

## RISKS AND THE MITIGATION STRATEGIES

# Knowing our risks, fortifying our defenses

**Organisations are operating in a rapidly changing environment and must identify risks and measure impact of such rapid changes on their business operations. These risks may be all pervasive and could emerge from various sources like market, geo-political, natural, operational, legal, etc. If not properly identified, assessed, and planned beforehand, such risks may have a significant impact on our operations.**



Given its importance, regulators across the globe have mandated for implementation of formal Risk Management Framework for corporate entities. At Shree Cement, however, risk management is not just a regulatory requirement fulfilled by the top management, but it is a continuous process which is embedded in all our Company's operations covering the Enterprise, Functions, and our manufacturing plants.

We identify risks inherent in the business operations of the Company considering our goals, external environment, and expectation of our stakeholders among others. This helps us in developing mitigation plans as a response to risks that pose a threat to our long-term goal of creating value for all our stakeholders. A proactive risk management approach also provides opportunities for improvement and development of new solutions that can give us a competitive advantage among our competitors.

To identify and mitigate risks, we have laid down an ERM policy and Enterprise Risk Management framework which provides guidelines to define, measure, control, mitigate and report the

identified risks at the enterprise level which impact the achievement of strategic /enterprise level objectives. It helps to identify potential risk areas in various economic, environmental, social, sectoral, sustainability related, and industrial environments in which we operate. The framework prescribes guidelines for contextualisation of risks by linking them with our business objectives and risk identification, assessment, mitigation, and governance thereof.

### Enterprise Risk Management structure

We have multi-level governance structure to monitor, and report risks and relevant mitigation strategies. The structure is led by the Risk Management Committee of the Board of Directors which reviews risk policy and the mitigation measures at specified intervals. The senior executives of the Company and relevant teams, as part of the above structure, identify the risks, evaluate, and take necessary mitigating measures for the Enterprise level risks in line with the ERM policy and Framework.

### Risk management process



#### Risk identification

Risk identification is the process of identifying major risks. It is done in number of ways such as by tracking list of leading events or key risk indicators, brainstorming, discussions with peers and internal analysis, comparison with other organisations, process flow analysis, etc.



#### Assess risk severity and risk prioritisation

Once risks have been identified, they are evaluated to determine which are of an unacceptable nature and which should be targeted for mitigation. The risks are calculated based on their Impact and Likelihood. The most important risks are identified by using a combination of Risk Impact from Low to Critical, and Risk Likelihood ranging from Remote to Likely.



#### Define mitigation plan

Mitigation consists of risk responses and control objectives. Senior Executives are responsible for their respective area of oversight and to ensure that appropriate risk responses are in place.

## RISKS AND THE MITIGATION STRATEGIES

The top risks identified by us and their mitigation strategies are as follows:

| Risk                                        | Risk description                                                                                                                                                                                                                                                                                                                                                                     | Mitigation strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Excess capacity in the industry</b><br>▲ | Prolonged periods of excess capacity in the industry leads to under-utilisation of plant capacities and output prices falling to un lucrative levels, leading to lower profits.                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>Our continued thrust on building a brand equity through high quality products being readily available in the market has helped us consolidate our market share.</li> <li>To maintain and grow market share, we have been continuously adding capacities in the market where the demand-supply situation is favourable and there is no/ low cannibalisation with existing plant.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Availability of limestone</b><br>▲       | Limestone is the basic raw material for cement manufacturing and its consistent availability at optimum cost is essential for existing and future plant requirements. With depleting reserves at existing mines and acquisition of new limestone mines getting uncertain due to regulatory and competition issues, availability of limestone may be a risk for continued production. | <ul style="list-style-type: none"> <li>We have been making all efforts to optimise the usage of limestone, thereby, conserving the deposits and enhancing their life. These include use of additives in clinker production without compromising the quality, enhanced production of blended cement, deployment of latest mining techniques to reduce overburden and wastage, etc.</li> <li>We have been regularly participating in the auctions for the new limestone deposit and have secured such deposits in some of the auctions.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Availability of water</b><br>■           | Majority of the plants are located in Northern region water deficient areas with continuously depleting water tables and as such, conserving water becomes very important.                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>In power generation, we have installed Air Cooled Condensers (ACC) in all our thermal power plants which though involve additional capital expenditure, have helped us reduce water consumption significantly.</li> <li>Additionally, we have installed Waste Heat Recovery Systems (WHRS) in all our clinker units thereby, eliminating the need for cooling of waste hot gases and thus, saving water. Water harvesting reservoirs have also been constructed within plant and mines area.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Input cost inflation</b><br>■            | Cement manufacturing is an energy intensive process and we have witnessed a sharp rise in prices of coal, pet coke, power, etc. due to the surge in demand and geo-political situations. This can severely impact the cost of production and dent profitability.                                                                                                                     | <ul style="list-style-type: none"> <li>All our plants have multi fuel kilns and can switch to the most economical fuel in a short period of time. We also participate in auction for securing coal linkage as and when organised by relevant authorities. We use agro-waste as well as wastes of various industries such as Pharma, Chemical, Sponge Iron as alternate fuel, thus keeping the Fuel cost under check. We took advance strides to raise our waste heat recovery plants to reduce our dependence on thermal power requiring use of coal. As a result, we have WHR capacity which is highest in the cement industry globally after China.</li> <li>We have been continuously investing in expanding our green energy portfolio (WHR, wind, solar) for meeting our electrical energy requirements. During FY 2021-22, we met 48.2% of electrical energy requirement from green energy sources which in turn reduced the requirement of thermal power.</li> </ul> |
| <b>Cyber Security</b><br>●                  | Digital transformation in majority of our business activities like logistics, marketing, and manufacturing have improved operational efficiency. However, inadequate controls to protect the system against cyber-attacks, unauthorised access, data loss, etc. can lead to disruption of operations.                                                                                | We have been taking necessary measures like systematic back-up procedures, updating with latest security and firewall systems, employee trainings on preventing data leakages, and better monitoring & control mechanism to mitigate any risks arising due to digitisation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

### Risk Category

▲ Sectoral Risk ■ Operational Risk ● Information and technological Risk

## EMERGING RISKS

In addition to the enterprise risks listed above, we have also identified some emerging risks that are likely to have a long-term impact on our business. In some cases, they may have already begun impacting the business today. We have already planned strategies to mitigate the emerging risk.

| Risk                                       | Risk Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mitigation Strategy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Climate change</b><br>★                 | Global warming and consequent impact in the form of erratic and frequent climate change has emerged as a major risk across globe. This may impact our operations also as cement manufacturing is an energy and resource intensive process and releases CO <sub>2</sub> due to calcination process and combustion of fuels. Efforts to address climate change by reducing emissions of Greenhouse Gases (GHG) through National, State, and regional laws and regulations as well as international agreements will bring about various regulatory requirements impacting the way we carry out our operations. New legislative or regulatory controls may pose risks which could include costs to purchase allowances or credits to meet GHG emission caps, costs required to procure advanced equipment to reduce emissions to comply with GHG limits or required technological standards or higher production costs. In addition, physical risks arising from extreme weather or high temperatures may impact any manufacturing sector in terms of property damage and disruption to operations. | While combating climate change requires collaborative and coordinated efforts from all, we have been continuously making efforts in this field. Efforts towards conservation of natural resources, enlarging renewable energy portfolio at various plant locations, use of efficient and state-of-art technologies in operations, etc. are testimony to the same. We have integrated sustainability as core to our operations and are thus prepared to meet new regulatory and legislative requirements resulting from climate change risks. |
| <b>Health and safety of employees</b><br>■ | Unsafe and unhygienic workplace conditions may lead to legal actions, workers unrest, production disruption, discipline particularly observing the safety procedures and may cause injury /fatality to employees/workers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | We continue to work on institutionalising operational and protocols, both for employees and workers. Safety Committees have been formed to oversee safety related issues and implementing best safety practices. Wellness Management Centres have been established at plant level to meet any medical emergency requirement and oversee health related issues of the employees.                                                                                                                                                              |
| <b>Impact of regulatory changes</b><br>★   | India's regulatory framework is constantly evolving, and regulations in the field of environment, taxation, competition, governance, etc. can change over time. Non-compliance of applicable regulations may lead to imposition of penalties, suspension of operations, among others apart from reputational damage. This may also hinder the pace of innovation, upgradation, transformation within the organisation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | We keep a track of the regulatory environment and take necessary actions wherever required. We regularly incur capex to upgrade operational practices so that we are in-line with the applicable regulations. We are using a statutory compliance tool to track the location-wise legal and regulatory compliance.                                                                                                                                                                                                                           |

### Risk Category

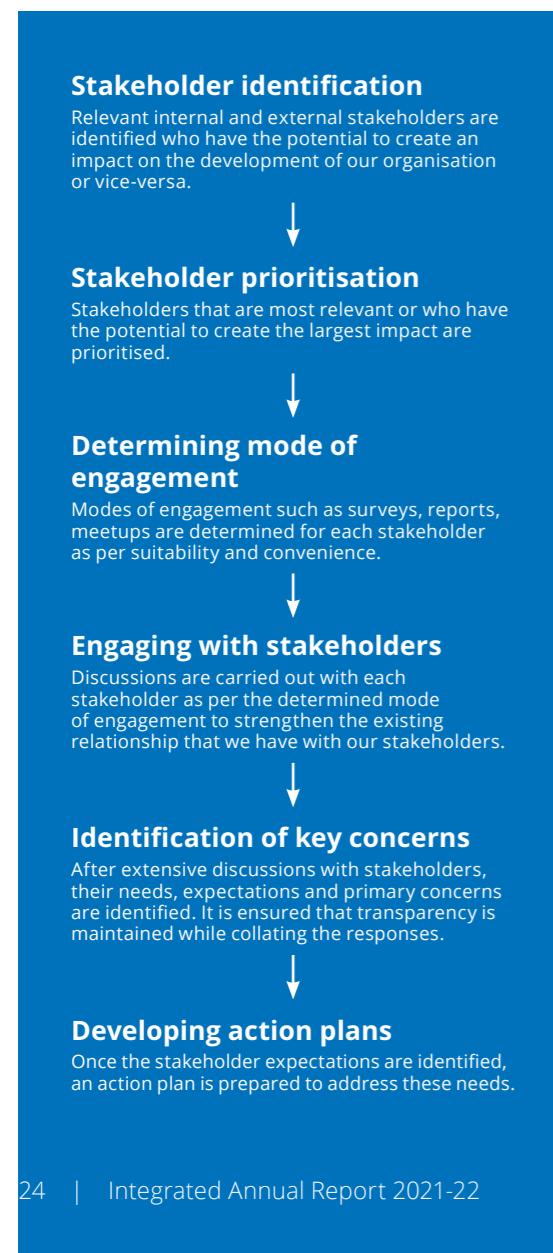
★ Sustainability Risk ■ Operational Risk

## STAKEHOLDER ENGAGEMENT

# Communicating for a strong sense of community

At SCL, we value the relationship with our stakeholders the most. By engaging with our stakeholders at regular intervals, we get an insight about the key concerns and issues raised by them and try to address accordingly.

To engage with our stakeholders, we carry out the below mentioned steps to ensure effective communication:



| Stakeholder                         | Relevance                                                                                                                                                                                                                                     | Key Concerns / Priorities                                                                                                                                                                                                                      | Mode of Engagement                                                                                                                                                                                           | Our Response                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customers                           | <ul style="list-style-type: none"> <li>Customer satisfaction remains our motto for product development and enhancement</li> <li>Customer feedback helps in product quality enhancement, process improvement and cost optimisation.</li> </ul> | <ul style="list-style-type: none"> <li>Product cost and quality</li> <li>Timely delivery</li> <li>Post-delivery concerns</li> <li>Responsible and sustainable production</li> </ul>                                                            | <ul style="list-style-type: none"> <li>Online communication</li> <li>Meetups with customer representatives</li> <li>Customer satisfaction survey</li> </ul>                                                  | <ul style="list-style-type: none"> <li>Customer satisfaction score of 85%</li> <li>Enhanced customer experience</li> </ul>                                                                                                                                                                                                                                                                    |
| Employees                           | <ul style="list-style-type: none"> <li>Employees are our most valuable asset</li> <li>All round development of employees helps in obtaining better output for the business</li> </ul>                                                         | <ul style="list-style-type: none"> <li>Career and personal development</li> <li>Training and development opportunities</li> <li>Smooth and effective grievance mechanism</li> <li>Appraisal and compensation</li> </ul>                        | <ul style="list-style-type: none"> <li>Employees feedback survey</li> <li>Employee grievance mechanism</li> <li>Regular trainings and workshops</li> </ul>                                                   | <ul style="list-style-type: none"> <li>Average training hours per employee stood at 20.98 for the reporting year</li> <li>₹ 91.4 Crore spent on employee benefits (including PF, Superannuation Fund, NPS, Gratuity Fund and ESIC)</li> <li>Robust employee engagement</li> <li>Well defined trainings and skill development programmes for all round development of our workforce</li> </ul> |
| Investors and Shareholders          | <ul style="list-style-type: none"> <li>Participates in our growth by providing capital for business development.</li> <li>Provide with business oriented inputs for achieving goals and targets</li> </ul>                                    | <ul style="list-style-type: none"> <li>Improved product value</li> <li>Robust corporate governance</li> <li>Consistent returns</li> <li>Enhancing revenue and market value</li> </ul>                                                          | <ul style="list-style-type: none"> <li>Annual shareholders' meetup</li> <li>Management of investor relations</li> <li>Annual and quarterly reports</li> <li>Corporate filings with stock exchange</li> </ul> | <ul style="list-style-type: none"> <li>13% increase in revenue within the reporting year</li> <li>3% increase in Profit After Tax within the reporting year</li> </ul>                                                                                                                                                                                                                        |
| Suppliers                           | <ul style="list-style-type: none"> <li>Procurement of quality supplies, raw material and services</li> <li>Supplier relationship helps in timely and efficient production cycle</li> </ul>                                                    | <ul style="list-style-type: none"> <li>Ethical business practices</li> <li>Payment negotiations and timely payments.</li> <li>Continued business relationship</li> <li>Prevention of violations of human rights in the supply chain</li> </ul> | <ul style="list-style-type: none"> <li>Supplier assessment</li> <li>Meetings with Suppliers</li> </ul>                                                                                                       | <ul style="list-style-type: none"> <li>Assessment of new suppliers on environment and social parameters</li> </ul>                                                                                                                                                                                                                                                                            |
| Government and Regulatory Authority | <ul style="list-style-type: none"> <li>Obtaining necessary licenses and permits for uninterrupted business operations</li> <li>Maintaining legal compliances</li> </ul>                                                                       | <ul style="list-style-type: none"> <li>Compliance with regulatory requirements</li> <li>Managing the impacts of social and environmental issues.</li> </ul>                                                                                    | <ul style="list-style-type: none"> <li>Meetings with government officials</li> <li>Regular filings with government</li> </ul>                                                                                | <ul style="list-style-type: none"> <li>Adherence to prescribed regulatory compliance</li> </ul>                                                                                                                                                                                                                                                                                               |
| Media                               | <ul style="list-style-type: none"> <li>Helps in taking the agendas of climate change and sustainability to wider range of people</li> </ul>                                                                                                   | <ul style="list-style-type: none"> <li>Transparency and relevancy of information</li> <li>Disclosure of confidential information</li> <li>Preventing the spread of inappropriate information</li> <li>Last mile reach of media</li> </ul>      | <ul style="list-style-type: none"> <li>Meetings with media representatives</li> </ul>                                                                                                                        | <ul style="list-style-type: none"> <li>Increased awareness of the product</li> <li>Increased sales value</li> </ul>                                                                                                                                                                                                                                                                           |
| Local Communities                   | <ul style="list-style-type: none"> <li>Local communities are our partners in development</li> <li>They provide us with social license to operate</li> </ul>                                                                                   | <ul style="list-style-type: none"> <li>Maintaining environmental quality</li> <li>Local employment generation</li> <li>Local community development</li> </ul>                                                                                  | <ul style="list-style-type: none"> <li>Meetings with local communities during CSR activities</li> <li>Meeting with local community representatives for dialogue</li> </ul>                                   | <ul style="list-style-type: none"> <li>₹ 57.54 Crore spent on community development initiatives</li> <li>6.27 Lac beneficiaries from community development initiatives</li> </ul>                                                                                                                                                                                                             |
| Trade Associations                  | <ul style="list-style-type: none"> <li>Help in strengthening employee relationship</li> <li>Lays benchmark for ethical business practice</li> </ul>                                                                                           | <ul style="list-style-type: none"> <li>Implementing and managing any changes.</li> <li>Support for managing industry events.</li> </ul>                                                                                                        | <ul style="list-style-type: none"> <li>Meeting with representatives of trade associations</li> </ul>                                                                                                         | <ul style="list-style-type: none"> <li>We witnessed no strikes or lock-outs for the reporting period and maintained cordial relations with all our union members.</li> </ul>                                                                                                                                                                                                                  |

### Frequency of Engagement

Continuous      Quarterly      At regular intervals      As and when required

## MATERIALITY ASSESSMENT

# What matters the most

Materiality assessment is the process of identifying topics across the environmental, social and governance parameters that have the greatest impact on the organisation. Material topics are identified through a wide array of procedures including communication with internal as well as external stakeholders, study of sustainability standards and assessment of industry specific material topics. The identified topics are then classified as high priority topics and low priority topics depending upon the impacts that they have on each of our internal and external stakeholders.

For FY 2021-22, SCL has identified and collated industry specific material topics along with topics provided in sustainability standards such as GRI, SASB, SDGs, and the topics that are material to the peers. These identified material topics have been shortlisted through internal discussions depending upon the impact they have on each stakeholder.

**The material topics identified are:**



| Environment                 |                                                                           |                                                                                                                                                                 |                  |               |
|-----------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|
| Topic                       | GRI Alignment                                                             | Performance Highlight                                                                                                                                           | Related Capitals | SDG Alignment |
| <b>Waste management</b>     | GRI 306: Waste                                                            | <b>100%</b><br>hazardous waste is disposed as per applicable regulatory requirements                                                                            |                  |               |
| <b>Water</b>                | GRI 303: Water and Effluents                                              | <b>0.082 M³/Tonne of cement</b><br>Specific freshwater consumption                                                                                              |                  |               |
| <b>Emissions management</b> | GRI 305: Emissions                                                        | <b>529 Kg CO₂/Tonne</b> of Cement equivalent, for Specific Net Scope 1 CO₂ emissions                                                                            |                  | <br>          |
| <b>Energy</b>               | GRI 302: Energy                                                           | <b>373,020 GJ</b> of Renewable energy consumption<br><b>48.2%</b> Share of green power in total power consumption                                               |                  |               |
| <b>Biodiversity</b>         | GRI 304: Biodiversity                                                     | <b>84,646</b> Saplings planted<br><b>90%</b> Survival rate of saplings                                                                                          |                  |               |
| <b>Circular economy</b>     | GRI 306: Waste                                                            | <b>27.23%</b> Alternate raw material consumption by weight                                                                                                      |                  |               |
| <b>Low carbon products</b>  | Non-GRI topic                                                             | <b>75.13%</b> of low carbon cement produced                                                                                                                     |                  |               |
| <b>Climate change</b>       | GRI 302: Energy<br>GRI 305: Emissions<br>GRI 306: Waste<br>GRI 303: Water | <b>263 MW</b> Total green energy capacity<br><b>336,458 KL</b> of water recycled<br><b>530 Kg/Tonne</b> of cementitious material Specific Net Scope 1 Emissions |                  | <br>          |



Manufactured Capital



Natural Capital

## MATERIALITY ASSESSMENT

### Social

| Topic                                  | GRI Alignment                                                                                                                                                                                                                           | Performance Highlight                                                                            | Related Capitals | SDG Alignment |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------|---------------|
| <b>Occupational health and safety</b>  | GRI 403: Occupational Health and safety                                                                                                                                                                                                 | Lost time injury Employees: 1<br>Contract workers: 14                                            |                  |               |
| <b>Employee relation</b>               | GRI 401: Employment                                                                                                                                                                                                                     | <b>Zero cases</b><br>Of Labor unrest during the year                                             |                  | <br>          |
| <b>Training and development</b>        | GRI 404: Training and development                                                                                                                                                                                                       | <b>20.98</b><br>Hours Average training hours per employee                                        |                  | <br>          |
| <b>Supply chain</b>                    | GRI 308: Supplier Environmental Assessment<br>GRI 414: Supplier Social Assessment                                                                                                                                                       | Third Party Audit of 28 of suppliers on Environment and Social parameters within past four years |                  |               |
| <b>Non-discrimination</b>              | GRI 406: Non-discrimination                                                                                                                                                                                                             | <b>Zero cases</b><br>Of discrimination and sexual harassment                                     |                  |               |
| <b>Customer satisfaction</b>           | Non-GRI                                                                                                                                                                                                                                 | <b>85%</b><br>Customer Satisfaction Score                                                        |                  |               |
| <b>Community development</b>           | GRI 413: Local communities                                                                                                                                                                                                              | <b>6.27 Lac</b><br>Beneficiaries from community development programmes                           |                  | <br>          |
| <b>Resettlement and rehabilitation</b> | GRI 411: Rights of Indigenous People                                                                                                                                                                                                    | <b>Zero incidents</b><br>Of violations involving rights of indigenous people                     |                  |               |
| <b>Human rights</b>                    | GRI 405: Diversity and Equal Opportunity<br>GRI 406: Non-discrimination<br>GRI 408: Child Labor<br>GRI 409: Forced or Compulsory Labor<br>GRI 407: Freedom of Association and Collective Bargaining<br>GRI 412: Human Rights Assessment | <b>6,242</b><br>Man hours of training on human rights                                            |                  |               |

Human Capital

Social and Relationship Capital

### Governance

| Topic                           | GRI Alignment                                                  | Performance Highlight                                                                                                             | Related Capitals            | SDG Alignment               |
|---------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------|
| <b>Regulatory compliance</b>    | GRI 205: Anti-corruption<br>GRI 206: Anti-competitive Behavior | Regular monitoring and review of compliances                                                                                      |                             | Corporate Governance Report |
| <b>Cyber security</b>           | GRI 418: Customer Privacy                                      | <b>ZERO</b><br>Cases of complaints concerning breaches of customer privacy and loss of customer data                              |                             |                             |
| <b>Governance and ethics</b>    | GRI 205: Anti-corruption<br>GRI 206: Anti-competitive Behavior | Robust governance framework                                                                                                       | Corporate Governance Report |                             |
| <b>Business performance</b>     | Non GRI topic                                                  | <b>₹14,306 CRORE</b><br>Net revenue from operations                                                                               |                             |                             |
| <b>Raw material procurement</b> | GRI 301: Materials                                             | <b>27.23%</b><br>Low grade material and other companies waste used as raw materials                                               |                             |                             |
| <b>Procurement Practice</b>     | GRI 204: Procurement Practices                                 | <b>99%</b><br>Local consumption of raw material and stores and spares out of total raw material and stores and spares consumption |                             |                             |
| <b>Indirect Economic Impact</b> | GRI 203: Indirect Economic Impacts                             | <b>₹23.53 CRORE</b><br>Expenses on rural development projects including road construction and other infrastructure development    |                             | <br>                        |
| <b>Risk Management</b>          | Non GRI topic                                                  | Robust risk management framework                                                                                                  |                             |                             |
|                                 |                                                                |                                                                                                                                   |                             |                             |

Human Capital

Social and Relationship Capital

Intellectual Capital

Financial Capital

Manufactured Capital

Natural Capital

**FY 2021-22**  
**PERFORMANCE HIGHLIGHTS**

## Our work shines through in several ways

| Intellectual Capital                                                                                                                                            | Manufactured Capital                                   | Natural Capital                                                                                                       | Human Capital                                              | Financial Capital                                                                  | Social and Relationship Capital                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>Intellectual Capital</b><br>                                                                                                                                 | <b>Manufactured Capital</b><br>                        | <b>Natural Capital</b><br>                                                                                            | <b>Human Capital</b><br>                                   | <b>Financial Capital</b><br>                                                       | <b>Social and Relationship Capital</b><br>                               |
| <b>02</b><br>New R&D units recognised by Department of Scientific and Industrial Research (DSIR) approved R&D units available at all integrated unit locations) | <b>14</b><br>Manufacturing locations across India      | <b>2.56 GJ/TONNE</b><br>Specific energy consumption (per tonne of cement produced)                                    | <b>6,445</b><br>Permanent employees                        | <b>₹14,306 CRORE</b><br>Revenue from operations (net) 13% ↑ Growth YoY             | <b>6.27 LAC</b><br>Number of lives touched                               |
| <b>₹24.85 CRORE</b><br>Investment on Research and Development                                                                                                   | <b>46.40 MTPA</b><br>Cement production capacity        | <b>0.082 M<sup>3</sup>/MT</b><br>Specific water consumption (per tonne of cement produced)                            | <b>13,019</b><br>Contractual workmen                       | <b>₹4,185 CRORE</b><br>EBIDTA                                                      | <b>₹57.54 CRORE</b><br>Amount spent on community development initiatives |
| <b>04</b><br>Patents granted till date                                                                                                                          | <b>10</b><br>Presence in number of States in India     | <b>48.2%</b><br>Share of green power in total power consumption                                                       | <b>817</b><br>New hires                                    | <b>₹2,377 CRORE</b><br>PAT                                                         | <b>90%</b><br>Revenue from repeat customers                              |
|                                                                                                                                                                 | <b>2</b><br>New cement / clinker projects commissioned | <b>263 MW</b><br>Total green power capacity (Waste Heat Recovery Power Plant, Wind Power Plant and Solar Power Plant) | <b>89</b><br>'Great place to work' survey score            | <b>₹8,601 CRORE</b><br>Investments (Excluding investment in subsidiaries)          | <b>30,672</b><br>Dealers                                                 |
|                                                                                                                                                                 |                                                        | <b>&gt; 5X</b><br>Water positivity                                                                                    | <b>1,35,244</b><br>Hours of training and skill development | <b>₹90</b><br>Per share (900%) dividend (including final dividend recommended)     | <b>1,156</b><br>Depots                                                   |
|                                                                                                                                                                 |                                                        |                                                                                                                       |                                                            | <b>₹86,711 CRORE</b><br>Market capitalisation (as on 31 <sup>st</sup> March, 2022) |                                                                          |
|                                                                                                                                                                 |                                                        |                                                                                                                       |                                                            |                                                                                    | <b>17.2%</b><br>Return on average capital employed                       |

## INTELLECTUAL CAPITAL

# Harnessing science for long-lasting impact



Augmenting our innovation capabilities by encouraging partnerships in sustainable product development and process enhancement.

At Shree Cement, culture of innovation is at the core of our business processes. The primary focus on continuously improving processes through innovation helps us to manufacture sustainable products in most efficient manner.

### Contribution to SDGs

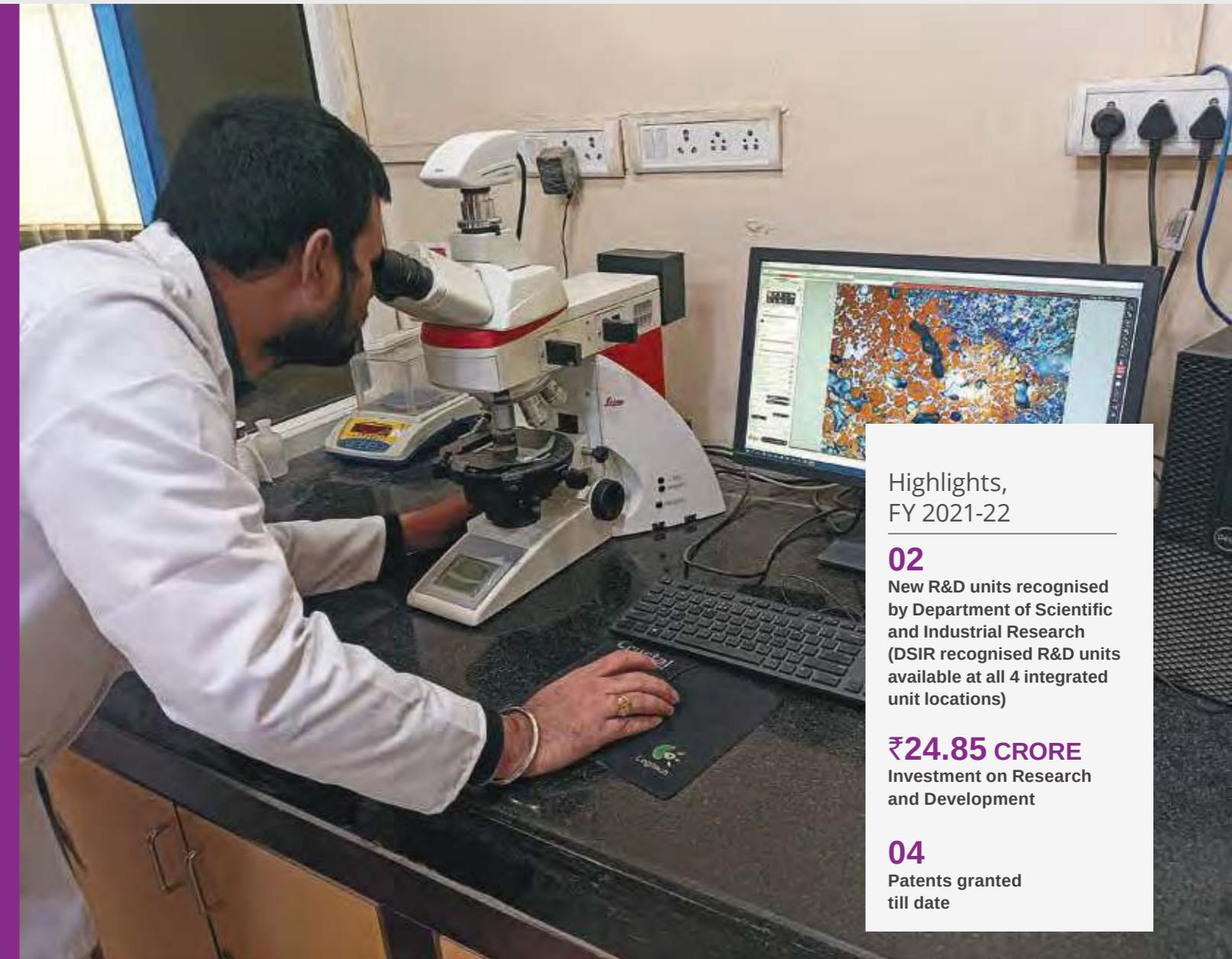


Industry,  
Innovation and  
Infrastructure



Responsible  
Consumption and  
Production

### Capitals Connected



Highlights,  
FY 2021-22

**02**

New R&D units recognised by Department of Scientific and Industrial Research (DSIR recognised R&D units available at all 4 integrated unit locations)

**₹24.85 CRORE**

Investment on Research and Development

**04**

Patents granted till date

### Outcomes

- Improved Productivity
- Patents Granted

### Associated Material Topics

Low carbon/  
green products

Cybersecurity

### Focus areas

Strengthening  
innovation capabilities

Digitalisation to  
be changed to  
Digitalisation at all  
places

Collaborate  
to innovate

Product innovation  
with improved carbon  
footprint

### Inputs

- Investments in Innovation
- Innovation in production and business performance

## INTELLECTUAL CAPITAL

Our vision is to lead in creating prosperity and happiness for all stakeholders through innovation and sustainable practices. Thus, we aim to constantly adapt and grow through our continuous innovation and research capabilities. We are focusing on embracing digitalisation and sustainability, optimising performance, and strengthening our innovation capabilities, thereby leading to future-proofing the business.

Our processes and policies are adapted and consistently improved to minimise environmental impact and create inclusive growth. This has been supported by use of efficient technologies and digital transformation leading to design improvements and process automation. Process automation has resulted in improved product quality and process efficiency.

### Strengthening the innovation capability

The aim of our Research and Development (R&D) at Shree Cement is to develop innovative products and technologies, and, optimise processes. This results in energy efficiency, reduced CO<sub>2</sub> emissions, and reduced cost of production.

We, at Shree Cement, are committed to finding sustainable ways of making cement. As a part of strategy, we invested in optimised energy and process efficiencies and replaced energy intensive technologies with alternative and more efficient solutions.

In FY 2021-22, we invested ₹ 24.85 Crore on R&D, in line with our purpose to develop value-added and eco-friendly varieties of cement and concrete and improve the existing processes through digitalisation and automation.

As on 31<sup>st</sup> March, 2022, our R&D footprint covered facilities at Beawar & Ras – Rajasthan (North Zone), Raipur-Chhattisgarh (East Zone) and Kodla-Karnataka (South Zone). All our R&D centers are powered by our world-class technology ecosystem to provide more advanced solution in cement and concrete along with effective utilisation of waste and resources to develop better products that meet quality requirements and are more sustainable. With the most recent accreditation of Raipur and Kodla R&D centers, all our R&D centers are now duly accredited by Department of Scientific and Industrial Research (DSIR).

### Patents

We are the first Indian cement company to produce synthetic gypsum to replace natural gypsum in cement production. Our efforts have been acknowledged by the Government of India by awarding two patents on technology developed to manufacture synthetic gypsum.

Two other patents are granted for our innovations in waste heat recovery and cement mill. We have filed one new patent within FY 2021-22, which is under review.

#### CASE STUDY

### Use of modified poly carboxylic ether as a water reducing agent

We conducted several R&D experiments during the reporting period with a central focus on performance improvement and sustainability.

One such experiment was conducted with an objective to determine effect of water reducing additive on the performance of Ordinary Portland Cement (OPC). We used poly carboxylic ether as an additive which is known as high range water reducer, mainly used in making high strength mortar & concrete. The experiment showed an increased strength in concrete at additive dose of 0.20% with reduction in water to cement (W/C) ratio on various days of testing.

#### Increase in OPC strength (in %)

|    | Percentage increase in OPC strength |
|----|-------------------------------------|
| 3  | 29                                  |
| 7  | 21                                  |
| 28 | 25                                  |

n<sup>th</sup> Day

### Collaborate to Innovate

Our research aims to bring together the best thinking and ideas to innovate boldly for people and the planet. We have strengthened our in-house capacity and partnered with different academics and agencies and government institutions such as Global Cement and Concrete Association (GCCA), National Council for Cement and Building Materials (NCCBM), IIT Delhi and others.

We have also held discussions with The World Bank to act as a knowledge partner with them (including their affiliates), on projects / programmes relating to sustainability and climate change. We have offered to participate in initiatives, workshops, training programmes, etc. related to sustainability and also to fund research in the areas of Carbon Capture, Usage & Storage (CCUS), use of waste materials, resource conservation, power storage technology and pollution control measures. We also offered our facilities for setting up pilot projects in these areas.

### Strategic partnerships and collaborations during FY 2021-22

To achieve net zero globally by 2050, the Global Cement & Concrete Association started an initiative 'Open Challenge', where selected start-ups from around the globe will be backed by its member companies to develop new technologies around Carbon Capture, Usage & Storage (CCUS). Being one of the member firms of GCCA, we participated in "Innovandi" project designed to accelerate deployment of enabling technologies for CCUS.

We, along with other member firms, will collaborate with Carbon Upcycling Technologies (CUT) a leading firm engaged in identifying solutions and technologies to reduce cement and concrete's carbon footprint. The new technology identified by them utilises captured CO<sub>2</sub> to produce a range of supplementary cementitious materials from hitherto unusable materials to create low carbon cement and concrete. Presently, the process is still in the preliminary stage. If successful, this could be a very good utilisation of CO<sub>2</sub> that is otherwise released into the atmosphere and an important milestone in SCL's net zero journey.



"The prospect of using new state-of-the-art technologies to resolve cement industry's greatest abatement challenge is super exciting. We look forward to deploying one of these technology-based solutions to achieve net zero status and combat climate change."

**Mr. Shrinath Savoor**  
Chief Sustainability Officer



## INTELLECTUAL CAPITAL

### CASE STUDY

#### Industrial Internet of Things (IIoT) for smart manufacturing

Driven by the advent of IIoT we have adopted an innovative integrated logistics management system. The solution is targeted to deal with inefficiencies at each step – vehicle fleet, weigh bridges and production facilities.

Earlier, the vehicles entering to load or unload at the plants took a long time to exit as the entire process starting from security checks, loadings to payment were done manually. Moreover, they not only hampered efficiency but were also human resource intensive. There were several other challenges such as vehicle history data could not be verified and extended periods of waiting inside factories with engines running wasted a lot of fuel and caused traffic congestion.

Leveraging IIoT solutions to integrate and automate the process, we deployed integrated logistics management solution and automated the entire process. Now entire vehicle fleet has been registered and given RFID-tags. From gate-entry to gate-out, there is no manual intervention and entire process has been automated.

This has significantly reduced the total turnaround time resulting into increased productivity and capability to load more truck.



#### Cyber security

Over the last decade, the number of information security breaches has increased exponentially exposing vulnerable users and systems to great risk. The effects of cyberattacks are widespread and can damage an organisation's reputation.

Our cyber security strategy ensures the confidentiality and integrity of business and customer data. We have adopted a 360-degree cyber security framework that covers people, processes and technologies. Our IT policy enhances our cyber security roadmap and is available to all the employees throughout the organisation. We regularly review and update our policy to improve data security and processes.

Our Chief Information Officer (CIO) is responsible for managing various aspects of cyber security strategy and ensures that our organisation remains protected in the context of dynamic cyber threats. Our Risk Management Committee at Board level oversees overall enterprise risks of the organisation related to cyber security.

As part of our continual strengthening of security systems and practices, every year, we carry out end to end assessment of IT infrastructure followed by cyber security awareness sessions for our employees on cyber threats and attacks. Our incident response team detects and eliminates attempts of security breaches or cyber-attacks through proactive planning and monitoring.

#### Embracing Sustainability

The path forward to having a competitive edge and building resilience through sustainability is clearly embedded into products and processes, and drive innovation with digitalisation. This allows us to anticipate stakeholder expectations, identify potential business prospects, and thus, future-proof our company. As a continued effort, our research team is working relentlessly on product development and process enhancement which are not only innovative in nature but are also responsible and sustainable.

We have diversified our product portfolio to cater to the evolving needs of our wide customer base. We manufacture Ordinary Portland Cement (OPC) and blended cement under categories of Portland Pozzolana Cement (PPC), Portland Slag Cement

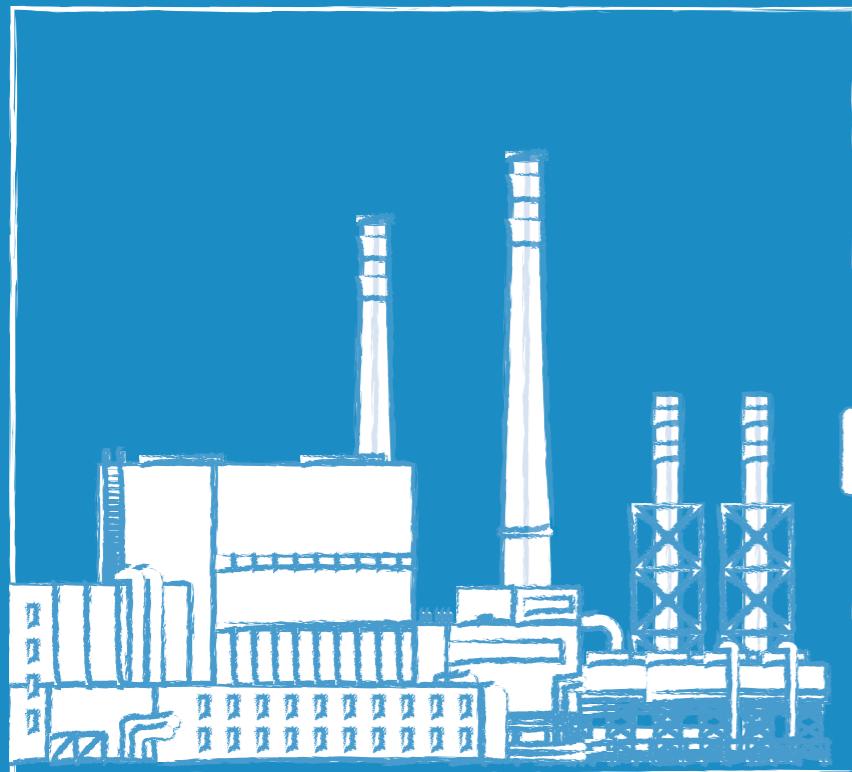
(PSC) and Composite Cement (CC). Blended cement contributes to sustainable design by making concrete stronger and durable, reducing consumption of natural resources such as limestone, lowering greenhouse gas emissions. It contributes to a circular economy by utilising wastes from power, and iron and steel plants. During FY 2021-22; total blended cement production accounted for 75.13% of total cement production.

We are currently in process to explore feasibility of another sustainable alternative to OPC i.e., Limestone Calcined Clay Cement (LC3). LC3 cement can help reduce up to 40% CO<sub>2</sub> emission as compared to OPC and contribute towards sustainable growth. This also supports in meeting our commitment of reducing our specific GHG emissions.



## MANUFACTURED CAPITAL

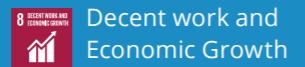
# Process excellence, enhanced capacities compound growth traction



## Paving the way for sustainable infrastructure

We are proud to be amongst top three cement manufacturers in India. We have been expanding our capacity at a pace higher than the industry which has helped us gain market share as well as spread our presence in new geographies. We constantly focus on improving the efficiency of our manufacturing processes. This contributes to our effective growth and operational excellence. We are also focusing on adoption of Industry 4.0 as we expand our manufacturing footprint. This will facilitate meeting our objective of making our plant 'State of the Art and IT driven' by adoption of newer technologies, safety practices & IT integration.

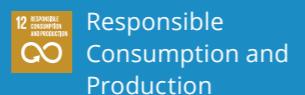
### Contribution to SDGs



Decent work and Economic Growth



Industry, Innovation and Infrastructure



Responsible Consumption and Production

### Capitals Connected



Highlights,  
FY 2021-22

**14**  
Manufacturing locations  
in India

**46.40 MTPA**  
Cement production  
capacity

**10**  
Presence in number  
of States in India

**2**  
New Cement / Clinker  
projects commissioned

### Associated Material Topics

Circular Economy

Low carbon/green products

Business performance

### Focus areas

Capacity Expansion

Promoting Sustainable Manufacturing

Enhancing Quality and Efficiency improvement

### Outcomes

- Capacity Utilisation (%)
- Indirect Economic impacts (employment generation, environmental conservation)

### Inputs

- Integrated Cement Plants
- Grinding units
- Cement production capacity
- Total power generation capacity
- Clinker Production Capacity

## MANUFACTURED CAPITAL

Our manufactured capital consists of physical assets that help us run our operations and produce products for serving our customers. This includes our land & building, plant & equipment, mine facilities, railway sidings and all other physical assets.

Our manufacturing facilities at 14 locations including four integrated plants and ten split grinding units form the core of our operations. These facilities provide us with space wherein multiple opportunities for innovation and creativity are explored. As a result of our focus on continuous improvement, we have been able to achieve 'best-in-class' operational excellence. Our total installed capacity of cement stands at 46.40 million tonnes per annum. Our clinkerisation locations are strategically positioned so as to have a close proximity to raw materials and principal markets. Our cement facilities at the above integrated unit locations as well as our split grinding units combine as a well-knitted hub of facilities for ensuring faster and timely service to our customers. The split grinding units deliver significant logistics management and cost benefits, allowing us to price our products in an efficient manner.

We develop our products to meet the requirements of different customer segments. Our products include Ordinary Portland Cement (OPC), Portland Pozzolana Cement (PPC), Portland Slag Cement (PSC) and Composite Cement (CC). We are continuously increasing our market share through multiple brands in the market. Over the last few years, we have launched premium products i.e., Roofon & Bangur Power which have helped us in maintaining our brand positioning. A small portion of our revenue comes from another building solution viz Autoclaved Aerated Concrete (AAC) blocks.

We also have an Integrated plant in UAE through our subsidiary Union Cement Company (PJSC). It caters to customers in the Middle East and International markets.

### New Developments

As part of our strategy of continuous increase in our market share and sustained improvement in our efficiency and productivity, we continually invest in building new manufacturing facilities as well adding newer and more advanced technologies in existing facilities. The much-needed competitive edge derived through this investment helps us build cost leadership, gain market share and contribute towards sustainability.

### Cement & Clinker Capacity addition

- We added a third kiln having capacity of 4 MTPA at Baloda Bazar in Raipur district of Chhattisgarh on 28<sup>th</sup> March, 2022. The project was completed in a record time of 18 months, six months ahead of its target completion date. This will help us augment clinker supply to our grinding units in the eastern region. Further, work for setting up Waste Heat Recovery (WHR) is progressing as per schedule and is expected to be completed by end of September 2022. This will help us replace our captive thermal and grid supply through clean and green source.
- We commissioned our greenfield project having capacity of 3 MTPA at Patas, Pune Grinding Unit on 01<sup>st</sup> February, 2022. This will help us to strengthen our market share in the growing markets of Maharashtra.
- We are in the process of setting up an integrated cement plant at Nawalgarh in Rajasthan with a project cost of ₹ 3,500 Crore. The project would have waste heat-based power generation facility as well. We expect to commission this plant by March 2024.
- We have undertaken work of setting up a cement grinding unit of 3 MTPA in West Bengal through a wholly owned subsidiary in order to increase our market share in the eastern market.



### Railway Siding Development

We have invested in reinforcing our logistics capabilities in the form of railway sidings at various plant facilities. We already had these facilities at our manufacturing plants at Beawar and Ras. We also had a dedicated private railway freight terminal for our Baloda Bazar plant through our wholly owned subsidiary. This year, we have completed the work of new siding at our plant in Jharkhand, while the work of new siding is near completion for our plants in Maharashtra and Karnataka. The new sidings will generate savings in logistics cost as well as improve logistics capability.

### Renewable Energy Capacity

We commissioned wind power capacity of 8.4 MW in Karnataka which will help us in meeting additional power requirement of our Kodla Plant. Further, we commissioned wind power plant of 10.5 MW capacity for our Patas grinding unit in Maharashtra.

We are in the process of setting-up of 106 MW solar power plant for meeting captive power requirement of our cement plants. Presently, we are meeting around 48% of our power requirement through green energy sources. With the new investment in renewable energy, we aim to enhance our share of green energy in total power consumption significantly. This will facilitate in raising our green footprint as part of our sustainability goals.

### Other investments

For ensuring sustained raw material supplies as well as to augment existing supply sources, we have acquired mining lease rights at some locations. We are also regularly participating in auctions for newer mines. Further, we are continuously buying land and building necessary infrastructure at various sites. These investments will help us augment our capacity in future.

### Ras, Rajasthan- Our flagship facility

Our manufacturing plant at Ras in Rajasthan is our flagship facility. This facility houses 8 kilns at a single location, giving it the distinction of being the only facility in world with the highest number of kilns at a single location. The captive limestone mines at Ras with a daily capacity of around 1 Lac tonne including waste makes this site as one of the largest single-location limestone facility in the world. The facility uses state of the art technology with majority of the power being met from WHR based generation. With high standards of energy consumption and productivity, this site truly reflects

high sustainability credentials. Also, concentration of such large capacity at a single location helps us in optimising our administrative cost and increase operational efficiency.

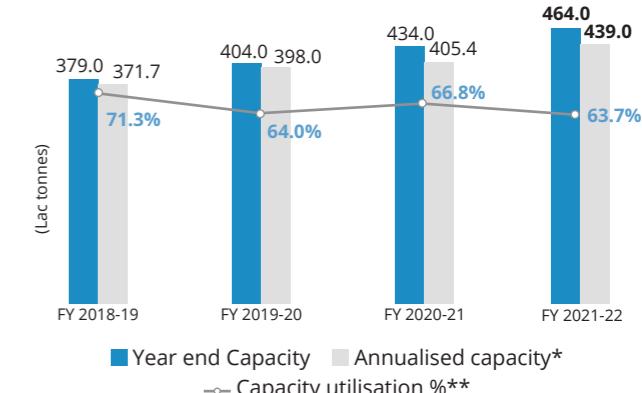
### Production trends

We at Shree Cement, believe in consistent improvement in cement production techniques to make it more sustainable and earth friendly. Our strategy is to expand our production capacity and market share while taking into consideration the reliability and safety of our operations and techniques.

| Cement Production | (Lac tonnes) |
|-------------------|--------------|
| FY 2021-22        | 276.92       |
| FY 2020-21        | 263.61       |
| FY 2019-20        | 241.15       |
| FY 2018-19        | 250.63       |

| Clinker Production | (Lac tonnes) |
|--------------------|--------------|
| FY 2021-22         | 176.99       |
| FY 2020-21         | 171.25       |
| FY 2019-20         | 165.57       |
| FY 2018-19         | 176.50       |

### Capacity and capacity utilisation



\* Annualised capacity has been calculated based on number of days' capacity is available.  
\*\* Capacity utilisation has been worked out based on equivalent cement production (i.e. [cement production + (clinker production x conversion factor)]) divided by annualised capacity during the year.

## MANUFACTURED CAPITAL

### Initiatives taken during pandemic to achieve and maintain operational excellence and production capacity

We activated our Business Continuity Management (BCM) plan in March 2020. We prepared contingency plans such as work from home, enhanced safety measures, strategies for continuity of business and rapid restoration of operations. On resumption of operations post relaxation of the nation-wide lockdown, we immediately put in place all COVID-19 related protocols mandated by the government as well as industry bodies, to ensure safe working conditions for employees and workers. Depending on the nature of work, employees were shifted to a 'work from home' mode, and online/digital tools were deployed to make the transition seamless.

### Power Generation facilities

We have established total power generation capacity of 771 MW, which includes green power capacity of 263 MW. These facilities help us meet a significant portion of power required for our manufacturing units while also take advantage of opportunities of selling surplus power from time to time.

### Sustainability and Innovation

For development of our new site at Nawalgarh, Rajasthan, we have associated with the best-in-class Danish equipment manufacturer to provide state-of-the-art, sustainable technology, which offers the lowest NOx emissions for various fuel types. These sustainable technologies will lead to five to ten percent less power consumption compared with other grinding systems in the market.

Being recognised as a Sustainability Champion by the World Economic Forum, is a testament of our emphasis on sustainability at every stage of our operations. The new line will push that agenda even further in terms of lowering the benchmarks on energy consumption and emissions, and thereby, reducing our environmental footprint.

### Raw Material Linkages

We excavate our raw materials using the best available technology from our mines. Limestone is extracted from our captive mines at Beawar, Ras, Raipur and Kodla. We are pioneers in manufacturing synthetic gypsum in-house using alternative raw materials which in turn helps us to reduce our dependence on mineral gypsum. At Shree Cement, efficient transportation is one of our main objectives. Additionally, taking a step towards decarbonisation, we have dedicated railway

sidings at Beawar, Ras and Burudih with mechanised wagon loading system for cement loading. We also have access to a dedicated railway siding system outside our premises at Raipur. All our upcoming grinding locations will also have captive railway sidings. Additionally, a mechanised clinker wagon loading system is available at Ras & Raipur locations. This system lets us load clinker directly in the wagons using telescopic chutes. The strategic positioning of these locations leads to cost optimisation and reduction in freight costs.

### Key technologies to enhance operational excellence

We are pioneers in using advanced technology to boost our operational excellence. We use latest and most advanced technology to setup our manufacturing facilities and allied processes. We have been undertaking Computational Fluid Dynamics (CFD) studies to understand the air flow and take measures to enhance efficiency and hence, reduce power consumption. We have installed online conditional monitoring system within our raw mills that helps us detect machine faults at a very early stage, prevents machine break down and thus, enhances equipment life through preventive maintenance. A kiln online Condition Monitoring System (CMS) is now being tested within our kiln for monitoring kiln ovality, crank and vibration.

With an aim to optimise production lines, minimise equipment downtime and improve productivity, we are in the process of automating Plant Data Management System (PDMS) in collaboration with our multinational engineering service solution provider.

### Responsible mining strategies

During our mining lifecycle, we follow responsible mining techniques. We have government approved mine closure and rehabilitation plans in place. We take all statutory clearances from government. We carry out Environmental Impact Assessment (EIA) before beginning our mining operations to ensure that environmental impact are duly taken care of as well as local communities and biodiversity are not affected. Our mining sites do not violate any laws and do not intrude into the territories of indigenous people. The excavated soil during mining process is used for cultivation or land development. Dump slopes created by mining operations are designed for stability and safety.



### Use of digital technology

We use DATAMINE, a mining software for reserve estimation and day-to-day planning for maximum mineral recovery. We are the only company in the cement industry to use structural mapping for planning minimum wastage of limestone.

We are also the first cement manufacturing company to adopt Shree Dynamine, a GPS based truck dispatch system at our mines at Ras. Dynamic allocation of equipment along with optimisation of dumper routes are an important feature of Shree Dynamine. Entire operation is controlled from central control room and our prime focus is safety enhancement.

### Efficient techniques

We have installed cross belt analyzer at our mines to safeguard quality consistency and conservation of limestone.

To improve safety during blasting, we use shock tubes Non-Electric Detonators (NONE). They help in reducing blasting nuisance like vibrations, noise, fly rocks etc. Also, we use Bulk Mixing and Delivery (BMD) vans to guarantee better oxygen balance while blasting which results in optimal blasting energy. BMD also helps to eliminate the brown fumes generation.

### Way Forward

#### Long term goals

Our long-term goal is to grow sustainably and to maintain our pre-eminent position in the Indian cement industry. Our first target in this direction is to achieve

cement production capacity of 80 MTPA by FY 2030. We shall do this in a responsible manner keeping in mind the interests of all stakeholders. Expanding our asset footprint in regions where our presence is still low will lead to quicker growth while getting us a more balanced distribution of capacity.

#### Short term goals

Our short-term goal is to improve market share in our existing market by offering varied products based on requirements and preferences of our different customers at a reasonable price and improve distribution.



"Our use of technology has helped us meet our strategic objectives and accelerated efficiencies significantly. From better logistics management to wider implementation of circularity, the impact is multi-dimensional."

**Mr. P N Chhangani**  
Whole-time Director

## NATURAL CAPITAL

# Consistently adding to our green capabilities



Minimising our impact on the environment through resource conservation and responsible consumption.

Cement production requires large amount of resources as well as it is an energy intensive process. Mitigating environment related risks and tapping related opportunities is an integral part of the business strategy. This has gained additional importance with the increased challenges of resource depletion and impact of climate change.

### Contribution to SDGs

|                                       |                                           |
|---------------------------------------|-------------------------------------------|
| 6 CLEAN WATER AND SANITATION          | 7 AFFORDABLE AND CLEAN ENERGY             |
| 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION |
| 13 CLIMATE ACTION                     |                                           |

### Capitals Connected



Highlights,  
FY 2021-22

**2.56 GJ PER  
TONNE OF CEMENT**  
Specific energy consumption

**48.2%**  
Share of green power in total power consumption

**0.082 M<sup>3</sup> PER  
TONNE OF CEMENT**  
Specific water consumption

**263 MW**  
Total green power capacity (including Waste Heat Recovery, Wind and Solar)

**> 5X**  
Water Positivity

### Associated Material Topics

|                            |                         |
|----------------------------|-------------------------|
| Climate Change             | Emissions Management    |
| Circular Economy           | Water management        |
| Low carbon/ green products | Biodiversity management |
| Waste Management           | Regulatory compliance   |
| Energy management          |                         |

### Focus areas

|                                              |                             |                                                          |
|----------------------------------------------|-----------------------------|----------------------------------------------------------|
| Increasing share of green energy consumption | Improving energy efficiency | Emission management                                      |
| Enhancing Quality and Efficiency improvement | Water stewardship           | Circular Economy/ Responsible production and consumption |

### Outcomes

- Enhanced use of alternative raw material and alternative fuel
- Thermal substitution rate
- Reduction in specific water consumption
- Biodiversity management
- Reduction in Emissions (Scope 1 and stack emissions)

### Inputs

- Raw Material Consumption
- Energy Consumption
- Water Consumption
- Renewable Energy Capacity

## NATURAL CAPITAL

Laying a strong foundation with sustainability at its core require continuous efforts. As an organisation, we ensure to create a positive impact on the environment in order to strengthen the future. We have been focusing on recycling materials and increasing the share of clean energy in our total energy consumption. We are also committed to reducing our GHG emissions in line with the targets validated by Science Based Targets initiative (SBTi).

### Increasing share of green energy consumption

Energy management plays a vital part in transitioning to low carbon economy and reducing one's carbon footprint. Our culture of innovation, cost consciousness and operational efficiency has led us to work on improving our process efficiency and optimising energy consumption. We have been continuously working in enhancing the use of alternative fuels instead of fossil fuel-based energy. Source-wise energy consumption details for the reporting period are shown below:

| Energy Source                   | FY 2020-21<br>Million GJ | FY 2021-22<br>Million GJ |
|---------------------------------|--------------------------|--------------------------|
| Solar, Wind & Biomass           | 0.26                     | 0.37                     |
| Alternative Fossil Fuels        | 0.52                     | 1.22                     |
| Waste Heat Recovery             | 2.96                     | 3.01                     |
| Conventional Fuels              | 67.36                    | 66.41                    |
| <b>Total Energy Consumption</b> | <b>71.10</b>             | <b>71.01</b>             |

To meet our power requirement, we have installed power plants (thermal, wind, solar, waste heat recovery based) of aggregate capacity of 771 MW. Our power generation capacity from waste heat recovery based power plants is highest in the world cement industry excluding China. Over time, we have added wind and solar power plants in our power capacity portfolio. We take pride in sharing



that we have consistently increased the share of green power in the total power consumption and for the reporting period. The same stands at 48.2% which is one of the highest in the industry.

### Share of green power in Total power consumption (%)

|            |      |
|------------|------|
| FY 2021-22 | 48.2 |
| FY 2020-21 | 47.9 |
| FY 2019-20 | 45.2 |
| FY 2018-19 | 41.4 |

### Total Green Energy Capacity (in MW)

|            |     |
|------------|-----|
| FY 2021-22 | 263 |
| FY 2020-21 | 244 |
| FY 2019-20 | 234 |
| FY 2018-19 | 147 |

### Improving energy efficiency

One of the cement industry's constant key concerns is the optimisation of manufacturing processes. Energy consumption is a crucial parameter in plant performance and a critical factor for optimisation. We have consistently upgraded our existing technology and have invested in more energy efficient technologies, which has resulted in power savings.

### Specific energy consumption (GJ/tonne of cement)

|            |      |
|------------|------|
| FY 2021-22 | 2.56 |
| FY 2020-21 | 2.70 |

"We have been steadily increasing our solar generation cover and securing ourselves against fuel and cost fluctuations. With existing facilities in states with some of the best solar potential in India, this is an advantage that we will fully leverage."

**Mr. M M Rathi**  
Jt President (Power Plant)

### Specific Thermal Energy Consumption\* (GJ/tonne of cement)

|            |      |
|------------|------|
| FY 2021-22 | 2.39 |
| FY 2020-21 | 2.54 |

\* Including thermal energy consumption by Captive Thermal Power Plants, Kilns, Furnaces and onsite equipment and vehicles.

Due to continuous optimisation in processes, adoption of newer technologies, and other initiatives, we have been able to reduce our total specific energy consumption year on year basis. Marginal increase in our electrical energy consumption in FY 2021-22 is due to shifting of consumption of captive power from electricity from the grid/energy exchange. However, if our overall specific electrical energy consumption is considered including that produced from the captive power plants, the same has come down by over 2% during FY 22.

### Specific electrical energy consumption (kWh/tonne of cement)

|            |       |
|------------|-------|
| FY 2021-22 | 67.15 |
| FY 2020-21 | 68.65 |

### Performance Optimisation

We conduct internal energy audits that have resulted in implementation of various energy saving initiatives over the year across various operations. Our operation team has been able to achieve remarkable energy reduction across our facilities.

Some of our other energy conservation initiatives include deployment of energy efficient technology and process, modification in existing equipment, replacement of conventional systems with more advanced ones and more. Few of the examples are -

- Replacing reciprocating compressor for plant air application with screw compressor in the grinding units
- Installation of new energy efficient fans in place of existing inefficient fans
- Replacing the old (oversized) pumps with the energy efficient pumps
- Interconnection of pump pipeline for energy saving
- Installation of low pressure screw compressor for bulk cement unloading which helped us unload bulkier more efficiently while providing substantial power saving

#### CASE STUDY

##### Installation of centrifugal compressor instead of reciprocating compressor for plant air application

Reciprocating compressor have been in use in the cement industries due to its robustness and easy maintenance. However, this has high specific power consumption and during the unload condition leads to power loss. As a part of internal energy audits, we had identified replacing reciprocating compressor with centrifugal compressor that reduces the specific energy consumption.

We replaced all the reciprocating compressors with centrifugal compressors for plant air (Pyro, raw mills, coal mills and other areas) with a target to reduce specific energy consumption of compressed air power by 30-35%.



## NATURAL CAPITAL

### Energy conservation initiatives

| Initiative description                        | Annual Electrical Energy Savings (Lakh KWH) | Annual Fuel Savings (TJ) |
|-----------------------------------------------|---------------------------------------------|--------------------------|
| Deployment of Energy Efficient (EE) equipment | 25.24                                       | -                        |
| EE Lighting                                   | 8.84                                        | -                        |
| Equipment modification                        | 112.52                                      | -                        |
| Installation of AFR Feeding System for Kilns  | -                                           | 1,196.00                 |
| Process Modification                          | 53.21                                       | -                        |
| <b>Grand Total</b>                            | <b>199.81</b>                               | <b>1,196.00</b>          |

### Emission management

We keep a track of our emissions through regular monitoring. This ensures that we are always well within the permissible limit while complying with the rules and regulations. We have set GHG emission reduction targets while aligning ourselves with the national commitments. We target to reduce our Scope 1 Green House Gas (GHG) emissions by 12.7% per tonne of cementitious material by 2030, from a 2019 base year. We have also targeted to reduce our Scope 2 GHG emissions by 27.1% per tonne of cementitious material. These targets have been validated by Science Based Target initiatives (SBTi).

|                          | Unit                              | FY 2018-19 | FY 2019-20 | FY 2020-21 | FY 2021-22 |
|--------------------------|-----------------------------------|------------|------------|------------|------------|
| Gross scope 1 emissions* | Thousand tonnes CO <sub>2</sub> e | 15,426     | 15,055     | 15,465     | 15,735     |
| Net scope 1 emissions**  | Thousand tonnes CO <sub>2</sub> e | 14,305     | 14,139     | 14,334     | 14,776     |
| Scope 2 emissions***     | Thousand tonnes CO <sub>2</sub> e | 191        | 254        | 241        | 331        |
| Scope 3 emissions****    | Thousand tonnes CO <sub>2</sub> e | 236        | 210        | 248        | 264        |

Note: Figures conforming to Global Cement and Concrete Association (GCCA) CO<sub>2</sub> and Energy Protocol, World Business Council for Sustainable Development (WBCSD) GHG Protocol and CDP Climate Change Reporting Guidance.

\* Due to raw materials, kiln fuels and non-kiln fuels, including CO<sub>2</sub> from onsite power generation (all fossil sources)

\*\*Due to raw materials, kiln fuels and non-kiln fuels, excluding CO<sub>2</sub> from onsite power generation and excluding CO<sub>2</sub> from alternative fuels

\*\*\* Scope 2 emissions: Emissions associated with purchased electricity from grid

\*\*\*\* The Scope 3 emissions includes following categories:

Category 3: Fuel and Energy related activities; Category 4: Upstream transportation and distribution; Category 6: Business Travel; Category 7: Employee Commuting; Category 8: Upstream Leased Assets; Category 9: Downstream transportation and distribution; Category 13: Downstream Leased Assets

### Specific Net Scope 1 CO<sub>2</sub> emissions (Kg CO<sub>2</sub>/tonne cement equivalent)

|            |            |
|------------|------------|
| FY 2021-22 | <b>529</b> |
| FY 2020-21 | 533        |
| FY 2019-20 | 554        |
| FY 2018-19 | 543        |

CO<sub>2</sub> emission of 529 Kg CO<sub>2</sub> per tonne cement and our specific gross Scope 1 CO<sub>2</sub> emission of 532 Kg per tonne cement during FY 2021-22.

1 Global Average (Excluding CO<sub>2</sub> from onsite power generation) = 604 Kg CO<sub>2</sub> / t cement Source: GCCA GNR 2019

2 Indian Average Sp. Net GHG emissions (Excluding CO<sub>2</sub> from onsite power generation) = 555 Kg CO<sub>2</sub>/t cement Source: GCCA GNR 2019

### Specific gross Scope 1 CO<sub>2</sub> emissions (Kg CO<sub>2</sub>/tonne cement equivalent)

|            |            |
|------------|------------|
| FY 2021-22 | <b>532</b> |
| FY 2020-21 | 535        |
| FY 2019-20 | 557        |
| FY 2018-19 | 545        |

Our environment performance has remained one of the best and witnessed continuous improvement. Compared to global average of 604 Kg per tonne of cement and Indian average of 555 Kg per tonne of cement, we are well ahead of the curve with our specific net Scope 1

### Air emissions

At Shree Cement, we take strict measures to track air emissions such as Oxides of Nitrogen (NOx), Oxides of Sulphur (SOx) and Particulate Matter (PM). We comply with applicable laws while deploying state of the art technology for air pollution control. Regular stack monitoring helps us to keep a check on the air emission parameters. Through our continuous efforts, we have been able to keep our emission levels well within the regulatory requirements. Our Ozone Depleting Substance (ODS) emissions stood at 0.13MT of CFCeq. During the reporting period. Further, there were no environmental non-compliance.

### 909 MT; 51.43 Gm/tonne clinker

Particulate Matter (PM)

### 11,287 MT; 638.38 Gm/tonne clinker

Oxides of Nitrogen (NOx)

### 1,088 MT; 61.54 Gm/tonne clinker

Oxides of sulphur (SOx)

Our cement plant in Baloda Bazar, Chhattisgarh has been included in PAT III cycle (FY 2017-20) for assessment. The monitoring & verification audit for PAT Cycle-III has been completed and we have again overachieved our target and are entitled to claim 12,222 ESCerts. Our grinding units at Roorkee, Khushkhera, Jobner, Panipat, Bulandshahr and Aurangabad have been notified in PAT -VI cycle and targets have been notified for the same.



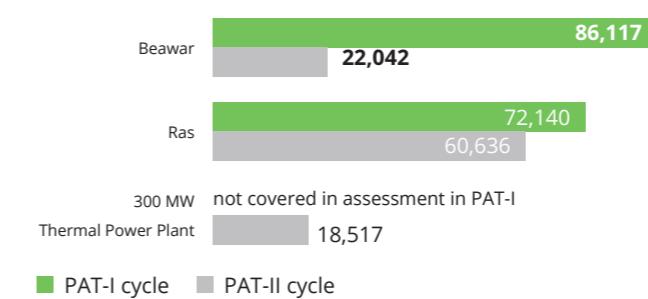
### CDM Projects

We were the first cement company in India to register its project 'Optimum Utilisation of Clinker' with the United Nations Framework Convention on Climate Change (UNFCCC) under the Clean Development Mechanism (CDM). We were granted 4,50,000 units of Certified Emission Reductions (CERs) by UNFCCC for this project. Currently, we have two projects viz. waste heat recovery based power generation at Ras and generation of power through wind power plant at Kodla registered with gold standard through Verified Carbon Standard (VCS).

### Performance under PAT

Our performance in energy conservation is getting exemplified at platforms like "Perform, Achieve & Trade" (PAT) scheme of the Govt. of India wherein we overachieved our targets in PAT Cycle I, II and III continuously. We have been awarded with the 'Best Performer' award for energy saving under PAT Cycle I by Bureau of Energy Efficiency. For Beawar and Ras plants, a total of 1,08,159 and 1,32,776 ESCerts have been issued under PAT cycle I & II respectively. Our 300 MW thermal power plant which was part of PAT Cycle II has also been accorded 18,517 ESCerts.

### ESCert issued



## NATURAL CAPITAL

### Responsible consumption and Circular economy

Cement is a manufactured product made by blending different raw materials and firing them at a high temperature. Clinker quality is directly related to the chemistry of the raw materials used, main ingredient being limestone. Portland cement is the most widely produced by blending clinker and gypsum while blended cement is produced mostly by grinding clinker with other alternate raw materials such as blast furnace slag, natural pozzolanas, siliceous fly ash, etc. We have been consistently working on minimising usages of conventional raw material in cement production to conserve them for future. Consumption of each of the conventional raw materials within the reporting period is given below:

| Conventional Raw Material                                     | Unit       | FY 2020-21   | FY 2021-22   |
|---------------------------------------------------------------|------------|--------------|--------------|
| Limestone                                                     | MMT        | 25.55        | 26.54        |
| Additives (Red ochre, red mud, bauxite, murum, laterite etc.) | MMT        | 0.35         | 0.41         |
| Natural gypsum                                                | MMT        | 0.30         | 0.13         |
| <b>Total</b>                                                  | <b>MMT</b> | <b>26.20</b> | <b>27.08</b> |

### Alternative raw material

We pioneered in-house manufacture of synthetic gypsum at Ras and Beawar plant. Synthetic gypsum replaces mineral gypsum in cement manufacturing without impacting the quality of our product thereby deriving multiple benefits such as utilisation of hazardous material (spent acid) and low grade waste limestone while reducing demand for natural resource i.e., mineral gypsum. Additionally, we procure chemical gypsum which is a byproduct of industries like fertilizer industry, to replace mineral gypsum. Alternative sources



of gypsum contributed more than 85% of total gypsum consumption within the reporting year.

| Replacement of Natural Gypsum                          | Unit        | FY 2020-21  | FY 2021-22  |
|--------------------------------------------------------|-------------|-------------|-------------|
| Chemical Gypsum                                        | MMT         | 0.27        | 0.36        |
| Synthetic Gypsum*                                      | MMT         | 0.75        | 0.62        |
| FGD Gypsum                                             | MMT         | 0.01        | 0.04        |
| Other Synthetic Gypsum                                 | MMT         | 1.01        | 1.41        |
| <b>Total Alternative Gypsum MMT</b>                    | <b>2.04</b> | <b>2.43</b> |             |
| <b>Alternative gypsum (excluding synthetic gypsum)</b> | <b>MMT</b>  | <b>1.29</b> | <b>1.81</b> |

\*Synthetic Gypsum is an intermediate product manufactured in-house using low grade limestone and spent acid, contributing to circular economy.

### Consumption of natural gypsum (MMT)

| FY 2021-22 | 0.13 |
|------------|------|
| FY 2020-21 | 0.30 |
| FY 2019-20 | 0.38 |

Most of the alternative raw material or alternative fuel that we utilise within our processes is waste from other industries which would otherwise be dumped or incinerated, thus preventing huge environmental impacts of these wastes and turning them into useful material.

Other alternative raw material utilised within the reporting year is shown below:

| Alternate Raw Material              | Unit        | FY 2020-21  | FY 2021-22 |
|-------------------------------------|-------------|-------------|------------|
| Bed Ash                             | MMT         | 0.02        | 0.02       |
| Fly Ash                             | MMT         | 6.52        | 7.11       |
| GBFS Slag                           | MMT         | 0.48        | 0.31       |
| Low-grade limestone                 | MMT         | 0.37        | 0.36       |
| Marble Slurry                       | MMT         | 0.19        | 0.07       |
| Sludge                              | MMT         | 0.01        | 0.02       |
| Sulphuric Acid                      | MMT         | 0.25        | 0.26       |
| Spent Sulphuric Acid                | MMT         | 0.08        | 0.18       |
| <b>Alternative Raw Material MMT</b> | <b>7.92</b> | <b>8.33</b> |            |

Alternative raw material consumption accounted to 27.23%\* of the total raw material consumption within the reporting year vis-à-vis 26.01%\*\* of previous year FY 2020-21.

| Raw Material                                   | Unit | FY 2020-21 | FY 2021-22 |
|------------------------------------------------|------|------------|------------|
| Alternative Raw Material                       | MMT  | 7.92       | 8.33       |
| Alternative gypsum less synthetic gypsum       | MMT  | 1.29       | 1.81       |
| Total Alternate Raw Material Consumed(A)       | MMT  | 9.21       | 10.14      |
| Total Conventional Raw Material (B)            | MMT  | 26.20      | 27.08      |
| Total Raw Material Consumed (C= A+B)           | MMT  | 35.41      | 37.22      |
| Alternate raw material consumption (D=A/C*100) | %    | 26.01      | 27.23      |

\* % Alternative material is calculated considering alternative raw material and alternative gypsum excluding synthetic gypsum within total raw material consumption as Synthetic Gypsum is an intermediate product manufactured in-house using low grade limestone and spent acid.

\*\* FY 2020-21 % alternative material values were recalculated by excluding manufactured synthetic gypsum quantities from total consumption quantity as this is an intermediary product.

### Blended Cement

Production of blended cement i.e., Portland Pozzolana Cement (PPC), Portland Slag Cement (PSC) and Composite Cement (CC), reduces consumption of natural resources like limestone and contributes to circular economy through utilisation of waste from other industries (such as fly ash and slag). As a result, our clinker factor came down from 63.70% in FY 2020-21 to 63.25% in FY 2021-22.

Blended cement form a major portion of our diverse range of product portfolio. Blended cement have lower clinker content leading to lower GHG emissions in manufacturing and hence are also defined as low-carbon product. We have avoided approx. 6.04 million tonnes of CO<sub>2</sub> by producing blended cement in FY 2021-22. Use of blended cement also help our customers achieve credits towards our various green building certifications such as LEED USGBC/IGBC and GRIHA.

### Alternative Fuel

As a part of our strategy to reduce our carbon footprint, we have been focusing on replacing fossil fuel with Alternative Fuels. We have been able to increase the share of alternative fuel within total fuel consumption to 9.84% in FY 2021-22 against 6.03% in FY 2020-21. Alternative Fuel in the kilns helped us achieve a Thermal Substitution Rate (TSR) of 2.41% of the kiln thermal energy consumption during the reporting period FY 2021-22 as against 0.98% during FY 2020-21.

### Waste management

Hazardous waste can have serious impact on the environment as well as the health and safety of the community and our workers. Our waste management approach includes properly utilising and disposing the waste that we are generating from our operations. Major portion of used oil generated from our premises at Ras, Beawar, Khushkhera and Jobner is co-processed while remaining is disposed-off through authorised recyclers. At all our other locations, entire used oil is disposed-off through authorised recyclers. The biomedical waste is disposed through authorised agency as per the regulatory norms. Further, the e-waste and the batteries generated are disposed through authorised recyclers.

### Hazardous waste generation quantity

| Type             | Unit      | FY 2020-21    | FY 2021-22    |
|------------------|-----------|---------------|---------------|
| Used oil         | MT        | 97.31         | 125.85        |
| Biomedical waste | MT        | 1.18          | 1.19          |
| E-waste          | MT        | 21.20         | 19.8          |
| Batteries        | MT        | 21.67         | 26.84         |
| <b>Total</b>     | <b>MT</b> | <b>141.36</b> | <b>173.68</b> |

The non-hazardous waste generated from our operations majorly include scrap filter bags, cardboard, paper, mixed metals, plastic scrap, mixed rubber, wooden scrap and inert material. We have on-boarded recyclers and the non-hazardous waste is disposed through the registered recyclers only.

### Non-hazardous waste generation quantity

| Type                  | Unit | FY 2020-21 | FY 2021-22 |
|-----------------------|------|------------|------------|
| Scrap Filter Bags     | Nos. | 12,396     | 11,606     |
| Inert Scrap           | Nos. | -          | 9,716      |
| Cardboard/paper Scrap | MT   | 7.76       | 8.57       |
| Mixed Metal Scrap     | MT   | 10,122     | 11,891     |
| Mixed Metal Scrap     | Nos. | 12,546     | 8,971      |
| Mixed Plastic Scrap   | MT   | 291        | 305        |
| Mixed Plastic Scrap   | Nos. | 16,83,054  | 14,20,963  |
| Rubber Scrap          | MT   | 235        | 314        |
| Tyre scrap            | Nos. | 128        | 104        |
| Wooden Scrap          | MT   | 25.16      | 1.59       |

### Food waste

Various awareness measures have been undertaken to minimise generation of food waste. We ensure that the food waste is segregated from other waste streams for its management in the most eco-friendly manner. During the reporting period, we generated 11.8 MT of food waste. Most of the food waste is fed to the animals while remaining is composted through compost pits, pipe composting and organic waste composting systems. Compost thus produced is used as manure for horticulture purposes.



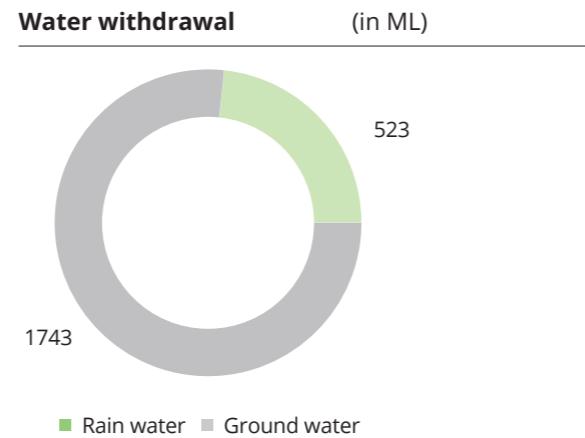
## NATURAL CAPITAL

### Water stewardship

Water management is a critical aspect for any organisation. As a responsible corporate citizen, we ensure careful management of water for our operations while taking care of the needs of the community. We follow a two-pronged approach as described below



We conform with all the applicable laws and regulations that safeguard water as a resource. Our water policy acts as a guiding principle that lays down our commitment to efficient water management through water harvesting, treatment of water discharge through water reuse, awareness sessions to educate people, water audits and regular monitoring of water consumption. Our water audits and regular monitoring helps us understand and assess the water related risks and plan suitable actions as required.



|                            | Unit                     | FY 2020-21 | FY 2021-22 |
|----------------------------|--------------------------|------------|------------|
| Specific Water consumption | m3/MT of cement produced | 0.084      | 0.082      |

#### Water Positivity

| FY 2021-22 | >5 times |
|------------|----------|
| FY 2020-21 | >4 times |
| FY 1919-20 | >3 times |

Over the years, we have implemented various water conservation initiatives within and outside our premises. Some of these are installation of air cooled condensers, waste heat recovery system and drip irrigation system. Further, we have developed and maintained artificial rainwater harvesting and recharge measures among others. We also create awareness among the nearby villagers, farmers and school children to educate them for effective utilisation and conservation of water. During the reporting period, the total rainwater harvested across all our locations was 11,602 ML. These measures have resulted in our organisation being >5 times water positive.



#### CASE STUDY

##### Harvesting water to tackle water scarcity

Ground water availability and soil erosion are some of the challenges inherent to the area that we operate in. We took this as an opportunity to create various water harvesting structures and undertook pond deepening work in the nearby villages in collaboration with Prabhu Foundation. This also supported our villagers making them self-sufficient.

At our Ras plant, we developed a 7 Lakh KL capacity of water harvesting pit in block 2 of our mine. In addition, at our plant in Kodla, we excavated a rainwater harvesting pond in the plant area of approx. 2.5 Lakh KL capacity. The water coming from mining process and rainwater is stored in this water harvesting pond.

## NATURAL CAPITAL

### Biodiversity Management

Managing biodiversity around mining and manufacturing operations play a critical part to preserve the ecosystem. We conduct ecological study in collaboration with our partners, university experts, research institutions and accredited consultants for the species and habitats around our operations. We also engage with local experts as well as with the forest departments to develop biodiversity action plans, wherever needed.

Our approach of mitigation includes avoiding, minimising and restoring. The matured mining dump area of our mining sites have already been restored through leveling and plantation of trees and grass on the slopes along the internal roads. We encourage plantation of native species since they consume less water and can thrive easily. We have planted some of the native species on the overburden around the mines and at boundaries.

Through our efforts of developing water storage areas and plantation of saplings, we have been able to restore habitats.

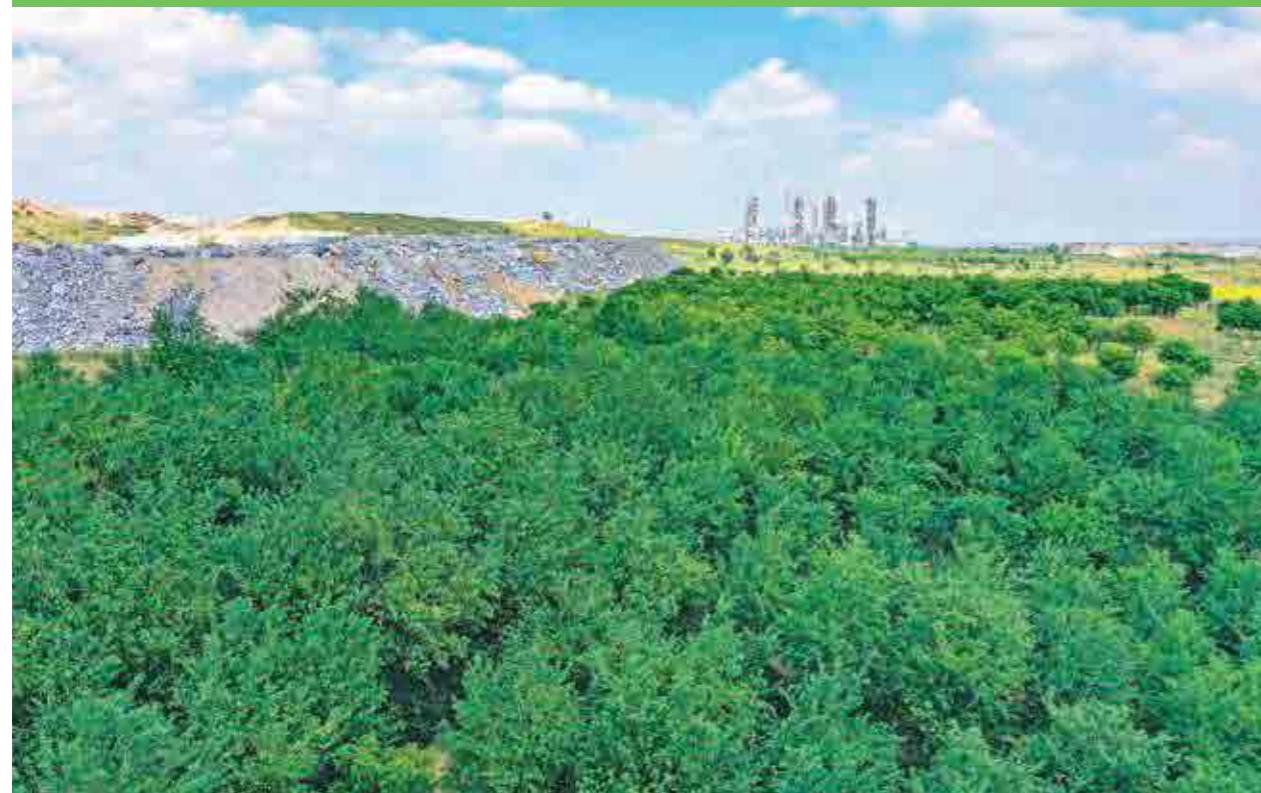
In addition, we ensure we do not operate or set up projects within any world heritage areas, protected or eco sensitive zones, high biodiversity value or the International Union for Conservation of Nature (IUCN) category protected areas. None of the areas affected by our operations include habitat of any critically endangered or vulnerable species as per IUCN red list and national conservation list. We also do not have any direct or indirect significant impact on the biodiversity of the geographical areas that we operate in.

#### CASE STUDY

#### Plantation of saplings around the facilities

Plantation of trees can act as carbon sink and help offset our carbon emissions. To protect our ecosystem, we take efforts to plant saplings in the nearby areas of the manufacturing facilities. The saplings are planted with tree guards and regular monitoring and maintenance is carried out to ensure they survive.

During the reporting period, we planted 84,646 saplings out of which 90% have survived.



### Responsible Mining

With an increased focus on achievement of SDG 6 and judicious consumption of resource across the world, water management has evolved as a major challenge in global sustainability initiatives. At Shree Cement, water conservation has been at the forefront of sustainability initiatives. We adopted a multidimensional approach to conserve water which includes rainwater harvesting, restoring water bodies, and use of non-toxic chemicals in mines water harvesting pit to reduce the evaporation.

Earlier at Ras mines in Rajasthan, we used water tanker for sprinkling water for dust suppression. With the installation of automated water sprinkler along the permanent haul road of 1.5 km, we were able to save 178 KL water every day, and thus reducing overall water consumption.

Our prolonged approach for water management focuses on water conservation initiatives in and around the plant boundaries. With a commitment to give back to the communities and to secure water supplies without risking the local water systems, we constructed a rainwater harvesting pit in the mines of 13 lac KL capacity for improved water carrying capacity. Additionally, to reduce evaporation loss due to increased global temperature, we have started using bio-degradable chemical, EVALOCK, in mines water harvesting. This saves 30% water due to evaporation loss.

## HUMAN CAPITAL

# Our workforce powers our engine of productivity



Empowering people with value driven capabilities and skills to build the sustainable foundation

Our employees play a critical role in building foundation for a sustainable future. We have carefully designed policies, procedures and programmes aligned towards holistic development of our employees. This approach has helped us to secure 82 rank in India's best companies to work for 2021 survey conducted by 'Great Place To Work® Institute, India, putting us ahead of the curve.

### Contribution to SDGs

|  |                           |  |                                      |
|--|---------------------------|--|--------------------------------------|
|  | Good health and wellbeing |  | Quality Education                    |
|  | Gender equality           |  | Decent work and economic development |
|  | Reduced inequality        |  |                                      |

### Capitals Connected



Highlights,  
FY 2021-22

**6,445**  
Permanent Employees

**13,019**  
Contractual workmen

**7.48%**  
Voluntary Employee Turnover Rate

**89**  
'Great Place to work survey' score

**1,35,244**  
Hours of Training and Skill Development

### Associated Material Topics

Non-discrimination  
Employee relations  
Human rights  
  
Occupational health and safety  
Training and development

### Focus areas

|                               |                                          |
|-------------------------------|------------------------------------------|
| Employee health and wellbeing | Promoting occupational health and safety |
| Being a trustworthy employer  | Boosting employee performance            |

### Outcomes

- Ingrown leadership team
- Employment generation
- Employee Turnover rate
- Average hours of training and skill development
- Great Place To Work survey score

### Inputs

- Employee Strength/Strong workforce
- Investment in Training and Skill Development
- Robust Health and Safety management system

## HUMAN CAPITAL

Human capital forms the core of our business operations. With a strong workforce of 19,464 people, we are committed towards building a sustainable foundation for our business. Our approach towards health and safety is governed by robust health and safety management systems, providing a safe workplace for our employees.

As a result of employee centric policies, we featured in top 100 companies in India in the Great Place to Work (GPTW) survey 2021. GPTW ranked us among

the top 30 companies in the manufacturing and production sector for third consecutive year. We were also ranked among the best in cement and building materials sector. Owing to our continued excellence, we were awarded the 'Great Place to work - Commitment to being' Badge



### Exhilarating our workforce

At SCL, our dynamic workforce is our strength and thus, we believe in providing equal opportunities to all, irrespective of gender, age, and place of origin. Following are the details of our diverse workforce:

#### Employee diversity during FY 2021-22

| Employee Category         | Male         |               |              | Female        |           |             | Grand Total |            |               |
|---------------------------|--------------|---------------|--------------|---------------|-----------|-------------|-------------|------------|---------------|
|                           | <30 years    | 30-50 Years   | >50 years    | Total         | <30 years | 30-50 Years | >50 years   |            |               |
| Senior Management         | -            | 40            | 112          | 152           | -         | -           | -           | 152        |               |
| Middle Management         | -            | 714           | 198          | 912           | 1         | 10          | 2           | 925        |               |
| Junior Management         | 1,151        | 3,653         | 381          | 5,185         | 5         | 17          | 2           | 24         | 5,209         |
| Workers (Permanent)       | -            | 81            | 78           | 159           | -         | -           | -           | 159        |               |
| Total- Permanent Employee | 1,151        | 4,488         | 769          | 6,408         | 6         | 27          | 4           | 37         | 6,445         |
| Workers (Contractual)     | 4,731        | 7,487         | 617          | 12,835        | 3         | 136         | 45          | 184        | 13,019        |
| <b>Total</b>              | <b>5,882</b> | <b>11,975</b> | <b>1,386</b> | <b>19,243</b> | <b>9</b>  | <b>163</b>  | <b>49</b>   | <b>221</b> | <b>19,464</b> |

Our senior management consists of General Manager (GM) and above, middle management consists of Manager to Additional General Manager (GM) whereas, our junior management consists of employees below Manager designation.

**1:1.10**

Ratio of Male to Female basic salary for Middle Management employees

**1:1.02**

Ratio of Male to Female basic salary for Junior Management employees



"We are invested in our human capital – through policies that empower and nurture, through training that stimulates and challenges, through a work environment that makes them feel they truly belong."

**Mr. Sanjay Mehta**  
President (Commercial)



#### Permanent employees

|            |              |
|------------|--------------|
| FY 2021-22 | <b>6,445</b> |
| FY 2020-21 | 6,259        |
| FY 2019-20 | 6,185        |
| FY 2018-19 | 5,837        |

All our permanent employees are of Indian origin. While majority of contractual workforce is from India, 30 of our contract men belong to Nepal.

In terms of gender diversity, we have 0.46% women in junior management position and 1.41% in women in middle management position.

We provide equal opportunities to all and have 5 employees who are differently abled.

Due to the exceptional support and the benefits that we provide to the employees, people do wish to join back to work with us. About 113 employees have joined us back since 2017 out of which 34 have joined in FY 2021-22 itself.

Our female employees are our most valued pool of talent. We provide maternity leave of six months to them. This ensures adequate caregiving by new mothers to their infants. During the reporting period, one female availed the maternity leave benefit, who would be joining back in the upcoming financial year.

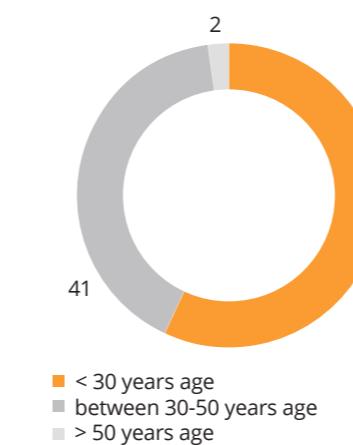
#### Encouraging new talent

Hiring talents with the right skills ensures the upkeep of an organisation and at SCL, we always welcome new talents to our team specially at junior and middle management level. We provide support to all our employees for their holistic development. The average hiring cost per employee is ₹ 6,065 per hire. The number of new employees hired during FY 2021-22 is provided in the table below.

#### Employees hired in FY 2021-22

| Employee Category | Male       |            |           |            | Female   |          |          |          | Grand Total |    |
|-------------------|------------|------------|-----------|------------|----------|----------|----------|----------|-------------|----|
|                   | <30        | 30-50      | >50       | Total      | <30      | 30-50    | >50      | Total    |             |    |
| Senior Management | -          | 8          | 4         | 12         | -        | -        | -        | -        | 12          |    |
| Middle Management | 1          | 44         | 7         | 52         | 1        | -        | -        | -        | 1           | 53 |
| Junior Management | 460        | 283        | 5         | 748        | 1        | 3        | -        | 4        | 752         |    |
| <b>Total</b>      | <b>461</b> | <b>335</b> | <b>16</b> | <b>812</b> | <b>2</b> | <b>3</b> | <b>-</b> | <b>5</b> | <b>817</b>  |    |

#### Employees hired in FY 2021-22 (%)



## HUMAN CAPITAL

### Employee Separations

The voluntary and total employee turnover rate for our permanent employees during the reporting period was 7.48% and 9.79% respectively. The details of the separation have been provided in the table below.

#### Employee Separation during FY 2021-22

| Age          | Voluntary separations |          | Other Separations [Retirement & Death] |          | Total separations |          | Total employee turnover rate |
|--------------|-----------------------|----------|----------------------------------------|----------|-------------------|----------|------------------------------|
|              | Male                  | Female   | Male                                   | Female   | Male              | Female   |                              |
| <30 years    | 136                   | -        | 17                                     | -        | 153               | -        | 13.20%                       |
| 30-50 years  | 330                   | 1        | 45                                     | -        | 375               | 1        | 8.32%                        |
| >50 years    | 15                    | -        | 87                                     | -        | 102               | -        | 13.19%                       |
| <b>Total</b> | <b>481</b>            | <b>1</b> | <b>149</b>                             | <b>-</b> | <b>630</b>        | <b>1</b> | <b>9.79%</b>                 |

The employee turnover rate for our male employee was 9.83%, whereas, for our female employees was 2.7%.

### Nurturing the wellbeing of our employees

We understand that individuals produce the best possible results when they have sound state of physical and mental health. Hence, the wellbeing of our employees and their families is our top priority. Along with a competitive remuneration, all our permanent as well as contractual employees are covered under 'personal accidental cover'. Health insurance is extended to the families of permanent employees as well.

State-of-the art health facilities are provided at our workplaces and in our townships which can be availed by our staff as well as local communities. Wellness Management Centers (WMC) are developed at all our locations with deployment of qualified healthcare professionals. These centers are equipped with facilities for spirometry test, X-ray, Audiometry tests, eye care, road accident care and annual health checkup, etc.

COVID-19 vaccination drive was carried out at all our locations in 274 sessions during year FY 2021-22.

During the year, as the pandemic hit the country, we took proactive measures to facilitate our employees connected with the workplace through our online platform SPARQ. This application facilitated all workplace related details, information and activities in virtual manner for our employees to continue working from home.



Apart from health benefits, some of the additional key benefits provided to permanent as well as contractual employees at all levels include Employees' Pension Scheme (EPS), Employees' Provident Fund Scheme (EPFS), and Employees' Deposit Linked Insurance Scheme (EDLIS) as a part of PF. The benefits also include bonus as per the Bonus Act, as applicable.

Our existing ERP (oracle) implemented in the year 2008 helps in employee management through inclusion of salary payments, production data capturing and reporting, sales and material distribution, accounting, logistics etc. A Contractor Labour Management System (CLMS) is being implemented across our company. During FY 2021-22, CLMS was integrated with the ERP at Ras and Suratgarh for functions including attendance approval automation, wages calculation and payment.

### Performance development of employees

Our employees put exceptional amount of hard work for the development of our organisation. To encourage and motivate them to reach their goals and targets, we have introduced employee development programme through which employees obtain regular performance reviews. Our employees at all levels are encouraged to set Specific, Measurable, Achievable, Relevant, Time bound (SMART) goals on which they receive continuous feedback throughout the year. This enhances their performance and skillset. During FY 2021-22, 100% employees received performance and career development review.

With the continued support and guidance that employees received they have attained new sets of skills which helped them to take new responsibilities in the organisation. Due to these efforts, about 75 open positions could be filled by internal employees during the reporting year.

### Human Rights

We follow practices that are ethically and lawfully sound. We believe in respecting the rights of every individual across all our operations and this is reflected through our policies, procedures, and ethics trainings. We thus, ensure that we do not engage in forced labour or child labour.

Our policy on 'Ethics, Transparency and accountability, and Code of conduct' provides guidelines on:

- Employees conduct at workplace that ensures securing the company's assets and confidential information
- Providing equal opportunities to all our employees irrespective of age, gender, cultural and educational background, length of employment etc. and not tolerating discrimination on any grounds.
- Prohibition of any act of harassment that could result in a punishable offence.
- Business integrity, anti-bribery and anti-corruption norms are to be strictly practiced.
- Responsibility towards local communities and mechanism to fulfill the same.

We constantly strive to build awareness on human rights and transparency and thus, during the year we imparted 6,242 hours of training to 3,568 employees on 'Human Rights issues' covering around 55% of our employees. For ethics, transparency, and accountability 951 persons were trained with 1,876 hours of training.

We are in the process of developing human rights impact assessment framework to proactively identify and assess potential impacts and risks relating to human rights. Our Human Rights Due Diligence process is expected to be completed in the next couple of years.

### Internal complaints committee

For the prevention, prohibition and redressal of sexual harassment and discrimination at workplace, we have formed the internal complaints committee. The committee is chaired by the senior most woman member of the organisation and has four members. We comply with the provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. There were zero cases of discrimination during the reporting period.

### Labour relations

All our wage board workers are covered under collective bargaining agreements which allows us to maintain amicable relations through a consultative

**Zero**  
Cases of  
Child Labour

**Zero**  
Cases of Sexual  
Harassment

process with them and their representatives. Accordingly, we have 100% coverage for permanent workmen (employed as per contract Labor Regulation and Abolition Act 1970) under three registered trade unions affiliated with their country-wide trade unions namely Bhartiya Shree Cement Karmachari Sang (BMS), Shree Cement Works Union (AITUC) and Rashtriya Shree Cement Mazdoor Sangh (INTUC). Because of maintaining cordial relations with all our union members, there were no strikes or lock outs for the reporting period. We provide a minimum eight weeks notice to our employees and their representatives prior to the implementation of significant operational changes (such as closure) that could substantially affect them.

### Grievance mechanism

To enable employees to address concerns without any hesitation, we have introduced the 'Whistle Blower' Policy. The policy enables addressing any fraud, suspicious or unethical activity in the company. It enables anyone including employees, customers, shareholders, vendors to be whistleblowers, the one who can bring any issues to light. The process for addressing the concerns include writing a letter to the compliance officer.

### Training and development

The hard work and skills that our people bring to our company is the key to our success. Thus, nurturing their talent and motivating them to succeed helps us to be on the forefront. Our training and development programmes help employees improve their skills and knowledge base.

To enable continued learning and prevent the hindrance caused during the pandemic, we launched an online learning initiative 'Shree STEPS' with support of learning platform 'Edcast' that enabled virtual trainings during the testing times. With the help of this programme, traditional classroom style learning was completely transformed to online training within 10 days of the onset of the pandemic. With the shift from classroom to online training we could witness a 59% increase in time spent on learning.

During FY 2021-22, we conducted 403 training programmes and provided trainings to our employees on

## HUMAN CAPITAL

various topics ranging from health and safety, skill upgradation, human rights issues and policies, trainings on ethics, transparency, and accountability, etc. The table below provides details on trainings hours:

| Employee category | Total training hours |             | Average training hours per employee |              |              |
|-------------------|----------------------|-------------|-------------------------------------|--------------|--------------|
|                   | Male                 | Female      | Male                                | Female       | Total        |
| Senior Management | 4936                 | -           | 32.47                               | 0            | 32.47        |
| Middle Management | 61091                | 1079        | 66.99                               | 82.99        | 67.21        |
| Junior Management | 67421                | 525         | 13.00                               | 21.90        | 13.04        |
| Workers           | 192                  | -           | 1.21                                |              | 1.21         |
| <b>Total</b>      | <b>133640</b>        | <b>1604</b> | <b>20.86</b>                        | <b>43.37</b> | <b>20.98</b> |

For upskilling our employees with latest market technologies, we have provided about 30,792 hours of skill upgradation trainings and out of which 383 hours of trainings were provided to female employees.

### Occupational health and safety

Workplace is the second home of employees, and we believe that safe work environment is the right of every employee. Our commitment towards providing safe environment to all our permanent and contractual employees as well as visitors serves above all purpose. Thus, we have built a robust safety management system based on ISO 45001 standard, which is globally recognised practice for safety management. Our occupational health and safety management system consist of providing trainings, toolbox talks and mock drills to employees and contractors. We also conduct safety inspections and joint safety audits. We have envisioned a zero-harm work environment approach towards occupational health and safety. To reduce injuries, we have undertaken mission zero injury as



a goal. We take various measures to achieve this goal such as imparting safety trainings, safety inspections and audits. We submit health and safety related details in our Board meetings on quarterly basis. We conduct regular independent external audit as well based on ISO 45001 standards to safeguard health and well-being at our workplace. Additionally, engaging activities such as contests and competitions help workers and employees understand more about occupational safety in a fun and interesting manner.

We provide medical benefits such as annual health checkups and health insurances to employees and their families. During COVID-19, we supported our employees with provisions such as special COVID-19 leaves. This leave could be availed if the employees themselves or their family members were tested positive for COVID-19. We also provided oxygen support when acute oxygen shortage was experienced during the second wave of pandemic. A special insurance coverage called 'Corona Kawach' of ₹ 2.5 lacs was introduced for all employees.

Furthermore, we have a structured onsite emergency control plan prepared in accordance with the Factories Act, 1948. This plan acts as a guiding principle to emergency procedures to protect plant, personal and general public, minimise damage to property and the environment and review accident after it has occurred in order to evaluate our efforts to improve emergency management response in the future.

#### Details of safety initiatives

|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| Truck driver Training                   | 112 programmes<br>2,453 participants    |
| Toolbox Talks                           | 9,258 programmes<br>83,263 participants |
| No. of Joint Safety Audits Conducted    | 476                                     |
| No. of Mock Drill Conducted             | 58                                      |
| Safety Inspections by Safety Department | 1,032                                   |

### Improving safety of Komatsu Dumpers

Dumpers are an important equipment for unloading material on site. Dumpers are prone to creating safety hazards while the body is raised. Hence, Komatsu dumpers are provided with a safety feature that prevents them from moving beyond first speed with raised body. Yet this feature does not eliminate the possibility of hazards or accidents completely.

To overcome this safety hazard, we explored the automatic control system and came up with an innovative solution where the rare breaks would be automatically applied when the dumpers raised body. Till now, we have applied this system in three Komatsu dumpers and would install in all the dumpers on site.

With this installation, we have eliminated a major safety hazard and are proud to be the first to install this system.



We have Standard Operating Procedures (SOPs) for identification of work-related health hazards such as exposure to carbon mono-oxide, sulfuric acid, dust pollution, noise pollution, heat among others. The SOPs also provide remedial measures for each of the health hazards.

Safety audits were conducted by us at Beawar and Ras power plants by team of auditors from National Safety Council, Mumbai. The council conducted a detailed audit for the safety management system, fire protection system, work place safety of plant machinery & maintenance system storage facilities. Additionally, we also conducted safety audit for electrical power supply distribution including the entire plant and facilities.

## HUMAN CAPITAL



| Details of Employee safety for FY 2021-22 |                         |                           |
|-------------------------------------------|-------------------------|---------------------------|
| Details                                   | Employee Safety details | Contractor safety details |
| Total manhours worked                     | 1,08,61,505             | 2,47,45,839               |
| Safety training No. of Programme          | 105                     | 796                       |
| Safety training Participants              | 2671                    | 12,025                    |
| Lost time injury (in number)              | 1                       | 14                        |
| Fatalities (in number)                    | 1                       | 1                         |
| Occupational disease case (in number)     | -                       | -                         |

As a corrective measure for the fatalities and injuries that occurred during the year, we have taken all the necessary initiatives to further strengthen our safety related aspects, so that such incidents do not reoccur.

The table below provides details about health and safety related trainings conducted during the reporting period.

| Health and safety Training during FY 2021-22 |                   |            |               |
|----------------------------------------------|-------------------|------------|---------------|
| Employee category                            | Hours of Training |            |               |
|                                              | Male              | Female     | Total         |
| Senior Management                            | 198               | -          | 198           |
| Middle Management                            | 3,256             | 71         | 3,327         |
| Junior Management                            | 11,898            | 83         | 11,981        |
| Workers (Permanent)                          | 7                 | -          | 7             |
| <b>Total</b>                                 | <b>15,359</b>     | <b>154</b> | <b>15,513</b> |

During the year, several initiatives were taken across various plants and units for occupational health and safety. Some of the celebration have been described below;

### National Road safety week

Like each year, this year too we observed the 33<sup>rd</sup> 'National Road Safety Week 2022' from 11<sup>th</sup> Jan to 17<sup>th</sup> Jan 2022 at all our units to impart road safety training to our employees. The theme of the year was "Sadak Suraksha-Jeevan Raksha". We displayed banners, road safety posters, films and distribution of leaflets related to road safety. As an incentive to attend the programme, free medical and eye check-up camps were held. The programme motivated participants to wear helmets and seat belts and follow road safety norms.



### National Safety Day

We celebrated the 51<sup>st</sup> 'National Safety Day' as the 'Safety Week' from 4<sup>th</sup> to 10<sup>th</sup> March, 2022. The theme for this year was "Nurture young minds – Develop safety culture". During this week, we organised several campaigns, activities and competitions to increase the awareness of people on industrial accidents and safety. Beawar unit won "State safety Award- 2022" for exemplary work done under areas related to safety, health and welfare of the workers in large scale industries category. State level competition was organised by Factories & Boiler Inspection Department Rajasthan in association with National Safety Council Rajasthan Chapter.



### National Fire service day

Each year, all over the nation, 14<sup>th</sup> April is observed as 'National Fire Service Day' as a tribute to the brave fire fighters who lost their lives in the massive fire & explosion which occurred at Bombay Dockyard in 1944. Thus, all our units celebrated 'National Fire Service Day' on 14<sup>th</sup> April, 2021 following the theme "Maintenance of Fire Safety Equipment is Key to Mitigate Fire Hazards" which was directed by the Ministry of Home Affairs.

As a part of this programme, we organised a knowledge sharing session on fire prevention and fire fighting. Banners and posters on fire safety were displayed at strategic locations in all our plants. Through this programme, the knowledge and awareness about fire safety was enhanced among our employees.



## FINANCIAL CAPITAL

**Prudence, consistency, ambition - our key financial tenets.**



Focusing on sustainable long term value creation for all our stakeholders

Financial Capital at Shree Cement is the combination of Shareholder's Equity and the Retained Earnings of the company which supports other capitals to serve our business purpose. Prudent capital allocation has been a constant area of focus for us, thereby creating long term sustainable economic value for all our stakeholders. This has helped us in serving our customers with the best quality products, earn a reasonable profit and distribute it amongst the shareholders in terms of dividend, contribute to the exchequer in the form of taxes & duties, and contribute to the betterment of society in which we operate through the CSR spend.

### Contribution to SDGs



Decent work and economic development

### Capitals Connected



Highlights,  
FY 2021-22

**₹14,306 CRORE**  
Revenue

**₹8,601 CRORE**  
Investments  
(Excluding investment in Subsidiaries)

**₹4,185 CRORE**  
EBIDTA

**₹86,711 CRORE**  
Market Capitalisation  
(as on 31<sup>st</sup> March, 2022)

**₹90 /SHARE (900%)**  
Dividend  
(including final Dividend recommended)

**17.2%**  
Return on Average Capital Employed

### Associated Material Topics

Business Performance

### Focus areas

Continuous increase in Market Share by timely capacity expansion at low cost

Cost efficient Cement production

Robust operating Cash Flows

### Outcomes

- Revenue from Operations
- EBIDTA
- ROCE
- Dividend
- Market Capitalisation

### Inputs

- Shareholder's Equity
- Net debt zero i.e. cash positive