>59</td>
<td>Chesapeake VA</td>
<td>Titan</td>
<td>▲</td>
<td>Active</td>
</tr>
<tr>
<td>43</td>
<td>San Juan PR</td>
<td>Cemex</td>
<td>▲</td>
<td>Not active</td>
<td>60</td>
<td>Norfolk VA</td>
<td>Lehigh (Heidelberg)</td>
<td>★</td>
<td>Domestic use</td>
</tr>
</tbody>
</table>
### Ownership of seaborne cement terminals

<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>Owner</th>
<th>Type</th>
<th>Remarks</th>
<th>No.</th>
<th>Location</th>
<th>Owner</th>
<th>Type</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>61</td>
<td>Newport News VA</td>
<td>Pier X (Lehigh)</td>
<td>Active</td>
<td></td>
<td>73</td>
<td>New Haven CT</td>
<td>LafargeHolcim</td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Baltimore Md</td>
<td>LafargeHolcim 1</td>
<td>Domestic</td>
<td></td>
<td>74</td>
<td>Providence RI</td>
<td>LafargeHolcim</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Baltimore MD</td>
<td>LafargeHolcim 2</td>
<td>Domestic</td>
<td></td>
<td>75</td>
<td>Providence RI</td>
<td>Lehigh</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>Baltimore MD</td>
<td>Lehigh</td>
<td>Domestic</td>
<td></td>
<td>76</td>
<td>Providence RI</td>
<td>McInnis (Ind)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>Bristol PA</td>
<td>Riverside (Ind)</td>
<td>Active</td>
<td></td>
<td>77</td>
<td>Boston MA</td>
<td>LafargeHolcim</td>
<td>Domestic + Canada</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>Newark NJ</td>
<td>Titan</td>
<td>Active</td>
<td></td>
<td>78</td>
<td>Boston MA</td>
<td>Lehigh</td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>Brooklyn NY</td>
<td>LafargeHolcim</td>
<td>Domestic</td>
<td></td>
<td>79</td>
<td>Boston MA</td>
<td>Dragon</td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>Brooklyn NY</td>
<td>Lehigh</td>
<td>Active</td>
<td></td>
<td>80</td>
<td>Newington NH</td>
<td>Dragon</td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>Bayonne NJ</td>
<td>LafargeHolcim</td>
<td>Domestic</td>
<td></td>
<td>81</td>
<td>Quebec QC</td>
<td>Beton Provincial (Ind)</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Brooklyn NY</td>
<td>NYC (Ind)</td>
<td>Domestic</td>
<td></td>
<td>82</td>
<td>St. Catharine QC</td>
<td>McInnis (Ind)</td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>Bronx NY</td>
<td>McInnis (Ind)</td>
<td>Active</td>
<td>Under construction</td>
<td>83</td>
<td>Oshawa ON</td>
<td>McInnis (Ind)</td>
<td>Domestic</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Queens NY</td>
<td>LafargeHolcim</td>
<td>Domestic</td>
<td></td>
<td>84</td>
<td>Chicago IL</td>
<td>Chicago (Ind)</td>
<td>Active (via New Orleans, slag)</td>
<td></td>
</tr>
</tbody>
</table>

Note: (Ind) = Independent = No cement production facility in US
The very large importance of networks

Market areas and cement flows in over supply situation.

Market areas and cement flows in a shortage situation.

The ownership of cement terminals matters a lot. Cement terminals work best in a network with cement plants and allow plants to have maximum possible utilisation in both surplus and shortage periods and to keep market share.
Cement plant and sea terminal ownership

- LafargeHolcim
- Lehigh (Heidelberg)
- Cemex
- CRH (incl. Ash Grove)
- Argos
- Buzzi Unicem
- Titan
- CPC (Taiheiyo)
- Mitsubishi
- American
- Giant
- McInnis
- Independents
- cement terminals

Cement plant
- Cement terminal with ship uploader
- Cement terminal without ship unloader
- Big bag import facility
Cement producers with sea terminals

LafargeHolcim has an extensive seaborne distribution and import terminal network consisting of a distribution system in the Northwest bringing in cement from Canada, a distribution system in the Northeast for slag and cement and import terminals on the East Coast and Mississippi. It also has distribution systems on the Great Lakes and the Big Rivers. The seaborne import figure of 2016 was a bit inflated as it included 0.75 mt clinker for the Ravenna plant during its modification.

Key statistics

- Seaborne imports 1.7 mt (2016)
  - of which 0.55 mt from Canada
- Sea terminals with a ship unloader (imports) 3
- Sea terminals without a ship unloader
  - importing 3
  - domestic distribution 9
- Great Lakes terminals 17
- Big River terminals 98
- US cement plants 13
Cement producers with sea terminals

Lehigh has also a substantial seaborne distribution and import facility network consisting of a distribution network in the northwest importing cement from Canada, a slag and cement domestic distribution system in the Northeast and an impressive number of import terminals on all coasts. Lehigh also has distribution networks on the Great Lakes and the Big Rivers.

Key statistics

- Seaborne imports 1.7 mt (2016)
  - of which 0.5 mt from Canada
- Sea terminals with a ship unloader (imports) 12
- Sea terminals without a ship unloader
  - importing 2
  - domestic distribution 4
- Great Lakes terminals 5
- Big River terminals 30
- US cement plants 13

[Nevada] [Colorado] [Wyoming] [Washington] [New Mexico] [NJ] [RI] [Maine] [Louisiana] [Georgia] [Tennessee] [Missouri] [Iowa] [Wisconsin] [Arkansas] [Minnesota] [Kansas] [Nebraska] [Oklahoma] [South Dakota] [North Dakota] [Hawaii] [Alaska] [Puerto Rico] [Montana] [Texas] [California] [Quebec] [Canada]
Cemex has a large number of seaborne import terminals focussed on the Southwest, Southeast and Gulf coasts. Quite a few of these terminals are still inactive. Cemex also has a distribution network on the Big Rivers.

Key statistics

- Seaborne imports: 0.6 mt (2016)
- Sea terminals with a ship unloader (imports): 11
- Sea terminals without a ship unloader:
  - importing: 1
  - domestic distribution: 0
- Great Lakes terminals: 0
- Big River terminals: 33
- US cement plants: 10
CRH (incl. Ash Grove) has four large seaborne import terminals that support its cement plants very well. It also has a small distribution network on the Great Lakes to supply its ready mix assets in the US Great Lakes region. One of the Great Lakes terminals has been used for a trial with seaborne imports in 2016. The recently acquired cement plant in Florida still stands very much alone.

Key statistics

- Seaborne imports 1,1 mt (2016)
- Sea terminals with a ship unloader (imports) 4
- Sea terminals without a ship unloader
  - importing 0
  - domestic distribution 0
- Great Lakes terminals 2
- Big River terminals 0
- US cement plants 10
Argos has a network focussed on the Gulf and Southeast coasts. It has six import terminals going back to the days that it did not have cement plants in the US. These terminals are now mostly inactive.

Key statistics

- **Seaborne imports**: 0.75 mt (2016)
- **Sea terminals with a ship unloader (imports)**: 4
- **Sea terminals without a ship unloader**:
  - importing: 2
  - domestic distribution: 0
- **Great Lakes terminals**: 0
- **Big River terminals**: 0
- **US cement plants**: 4
Titan has a two cement plants and three large import terminals on the US east coast between New York and Florida. Although this is a small network Titan is within the top five cement importers.

Key statistics

- Seaborne imports: 0.9 mt (2016)
- Sea terminals with a ship unloader (imports): 3
- Sea terminals without a ship unloader:
  - importing: 0
  - domestic distribution: 0
- Great Lakes terminals: 0
- Big River terminals: 0
- US cement plants: 2
Buzzi Unicem has an import terminal in New Orleans and a share in the two terminals of Houston cement. It has a distribution network on the Big Rivers.

**Key statistics**

- Sea terminals with a ship unloader (imports) 3
- Sea terminals with a ship unloader (domestic distribution) 0
- Great Lakes terminals 0
- Big River terminals 30
- US cement plants 7

Seaborne imports 0.3 mt (2016)
Cement producers with sea terminals

CPC (Taiheiyo) has five import terminals all along the Westcoast and 2 cement plants in California. The terminals support its plants and ready-mix assets very well.

Key statistics
- Seaborne imports 1,25 mt (2016)
- Sea terminals with a ship unloader (imports) 5
- Sea terminals without a ship unloader
  - importing 0
  - domestic distribution 0
- Great Lakes terminals 0
- Big River terminals 0
- US cement plants 2
Mitsubishi has a large cement import terminal and one cement plant in California. The terminal is still not active but a substantial upgrade of the terminal has been planned.
Cement producers with sea terminals

American has one cement plant and two import terminals in Florida. Both terminals are still not active.

Key statistics

- Seaborne imports 0 mt (2016)
- Sea terminals with a ship unloader (imports) 1
- Sea terminals without a ship unloader
  - importing 1
  - domestic distribution 0
- Great Lakes terminals 0
- Big River terminals 0
- US cement plants 1
McInnis has one operating import terminal in the US and one under construction supplied from its cement plant on the Canadian East coast. It has two terminals in Canada.

**Key statistics**

- **Seaborne imports**: 0 mt (2016)
  - of which 0 mt from Canada
- **Sea terminals with a ship unloader (imports)**: 2
- **Sea terminals without a ship unloader**
  - importing: 0
  - domestic distribution: 1
- **Great Lakes terminals**: 1
- **Big River terminals**: 0
- **US cement plants**: 0
Cement producers with sea terminals

Giant has two terminals for domestic sea distribution and three plants but lacks seaborne import capability.

Key statistics

- Seaborne imports: 0 mt (2016)
- Sea terminals with a ship unloader (imports): 0
- Sea terminals without a ship unloader:
  - Importing: 0
  - Domestic distribution: 2
- Great Lakes terminals: 0
- Big River terminals: 0
- US cement plants: 3
1. Hawaiian Cement has one import terminal and four distribution terminals and is the only importer in Hawaii.
2. Two Rivers terminal in Sacramento is 50% owned by A&A and 50% by Lehigh.
3. Riverside Construction Materials (owned by the Silvi Group) owns the largest terminal in the US (170,000 tons of storage) and can handle two different types of cement and a cementitious material.
4. NYC (Quadrozzi) has a small floating terminal in Brooklyn, NYC that receives its cement from domestic sources.
5. Beton Provincial has a very large terminals in Quebec which receives several types of cement as well as cementitious material. The terminal has its own blending plant.
6. Chicago Cement (Ozinga) has a large river terminal in Chicago. It imports slag in large bulkcarriers that is transhipped in barges in the new Orleans area.
7. There are four big bag import operations with the potential to upgrade to bulk import terminals.
8. There are four new independent terminals under consideration, mainly in the Gulf area.

Seaborne imports 1,15 mt (2016)
Cement producers without sea terminals

US cement producers without terminals for seaborne cement

1. Continental has two cement plants on the Big Rivers and a corresponding terminal network. It has recently imported cement by brining a large bulk carrier to the new Orleans area and transhipping the material into barges.

2. St. Mary’s has an extensive network on the Great Lakes and can import more cement from Canada when needed.

3. CCC has several plants in Southcentral US with a rail network to distribute it. It imports cement by rail from its plants in Mexico and can expand on that.

4. Eagle has a substantial number of cement plants in the Midwest plus a small terminal network (for slag) on the Big Rivers. Given its size and location Eagle should be interested in import capability on the Big Rivers and / or the Westcoast.

5. Martin Marietta, National, Drake Armstrong, Capital, Royal and Summer have standalone cement plants. Some of these are in a location were the addition of seaborne import capability might be of interest.
Final considerations
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Will all this independent terminal activity have an impact on US cement production and/or the market share of US cement producers?

1) It is highly unlikely that US cement production will be affected as current and new independents look sufficiently disciplined to operate within the ”shortage volume” that needs to be imported anyway.

2) The new independent terminal activity will increase the market share area of the independents somewhat on a short-term basis but this is only on a percentage basis. With imports growing as currently forecasted absolute volumes will grow for everybody. On a long-term basis it is good to remember that of the 46 import terminals with a ship unloader that existed in 2014, 19 (41%) had started as an independent facility but only “1,5” independent facilities had remained on the US mainland. It can be expected that at least a part of the new terminals will be absorbed into US producer groups (in line with existing market share).
Will all this independent terminal activity have an impact on the shipping of cement to the US?

1) With US cement consumption growing as forecasted, US seaborne imports of cement are set to double in the next 3 years and might be back to pre-crisis levels in 6-8 years.

2) There is a wide range in ship sizes that the new and expanded terminals are based on. But about half of these projects are based on Supramax/Ultramax vessels which is a significant improvement compared to the capabilities of the existing facilities.

3) There will be a significant growth in imports of cementitious materials. The new facilities for a large part will be able to handle multiple products.

4) The growing cost difference between shipping by Handymax and Supramax/Ultramax vessels will stimulate expansion of existing terminal facilities in the coming years.