

ACC

ACC LIMITED
SUSTAINABILITY REPORT 2018

Building a **FUTURE**
Cemented in **TRUST**

Highlights 2019



CLIMATE

Reduced net CO₂ emissions per tonne of cement by **38%** compared to the 1990 baseline.



CIRCULAR ECONOMY

Used **~11 million tonnes** of waste derived resources in our operations



WATER & NATURE

Reduction of Freshwater withdrawal per tonne of cement by **18%** since 2015.



PEOPLE & COMMUNITIES

Approximately half a **million people** benefited from our community investments and projects.

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1.0

Chairman's Message



Dear Stakeholders,

Countries like India which are moving at great speed to create a better world for its citizens are often at serious risk. In its quest to spur quicker economic growth, create smarter cities, deliver better opportunities and standards of living to its population, the government needs to balance both the needs of the ecology and the environment with that of economic progress. And therefore it is imperative - even critical - for business to work together with government and civil society to ensure that we are socially and environmentally responsible while pursuing economic growth.

The question that concerns organisations today is not how much profit they have earned but how they have achieved it. It is extremely important that the business performs its activities in a responsible manner ensuring that the community and the environment are not adversely impacted by their actions. More than ever, today profitability and sustainability represent two sides of the same coin.

By the year 2100 there will be an estimated 11.2 billion on people living on this planet. Where and how will these people live? The only possibility is through sustainable development – meeting the needs of the present without compromising on the ability of future generations to meet their own needs.

At ACC, we have embedded sustainability into our business strategy which is in turn aligned with the United Nations Sustainable Development Goals, focused on the four pillars of Climate, Circular Economy, Water & Nature, and People & Communities.

We support sustainable development by providing superior environment-friendly products and solutions to cater to the evolving construction needs of our customers. By continuously adopting cleaner and greener technologies, pursuing improvements in thermal and electrical energy efficiency, consuming energy from renewable sources and increasing our blended cements portfolio, we are helping to reduce ACC's level of impact on the environment. The Company is managing to steadily reduce its carbon footprint each year. By disposing off industrial, municipal and agricultural waste from across the country in our cement kilns through Geocycle, we are helping prevent harmful emissions that would have been otherwise generated if the waste been disposed through open burning or landfills. ACC has continued its tradition of caring for the communities and stakeholders through its Corporate Social Responsibility programme that has benefitted around half a million people in 2018.

Building on the holistic approach of creating shared value for our investors, customers, employees and the community at large, that was well articulated in our first Integrated Report 2018, we are proud to present ACC's 12th Sustainable Development Report based on the GRI Standards.

I'd like to thank all the employees of ACC for everything they do, every single day, to leave our planet in better shape for future generations.

Narotam Sekhsaria
Chairman, ACC Limited

1.1

Managing Director & CEO Message

Dear Stakeholders,

With a population of 1.2 billion people, the strain on our country's resources is tremendous. It is predicted that by 2030 at least 68 Indian cities will have over one million inhabitants, and six megacities will have more than ten million each. This rapid pace of growth creates opportunities but also brings challenges with it – be it in infrastructure, public transport or access to basic services such as clean drinking water and electricity. So herein is a partnering opportunity and role for corporates to help fulfil.

At ACC, we produce the materials that build infrastructure and habitats of the future, and have committed to a sustainable model of business, to ensure that our corporate actions positively impact the economic, societal and environmental dimensions of performance. In this, our 12th Sustainable Development Report, you will see evidence of this commitment.

On the economic front, ACC delivered a strong performance once again with healthy volume and revenue growth. Sales increased by 8% to 28.4 million tonnes while our consolidated operating EBITDA grew by 11% and Profit Before Tax grew by 21% YoY, on a normalised basis. Creating value through innovation, we introduced ACC F2R SUPERFAST – a revolutionary cement with superior strength, superfine quality and superfast setting as well as ACC LeakBlock – a high performance waterproofing compound that prevents water seepage, which is particularly useful in monsoon-fed India.

We remain committed to the judicious use of resources, using our strengths in innovation to create stronger blended cements that consume less natural resources such as limestone as well as put to good use industrial-generations. At over 88%, ACC produces the largest share of blended cements among the large cement producers in India.

I am very proud that ACC has championed the use of solar power in the cement industry. We have already contracted over 68 MW of solar power to fuel our plants, and increased our green energy portfolio by ~83% in the past year.

I am delighted that ACC is the first cement company in India to complete the process of assessing and publishing a life-cycle-impact-assessment of its products through an Environment Product Declaration (EPD) for all its cement and concrete products. ACC is also India's first cement company to be awarded 'GreenPro Certification' by the Confederation of Indian Industries (CII) for its eco-friendly, blended cement product portfolio across all its plants.



We continue to make progress in our ambition to ensure our workforce goes home safely every day with strong Health & Safety awareness programmes and interventions, increased accountability and visible leadership.

We invested ₹ 20.45 crore in CSR programmes that benefited close to half a million people in 185 villages across India focusing on critical areas such as Sustainable Livelihood, Quality Education and Water, Sanitation & Hygiene (WASH). We have developed expertise in relief and rehabilitation during natural disasters, with our teams hitting the ground running in the immediate aftermath of cyclone-hit Odisha and large-scale flooding in Kerala, to distribute relief materials and help repair homes and village infrastructure.

Receiving the 'Outstanding Accomplishment' Award under Corporate Excellence Category at CII-ITC Sustainability Awards 2018 was a cherished recognition of the efforts of the ACC Parivar. Moreover, it has made us even more determined to deliver on our vision to remain a responsible and ethical company, at the forefront of sustainable construction solutions and innovation.

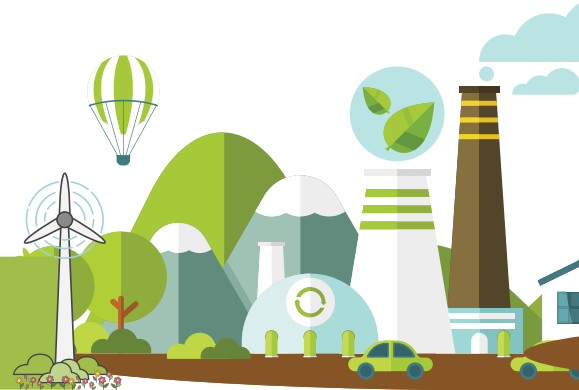
I would like to thank our employees, customers and partners for working with us to create a more sustainable world.

Neeraj Akhoury

Managing Director & CEO, ACC Limited

1.2

Sustainable Development 2030 Plan



ACC's sustainability strategy for the next decade is its Sustainable Development (SD) 2030 Plan, drawn up in 2016, aligned with the earlier SD 2030 Plan of the LafargeHolcim Group, focused on four significant pillars:





- **Climate** – Reduction of net specific CO₂ emissions
- **Circular Economy** – Enhanced utilisation of waste-derived resources
- **Water and Nature** – Reduction of specific freshwater withdrawal in cement operations; enhancing

biodiversity in all operating mines; implementation of Water Access, Sanitation and Health (WASH) pledge

- **People & Communities** – Improved H&S performance, gender diversity, provision of low cost shelter/affordable housing and sanitation

Since we have surpassed most of our targets in 2018, we are working towards setting higher targets for 2030 and the interim years. The targets will be restated to align with the LafargeHolcim Group's Strategy 2022 and revised SD strategy released by LafargeHolcim.

ACC will generate one-third of its turnover from enhanced sustainability solutions

	Climate	Circular Economy	Water & Nature	People & Communities
2020	 <p>We will Reduce net specific CO₂ emissions by 34% per tonne of cement (vs. 1990)</p>	 <p>We will Use 9.6 million tonnes of waste-derived resources per year</p>	 <p>We will Reduce specific freshwater withdrawal in cement operations by 19% Complete BIRS baseline assessments at all quarries Have BMP for all quarries</p>	 <p>We will Have zero onsite fatalities Reduce lost Time Injury Frequency Rate (LTIFR) <0.50 Reduce Total Injury Frequency Rate (TIFR) by 30% Benefit >1 million people from our social programmes Assess 80% high risk active suppliers</p>
2030	<p>We will Reduce net specific CO₂ emissions by 40% per tonne of cement (vs. 1990)</p>	<p>We will use 10.7 million tonnes of waste-derived resources per year</p>	<p>We will Reduce specific freshwater withdrawal in cement operations by 30% Show a positive change for biodiversity Implement WASH pledge at all our sites</p>	<p>We will Have zero fatalities Reduce LTIFR <0.20 Reduce TIFR by 50% Benefit 3.25 million people from our social programmes Assess 100% high risk active suppliers + Top sub-suppliers with high risk identified and assessed</p>

Note : Baseline year is 2015 unless stated otherwise



Case study:

ACC Kymore: Embedding Sustainability at a local level

At ACC, we believe that the hallmark of a great organisation is the shared value it creates for the communities in which it operates. Over the years, ACC Kymore has worked to conserve natural resources, improve air, land and water quality, manage waste efficiently and become an integral part of the community. Each year, ACC Kymore invests over ₹ 1.5 crores in activities to aid the social development of local communities benefitting over 35,000 people with particular emphasis on education, employable skills and livelihood opportunities, water and sanitation, covering 16 villages across Katni district.

Reducing our carbon footprint

At Kymore, we have undertaken various measures to reduce CO₂ emissions – from installing an 11 km-long conveyor that eliminates the usage of trucks to transport limestone from mines to the plant, to using captive power plant bed ash and fly ash to produce Portland Pozzolana Cement. We also utilise low-grade limestone extracted through strategically planned mining to conserve non-renewable resources.

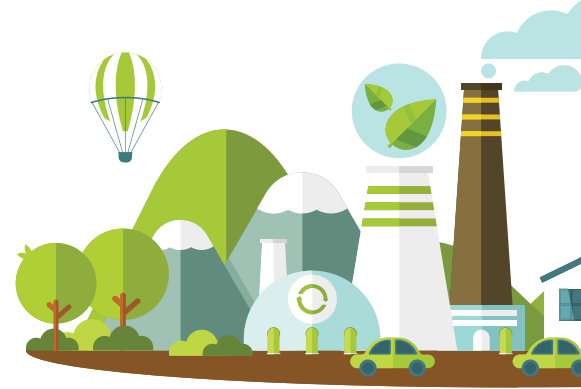
Recycling waste

We offer customised waste management solutions for a range of stakeholders. These include managing the plastic waste from local communities, helping large corporations such as Unilever manage their packaging waste, assisting the state government to safely dispose of ozone-depleting chlorofluorocarbon gases and even disposing of seized narcotics.

Catching water where it falls

Kymore is a drought-prone area, so interventions around water are critical. Our plant remains water-positive by recycling cooling water, ensuring zero water discharge and creating rainwater storage reservoirs in worked-out mine pits. To ensure the surrounding village communities have a regular supply of water for domestic use, ACC has helped recharge groundwater, deepen ponds, construct check dams and rainwater harvesting systems, and more. An 800-meter irrigation channel was built to channel water from our mine pits to help irrigate 200 acres of farmland, benefiting hundreds of farmers and their livestock. Several water bodies have been constructed in the forest areas to benefit wildlife and animals. In a wonderfully collaborative effort, over 200 villagers volunteered to deepen a pond along with ACC and the local authorities.

ACC's Sumant Moolgaokar Technical Institute (SMTI) offers skill building courses in electrical engineering, instrumentation, diesel and fitting trades. Each year, over 100 graduates from SMTI join ACC's workforce in plants across India.



WASH programmes

ACC Kymore has robust community development programmes that benefit over 35,000 people, with particular emphasis on education, employable skills and livelihood opportunities.

We reach out to 8,000 students every year to provide better education, re-enroll dropouts, deliver free coaching and more.

We mobilised the formation of 200 women's self-help groups to pursue income generation activities like tailoring, imitation jewelry making, spice grinding and backyard poultry to encourage alternative sources of livelihood and boost family income.

Over 15,000 people are positively impacted each year by our Health and Sanitation programmes, which include Medical Health Camps, adolescent health, and Handwashing and Hygiene programmes.

Recognition for our efforts

In 2018, ACC Kymore was recognised 'Excellent Energy Efficient Unit' by the Confederation of India Industry (CII) at the 19th National Award for Excellence in Energy Management 2018 and given a 5 Star rating by the Ministry of Mines for Sustainable Development for its Mehgaon and Bamangawan Mines.



> Water harvesting at ACC Kymore

“Sustainable development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance.”

- Ban Ki-moon, former UN Secretary General



2.0

ORGANISATION & STRATEGY

- 2.1** About the report
- 2.2** ACC – Pioneer in Cement & Concrete
- 2.3** Corporate Governance
- 2.4** Business Risks and opportunities
- 2.5** Stakeholder Engagement
- 2.6** Materiality
- 2.7** Compliance and Other Aspects



2.1

About the Report



Since 2007, ACC has been publishing its Corporate Sustainable Development Report using the Global Reporting Initiative (GRI) guidelines for communicating its sustainability agenda. This is the 12th year of the report that reviews sustainability performance in 2018 based on the latest GRI Standards in accordance with the “Comprehensive” option. (GRI 102-50,51,52,54)

This report scans the performance of all ACC’s operations viz. cement plants, grinding units, ready mix concrete plants, limestone mines, captive power plants, office buildings and all their related processes but excludes five subsidiary companies which are not material subsidiaries as defined by SEBI and have no significant bearing on overall operations. ACC has two joint ventures and two associate companies which are named in the Board’s Report of the Annual Report and on the Company’s website which do not form a part of this report. (GRI 102- 46)

The report contains a restatement of information on raw material consumption in chapter 4.1, which is described later in the report. The format adopted here is the same as in the report for 2017. (GRI 102-48, 49)

Materiality was assessed in 2018 including prioritisation of stakeholders. This exercise was entrusted to Thinkstep Sustainability Solutions Pvt. Ltd., a subsidiary of Thinkstep AG, Germany, that specialises in sustainability software and consulting. Details are presented in chapters 2.5 and 2.6. As before, we dedicate this report to our stakeholders whose interests and concerns are reflected in the materiality matrix presented in Chapter 2.6.

In our attempt to make a concise report, we have provided references to the website and annual report wherever required, while disclosing the background data. ACC’s Annual Report for 2018 which was aligned to Integrated Reporting Guidelines was used as basic reference. Images, tables and charts are obtained from internal sources, wherever available. This year too, we have aligned our report with 17 United Nations Sustainable Development Goals.

As we are working actively in various areas that are aligned with SDGs, we have mapped each chapter with the SDGs it is contributing to.

The report was compiled and steered by ACC’s Environment & Energy Conservation Cell (EECC) in close collaboration with the Corporate Communications Department and other functional departments of ACC. A complete GRI Index is annexed at the end of the report.

External assurance of the report is provided by an independent agency M/s TUV Nord India Pvt. Ltd. and their Assurance Statement is a part of this report.

We welcome feedback, queries or suggestions which may be sent by email to corporate.communications@acclimited.com. (GRI 102-53)

The report was compiled and steered by ACC’s Environment & Energy Conservation Cell (EECC) in close collaboration with the Corporate Communications Department and other functional departments of ACC. A complete GRI Index is annexed at the end of the report.



2.2

ACC – Pioneer in Cement & Concrete



The name “ACC” is synonymous with cement. The Company has, over 83 years of its existence, assiduously built a strong, trusted brand and a growing base of loyal customers.

ACC Limited, one of India’s leading manufacturers of cement and concrete was incorporated in 1936. Headquartered in Mumbai, the company’s operations are wholly domestic. Since 2016, ACC Limited is a subsidiary of Ambuja Cements Limited and a member of the LafargeHolcim Group, the leading building products & solutions company. (GRI 10 2-1,3,4,7)

ACC has long been recognised as a trendsetter in cement and concrete technology and for its unique expertise in cement manufacture, mining and distribution.

It is one of the big customers of the domestic coal industry and a considerable user of India’s vast network of rail and road transport network for inward and outward movement of materials.

ACC is among the first in India to demonstrate commitment to environmental protection and installed sophisticated pollution control equipment dating back to 1966, much before pollution control laws came into existence.

Our business practices are planet friendly

- Rehabilitating used mines into forests and useful water bodies
- Promoting renewable energy sources and alternative fuel and raw materials to conserve mineral resources and lower our carbon footprint
- Through the Geocycle, ACC offers waste management solutions through co-processing in its kilns

1st indigenous cement plant
to launch commercial distribution of
bulk cement and concrete
bulk cement handling facility



17
Cement
Plants



75
Ready Mix
Concrete
Plants



28.4
Million
tonnes of
cement sold



₹14,477
Crore net
sales



6,731
Employees



50,000+
Dealers &
Retailers

To promote best practices and build a strong knowledge and skills base, ACC runs two institutes that offer professional technical courses that benefit youth from backward areas. ACC also supports seven government run Industrial Training Institutes (ITI) by upgrading their quality of education and infrastructure.

Celebrated as one of India’s most trusted brands, ACC has touched the lives of generations of Indians with its quality products, services and expertise.

Corporate Governance



ACC is known and respected for conducting business with integrity, transparency, accountability and compliance with the spirit and law of the land. Over the years, this has built stakeholder trust and confidence, helped attract and retain financial and human capital and meet social expectations.

ACC is a professionally managed Company functioning under the overall supervision of the Board of Directors. Its Board comprises the required blend of Independent and Non-Independent Directors, including an Independent Lady Director in line with the provisions of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 (hereinafter referred to as the "SEBI Listing Regulations") as amended from time to time. The Managing Director & Chief Executive Officer (MD&CEO) of the Company is the only Executive Director on the Board.

Members of the Board are all eminent professionals selected on the basis of their expertise in areas relevant to the Company and their ability to advise on matters of strategy, economic, environmental and social aspects. The Board plays a pivotal role in ensuring good governance with its clearly defined role, responsibility and accountability. The Board and its Committees guide the Management team responsible for achieving the Company's objectives and enhancing stakeholder value.

Pursuant to SEBI Listing Regulations, the Company has a policy on Board diversity that is posted on the Company's website and can be accessed on the following link

http://www.acclimited.com/assets/new/new_pdf/Policyondiversityoftheboard.pdf (GRI 102-18)

BOARD OF DIRECTORS

N. S. Sekhsaria, *Chairman*
 Jan Jenisch, *Deputy Chairman*
 Neeraj Akhoury, *MD & CEO*
 Martin Kriegner
 V K Sharma
 Falguni Nayar
 Suhil Kumar Roongta
 Christof Hassig
 Shailesh Haribhakti
 Vinayak Chatterjee*
 D Sundaram*
 Sunil Mehta*

Golden Peacock Award for Excellence
in Corporate Governance in 2018
 Awarded a Certificate of Recognition
for Excellence in Corporate
Governance by the Institute of
Company Secretaries of India (ICSI)



*appointed at the AGM held on 22.3.19

Note: Mr. Ashwin Dani, Mr. A R Gandhi and Mr. F K Kavarana ceased to be Directors of the company as on 22.3.19.



Leadership & Organisation Structure

The Managing Director & Chief Executive Officer (MD & CEO) provides strategic direction, lays down policy guidelines and ensures implementation of the directives from the Board of Directors and its various Committees and functions under the superintendence, guidance and control of the Board. (GRI 102-5,16, 26, 27)

The Executive Committee (ExCo), comprising senior management holding strategic positions in the company, supports the MD & CEO. The ExCo is responsible for overall business deliverables and meets regularly to review and monitor the implementation of annual plans and budgets, discuss cross-functional matters and address business challenges. (GRI 102-19)

Organisation Structure, Roles and Responsibilities

ACC has a function-based organisation structure, which enables operational challenges to be addressed efficiently, swiftly and proactively. Led by the MD & CEO, it comprises verticals for the functions of Sales & Marketing, Manufacturing, Human Resources, Finance, Procurement and other Corporate Services. The Regional Heads for Sales, Logistics, Finance and HR have a direct reporting line to the respective Vertical Heads. The Heads of Plants report to the respective Manufacturing Cluster Head in the Region. Procurement activities are managed by the India Procurement Organisation executed from five Procurement Cluster Offices. The Finance, Secretarial and Compliance functions report to the Chief Financial Officer while the Health & Safety and Legal functions report to the MD&CEO. (GRI 102-20)

Committees of the Board





The Board has also set up a separate committee to monitor compliances of regulations by the company through its compliance committee.

The Board reviews the working of the committees. The Chairman of every Committee convenes its meetings and the minutes are circulated to the Board of Directors and presented at the Board Meeting. Composition and terms of reference of the committees are set out in more detail on the Company's website and in the segment on Corporate Governance of the Annual Report for 2018. The connections to these pages are outfitted in the last section of this part. (GRI 102- 18-24)

Code of Business Conduct

The Board of Directors has affirmed a Code of Business Conduct applicable to Members of the Board and to all employees. ACC has a policy of 'zero tolerance' to bribery and corruption in any form which is explained in detail in the 'Anti Bribery and Corruption Directive', added to the above Code, which has been posted on the Company's web site www.acclimited.com. All Board Members and Senior Management staff have confirmed compliance with the Code. The Management Staff is trained on the Code regularly . (GRI 102-17,25)

Board Effectiveness and Other Governance Practices

Well-defined guidelines and rules ensure the effectiveness of all facets of the functioning of the Board and its supervision of the overall performance of the company. This includes procedures adopted for:

- Familiarisation Programme for Independent Directors
- Board's annual self-evaluation of its performance
- Criteria for selection of candidates for appointment as Directors and Key Managerial Personnel and for senior leadership positions
- Remuneration Policy for Directors, Key Managerial Personnel and Members of the Executive Committee
- Related party transactions
- Prevention of Insider Trading

More details are available at www.acclimited.com/investor-relations/corporate-governance and also in the section on Corporate Governance on page 116 of the Annual Report for 2018 available at https://www.acclimited.com/newsite/annualreport2018/ACC_Annual_Report_2018.pdf (GRI 102-28, 32-37,38,39,41)

Our 'Green Friends' facilitate waste segregation to help reduce landfill waste and greenhouse gas emissions.



> Clean & Green Madukkarai – an ACC initiative to collect and segregate waste from 8,500 households in Madukkarai

Business Risks and Opportunities



The Company has a robust governance structure with well defined roles and responsibilities for each vertical. This helps in identifying and managing business risk in a proactive manner and at the same time empowers the management to pursue business opportunities. **The risks that fall under high likelihood and high impact are identified as key risks. 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 below: (GRI 102-11,15,29,30, 201-2)

Risk

Limestone Availability

As per the new Mines and Minerals (Development & Regulation) Amendment Act 2015 (MMDR), leases granted for captive use before its commencement are extended up to March 31, 2030 or until completion of their existing periods of renewal, whichever is later. New mining leases are now allotted by auction for a period of 50 years from the date of grant. Forest and wildlife clearances being a prerequisite, land acquisition is challenging and expensive.

Slag prices hardened during the year on account of increased demand coupled with shortage caused by wagon non availability.

Mitigation & Opportunities

Most of ACC's limestone leases got an extension in accordance with the new Act up to March 31, 2030.

The Company has initiated steps to convert prospecting licenses into mining leases, secure new mining leases for existing plants and new expansions.

As limestone is a vital natural resource, its usage is managed judiciously by adding higher percentage of additives enabling the use of low grade limestone, thereby conserving minerals and increasing the life of the mine.

In order to minimise the impact of inflating slag prices, the Company has introduced composite cement.

Risk

Fuel Availability

Cement manufacturing is an energy intensive process with high dependence on coal and petcoke and ACC uses over 5 million tonnes of them as the principal fuels. Fuel and energy costs rose steeply during the year. The volatility of fuel prices in the international markets coupled with uncertainty over availability of domestic and linkage coal continue to pose challenges in regard to coal availability and pricing.

Limited availability of domestic coal due to prioritisation on allotment of coal to the power sector and resultant reduction in rake availability by the Railways to the non-power sector impacted the availability of coal, thereby hardening prices. There was also significant increase in petcoke prices during the year.

Mitigation & Opportunities

Improved fuel mix at selected plants, progressive increase in the usage of Alternative Fuels, firming up contracts for part of the volume and balance on the spot to capitalise on opportunities, and spreading out purchases throughout the year are some of the measures adopted by the Company to balance out the impact of inflationary costs.



Risk

Market Competition

The cement industry is witnessing significant imbalance in its total installed capacity vis-a-vis capacity utilisation which presently is ~75%. Despite the capacity overhang, capacity expansion continues, resulting in intense competition and adverse impact on the Company's market share, sales volume and profitability.

Mitigation & Opportunities

Efforts are 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 B2B segment.

Risk

Cyber Security

With increased reliance on IT systems and the widespread usage of internet for doing business there is a constant threat to the Company's sensitive data assets being exposed to unethical hacking and misuse. The ramifications from cyber attacks may not only be confined to mere loss of data but may result in business and reputation loss.

Though the government has introduced tighter Cyber Security Laws, it is the responsibility of the Directors of the Company under the Companies Act, 2013 to take appropriate steps to ensure cyber security.

Mitigation & Opportunities

ACC's IT systems are fully geared to meet the highly probable threat of "Distributed Denial of Service" attack. Its cyber security management framework aligns with industry standards and regulations. Most hardware and software have been mapped.

LafargeHolcim Group has a strong firewall and Disaster Recovery System. 'Zenith', a new robust cyber security programme facilitates LafargeHolcim Group companies to be vigilant and well-prepared to face cyber attacks and take prompt remedial action.

Risk

Legal Risk

With the increasing ease of doing business, government norms are getting stringent to mitigate the rising nuances and possible lapses in governance. All the legal risks the company is exposed to can lead to high financial and/or reputational impact on the company.

Mitigation & Opportunities

All important cases are closely monitored by the Company and a broad strategy is outlined for effective management of litigation related risks.

The Company is in the process of developing a well defined system which not only tracks the status of all pending litigations but also provides updates on latest jurisprudence in relevant matters. The processes of the Company are subject to both internal and external audits to identify gaps which could lead to potential violation of competition law.

2.5

Stakeholder Engagement

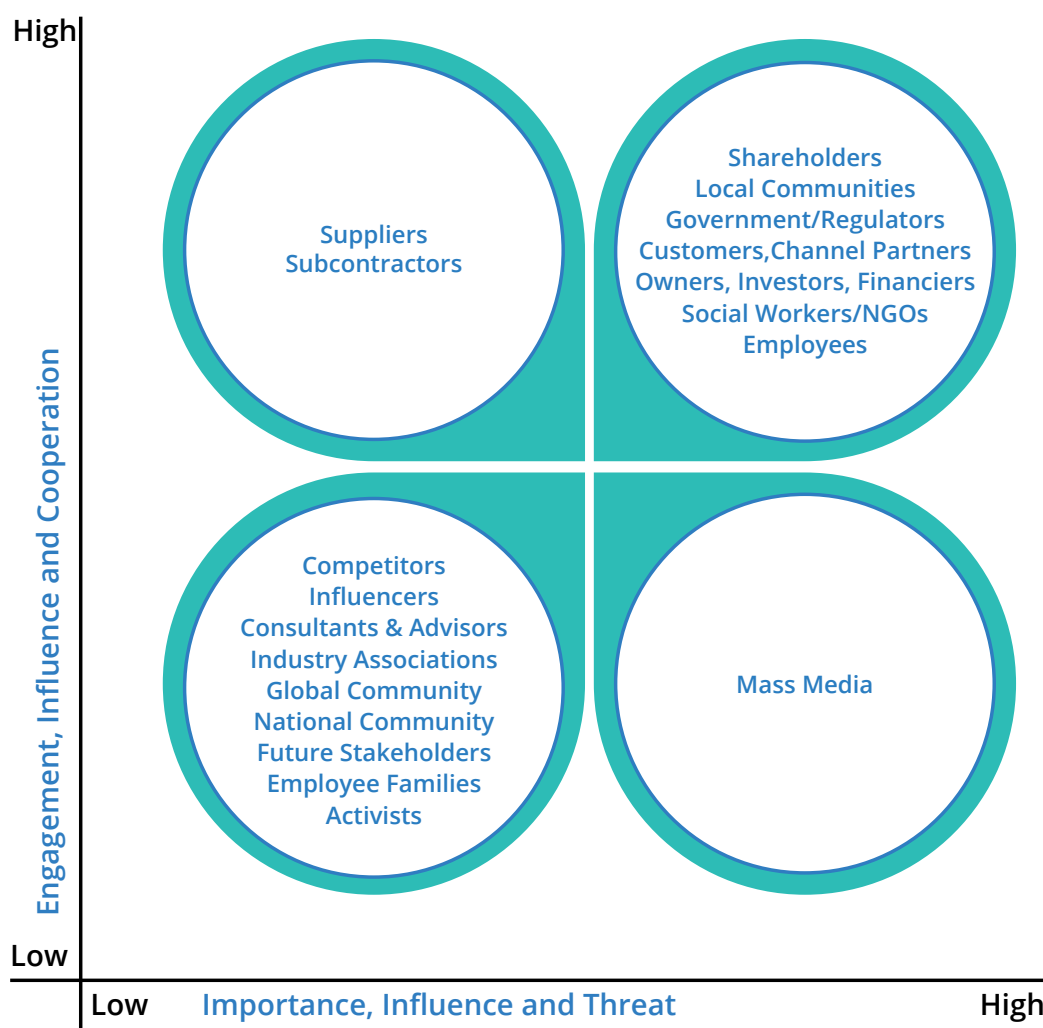


ACC has a large population of stakeholders from our shareholders to our workforce of permanent employees and contract workers as well as trade unions, from customers and channel partners to vendors and communities living in the vicinity of our operations.

Stakeholder Analysis

Stakeholder analysis is done periodically. It was done last in 2018 when we undertook a detailed exercise of

stakeholder identification, mapping their interface and influence, and thereafter, prioritisation. This year we took the results from the last evaluation; stakeholders were mapped in terms of their importance to ACC and their levels of influence, threat and cooperation. The accompanying matrix presents Stakeholders' Importance, Influence & Threat to ACC on X-axis and ACC's Engagement, Co-operation & Influence on stakeholders on Y-axis. (GRI 102-40, 42)





Effective Engagement

We engage with our stakeholders consistently, the nature and form of which depends on the relationship with the stakeholder.

Communication being an integral part of engagement is powered by various means and channels such as regular meetings, email messages, face-to-face interactions, webcasts, events, portals etc. These channels have fueled a two way dialogue; their feedback and suggestions help us make continuous improvements in our performance delivery. Technology has enabled more frequent and interactive communication particularly through social media channels. The intent is to build a strong chain of accountability in the organisation towards meeting stakeholder's needs and concerns and improving quality of our services. (GRI 102-43)

Charters and Memberships

ACC is a member of various bodies of trade, commerce and other associations at a national and international level. The advantages of being a part of these bodies is knowledge sharing on best practices, opportunities for networking and partnerships, access to the decision makers and experts of the industry, understanding global and national trends, gathering fresh insights on government policies. (GRI 102-12,13)

The various bodies ACC is associated with are as follows:

- a. United Nations Global Compact
- b. Cement Sustainability Initiative
- c. Leaders for Nature
- d. International Union for Conservation of Nature
- e. Indian Business & Biodiversity Initiative
- f. Confederation of Indian Industry
- g. National Safety Council
- h. British Safety Council
- i. Federation of Indian Chambers of Commerce & Industry
- j. Bombay Chamber of Commerce & Industry
- k. Indian Merchants' Chamber
- l. PHD Chamber of Commerce & Industry
- m. Council for Fair Business Practices
- n. The Institute of Company Secretaries of India
- o. Employers' Federation of India
- p. Indian Roads Congress
- q. Indian Geological Congress
- r. Federation of Indian Mineral Industries
- s. The Energy & Resources Institute
- t. Indian Green Buildings Council
- u. Association of Business Communicators of India

ACC has received the highest recognition of 'Outstanding Accomplishment' in the Corporate Excellence category at the CII ITC Sustainability Awards 2018





Stakeholder Engagement

 <p>Employees</p>	<p>Key Concerns</p> <ul style="list-style-type: none"> • Training & development • Performance evaluation, recognition • Sharing knowledge and best practices • Fair practices, work life balance • Health & safety matters <p>Frequency</p> <ul style="list-style-type: none"> • On a regular basis 	<p>Mode of engagement</p> <ul style="list-style-type: none"> • Town Hall meetings and webcasts • Intranet portal newsletter • Cultural events • Safety committees, meetings, toolbox talks • Trainings and performance management system • Reporting mechanisms
<p>Key Concerns</p> <ul style="list-style-type: none"> • Compliance with laws and regulations • Regular reporting <p>Mode of engagement</p> <ul style="list-style-type: none"> • Regular visits, applications 	<ul style="list-style-type: none"> • Meetings, presentation, reports and networking in different forums organised by regulatory authorities • Presentations from management <p>Frequency</p> <ul style="list-style-type: none"> • As and when required 	 <p>Government/ Regulators/ Local Authorities</p>
 <p>Channel - Dealers & Retailers</p>	<p>Key Concerns</p> <ul style="list-style-type: none"> • Assured quality • Support in sales promotion • Regular supply & timely delivery • Profitability and return on investment <p>Frequency</p> <ul style="list-style-type: none"> • Continuous contact visits • Dealer Meets, NPS survey - annual 	<p>Mode of engagement</p> <ul style="list-style-type: none"> • Sales calls • Relationship building activities like meets, events and engagements • Net Promoter Score (NPS) Surveys
<p>Key Concerns</p> <ul style="list-style-type: none"> • Estimation of building cost • Assured quality • Selection of good cement • Process of good construction • Troubleshooting <p>Frequency</p> <ul style="list-style-type: none"> • Customer visits are regular. Others are based on needs and opportunities 	<p>Mode of engagement</p> <ul style="list-style-type: none"> • Calls/visits by customer service engineer • Consumer meets & exhibitions • Information on ACC products • Complaint handling & feedback mechanism • Advice on good construction practices 	 <p>Consumers (Trade) - Individual Home Builders, Contractor</p>
 <p>Consumers (Institutional)</p>	<p>Key Concerns</p> <ul style="list-style-type: none"> • Assured quality • Consistency in product • Regular supply & timely delivery • One window solution for all cement and concrete needs • Testing if needed 	<p>Mode of engagement</p> <ul style="list-style-type: none"> • One-to-one sales calls • Technical after sales service • Key Account Management system • Be a solution-provider <p>Frequency</p> <ul style="list-style-type: none"> • High frequency and regular contact



Key Concerns

- Livelihood opportunities & income generation
- Quality education
- Preventive health and sanitation
- Community environment
- Infrastructure development

Frequency

- Programme-based and regular

Mode of engagement

- CSR interventions & volunteering
- Volunteering initiatives
- Community events and functions
- Stakeholder Engagement Surveys
- Community Advisory Panels meetings
- Social audits

Key Concerns

- Information on Company's performance
- Company's financial health, growth and performance
- Dividend payments

Frequency

- Quarterly/ annually/ as and when required

Mode of engagement

- Annual General Meetings.
- "Stakeholders' Relationship Committee" to addresses grievances of investors and shareholders.
- Designated email ID and a toll-free number 1800-3002-1001 that members and investors can call



Key Concerns

- Registration as approved vendor
- Product specifications
- Pricing & terms of payment
- Delivery period
- Product failures & user complaints
- Compliance to Supplier code of conduct

Mode of engagement

- By phone, VC, e-mail or in person.
- Suppliers meet
- Capacity building on Supplier code of conduct
- Surveys

Frequency

- High frequency and continuous contact visits

Key Concerns

- Awareness of safe, sustainable & cost-effective waste disposal methods
- Awareness about co-processing
- Delay in permit process
- Handling & transporting waste
- Assurance of regular waste disposal

Mode of engagement

- Regular visits, emails, telephonic conversations
- Participation in various forums, release of case studies and articles in reputed publications
- Customer events

Frequency

- Monthly or more



Key Concerns

- Sharing of information, expertise and best practices & concerns

Frequency

- As and when required

Mode of engagement

- Providing inputs and information
- Participating in awards, training and capacity building programmes

Key Concerns

- Transparent disclosure and information sharing

Frequency

- As and when required

Mode of engagement

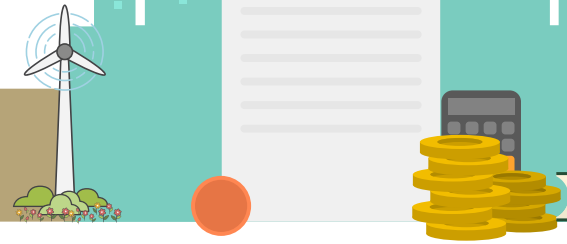
- Press releases
- Publishing articles, news
- Meetings and interviews



2.6



Materiality



Materiality mapping was last done in the year 2017 as per the requirement of GRI standards. In 2018, a comprehensive assessment of materiality was conducted to review the previous assessment, gain new insights and record improvements and changes. To provide an

unbiased perspective on materiality, we engaged an external consulting agency, Thinkstep, to anchor the exercise. It included focused group discussions and survey responses of a representative sample from external and internal stakeholders. The exercise included the following steps.

Identification:

All material topics were identified as per the organisational context, through industry peer research, sector initiatives, wider sustainability trends and harmonising with SDGs.

Prioritisation:

To prioritise business issues, impact of each material topic on our operations, sales, costs and reputation etc. were discussed at focus group discussions with department heads, topics were categorised and ranked. Stakeholder concerns were collected from key stakeholder groups through online surveys and interviews, wherein they were asked to categorise all material topics as low, medium or high.

Review and validation:

Lastly, materiality analysis outcomes were reviewed, validated and finalised in consultation with the SD team.

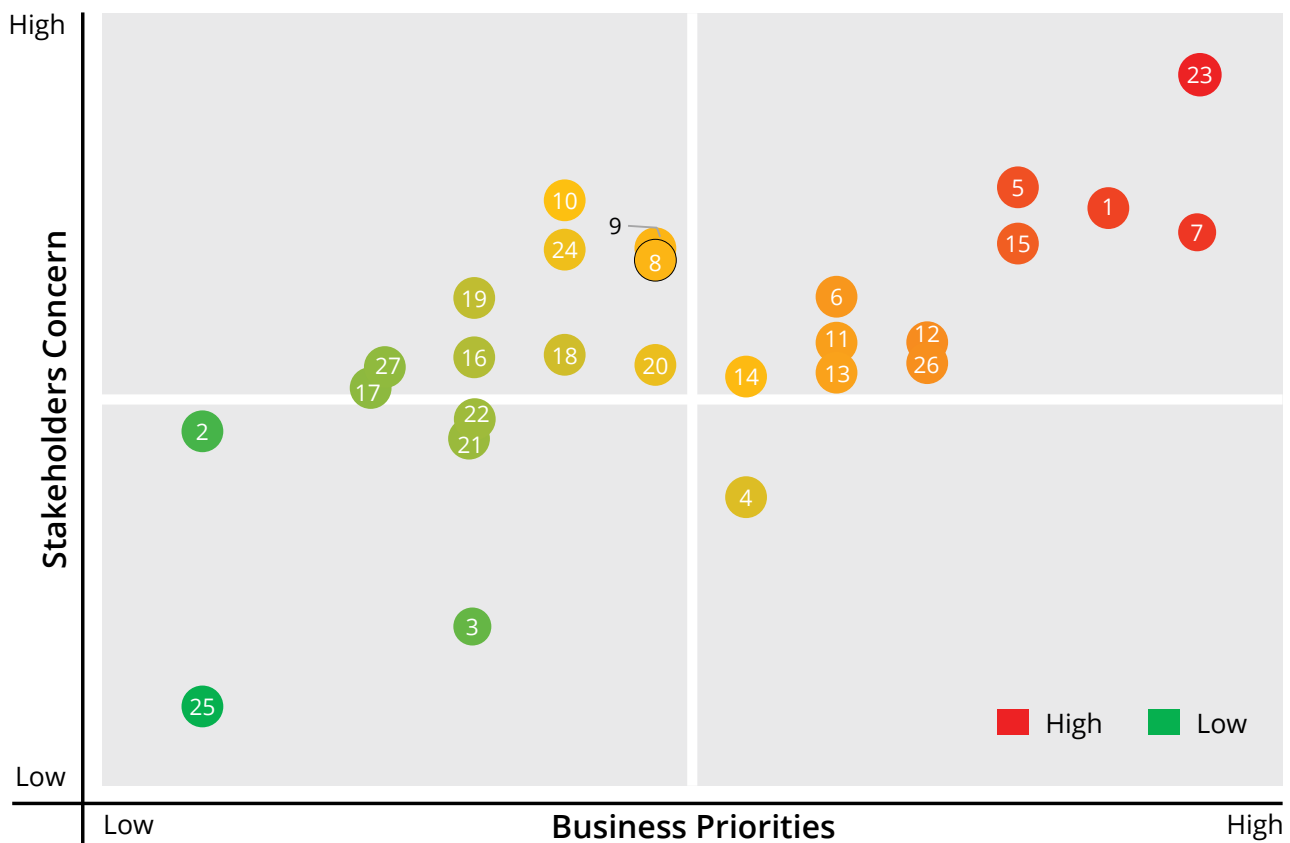
Refining the analysis done in 2017, the material aspects identified this year were aligned with those named by the LafargeHolcim Group in its Sustainability Development 2030 (SD 2030) Plan and adopted while formulating ACC's SD 2030 plan. Other than this realignment and refinement, the end results are largely similar, mainly because the organisation has not undergone any significant changes in terms of its business or constituent stakeholders. (GRI 102-10)

The company focuses on all the impacts of the potential material topics covered in the materiality matrix

regardless of whether we have direct control on the material subjects, or not. Key material points as per the business needs and stakeholder concerns are demonstrated in the matrix beneath. (GRI 102-44,47, 103-1)

Referring to the Materiality Matrix on the next page, all the material topics falling in the topmost (4th) quadrant are covered extensively throughout the length of the report, whereas the topics falling in the rest of the quadrants, are either jointly reported with other material topics or reported briefly in the chapters. Topic boundaries for each material topic is also mentioned with the matrix. (GRI 102-46)

Materiality Matrix



Internal

- 8 Research and Product Innovation
- 10 Code of Conduct and Business Ethics
- 15 Energy
- 21 Attraction/Development/Retention of talents
- 22 Employee Training and Development

Internal and External

- 1 Economic Performance
- 2 Indirect economic impacts
- 3 Land acquisition for mines and new projects

4 Supply Chain Management

- 5 Customer Relationship Management
- 6 Corporate Governance
- 9 Sustainable Construction
- 11 Risk Management
- 12 Climate change and Global Warming
- 13 Circular Economy
- 14 Biodiversity
- 16 Water Management
- 17 Effluent and Waste management
- 18 Air Emissions
- 20 Employment and Labour Practices

23 Health and safety

- 24 Human Rights
- 25 Public Policy and Advocacy
- 26 Community Development
- 27 Grievance mechanism

External

- 7 Compliance to regulatory/statutory requirements
- 19 Transportation and Logistics

Compliance and Other Aspects



ACC takes pride in being compliant with various policies and codes in place to ensure ethical conduct, fair competition, and anti-corruption. The top management and senior executives are kept abreast with the latest requirements of applicable laws, and regularly review compliance matters. (GRI 419-1)

Related Party Transactions

All transactions the Company entered in to with related parties during the year were in the ordinary course of business and on an arm's length pricing basis.

Strictures and Penalties

No strictures or penalties have been imposed on the Company by the Stock Exchanges or by the Securities and Exchange Board of India (SEBI) or by any statutory authority on any matters related to capital markets during the last three years.

Fair Competition Directive Programme & Whistleblower Policy

The Company is committed to high standards of corporate governance and stakeholder responsibility. The Fair Competition Directive programme which was earlier known as Value Creation in Competitive Environment (VCCE) was introduced as early as 2008 and the Company has been carrying out extensive training sessions annually for creating awareness among relevant employees on fair competitive practices. Employees in Sales and Purchase and other relevant functions, also receive training on various aspects of competition law and on behavioral aspects for ensuring fair competition in the market place.

The Company has an "EthicalView Reporting" (EVR) Policy to deal with instances of fraud, mismanagement and unethical behaviour, if any. The EVR Policy ensures that strict confidentiality is maintained whilst dealing with

concerns and ensures that no discrimination is meted out to any person with genuine concerns. A dedicated helpline "ACC Ethics Helpline" has been set-up which is managed by an independent professional organisation. Details of the Ethical View Reporting Policy are disclosed on the Company's website at www.acclimited.com/sh/ERP.pdf

Employees received extensive training through e-learning modules and face-to-face sessions to create increased awareness about the Company's Fair Competition Directive and Anti Bribery and Corruption Directive (ABCD). In 2018, the Company received 67 complaints under the EthicalView Reporting Policy, out of which 33 were resolved and the balance 34 complaints are under various stages of investigation and completion. (GRI 205-1-3)

Donations and Political Contributions

Being avowedly politically neutral in its Code of Business Conduct, the Company avoids political donations, campaigns and promotions of a political nature; it enjoins employees to also observe strict neutrality. The only donations allowed by the company are to recognised charitable causes. (GRI 415-1)

Legal Cases

There are two legal cases related to competition law which are pending against the company.

1. Complaint filed under Competition Act by Builders' Association of India
2. Complaint filed by Director, Supplies & Disposals, State of Haryana (GRI 206-1)

Details of these cases are given in our Annual Report 2018.

“The environment and the economy are really both two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves.”

- Wangari Maathai, Nobel Peace Prize Winner, 2004



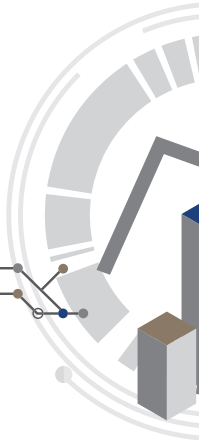
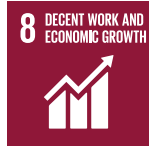
3.0

ECONOMIC ASPECTS

- 3.1** Performance Highlights
- 3.2** Products & Services
- 3.3** Customer Excellence
- 3.4** Transport & Logistics
- 3.5** Supply Chain & Procurement



3.1



Performance Highlights

In 2018, ACC reported a strong performance in both its cement and ready mix concrete businesses, growing net sales by 12% and PBT by 15% YoY.

The company's ready mix concrete business registered significant growth during the year.

Our Ready Mix Concrete (RMX) business surpassed its performance of previous years, witnessing substantial growth of over 16% in volume and 15% in revenue by focusing on profitable construction segments and Value-Added Solutions (VAS) delivered to large projects which increased by 13% in 2018 YoY.

Consolidated Operating EBITDA growth was up by 7%, achieved by executing a set of priorities, both on revenue and cost levers, improving efficiency, leveraging our premium products portfolio and strengthening our customer and market approach.

Consolidated income, comprising of revenue from operations (net of excise) and other income, for the year was ₹ 14,944 crore, 12% higher as compared to ₹ 13,392 crore in 2017.

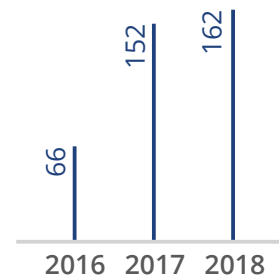
Consolidated Profit after Tax for the year was ₹ 1521 crore as compared to ₹ 925 crore in 2017.

A statement showing Direct Economic Value Generated and Distributed appears on page 31 of the Annual Report 2018 while page 32 shows the Value Added Statement. (GRI 102- 45, 201-1)

More details of the financial performance may be seen on ACC's Annual Report 2018 at https://www.acclimited.com/newsite/annualreport2018/ACC_Annual_Report_2018.pdf

FINANCIAL INCENTIVES AND SUBSIDIES

₹ CRORE



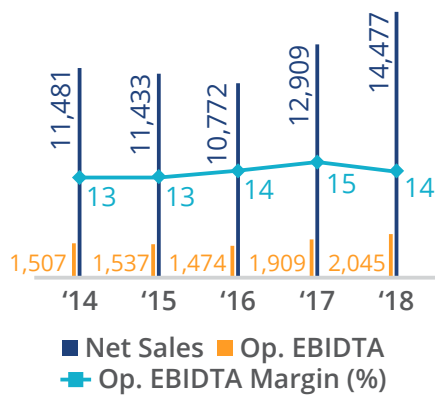
■ Incentives and Subsidies from Govt. (GRI 201-4)



ICAI Award for Excellence in Financial Reporting for Commended Annual Report 2017

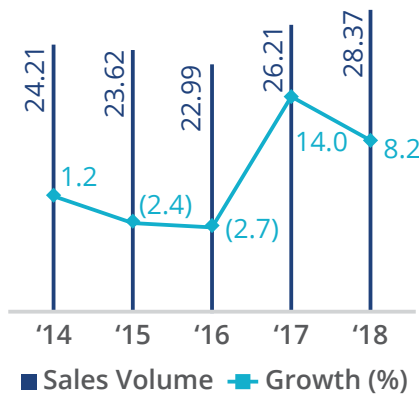
NET SALES, OPERATING EBITDA & OPERATING EBITDA MARGIN

₹ CRORE



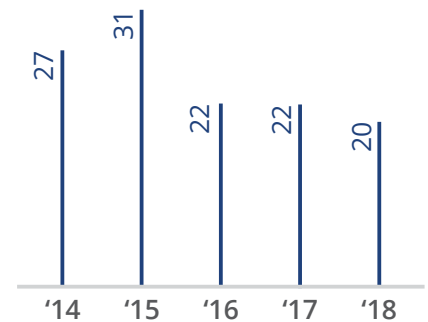
CEMENT SALES VOLUME & GROWTH

MILLION TONNES



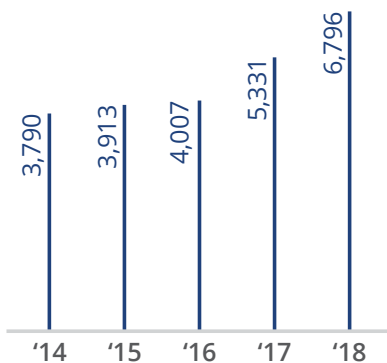
CORPORATE SOCIAL RESPONSIBILITY EXPENDITURE

₹ CRORE



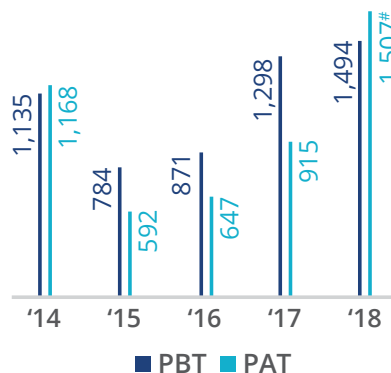
CORPORATE TO EXCHEQUER

₹ CRORE



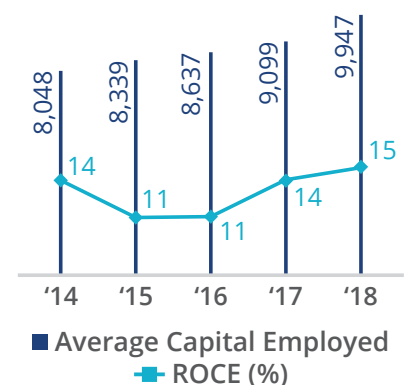
PROFIT BEFORE TAX & PROFIT AFTER TAX

₹ CRORE



AVERAGE CAPITAL EMPLOYED & RETURN ON CAPITAL EMPLOYED (ROCE)

₹ CRORE



* Figures for 2018, 2017 are as per Ind AS and remaining figures are as per Previous GAAP

Includes write-back of ₹501 Crore relating to tax provision.

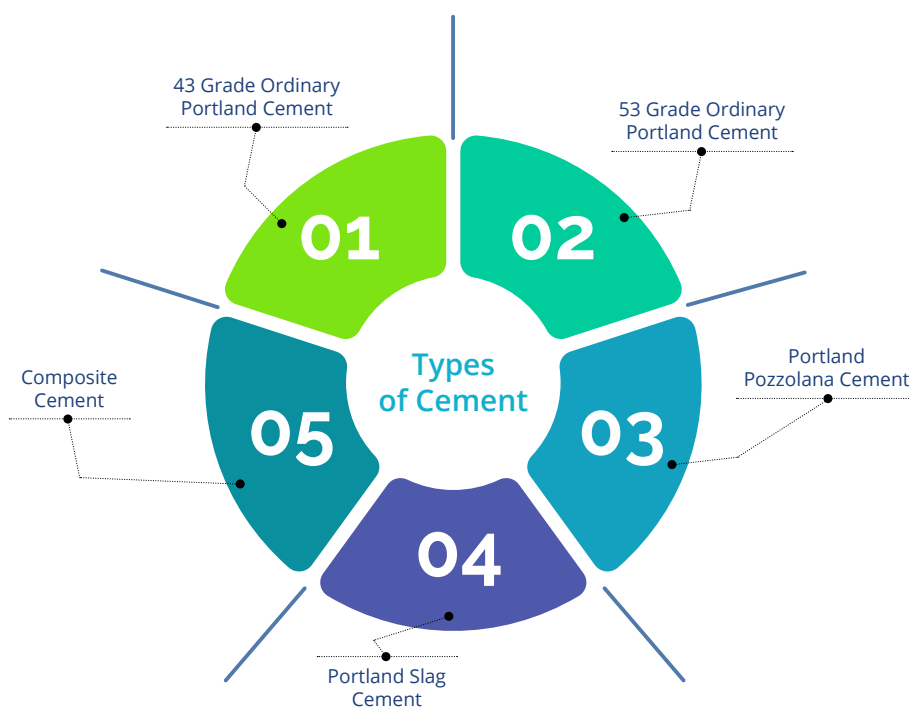
Products & Services

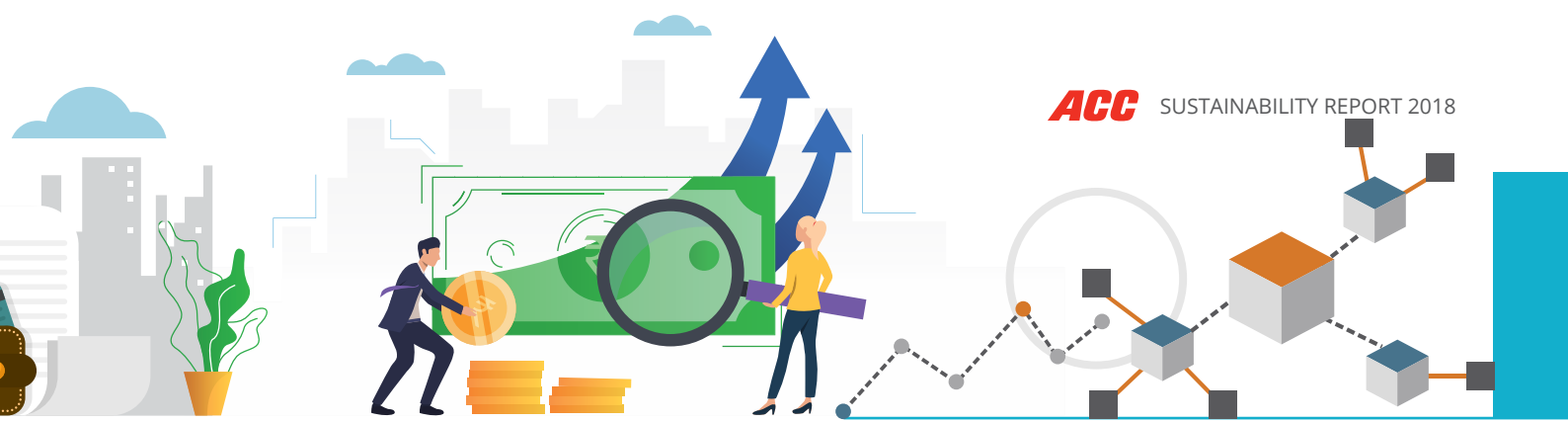


ACC's superior quality products, services and expertise have transformed Indian metropolises, towns and villages for over eight decades. Our cement and concrete is at the heart of mega infrastructure projects from dams and canals to power plants and ports. We have helped connect India, supplying our trusted products to build bridges, flyovers, roads, railways, metro projects and airports across the country. We have touched the lives of millions of Indians by helping build homes and schools in villages to transforming cities with their towering skyscrapers and huge housing projects. (GRI 102-2)

Innovation

The thrust on experimenting with new ideas and creating new prototypes is the backbone of the innovation journey and has led to the development of several breakthroughs in cement and concrete applications over the years. ACC widened its portfolio of value-added varieties of cement and concrete for special and customised applications. In this journey, ACC is supported by the expertise of its parent company LafargeHolcim.





These products assure superior performance for different applications from foundations to roofs, with water repellent properties for coastal areas, with special parameters like early strength and durability. Cement is distributed mostly in 50 kg bags, each made of polypropylene (PP) and AD Star bags. Bulk supply is also offered for large users.

Reducing the use of virgin materials and increasing the use of alternative materials helps minimise ACC's impact on the environment. Our blended cements are strengthened by adding industrial generations such as slag and fly ash which also help conserve natural resources of limestone and improve our clinker factor. In 2018, ACC's share of blended cement increased to ~88%.

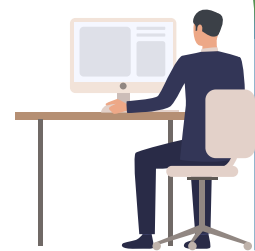
Blended Cements



Portland Slag Cement (PSC), Portland Pozzolana Cement (PPC) and Composite cements are blended cements that are made by substituting a part of clinker with certain industrial generations, such as slag from steel plants or fly ash from thermal power stations. Blended cements are recognised globally as being substantially more environment-friendly as they involve lower CO₂ emissions and help conserve precious limestone resources.

ACC has also started manufacturing environment friendly composite cements which use both slag and fly ash in Bargarh, Jamul, Sindri, Damodar and Kudithini plants primarily for sale in the Eastern region.

In 2018, ACC's share of blended cement increased to ~88%.



Over the years, the Company's marketing teams have developed a deep understanding of customer preferences and requirements which enables it to maximise utilisation of existing capacity on "product value-based volume strategy". This has resulted in creation of new revenue lines with introduction of new products. The sale of premium cements has been steadily increasing.

Ready Mix Concrete (RMX)

ACC is among the largest manufacturers of ready mix concrete in India with 75 modern ready mix concrete plants in major cities and towns. ACC's Ready Mix Concrete business serves the infrastructure, commercial and realty segments. It is the leading solutions provider serving diverse customer requirements from skyscrapers, townships, roads and highways, flyovers, metro rail projects to irrigation schemes and power plants, each with its individual requirement of concrete applications.

The concrete product range now includes a wide range of one-stop solutions and value-added products, all tailored to meet specific customer requirements from basic requirements up to higher grades of concrete to build the country's tallest and largest structures

Quality Specifications

ACC observes more stringent quality norms in the manufacturing process than the statutory ones prescribed by the Indian Standards. ACC cement conforms to 43 Grade Ordinary Portland Cement (IS 8112-1989), 53 Grade Ordinary Portland Cement (IS 12269-1987), Portland Slag Cement (IS 455-1989) and Portland Pozzolana Cement (IS 1489-Part 1).

Each bag of cement clearly indicates the statutory quality specification to which the cement contained therein conforms. Bags containing special cements also highlight key product benefits in addition to the statutory information.

ACC's ready mix concrete business refers to the two codes of IS 456:2000, Plain and Reinforced Concrete - Code of Practice (Third Revision), (Reaffirmed 2005) and IS 4926:2003, Ready Mix Concrete - Code of Practice (Second Revision), 2003.

We do not manufacture any products that are either restricted or disputed.

There were no instances of non-compliance with regulations and voluntary codes concerning product and service information & labeling and health & safety impacts of our products and services. (GRI 416-1, 417-2,3)

Customers

Individual Home Builders (IHBs) across the country make up our largest customer segment. IHBs purchase cement from trade channels. An important and growing segment is that of industrial, commercial and infrastructure (ICI) projects. These customers purchase cement directly from the Company. Direct buyers may also include ready mix concrete plants or units where cement is consumed as a raw material to make concrete products. The Company has enhanced its product range and capability to meet the rising engineering requirements needed for the increasing number of urban transformation projects.

ACC Supercoat Premium: 15 minutes Pothole Repair Solution

ACC Supercoat premium is a specialty product from ACC's concrete business for instant pothole repair. To support the road segment, a "rapid hardening ready to use material" has been developed specially to counter the menace of potholes on the roads. This quick pothole repair solution allows the road to be opened for traffic within 15 minutes of its application.



ACC F2R Superfast

ACC F2R Superfast, launched in January 2018, is a revolutionary new cement product with superior strength, superfine quality and a superfast setting formula that enables robust construction in quick time; it also has the added advantage of early strength. This innovative new product received phenomenal response from consumers who clearly see its benefits.

A Valuable and Viable product

India is the world's second largest market for cement and has contributed considerably to the Indian economy by generating direct and indirect employment, taxes and revenues. It also generates a tremendous amount of indirect employment and business opportunities. The cement industry draws a lot of services and products from Indian Railways, road transport, and the coal industry to run its production and day-to-day operations. Cement plants, most of which are in rural and semi-urban areas, have created hubs of economic activity in their vicinity. Cement is such an important commodity in the market that the consumption of cement per capita is often used as a rough indicator of economic and human development. With lower average embodied carbon and energy as compared to most other building materials, concrete is recognised as being the most viable building material in use today. India's cement industry is acknowledged as having the smallest carbon footprint as compared to its counterparts in the rest of the world, with ACC itself enjoying pride of place as being one of the country's most sustainable companies.



Unique Services promoting Sustainability

Green Building Centres (GBCs)

Geocycle

Details of these two unique services are available in subsequent chapters 4.4 and 4.8 of this report.

Customer Excellence



Customer-Centricity

ACC is a customer driven organisation committed to deliver the best value to the customer through its quality products and services.

The major customer segments for cement are housing (~66%), followed by infrastructure (~18%) and commercial (~16%) sectors.

For ACC, the largest customer segment in terms of both volume and profitability is the retail segment comprising Individual Home Builders and low-rise buildings.

ACC sells ~78% of its cement in retail i.e. "Business to Consumer" (B2C) segment while the remaining 22% is offered in the "Business to Business" (B2B) segment. (GRI 417-1, 102-6). It serves the home builders through its strong channel network of 50,000 dealers and retailers across the length and breadth of the country.

Customer Engagement

Successful Customer Relationship Management (CRM) frameworks are set up to oversee customer exchanges and inquiries. Each sales region convenes dealer meets. Moreover, there are customer meets, technical seminars and engagements to connect to Individual Home Builders, site visits and participation in home building and construction exhibitions.

Customer service engineers at each Sales Unit meet customers, end users and channel partners before and after sales to promote awareness on the correct usage of cement and concrete and good construction practices. (GRI 102-6)

Resolving Complaints

The Company has an effective complaint handling system that facilitates prompt logging, investigation, resolution and closure. A total of 1,096 complaints were received from customers in 2018, out of which 36 (accounting for 3.3%) were pending as of 31st December, 2018.

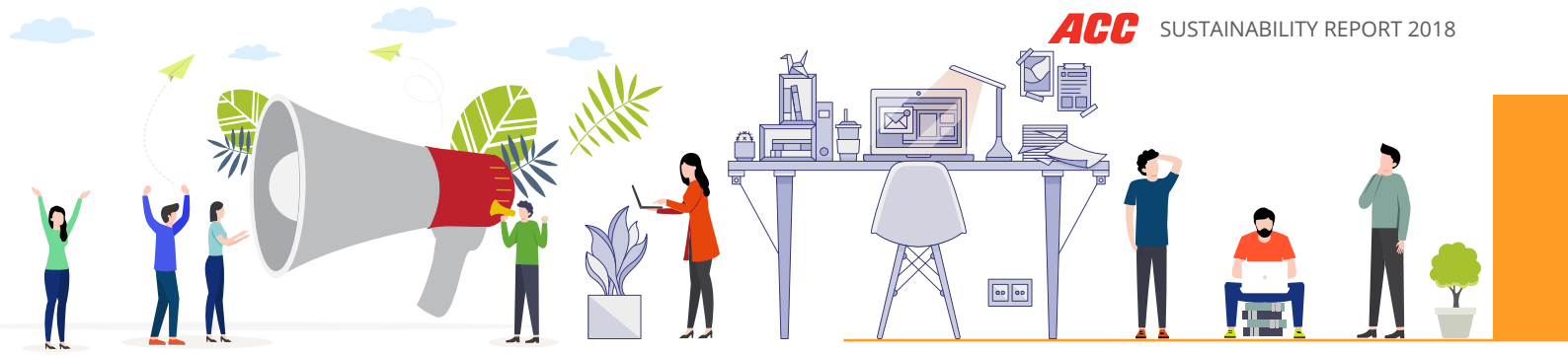
ACC is increasing its use of digital technology to connect with its existing customers and to further extend its customer base.

Using Technology to Connect

ACC's Dealer Connect app and website are designed to deliver a seamless user experience. Our channel partners can place orders and track order status, check loyalty points, confirm deliveries and download monthly ledgers at their convenience.

ACC's Service Connect App helps our field force to digitally geotag every construction site visited, add details of contractors of every site, conversion and orders, every day.





Channels of Communication

Well-structured and result-oriented sales and marketing campaigns are devised to reach out to customers through appropriate use of a mix of communication channels that enable visibility and frequent contact, particularly close to the point of purchase.

Our marketing communication is made up of a judicious mix of:

- 🗣️ Personal selling
- 🗣️ Direct marketing
- 🗣️ Advertising – outdoor, point-of purchase, print and electronic
- 🗣️ Public Relations
- 🗣️ Digital, interactive multimedia and social media

Care is taken to ensure that all these activities are compliant with relevant regulations and laws.

ACC's branding team has effectively used social media to launch and promote the Company's product and services thereby further strengthening Brand ACC.

As a responsible customer-centric organisation, ACC upholds a tradition of ethical marketing practices. During the year, there were no incidents of non-compliance with any regulations or voluntary codes relating to the Company's marketing communications, including advertising, promotion and sponsorships.

Marketing Communication Strategies

- 💬 To communicate ACC as a trusted brand in the marketplace
- 💬 To present a complete profile and description of our products, emphasising their superior quality and special features.
- 💬 To demonstrate the special values of our products through live examples and to disseminate customer-focused information.
- 💬 To dialogue with professionals and influencer groups who can serve as brand ambassadors.



Indian Concrete Journal

The Indian Concrete Journal (ICJ) was first published by ACC in 1927 to share knowledge and

information on concrete to engineers, architects, builders, contractors and manufacturers. ICJ enjoys a dedicated readership across India and internationally. It disseminates information on the latest developments in cement, concrete and construction practices, and highlights the versatility and varied applications of concrete. **Recently, ICJ published its first-ever ICJ Collector's Edition.** For more information, visit icjonline.com.

Transport & Logistics



Critical Success Factors

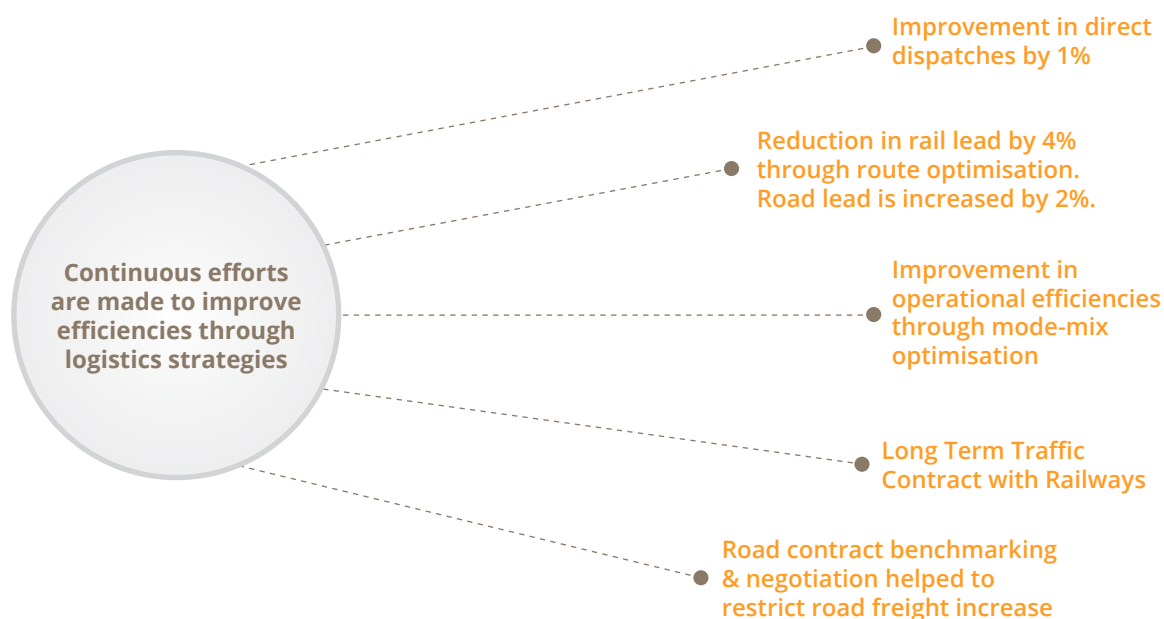
Logistics costs accounted for a whopping 27% of the total cost of operations. Cost efficient distribution and on-time delivery is the most important factor to run the business of a bulk commodity like cement. Effective management of transportation and logistics, through our sales channels and warehouse network spanned across the country, has been a game changer in retaining our position in the market.

Logistics Excellence

Logistics being a very important pillar of ACC's business, the team at ACC strives to achieve best-in-class logistics in terms of cost-to-serve and time-to-serve. Its logistics excellence programme covers employees to last mile delivery to customers. The motto is to move less, handle less, move efficiently, contract efficiently, and manage growth which is embedded in the logistics team, as it strives for continuous improvement.




Logistics Planning and Management

Road and rail are the major modes of transportation for inbound and outbound movement. Rail dispatches are always useful in moving large quantities of cement over long distances, while road transport is effective for shorter routes and enables direct delivery. Road transport is managed by company approved transporters. Cement manufacture is a continuous process and often there is a mismatch between production and demand, which is bridged by warehousing but entails extra costs of handling, storage and re-transport.






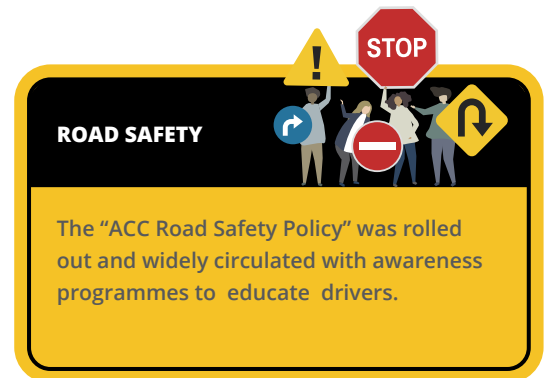
Innovative Improvements



-  Radio Frequency Identification (RFID) and Global Positioning Systems (GPS) - ACC was the first in the cement industry to use these technologies to monitor truck movement in-plant and in transit to help reduce loading and unloading time, reduce delays and manage vehicle turnaround
-  Road safety-Focused engagement with drivers and transporters
-  Improve warehouse efficiency and safety – The new “Star Warehouse Programme” aims to upgrade warehouses across several parameters to make them the best in class in the industry

Driver Management Centres (DMCs)

The Driver Management Centres set up at all plant locations provides valuable support for driver training and counseling. Multiple activities from Defensive Driver Induction (DDI) for first trip drivers to Defensive Driving Course (DDC), in-cab assessment, tool box talks, JRM briefing were carried out through these Driver Management Centres.

-  A Transport Control Tower (TCT) was set up in 2018 as a nodal point to monitor the driving patterns of the drivers through ‘In Vehicle Monitoring System’ (iVMS) and provide counselling to the drivers on safe methods of driving. The installation of iVMS in the trucks was also accelerated in order to bring more vehicles within the ambit of TCT monitoring and counseling.



-  In-Camera counseling for drivers was launched across all plants. In respect of vehicles yet to be installed with iVMS, a camera installed in the driver's cabin records the journey behavior of the drivers which is later used for driver counselling. Blind spots being a major area of safety concern were identified during the year and safety measures were taken to eliminate the chances of an accident. In addition, a video recording on negotiating blind spot safely was shown to the drivers, employees and their family members.
-  “Anti- toppling devices” were fitted in Transit Mixers to prevent accidents caused by roll-over of mixers.

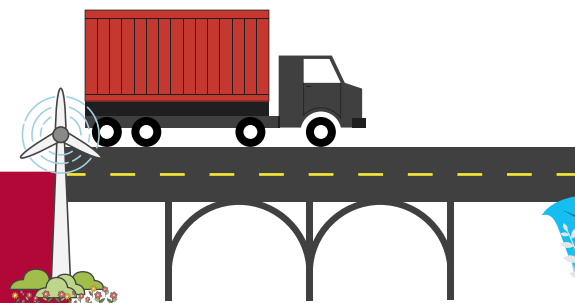
Driving Efficiency

Optimised sourcing helped reduce input costs. Optimisation of rail and road movement and route mapping helped control transport costs despite a rise in fuel prices.

Innovation in OSH – Safety implementation, Proactive at Occupational Safety & Health (OSH) India Awards 2018



Supply Chain & Procurement



Procurement is one of the most important parts of the organisation's value chain as it plays an influential role in its operations, efficiency and ultimate profitability. (GRI 102-9). The Procurement team is responsible for ensuring uninterrupted production and distribution so vital to a continuous process like cement. It streamlines these critical processes, manages raw material prices and costs at the best terms and sources of supply with the best mode of transport – together ensuring that the high standards of ACC's products and services are maintained.

Major inputs required for cement are limestone, coal, petcoke, gypsum, slag and fly ash, iron ore, bauxite, etc. Cement-making is energy intensive and needs a good deal of thermal and electrical energy. All cement plants of the Company are located within close proximity to limestone mines, which ensures minimum transportation of this principal raw material. Coal and petcoke are the major fuel and are procured directly from domestic companies or imported. ACC meets most of its electrical energy requirements from captive thermal power

plants. To substitute fossil fuel, the Company also utilises industrial, biomass and municipal waste to serve as Alternative Fuel & Raw Materials (AFR). Other bulk materials are transported inward by rail or road. Cement machinery being outsized, complex and specialised with few reliable sources, it is purchased directly from manufacturers.

Suppliers and Vendors

We have a large countrywide base of ~10,000 suppliers which includes large established manufacturers or distributors of trusted brand names. Wherever possible, ACC purchases materials and equipment directly from manufacturers or from their licensed sellers. In keeping with the Company's planet-friendly traditions, ACC prefers vendors with established practices in the areas of CSR and Sustainability. (GRI 102-9, 204-1)

“Demand Planning and Forecasting Award 2017”,
in the category Best Use of Analytics in Demand
Planning and Forecasting - Manufacturing Sector -
by the Institute of Supply Chain Management.

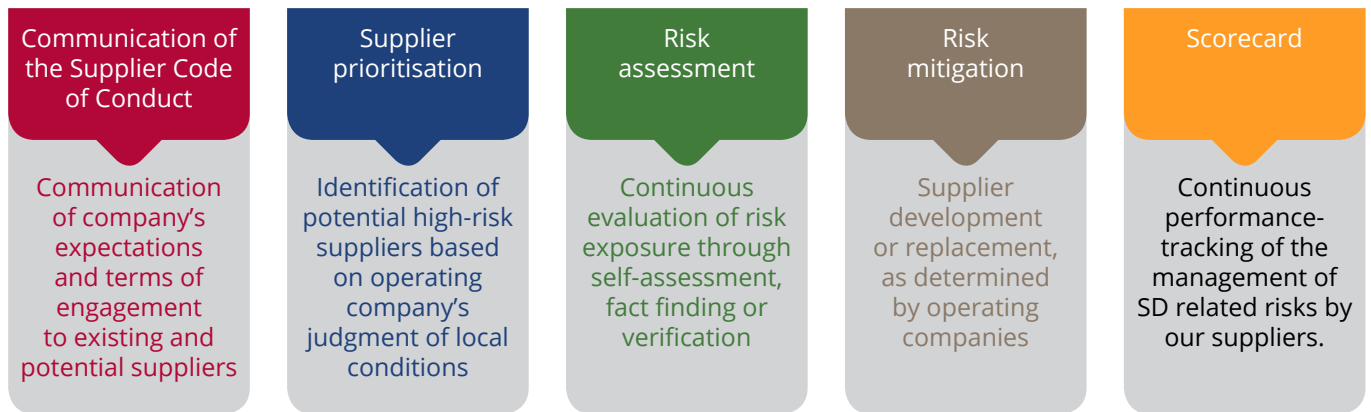
“Industry Excellence in Supply Chain –
Manufacturing 2017” at the 11th Express Logistics
and Supply Chain Leadership Awards 2017.

“Warehouse Innovation/ Initiative of the Year
2017” at the 11th Express Logistics and Supply
Chain Leadership Awards 2017.





Supplier Selection Steps



Supplier Code of Conduct

Suppliers and vendors are expected to adhere to our Code of Conduct which includes principles of health and safety, human rights, business ethics, and environment.

Transparency and accountability are a must in all procurement activities.

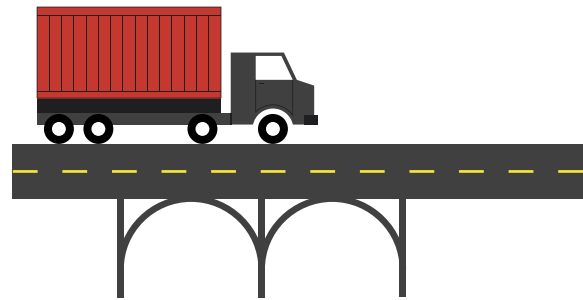
Supplier Environmental and Social Assessment

All agreements with suppliers such as purchase orders, purchase agreements, service agreements, and frame agreements have to refer to the supplier's compliance with the SA8000 audit certification, environmental management, legal compliance requirements and social clauses, including human rights aspects and ethical requirements. With its signature or order confirmation, the supplier accepts and agrees to adhere to these requirements.

In the reporting period under review, 6.2% of our suppliers were screened using environmental criteria and social criteria. (GRI 308-1, 414-1)

There were no instances where any supplier was identified to have significant actual and potential negative environmental or social impacts. (GRI 308-2, 414-2)

The intent of this initiative was to use about 30MW of solar power at these plants which will meet over half their annual power requirement - an estimated 45 million units of solar power annually.



Case study:

Lighting up the future with solar power

In a path-breaking initiative to reduce its dependence on conventional energy, ACC has adopted the use of solar power in the cement manufacturing process at its grinding units at Kudithini and Thondebhavi in Karnataka. Our procurement department is continuously exploring innovative ways and technologies to reduce our energy requirements. The intent of this initiative is to use about 30MW of solar power at these plants which will meet over half their annual power requirement - an estimated 45 million units of solar power annually. For this, ACC has signed a 10-year power purchase agreement with Amplus Solar and Cleanmax Solar to purchase 20MW and 10MW of solar power respectively.

This project has the potential of reducing CO₂ emissions by ~38,000 tonnes every year. "ACC is also exploring innovative on-site solar solutions and to begin with, partnered with solar developer to install a solar plant at its Jamul facility, Chattisgarh, which is currently ongoing.



“It is our collective and individual responsibility to preserve and tend to the environment in which we all live.”

- Dalai Lama

4.0

ENVIRONMENTAL ASPECTS

- 4.1 Raw Materials
- 4.2 Climate Change
- 4.3 Energy
- 4.4 Circular Economy & Managing Waste
- 4.5 Water
- 4.6 Biodiversity
- 4.7 Other Emissions
- 4.8 Sustainable Construction

4.1



Raw Materials

The planet is facing challenges due to depleting mineral and fuel resources, shortage of raw materials and climate change. Cement manufacturing is a continuous process which needs an uninterrupted supply of raw materials. The production of cement consumes a considerable amount of mineral resources such as limestone which is the primary raw material, shale, clay, sand, iron ore and bauxite. Each integrated cement plant has one or more captive mines to extract limestone using sustainable mining practices. The close proximity to the mines helps minimise transportation of the primary raw material. Other raw materials such as supplementary cementitious materials (slag, fly ash), bauxites, iron ore, additives, binders etc. are sourced externally. Cement manufacturing is energy intensive process requiring both thermal and electrical energy Coal and petcoke are used as principal fuel for thermal energy. The bulk of our electrical energy is generated in-house at our captive thermal power plants.

Reducing the use of virgin materials while increasing the use of alternative materials has helped ACC minimise its impact on the environment.

As a best practice, we are strengthening our cements by adding industrial generations such as fly ash and slag to

conserve natural resources like limestone. In 2018, ACC's share of blended cement increased to ~ 88%. Higher percentage of additives are used enabling consumption of low grade limestone without compromising on the quality and thereby conserving the mineral and increasing the life of the mine.

Some other initiatives include increased usage of cheaper wet fly ash, cheaper activated gypsum and raw-mix optimisation. (GRI 301-3)

Most of the mining leases extend up to March 31st, 2030 thereby ensuring adequate limestone reserves.

Conserving natural resources

In keeping with our approach to improve performance and focus on sustainable technology, ACC Jamul has modified the process of manufacturing Portland Pozzolana Cement (PPC) by using wet fly ash (pond ash) which is usually wasted.

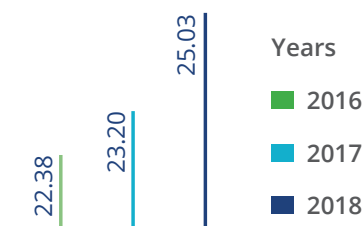
Traditionally, cement plants use dry fly ash to manufacture PPC and the wet fly ash factor in PPC remains at ~5-10%. Using a first-of-its-kind process, developed entirely in-house, ACC Jamul successfully utilised 100% wet fly ash, available freely in the vicinity, to manufacture PPC. This resultant PPC was tested thoroughly, met all quality parameters and was enthusiastically received by the market.





Most of the cement sold in India is packed in PP polypropylene and Adstar bags of 50 kg each. ACC has the facility of co-processing used and torn cement bags as alternate fuel in some of the manufacturing units. Unusable bags are reused within the plant. As the location of cement plants are far away from markets, a very low percentage of used bags get recycled at the Plants.

% RECYCLED MATERIALS USED PERCENTAGE (%)



Share of Blended Cement - **88%**

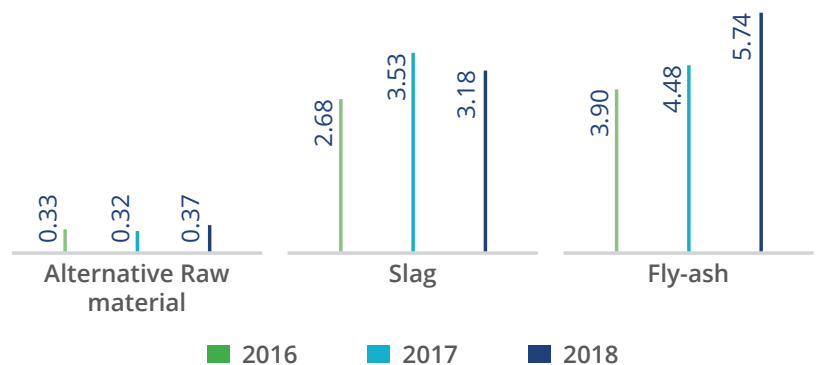
Percentage Recycled Materials- **25%**

Empty bags are sometimes used in construction sites for storage of material. Empty cement bags are also used as roof coverings particularly during monsoons.

Our commitment to mineral conservation is demonstrated in different ways, principally by promoting the manufacturing of blended cements using non-fossil fuels, petcoke and industrial and municipal waste for co-processing.

While we co-process waste generated by other industries and processes, no product made by the Company is reclaimed in any way.

RAW MATERIALS - CEMENT MILLION TONNES



Ready Mix Concrete (RMX)

Concrete is a mixture of specified proportions of Portland Cement, water and aggregates made up of sand and gravel or crushed stone. RMX refers to concrete manufactured at a concrete plant and transported in a Transit Mixer (TM) for delivery in a fresh ready-to-use state to the customer's construction. For select large projects, RMX plants are put up on site.

Further details can be found in our performance tables at the end of the report.

Note : % recycled materials in 2017 was incorrectly published as 26.37 instead of 23.20

Climate Change



Climate Change

Emission of carbon dioxide is inevitable during the clinkerisation process i.e. generated during clinker production, an intermediary in cement-making, through the chemical conversion of limestone (CaCO_3 & MgCO_3) into lime (CaO & MgO). The industry's environmental impact is measured by the proportionate quantity of carbon dioxide equivalent emitted per tonne of cement produced. The industry has found several ways to mitigate these emissions.

ACC has demonstrated a deep commitment to environment protection ever since its inception, has been quick to recognise the impacts of climate change on the environment and has proactively taken mitigation actions. India's voluntary emission reduction commitment to the international community translated into regulatory norms such as Perform, Achieve and Trade (PAT) and Renewable Energy Purchase Obligation (RPO) which have further enhanced our actions.

ACC has taken remedial measures to adopt strict carbon discipline in a bid to minimise its carbon footprint.

The Company's specific CO₂ emissions are among the lowest in the cement industry globally. ACC is an active member of the Indian Chapter of the Global Cement and Concrete Association (GCCA), previously known as the Cement Sustainability Initiative (CSI) and an important signatory of the Low Carbon Technology Roadmap for the Indian cement industry, a voluntary commitment by CSI member companies with time bound targets for reduction of carbon emissions by the year 2050. The key priority of GCCA is to support and accelerate innovation in the cement and concrete sector with the important aim of improving sustainability and lowering the CO₂ footprint.

We also support the use of carbon pricing as a means to incentivise the uptake of innovative low-carbon solutions. We have maintained our status in Band B of the Carbon Disclosure Project.

Biogenic Emissions

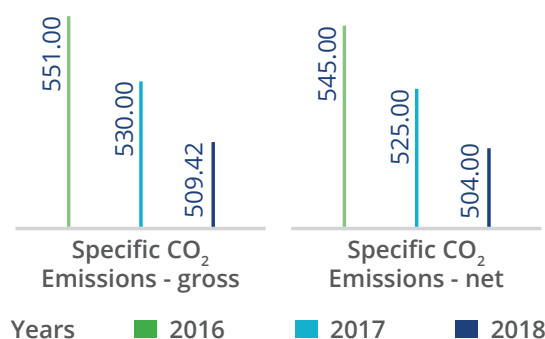
Biomass and agricultural wastes used in cement kilns also generate CO₂ emissions. This is not accounted by protocol in Scope 1 emissions as these are considered as Carbon Neutral as per the GHG accounting principles.

Reduction of GHG Emissions

ACC's SD 2030 Plan, aligning with that of LafargeHolcim, has ambitious targets for "reduction of specific CO₂ emissions by 40% per tonne of cement (vis-à-vis the base of 1990)".

To achieve this, several initiatives were continued with vigour during the year which helped to reduce specific CO₂ emission by ~3.8% over the previous year, to ~504 kg/T of cement in 2018.

GHG INTENSITY KG/TONNE OF CEMENT





Initiatives that reduced specific CO₂ emissions



Waste Heat Recovery System at Galgal

During the year, 52.97 million units of electrical energy were generated from WHRS at Galgal.



Clinker Factor

ACC aggressively reduces the clinker factor by consuming more blending materials like fly ash and slag. In 2018, blended cement portfolio was increased to ~88%.



Reducing Thermal Energy

ACC has implemented various energy conservation measures to reduce thermal energy from 3103 MJ/T to 3099 MJ/T of clinker.



Green Energy

In 2018, 34.74 million units of renewable energy generated from 3 wind farms along with additional "green power" of 44.48 million units procured through PPA.



Alternative Fuels & Raw Materials (AFR)

The Company has set up Geocycle platforms for co-processing hazardous, non-hazardous industrial & municipal waste and biomass for substituting traditional fuels in its kilns.



Adoption of new low carbon technologies

ACC has adopted state-of-the-art technological interventions; innovative production techniques and climate-resilient resource optimisation measures.





Emissions from Ready Mix Concrete

The production of ready mix concrete is a simple process, essentially involving blending and mixing operations. Consequently, the process entails relatively low levels of carbon emissions. Much of these CO₂ emissions are in fact, generated more during transportation and less in the process itself. We use crushed rock fines as alternative raw material to sand.

Emissions from Logistics and Transport

In logistics and transportation operations, CO₂ emissions arise mainly from fuel consumption by vehicles. The volume of emissions is directly related to the volume of raw materials and products transported, mode of transport (road or rail), the nature and efficiency of vehicles and the quality of roads. Some of it is addressed by regular maintenance of vehicles. Where available, movement through rail is preferred for long distances as a more sustainable mode.

Non-Compliance

During the year there were no instances of non-compliance with environmental laws or regulations. (GRI 307-1)

Further details can be found in our performance tables at the end of the report.



Yes Bank Natural Capital Award 2018 in
the Eco-Corporate – Manufacturing sector

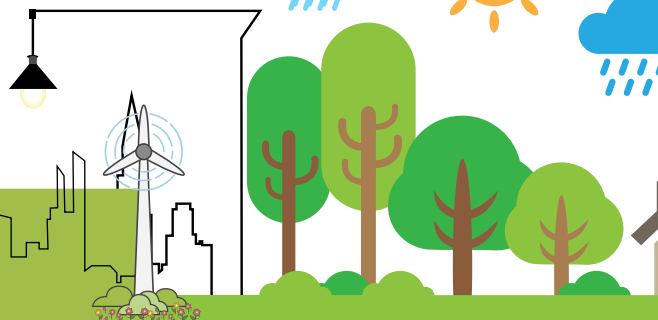
**Rehabilitating our mines for harvesting
rain water helps us meet almost half our total water requirement.**



> Water harvesting at Dungri mines, ACC Bargarh, Odisha

4.3

Energy



Cement manufacturing is an energy intensive process. Coal and petcoke are the main fuels for thermal energy used for cement manufacturing. Since energy cost is one of the primary cost drivers, any fluctuation in fuel prices can lead to a drop in operating margin. In 2018, power and fuel together made up 22.3% of the total Company's expenses.

ACC largely meets its power requirements through captive thermal power generating facilities at most of its integrated plants besides one grinding unit.

- ☀ ACC ensures maximum use of linkage coal, judicious procurement of market coal through e-auctions and imports, better fuel mix, higher use of cheaper coal and use of alternative fuels.
- ☀ As a result, kiln thermal efficiency improved by 4MJ to 3099 MJ /per tonne of clinker during the year as against 3103 MJ/per tonne of clinker in 2017; electrical energy efficiency improved by ~1 kwh to 69 kwh/t of clinker as against 69.9 kwh/t clinker in 2017 and by 1.6 kwh to 38.5 kwh/t of cement grinding as against 40.1 kwh/t cement grinding in 2017.
- ☀ Total electrical energy during 2018 was 81.13 kwh/T of cement compared to 84.33 kWh/T of cement during 2017.
- ☀ Grid power cost was partly reduced through consumption of Open Access (OA) power from comparatively cheaper sources.

- ☀ The Waste Heat Recovery plant of 7.5 MW at Galgal generated 52.97 million units of electrical energy delivered a saving of ₹ 22 crore during the year.

This helped contain the impact of higher cost of power and fuel to 7% over the previous year.

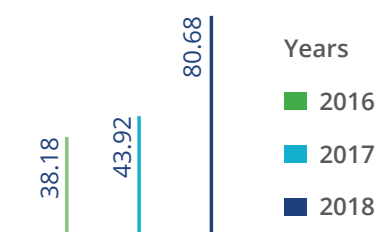
Renewable and Green Energy

- ☀ ACC's renewable energy portfolio consists of 19 MW of wind farms located in the states of Rajasthan, Tamil Nadu and Maharashtra. These generated 34.73 million units of green power (Rajasthan: 12.44 million units, Tamil Nadu: 18.67 million units, Maharashtra: 3.62 million units), which helped to fully meet the Renewable Purchase Obligation (RPO non-solar) for the Company's plants at Madukkarai and Lakheri, besides getting power at a much cheaper cost.
- ☀ Additional green power of 44.87million units of solar energy was procured through Power Purchase Agreements for Wadi, Thondebhavi and Kudithini plants in Karnataka to fulfill the Solar RPO and excess units are being used to fulfill Non Solar RPO, thus savings ~ ₹ 5 Crore.
- ☀ The RPO of other plants are met by purchasing Renewable Energy Certificates (REC), solar and non-solar.
- ☀ Lakheri plant installed a 10 KW rooftop solar plant at its DAV School.

ACC's renewable energy portfolio consists of 19 MW of wind farms located in the states of Rajasthan, Tamil Nadu and Maharashtra.

GREEN ENERGY USED

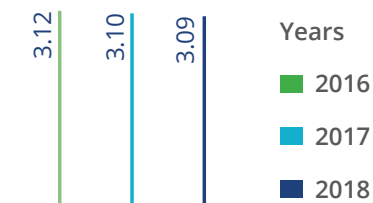
MILLION UNITS





- ☀ ACC Thane complex and Bulk Cement Corporation (India) Limited, Kalamboli, are operating mainly on renewable energy through ACC's wind turbines installed at Satara, Maharashtra, resulting in power cost saving of ₹ 2.5 crore.
- ☀ In all, 80.68 million units of green energy consumed, representing an increase of 83.7% compared to the previous year.

THERMAL ENERGY GJ/T OF CLINKER



ELECTRICAL ENERGY KWH/T OF CEMENT



Lakheri plant installed a 10 KW rooftop solar plant at its DAV School



83.7% increase in green energy consumed

Energy Conservation

Energy conservation and efficiency measures were undertaken in various areas of cement manufacturing and Captive Power Plants (CPPs), through Operational and Capex measures. A few highlights are as under:

- ☀ Dynamic reactive power compensation to improve grid power factor
- ☀ Focus on Productivity Rate Index (PRI) improvement through Computational Fluid Dynamics (CFD) studies
- ☀ Energy audits of all integrated plants
- ☀ Installation of high level controllers
- ☀ Installation of medium voltage drives for process fans and Boiler Feed Pumps
- ☀ Replacement of conventional lights with LED across plants



ACC Kymore, Jamul and Wadi Plants were recognised as 'Excellent Energy Efficient Unit' and ACC Thondebhavi as 'Energy Efficient Unit' by CII



ACC invested ₹48.8 crore on improving energy productivity and efficiency, besides implementing low cost measures to reduce energy consumption.

For a detailed list of projects please refer to our annual report 2018 on page no 91, https://www.acclimited.com/newsite/annualreport2018/ACC_Annual_Report_2018.

ACC invested ~ ₹ 48.8 crore on improving productivity and efficiency, besides implementing low cost measures to reduce energy consumption. Additional projects being implemented to further conserve energy include:

- ☀ Process optimisation; upgradation of existing fans with high efficiency fans
- ☀ Installation of Variable Speed Drive (VSDs) for process fans at clinkering and grinding units, boiler feed pump for CPP
- ☀ Online condenser cleaning system for turbine tubes
- ☀ Upgradation of Energy Management System

Energy Consumption in RMX

The ready mix business consumes a relatively small proportion of energy, which is used mainly in mixing, blending operations, pumping and in transportation. (GRI 302-1,2)

The issue of reduction in energy requirements of sold products and services is not applicable to cement or concrete. (GRI 302-5)

Case study:

Power factor improvement reduces costs

The kiln at ACC's Jamul plant was recently upgraded to 9000 TPD and thus the 25 MW Captive Power Plant was insufficient to meet the increased power demand. The existing infrastructure resulted in lower grid side power factor of ~ 0.89 which increased the electricity bills by ~ ₹ 60 lakhs a month, increased line loss and resulted in poor voltage regulation.

Taking the following innovative steps helped correct the low power factor problem:

Step 1: Replaced the faulty capacitors in the existing load side power factor correction equipment

Step 2: Optimised the generator terminal voltage and the reactive power during the synchronized operating condition without compromising on active power, resulting in a power factor of 0.93

Step 3: Installed step-less Hybrid Active Harmonic filter for smooth increase/decrease of reactive power to improve the power factor to 0.99 with harmonics within limits as per IEEE 519

Benefits achieved:

- Total Savings of ₹ **45.5** lakh/month in electricity bill
- Reduction in line losses and harmonics in the system

ACC Thondebhavi Plant and ACC Jamul won the 1st Prize in Energy Excellence at the Quality Circle Forum of India (QCFI), Hyderabad Chapter awards, in collaboration with CMA, NCCBM and CSI





Circular Economy & Managing Waste

Circular Economy

Waste poses a major societal challenge in the world today but one that can be resolved through an innovative approach. We follow the LafargeHolcim approach of promoting a circular economy by “repurposing waste through material recycling and energy recovery.” In doing so, we transform waste, create livelihood opportunities and offer gainful solutions for waste management, all of which, ensures a cleaner environment.

ACC also supports the promotion of industrial symbiosis and the recognition of energy recovery as a waste management solution for non recyclable waste.

- We manage the consumption of limestone judiciously with a mix of additives that enables the use of lower grade limestone
- We also substitute some part of limestone with industrial waste products from other processes such as slag from steel plants and fly ash from thermal power plants to make our blended cement
- We dispose industrial, municipal and agricultural wastes by co-processing in cement kilns which recovers energy and material value from them

Co-processing

Geocycle, a LafargeHolcim brand, provides sustainable waste management solutions to Indian industries, municipalities and the agriculture sector by co-processing waste in ACC’s cement kilns in a process that is practical, cost efficient and environment-friendly. By consuming waste material in our manufacturing process and recovering any resource or material value inherent in it, we not only produce a more environment friendly end product but also promote a circular economy. Co-processing waste in cement kilns guarantees complete destruction of all waste due to the high temperature and long residence time involved.

ACC has set up co-processing facilities at its network of cement plants. Additionally, we have three state-of-the-art pre-processing facilities with installations for processing waste in a state-of-the-art way in order to ensure its safe co-processing. These facilities have a waste processing capacity of around 0.5 M tonnes per annum, which allows us to manage large volumes of waste safely and sustainably.

Our operations are conducted with professional expertise and experience, carefully managing any associated risks to protect employees, communities and the environment.

The Government’s “Swachh Bharat” programme coupled with mega cities looking for solutions for municipal waste management, co-processing of waste for use as RDF is expected to get greater traction in future.

Three state-of-the-art pre-processing facilities at Wadi, Madukkarai and Kymore. Waste co-processing facilities at all our integrated cement plants.



**0.38 million tonnes
of waste**

Co-processed

4.47%

TSR achieved

Case study:

Co-processing at ACC Chaibasa

ACC Chaibasa Cement Works has pioneered the technology of waste co-processing in a cement kiln and created shared value for all stakeholders. By partnering with various industries across Jharkhand generating hazardous waste, ACC Chaibasa Cement Works has redirected their waste into the cement process, which ensures that instead of being disposed via landfill or incineration, the waste are sustainably managed. Utilisation of waste in cement manufacturing process contributes towards energy efficiency, recycles waste and conserves resources. The effort towards co-processing has been well appreciated by the officials of the Jharkhand State Pollution Control Board. In 2018, ACC Chaibasa Cement Works was awarded the Best Co-processing Unit for 2018 by Geocycle India

Managing Waste and Effluents

Waste water

Cement plants do not usually generate waste other than emissions outlined in the preceding chapters, or waste water and effluents. Water consumed for industrial cooling is recycled and reused in the process itself. Captive Power Plants (CPPs) may generate small quantities of effluents which are sent for treatment to Effluent Treatment Plants (ETP). Sewage from residential

townships in the plant campus is treated in Sewage Treatment Plants (STPs). Treated waste water is deployed in dust suppression and green belt development. Domestic waste water not amenable for recycling or treatment is sent into soak-pits located within the plant boundaries.

The “Zero Discharge” motto at ACC means that no plant or location is permitted to discharge any process effluent in nearby water bodies or elsewhere. (GRI 306-5)



The prescribed approach to handling waste is to first use the 4R approach: Reduce, Reuse, Recover and Recycle.

Solid waste

Solid waste such as used oil and grease, metallic scrap, etc. may be generated from maintenance and housekeeping activities of a cement plant. The prescribed approach to handling such waste is to first use the 4R Approach (Reduce, Reuse, Recover and Recycle). Permissible hazardous waste such as oil may be sent for co-processing. The remaining is sold to authorised third parties for final disposal (GRI 306-2). We do not transport hazardous waste categorised under the Basel Convention (GRI 306-4). Table 4.5.1 shows the quantity of hazardous and non-hazardous waste generated in 2017. (GRI 306-2)

We are taking necessary action to comply with the notification on Solid Waste Management Rules issued by Ministry of Environment, Forest and Climate Change in April 2016, whereby cement plants within residential townships are instructed to comply with the practices of segregation of waste at source, collection of waste from source and disposal in line with the prescribed practices. The spill management system minimises impacts in the event of a spill. There were no instances of any significant spill in 2018. (GRI 306-3)

Plastic waste

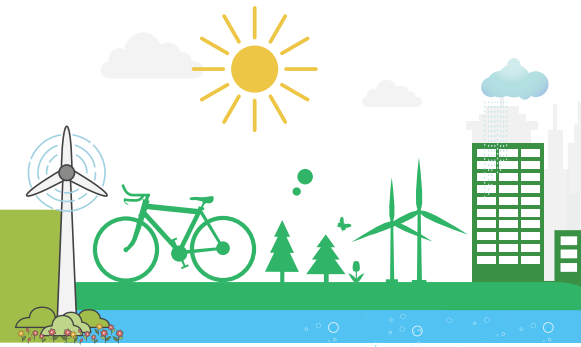
ACC is gearing up to implement the new Plastic Waste Management Rules, 2016 which bring in extended producers' responsibility to ensure a collect-back system of plastic waste apart from ensuring other compliances. According to the Rules, the cement industry has been challenged to establish a collection system for cement packing bags and the plan of collection is to be submitted to the State Pollution Control Boards (SPCBs) while applying for Consent to Operate.

In 2018, ACC co-processed 3,79,883 tonnes of waste in its cement kilns, helping reduce the growing burden of waste in our cities and towns.



4.5

Water



Our SD 2030 Plan target is to reduce specific fresh water withdrawal by 19% by 2020 and 30% by 2030, when compared with 2015.

Managing scarce resources such as water is the need of the hour. ACC takes every effort to reduce the water consumption at the plants and colonies and also conserve water through water harvesting.

ACC has resolved to achieve Zero Discharge of water in all its operations with sustained efforts like stringent discipline in water consumption and treatment, recycling and reuse of water. Several plants are already self-sufficient in meeting their water requirements, bringing us closer to our goal of becoming “water positive”. Besides, our withdrawal of water does not impact any water body. (GRI 303-2)

In 2018, we have achieved 16% reduction and brought down the freshwater withdrawal in cement plants to 96 Lit/T of cement. To achieve this, various initiatives have been taken such as:

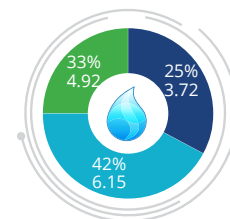
- Process optimisation and upgradation to water efficient technologies wherever feasible.
- Installation of Sewage Treatment Plants (STP), Effluent Treatment Plants (ETP), and Zero Liquid Discharge (ZLD) systems for effective reutilisation of waste water.
- Efforts to conserve water through rain water harvesting continue at all plants, mines, colonies and community areas.
- Installation of water metering and monitoring systems at most plants help identify the source of leakages and potential scope for water conservation.
- Reduction of fresh water intake by lowering water demand in process and non-process areas.

Implementing WASH

ACC reaffirms its commitment towards meeting the Sustainable Development Goals (SDGs) to be achieved by 2030 by implementing access to water, sanitation and hygiene (WASH) programme. The WASH pledge is an initiative by the World Business Council for Sustainable Development (WBCSD).

WATER CONSUMPTION

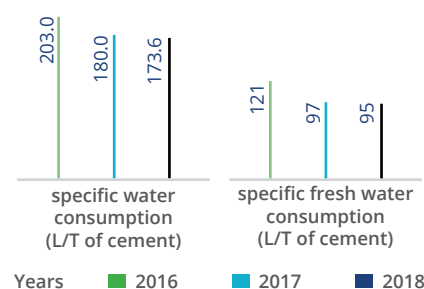
%, MILLION M³



Community+ Colony
Captive Power Plant
Cement Plant

WATER CONSUMPTION

LITRE PER TON (L/T) OF CEMENT





12%
of total water consumed recycled

Case study:

State-of-the-art Sewage Treatment Plant at ACC Lakheri

Domestic waste generated at the residential colony near ACC Lakheri Cement Works was earlier treated in the oxidation pond. In 2018, ACC installed a state-of-the-art 500 KLD Sewage Treatment Plant.

The system has been optimally designed: its features include virtually no maintenance, no special operational skills requirement (sludge recycles etc.), lesser area covered, stand-by provision at all critical points and easy operation.

The treated water is of better quality. The treated water is used for gardening and horticultural activities. We are also planning to use it in the manufacturing process.

Case study:

Zero Liquid Discharge at ACC Wadi

Our Wadi plant is located in a water scarce region. Zero Liquid Discharge (ZLD) was installed at its Captive Power Plant to reduce water waste and make it suitable for reuse in the process system. ZLD technology includes pre-treatment, high pressure Reverse Osmosis(RO) stages to remove salt concentration and separation of the industrial effluent until the dissolved solids precipitate as crystals. These crystals are removed and dewatered with a filter press. Finally with MEE (Multi-Effective Evaporator) the water vapour from evaporation is condensed and returned to the process, Hence ZLD is a closed loop cycle with no discharge and ensures over 90% water recovery.

The plant recycles 600m³/day of industrial effluent through ZLD. Parallely treated product water is blended with concentrated cooling water to protect equipment against scaling and corrosion.



4.6

Biodiversity



ACC's SD 2030 Plan includes a commitment to create a "positive change on biodiversity by 2030 vis-à-vis 2020."

Mining and Biodiversity

Mining for limestone, the primary raw material for cement manufacturing, is an activity which could directly impact habitat and biodiversity. The disturbance could lead to erosion of top soil, damage to flora and fauna, noise and dust pollution, and growth of invasive species. However, ACC adopts sustainable mining practices to reduce the impact of our operations on the flora and fauna. All our plants and mines work according to comprehensive mining plans approved by regulatory authorities. Exhausted mines undergo rehabilitation in a manner designed to protect the local biodiversity as per approved quarry rehabilitation plans. With 17 mining sites, by 2018, total disturbed area was 1051 hectares (Ha) while rehabilitated area was 752 Ha. (GRI 304-2,3)

Three sites are relatively biodiversity-sensitive where 10 species fall under 'Schedule I' category which is protected legally at the highest level in our country for which we have an approved Wildlife Conservation Plan (WCP). These 10 species include one critically endangered, two endangered, two vulnerable, one near-threatened and four of least-concern categories as per the categorisation of the International Union for Conservation of Nature (IUCN) Red List. The WCP is implemented in consultation with the forest department, Chief Wildlife Warden and local authorities. Other biodiversity issues, if any, are addressed through the Biodiversity Management Plan or Quarry Rehabilitation Plans at these locations. (GRI 304-1,3,4)

Biodiversity Indicator and Reporting System (BIRS)

In 2017, the company has conducted the baseline assessment through a tool called Biodiversity Indicator Reporting System (BIRS), to assess the condition of biodiversity of our sites and to monitor relative changes in it. Designed by independent experts in collaboration with the IUCN, the tool enables us to monitor relative changes in biodiversity and understand the changes to habitats and ecosystems over time. This exercise has helped the company to identify site-wise action plans for biodiversity conservation in consultation with third party experts. Actions are being implemented under the programme called the 'Biodiversity-Buzz' or B-Buzz. In collaboration with IUCN, ACC has conducted capacity building programmes for environment and mining managers.



Chanda, Kymore and Jamul limestone mines received the prestigious 5 star rating for sustainable development by IBM, Ministry of Mines



Case study:

Let's create a B Buzz

In 2018, ACC launched 'B-Buzz' with the intent of creating a buzz to sensitise people. Identified biodiversity projects under the following themes will be implemented at all our operating sites and mines.

1. Breakfast with Butterflies
2. Van-Upvan
3. Aushadhi Udyan

4. Evade that invades
5. Rent-a-Zone
6. Land to Wetland.
7. Geological/Rock garden
8. Ecosense—an awareness campaign
9. Insect Hotel.

Currently, 15 projects have been identified for implementation at various sites within a specific time period.

ONGOING INITIATIVES



All plants continued to pursue other ongoing efforts to conserve biodiversity, flora and fauna in plants, townships, mines and surrounding areas, which include:

Tree plantation

Around 1.40 lakh trees were planted with an average survival rate of over 80%, comprising native and local species best suited to the local ecology.

Rain water harvesting

All worked-out mining pits harvest rainwater which continue to enhance water self-reliance at some of our plants.

Top soil preservation

This is regularly practiced so that top soil is preserved for future use in afforestation and plantation activities.

Managing invasive species

Invasive plant species are a major threat to ecology. Apart from creating awareness on this, we take actions to manage invasive species by uprooting them, planting native species and sometimes by co-processing invasive species

Other Emissions



While CO₂ is the main emission in the cement manufacturing process, there are other emissions such as dust, sulphur oxides (SOx) and nitrogen oxides (NOx). ACC has made considerable efforts in controlling the stack and fugitive emissions using efficient air pollution control systems. In 2018, ACC completed many projects for compliance to dust, NOx and SO₂ emissions to comply with new emission regulations.

Dust Emission

Stack emissions

Various primary measures which include implementation of a Computational Fluid Dynamics (CFD) study in Electrostatic Precipitators (ESPs) along with the upgradation to three phase transformer rectifier sets, advanced microprocessor based controllers and rapper panels on coolers and boilers are already in place. During the year 2018, we have completed the upgradation of cooler ESPs at Bargarh, Madukkarai and Lakheri.

All these measures have together helped maintain stack dust emissions below 30mg/Nm³ and reduction of 31.40% from the previous year.

Transport emissions

Vehicular transport creates dust pollution, particularly by heavy vehicles moving in cities along dusty roads or at speed. Trucks are de-dusted and covered in tarpaulin

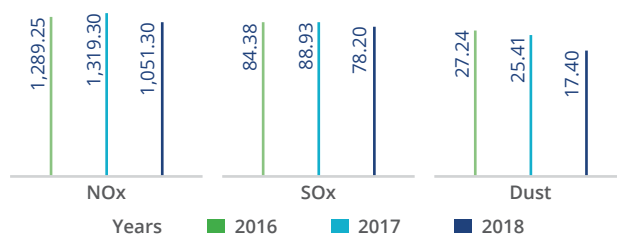
at our plants before dispatch. We also move cement through bulk transport as material is fully covered, making it cost-effective and environment-friendly. RMX is transported in fully covered transit mixers.

NOx Emissions

In 2018 we fine-tuned the performance of various primary measures implemented during the previous year to explore optimum potential of these measures. We have further implemented secondary NOx control measures i.e. Selective Non Catalytic Reduction (SNCR) systems commissioned at various plants. The cumulative impact of primary and secondary measures at various locations have resulted in reduction of specific NOx emissions in the kiln stack by 20.31% over the previous year.

OTHER EMISSIONS

(GRAMS/TONNE OF CEMENT)



₹208 Crore

spent on environment protection in 2018



SO₂ Emission

The Company's SO_x emissions are within specified regulatory limits, and hence do not require any emission control measures. However, secondary measures such as installation of limestone feeding systems are being taken at Chanda, Kymore, Jamul and Wadi plants to control SO_x emissions from CPPs. During the year, specific SO_x emissions from kiln stacks have reduced by 12.11% over the previous year.

Cement manufacturing does not generate significant levels of persistent organic pollutants (POP), volatile organic compounds (VOC), hazardous air pollutants (HAP) or ozone depleting substances (ODS) into the environment. (GRI 305-6,7)

To comply with disclosure instructions, ACC continuously uploads reports of emissions and effluents for all plants on the websites of the Central Pollution Control Board (CPCB) and State Pollution Control Boards, wherever available.

20%

reduction in specific NO_x emissions

12%

reduction in specific SO₂ emissions

31%

reduction in specific Dust emissions



Case study:

NO_x reduction at Kymore

Selective Non Catalytic Reduction (SNCR) systems for NO_x reduction was installed at Kymore plant in 2018. SNCR is an advanced technology for treating NO_x emissions. In SNCR systems, a reagent is injected into the flue gas in the furnace within an appropriate temperature window. Emissions of NO_x can be reduced by 30% to 50%. The NO_x and reagent (ammonia or urea) react to form nitrogen and water. A typical SNCR system consists of reagent storage, multi-level reagent-injection equipment, and associated control instrumentation. The SNCR reagent storage and handling systems are like those for SCR systems.

Sustainable Construction



ACC advocates innovative ways of using its products responsibly in construction. ACC is inspired by the LafargeHolcim Foundation for Sustainable Construction in its bid to promote and encourage sustainable construction in the country.

Other than adopting low carbon practices in its own production processes, the company actively demonstrates commitment to spread awareness among other stakeholders in the construction chain to use methods that are cost-effective, planet-friendly and socially responsive.

Green Building Centres

ACC shares its expertise wherever possible through its valued publication Indian Concrete Journal (ICJ), technical seminars and training programmes for masons, contractors and engineers. ACC has set up its Green Building Centres (GBC) initiative as a key programme to contribute towards sustainable construction. Through GBCs, the Company supports local micro-entrepreneurs and small businesses to make and market affordable cement-based home building components and pre-fabricated materials. During the year, the Company has helped set up 108 new Green Building Centres.

Resource conservation through enhanced energy and water efficiency, use of renewable energy, minimisation of waste etc., during the manufacturing process helps protect the environment.

LafargeHolcim Awards for Sustainable Construction

The LafargeHolcim Foundation promotes and illustrates the strength of diverse approaches to sustainable construction through its Awards competition and Forums. The flagship of the Foundation is the LafargeHolcim Awards for Sustainable Construction - the world's most significant competition for sustainable design. It rewards projects and visionary concepts that go beyond balancing environmental performance, social responsibility, and economic growth, thereby exemplifying architectural excellence and a high degree of transferability.

ACC wholeheartedly promotes this global competition in India, usually enabling the highest number of entries, using it as an opportunity to spread awareness on sustainable construction in India among a range of stakeholders. Further details can be accessed through www.lafargeholcim-foundation.org/

Green Building Centres contributions



37,577 MT of fly ash

Utilised with the help of GBC



81,416 MT conserved

Earth's natural soil




5,730 MT of CO₂

Avoided during the year



27,769 affordable houses

Constructed till date



“ The earth, the air, the land and the water are not an inheritance from our fore fathers but on loan from our children. So we have to handover to them at least as it was handed over to us. ”

- Mahatma Gandhi

5.0

SOCIETAL & OTHER ASPECTS

- 5.1 Health & Safety
- 5.2 People Processes
- 5.3 Human Rights
- 5.4 Community Development & Social Responsibility

5.1



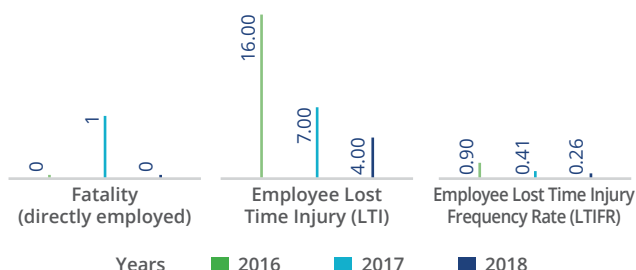
Health & Safety



In our continuous mission to improve Health & Safety (H&S), 2018 saw our Zero Harm programme running at full throttle, both on site and off site.

Our efforts to ensure that all our people go home safely included increased communications and engagement, roll out of new standards, incident reviews, lone working solutions, LafargeHolcim global H&S challenges, global H&S Days, numerous H&S Audits, in-depth H&S improvement plans and more.

SAFETY PERFORMANCE



Activities that Contributed to this Achievement

The initiatives “More Boots on the Ground” and “Visible Personal Commitment” were pursued vigorously, to reinforce the visible personal commitment of senior management to promoting a ‘safety culture’ through role modeling and counseling. (GRI 403-6,7,8)



All plants have joint management and worker H&S Safety Committees



8,200 employees underwent risk-based health assessment



Star Warehouse Programme’ continues to improve safety standards in warehouse operations



The Suraksha Laher campaign focused on ‘Safe Work Planning’; awareness training was provided on job risk assessment, work permits, preparation of work method statement, review of SOPs etc

Safety corner

ACC launched Safety Corner – a step towards safer us’ in 2018 as an initiative to influence employee behavior and develop a more conscious attitude towards health and safety. On the first day of each month, employees gather in small groups across offices and plants to discuss a pertinent H&S topic



Health & Safety Improvement Plan

The Health & Safety Improvement Plan (HSIP) 2018 plan put the onus of engaging with SFAs and contract workers on the Management to lead improvements in areas such as H&S leadership & accountability, road safety, health, contractor safety management, strengthening frontline safety behavior, building people capability & engagement and more. (GRI 403-1,3,4)

Assessment

All cement and ready mix concrete plants were audited for Health and Safety Management systems to provide assurance on the implementation and effectiveness of these systems and processes as per LafargeHolcim Group's defined protocol.

- ✿ A Process Safety Management (PSM) programme was launched wherein PSM champions audited important areas in the manufacturing process viz. Traditional Fuel, Hot Meal, Electrical Safety and Quarry & Slopes. The PSM audit was completed for all sites and action plans are being implemented.
- ✿ Diesel tank safety audits were carried out to control liquid fuel associated hazards.

Case study:

Health & Safety Culture Perception Survey

To assess the H&S culture of ACC and build a robust Health and Safety Improvement Plan, a Health & Safety Culture Perception survey covering all management staff, SFA's and contract workers across ACC was conducted to take on board their opinions on the present culture and assist in effective improvement planning. A Computer Assisted Personal Interview (CAPI) tool was used to cover SFAs and contract workers and assure confidentiality. More than 9000 people participated in the survey representing over 70% of ACC population.

Road Safety

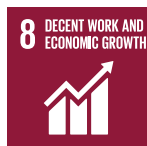
- ✿ ACC Road Safety Policy rolled out
- ✿ Driver Management Centres (DMC) at each plant provide valuable support for driver training and counseling. Multiple activities from Defensive Driver Induction (DDI), Defensive Driving Course (DDC), in-cab assessment, in-camera counseling, blind spots training, Journey Risk Management briefing and tool box talks were delivered through these Driver Management Centres
- ✿ A Transport Control Tower (TCT) was set up as a nodal point to monitor driving patterns through the 'In Vehicle Monitoring System' (iVMS) and provide bespoke counseling to drivers. The installation of iVMS in the trucks was also accelerated in order to bring more vehicles within the ambit of TCT monitoring and counseling. For vehicles yet to be installed with iVMS, a camera installed in the driver's cabin records the journey behavior which is used for driver counseling.

Health

Several initiatives to safeguard the health of employees were undertaken such as Industrial Hygiene surveys; a Lifestyle Management Programme to monitor at-risk employees and provide health assistance; 'Click2Health' an online health management system for managing health care and OPD treatment; and 'Protect Your Ear's' a hearing conservation programme .

5.2

People Processes



We strive to create a safe workplace where employees feel empowered and motivated to realise their full potential and are recognised for their contributions. ACC's integrated people development strategy aims to make our workforce ready for changing market scenarios and the future needs of the organisation. Our people strategy focuses on developing a stronger performance culture and investing in the development of leaders for today and tomorrow. Our commitment to become leaner and more agile has significantly improved the manpower productivity indicator (tonnes/FTE) of ~50% over the last two years, which is one of the best in the cement industry.

People For Tomorrow (Pft)

is a programme to create better leaders and an organisation that is future ready by grooming successors for critical roles; it helps in assessing and bridging competency gaps for key roles. The PFT framework is specially designed for our manufacturing function and facilitates an understanding of the business context, competency assessment, talent assessment, successors/talent pipeline identification and an action plan for talent development.

Developing Leaders

The Performance Management System (PMS) defines roles, targets and measures for individual and group performance such that they are closely aligned with the strategic goals of the company. This enables objectivity and enhances on-the-job engagement and retention. Our Talent Review and Succession Planning Framework provides a pipeline of internal talent that is ready and equipped to take on bigger roles. (GRI 404-2)

Industrial Relations

ACC enjoyed harmonious industrial relations during the year. Robust employee relation practices, a collaborative approach to working, creating and maintaining positive relationship with its employees, maintaining regular dialogue with employees and unions and a vibrant work culture has created a win-win situation for employees and the organisation and led to a harmonious environment across all units.



4,770 tonnes/FTE
Best in class people productivity



2%
Reduction in attrition rate



1,32,762 hours
Of training imparted



Employee Benefits

In addition to competitive salaries, full-time employees benefit from attractive schemes covering education, health, retirement, loans, disability and invalidity coverage, as well as financial assistance. Plant employees get furnished or unfurnished accommodation according to their entitlement while their families enjoy round-the-clock healthcare at well-equipped healthcare centres run by the Company in its premises as well as by professional health care providers operating in nearby cities, recreational and cultural facilities, and subsidised education at excellent company schools.

Temporary or part-time staff do not receive the same benefits as full-time or permanent staff, though these benefits compare well with local market practice. Nevertheless temporary or part time staff do get covered under various social welfare legislations along with full time or permanent staff. (GRI)

Other Aspects

A minimum notice period of 15-30 days is typically provided to employees and their elected representatives before the implementation of any significant operational change that could substantially affect them. (GRI 402-1)

Senior management staff are mostly hired within the country, while non-management staff at most operations is drawn from the local communities. (GRI 202-2)

Ratio of the basic salary of women to men for management staff and shop floor associates category is 0.95 and 0.97 respectively. (GRI 405-2)

Parental Leave

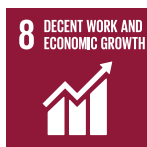
Paid maternity leave has been a long tradition at ACC. The majority of women who avail of maternity leave return to work, invariably involving no loss of continuity in position or job content. In 2018, 15 entitled women took maternity leave, of whom 18 returned to work including 7 from previous year, 2 were still on leave while 2 resigned. This facility of parental leave is not open to male employees. (GRI 401-3)

Engaging Employees

Year-round activities create engagement at various levels for our employees. Quarterly townhall webcasts connecting all our employees from the shopfloor to the sales offices to the corporate offices help engage them behind our business priorities and performance in a transparent manner.

'Innovate to Excel' is an annual national competition which urges employees to incorporate innovation into everyday operations. Participation and engagement levels have grown tremendously over the past 14 years of the competition.

'Sitaron ki Khoj': A national artistic talent hunt to give ACC employees and their families the opportunity to shine and be recognised for their talent in front of a large audience. More than 1,000 participants across locations displayed a variety of singing, dancing and more talents with tremendous skill and enthusiasm.



Human Rights

At ACC, we are committed to respecting and protecting human rights wherever we conduct business. ACCs Human Rights Management System applies to all our stakeholders and is mandatory. This system looks at our own behaviour as well as at the value chain, in particular the supply side and third party service contractors.

Violation of human rights is unacceptable at ACC. We strictly adhere to our values of equality and dignity for all and we adhere and comply to all local laws and regulations relating to fair treatment of employees and workers, whether engaged directly or by contractors, vendors, service providers and other stakeholders in matters such as minimum wages, recruitment and promotion, working hours, equal opportunity, diversity, anti-discrimination, compensation and dismissal, and other benefits and welfare.

We are committed to the principles of the internationally recognised standards such as universal declaration of human rights, core labour standards of ILO, OECD guidelines for multinational enterprises.

Awareness of Human Rights

All aspects of human rights are covered under the Code of Business Conduct as well as in various human resource policies and practices. Online or face-to-face training is conducted for all employees to make them aware of all aspects of the Code which includes human rights aspects. In 2018, no instances of human rights violations by way of incidence of child labour, forced or compulsory labour etc. were recorded across the company. (GRI 412-1)

No Discrimination

The company has complied with the requirements of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and rules framed thereunder. A policy is in place for the prevention and redressal of sexual harassment at the workplace which covers all women - permanent, temporary or contractual and has been communicated widely internally. Redressal of complaints relating to sexual harassment is overseen by an internal committee of four management staff, including three women. One nodal person nominated in each unit receives and forwards complaints either to the First Instance Person (FIP) who is a woman or directly to the committee. There were no complaints relating to incidents of discrimination including sexual harassment. (GRI 406-1)



Freedom of Association and Collective Bargaining

ACC supports the freedom of association of employees and multiple unions exist at different units. We have maintained a healthy tradition of maintaining a conducive and fulfilling employee relations environment. ~43% of permanent employees are members of recognised employee associations. There are recognised trade unions affiliated to various central trade union bodies. Shop Floor Associates are members of their respective unions and covered by a collective bargaining agreement which includes notice period and provisions for consultation and negotiation. No complaints were recorded during the year. As a testimony of the same, the Company has recently signed a wage settlement with unions operating in its different cement manufacturing units on 20th May 2019 which will remain in operation till 31st March 2022. (GRI 402-1; GRI 407-1; GRI 102-41)

Child and Forced Labour

Our Code strictly forbids the practice of child labour as well as forced or compulsory labour across the organisation. Our procurement policy does not permit business to be conducted with any vendors or service providers known to engage in such practices. No violations were reported during the year. (GRI 408-1, 409-1)

Security Practices

Induction and orientation of the company's security staff, as well as third party third party service providers providing security personnel, includes training in human rights aspects as laid down in the Code. (GRI 410-1)

Rights of Indigenous Peoples

The organisation respects local government regulations on provisions of the rights of indigenous people and there were no violations in this respect. (GRI 411-1)



5.4

Community Development & Social Responsibility



ACC TRUST is the Corporate Social Responsibility (CSR) arm of ACC, committed to fuelling the development of communities around ACC's business presence. ACC TRUST reaches out to more than 185 villages across India impacting over half a million individuals annually through its diverse CSR initiatives.

Planning and Implementation

CSR projects are designed, implemented on the basis of need-assessment reports and CSR Policy of the Company which meets the statutory requirements of Schedule VII of the Companies Act, 2013 and is in consonance with all the UN Sustainable Development Goals except four not directly applicable to our operations. Through our ACC TRUST, we deliver integrated community development and capacity building interventions with particular focus on economic upliftment of the vulnerable and marginalised sections of society. Projects are planned and undertaken in an inclusive manner with a Community Advisory Panel (CAP) that includes community representatives and opinion leaders, and implemented by the CSR team along with partners such as NGOs, academic, corporate and government bodies. Quarterly meetings are held with the CAP to review progress and suggest course correction.

Best practices and development principles are adopted in the management of The Company's community development agenda adopts best practices and development principles, uses Participatory Rural Appraisal (PRA) tools to conduct needs assessment, develop village level micro-plans, monitor project implementation, completion and evaluation.

Priority is given to marginalised people such as the landless, farmers with small land holdings, and woman-headed households. Importance is placed on community ownership and contributions as it ensures sustenance of the project through the self-governance model.

During the annual Social Audit, Stakeholder Engagement Surveys (SES) are conducted to receive community feedback; ongoing initiatives are reviewed and project outcomes assessed.

Project Thematic Areas

DISHA
(Sustainable Livelihood)

**VIDYA
UTKARSH**
(Quality Education)

WASH
(Water, Sanitation & Hygiene)

GRI 203-1,2

Golden Peacock Award
for Corporate Social
Responsibility





Social Audit

A team of experts from the social sector and academia led by the Head of Dialogue of Civilisations (DOC) Research Institute gGmbH, Berlin conducted an independent third party social audit of CSR work (expenses, impact and outcomes) done at all ACC plant sites. Based on field findings on parameters of compliance, relevance, effectiveness, efficiency, rigor of implementation and sustainability, each plant was given a performance score for 2018 which was included in ACC's Performance Management System. The social audit at ACC which has taken place for the 5th consecutive year includes ~30 days of field assessment and reporting.

CSR Footprint

ACC spent ₹ 20.45 crore on CSR in 2018, which is 2.09% of the average net profit of the Company during the last three years. (GRI 413-1,2)



The social audit at ACC which has taken place for the 5th consecutive year, includes ~30 days of field assessment and reporting

Most Innovative CSR Project for Vidya Utkarsh by Government of Odisha





Success stories

ACC DISHA Transforming lives

The livelihood project for a better India

For Wadi resident Basheer Ahmed, growing up without a father's support, forced him to drop out of school after Class 8 and take up odd jobs at the young age of 12 to support his family. He pursued odd jobs at a food stall or as a waiter but lacked a steady income. A friend of Basheer's recommended he join the Refrigerator and AC mechanic course at the DISHA Centre at ACC Wadi. The Centre has 10 classrooms and a conference hall with modern facilities to train 500 people at a time. The six-month long course enabled him to become a skilled mechanic and he landed a job at the IFB service centre in Gulbarga. Says 20-year-old Basheer, "My mother is proud of me. I am happy that I can support my family with my salary."



ACC Vidya Utkarsh Focusing on quality of education

Educating future generations

ACC's efforts to empower students in Odisha were recognised by the Government of Odisha at the Make in Odisha Conclave 2018. Naveen Patnaik, Hon'ble Chief Minister of Odisha, felicitated ACC with the 'Most Innovative CSR Project' award for Vidya Utkarsh, a project that aims at facilitating the reach of quality education to every child in the host community.

Nine-year-old Rohit Mahananda from Bandhapada village, Piplipali, had difficulty staying focused on his studies, with a low attention span in class, due to his family's condition. His father is a daily wage labourer and his mother a homemaker. Rohit often runs errands for his family, leaving him little time and energy to study or engage with his peers.

When the ACC TRUST team started its intervention in Piplipali Primary School it found Rohit to be a disengaged, non-participatory student, sitting silently at the back of the class. He expressed to the team, his fear of the noisy classroom and inability to understand what was being taught. For children like him, ACC TRUST has opened a 'Children's Club' at each government school in the area. Rohit was encouraged to enroll in the club where a few students gather to participate in different activities such as drawing, paper craft, toy making, dance, poetry, singing and skipping. Slowly, Rohit began interacting in the club and also in the class and his interest in the school curriculum improved dramatically. His improvement and wellbeing is monitored by ACC TRUST. Rohit's parents are so appreciative of the change in him.



WASH (Water, Sanitation & Hygiene)

Achieving water positivity through the integrated water management



Babita Bouri was troubled by water shortages throughout the year. For the dwellers of her Shunuri village, West Bengal, the nearest water body was 1 km away from the village. The water scarcity affected agriculture and elderly care in the village. ACC TRUST intervened and through their Integrated Water Management initiative the team at ACC Damodhar excavated a new pond in the village. Named Gourango Bandh, the new pond has a storage capacity of 33,198 KL. Agriculture is once again thriving in the village and Babita Bouri and her fellow village women are taking advantage of the pond to create an alternative livelihood for their SHG. The SHG can earn ₹ 1,20,000 through fish farming per year using the pond water. Besides this, they can also earn a considerable amount by tending to the community kitchen garden and through sustainable agriculture. Babita's SHG is on its way to becoming financially self-sufficient.

Describing the benefits to her life that water availability has brought about, Babita Bouri says, "We used to face water scarcity throughout the year. With ACC TRUST's pond, our SHG, Vivek Swanirbhar Sangha, is engaged in fish cultivation and growing a community kitchen garden on the pond bund. Apart from this, paddy cultivation through SRI technique is also practised using this water. We are very thankful to ACC TRUST"



ACC CSR - Making a Difference Footprint 2018

185
Villages covered



EDUCATION

- 44,381 beneficiaries of education initiatives
- 31,421 children & 160 schools impacted through education programmes
- 670 Student scholarships
- E-learning and interactive kiosks introduced in 53 schools
- Connected 10 schools through internet
- 60 Teachers and assistants trained
- 69 Libraries in community schools

WATER & SANITATION

- 1.08 lakh Beneficiaries of WASH initiatives
- 1,187 Household toilets constructed
- 16 Villages supported to achieve Nirmal Gram Status
- 116 Schools fitted with 100% sanitation
- 68,015 Beneficiaries of drinking water initiatives
- 4,414 People benefitted from pond excavation
- 290 Borewells repaired & recharged
- 11 Rain Water Harvesting structures





SKILL BUILDING

- ⚙️ Beneficiaries of sustainable livelihood initiatives- 39,382
- ⚙️ 2,303 Youth benefited from placement-linked employability programmes
- ⚙️ 132 new SHGs created
- ⚙️ Cumulative no. of SHGs 1,562
- ⚙️ Supported 1,430 existing SHGs
- ⚙️ 457 SHGs with NABARD 'A' level rating
- ⚙️ 5199 Women members of NABARD 'A' level rated SHGs
- ⚙️ Total Savings of SHGs: ₹ 4.33 Cr
- ⚙️ 105 Farmer's Groups (cumulative) with 1,290 members
- ⚙️ 17,034 farmers benefited from better methods of agriculture and animal husbandry.



HEALTH

- ⚕️ 224 Health Camps conducted, benefitting 55,052 people
- ⚕️ 4,800 participants in #SaveKidsLives campaign
- ⚕️ 3,000 people received counseling, testing & treatments for HIV/AIDS
- ⚕️ 305 Anganwadis with 12,581 children supported



4,80,906
Population benefited





Case study:

Rebuilding lives in Kerala

In August 2018, torrential rains hit many parts of Kerala, causing large scale flooding and landslides, leaving behind unimaginable destruction to homes, schools, hospitals and civic infrastructure.

ACC salutes the spirit of the people of Kerala and their resilience, courage and sheer determination with which they faced one of the most daunting times. We feel privileged to have participated and assisted the brave citizens of Kerala as they built the communities.



- ❖ ACC leaped into action and was on site within 24 hours

- ❖ Set up a Core Action Group and Control Centre

- ❖ In 48 hours, ACC Help kiosks, ACC Help Vans, logistics hubs for relief material distribution, volunteer task force deployed

- ❖ Leadership team led the relief effort

- ❖ A massive collaborative effort involving employees, dealers, CFAs, and plant rehabilitation teams

- ❖ In-house professional and technical personnel with skills such as plumbing, electrical, carpentry, specialised cleaning and masonry, from Madukkarai plant deployed to help clean, repair and rehabilitate schools, homes, toilets and more.

- ❖ Directors & employees contribution supplemented by Company contribution

- ❖ 17,000 relief kits of food, cleaning, clothing, utensil kits distributed

- ❖ 120 classrooms, school infrastructure, homes rehabilitated

- ❖ 16,700 families assisted

“We, the present generation, have the responsibility to act as a trustee of the rich natural wealth for the future generations. The issue is not merely about climate change; it is about climate justice.”

- Prime Minister Narendra Modi

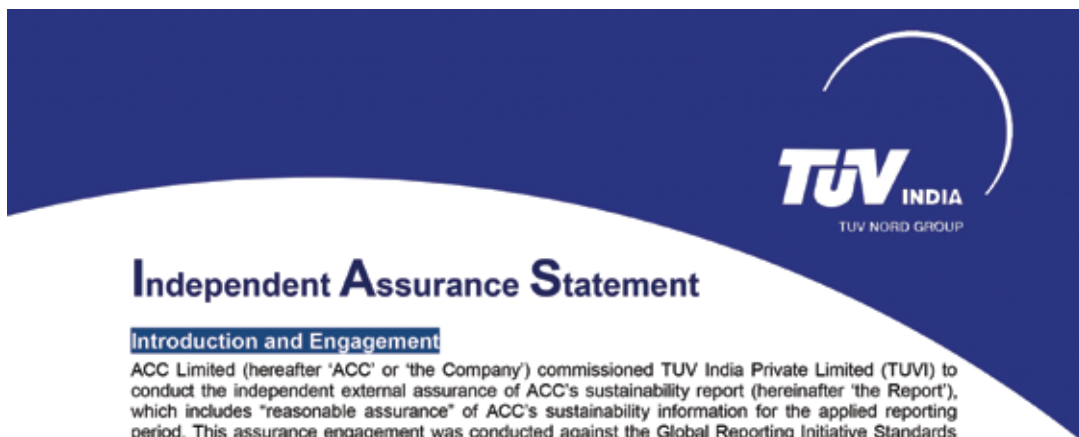
7.0

ANNEXURE

- 7.1** Assurance Statement
- 7.2** Performance Table
- 7.3** United Nations Global Compact
- 7.4** Glossary
- 7.5** Our Network

7.1

Assurance Statement



Independent Assurance Statement

Introduction and Engagement

ACC Limited (hereafter 'ACC' or 'the Company') commissioned TUV India Private Limited (TUVI) to conduct the independent external assurance of ACC's sustainability report (hereinafter 'the Report'), which includes "reasonable assurance" of ACC's sustainability information for the applied reporting period. This assurance engagement was conducted against the Global Reporting Initiative Standards and AA1000AS (2008) Protocol (Type 2, Moderate Level) for verification of the Report. The onsite verification was conducted in April 2019 for the plants in Kudithini (Karnataka), Madukkarai (Tamil Nadu) and ACC Limited, Head office, Mumbai, together with a desk review carried out for all other ACC sites within the reporting boundary. The Report covers ACC's sustainability information for the period 01 January 2018 to 31 December 2018.

Management's Responsibility

The ACC's management is responsible for the accurate preparation of the Report in accordance with the criteria stated in the GRI Standards. This responsibility includes selection and application of appropriate methods to prepare the report as well as the usage of reasonable assumptions and estimates for individual sustainability disclosures. Furthermore, the responsibility also includes designing, implementing and maintaining systems and processes relevant for the preparation of the report in a way that it is free of – intended or unintended – material misstatements.

Scope, Boundary and Limitations of Assurance

The scope of the assurance includes the verification of sustainability performance as per the "Comprehensive" option given in GRI Standards. Assurance Engagement includes the following:

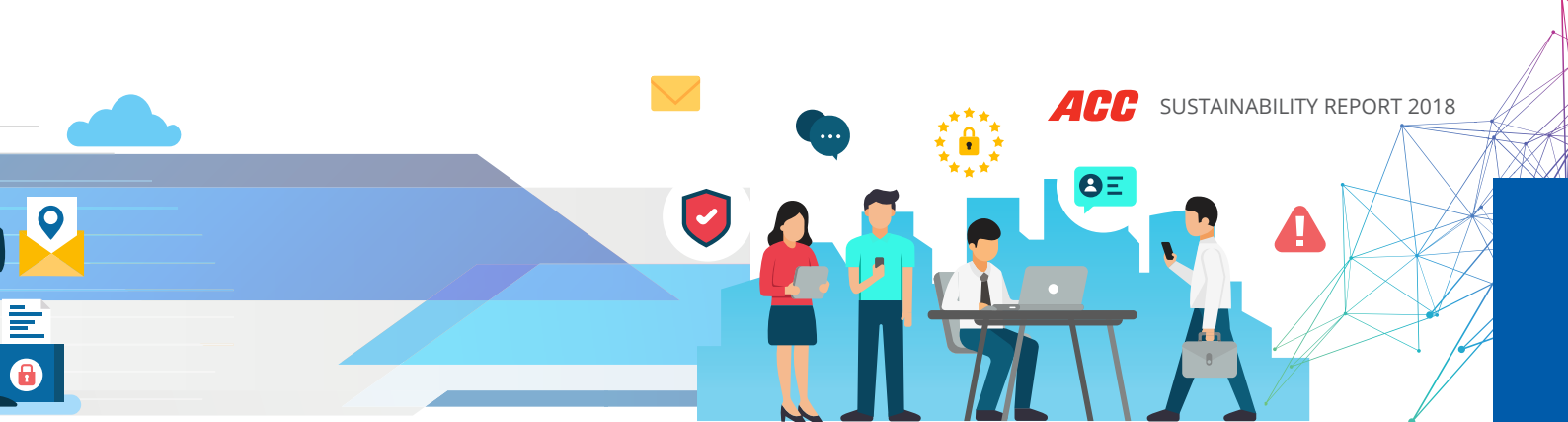
- Verification of the application of the Report content, and principles as mentioned in the GRI Standards, and the quality of information presented in the Report over the reporting period;
- Review of the policies, initiatives, practices and performance described in the Report;
- Review of the disclosures made in the Report against the requirements of the GRI Standards
- Verification of the reliability of the GRI Standards Disclosure on economic, environmental and social
- Specified information was selected based on the materiality determination and needs to be meaningful to the intended users;
- Confirmation of the fulfilment of the GRI Standards; "in accordance" with the "Comprehensive" option, as declared by the management of ACC

The reporting boundary is based on the internal and external materiality assessment. The reporting topic boundaries are set out in the Report covering the sustainability performance of the ACC, encompassing 11 Integrated Cement Plants and 6 Grinding Units and 75 Ready Mix Concrete (RMX) plants and offices. Our engagement did not include an assessment of the adequacy or the effectiveness of ACC's strategy or management of sustainability-related issues. During the assurance process, TUVI did not come across the limitations to the scope of the agreed assurance engagement. No external stakeholders were interviewed as a part of the sustainability engagement.

Verification Methodology

This assurance engagement was planned and carried out in accordance with the GRI Standards and AA1000AS (2008). The Report was evaluated against the following criteria:

- Adherence to the principles of Stakeholder inclusiveness, Materiality, Responsiveness, Completeness, Neutrality, Relevance, Sustainability context, Accuracy, Reliability, Comparability, Clarity, and Timeliness; as prescribed in the GRI Standards and AA1000AS (2008);
- Application of the principles and requirements of the GRI Standards for its in accordance "Comprehensive" option.



During the assurance engagement, TUVI adopted a risk-based approach, concentrating on verification efforts on the issues of high material relevance to ACC's business and its stakeholders. In doing so:

- TUVI reviewed the approach adopted by ACC for the stakeholder engagement and materiality determination process. TUVI performed limited internal stakeholder engagement to verify the qualitative statements made in the Report;
- TUVI verified the sustainability-related statements and claims made in the Report and assessed the robustness of the data management system, information flow, and controls;
- TUVI examined and reviewed the documents, data and other information made available by ACC for the reported disclosures including the Disclosure on Management Approach and performance indicators;
- TUVI conducted interviews with key representatives including data owners and decision-makers from different functions of the ACC during the site visit;
- TUVI performed sample-based reviews of the mechanisms for implementing the sustainability-related policies, as described in ACC's Sustainability Report;
- TUVI verified sample-based checks of the processes for generating, gathering and managing the quantitative data and qualitative information included in the Report for the reporting period.

Opportunities for Improvement

The following is an extract from the observations and opportunities for improvement reported to the management of ACC and are considered in drawing our conclusions on the Report; however they are generally consistent with the Management's objectives.

Opportunities are as follows:

- ACC can undertake an assessment of present emission targets following the "Science-Based Targets" methodology (sectoral de-carbonization approach or absolute based targets or economic approach)
- ACC can accelerate the implementation of the projects for water neutrality and water positive status, wherever possible
- Environmental and social audit of major supply chain vendors are recommended
- Periodic assessment of "Human Rights" are recommended at remaining sites
- ACC may avail the publish Report review service by GRI

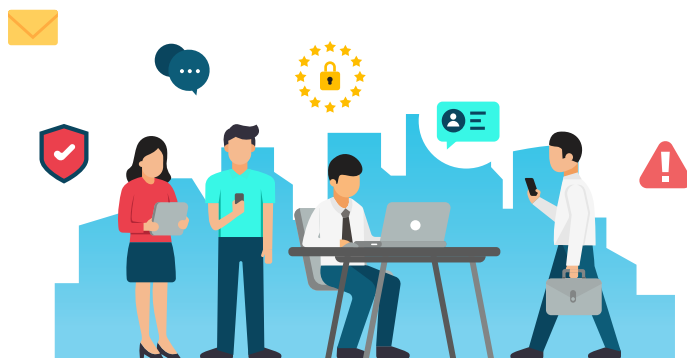
Conclusions

In our opinion, based on the scope of this assurance engagement, the disclosures on sustainability performance reported in the Report along with the referenced information provides a fair representation of the material aspects, related strategies, and performance indicators, and meets the general content and quality requirements of the GRI Standards "Comprehensive" Option.

- Universal Standards: ACC followed GRI 101: Reporting Principles for defining report content and quality. GRI 102: General Disclosures were followed when reporting information about an organization's profile, strategy, ethics and integrity, governance, stakeholder engagement practices, and reporting process. Furthermore, GRI 103 was selected for Management's Approach on reporting information about how an organization manages a material topic. TUVI is of the opinion that the reported disclosures generally meet the GRI Standards reporting requirements for "in accordance" Comprehensive reporting.
- Topic-specific Standards: 200 series (Economic topics), 300 series (Environmental topics) and 400 series (Social topics): These Topic-specific Standards were used to report information on an organization's impacts related to environmental and social topics. TUVI is of the opinion that the reported material topics and Topic-specific Standards that ACC uses to prepare its Report are appropriately identified and addressed.

On the basis of the procedures we have performed, nothing has come to our attention that causes us to believe that the information subject to the Type 2 moderate level assurance engagement was not prepared, in all material topics, in accordance with the GRI Standards "Comprehensive" option sustainability reporting guidelines, or that the sustainability information is not reliable in all material respects, with regards to the reporting criteria.

TUVI did not perform any assurance of procedures on the prospective information, such as targets, expectations, and ambitions, disclosed in the sustainability information. Consequently, TUVI draws no conclusion on the prospective information. This assurance statement has been prepared in accordance with the terms of our engagement. TUVI has evaluated below requirements in the context of GRI Standards.



Stakeholder Inclusiveness: Stakeholder identification and engagement is carried out by ACC on a periodic basis to bring out key stakeholder concerns as material topics of significant stakeholders. In our view, the Report meets the requirements.

Materiality: The materiality assessment process has been carried out, based on the requirements of the GRI Standards, considering topics that are internal and external to the ACC's range of businesses. The Report fairly brings out the aspects and topics and its respective boundaries of the diverse operations of ACC. In our view, the Report meets the requirements.

Responsiveness: TUVI believes that the responses to the material topics are fairly articulated in the report, i.e. disclosures on ACC's policies and management systems including governance. In our view, the Report meets the requirements.

Completeness: The Report has fairly disclosed the General and Specific Standard Disclosures, including the Disclosure on Management Approach, covering the sustainability strategy, management approach, monitoring systems, and sustainability performance indicators against the GRI Standards, 'in accordance with the "Comprehensive" option. In our view, the Report meets the requirements.

Reliability: The majority of the data and information was verified by TUVI's assurance team at ACC's office on the factory's premises and found to be fairly accurate. Further desk review of web-based data was carried out for all other sites mentioned above. Some inaccuracies in the data identified during the verification process were found to be attributable to transcription, interpretation and aggregation errors and these errors have been corrected. Therefore, in accordance with the GRI Standards and AA1000AS (2008) for a Type 2, moderate level assurance engagement, TUVI concludes that the sustainability data and information presented in the Report is fairly reliable and acceptable. In our view, the Report meets the requirements.

Neutrality: The disclosures related to sustainability issues and performances are reported in a neutral tone, in terms of content and presentation. In our view, the Report meets the requirements.

TUVI expressly disclaims any liability or co-responsibility for any decision a person or entity would make based on this Assurance Statement. The intended users of this assurance statement are the management of ACC. The management of the ACC is responsible for the information provided in the Report as well as the process of collecting, analyzing and reporting the information presented in web-based and printed Reports, including website maintenance and its integrity. TUVI's responsibility regarding this verification is in accordance with the agreed scope of work which includes non-financial quantitative and qualitative information (Sustainability Performance) disclosed by ACC in the Report. This assurance engagement is based on the assumption that the data and the information provided to TUVI by ACC are complete and true.

TUVI's Competence and Independence

TUVI is an independent, neutral, third party providing sustainability services, with qualified environmental and social assurance specialists. TUVI states its independence and impartiality and confirm that there is "No Conflict of Interest" with regard to this assurance engagement. In the reporting year, TUVI did not work with ACC on any engagement that could compromise the independence or impartiality of our findings, conclusions, and recommendations. TUVI was not involved in the preparation of any content or data included in the Report, with the exception of this Assurance Statement. TUVI maintains complete impartiality towards any individuals interviewed during the assurance engagement.

For and on behalf of TUV India Private Limited

Manojkumar Borekar
Project Manager and Reviewer
Head – Sustainability Assurance Service
TUV India Private Limited

Date: 23/05/2019
Place: Mumbai, India
Project Reference No: 8116970291
www.tuv-nord.com/in



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7.2

Performance Table



	Unit	2016	2017	2018	GRI Standards
ECONOMIC VALUE GENERATED					201-1
Gross Income	₹ Crores	14453	18867	20883	
Operating Costs	₹ Crores	8554	11289	11249	
ECONOMIC VALUE DISTRIBUTED					
As remuneration including retirement benefits for Employees	₹ Crores	755	881	819	
Contribution to Government as taxes and other levies	₹ Crores	4008	6796	5331	
As dividend to Shareholders	₹ Crores	319	282	319	
Community investments	₹ Crores	22	20	22	
Finance Cost	₹ Crores	83	89	102	
Retained with the Business	₹ Crores	712	1566	985	
PROCUREMENT AND SUPPLY CHAIN					
Total No of suppliers	no	10,796.00	10,413.00	9,517.00	204-1
Indian suppliers (local)	no	10,704.00	10,322.00	9,442.00	
International suppliers	no	92.00	91.00	75.00	
Number of Suppliers screened through Self Assessment Questionnaire (socials, environmental aspects)	no		464.00	590.00	
Monetary value of payments made to suppliers	₹ Crores	9,100.00	10,361.00	12,784.00	
Proportion of spending on local suppliers	%	97.24	97.29	96.82	
RAW MATERIALS- CEMENT					
Limestone	Million tonnes	22.41	24.31	24.86	301-1
Gypsum	Million tonnes	0.86	1.17	1.18	
Alternative Raw material	Million tonnes	0.33	0.32	0.37	
Slag	Million tonnes	2.68	3.53	3.18	
Fly-ash	Million tonnes	3.90	4.48	5.74	
Additives	Million tonnes	0.02	0.10	0.10	
Others (Bauxite, Iron ore etc.)	Million tonnes	0.67	2.07	1.67	
Lubricating oil (tonnes)	tonnes	489.00	524.00	471.00	
Grease (tonnes)	tonnes	167.00	153.00	137.00	
Weight of bags consumed	tonnes	29,992.00	27,248.00	36,374.74	
% recycled materials used	%	22.38	23.20	25.03	301-2
RAW MATERIALS- RMX					
Cement	tonnes	6,33,830.00	7,80,083.00	7,53,667.00	301-1
Slag	tonnes	53,381.00	43,784.00	75,725.70	
Flyash	tonnes	1,77,670.00	1,95,316.00	1,76,693.30	
Additives	tonnes	8,312.00	9,369.00	9,547.00	
Sand	tonnes	18,59,552.00	21,45,884.00	20,82,169.00	
Aggregates	tonnes	23,90,050.00	27,55,088.00	29,42,832.00	
Lubricating oil (tonnes)	tonnes	20.93	93.50	19.50	
Grease (tonnes)	tonnes	8.56	9.60	8.20	
GHG EMISSIONS - CEMENT					
Total CO2 Emissions - Gross	tonnes	1,27,37,840.00	1,44,91,480.50	1,44,42,416.54	CSI
Total CO2 Emissions - Net	tonnes	1,26,28,887.00	1,43,51,798.66	1,43,00,900.31	CSI
Specific CO2 Emissions - gross	kg/tonne of cementitious material	551.00	534.00	511.00	305-4/CSI
Specific CO2 Emissions - net	kg/tonne of cementitious material	547.00	528.00	506.00	
Scope 1 emissions cement	tonnes	1,48,56,102.00	1,66,66,819.09	1,66,36,629.78	305-1
Scope 2 emissions cement	tonnes	5,44,035.00	5,95,431.27	5,34,401.00	305-2
Scope 3 emissions cement	tonnes	5,39,067.00	6,75,988.10	6,66,259.00	305-3



	Unit	2016	2017	2018	GRI Standards	
GHG EMISSIONS - CONCRETE						
Scope 1 emissions concrete	tCO2	3,015.00	4,275.15	3,297.00	305-1	
Scope 2 emissions concrete	tCO2	6,772.00	5,109.87	4,932.88	305-2	
Scope 3 emissions concrete	tCO2	41,607.00	36,961.00	43,878.00	305-3	
OVERALL CO2 REDUCTION ACHIEVED (SCOPE-1 &2)#						
On account of thermal savings(1)	tCO ₂	2,451.00	35,746.31	4,067.00	302-4, 305-5	
On account of electrical savings(2)	tCO ₂	Nil	1,08,113.16	88,464.00		
On account of clinker factor improvement	tCO ₂	Nil	5,31,861.00	3,97,293.00		
Note:						
(1) CO2 emission reductions on account of thermal energy is calculated value.						
(2) CM Emission Factor (CO2 Baseline Database for the Indian Power Sector – V 11 – Apr 2016 – by Central Electricity Authority) was used for calculating the CO2 emissions on account of electrical savings.						
EMISSIONS*						
NOx	g/t clinker	1,966.91	2,020.62	1,718.10	305-7/CSI	
	g/t cement	1,289.25	1,319.30	1,051.30		
	t	29,880.65	35,040.30	29,810.30		
SOx	g/t clinker	128.74	136.20	127.70		
	g/t cement	84.38	88.93	78.20		
	t	1,955.72	2,361.89	2,216.10		
Dust	g/t clinker	41.50	38.93	28.50		
	g/t cement	27.24	25.41	17.40		
	t	630.52	675.01	494.30		
* The emissions reported are based on Kiln stacks only						
ENERGY CONSUMPTION - CEMENT KILN FUEL CONSUMPTION						
Coal+Petcoke	TJ	45,927.00	51,695.18	51,417.00	302-1	
Diesel oil	TJ	70.00	71.05	62.00		
Alternative fossil and mixed fuels*	TJ	1,241.00	1,712.02	1,744.00		
Biomass fuels	TJ	304.00	501.32	648.00		
NON-KILN FUEL CONSUMPTION						
Coal+petcoke	TJ	23,136.00	24,305.77	24,510.00		
Diesel oil	TJ	8.00	9.65	7.00		
Alternative Fuels	TJ	98.00	290.91	100.00		
Alternative biomass fuels	TJ	151.00	131.04	167.00		
Electricity Purchased/Imported	MWh	5,66,703.00	6,20,240.00	6,01,649.00		
Energy consumption outside the organisation**	TJ	7,275.00	9,122.00	8,991.00	302-2	
Specifc Power consumption upto and including clinker prod	kWh/ton clinker	73.06	69.80	69.01	302-3	
Specifc Power consumption upto and including cement grinding	kWh/ton cementitious material	84.62	80.30	77.81		
Specifc Power consumption upto and including cement grinding, colony auxillaries	kWh/ton cementitious material	87.04	82.42	79.83		
* As per WBCSD protocol, alternative fossil fuel comprises of waste oil, waste tyres, plastics, solvents, impregnated saw dust etc						
** Considered diesel as fuel consumed in transportation						
ENERGY CONSUMPTION - RMX						
Diesel Oil	TJ	41.00	43.00	43.30	302-1	
Electricity purchased	MWh	7,054.00	5,436.00	5,247.00		
Energy consumption outside the organisation*	TJ	561.00	355.00	592.00		
* Considered diesel as fuel consumed in transportation						



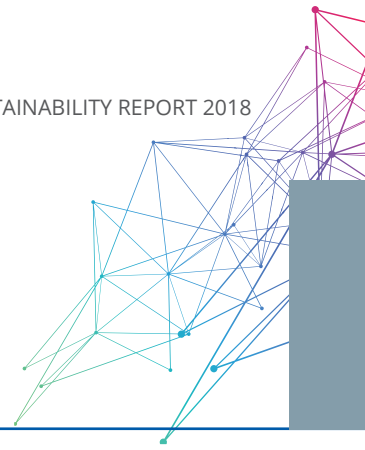
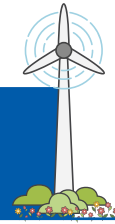
	Unit	2016	2017	2018	GRI Standards	
TOTAL DIRECT & INDIRECT ENERGY						
Total Power Generation	TJ	23,393.00	25,696.00	5,876.00	302-1	
Total Renewable Energy Generation	Million Units	36.51	37.37	34.73		
% of RE in total power consumption	%		1.95	3.42		
Renewable Energy Certificates Purchased	MWh	69,336.00	76,080.00	97,415.00		
Total Green Energy	Million Units	38.18	43.92	80.68		
Power and fuel expenses	₹ Crores	2,157.00	2,714.00	2,998.00		
Thermal energy efficiency	Gj/tonne clinker	3.12	3.10	3.09		
Electrical energy efficiency	Kwh/tonne cement	88.66	84.33	81.13		
WASTE TYPE						
Hazardous waste						
Waste oil	litres	83,633.00	1,85,063.00	1,33,246.90	306-1	
Grease	kgs	50,232.00	50,490.00	52,046.00		
Others (Biomedical waste, e waste, used batteries)	tonnes		37.03	59.00		
Non-hazardous waste						
Steel scrap (1)	tonnes	30,635.00	12,579.09	11,810.44		
Others(2)	tonnes	5,098.00	4,411.73	7,329.66		
Filter bags	no	1,13,671.00	92,908.00	81,510.00		
Note:						
1. Steel Scrap includes castings, waste steel, MS drums, wrapper scrap, iron scrap, grinding balls, HC lining plate, table liner, HC grinding media, etc.						
2. Others includes waste cement bags, conveyor belts, wood, copper, plastic bags, electrical cables, empty glass bottles, aluminum, tyres, paper, PVC drums, HDPE wrapper, etc.						
TOTAL WATER WITHDRAWAL - CEMENT+CPP+COLONY						
Surface water	million m³	5.44	6.68	6.71	303-1/CSI	
Harvested rainwater	million m³	6.85	6.76	6.74		
municipal water	million m³	0.07	0.14	0.09		
Ground water	million m³	1.99	2.00	1.17		
Percentage of sites with water recycling	%	88.24	100.00	100.00	303-3	
Total Quantity of Water Treated and Reused Annually	%	9.10	10.50	12.15		
Total Quantity of Water Treated and Reused Annually	million m³	1.31	1.63	1.68		
LOCAL IMPACTS						
% of sites with Community Engagement Plan	%	100.00	100.00	100.00	CSI	
% of sites with Quarry Rehabilitation Plan	%	100.00	100.00	100.00		
TOTAL WATER WITHDRAWAL - RMX						
Surface water - RMX	million m³	-			303-1	
Harvested rainwater - RMX	million m³					
Municipal water - RMX	million m³	0.48	0.37	0.78		
Ground water - RMX	million m³	0.32	0.64	0.22		
HEALTH AND SAFETY PARAMETERS						
Employee Fatalities	no	0.00	1.00	0.00	403-2, 9/CSI	
Fatality rates (directly employed)	no	0.00	0.67	0.00		
Contractor Fatalities (onsite)	no	5.00	0.00	0.00		
Contractors Fatalities (off site)	no	5.00	4.00	6.00		
Employee Lost Time Injury (LTI)	no	16.00	7.00	4.00		
Employee Lost Time Injury Frequency Rate (LTIFR)	no	0.90	0.41	0.26		
Employee Injury Rate (IR)	no	1.33	0.94	0.81		
Employee Lost day rate (LDR)	no	53.80	18.95	6.18		



	Unit	Female	Male	Female	Male	Female	Male	GRI Standards
TOTAL EMPLOYEE - BY CATEGORY								
Management Staff	no	291	7542	274	7148	218	3611	102-8
Non management staff	no	247	3975	227	3843	44	2844	
Retainers/Advisors	no	43						
Third party employees	no		8436		7914		8312	
Casual employees	no		29		27		14	
Total	no						15043	
TOTAL EMPLOYEE - BY AGE								
<30	no	129	1409	110	1229	102	1030	102-8
30-50	no	127	3792	128	3734	132	3680	
>50	no	57	2319	36	2185	28	1759	
EMPLOYEE TURNOVER - BY AGE								
<30	no	34	195	27	160	22	136	401-1
30-50	no	16	204	11	224	17	318	
>50	no	9	440	7	332	14	569	
NEW HIRES - BY AGE								
<30	no	7	140	18	111	25	216	401-1
30-50	no	9	178	9	147	6	150	
>50	no	2	8	1	9	1	7	
ANNUAL PERFORMANCE								
Managers who Received annual performance	no	247	3,675	227	3,843	218	3,611	404-3
Non- management employees who received annual performance	no	44	3,567	47	3,305	44	2,858	
TRAINING HOURS - BY CATEGORY								
Management Staff	hrs	126.00	2,417	3,699	93,761	4,425	1,01,650	404-1
Non-management Staff	hrs	45.00	2,286	874	22,142	30	26,657	
NUMBER OF TRAINING HOURS								
For Health and safety	hrs	1408	219749	534	30836	549	30849	403-5, 404-1, 412-2
For IT training	hrs	100	1250	13	364	226	3643	
For Management skills	hrs	2039	34346	2616	41221	1436	41837	
For Environment & sustainability	hrs	250	5110	96	980	18	1493	
Anti-corruption policies & procedures	hrs	12	446	59	831	144	2507	
Other Trainings	hrs	1522	32138	408	11784	2082	47978	

7.3

United Nations Global Compact



ACC became a signatory to the United Nations Global Compact (UNGC) in 2006 and has since then periodically affirmed adherence to its ten principles. Various chapters of this Sustainable Development Report explain at length the organization's response to the requirements of the ten principles. The following table indicates the relevant chapter of this report where each principle is addressed. This report may thus be read as the Communication on Progress (CoP) required to be disclosed by signatories of the UNGC.

S. No	Principle	Chapter
HUMAN RIGHTS		
1	Businesses should support and respect the protection of internationally proclaimed human rights; and	5.3 Human Rights
2	Make sure that they are not complicit in human rights abuses	5.3 Human Rights
LABOUR		
3	Business should uphold the freedom of association and the effective recognition of the right to collective bargaining;	5.2 People Processes 5.3 Human Rights
4	The elimination of all forms of forced and compulsory labour;	
5	The effective abolition of child labour; and	
6	The elimination of discrimination in respect of employment and occupation	
ENVIRONMENT		
7	Businesses should support a precautionary approach to environmental challenges;	4.1 Raw Materials 4.2 Climate Change 4.3 Energy 4.4 Circular Economy & Managing Waste 4.5 Water 4.6 Biodiversity 4.7 Other Emissions 4.8 Sustainable Construction
8	Undertake initiatives to promote greater environmental responsibility; and	
9	Encourage the development and diffusion of environmentally friendly technologies	
ANTI-CORRUPTION		
10	Businesses should work against corruption in all its forms, including extortion and bribery	2.8 Compliances and other aspects

7.4

Glossary



Alternative Fuels and Raw Materials or Resources (AFR)

- Inputs derived from waste streams contributing energy and/or resource recovery

Bag House - Air pollution control equipment that removes particulates from flue gas released in manufacturing processes

Biodiversity - Refers to the variety of life on earth - the different animals, plants and micro-organisms, their genes and the ecosystems of which they are a part.

Blended Cement - Hydraulic cements consisting essentially of an intimate and uniform blend of ordinary Portland cement with either slag or fly ash

Captive Power Plants (CPP) - Power plants or generation sets set up by an industry to meet its own power requirements.

Carbon Footprint - The total set of greenhouse gas emissions caused by an organisation.

Cementitious Material - Total clinker produced plus mineral components consumed for blending and production of cement substitutes, including clinker sold, excluding clinker bought.

Cement Sustainability Initiative (CSI) - A global group of 24 major cement producers set up under the World Business Council for Sustainable Development for the pursuit of issues concerning sustainable development in the cement sector.

Clinker - An intermediate product in cement manufacture that is produced by sintering and fast-cooling ground limestone

Clinker Factor - The percentage of clinker in cement

Community Advisory Panel (CAP)

- An informal but representative group of persons selected as accurately representing views of the community in matters concerning its social needs and development schemes

Concrete - A building material produced by mixing cement, water and aggregates comprising sand and gravel or crushed stone.

Co-processing - The act of adapting an existing industrial process in a single combined operation, whereby certain so-called 'waste' materials may be put to use as alternative fuel or raw material in cement kilns, dryers and captive power plants

Corporate Social Responsibility (CSR) - The commitment of businesses to contribute to sustainable development, working with stakeholders, local community and society at large to improve their quality of life. We use the term to refer to community development.

Central Pollution Control Board (CPCB) - A statutory organisation under the Ministry of Environment and Forests responsible for maintaining national standards under a variety of environmental laws, in consultation with zonal offices, and local governments.

Debottlenecking - A technique of optimising production capacity at a plant by modifying the configuration of equipment or workflow or eliminating bottlenecks that limit throughput.

Employee Lost Time Injury - A work-related injury after which, the injured person cannot work for at least one full shift / full working day.

Employee Lost Time Injury

Frequency Rate - Refers to the rate of occurrence of workplace incidents that result in an employee's inability to work the next full work day. This is calculated as the number of lost-time injuries within a given accounting period relative to the total number of hours worked in the same accounting period.

Employee Lost Working days - Those days on which, because of occupational injury or illness, the employee was away from work or limited to restricted work activity.

Environmental Product Declaration (EPD) - A uniform way of quantifying and disclosing the environmental impact of a product or system.

Ethical View Reporting (EVR) - The company's new mechanism to report concerns about unethical behavior, frauds and violation of the Company's Code of Conduct and Ethics Policy

FICCI - Federation of Indian Chambers of Commerce and Industry, an association of business organisations in India

Fly Ash - Waste particulate residue from thermal power plants or incineration plants

Fossil Fuels - Non-renewable carbon-based fuels like coal and oil, etc.

Geocycle - The brand name under which LafargeHolcim offers sustainable solutions for waste management.

Global Reporting Initiative (GRI) - An international framework recommended for reporting progress on Sustainable Development.

GPS - Global Positioning System

Green Building - A building which uses less water, optimises energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building.

Greenhouse Gases - Gases that absorb and emit radiation within the thermal infrared range of the earth's atmosphere.

IUCN - The International Union for Conservation of Nature, an international organisation working for natural resource conservation.

Kiln - Large rotating cylindrical industrial oven used in the manufacture of cement clinker. In this report, "kiln" always refers to a rotary kiln. A cement kiln is believed to be among the largest moving machines.

Life Cycle Assessment - An approach to assess the environmental impacts of a product in all stages of its life

Limestone - A sedimentary rock composed of calcium carbonate used as the main input in cement manufacture.

Material Aspects - Topics that reflect the organisation's significant economic, environmental and social impacts or those that substantially influence stakeholders' assessment and decisions.

Materiality - The threshold at which an issue or indicator becomes sufficiently important that it should be reported.

MT - Metric Tonne

MW - Megawatt, a unit of power equal to one million watts



Needs Assessment - A systematic process to acquire an accurate understanding of a community's needs and priorities in the context of its economic and social development

NOx - A generic term for Nitrogen Oxides, which usually refers to it as an air pollutant.

NPS - Net Promoter Score, an index used to measure the willingness of customers to recommend a company's products or services to others. This is also used as a proxy to gauge customer satisfaction.

Ordinary Portland Cement (OPC) - Cement made by inter-grinding clinker and gypsum.

Participatory Rural Appraisal (PRA) - A community-centric approach to development that engages communities in all phases of development programmes from identifying needs and formulating schemes for implementation and monitoring.

Perform Achieve Trade (PAT) Scheme - A trading scheme aimed to reduce energy consumption in industries across India using market oriented mechanisms. The scheme is designed and implemented by the Bureau of Energy Efficiency (BEE), under the Ministry of Power, India.

Profit After Tax (PAT) - It is the net profit earned by the company after deducting all expenses like interest, depreciation and tax.

Personal Protective Equipment (PPE) - Protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury.

Petcoke - Petroleum coke which is a carbon solid derived from oil refinery coker units or other cracking processes.

Portland Pozzolana Cement (PPC) - Cement produced by inter-grinding a Pozzolanic material such as fly ash with clinker and gypsum.

Portland Slag Cement (PSC) - Cement produced by inter-grinding slag with clinker and gypsum.

Public Private Partnership (PPP) - A government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies.

Radio Frequency Identification Device (RFID) - The wireless non-contact use of radio-frequency electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags attached to objects.

Rain Water Harvesting (RWH) - Techniques used for collecting, storing and using rainwater

Ready Mixed Concrete (RMX) - Concrete specifically manufactured for delivery to construction sites in a freshly mixed or unhardened state. RMX is the acronym we use at ACC, though most others refer to it as RMC.

Self-Help Group (SHG) - A village-based voluntary support group usually composed of 10-20 local women or men who come together to address a shared cause or objective.

Slag - A non-metallic product consisting essentially of glass containing silicates, allumino-silicates of lime and other bases. It is obtained as a waste by product in the manufacture of pig iron in a blast furnace or electric furnace.

SO₂ - The chemical term for sulphur dioxide, usually an air pollutant that plays a critical role in global warming.

Social Audit - A structured way of evaluating an organisation's social responsibility performance in terms of its schemes, expenditures and outcomes

Stakeholder - Individuals or groups whose actions significantly affect or can be affected by an organisation's activities, products or services.

Stakeholder Engagement - The process by which an organisation involves its stakeholders, that is, the people who may be affected by its decisions or can influence the implementation of its decisions.

Sustainable Construction - Building in a way that is socially, economically, environmentally, functionally and aesthetically balanced to meet today's needs and to provide and conserve resources for future generations.

Sustainable Development (SD) - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. SD is the acronym we use at ACC.

Sustainability Reporting - The practice of measuring, disclosing and being accountable to internal and external stakeholders for organisational performance towards the goal of sustainable development

Thermal Substitution Rate (TSR) - The amount of energy used from alternative fuels as a percentage of the total energy consumed in the process.

Tolling - An arrangement in which a company with specialised equipment processes raw materials or semi-finished goods for another company

UN Global Compact (UNGC) - A UN initiative to encourage global businesses to adopt ten principles covering human rights, labour standards, environment and anti-corruption.

VCCE - Value Creation in Competitive Environment

Vertical Roller Mill (VRM) - A type of grinding machine used to grind materials into extremely fine powder. A VRM is now recognised as standard energy efficient equipment to grind clinker into cement.


Waste Heat Recovery - Generating power by utilising waste heat from preheater and cooler gases.

World Business Council for Sustainable Development (WBCSD) - A CEO-led organisation of forward thinking companies that galvanizes the global business community to create a sustainable future for business, society and the environment.

7.5

Our Network

ACC Limited is India's foremost manufacturer of cement and ready mix concrete with 17 cement plants, 75 ready mix concrete plants, 1 bulk terminal, a vast distribution network of 50,000+ channel partners and a countrywide spread of sales offices.

 **Corporate Office**
Mumbai (Maharashtra)

Cement Plants

Andhra Pradesh

1. Vizag

Chhattisgarh

2. Jamul

Himachal Pradesh

3. Gagal I

4. Gagal II

Jharkhand

5. Chaibasa

6. Sindri

Karnataka

7. Kudithini

8. Thondebhavi

9. Wadi I

10. Wadi II

Madhya Pradesh

11. Kymore

Maharashtra

12. Chanda

Odisha

13. Bargarh

Rajasthan

14. Lakheri

Tamil Nadu

15. Madukkarai

Uttar Pradesh

16. Tikaria

West Bengal

17. Damodhar

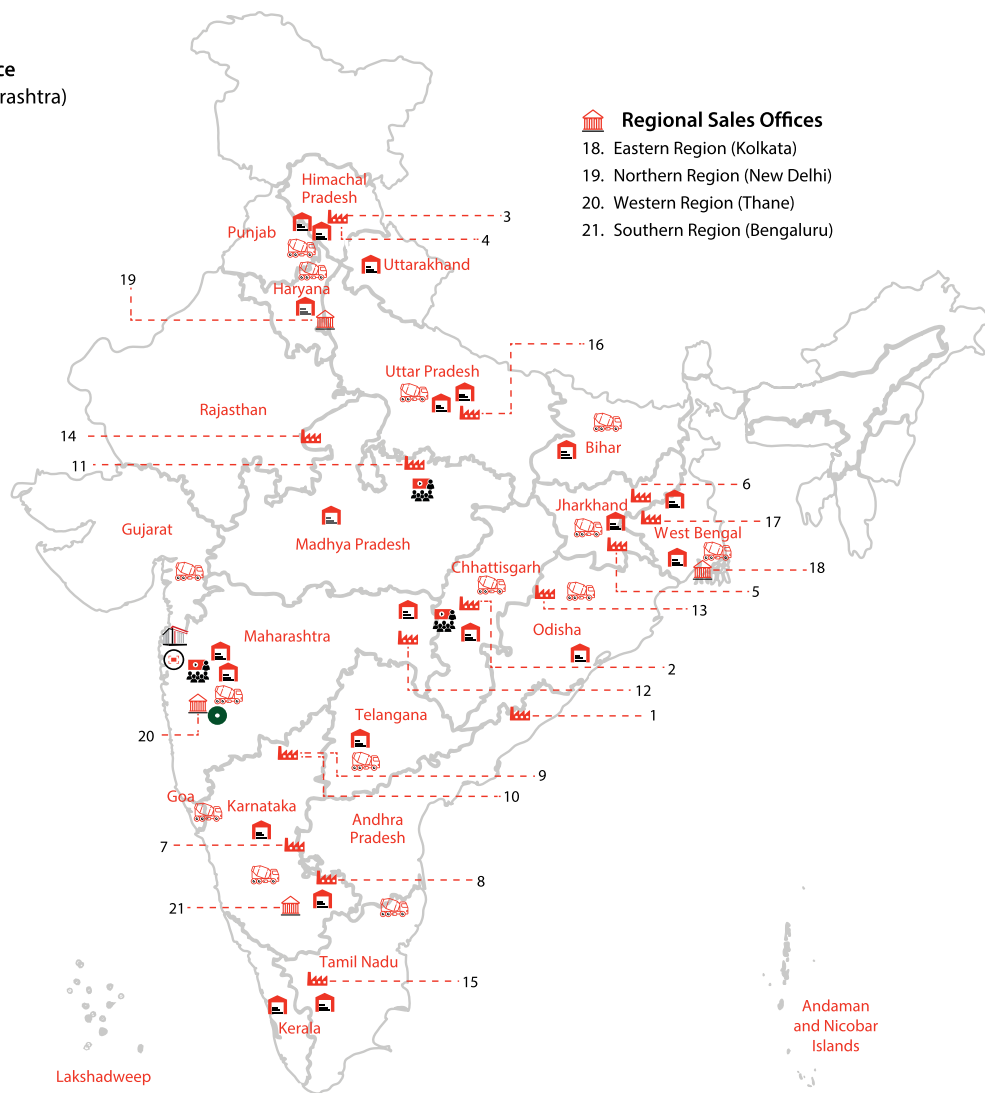
Regional Sales Offices


18. Eastern Region (Kolkata)


19. Northern Region (New Delhi)

20. Western Region (Thane)

21. Southern Region (Bengaluru)



 TECHPORT, Thane, Maharashtra

 Geocycle India, Thane, Maharashtra

Training Centres

ACC ACL Leadership Academy, Thane

ACC Cement Technology Institute, Jamul

Sumant Moolgaokar Technical Institute, Kymore

 Ready Mix Concrete (RMX) Plants

 Sales Offices

This map is of 31st December 2018. It is illustrative and not drawn to scale.

**ACC Limited**

Registered Office
Cement House
121, Maharshi Karve Road
Mumbai 400 020, India.



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