

HABITAT MATTERS

Request for applications



HABITAT MATTERS

A Godrej Properties initiative

1. About the programme

India is entering one of the largest construction expansions in the world. By 2050, the country is expected to have approximately 34 billion square metres of building stock¹, with many studies estimating new construction almost doubling its current levels. The materials used in that expansion will shape India's environmental footprint for decades. Cement, concrete, steel, and other construction materials account for a significant share of embodied carbon emissions, much of which becomes locked in the moment a building is constructed.

At Godrej Properties, we believe that how we build matters as much as what we build. As India's most awarded real estate developer and a long-standing leader in sustainable development, we recognise that reducing embodied carbon in construction materials is one of the most consequential and under-addressed challenges facing our industry today. It is also an area where developers of scale have both the responsibility and the ability to drive meaningful change. **'Habitat Matters' is our response to that responsibility.**

'Habitat Matters' is a GPL-led CSR initiative that works at the intersection of innovation and deployment to accelerate the adoption of low-carbon construction materials in India, and will be piloted through Godrej Good & Green Labs, the innovation arm of Good & Green, Godrej Industries Group. The name carries a deliberate dual meaning: *habitat* refers to the homes, communities, and ecosystems we shape through the act of building; *matters* refers to the materials from which those habitats are made. *Both matter, and through this programme we aim to improve both.* The programme focuses on five material categories—cement, concrete, blocks, steel, and glass—that together account for a significant share of embodied carbon in the built environment.

The programme is grounded in a simple observation. India is not short of innovation in low-carbon materials. What is often missing is the bridge between a promising solution and its first real-world deployment within a live construction project. Access to projects, engineering support, real site conditions, and credible validation opportunities remain major barriers to adoption. Habitat Matters aims to help bridge that gap.

Habitat Matters will identify promising low-carbon material solutions from start-ups, research institutions, and technology providers across India and globally. Selected innovations will be piloted on active construction projects, where they will be tested under real-world conditions via Good & Green Labs, rigorously evaluated, and refined. The learnings from these pilots are also intended to support broader industry awareness and adoption, recognising that the challenges being addressed are industry-wide in nature.

Why it matters

For innovators, Habitat Matters offers something that few grants or incubators can provide: the opportunity to validate solutions within real construction environments and build commercial credibility through deployment. For the broader industry, every successful pilot becomes a proof point that can help accelerate adoption across developers, contractors, and material manufacturers.

For India's climate ambitions, the programme demonstrates that rapid urban growth and decarbonisation need not be in conflict. For Godrej Properties, Habitat Matters represents a commitment to being not just a responsible

¹ Scenarios towards Viksit Bharat and Net Zero. Sectoral Insights: Buildings (Vol. 5), NITI Aayog

developer, but an active participant in transforming how India builds. We are not waiting for better solutions to emerge at scale. We are actively seeking them out, testing them, and helping demonstrate their real-world applicability so that the wider industry can move forward with greater confidence.

2. About the request for applications

The programme focuses on five priority material categories: cement, concrete, blocks, steel and glass. In addition, the programme will also support bio-based alternatives within these categories, as well as other innovative construction materials that demonstrate strong potential to reduce embodied carbon.

Habitat Matters is designed as a selective deployment-focused programme with the objective of helping promising solutions bridge the critical gap between early-stage innovation and commercial deployment. To achieve this, it provides:

- Pilot opportunities within ongoing projects of partner ecosystem
- Commercialisation support, including guidance on integration into supply chains, procurement systems, and market positioning
- Ecosystem access, connecting innovators with developers, validation agencies manufacturers, and expert networks
- Knowledge sharing and policy engagement, working with government and industry bodies to enable broader adoption and reduce systemic barriers

Given the practical constraints of live construction projects, the programme intends to support a select number of solutions that demonstrate strong potential for near-term pilot implementation and commercial applicability within the built environment sector.

Through this request for applications, we invite start-ups, research institutions, material manufacturers, and technology providers to apply for participation in the programme. Selected applicants will have the opportunity to pilot their innovations in active construction projects within the partner ecosystem and receive structured technical and commercialisation support to accelerate adoption.

3. Support provided to selected applicants

Selected applicants will receive support across the following areas:

- **Pilot opportunities:** Selected innovations will be deployed through pilot projects within active construction sites across the built environment ecosystem. Pilots will be designed collaboratively with the applicant to ensure technical feasibility, appropriate scale, and the generation of meaningful performance data under real construction conditions.
- **Grant support:** Select innovations may receive grant support (up to ₹25 lakh), depending on the nature and requirements of the pilot. This support is intended to help address key barriers to early deployment and testing.
- **Commercialisation support:** The programme will support the pathway to commercial adoption by facilitating introductions to procurement teams, assisting in navigating regulatory and certification processes, and connecting with the broader real estate sector.
- **Market access and reference projects:** Successful pilots under the programme will serve as credible reference projects, enabling innovators to demonstrate performance in real-world construction settings.

- **Knowledge exchange and ecosystem access:** Applicants will gain access to the developer ecosystem, including insights into current construction practices, site conditions, and procurement requirements. This will help innovators refine, validate, and adapt their solutions for the Indian construction market.

4. Who should apply

We welcome applications from organisations with credible low-carbon material innovations that are ready for, or approaching, real-world pilot deployment. This includes:

- Start-ups and deep-tech ventures developing novel low-carbon construction materials
- Research institutions and universities with innovations at an advanced stage of development
- Technology providers enabling low-carbon material production, such as process technology, admixtures, or novel binders

Technology Stage:

The programme prioritises innovations at TRL 5 and above, meaning the technology has been validated at lab-scale, with the strongest preference for solutions that demonstrate readiness for pilot deployment. Earlier-stage solutions may be considered selectively where there is exceptional carbon reduction potential and a credible pathway towards deployment.

Out of scope:

- Pure research projects without a credible deployment pathway
- Early-stage concepts lacking demonstrated technical feasibility
- Large-scale industrial transformation initiatives not linked to deployable construction material applications
- Solutions that require substantial upstream industrial infrastructure transformation or lack a credible pathway toward project-scale implementation within the near to medium term
- Solutions focused solely on operational carbon reduction without a material or embodied carbon component

5. Eligibility criteria

Applications will be assessed against the following considerations:

1. The innovation falls within one of the material categories listed in Section 6
2. The innovation demonstrably reduces embodied carbon compared to the conventional material it replaces, supported by data, life cycle assessment, or published references
3. The innovation is applicable to Indian construction conditions, supply chains, and regulatory context. All products shall be such that they follow the specifications of material specified by national and/or international standards with respect to different parameters in their respective category.
4. The applicant can demonstrate a credible development pathway toward commercial scale
5. The applicant is willing to engage in a structured pilot on a live project under agreed terms
6. There are no known unresolved safety, structural, or regulatory barriers that would prevent use of the material in a built environment context in India

6. Problem statements by material categories

The following section outlines the specific challenges and innovation needs the programme has identified across each of the priority material categories. Applicants are encouraged to align their solutions with one or more of the focus areas below and clearly articulate how their innovation addresses the identified challenges.

While the programme does not prescribe fixed thresholds across all categories, stronger applications are expected to demonstrate clear and measurable embodied carbon reduction potential relative to conventional alternatives, along with practical pathways toward deployment, compliance, and commercial adoption.

A. Cement and concrete

Cement and concrete account for the largest share of embodied carbon in most real estate projects. India's cement carbon intensity sits at approximately 0.63 tonnes of CO₂ per tonne of cement, higher than the global average of around 0.54 tonnes². A key actionable lever is reducing cement intensity within concrete mixes through clinker substitution, supplementary cementitious materials, mix-design optimisation, and lower-carbon binder systems that can be specified and procured within live projects.

Innovation focus areas

The programme is seeking solutions that enable:

- Lower-carbon cement and binder systems
- Cement reduction through admixtures, additives, and material optimisation
- Integration of industrial by-products, recycled aggregates, and alternative raw materials
- Lower-carbon concrete systems compatible with conventional batching, pumping, pouring, and curing practices
- Concrete optimisation approaches that reduce material intensity while maintaining performance

Preference will be given to solutions that:

- Can be integrated into existing batching, pouring, pumping, and curing practices with minimal operational disruption
- Maintain structural performance, durability, and workability under Indian climatic and site conditions
- Demonstrate compatibility with conventional reinforcement systems and construction methodologies

B. Glass

Glass is a carbon-intensive material whose footprint is largely locked in at the point of façade specification. The most consequential decisions therefore sit at the project level: which façade glass products are available in India that demonstrably reduce embodied carbon while meeting the thermal, optical, and durability requirements of modern commercial and residential projects. Industry references place typical embodied carbon for architectural flat glass at around 1200 - 1400 kg CO₂e per tonne³, with majority attributable to the uncoated flat glass itself.

Innovation focus areas

The programme is seeking solutions that enable:

- Lower-carbon glass formulations and material optimisation approaches
- Increased recycled cullet utilisation and circular glass systems
- Lower-carbon glass products suitable for façade and built environment applications

² Roadmap for cement sector decarbonisation, NITI Aayog

³ Available EPDs for leading glass manufacturers

- Material efficiency and circularity approaches within glass value chains

Preference will be given to solutions that:

- Maintain required optical clarity, durability, thermal performance, and façade compatibility standards
- Can integrate into existing glass fabrication, processing, and installation systems
- Support increased recycled content utilisation without compromising quality consistency

C. Blocks

Brick kilns alone contribute around 65 million tonnes of CO₂ per year, or roughly 2.5% of India's national emissions⁴. Indian-context LCA studies place the embodied carbon of fired clay bricks at approximately 102 g CO₂ per kg of brick, or roughly 0.29 kg CO₂ per brick⁵. Over the past decade, many leading developers have increasingly shifted towards lower-carbon alternatives such as autoclaved aerated concrete (AAC) blocks, which are now widely specified across residential and commercial projects. Published studies typically report cradle-to-gate embodied carbon values for AAC in the range of 0.23-0.28 kgCO₂e per kg, depending on raw materials, manufacturing process, and system boundaries. While this represents an important market transition, there remains significant opportunity to further reduce embodied carbon through next-generation block systems that improve on the carbon footprint, resource efficiency, circularity, or performance of current mainstream solutions.

Innovation focus areas

The programme is seeking solutions that enable:

- Demonstrate a measurable embodied carbon reduction relative to commercially available AAC block systems
- Development and scaling of bio-based, waste-based, recycled, and other lower-carbon block alternatives
- Material optimisation approaches that reduce emissions intensity and resource consumption
- Modular or prefabricated block systems that support construction efficiency and reduced material use

Preference will be given to solutions that:

- Demonstrate ease of handling, installation, and adoption within existing masonry and contractor practices
- Maintain dimensional consistency, durability, and on-site usability under practical construction conditions
- Integrate into existing masonry and contractor practices with minimal disruption

D. Steel

India's steel sector accounts for ~12% of national CO₂ emissions, with domestic emission intensity at approximately 2.54 tonnes of CO₂ per tonne of crude steel, meaningfully higher than the global average of 1.91 tCO₂/tcs.⁶ In December 2024, the Ministry of Steel introduced a green steel taxonomy classifying steel produced with emissions below 2.2 tonnes per tonne of finished steel as "green steel," with the cleanest "five-star" category set at below 1.6 tonnes.⁷ An immediate lever is specifying and procuring lower-carbon structural steel and rebar that are available within Indian supply chains today, supported by credible verification.

Innovation focus areas

The programme is seeking solutions that enable:

⁴ India Brand Equity Foundation (IBEF), *Green Building Materials: Cutting India's Emissions* (2026)

⁵ Nature Scientific Reports—Large CO₂ reduction and enhanced thermal performance of agro-forestry, construction and demolition waste based fly ash bricks for sustainable construction (2024)

⁶ Greening the steel sector in India – Roadmap and Action Plan, Ministry of Steel India

⁷ Green Steel Taxonomy for India, Ministry of Steel

- Lower-carbon steel products suitable for real estate and built environment applications
- Material traceability, transparency, and verification systems supporting low-carbon procurement
- Design, fabrication, or material optimisation approaches that reduce steel intensity within construction applications
- Solutions that improve recovery, reuse, or recirculation of steel within construction value chains

Preference will be given to solutions that:

- Support increased recycled content, material efficiency, reuse, or circularity within construction applications
- Demonstrate practical applicability within real estate and construction projects rather than upstream industrial process transformation

E. Bio-based materials

Bio-based materials offer significant potential to reduce embodied carbon through material substitution and, in some cases, carbon sequestration. India produces significant volumes of agricultural residues including rice straw, bagasse, and husk that are currently underutilised or openly burnt, representing both an emissions source and a potential feedstock for construction applications.

Innovation focus areas

The programme is seeking solutions that enable:

- Plant-based construction materials such as bamboo, timber, hemp, and jute
- Agro-residue-based materials using feedstocks such as bagasse, straw, and husk
- Advanced and emerging bio-materials suitable for built environment applications
- Scalable production, integration, and standardisation of bio-based construction systems
- Bio-based alternatives capable of replacing conventional materials within practical construction applications

Preference will be given to solutions that:

- Demonstrate suitability under Indian climatic, moisture, durability, and operational conditions
- Have credible pathways toward fire safety approvals, certification, and long-term performance validation
- Demonstrate reliable feedstock availability and scalable supply-chain potential
- Balance carbon reduction potential with practical considerations such as maintenance, durability, cost, and deployment feasibility

F. Other deployable embodied carbon solutions

The programme recognises that not all innovations that reduce embodied carbon fit neatly within a single material category. Therefore, the programme also welcomes deployable solutions that can demonstrate measurable reductions in whole-building embodied carbon. Such solutions should be suitable for deployment within live construction projects and demonstrate a clear pathway towards commercial adoption.

7. Evaluation process

Applications will be evaluated on a rolling basis through a **structured two-stage process** to ensure efficient screening and detailed assessment of high-potential solutions.

Stage 1: Initial screening

Applicants are required to submit a short overview of their solution in a standardised format (PPT or Word), covering a limited set of key indicators.

This stage will assess:

- Relevance to programme focus and material category (refer to section 6)
- Potential for embodied carbon reduction
- Readiness for pilot deployment
- Indicative pathway to commercial scale

Based on this assessment, a shortlist of applicants will be invited to proceed to the next stage. A detailed application form and submission guidelines will be shared with shortlisted applicants at this stage.

Stage 2: Detailed evaluation

Shortlisted applicants will be required to submit a comprehensive application covering technical, environmental, commercial, and pilot-related aspects. These applications will be evaluated by the programme's Technical Advisory Committee across the following dimensions:

- **Technical performance:** Assessment of the material's structural and engineering performance, including mechanical strength, durability, thermal and fire performance.
- **Carbon and environmental impact:** Evaluation of the magnitude and credibility of embodied carbon reduction compared to conventional materials, supported by life cycle assessment (LCA) or equivalent methodologies. This dimension will also consider the use of industrial by-products or waste streams, and broader environmental impacts such as water use and land footprint.
- **Commercial readiness:** Assessment of the innovation's readiness for market adoption, including cost competitiveness relative to conventional materials, maturity of the supply chain in India, and the potential to scale production.
- **Pilot feasibility:** Evaluation of the practical feasibility of deploying the material, including ease of integration with existing construction practices, regulatory compliance within India, contractor and workforce readiness, and overall pilot implementation risk.
- **Innovation and start-up potential:** Assessment of the degree of innovation and differentiation, clarity of the commercialisation pathway, and the potential of the innovation to create meaningful change within the construction ecosystem.
- **Team expertise and credentials:** Evaluation of the founding and leadership team's capabilities, including domain expertise in materials or construction, relevant experience, and evidence of execution or delivery in previous projects.

Please note this is only for information; the additional information will be requested once the applicant makes it to the second round. The final selection will be based on overall performance across these dimensions, alignment with programme priorities, and suitability for pilot deployment within the partner ecosystem.

8. Stage 1: Application requirements

Applicants are required to submit a short overview of their solution (maximum 5 slides or equivalent word format), covering the following:

- **Solution overview:** Description of the innovation and material category (cement, concrete, blocks, steel, glass) addressed

- **Emissions impact:** Indicative embodied carbon reduction compared to the conventional alternative, with basis for estimation
- **Current readiness:** Technology readiness level, stage of development, and any existing pilots or deployments
- **Commercialisation potential:** Indicative cost position and pathway to scale, including manufacturing and supply considerations
- **Pilot fit:** Proposed use case in construction and suitability for real-world deployment

9. How to apply

Applications should be submitted by email in PPT or Word format as per the guidelines below:

Submission email/form	habitatmatters@xynteo.com
Submission format	Maximum 5 slides (PPT) or equivalent structured word format
File naming	RFA_[OrganisationName]_[MaterialCategory]_[MonthYear]

10. Timeline

Application deadline	15 October, 2026
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11. Terms and conditions

- Submission of an application does not guarantee selection for a pilot or any form of engagement with Habitat Matters.
- Habitat Matters reserves the right to accept or reject any application at its sole discretion without assigning reasons.
- Information provided in applications will be treated as confidential and used solely for evaluation purposes under this programme.
- Applicants retain full ownership of their intellectual property. Submission of an application does not constitute any transfer of IP to Habitat Matters.
- Habitat Matters does not provide financial compensation for the preparation or submission of applications.
- Pilot terms, including scope, duration, cost-sharing arrangements, and data rights, will be agreed separately through a formal written agreement prior to pilot commencement.

12. Contact and further information

For any queries, please write to habitatmatters@xynteo.com