

#### Introduction

This article offers a regional review of the Gulf and North Africa cement industries, based on a recent report published by Cement Business Research (CBR). CBR is a research firm addressing the global cement sector. Its research is combined into regional reports. The markets assessed in this regional report are Algeria, Egypt, Kuwait, Morocco, Oman, Quatar, Suadi Arabia, Tunisia, and the UAE. The report provides data and insights up to 2022.

## The current situation

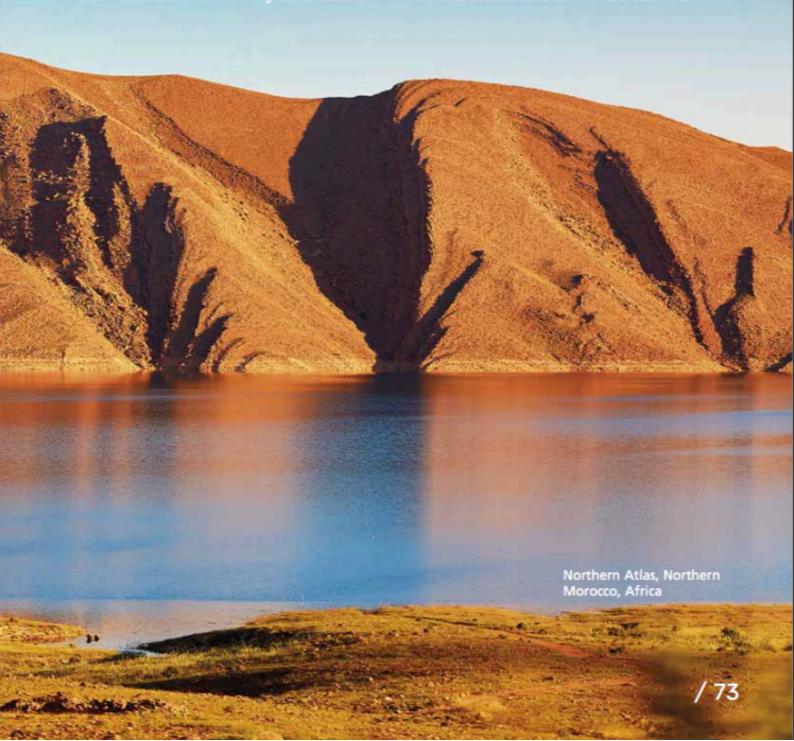
In 2017, the region had a population of 240 million and a cement demand of just under 190 tpy. This yields an average per capita consumption of just under 785 kg (Figure 1).

There is significant variation in the per capita consumption between the countries (Figure 2).

The Gulf states are some of the highest consumers

of cement in the world. Even the North African countries currently show per capita consumption significantly higher than the average of twelve European countries located in the coastal Mediterranean region.

This demand is met by a regional supply of around 275 million t, from 97 integrated and 22 grinding plants. This results in a Domestic Capacity Utilisation Factor (DCUF™) in the region of around 69%. The various markets in the region exhibit varying supply-demand characteristics and significantly different DCUFs. The report has assessed several other issues regarding products, imports/exports, vertical integration, distribution chain, and existing cement plant locations/capacity/ownership for each market, as well as providing a discussion as to whether a market is regional or national. The report found that there are significant differences in the various countries but also some common characteristics.



## The future outlook

By 2022, demand in the region is projected to grow at around 4.5%/year to around 235 million t. At the same time, it is expected that capacity will grow by less than 3%/year to around 315 million t. This includes capacity projections that have a high degree of certainty. This will only slightly shrink the excess capacity in the region from around 85 million t in 2017 to around 80 million t in 2022. However, the DCUF will improve from 69% – 75%, as demand grows at a higher rate than supply. The various markets within the region are projected to grow at different rates of demand, whereas new capacity additions are almost exclusively in the North African countries.

The demand projects were risk adjusted by asking the following questions:

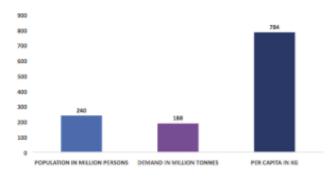


Figure 1. 2017 regional data.

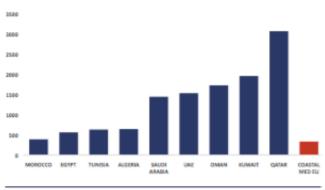


Figure 2. Per capita consumption (kg) (2017).

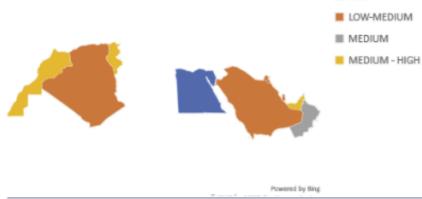


Figure 3. ITAM™.

- Is there a need for such growth?
- Does the country/industry have the capability to deliver such growth?
- Is funding available to support such growth?

This assessment varies from country to country. In some the risk is on the upsid; in others, the risk is on the downside.

Given the overall oversupply situation in the region (and in most individual markets within it), this report also assessed the ability and potential of each market to export its excess capacity. For this purpose, it examined the International Trading Assessment Matrix (ITAM<sup>TM</sup>). This analytical tool also works for markets that need to import (some of the Gulf states) and ascertains whether consumption can, in some cases, be supply restrained. The criteria examined in ITAM are the following:

- Trade supporting legislation.
- Port infrastructure and capacity.
- Existence of coastal plants.
- Cost of haulage.

LOW

Economics of trading.

An overall assessment was made for each country. A graphical representation for the ITAM findings for the region is shown in Figure 3.

Each market has a different level of need to export or import. This is indicated by the DCUF of each market. The DCUF and ITAM combined examine the propensity and ability of each market to export and import; however, we considered that these were not enough to determine whether an industry will actually export (or import). For this reason, the report has also assessed each industry's existing or potential destination markets to see whether exporting their excess capacity is a viable solution.

The report found that in many cases in this region, such opportunities are not available. A notable example here is the switch made by Algeria from a significant importing destination, to a market that is projected to experience excess capacity during the forecast period. As the few deficit markets in

the vicinity disappear or become the subject of fierce competition by traditional exporters, the industries in this region may find exporting their excess capacity a challenging task.

Conversely, in some of the importing markets, the above considerations indicated that there are limitations in increasing consumption due to low ITAM scores and other issues, such as government interference. A case can be made for Kuwait, that potential growth in the market may be supply constrained.



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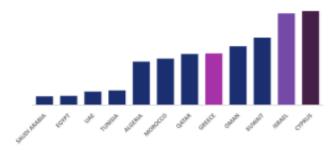


Figure 4. Consolidation Index.

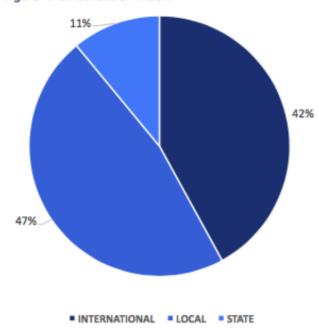


Figure 5. Nature of participants calculated by the ownership of cement capacity.

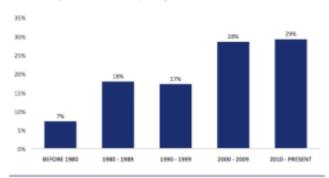


Figure 6. Age of kilns as a percentage of total number of kilns.

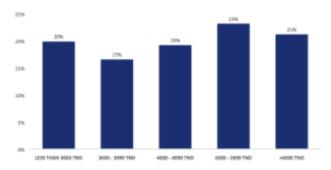


Figure 7. Size of kilns in tdp as a percentage of total.

## **Industry Structure and Dynamics**

Industry Structure and Dynamics (ISD™) examines, in detail, the nature of participants, the consolidation index of the industry, and the cost structure and dynamics of the industry.

The ISD analysis findings were extremely informative and insightful. The nature of participants determines their behaviour in each market, whereas a highly consolidated industry provides useful information regarding future prices. In the industry cost structure and dynamics analysis, the report examined the current situation of the industry in terms of technology, improvement potential, and industry profitability. Some of the regional findings of the ISD are outlined below.

### Industry consolidation

The industry consolidation (Consolidation Index) provides a view of the competitive situation within a market.

Figure 4 shows the Consolidation Indeces (CI) of all markets in the region. For comparison, it also shows the CI of Greece (consolidated) and Israel and Cyprus (highly consolidated). The lower the number, the lower the consolidation in a market. The region is made up of markets of varying levels of consolidation. Saudi Arabia, Egypt, the UAE, and Tunisia are considered highly fragmented markets, whereas Oman and Kuwait are highly consolidated.

#### Nature of participants

The nature of participants also provides some very useful insights into each industry. The report found that the absence of international cement players from a market for example, impedes vertical integration (some of the Gulf states being a good example here). The involvement of the state in the industry (as owners of cement businesses) is another characteristic identified, particularly in North African countries. How would this develop? Would enlightened governments manage to privatise their assets (e.g. the recent announcement of the disposal of 50.52% of Carthage Cement in Tunisia - with more to come?) or will they continue their involvement unabated (the military in Egypt is a good example here).

The current nature of participants in the region is shown in Figure 5.

The report makes a distinction between international producers and local producers, depending on their presence in markets other than their own. Also, a third category was the state-owned players (including the military). It found that the largest part of capacity in the region is in the hands of local players, who often own one plant with no presence in other markets.

#### Industry cost structure and dynamics

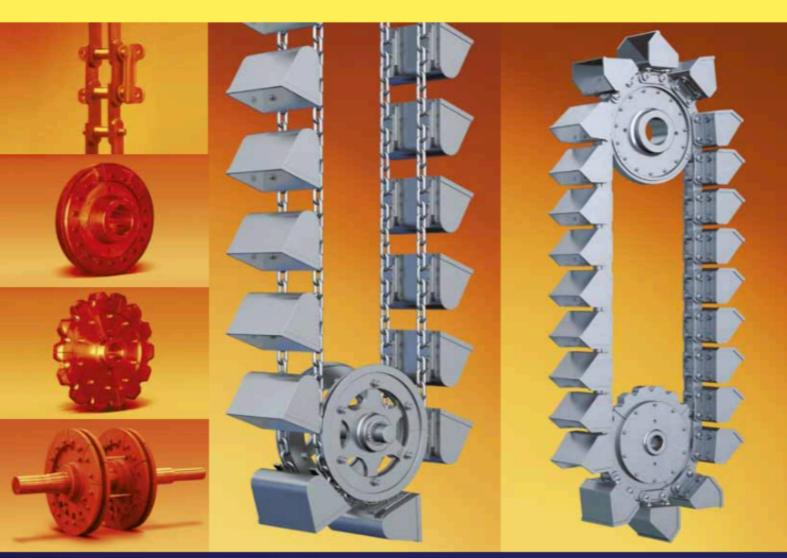
The report provided the following insights on the assets in the region:



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- The time period of kilns, showing the age of the kilns in the region (Figure 6).
- The size of kilns in tpd in the region (Figure 7).

The report found that, in the main, the region boasts new kilns (employing recent technology and kilns of larger size (offering economies of scale).

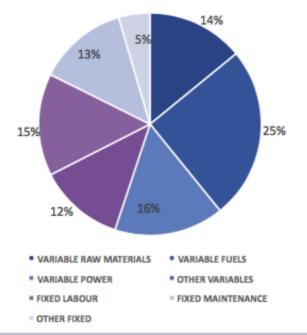


Figure 8. Region's average production cost breakdown.

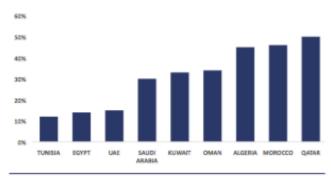


Figure 9. Examination of industry profitability.

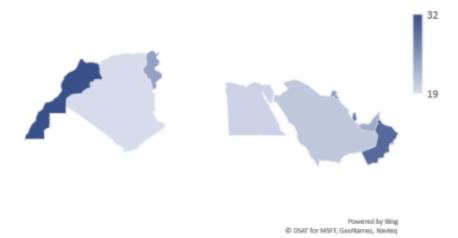


Figure 10. CBRRT™.

The region's production cost breakdown is shown in Figure 8. As can be seen, individual industries have different production cost profiles. For example, in Kuwait where limestone is scarce, the variable cost for raw materials is relatively high. The report estimated that, in Kuwait, the raw materials cost accounts for around 30% of total production, whereas, however the regional average is 14%. In Algeria, where the industry benefits from high levels of energy subsidies, the energy costs account for around 12% of production, against a regional average of around 40%.

The report also found significant variability in industry profitability across the region (Figure 9). This varying profitability depends on the various aspects that drives them: pricing (which the report found correlates with the industry consolidation); the supply-demand balance; and in some cases government intervention. The report also found that costs vary significantly from country to country, particularly energy costs, which are often subject to government subsidies.

#### Conclusion

The report's conclusions are encapsulated in the CBR Ranking Tool (CBRRT<sup>TM</sup>). This synthesises all the data, insights, and analysis findings and offers a quantitative approach to market attractiveness. The assessment was carried out by examining and grading each market on the following six main criteria, as they develop in the next five years:

- Attractive supply and demand balance.
- Attractive industry structure and dynamics.
- Capability to export and import.
- Industry projected profitability.
- License to operate.
- Potential M&A activity.

The report then ranks each market in the region. Figure 10 shows the CBRRT results for the Gulf and North Africa. The CBRRT scores for this region vary from a score of 19 (least attractive) to a score of 32

(most attractive). As a comparison, CBR's recent assessment of European markets found that Belgium has a CBRRT score of 33, France of 35 and the UK, of 37.

#### About the author

Terry Pavlopoulos is the founder and Managing Partner of Cement Business Advisory Ltd (CBA). CBA is a consulting boutique operating solely in the global cement sector. CBA's clients include cement producers and financial institutions worldwide. Pavlopoulos is also a member of the team behind Cement Business Research (CBR), a research and insights provider into the global cement sector.