ECONOMIC SCENARIO AND OUTLOOK

India’s economy grew at 7.2% and 6.8% in fiscal 2017-18 and 2018-19, respectively. The current fiscal has witnessed a slowdown and the full year GDP growth rate for the fiscal 2019-20 is pegged at 5%. This is primarily due to demand weakness across sectors (including cement), financial sector stress, tightening of credit and lingering effects of earlier policy measures. Inflation has been contained at around 3% till August 2019 and has seen a gradual increase during the later months of the year. A key positive has been the decline in fuel prices (crude oil and coal) during 2019 due to moderation in global economic activity.

To address the deceleration in economic growth, the RBI has reduced the repo rate by 135 bps through the entire stretch of 2019. Due to weak transmission of rates by commercial banks and the stress in financial and banking sector, gains were limited during the year. Lower than expected tax collections have limited the fiscal space available to the Government of India to undertake counter-cyclical measures. In the Union Budget 2020, the Government of India raised the fiscal deficit target to 3.8% of GDP from 3.3% pegged earlier for 2019-20.

The outlook for fiscal 2020-21 remains largely positive with an estimated GDP growth rate of around 6%. Private investment is anticipated to pick up on the back of deleveraging of corporates, significant financial sector reforms and resolution of stressed assets under the Insolvency and Bankruptcy Code (IBC), which will contribute to cleaning up of banks’ balance sheets.

Recent reforms to improve the ease of doing business — including steps to liberalise FDI, lower corporate income tax rates and aggressive disinvestment plans by the Government of India — will support broad-based growth in 2020. A very good monsoon, along with full implementation of the new income support scheme is also expected to drive rural consumption in the coming year. These initiatives and positive interventions by the Government of India, coupled with the fact that the fundamentals of the Indian economy remain intact should be a positive impact on economic growth and on demand for cement.

CEMENT INDUSTRY — OUTLOOK AND OPPORTUNITIES

India is the world’s second largest cement producer with a cumulative production capacity of c. 520 Million tonnes annually (MTPA) in 2019, estimated to touch 550 MTPA by 2020.
After a healthy cement demand growth of around 9% in 2018, 2019 exhibited a mid-cycle slowdown with a growth of 1.5% to 2%, impacted by the broader economic environment.

Apart from the general economic slowdown, cement demand was sluggish during the first half of the year mainly due to the build-up of the national general elections in April-May 2019. The latter half of the year did not witness an expected rebound due to extended monsoons, low-capital expenditure in infrastructure activities and stresses in the NBFC and housing segments.

However, the outlook for the sector remains positive with an estimated demand growth of 5% in 2020. A key driver for this is the road map laid out under the National Infrastructure Pipeline for spends of $1.5 trillion over the next five (5) years.

The country’s demand growth is likely to be led by East and Central regions and will be primarily from affordable housing and infrastructure creation. Affordable housing initiatives are expected to pick up pace under the Pradhan Mantri Awas Yojana (‘PMAY’) with enhanced budgetary allocation by 9% over last fiscal’s estimates. PMAY-Urban has an overall target of constructing 1.12 Crore houses by 2022, of which 1.03 Crore houses were sanctioned as of January 2020.

PMAY-Rural has the overall target of 1.95 Crore units, of which about 0.9 Crore units stand completed as of December, 2019. The Government remains strongly focused on infrastructure development as a key lever of economic growth. Higher capital expenditure, faster execution of infrastructure projects such as Dedicated Freight Corridors (DFC), airports and Metro Rail projects in Tier I and Tier II cities should bolster cement demand growth in 2020.

Good monsoons complemented with PM-KISAN scheme, higher budgetary allocation for the Pradhan Mantri Gram Sadak Yojana and increase in minimum support prices for farmers is expected to drive rural cement demand. Demand in Tier II cities can also be expected to improve with increased construction of commercial centres and office spaces. Based on these developments, the outlook for the cement sector in the coming year remains positive.

**SALES VOLUME**

In 2019, the Company’s cement sales increased by 1.8% from 28.37 Million tonnes in 2018 to 28.89 Million tonnes. Overall, the industry witnessed marginal growth of ~1.5%-2% due to macro headwinds. This was further compounded by a relatively prolonged monsoon, which impacted industry growth. In Retail segment, individual house builders and ground plus three storey (G+3) buildings continues to remain the Company’s largest

**DETAILS OF SIGNIFICANT CHANGES IN KEY FINANCIAL RATIOS (Standalone)**

Key financial ratios of the Company showing financial performance are as under:

<table>
<thead>
<tr>
<th>Ratios</th>
<th>2019</th>
<th>2018</th>
<th>Change</th>
<th>Change%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtors Turnover (Days)</td>
<td>18</td>
<td>19</td>
<td>(1)</td>
<td>(5)</td>
</tr>
<tr>
<td>Inventory Turnover (Days)</td>
<td>34</td>
<td>39</td>
<td>(5)</td>
<td>(13)</td>
</tr>
<tr>
<td>Interest Coverage Ratio</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current Ratio (Times)</td>
<td>1.04</td>
<td>1.18</td>
<td>(0.14)</td>
<td>(12)</td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating EBITDA Margin (%)</td>
<td>16</td>
<td>14</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>*Net Profit Margin (%)</td>
<td>9</td>
<td>7</td>
<td>1.91</td>
<td>27</td>
</tr>
<tr>
<td>*Return on Net Worth (%)</td>
<td>12</td>
<td>10</td>
<td>2</td>
<td>23</td>
</tr>
</tbody>
</table>

*Before considering the tax write back of ₹500.63 Crore in 2018

Net Profit Margin and Return on Net Worth has improved primarily due to the increase in Profit after tax during the year.

There is no significant change (i.e. change of 25% or more as compared to the immediately previous financial year) in the other key financial ratios.
Management discussion and analysis (contd.)

customer segment in terms of volume and profitability. With growing urbanisation and rural empowerment, the demand from these sectors is expected to accelerate.

**MARKET DEVELOPMENT**

ACC is synonymous with cement. For over eight (8) decades, the Company has assiduously built a strong brand equity and recall, and continues to have a loyal customer base. Around 78% of the Company’s cement sales are in the retail segment, which is addressed through its strong channel network of ~11,000 dealers and ~55,000 channel partners located across India. For developing its B2B customer base, dedicated teams have been set up to service the residential and infrastructure segments.

Over the years, the Company’s sales and marketing teams have developed a deep understanding of customer preferences and requirements. This enables it to maximise the utilisation of existing capacity on ‘product value-based volume strategy’. It has resulted in the creation of new revenue lines with the introduction of new products. Composite cement volumes have been scaled up significantly in the Eastern India markets.

The Company also launched composite cement in Karnataka. It has consciously driven the growth of premium products. The volume contribution of premium products has increased significantly in the last couple of years. The Company has also worked towards increasing the contribution of blended cement. As part of the overall sustainability strategy, ACC has also reduced the percentage contribution of OPC to the Company’s overall volumes.

The Company has undertaken various steps for effective dealer channel management to drive growth in key relevant markets. The strategy is to appoint new channels, enhance wallet share per counter and to remain connected with the channel and retail customers, who are serviced through the dealer channel.

The ACC Dealer Connect App/portal, a web-based application, enables the dealer channel to digitally transact and track information on a real-time basis. The facility is not only important for their businesses, but provides the Company invaluable data on dealer performance.

Another ‘Service Connect App’ helps to digitally capture 100% site information of influencers for effective conversion and providing on-site services to home builders.

Digitalisation, for the Company, is a key enabler to remain future-ready and to reach out to a wider fraternity of stakeholders comprising dealers, contractors, engineers, customers, sales officers and customer service officers. These apps are being integrated into the larger digital ecosystem to leverage synergies across groups through new data mining capabilities.

The Company continues to strengthen influencer ownership programs through a mix of digital technologies and process changes and in tune with changing times. The objective is to give out more value to influencers and build long-term relationships to remain ahead of the curve.

During the year, ACC has effectively used performance marketing via digital marketing channels to launch and promote the Company’s products and services, strengthening the ACC brand.

An interesting mix of TVC, digital films, hoardings, on-site demos, local activation and shop branding were deployed as a part of this campaign. A new brand campaign, ‘Karein Kuch Kamaal’ [करें कुछ कमाल] was launched in 2019 to energise the Company’s corporate brand. An integrated
marketing campaign was launched using a blend of television, print, outdoor and digital.

Product specific campaign was also launched for ‘ACC Gold Water Shield’ cement. The emphasis was on highlighting the product’s uniqueness in providing protection against water seepage. An interesting mix of short films, brand posters, local activation and shop branding were deployed as a part of this campaign.

New products were launched by your Company in construction chemicals and drymix product space. ACC has two (2) products, i.e. LeakBlock 202 (Cement Mix) and LeakBlock 303 (Cement Coat) in construction chemicals category.

In drymix, overall your Company has six (6) products across segments such as plasters, tile adhesives and grouts. The product range and packaging are separate for B2B and B2C segments. In precasts, solutions were developed around different applications such as pavement and sanitation, among others. Pilot trading operations have also been started in aggregates in cities of Bangalore and Mumbai.

### CEMENT BUSINESS – PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>Change%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (Million tonnes)</td>
<td>27.87</td>
<td>28.36</td>
<td>(2)</td>
</tr>
<tr>
<td>Sales Volume (Million tonnes)</td>
<td>28.89</td>
<td>28.37</td>
<td>2</td>
</tr>
<tr>
<td>Net Sale Value (₹ Crore)</td>
<td>14,060.31</td>
<td>13,387.09</td>
<td>2</td>
</tr>
<tr>
<td>Operating EBITDA (₹ Crore)*</td>
<td>2,256.30</td>
<td>1,981.17</td>
<td>14</td>
</tr>
<tr>
<td>Operating EBITDA Margin (%)</td>
<td>16.05</td>
<td>14.80</td>
<td>1.25 pp</td>
</tr>
</tbody>
</table>

* excluding employee separation cost of ₹70.37 Crore in 2018

### Costs – Cement business

During 2019, the Company undertook various initiatives towards effective cost management.

**a) Cost of materials consumed**

The Company’s raw materials cost is lower by 34% per tonne of cement vis-à-vis 2018 through overall improvement in supply chain and source mix efficiencies. The landed slag cost is lower by 16% during the year compared to 2018 by improvement in procurement source planning and better supply chain efficiencies. Fly ash landed cost is reduced by 15% as compared to previous year on account of an increase in the consumption of lower cost wet fly ash and through source-mix optimisation.

Higher usage of low-cost gypsum (phospho and activated) and reduction in the consumption of costlier imported gypsum through raw-mix optimisation resulted in overall reduction in gypsum cost by 3% when compared to that of the previous year.

The measures adopted by the Company helped step up manufacturing efficiencies and product mix; improving volumes of blended cement, reduced overall raw materials cost and consequent clinker factor.
Management discussion and analysis (contd.)

b) Power and Fuel
Power and fuel cost account for 26% of the total operating cost. Overall power and fuel cost is marginally higher by 2.6% per tonne of cement compared to the previous year, despite an increase in fuel cost and transportation cost of rail freight. The thermal power cost was adversely impacted on account of an increase in prices of imported and domestic coal as well as domestic petcoke in H1’19 due to limited availability of petcoke and increase in rail freight.

The Company is undertaking sustained measures to build a better fuel mix by maximising the use of cheaper fuel, judicious procurement of market coal through E-auctions and imports, higher consumption of alternative fuels and improvement in competencies and efficiencies at plants. As a result of these initiatives, Thermal Substitution Rate (TSR) is up by 1% during the current year compared to the previous year despite increase in fuel cost during later part of the year. The Company implemented logistics cost and efficiency improvement initiatives such as better evacuation efficiency, network optimization, more direct sales from plants and better asset utilization.

The Company aims to leverage technology and digital platforms to integrate its supply chain partners for a transparent and trustworthy relationship for a sustaining competitive edge.

c) Freight and Forwarding expenses
The Company continues to undertake various cost-containment measures throughout the year. Freight and forwarding expenses were higher during the year compared to the previous year due to higher sales volume.

Freight and forwarding per tonne has reduced by 1% during the current year compared to the previous year despite increase in fuel cost during later part of the year. The Company implemented logistics cost and efficiency improvement initiatives such as better evacuation efficiency, network optimization, more direct sales from plants and better asset utilization.

The Company aims to leverage technology and digital platforms to integrate its supply chain partners for a transparent and trustworthy relationship for a sustaining competitive edge.

d) Employee cost
Employee cost was lower during the year, compared to that of last year. The Company has rationalised human resource cost during the second half of 2018 to enhance productivity.

CAPACITY EXPANSION
To effectively manage our manufactured capital, we regularly undertake both capacity augmentation projects and engage efficiency capex initiatives. This ensures that we have ample capacity to cater to a rising demand scenario. In this regard, we have undertaken three development capex projects in 2019:

1. Setting up of a greenfield integrated cement plant in Ametha, Madhya Pradesh with a clinker capacity of 3 MTPA and a cement capacity of 1 MTPA
2. Setting up of 1.1 MTPA PSC/1.4 MTPA PCC grinding facility at the existing location of Sindri, Jharkhand
3. Expansion of existing grinding unit in Tikaria, Uttar Pradesh with a 1.6 MTPA PPC cement capacity and a third unit in the state with a grinding capacity of 2.2 MTPA PPC

READY MIX CONCRETE BUSINESS (RMX)
The year 2019 has been satisfying for team RMX. Despite market challenges, slowdown and liquidity crunch, the RMX business has not only shown its capability to withstand challenges, but has also shown its mettle by surpassing its previous records. The Company witnessed significant growth in terms of business expansion, volume, top line and EBITDA.

During the year, the RMX business expanded its footprint by adding fifteen (15) new plants. With this addition, the nationwide network of RMX plants comprises ninety (90) state-of-the-art plants. We strongly believe that this initiative will help us bring more value to customers as well as to the Company.
RMX is consistently performing well and its growth has outperformed the market. RMX sales volume in 2019 rose by 12% and EBITDA rose by 14% in 2019, compared to the previous year.

For the preceding twenty-seven (27) years, ACC RMX has been a key player in shaping India’s construction and infrastructure sector, constantly striving to enhance service standards and deliver value to customers by catering to both on-site and commercial projects.

**LH Global Rank:** The RMX team is ambitious, aspiring and are determined to achieve new milestones, going forward. ACC RMX ranked no. 1 in LH global RMX ranking list for 2019.

Ranking was done based on various parameters like net sales growth, EBITDA growth, EBITDA margin and Return on Net Assets and RONOA. The team is confident to retain their no. 1 position in upcoming years as well.

**Value-added Solutions (VAS):** RMX with its technical capabilities and a wide range of value-added solutions stand out as the preferred partner for varied construction requirements. It serves key residential, infrastructure and commercial segments. In 2019, VAS has reached a new milestone and now contributes to 26% of the total RMX sale.

New products such as ACC Refraxcrete, ACC Curecrete and ACC Sustaincrete were successfully launched in the year.

**Green Concrete:** RMX has been conferred Green Pro Certification by the CII – Green Products and Services Council at the Green Building Conference 2019 held at Hyderabad. ACC RMX is the only ready mix concrete in India to have both Environmental Product Declaration (EPD) and Green Pro certification.

**DISCUSSIONS ON FINANCIAL PERFORMANCE v/s A-OPERATIONAL PERFORMANCE**

The section relating to operational performance vis-a-vis financial performance forms part of Board’s Report.

**INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY**

The section relating to Internal Control Systems and their Adequacy forms part of Board’s Report.

**SUSTAINABLE DEVELOPMENT (SD)**

The Company views sustainable development through the prism of meeting the requirements of the present without compromising the ability of future generations to meet their own needs.

As a part of its agenda for sustainable development, the Company continues to maintain high governance standards, respect for nature and social responsiveness towards communities.

Moreover, sustainable development has received greater attention in recent years owing to growing awareness among stakeholders and their ever-increasing expectations. The Company, in line with expectations, is undertaking various initiatives and putting concerted efforts towards sustainability to create value for each stakeholder.

The Company’s SD strategy, its targets and initiatives are communicated to stakeholders through the SD report, which it has been publishing since 2009. The previous Sustainability Report 2018, along with preceding ones are prepared according to the Global Reporting Initiative (GRI) framework, externally assured and available on the Company’s website at www.acclimited.com.

2019 was a remarkable year as we received nation-wide recognition for our focused efforts in the sustainability landscape. Our efforts to reduce carbon emissions and co-processing of waste were recognised in the form of CII-ITC Corporate Sustainability Outstanding Accomplishment Award 2019, JSW Earth Care award, India-first Resilient Climate Action Plan (CAP 2.0) Award and FICCI’S India-first circular economy award.

**SD 2030 Plan – Building for Tomorrow**

In 2016, a structured sustainability strategy was drawn up under SD 2030 Plan, defining the focus areas: (i) climate (ii) circular economy (iii) water and nature and (iv) people and communities, with roadmap and measurable targets to achieve the set goals by 2030.
This SD 2030 Plan is aligned with the LafargeHolcim Group’s SD Plan. During 2019, LafargeHolcim has revisited its sustainability strategy and restated its targets for each pillar. Also, ACC achieved most of its targets set in 2016. Considering the above two (2) factors, the Company has also revised its sustainability strategy and associated targets based on LH targets, new external references, internal scenario planning and commitments to combat climate change in India. Thus, the Company is pleased to present the revised strategy as given below:

**SD 2030 Plan**

<table>
<thead>
<tr>
<th>Sustainability Pillars</th>
<th>Climate &amp; Energy</th>
<th>Circular Economy</th>
<th>Environment</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Reduction of CO₂ emissions</td>
<td>Enhanced reuse of waste derived resources</td>
<td>Creating a positive impact on Environment</td>
<td>Creation of shared value</td>
</tr>
<tr>
<td><strong>Lead Metrics</strong></td>
<td>CO₂ emitted* [kg CO₂/t of cement]</td>
<td>Quantity of waste derived resources used [MT]</td>
<td>Water Positive Index [no. of times]</td>
<td>No. of new beneficiaries [M new beneficiaries]</td>
</tr>
<tr>
<td><strong>Target 2030</strong></td>
<td>400</td>
<td>30</td>
<td>5</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Scope 1 emission only and excluding CPP

The Company is undertaking all possible measures to strive beyond the charted sustainability roadmap. During the year, the Company unveiled its aspiration to become carbon neutral, water negative and plastic negative and bio-diversity positive and is working to develop relevant strategy in that direction.

**Climate and energy**

While the Company has already achieved 2020 climate target to reduce its specific CO₂ emissions by 38% compared to 1990 level, the Company has marginally increased its specific carbon emissions from 504 kg/t of Cement in 2018 to 505 kg/t of Cement in 2019. While some of the levers impacting the CO₂ emissions, such as clinker factor, Thermal Substitution Rate (‘TSR’) have improved over the last year, thermal energy consumption increased by 1%, which negated the positive contribution from clinker factor and TSR.

**Clinker Factor**

The Company has continued its efforts to reduce clinker factor across its blended cement portfolio. During 2019, the Company increased its blended Cement portfolio from 88% to 89%. This initiative helped the Company achieve 0.57% reduction of average clinker factor.

**Thermal Energy**

In 2019, the Company has increased its thermal energy consumption by 1% from 741 kcal/kg of clinker in 2018 to 748 kcal/kg of clinker in 2019. One of the reasons for higher thermal energy in some plants is attributed to enhanced usage of alternative fuels, besides switching over to petcoke at two (2) of the plants operating with conventional fuel. This will certainly be a focus area in 2020 as an important lever to reduce carbon emissions.

**Green Energy and Power Generation through Waste Heat Recovery System**

In 2019, 35.50 Million units of renewable energy were generated from Company’s three (3) captive wind farms. In addition, the Company has consumed 51.5 Million units of solar power through Power Purchase Agreement (PPA). Thus, a total of 82.39 Million units of ‘green energy’ was consumed in 2019.
The Waste Heat Recovery system at Gagal Cement Works also generated around 55 Million units of electrical energy during the year. Company’s new 5.35 MW solar photovoltaic plant at Jamul Cement Works, Chhattisgarh is ready to generate solar energy to augment power requirements.

During the year, the Company also enhanced Renewable Energy portfolio with the potential to consume 126 Million units of solar power for the coming year. Company’s waste heat recovery projects at two (2) plants are in advance stage and will be operational by 2021.

**Alternative Fuels and Raw Materials (AFR)**

The co-processing of waste as alternative fuels (AFR) in cement production is a preferred option as it results in multiple benefits. The Company has set up three (3) platforms for pre-processing and facilities at nine (9) plants for co-processing hazardous and non-hazardous waste, municipal waste for use as Refuse Derived Fuel (‘RDF’) and biomass in its kilns, wherever permissible by law. Through the ‘Geocycle’ brand, the Company continues its efforts to provide safe waste management solutions to industries and municipalities, while meeting the highest standards of health, safety and sustainability.

Geocycle is also promoting the use of alternative fuels through advocacy at appropriate forums and by creating stakeholder awareness. The Government’s Swachh Bharat programme and mega cities seeking solutions for mutual waste management and co-processing of waste for use as RDF is expected to receive future traction. With increased consumption of alternative fuels, the Company has achieved 5.56% of TSR vis-à-vis 4.5% in 2018.

**Circular Economy**

ACC promotes the concept of circular economy by utilising waste from other industries into the Company’s cement manufacturing process. Besides co-processing waste as a fuel substitute, the Company also uses waste materials from the power and steel industries such as fly ash and slag to replace clinker in our cement. It saves primary raw material and reduces CO₂ emissions.

During 2019, 6.6 Million tonnes of fly ash, 2.85 Million tonnes of slag, 2.3 Million tonnes of crushed rock fines and 0.48 Million tonnes of alternative raw materials were consumed, contributing to the circular economy and providing sustainable, environment-friendly services to the nation.

**Water & Nature**

During the year, ACC consumed around 2.8 Million cubic metres of harvested rainwater in its cement operation, which is more than 50% of total water consumption. A note on water conservation is provided in the sustainability section of the Annual Report.

**Biodiversity**

This year, in its journey to conserve nature and preserve biodiversity, the Company planted >1 Lakh trees at its various locations. Few initiatives, focused on a particular floral/faunal group, were also undertaken at some plant locations under the ‘B-Buzz’ project.

The Company is committed to bringing about a positive change on biodiversity by 2030 vis-à-vis the baseline of 2020. The baseline assessment has already been completed ahead of 2020; and the action plan for biodiversity conservation is being firmed up in consultation with third-party experts.

**Green Building Centres (GBCs)**

By December 2019, 93 GBC’s have been operational. The GBC have collectively helped utilise 79,341 MT of fly ash, conservation of 1,71,905 MT of Earth’s natural topsoil and avoidance of 12,099 MT of carbon-dioxide emission during the year. Besides, as a part of this initiative direct employment opportunity was provided to more than 5,500 people and more than 36,000 low-cost housing has been facilitated through GBC products.

**Product Stewardship**

The Company has been the frontrunner to manufacture eco-friendly products such as blended cements. It aims to strengthen its efforts towards environment protection, health and safety performance throughout the entire products lifecycle.

In 2018, the Company became India’s first to obtain certified Environmental Product Declaration (‘EPDs’) for all its cement and concrete products. These EPDs can be used nationally and internationally to enhance the green building rating. The Company had also obtained GreenPro certification for all cement products.

In 2019, efforts continued for the concrete business and recently ACC Concrete has been conferred a ‘GreenPro certification’ by the Confederation of Indian Industries (‘CII’). The ‘GreenPro certification’
is a testament to ACC’s initiatives to ensure more efficient use of resources such as water, energy and other natural resources, allaying environmental issues and concerns.

**Air Emissions**

Air emissions represent a key environmental aspect of cement production. As an operating principle, ACC ensures that all of its sites measure and manage air emissions. During the year, the Company achieved 100% compliance with New Emission Regulations for cement plants by implementing various primary and secondary measures.

**Brief details of these initiatives are provided below:**

**Dust Emission Control**

Various primary measures were implemented for cooler exhaust gases such as flow improvement through modifications based on Computational Fluid Dynamics (‘CFD’) study in Electrostatic Precipitators (ESPs), along with upgrading to three (3) phase Transformer Rectifier sets, advanced microprocessor-based controllers and raper panels. The CAPEX project of conversion of two CPP ESPs to Hybrid Bag filters was implemented in one of our CPP. The above measures have together resulted in ensuring stack dust emissions in cement plants < 30mg/Nm³.

**NOₓ Emission Control**

Various primary and secondary measures such as NOₓ emission control comprising CFD modelling, meal curtain and low NOₓ burners and installation/commissioning of SNCR systems in integrated cement plants have been implemented. This has resulted in ensuring compliance with NOₓ emissions according to new emission regulations.

**SO₂ Emission Control**

The Company’s SO₂ emissions are within the specified regulatory limits and do not require major emission control measures.

The Company’s plants are required to have continuous online reporting of ambient air quality, effluents and process emission on a real time basis on the websites of regulatory authorities, and the Company had complied with this requirement.

**CORPORATE SOCIAL RESPONSIBILITY INITIATIVES**

ACC structured its social development interventions through ACC TRUST in alignment with the Global Sustainability Development Goals. Community development interventions undertaken in previous years continued with further vigour. The widening of portfolio included projects contributing to the national vision of achieving ‘Skilled India’.

The Company’s total CSR spent during the year was to the tune of ₹25.07 Crore. This was 2.10% of the average net profit of the last three (3) years. The Company’s CSR projects primarily focused on the following broad thematic areas, viz., Sustainable Livelihood, Quality of Education and WASH (Water, Sanitation and Health), which are as per Schedule VII of the Companies Act, 2013 and aligned to Global Goals.

The Company disbursed 370 scholarships under its ‘VidyasAarathi’ scheme, a comprehensive online scholarship. This helped economically disadvantaged students to get financial support to pursue their dream of better education.

Contemporary learning modules such as smart classes and interactive kiosks benefited students in 55 rural schools. Efforts were made to educate 1,380 girl children as part of the ‘ACC ki Laadli’ project. The Company continued to support seven government-run Industrial Training Institutes under the Public Private Partnership Scheme with the Government of India.

WASH (Water, Sanitation and Health) initiatives have till now touched more than two (2) Lakh lives. The project addresses community requirements for safe drinking water, better health through health camps and waste management in collaboration with municipal bodies.

More than 3,200 children received access to better health and nutrition through the support provided to 68 Anganwadi
centres. Company supported ART Centre and STI clinics. Over 5,600 persons got benefitted through the OPD, counselling, testing and treatment for HIV/AIDS.

The unprecedented rains and floods which ravaged many parts of Bihar and Odisha (cyclone-Fani) destroyed many lives, homes, schools, hospitals and civic infrastructure of the people in this region. The Company immediately stepped in to help local authorities in the flood impacted regions of Odisha and Bihar. The ACC Team along with channel partners reached out to affected people in both states. More than 4,400 families were provided relief kits and more than 800 people were provided medical aid in Bihar. Similarly, more than 2,200 families were provided relief kits and more than 800 people were rendered medical aid in Odisha.

HEALTH AND SAFETY (H&S)

The Company launched ‘More Boots on the Ground’ initiative to reinforce focus on the ground level and leadership engagement by interaction with shop floor employees. As part of this initiative, the management team of various departments/work sites/zones are conducting workplace inspection and are interacting with people to help improve the behavioural aspect of shop floor workforce and are enhancing the safety knowhow that is required for sustaining the H&S systems. To digitalise the platform, a Boots on Ground application is being launched in ACC, where people have to record their Boots on Ground (BOG) via scanning the QR codes.

• Health & Safety Improvement Plan (HSIP) 2019 was developed in the beginning of the year through a brainstorming session to identify key activities as this year’s focus area. The plan contains seven (7) H&S objectives with clear ownership of the top management for each objective. HSIP is developed to build on improvements in the areas of H&S Leadership and Accountability, Road Safety, Health, Contractor Safety Management, Strengthen Frontline safety Behaviours, People Capability & Engagement, Drive Zero Harm Culture, and Fatality Elimination Control.

• According to the Group’s Health and Safety Improvement Plan (HSIP), the Senior Management Team’s visibility at shopfloor tools like Visible Personal Commitment (VPC), have been conducted, where senior management discusses with subordinates on safety topics.

• In 2019, every site of ACC and RMX were audited for Health and Safety Management system (HSMS) to provide assurance on the implementation and effectiveness of on-site system and process, through a group-defined protocol. The site is being audited by the auditors. To strengthen the audit process ACC has developed online audit website and the audits of 2019 were conducted through this application.
Management discussion and analysis (contd.)

- **Process Safety Management (PSM) programme** The programme includes identifying the gaps in areas like coal mill and conventional fuel, mining operation, hot meal handling and electrical safety. The Company is gradually stepping up the implementation programme. Our compliance level is approximately 78%. The Company will conduct another round of self-assessment in 2020 and close all open points.

- **Global H&S Safety Days** were celebrated from 6th to 18th May'19 on ‘Minimum Safe Behaviours’ (‘MSB’). The focus was on the seven primary behaviours, which are linked to health and safety rules and are the condition for employment.

- Several activities were conducted during that period across ACC comprising the management staff, SFA and contractors, poster competition, street play, awareness sessions, and MSB video completion. The global H&S days were launched with a webcast for all employees by the Company’s senior leadership.

- ACC participated in LH group Video competition on MSB and 1 ACC winning entry was sent for group participation, which was organised as a part of Global H&S Days.

- ACC participated in LH group competition of Good Practice Challenge#3 — ‘How have you used advanced technology to improve H&S in your workplace?’ — The country has submitted final three (3) entries for global participation, of which ACC has won Challenge #3.

- Continuing our commitment to create awareness about safe work practices and behaviours, we launched the campaign of ‘SurakshaLaher — 2019’ in September 2019 ‘Confined Space’. This initiative from September 1, 2019 to September 30, 2019 consists of, but is not limited to, Awareness training on confined Space, Cross-functional teams conducting confined space survey identify gaps and mitigate them, More Boots on the Ground, Inspection of confined space tools and permit to work job cycle.

- **Capability Development** is always a focus area for ACC, where we cover each employee and shop floor people, auditor trainings on Health and Safety Management system, Behaviour Based Safety Training, Hazard Identification and Reporting Training, Excellence in Execution Workshop and many more were imparted during the year.

- **Key Lessons** initiative of sharing key lessons for all onsite LTIs and critical incident as per group requirements has been carried for implementation of actions across sites to avoid similar incident occurrence at other sites.

- A new initiative on ‘reviewing critical jobs’ is implemented in the Company. Critical jobs are those which have the probability of high-severity accident, if mitigation measures are not implemented properly. Hence, these jobs are reviewed by respective Director Plant one day before. On the day of execution, the CMO office and corporate H&S office directly contact supervisors over phone or video call, to discuss and ensure its proper implementation. It is done on a sample basis; and enjoys significant shop floor impact.

**Health**

During the year, the Company’s focus was to provide a healthy workplace, keeping employees healthy and providing emergency medical response. The lifestyle management programme was started wherein employees with health risk factors were monitored and provided with nutritional counselling. Around 2000 employees are registered in this programme and a significant reduction of health risk factors was observed.

A Hearing Conservation programme, ‘Protect your Ears’ was launched to protect hearing of employees because of high noise in the workplace. The Emergency Medical Response (‘EMR’) is another focus area during the year. The skill and infrastructure has been optimised and the regular monthly EMR drills are being conducted to sharpen and sustain the skills.

**Logistic Safety**

The Company has excelled in the road safety journey according to the roadmap committed in 2019. The Company’s Driver Management Centres provide valuable support for driver training and counselling. It has been a major influencer to change driver behaviour aligned with the Transport Analytics Centre.
(TAC). The major focus for 2019 was IVMS installation in 90% of controlled population and 20% km by the trained driver.

A Fatigue Management Campaign was launched across all plants for awareness on periodic rest to drivers. ACC increased its ‘trained driver’ pool to 60%, which covered 20% of the kilometres in 2019. Going forward, the Company’s primary focus will be on more volume by IVMS and trained drivers. Besides, the Company’s driver retention to make ACC a preferable destination will continue to be a strategic priority.

HUMAN RESOURCES

The Company believes that its employees are its opportunity multipliers and preparing them for the future is its top priority.

In our journey of challenging conventions, ACC is committed to provide best-in-class work environment and create people practices, which enables the Company in the development of employees and achievement of organisational ambitions.

Building for the Future

Sustainable and profitable growth can only be achieved in an organisation that focuses on performance culture and where employees are engaged and empowered to be the best they can be. The Company’s results are testament to effectiveness of its performance culture, which keep reinforcing accountability and ownership in teams to achieve and aspire for the stretched targets and enabling our people to partner in every step of the Company’s transformation journey.

To ensure the organisation and people meet their aspirations, we have put development plan in place for teams and individuals and are continually working towards strengthening ACC’s future readiness. To augment this further, ACC’s growth strategy has presented with fabulous opportunity to grow the talent within, which is not only fulfilling the organisation’s talent need, but also enabling employees to fulfil their professional aspirations.

Nurturing Talent

To ensure continuous development and ease of access to Company’s employees, ACC has adopted a digital learning route through our learning application ‘SAIL’. This application empowers employees to learn anywhere and anytime at their convenience.

The Company also had specific development initiative designed for senior executives, and its leadership teams in collaboration with reputed business school globally and in India.
Management discussion and analysis (contd.)

Infusion of Young Talent and Commitment towards Diversity
To stay competitive and become future-ready, ACC makes continuous efforts to identify, develop and nurture talent at all levels of the organisation for which the organisation has reinstated campus recruitment. Sixteen (16) young Chartered Accountants (CAs) from across India were inducted into ACC. These bright young CAs from the Institute of Chartered Accountants of India are currently working across plants and offices of the Company.

These campus recruits have brought new energy, infusing a spirit and culture of exciting new ideas, driving innovation across every sphere and refreshing the Company’s talent base. The Company has initiated a drive and is encouraging hiring of women professionals/employees across functions to improve gender diversity. The Company’s commitment to fostering an inclusive and diverse workplace is reflected by the fact that over half of the fresh CAs recruited by the Company are women.

The objective at ACC is to encourage the hiring of women employees across functions. Such initiative embodies the spirit of a gender diverse workforce and an inclusive work environment.

Industrial Relations
The Company enjoys harmonious industrial relations due to its vibrant work culture and believes in a collaborative approach to working. ACC’s employee relation practices ensures that it creates a win-win situation for both employees and the organisation. This caring spirit has gone a long way in maintaining a harmonious environment across all units.

The Company has expanded its area of innovation beyond cement and concrete to new building material categories like construction chemicals and dry mix products. ACC MAQER is an open innovation platform launched by the Company to explore institutional partnership (with leading B-schools, design schools and engineering colleges) and tie-ups with start-ups in related fields. Digitization is also another big area for innovation in terms of simplification of process, interface improvement and data accessibility.

BUSINESS RISKS AND OPPORTUNITIES
The Company’s governance structure has well-defined roles and responsibilities, which enable and empower the Management to identify, assess and leverage business opportunities and manage risks effectively. There is also a comprehensive framework for strategic planning, implementation and performance monitoring of the business plan, which includes a well-structured Business Risk Management (BRM) process. To systematically identify risks and opportunities and monitor their movement, a heat map has been designed comprising two parameters: a) likelihood of the event and b) the impact it is expected to have on the Company’s operations and performance.

The risks that fall under the purview of high likelihood and high impact are identified as key risks. This structured process in identifying risks supports the ExCo in strategic decision-making and in the development of detailed mitigation plans. The identified risks are then integrated into the
Company's planning cycle, which is a rolling process to, *inter alia*, periodically review the movement of the risks on the heat map and the effectiveness of the mitigation plan.

The key business risks and their mitigation plans are described herein below:

**Raw Material Risk**

*Fuel*: Cement manufacture is an energy-intensive process and there is a high dependence on coal and petcoke, which forms the principal fuels in thermal energy production. More than 3.8 Million tonnes of petcoke and coal are required each year by the Company to meet the requirements of its kilns and CPP respectively.

International coal and petcoke prices witnessed a sharp drop in H2 financial year 2019, however freight was on a higher range due to International Maritime Organization (IMO) regulations and volatility in the market. In the domestic petcoke market, lead domestic player has successfully started eight (8) gasifiers out of ten (10), leading to tighter availability of domestic petcoke, especially in Q1 financial year 2019.

The availability of domestic coal in 2019 was improved and all old linkage backlogs were cleared, leading to price advantage. Domestic coal-linkage Fuel Supply Agreements ("FSA") of majority cement players and all FSAs of ACC expired in June, 2018, which were auctioned in Tranche-IV between August and December 2018 and movement started from Q2 financial year 2019.

In 2019, ACC grabbed new opportunities by using flexible fuel mix, coupled with receipt of all old linkage low-cost backlog. Also, in the most competitive Auction Linkage Tranche-IV, ACC successfully secured more than expired quantity for the next five (5) years. Off-spec imported coal was utilised to mitigate the risk of high RB1/RB2 coal. In addition, continuous fuel mix optimisation, alternative fuels, firming up contracts for part of the volume and balance on the spot to capitalise on opportunities, spreading out purchases throughout the year, are some of the measures adopted by the Company to balance out the impact of the inflationary costs.

**Limestone**: Limestone is among the primary raw materials used in the manufacture of cement, making it imperative for the Company to ensure its uninterrupted long-term availability.

According to the Mines and Minerals (Development and Regulation) Amendment Act, 2015 ("MMDR Act"), mining leases granted before the commencement of the Act, for captive use are extended up to a period ending on March 31, 2030, or till the completion of their existing period of renewal, whichever is later. New mining leases would henceforth be allotted for a period of fifty (50) years through fresh auctions.

Most of the Company’s mining leases extend up to March 31, 2030, thereby ensuring adequate limestone reserves to cater to the requirements of its plants till the said date, after which the Company will have to participate in auctions.

As per the provisions of the MMDR Act, wherever a Company has been issued a Letter of Intent ("LOI") for grant of a mining lease, such LOI should be converted into a mining lease.

Wherever, the Company is of the view that it had a LOI, it has taken up the matter in the respective High Court’s seeking a direction to issue the mining lease. Currently, these matters are sub-judice. The Company is also participating in auctions to securing new mining leases for its existing plants as well as for its expansions at different locations.

As limestone is a gradually depleting natural resource to ensure prudent usage of the mineral in cement manufacture, a higher percentage of additives are added. This helps to make use of the low-grade limestone, without compromising on quality, and thereby conserving the mineral and increasing the life of the mine.

**Environment Clearance, Forest and Wild Life clearances** are a pre-requisite for mining activities wherever applicable. Besides, land acquisition is also becoming more challenging and expensive. The Management is taking adequate steps to put in place robust processes for obtaining fresh environmental clearances, wherever necessary.

**Slag**: Slag prices hardened during the year on account of a demand spurt, coupled with the shortage caused by wagon non-availability. To minimise the impact of the inflating slag prices, the Company has diverted its focus to composite cement.

**Market Competition**

The Cement Industry is witnessing a significant imbalance in its total installed capacity vis-à-vis the present capacity utilisation. Despite the capacity overhang, capacity expansion still continues, resulting in intense competition and adverse impact on the
Company’s market share, sales volume and profitability.

Efforts are also being made by the Company to widen the product portfolio by increasing the share of its premium products in the retail segment, application-based products and value-added products and services to the B2B segment.

Cyber Security
In the last few years, technology has evolved manifold and so have the risks attached to it. The proliferation of business data beyond our data centres to the cloud, social media and digital platforms for B2B and B2C connect have forced us to change the way we deal with cybersecurity. In addition to data loss, cyber-attacks can impact business operations, machinery and human assets, also resulting in legal and regulatory liabilities.

Recognising cyber risks, the Government of India has also introduced tighter cyber security laws. The responsibility has been entrusted to the Directors of the Company under the Act to take appropriate steps to ensure cyber security. In addition, the India Data Protection Bill is being analysed by the Joint Parliamentary Committee and is expected to get approved in 2020.

In view of the above priorities, appropriate controls (technology and governance) are implemented and planned as ACC’s business landscape presents a large surface for a possible attack in view of its vast and disparate network spanning many remote locations, with complex Information Technology (IT) and Operational Technology (OT) environment.

Adequate perimeter security is in place and business continuity plans are tested every year. The impact assessment of most of the hardware and software has been mapped. The Company’s cyber security management framework aligns with industry standards and regulations. A global Security Operations Centre (SOC) keeps track and prevents any potential attack in LafargeHolcim IT landscape, of which the Company’s IT landscape is part. Year-on-year (YoY) cyber security maturity assessments are conducted and improvement is tracked and measured regularly.

The Risk Management Committee of the Board is apprised of steps taken to mitigate cyber security risks.

Legal Risks
Since the Company’s business is dependent upon various approvals, consents, licences, permits and other such items, the Company is exposed to various legal, regulatory and litigation risks. The Company has a process of regularly reviewing key legal cases in terms of the demands involved, probability of receiving any adverse orders or matters where there may be financial or reputational impact on the Company.

ACC engages the best external legal counsel depending on the stakes involved, risks associated and keeps in mind the litigation cost. The LafargeHolcim Ltd., Ultimate Holding Company, has a Legal Case Management (LCM) Tool, where all legal cases are uploaded and tracked.

The Company organises regular Fair Competition training sessions on Competition Law for relevant employees, with special focus on functions like sales, marketing and procurement, among others. The purpose of this training is to create awareness on various facts of Competition Law compliance, ‘Dos’ and ‘Don’ts’, which forms part of risk mitigation. Apart from the face-to-face training sessions, E-learning modules are also rolled out to ensure better understanding of Competition Law compliance. The Company has also implemented various policies of the LafargeHolcim Group, including the Commercial Documentation Directive on Competition Law, to ensure awareness and review as part of the risk mitigation strategy. The process of the Company is subject to both internal and external audit to identify gaps if any, and accordingly corrective actions are taken.

Climate Risk
The details relating to climate risk and opportunities are dealt in the Natural capital part which forms parts of this Annual Report.