

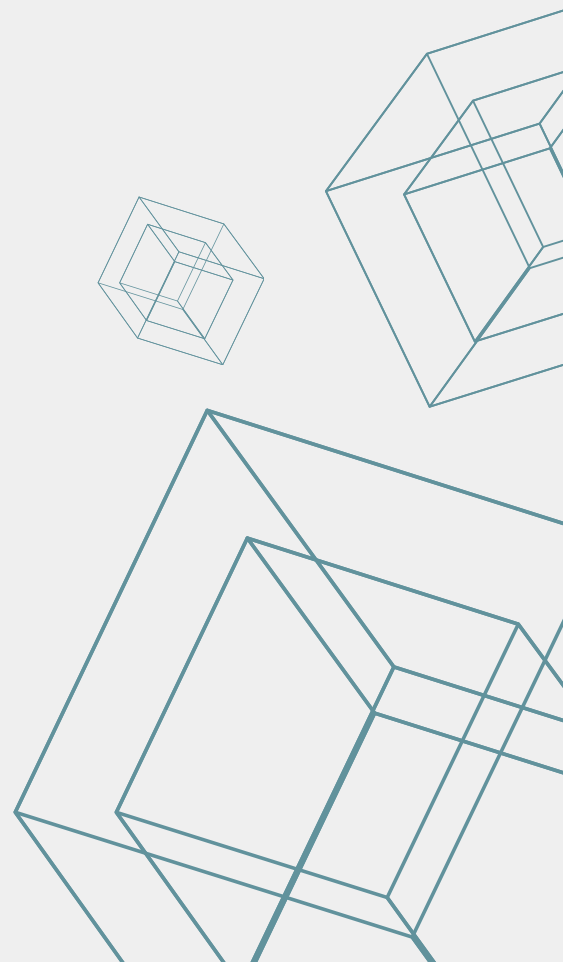
The Cement Industry in India

*Current State,
2035 Outlook,
and Aligning with
Viksit Bharat 2047*



Published by: Policy Draft Division, All India

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CEMENT INDUSTRY IN INDIA

Current State, 2035 Outlook, and Aligning with Viksit Bharat 2047

Cement is fundamental to nation-building. It's the backbone of housing, infrastructure, and urban expansion — all pillars of India's push toward a "Viksit Bharat 2047." Over the next decade (to 2035), the Indian cement industry will be shaped by urbanisation, large public infrastructure programs, climate and energy transitions, raw-material constraints, and technology changes. This article summarizes where the industry stands today, projects its likely path to 2035, and offers practical ways to align the industry with government goals and India's vision for development.

1. Snapshot today (2025): scale, structure, and key facts

India is the **world's second-largest cement producer**, with hundreds of millions of tonnes produced annually and large installed capacity that continues to expand through brownfield and greenfield projects. Major firms — UltraTech, ACC/Ambuja, Shree Cement, Dalmia, and regional players — dominate capacity additions and market share. (India Brand Equity Foundation)



- Recent market estimates put the 2025 market size in the range of ~350–440 million tonnes (different sources use slightly different baselines). Long-term market forecasts expect steady growth as housing, infrastructure and urbanisation accelerate. (***Claight***)
- The sector is already an early mover on some decarbonisation measures (e.g., waste fuels, alternative clinker blends, WHRS), but cement remains carbon- and energy-intensive, and is a major target for national decarbonisation plans. Industry roadmaps and research into CCUS are now high priorities. (teriin.org)
- A pressing, often under-appreciated constraint is limestone availability and mine life in certain regions — some analyses suggest a significant share of mines face expiry or reserve constraints by 2035, creating strategic supply-side risks. (Ikigai Asset Manager Holdings Pvt. Ltd.)

2. Demand drivers to 2035

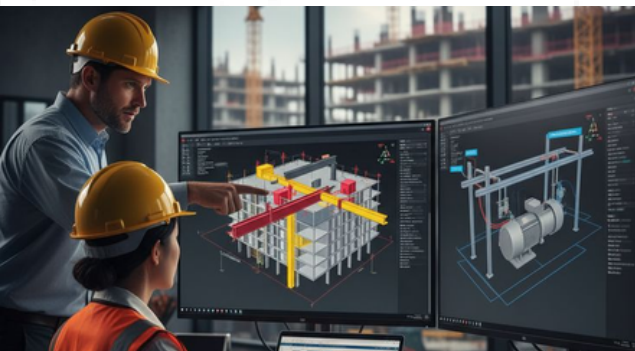
A. Urbanisation & Housing

India's urban population and per-capita built area will keep rising. Affordable housing programs (PMAY and related initiatives) plus rising home ownership aspirations drive steady residential demand.



B. Large infrastructure programs

National plans (PM GatiShakti, highways, ports, rail modernisation, metro expansion, water & sanitation projects) create predictable long-term demand for cement for roads, bridges, tunnels and transit infrastructure. Integrated planning under the PM GatiShakti master plan boosts multi-modal projects and efficient procurement cycles - a structural tailwind for cement demand. (Press Information Bureau)



C. Industrial & commercial development

Warehouses, data centers, factories, and urban facilities (health, education, civic) expand with economic growth.

D. Export opportunity

As capacity rises and Southeast Asian/African markets develop, selective exports may grow, particularly for blended and specialty cements.

Collectively, credible market analyses forecast mid-single digit CAGR through 2035 — many industry reports project the Indian market in the range of ~600 MMT by 2035 (varying by base year and scenario). (*Claight*)

3. Supply-side constraints and risks

Limestone & raw material limits: Local depletion, leases expiring, and the cost/time to develop new mines mean raw-material supply is a strategic bottleneck for some operators. This pushes a need for mine acquisition and longer-term resource planning. (Ikigai Asset Manager Holdings Pvt. Ltd.)

Energy & fuel volatility: Coal remains widely used for thermal energy; electricity for grinding/clinkerisation is significant. Power transition choices (grid decarbonisation, renewables availability) will impact operating costs and emissions.

Environment & regulation: Stricter emission norms, carbon pricing or compliance mechanisms, and local environmental clearances will raise compliance costs and drive technology upgrades.

Logistics: Cement is heavy and low value-density; transport and last-mile logistics matter greatly. Road/rail bottlenecks can raise delivered cost and regional price dispersion.



4. Decarbonisation & technology: imperative, progress, options

India's cement sector is included in national decarbonisation plans with long-term net-zero commitments and nearer-term targets and roadmaps.

Key options:

Clinker substitution & blended cements: Use of fly ash, slag, calcined clays and other SCMs reduces clinker factor and CO₂ intensity. This is a near-term, cost-effective lever.

Alternative fuels & circular feedstocks: Industrial wastes, biomass, and refuse-derived fuels reduce coal dependence.

Energy efficiency & electrification: Waste Heat Recovery Systems (WHRS), more efficient kilns, and electrification of processes where feasible.

CCUS (Carbon Capture, Utilisation & Storage): Long-term requirement for deep decarbonisation; government R&D roadmaps and pilot programs are being formulated to accelerate CCUS deployment in heavy industries, including cement. (teriin.org)

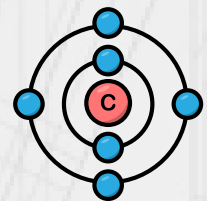
Digital & process automation: Drives kiln stability, predictive maintenance, and better energy use.



5. Outlook to 2035 — scenarios and likely trajectory

Broad consensus from recent reports and market analyses indicates:

- **Demand growth:** Expect continued growth with a mid-single digit CAGR (roughly 4–7% depending on cyclical effects), with the market likely reaching approximately ~600 MMT by 2035 in a baseline scenario (some forecasts vary). This is supported by rising urbanisation, housing and large infrastructure pipelines. (Claight)
- **Capacity additions:** Strategic capacity additions by major players are anticipated, focused on regions with robust demand or favourable logistics. Leading firms have announced significant capacity additions in recent years. (India Brand Equity Foundation)
- **Carbon intensity:** The sector will reduce carbon intensity materially by 2035 via clinker substitution, efficiency and fuels mix changes, but absolute emissions may remain substantial without large-scale CCUS deployment.
- **Regional shifts:** Demand growth concentrated around urban corridors, industrial corridors, and port regions; plants near consumption clusters and with access to SCMs will have competitive advantage.



6. How the cement industry should align with government outlook & Viksit Bharat 2047

To align with the government's development goals (urbanisation, infrastructure, Viksit Bharat 2047) and comply with environmental commitments, the industry — working with government — should pursue a coordinated strategy across six pillars:

A. Match capacity and geography to India's infrastructure map

Use PM GatiShakti planning data and state development plans to prioritise capacity additions near major demand corridors (ports, industrial corridors, metros). This reduces haulage cost and improves responsiveness to project procurement cycles. (Press Information Bureau)



6. How the cement industry should align with government outlook & Viksit Bharat 2047

B. Prioritise low-carbon cement types and blended products

Promote blended cement (PPC, PSC, calcined clay cements) through standards, government procurement preferences, and incentives for SCM use. Government can fast-track standards and accept blended cements for most public works to scale adoption.

C. Scale circularity & alternative fuels

Expand use of industrial by-products (fly ash, slag), municipal solid waste-derived fuels, and biomass. Governments should enable easier cross-sector waste sourcing, standardized testing, and logistics incentives for waste collection to the cement kilns.

D. Invest in mine security & resource planning

Encourage longer-tenure mining leases, strategic acquisition of limestone assets, and shared logistics for raw materials. Government can streamline approvals for mine expansions where environmental safeguards are met.

E. Mobilise green finance & incentives for decarbonisation

Create targeted green finance lines and tax incentives for WHRS, energy-efficiency upgrades, electrification and CCUS pilots. Soft loans, accelerated depreciation and viability gap funding for demonstrator CCUS projects can accelerate early adoption.

F. Workforce & skill development, local supplier ecosystems

- Align vocational training with modern process control, emissions management and circular economy skills. Support MSME clusters (admixture suppliers, grinding units) to localize value chains and employment growth.



7. Policy recommendations — practical steps (2025–2035)

Short-term (2025–2028)

- Government procurement mandates: specify maximum allowable clinker factor for public projects and prefer blended cements where technically feasible.
- Fast-track approvals for WHRS and renewable energy PPAs for cement plants.
- Launch competitive CCUS pilot auctions for industrial clusters with government co-funding.

Medium-term (2029–2032)

- Introduce phased incentives for low-emission cement production (tax credits/offsets).
- Build shared SCM parks and logistics hubs near consumption clusters (urban corridors).
- Create a national “Green Cement” certification (procurement premium for certified low-carbon cement).



Long-term (2033–2035)

- Scale CCUS and incentivize regional capture hubs linked to industrial transport/storage networks.
- Integrate cement decarbonisation metrics into state and central infrastructure appraisal frameworks (e.g., lifecycle carbon budgets for major projects).



8. Business Implications — What Cement Companies Should Do Now

1. **Resource strategy:** Lock in limestone reserves, diversify raw-material sourcing (calcined clays, SCMs), and optimize quarry lifecycles.
2. **Green transformation:** Invest in WHRS, energy efficiency, alternative fuels and blended cement R&D. Set decarbonisation targets aligned to national roadmaps and disclose progress.
3. **Cluster & corridor play:** Pursue brownfield capacity increases and distribution hubs near metros and industrial corridors rather than isolated greenfield plants far from demand.
4. **Collaborate with governments & cities:** Offer product solutions (low-carbon cement, prefabricated components) for affordable housing and fast-track projects; co-design procurement frameworks that reward circularity.
5. **Financial & commercial innovation:** Use green bonds, sustainability-linked loans, and link pricing to carbon savings where possible.



9. Risks to monitor



- **Slower than expected urban/infra spend:** Macro slowdowns or budget reprioritisation would reduce near-term demand.
- **Raw material constraints:** Local scarcity or lease issues could tighten supply.
- **Regulatory surprises:** Rapid introduction of carbon pricing or strict emission caps without transitional measures could raise costs.
- **Technology adoption lags:** CCUS commercialization is still uncertain and expensive — failure to scale alternatives would slow deep decarbonisation.

The Conclusion

10. Conclusion — building a Viksit Bharat with resilient, green cement

India's cement industry sits at a pivotal crossroads. Demand fundamentals — urbanisation, affordable housing, and infrastructure — point to robust growth through 2035. At the same time, climate commitments and resource constraints demand a transformation in how cement is produced, transported, and specified in construction. When industry action (mine security, blended cements, energy efficiency, CCUS pilots) pairs with government policy (procurement preferences, green finance, integrated infrastructure planning like PM GatiShakti), the result will be a sector that not only supplies the physical materials for Viksit Bharat 2047, but does so in a way that is resource-efficient and progressively low-carbon. The next decade is about aligning capacity with corridors of demand, decarbonising at scale, and embedding circularity — all of which will determine whether cement becomes an enabler or an obstacle to India's development ambitions. (India Brand Equity Foundation)

Selected sources and further reading

- IBEF — Indian cement industry overview and capacity notes. (India Brand Equity Foundation)
- Expert Market Research / industry forecasts to 2035. (Claight)
- TERI — Decarbonisation roadmap for the Indian cement sector. (teriin.org)
- PM GatiShakti National Master Plan (policy & infrastructure integration). (Press Information Bureau)
- IKIGAI / sector reports on raw-material (limestone) availability and mine expiry issues. (Ikigai Asset Manager Holdings Pvt. Ltd.)

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