



BUILDING COST INFORMATION SERVICES MALAYSIA

# MARKET REVIEW ON CEMENT TREND

“Cement is a binder, a substance used for construction that sets, hardens, and adheres to other materials to bind them together.”



# MARKET REVIEW ON CEMENT TREND

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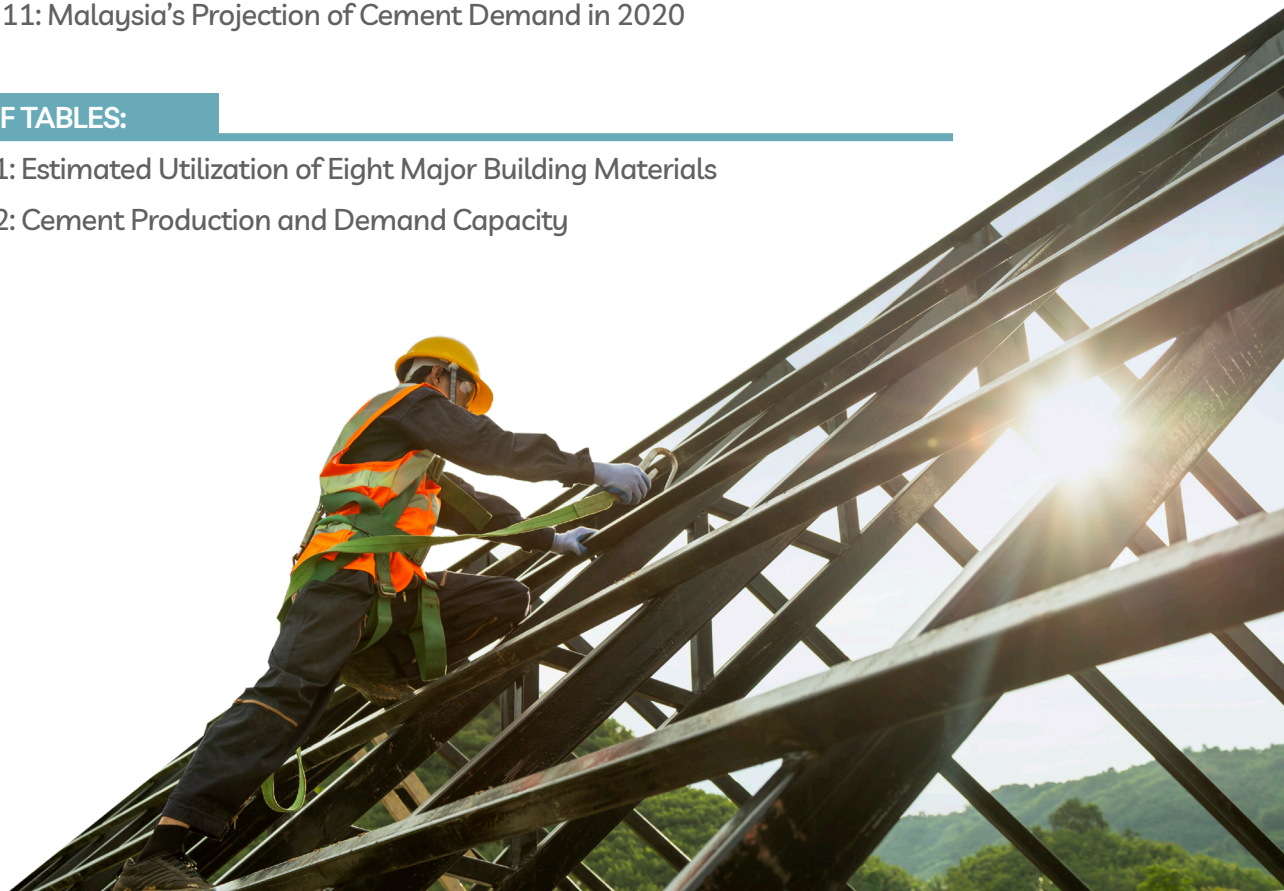
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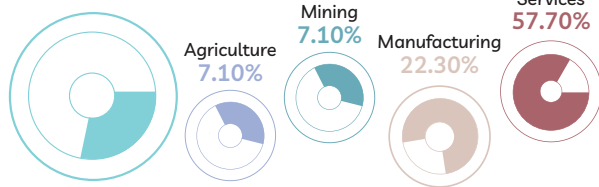
## 1.0 Malaysian Construction Industry Scenario

The Malaysia construction industry is a unique, complex, and often fragmented industry. Nevertheless, in 2019 the total turnover of the industry was RM70.97 billion or the equivalent of 4.7% of the Malaysia gross domestic product, making it an important contributor to the wealth of the nation. The industry employs approximately 1.5 million people or 9.7% of national workforce.

GDP Contribution by sector, Malaysia

Numbers of employed persons by sector, Malaysia, 2019

### Construction 4.70%



### Construction 9.70%

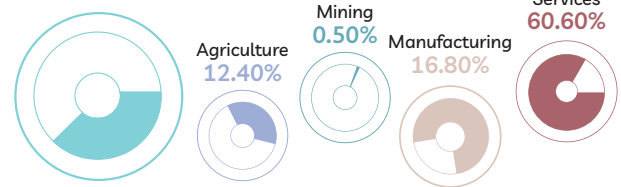
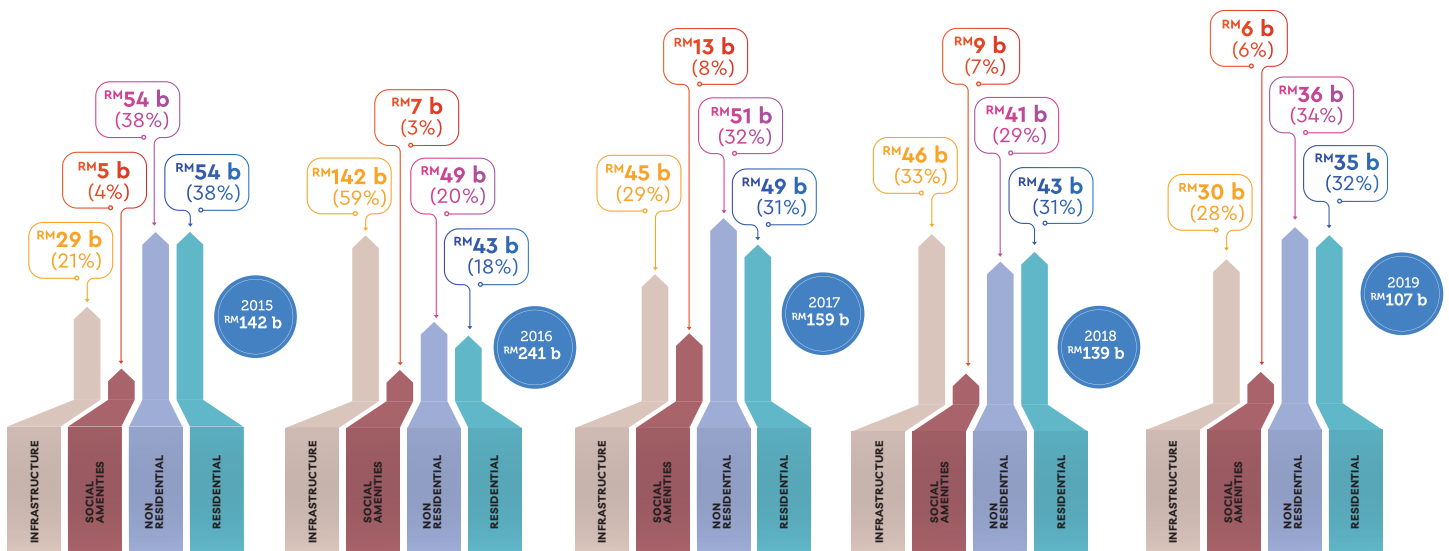


Figure 1: Malaysia GDP Contribution & Employed People by Sector in 2019

During the period 2015 - 2019, the value of construction projects awarded in Malaysia grew at a Compound Annual Growth Rate (CAGR) of about 70% and peaked in 2016 at RM241 billion (Figure 2).

The value declined in 2017 onwards due to residential overhang issue loom in the property sector and oversupply of commercial space. Both residential and non-residential projects' value represented 38% of total value awarded in 2016, while the remaining value was mainly attributed to infrastructure projects (59%).



### NUMBER OF PROJECT

|                  | 2015  | 2016  | 2017  | 2018  | 2019  |
|------------------|-------|-------|-------|-------|-------|
| INFRASTRUCTURE   | 2,035 | 2,286 | 2,429 | 2,334 | 2,998 |
| SOCIAL AMENITIES | 727   | 898   | 989   | 791   | 892   |
| NON RESIDENTIAL  | 2,697 | 2,857 | 3,114 | 3,102 | 3,368 |
| RESIDENTIAL      | 2,096 | 2,122 | 2,266 | 2,247 | 2,489 |
| TOTAL            | 7,555 | 8,163 | 8,794 | 8,474 | 9,727 |

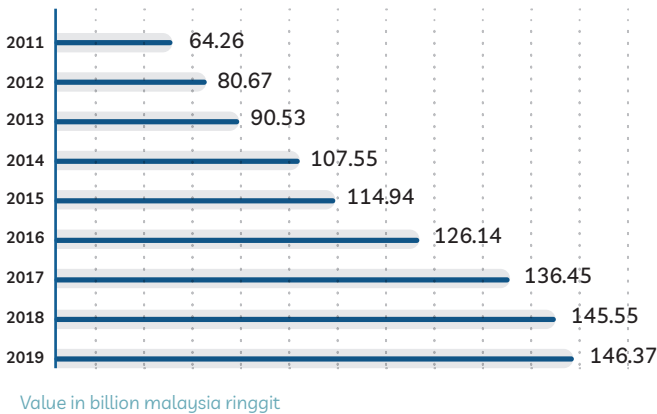
Figure 2: Value and Number of Construction Projects Awarded, by Type 2015-2019

In terms of number of projects awarded, the growth momentum was growing and peaked in 2019 to 9727 number of projects but valued only to RM107 billion across all types of projects (except social amenities). Year 2015 witnessed the lowest number of projects at 7,555 to a total value of RM142billion however, the average value per project was highest in 2016, i.e. at about RM29 million.

In 2019, the value of construction work in Malaysia was valued at approximately 146.5 billion Malaysian ringgits, which means the construction sector is running at a slower pace, due to the government decision to reduce debt.

The infrastructure sector registered the highest average value per project at RM69 million, followed by residential sector (RM20 million) and non-residential sector (RM17 million)

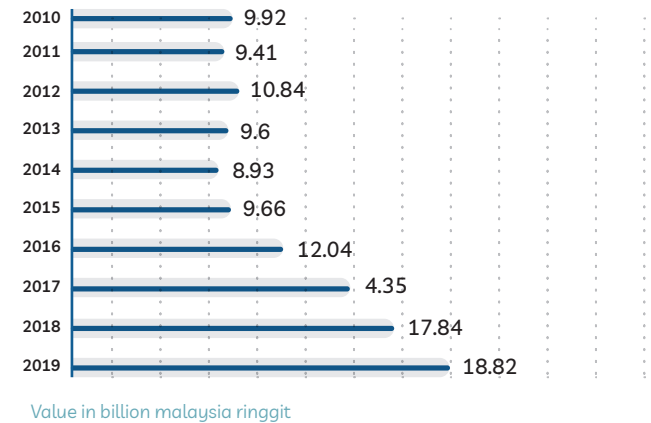
#### Value of construction work in Malaysia from 2011 to 2019 (in billion Malaysian ringgit)



Value in billion Malaysia ringgit

Source: Department of Statistic Malaysia

Figure 3: Malaysia Quarterly Construction Statistics Q4 2019



Value in billion Malaysia ringgit

Figure 4: Malaysia Quarterly Civil Engineering Works Statistics until Q4 2019

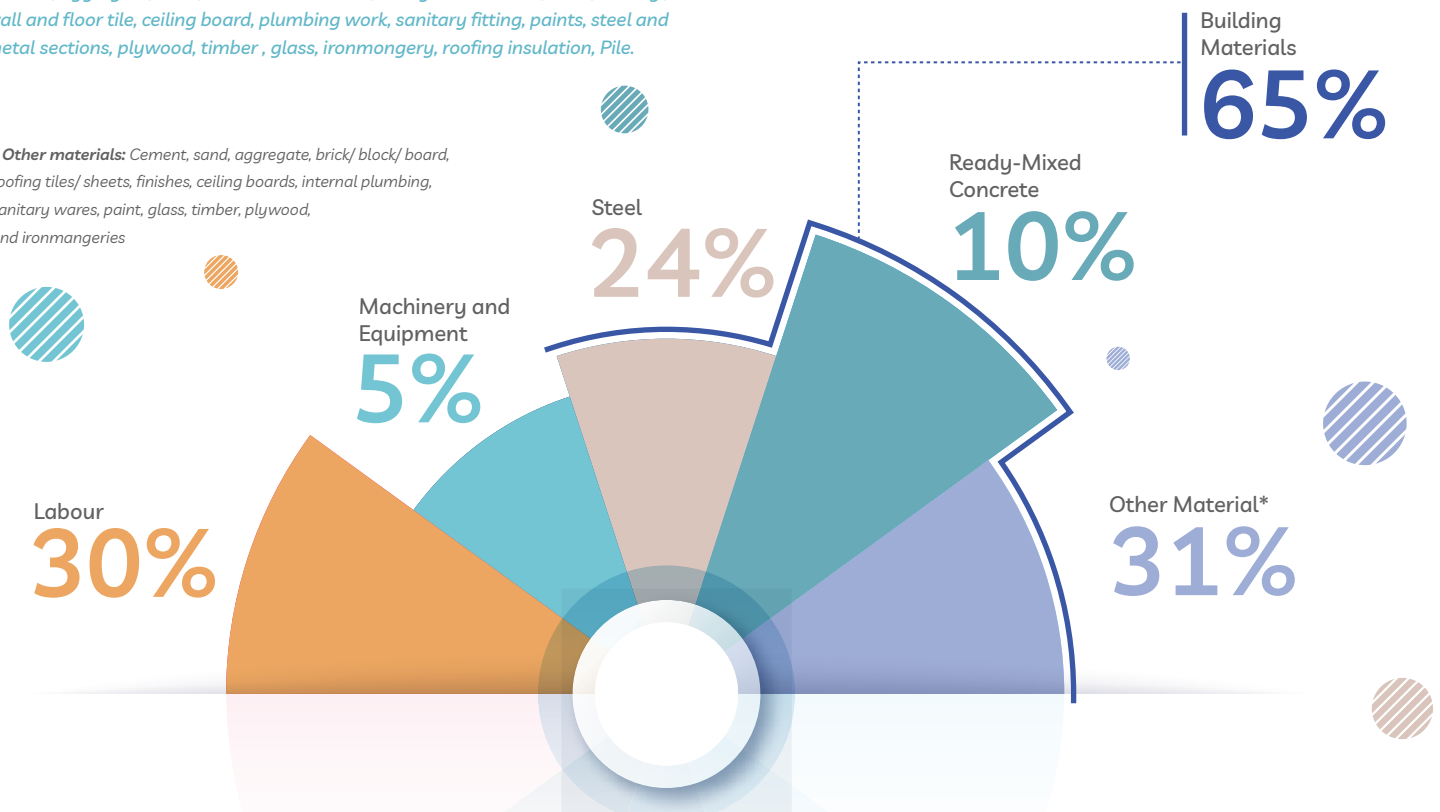
## 2.0 Building Materials Utilization

The development of the construction industry has given rise to the growth of various building materials. Building materials comprise natural substances such as sand, wood, and rocks, or manufactured materials such as concrete, metal, cement, and glass, which are used in various applications for construction purposes. CIDB classifies important building materials into 19 categories:

*Cement, aggregate, sand, steel reinforcement, ready mix concrete, brick, roofing, wall and floor tile, ceiling board, plumbing work, sanitary fitting, paints, steel and metal sections, plywood, timber, glass, ironmongery, roofing insulation, Pile.*

**\* Other materials:** Cement, sand, aggregate, brick/ block/ board, roofing tiles/ sheets, finishes, ceiling boards, internal plumbing, sanitary wares, paint, glass, timber, plywood, and ironmongeries

In a study conducted by CIDB on the average cost of buildings (residential, office, commercial, industrial, education, social facilities, hotel and others), the cost of materials represent 65% of the total building cost followed by labour (30%) and plant , machinery & equipment cost (5%). Costs of land and logistics have not been included in the cost breakdown analysis.



Source: Construction Industry Development Board (CIDB) Malaysia

(Kajian Wajaran Kos Bahan Binaan, Wajaran Kos Buruh dan Wajaran Kos Jentolak 2012)

Figure 5: Cost breakdown of materials, labour, & plant in a building.



The cost breakdown in Figure 5 shows that the cost of steel (24%) represents the largest portion of total material cost, followed by ready-mixed concrete (10%). These two materials constitute 34% of the total building cost. Other materials such as cement, sand, aggregate, brick / block / board, roofing tiles / sheets, finishes, ceiling boards, internal plumbing, sanitary wares, paint, glass, timber, plywood, and ironmongeries represent 31% of the total building cost.

Table 1 outlines the 8 major materials which have been identified by CIDB as the most frequently required for building projects and civil engineering works. The estimated utilization of these materials in 2019 in term of value, steel reinforcement (RM18.4 mil) topped the list, followed by ready-mixed concrete (RM14.0mil) on the second place. However it was estimated that ready mix concrete will be the number one materials in 2020.

#### ESTIMATED MAJOR CONSTRUCTION MATERIAL DEMAND

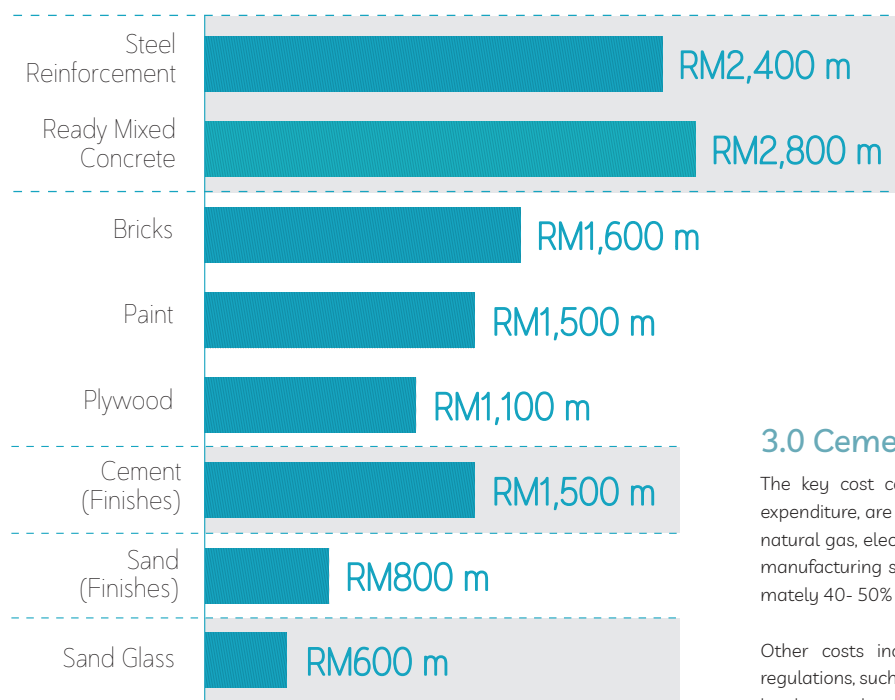
| CONSTRUCTION MATERIAL | UNIT           | MATERIAL DEMAND FOR TOTAL WORK DONE |                       |                             |                       |                             |                       | MATERIAL DEMAND FOR TOTAL WORK TO BE DONE |                       |
|-----------------------|----------------|-------------------------------------|-----------------------|-----------------------------|-----------------------|-----------------------------|-----------------------|---|-----------------------|
|                       |                | 2017                                |                       | 2018                        |                       | 2019                        |                       | 2020                                      |                       |
|                       |                | MATERIAL QUANTITY (MILLION)         | MATERIAL VALUE (RM m) | MATERIAL QUANTITY (MILLION) | MATERIAL VALUE (RM m) | MATERIAL QUANTITY (MILLION) | MATERIAL VALUE (RM m) | MATERIAL QUANTITY (MILLION)               | MATERIAL VALUE (RM m) |
| STEEL REINFORCEMENT   | TONNE          | 8.9                                 | 23,200                | 8.8                         | 23,000                | 7.1                         | 18,400                | 0.9                                       | 2,400                 |
| READY MIXED CONCRETE  | M <sup>3</sup> | 67.5                                | 15,900                | 69.4                        | 16,400                | 59.3                        | 14,000                | 12.0                                      | 2,800                 |
| BRICKS                | PALLET         | 10.8                                | 2,500                 | 13.0                        | 3,000                 | 17.9                        | 4,000                 | 6.8                                       | 1,600                 |
| PAINT                 | 5 LITER        | 5.4                                 | 700                   | 11.7                        | 3,000                 | 17.9                        | 2,300                 | 11.6                                      | 1,500                 |
| PLYWOOD               | PIECE          | 66.6                                | 3,200                 | 75.4                        | 3,600                 | 70.7                        | 3,400                 | 22.3                                      | 1,100                 |
| CEMENT (FINISHES)     | TONNE          | 2.4                                 | 800                   | 4.6                         | 1,600                 | 6.5                         | 2,300                 | 4.4                                       | 1,500                 |
| SAND (FINISHES)       | TONNE          | 14.0                                | 600                   | 22.9                        | 1,000                 | 38.4                        | 1,700                 | 17.5                                      | 800                   |
| SAND GLASS            | M <sup>3</sup> | 9.1                                 | 500                   | 14.6                        | 940                   | 25.1                        | 1,612.0               | 9.8                                       | 600                   |

Note: Material value is calculated based on material's average price in 2018

Sample of project awarded since 2017 until in 2020 (11,000 projects estimated under construction in 2019)

Table1: Estimated utilization of eight major building materials.

Material Demand for Total Work Done for 2020



Source: CIDB (M) Projection of Construction and Material Demand (Dec 2019)  
Figure 6: Estimated Utilization Value of Eight Major Building Materials for 2020

### 3.0 Cement Pricing Components

The key cost components in clinker and cement production, excluding capital expenditure, are the raw materials (e.g. limestone, clay) and energy (e.g. coal / coke, natural gas, electricity). Cement manufacturing is one of the most energy intensive manufacturing sectors, whereby coal and other energy costs account for approximately 40- 50% of the total production cost.

Other costs include labour, transportation and logistics, and compliance to regulations, such as environment and standards. The prices of cement are influenced by the supply availability of raw materials and coal, currency exchange rates (for imported raw materials and coal), electricity and natural gas tariffs, as well as local supply and demand of cement.

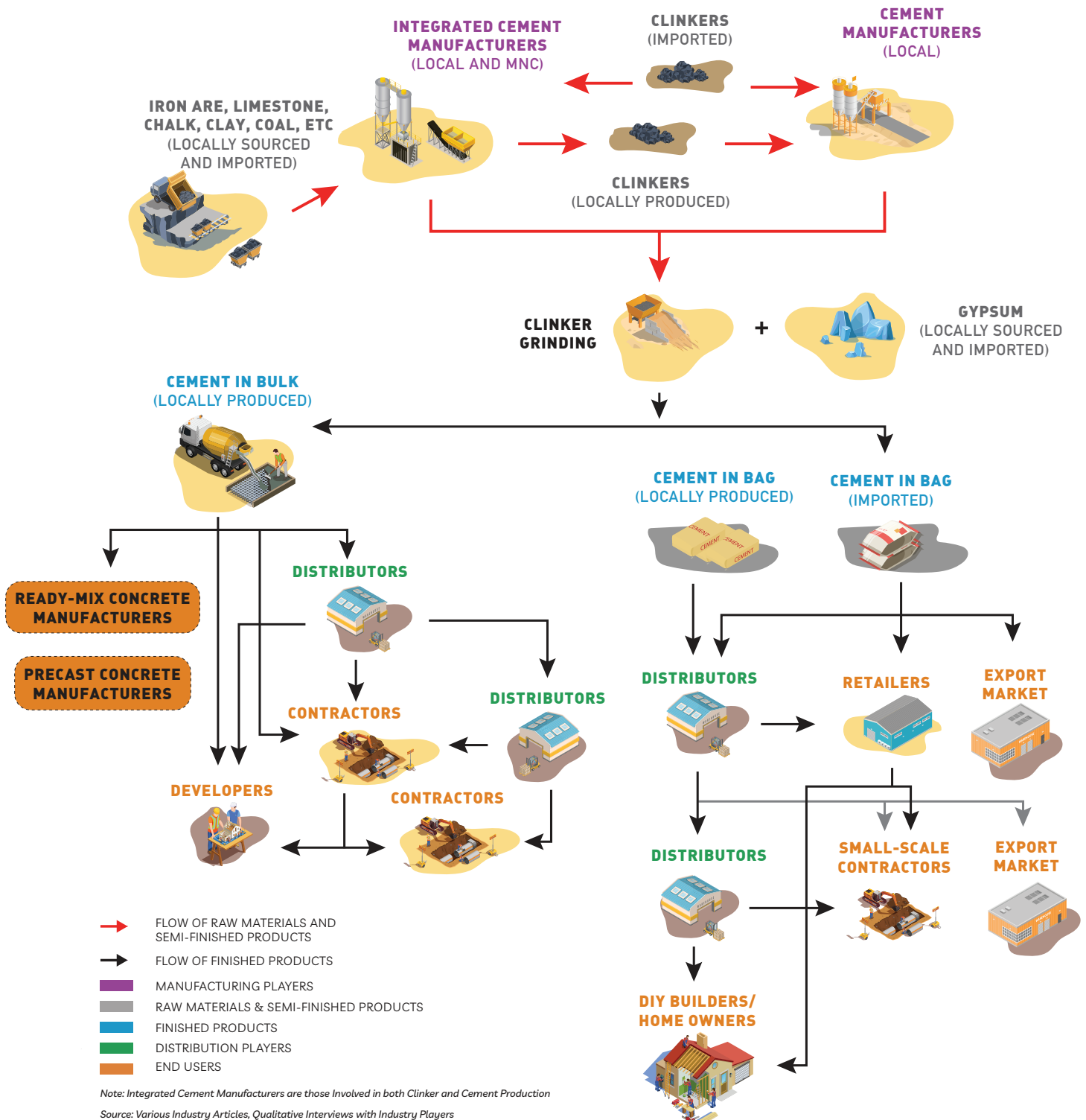
## 4.0 Market Assessment of Cement

Malaysia has enjoyed continuous growth in cement demand since 2009. However, demand registered a drop of 5% in 2016. Coupled with production overcapacity, the situation led to intense price pressure in 2016 and first half of 2017 until fourth quarter of 2018. The price remains stable for one quarter and then start to pick up until January 2019 and remain stable at RM16.50 since then until July 2020.

Malaysian weakening currency and higher price of coal affects cost of imported raw materials in 2017 compared to 2016. Cement manufacturing is a highly capital intensive; an integrated plant will require an investment of up to RM1 billion. While cement producers are adjusting to the increased capacity in the market, weaker domestic demand is affecting them as well.

A number of large-scale infrastructure projects have come to an end while new ones have yet to be implemented, in addition to slowdown in residential property market post effect of covid 19 pandemic further slowing down the market. The weak market growth is also expected to be affected by a growing number of premix cement and concrete plants built by some large construction companies for in-house use.

The cements manufacturers are vertically integrated in the manufacturing value chain (upstream and downstream) via subsidiaries or sister companies.





## 5.0 Cement Manufacturers in Malaysia

Malaysia is divided into two parts – West Malaysia and East Malaysia in the northern part of the island of Borneo. West Malaysia comprises 13 states, which account for 85 per cent of the country's GDP. These states operate as one-cement market that is distinct from the cement markets of the Sabah and Sarawak states in East Malaysia.

The year 2015 see the cement market recorded diminishing demand as a result of an overall slowdown in economic growth to below five per cent per annum and reduced residential real estate activities due to prior overbuild. The declining demand trends since 2015 were met by rising industry capacity as major cement players like YTL, Hume Cement and CIMA added new production lines between 2010 - 2015. Consequently, utilisation declined and led to a price war among cement manufacturers.

Until recently cement production in West Malaysia is highly concentrated with the top five (5) producers: Lafarge Malaysia, YTL Cement, CIMA, Hume Cement and Tasek Industries. In East Malaysia the key players are Cement Industries (Sabah) and Cement Manufacturers Sarawak. In 2019 YTL acquired LafargeHolcim's Malaysian unit (and subsequently renamed it Malayan Cement), rendering it a market share of more than 50 per cent. The combined entity now controls eight of the 12 cement plants in West Malaysia, giving it a capacity of roughly 18MT. Significant operational, distribution and logistical synergies can be expected from this merger.

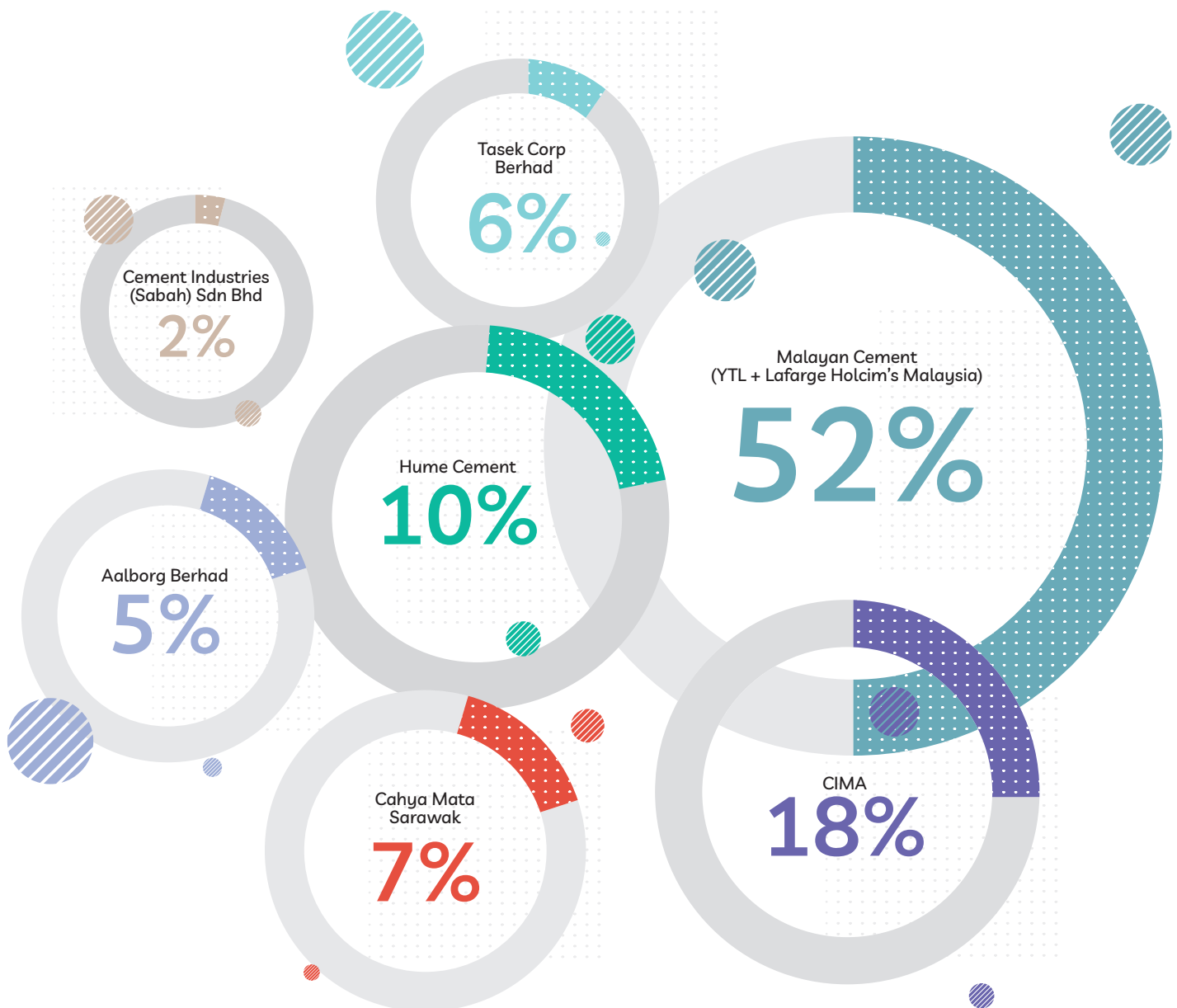


Figure 8: Cement production capacity share in Malaysia in 2019

## 6.0 Production and Consumption of cement

During the period 2010 – 2019, the production of cement has grown in tandem with demand, averaging 9 – 17% growth annually for production and 6% - 11% for consumption demand capacity (Figure 9). However, both production and consumption of cement hit the tipping point in 2015, and registering negative growth in 2016, 2017 and 2018. Consumption drop by -5% from 20MT down to 19MT, 17MT respectively and only start to pick up again in end year 2018, registering 6% increase to 18MT

YoY: Cement Demand & Capacity

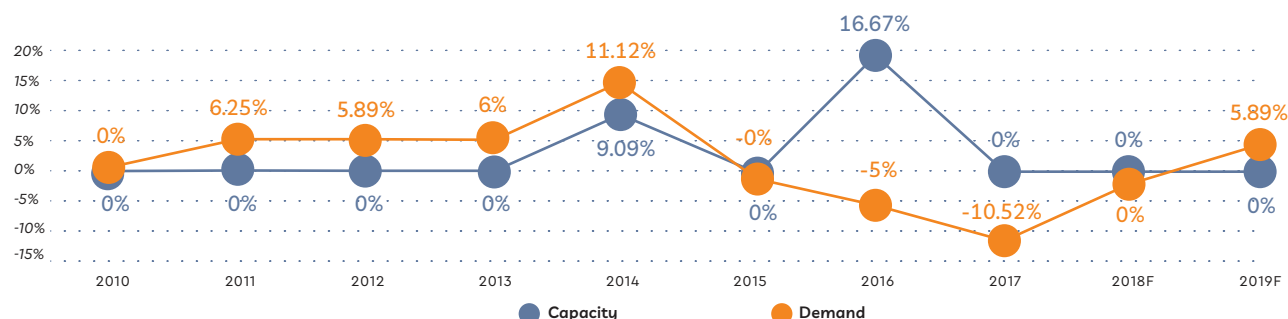


Figure 9: Cement Production & Demand growth (%YoY) (Source CIRP 2018/2019)

| Year     | 2010(base) | 2011  | 2012  | 2013 | 2014   | 2015 | 2016   | 2017    | 2018 | 2019  |
|----------|------------|-------|-------|------|--------|------|--------|---------|------|-------|
| Capacity | 22         | 22    | 22    | 22   | 24     | 24   | 28     | 28      | 28   | 28    |
| Y-o-TC   | 0%         | 0%    | 0%    | 0%   | 9.09%  | 0%   | 16.67% | 0%      | 0%   | 0%    |
| Demand   | 16         | 17    | 18    | 18   | 20     | 20   | 19     | 17      | 17   | 18    |
| Y-o-TC   | 0%         | 6.25% | 5.89% | 0%   | 11.12% | 0%   | -5%    | -10.53% | 0%   | 5.89% |

Table 2: Cement capacity and demand (Source CIRP 2018/2019)

## 7.0 Pricing trends

This section shows the pricing trends of bagged cement in Selangor, for the period 2016 - 2020. Prices for this trend analysis are sourced from CIDB, which are based on the nett transaction price between contractors (across different grades in selected states or cities) and suppliers (manufacturers and distributors) under normal credit terms and for bulk purchase.

From 2016 to 2020, bagged cement prices in Selangor experienced minor fluctuations with prices trying to slowly adjusting to 2016 level. The prices were relatively stable, with an average RM4.00 price gap between Sabah and Sarawak until 2016. For the first three quarter of 2016, both West and East Malaysia saw stable prices in bagged cement, ranging from RM17.58 to RM18.92 per bag with minimal price movements.

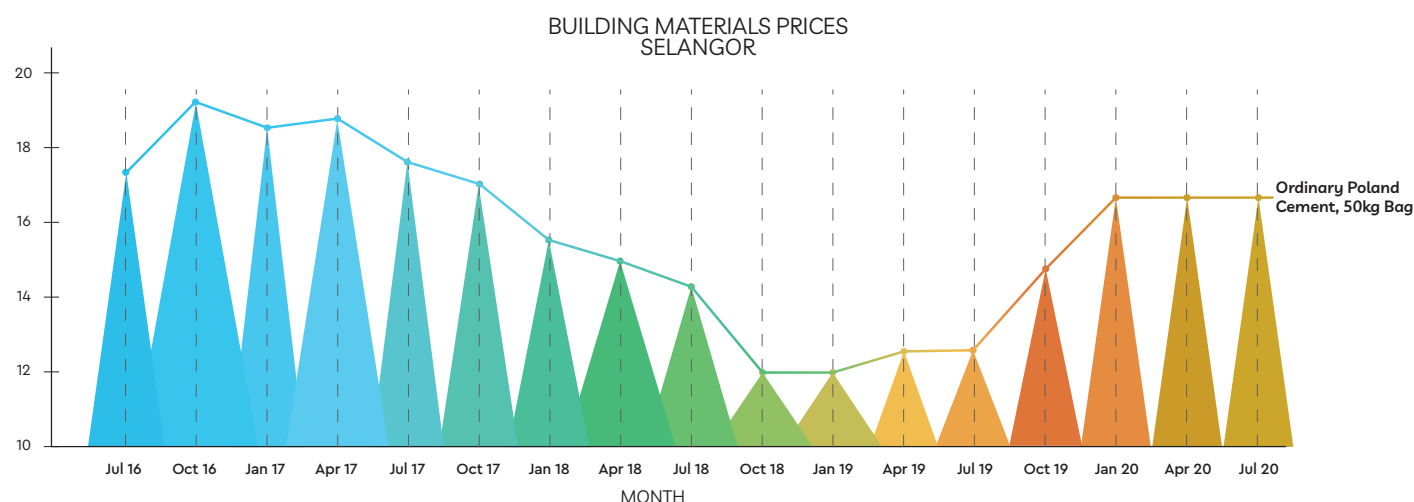


Figure 10: Pricing trend of cement 50kg bag, July 2016- July 2020

Cement prices recorded the highest price RM 18.92/50kg bag in September and October 2016. This is an increase of RM1.34 from July 2016. The price starts fluctuate to maintain a decreasing trend to the lowest RM12.00/50kg bag in October 2018. Stayed low for five months and begin to increase again slowly in March 2019 as a result of YTL taking over Lafarge Malaysia, cement price has been on a slow and steady increase.

In March, cement price in Selangor saw an increase of RM0.50 and the price maintained until August. The following two months see an increase of RM1. Another price hike of RM2.33 in January 2020 to bring the cement price to RM16.50. Since then the price has remained stagnant at RM16.50 until September 2020, most probably is the effect of Covid 19 and MCO. The total increase is about 33% or RM 4 since July 2019.



## Covid-19 disruption

Participants in the cement value chain had looked towards 2020 with optimism – hoping revival of mega projects, which in turn would translate to growth in the construction sector and consequently in cement demand.

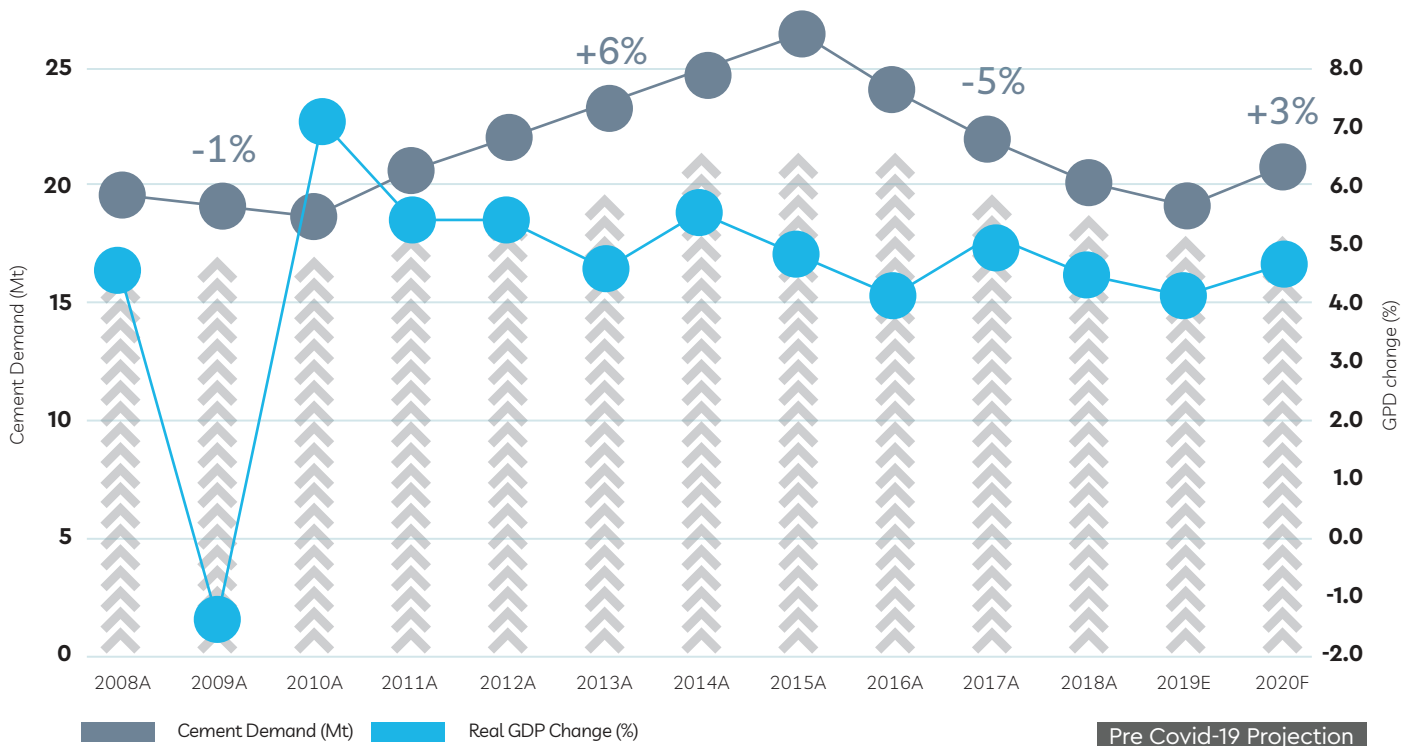
However, the Covid-19 outbreak had major ramifications for the industry. The novel coronavirus pandemic has created a universal chasm – on either side of this rift are the realities before and after the outbreak. The Malaysian cement industry is not immune to this disruption. Pre-Covid-19 trends indicated that the construction sector would grow by about four per cent in 2020.

However, the post-outbreak market poses new realities with a complex set of challenges. There has not only been a slowdown in incremental demand but also a significant impact on existing projects. The government's Movement Control Order (MCO) that closed down non-essential businesses also brought the entire construction industry to a virtual standstill and at risk of severe delays.

In addition, Malaysia is a main supplier of cement to Singapore, which itself is reeling from the pandemic, and therefore further reducing Malaysian cement demand. The MCO has also meant that cement plants around the country ceased production since staff could not access the facilities. Moreover, the Malaysian cement industry is reliant upon imported coal, particularly from Indonesia, and thus exposed to the risks of continuing lockdown measures elsewhere even as its own MCO is lifted.

A silver lining offered by the Covid-19 crisis to the Malaysian cement sector could be perhaps a reduction in prices of raw materials, especially energy, in the medium-term, owing to a slowdown in global demand. The government's robust response to the pandemic via an emergency aid package could also support some demand bounce back.

Cement Demand, Peninsular Malaysia, 2008A-20F



Source: The Global Cement Report, World Bank, LEK Research and Analysis  
Figure 11: Malaysian's Projection of Cement demand in 2020

## Conclusion

Malaysia has enjoyed continuous growth in cement demand since 2009. However, demand contraction in 2016 coupled with increasing production capacity led to intensified competition and price pressure in 2016, with rebates of up to 40-50%. The issue is further compounded by escalating operating costs, mainly due to the weakening currency and increase in coal pricing, which has almost doubled in 2017 compared to 2016. 2018 witness less players in the cement industry with the taken over of Lafarge by YTL company and since then price has been normalizing to 2017 price, RM16.50/50kg bag in Peninsular Malaysia, RM16.80/50kg bag in Sabah and RM19.30/50kg bag in Sarawak.

The Malaysian cement industry has had a difficult journey in recent years, from the growth spurt in the 1980s to becoming one of the worlds largest cement consumers on a per capita basis. Going forward, the industry faces many challenges, such as continued overcapacity and often ill-disciplined competition. Although recent consolidation and an emphasis on industry profitability will help, the wreckage of Covid-19 is yet to be fully realised and the resilience of the Malaysian cement industry will be tested further.

For more information and data of other materials on various locations, can be subscribed at [www.n3c.cidb.gov.my](http://www.n3c.cidb.gov.my). This website contain 150 materials details since 2012.

SCAN HERE



Website: [www.n3c.cidb.gov.my](http://www.n3c.cidb.gov.my)

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