

www.IndianCementReview.com

₹150

INDIAN CEMENT REVIEW®

INDIA'S FIRST & ONLY BUSINESS MAGAZINE FOR INDIAN CEMENT INDUSTRY VOLUME 36 • July 2022 • NO 12



The more efficiently I manufacture cement

The more housing projects I help India build



Farak Laakar Dekhiye



Increased oil drain interval



Optimized equipment uptime



Enhanced operational efficiency



[mobil.in/business](https://www.mobil.in/business) mobil.b2b@exxonmobil.com

© 2022 ExxonMobil. All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries.

Mobil™

“Change is inevitable and businesses must be ready.”

Anil Sharma, Chief Financial Officer (CFO), HeidelbergCement India, shares his views on managing finances, investments and costs, in the face of inevitable changes in the cement sector.

Cement industry is capital intensive – How does HeidelbergCement deal with its Capex requirement?

Cement is one of the most consumed and important materials for infrastructure development but it requires huge CAPEX starting from setting-up a cement plant to maintain it and to adhere to all the compliance norms required for our industry.

At HeidelbergCement, we have a systematic way of assessing the Capex requirement. We do Capex planning for three years well in advance split into categories – (i) Environmental, Safety and Legal Capex – these are mandatory Capex, (ii) Replacement Capex which is required to maintain and to keep plant healthy, (iii) Improvement capex - with passing time and advancement of technology, we have to upgrade plants to bring efficiency or increase productivity and (iv) Expansion or Strategic capex which is used for new capacity, new product, for entering into new markets etc.

We do carry out exercise of comparison between Own vs Hire before finalisation of Capex. Once Capex Plan is approved, respective Process / Project Owner raises their authorisation for Expenditures (AFE) giving rational, risk evaluation, WDV of existing asset, payback period, timeline, year wise cash outflow etc. Post approval of AFE, Capital asset is procured/installed. With respect to Capex amount, as a thumb rule, we keep 40 per cent of our annual depreciation as a sustainable Capex.

This is not the end of the Capex cycle; Once Capex is done, we carry out Post Investment Review (PIR). Any improvement Capex beyond a threshold is reviewed after one year from the completion of the project in order to know the actual result and the same is compared with the assumptions taken in AFE. Lesson learnt is shared with all other plants.



Anil Sharma, CFO, HeidelbergCement India

What are the major cost elements for producing cement and how have these cost dynamics changed in recent past?

Cement manufacturing is a simple process. But production costs are very dynamic. It changes with development in various cost elements.

India is a very competitive market for cement and to be relevant for the same, we should remain cost efficient. To decide the cost of the end product, the method is not a simple and straight line; it needs to be broken down into different cost elements. In our organisation, we have the process of splitting

DIGITAL INITIATIVES

Three Pillars for Digitalisation

HConnect



End-to-end experience for our customers

Key levers:

- Realtime information for Customer satisfaction & business development
- Reduced back-office workload
- Additional revenues

HProduce



Real-time insights and advanced analytics optimizers

Key levers:

- Higher production efficiency
- Lower production cost / less Down Time
- Lower maintenance cost

HService



Seamless connection with partners

Key levers:

- Digitalization of repetitive processes
- Increased productivity
- Further automation through Robotic Process Automation

cost in two parts, i.e., variable cost and fixed cost.

The variable costs are further split - starting with Limestone, the key raw material for cement manufacturing. Limestone is excavated from our own mines, crushed and sent to the plant. The second cost element is the power and fuel. This is the biggest cost element for the manufacturing of cement and currently with increase in fuel and energy cost, it accounts for approximately 40 per cent of the total cost. Cement Industry consume mainly coal and pet coke - domestic and imported. Alternative fuel consumption is gaining momentum to reduce CO2 emission. With respect to power, we draw power from State Grid in addition to own power generation – Conventional Thermal power plant, Waste Heat Recovery (WHR) and Renewable power.

The third cost elements are cementitious materials like fly ash, slag and other packing materials.

Another category that accounts for variable cost is logistics. Materials in bulk are brought into the plant and end products are shipped out. The outward transportation contributes to approximately 20 per cent of the total cost and is the second largest category of variable cost after Power and Fuel.

Fixed costs are also divided into three categories i.e., fixed production cost, sales and marketing costs and other administrative costs.

Fixed production costs include Employee costs in plant, Repair and maintenance, license fees, Royalty etc. The sales and marketing costs include sales promotion and advertisement costs, cost at sales offices, warehouses etc. Administrative costs

include travel costs, office rent, Support Functions and back office Employees costs etc. Fixed cost account to approximately 15 per cent of the total cement cost.

What initiatives HC has taken to optimise its cost?

In cement, we believe that there is always room for improvements. Although the processes are almost set over the 150 years of manufacturing, but there are ways to optimise costs. In our organisation, we have Continuous Improvement Programme (CIP), where employees continuously look into various elements of processes and costs, give suggestions and with that we improve processes, bring efficiency and increase productivity.

HeidelbergCement has taken multiple measures to optimise cost, some of them are

- **Optimisation of Fuel costs.** We have brought a flexibility in changing fuel mix depending on cost of fuels either coal or pet coke. Fuel that is lesser in cost, we consume to produce clinker. We have also put-up plant for handling of alternative fuel in the manufacturing process and use many types of alternative fuels (AF) like biomass, municipal waste, plastic waste, pharma waste etc. We have started consumption of AF of around 5 per cent Thermal Substitution Rate (TSR) and target to increase it to double digit in short to medium term. It helps us not only to reduce our costs but also reduce carbon footprint.

INTERACTION

- **Renewable sources of energy / Green Energy**– It is the “**need of the hour**”. We have put up Solar Power Plant and Waste Heat Recovery Power Plant (WHR). We have also arranged renewable power through third party. Currently, we have reached to 25 per cent green power of our total power requirement and are working towards reducing dependency on grid power below 50 per cent.
- **De-bottlenecking projects** - In the recent past, we have taken up some de-bottlenecking projects to optimise logistics cost. We have made dispatch flexibility between road and rail depending upon cost at the time of dispatch. This also helps us to dispatch higher cement quantity during peak season.
- **Process Simplification** - We have increased productivity by process simplification and optimisation and implementing various digitalisation and automation projects. Bundling of various contracts with an aim to get end to end solutions also helps us to bring down cost. It also improves various Key Performance Indicators (KPI).

What are the various types of direct / indirect tax, cement industry undergoes?

The cement industry is a highly tax levied industry. GST, the highest one and known to the people is 28 per cent. But there are other taxes like royalty on limestone or other minerals, district mineral funds, electricity duties, import duty, Coal Cess, Income tax etc. All taxes combined amount to approximately 40 per cent of net sales realisation.

Please share your experience on transformation of indirect taxes under GST regime? Are there any challenges due to GST implementation faced by the cement industry and what initiatives HC did take to overcome those challenges?

GST is one of the biggest tax reforms in India. In fact, it is a transformation of indirect taxation landscape in the country. It has subsumed many Central and State taxes. It was transition from multiple taxes to one tax and that is uniform across all States – One Nation One Tax. It has brought an ‘*ease of doing business*’ when we deal with many States for movement of materials etc. Earlier when the taxes were different between various States, their processes were also different, and paperwork was very cumbersome. GST implementation has made processes smoother and transparent, thus, easing

logistics and procurement for the industry. Calculation methodology of GST is simple. We could do away with many forms which were different from State to State. There is improvement in overall Supply-Chain system. It has brought transparency with high degree of automation. It has made process for availing of ITC smoothly and that on time. It also leads to timely reconciliation with the vendors and customers.

The change from state wise tax to GST, came with its own set of challenges. GST Framework with respect to Levy of tax, Input Tax Credit, Time of supply etc. are very much different than old tax regime. Business practice undergo change – filing of on-line return, e-invoice/e-way bill for dispatch of materials, timely reaching of material at destination before expiry of e-way bill validity, different tax treatment on stock transfer within the State vis-à-vis outside State, PAN based GST number etc. required change in business practices. People initially struggled in

- Transition of ITC on opening inventory/in transit
- Filing of Returns for Outward supplies/ Payment of GST under RCM
- High level of computerisation of books of account/ Invoice/Debit Note/Credit Note

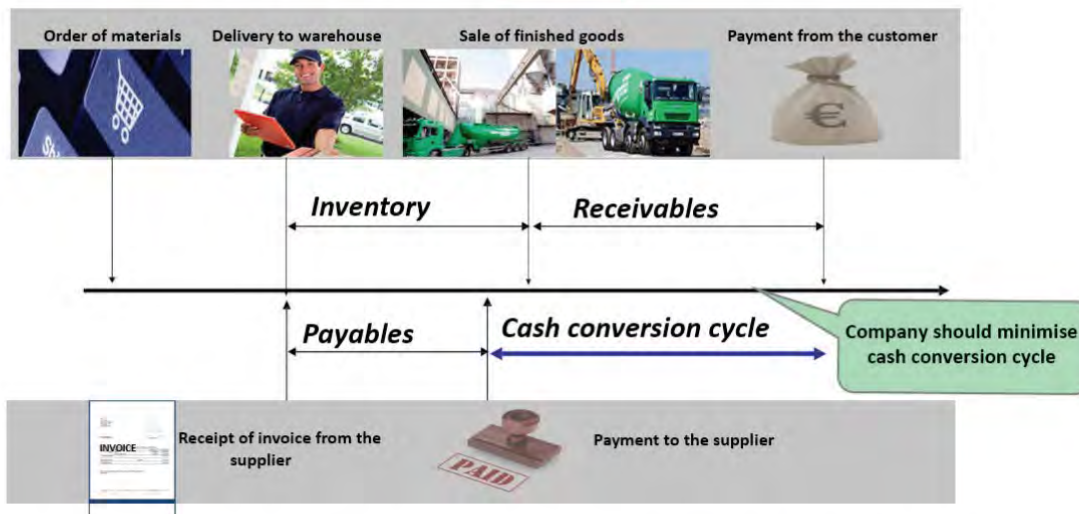
Initially, it became a nightmare for many but gradually it has stabilised. At the beginning, setting up systems and procedures for implementing GST took time but that happens for any new changes. It was really a **Change Management** for people, business and all stake holders.

It requires us to unlearn old tax regime and learn new one and therefore training was pre-requisite. Since we know that our success on GST implementation/migration depends on same level of migration by our Vendors and Customers, we did impart lot of trainings proactively and continued handholding during initial years to them. We are still overcoming these challenges but at the same time are also now in ease with the process. In nutshell, GST became a catalyst for smooth business function in India.

How has digitalisation and automation played a game-changing role in the finance sector for cement industry?

Our business is volume driven and hence, all transactional activities are large in numbers. From raising invoices, debit notes, credit notes etc. is done everyday, multiple times a day. Many people are involved in these mundane jobs which can be very well automated – to improve productivity at the same time standardise the processes. Cement

Cash Conversion Cycle



Industry being labour intensive also is challenged by increasing labour cost and lack of availability of required skilled White/Blue Color Employees. Therefore automation is beneficial/economical be it standardisation of our process, and eliminate manual errors.

The concept of bringing technology to the business was a costly proposition, but now people are understanding that it is for the betterment of the business.

In HeidelbergCement, digital transformation is rapidly changing the landscape of the business, not only in the finance department but also in the manufacturing activity. We have made this a project on a global level and have identified three pillars for digitalisation:

H-Connect: The real time, end to end experience for our customers. Through this portal, customers can know about the statement of account, dispatch of material, track it, place order etc.

H-Produce: This is related to our manufacturing system. We have moved to the next mile with respect to digitalisation where we are bringing technology to our production, be it maintenance of equipment, remote monitoring, online tracking of KPIs of production parameters reducing maintenance cost and increasing productivity of man and machine.

H-Service: All service related processes are automated under H-Service. We have also implemented Robotic Process Automation (RPA) in the area of Master Data, Credit Limit, Closure of Orders, broadcasting of regular reports/statement. RPA is also gaining momentum in our manufacturing side

where mundane human tasks are done by robots.

There are various digitalisation projects taken up by the organisation and it is a journey that we are participating in. We identify the areas that can be digitalised and depending on its capex requirement, we implement the same. We still have a long way to go.

What are the risks / concern for cement industry in short to medium term?

Cement industry is going through a difficult time. The biggest short term risk is the increase in the input cost of the cement which have increased exorbitantly and the Industry has not been able to pass it to the market resulting into Return on Capital Employed touching it's lowest levels. The demand in the recent times has also moderated and not increased as was expected. One of the major reasons for this increase in cost and lack of cement demand is inflation. If the inflation is not controlled timely, the cycle of inflation to purchasing capacity will remain imbalanced and it shall impact the top line and bottom line of companies due to lack of consumption. This may also defer new investments in the business. There is a further risk as Indian Rupee weakens in comparison to the Dollar, which would increase the input costs more.

Another risk is the liquidity crunch in the market. Not only in the business, but a higher fiscal deficit leaves less room to bring rapid development in infrastructure growth as planned in short to medium term which can make the growth of cement market slower. These challenges have to be overcome in

INTERACTION

short term, otherwise its impact shall stay on the industry for a longer duration than expected.

In addition to that I foresee another risk i.e. the availability of cementitious materials. One of the important cementitious materials is fly ash, and the availability is not the same as it was 10 years ago. Sometimes, it needs to be procured from farther areas. Similarly, slag which is the by-product of steel companies, is also getting scarce. These being contributors to de-carbonising of cement will be much in demand and lower in supply. These materials can be a risk in medium to long term. The industry must invest in research and development to identify newer alternative raw materials and supporting the environment.

What are the key priorities for next 2 to 3 years? What recommendation do you have for Indian business eco-system?

The foremost priority for us at the moment is to reduce our carbon footprint. The process of calcination of the limestone, emits carbon dioxide. We need to reduce these emissions from the entire cement manufacturing process.

We are currently working on two ways to reduce carbon dioxide emission from the cement manufacturing process. First, to increase the consumption of cementitious materials and make more blended cements, and the second one is to use alternative fuels replacing fossil fuel.

We have already started the process and our current alternative fuel consumption is in the range of mid single digit of TSR (Thermal Substitution Rate). However, there are many constraints in the availability and quality of alternative fuels, obtaining municipal waste of the required standard, logistic cost of acquiring the same etc. We have to do a cost analysis of alternative fuel to fossil based fuel to ascertain which is beneficial to the business. These are the key priorities for the business to reduce carbon footprint.

Another focus area is to increase the use of renewable power. We purchase power and if that purchased power is thermal power, then it adds to the carbon footprint. Thus, we want to increase the percentage of renewable power consumption in our total power consumption. Capex is set aside in that direction and steps are being taken to bring this in action.

The third focus is automation and technology. If the business needs to reach a certain level of maturity, customer satisfaction and adoption to newer methods of business is a must and that also

to be done quickly and real time; the solution is to integrate system and processes to the automation and digital tools. This would also include integrating vendors, third parties and customers within our process.

In my experience, the recommendation I can give to any business especially in the post pandemic era is to always be ready with a Plan B. There are a lot of uncertainties in business and plans should be made in a manner to accommodate change/s and keep it flexible. Change is inevitable and businesses must be ready to adapt to these changes that are coming in the dynamic world.

Another recommendation is that business should continue evaluating their risks. They must take all kinds of steps to understand and mitigate possible risks. Risk: a daily fact of life and at the same time, a company can't devote enough resources to mitigate all risks. Therefore, they should always do a risk-benefit analysis and put resources to mitigate those risks which might have long lasting impact on business.

In our organisation, we split our risk evaluation matrix into four baskets called risk atlas. Market risk would include competition, new product, change in customer behaviour. Second would be legal and compliances risk which includes risks arising from new policies, new regulations, compliances etc. Third risk would be operational risk that are related to production, availability of raw material, dependency on vendors etc. Lastly, financial risk, which would include bad debts, working capital requirements, tax risk, cash flow etc. We always have the processes and policies in place where we deliberate and prioritise tasks and decide where the funds and resources should be allocated.

A very important recommendation is to conserve cash. Cash is King. Business must prioritise its spend to support its growth. They must focus on cash flow and optimise their cash conversion cycle by optimising Days Inventory Outstanding (DIO), Days Sales Outstanding (DSO) and Days Payable Outstanding (DPO).

Last recommendation for the entire business ecosystem would be to allow the next generations to come to live with all the resources we have and in a safe environment. It is possible only if we give priority to sustainability. Sustainability is not a burden/cost element; rather it is an investment for survival and future growth. If businesses do not wake up and start working to bring down their carbon footprint, it may be too late.

- KANIKA MATHUR