PCA Portland Cement Association

Market Intelligence

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PCA Market Intelligence Special Update – U.S. Cement Manufacturing Capacity

The following is a Portland Cement Association (PCA) Market Intelligence analysis of potential impacts from increased demand likely to result from a revitalization of U.S. infrastructure being contemplated by the Trump Administration and 115th Congress.

Growth in cement consumption is likely to accelerate if Trump Administration economic initiatives materialize.

The existing economic fundamentals characterizing the U.S. economy are relatively sound, as are those facing the construction and cement industries. Even without added stimulus to the economy, construction activity and cement consumption are likely to record sustained gains. The prospect of tax reform and an aggressive infrastructure spending program will add to the near-term economic growth and cement consumption.

While uncertainty remains regarding the details of Trump stimulus programs, PCA conducted a study that evaluates various policy scenarios that may unfold. In each scenario, added fiscal stimulus (tax reform and increased infrastructure spending) adds new layers of economic demand to an already sound economy and results in rising inflationary expectations, Federal Reserve policy reactions and rising interest rates. These market and policy reactions are likely to partially offset some demand for cement arising from infrastructure initiatives.

Taking into consideration the positives of infrastructure spending and the potential offsets of higher interest rates, PCA's baseline scenario suggests cement consumption reaches 112.7 million metric tons in 2021. Lacking any market or policy reaction by the Federal Reserve, even the most optimistic tax reform and most aggressive infrastructure spending initiatives suggest that cement consumption could reach as high as 128 million metric tons by 2021.

The U.S. cement industry has more than enough supply potential to feed even the most optimistic infrastructure spending program.

The portland cement industry in the U.S. is comprised of more than 25 producers operating more than 140 kilns with an estimated domestic clinker capacity of approximately 100 million metric tons. Gypsum, slag, fly ash and limestone are mixed with clinker to form portland cement. These additions to clinker can add as much as 10 percent to the clinker mix. Including these additions, domestic cement capacity is currently estimated at 108 million metric tons.

Aside from domestic supply, the industry operates roughly 125 import terminals with an import capacity of 45 million metric tons. The ability and willingness to import cement is determined by demand conditions, the value of the dollar, prevailing global shipping rates and the availability of ships to carry cement.

Combining domestic and foreign sources of potential supply, the U.S. is capable of supplying over 150 million metric tons currently. Realistic sustained potential maximum operating rates are generally believed to be in the neighborhood of 90 percent utilization. This implies that the current maximum cement supply is approximately 135 million metric tons.

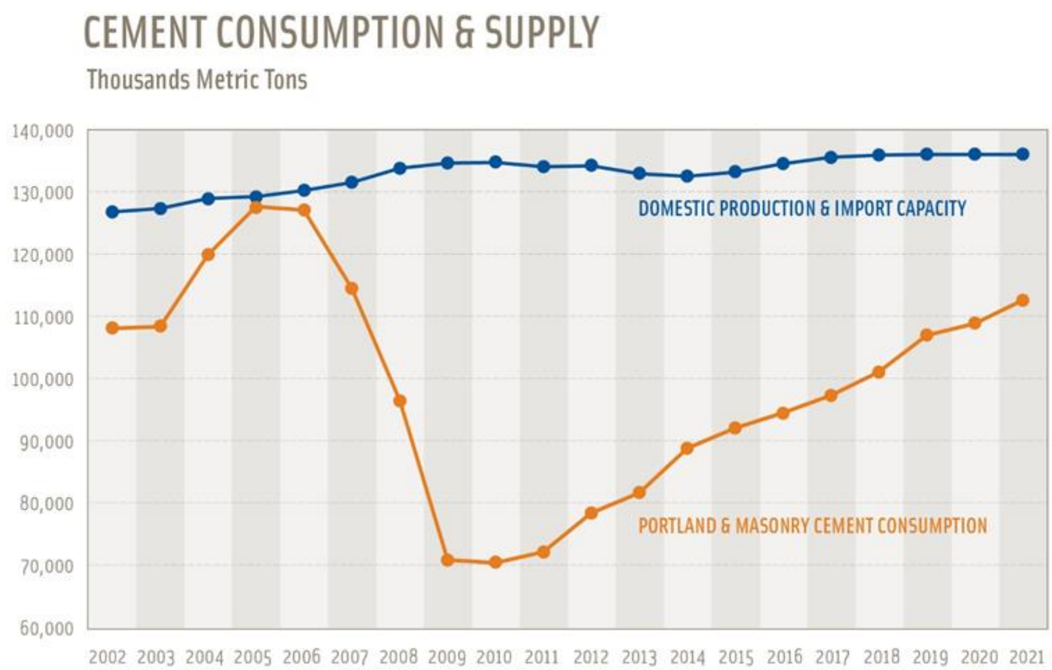
Cement volumes have increased slowly during six consecutive years of post-recession growth.

Prior to the recession, in 2005, the U.S. consumed more than 125 million metric tons of cement. The recession forced a retrenchment in construction and cement consumption – pushing volumes to 69 million metric tons, a 56 million metric ton decline or nearly a 45 percent contraction at the recession low point in 2009.

The recovery in cement consumption has reflected the relatively tepid recovery in the economy as a whole and consumption in 2016 is estimated at 94.5 million metric tons. While this reflects more than a 25 million metric ton increase over recession trough levels, it remains nearly 25 percent below past peak levels.

The U.S. cement industry's capacity utilization rate is improving but remains well below its potential maximum level.

At the nadir of the recession, clinker capacity utilization sank to 62.2 percent. With the recovery, clinker cement capacity utilization has improved and now stands at 78.9 percent.



The utilization rate at import terminals is estimated at 30 percent during 2016. Both measures suggest that some supply slack still characterizes the United States cement industry. The amount of slack, or lack thereof, varies depending upon regional economic activity.