

# We remain confident of the future inflow



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## How is the Indian Roads & Highways sector adopting green and sustainable practices? Can you highlight any notable projects that showcase the integration of eco-friendly technologies and materials?

In order to achieve the government's target of reducing carbon emissions by 1 billion tonnes by 2030, we are significantly embracing sustainable and environment friendly practices. Our commitment lies in ensuring that our projects are not just economically viable, but also have a positive impact on the environment. Our efforts to adopt eco-friendly practices in construction involve the utilization of renewable energy sources and the implementation of effective waste management strategies.

These included substituting conventional soil with inert materials in embankments to promote ecological sustainability. Moreover, establishment of Sewage Treatment Plants (STPs) and well-designed drainage system were implemented across project sites to effectively tackle wastewater concerns. We are implementing a green procurement strategy by incorporating recycled materials like fly ash, pond ash, and plastic in road construction. We

reuse milling materials in road construction to promote resource conservation. To counter the emissions produced by vehicles and to create environment friendly highways, we have formed partnerships with stakeholders and NGOs. Together, we have organized tree planting campaigns, resulting in the planting lakhs of saplings during the fiscal year 2022-23. Additionally, to promote a sustainable environment, we have established wildlife crossings to mitigate conflicts between humans and animals.

By transitioning to grid electricity, the company managed to reduce its reliance on diesel generators. We have converted 17 of our diesel trippers to operate on Compressed Natural Gas (CNG), thereby reducing carbon footprint. Recognizing the dust generated during construction, we are efficiently using water sprays and anti-smoke gun for dust suppression. Strategic scheduling of bituminous tasks during night time hours not only aided in pollution control but also contributed to more efficient traffic management. Furthermore, the installation of a screw conveyor system acted as a preventive measure against air pollution.

**Discuss the significance of public-private partnerships in the advancement of technology-driven projects within the Indian Roads & Highways sector. How do these collaborations contribute to infrastructure development?**

PPPs offer a framework to pool resources, creating a critical mass that surpasses individual firms' capabilities, even with substantial funding. Private entities contribute to cutting-edge technologies and innovations that might pose financial challenges for the public sector alone. Their specialized technical expertise becomes invaluable, especially for intricate technology solutions like intelligent traffic management systems, smart tolling, and real-time monitoring tools.

In a PPP model, risk-sharing is common between the public and private sectors, fostering a balanced decision-making approach and enhancing project feasibility, particularly for ventures involving unproven technologies. Moreover, this collaborative approach expedites technology-driven project implementation by streamlining bureaucratic processes and leveraging the private sector's efficiency. These partnerships also yield improved service delivery, foster connectivity among national innovation systems, and offer mutually beneficial incentives for stakeholders in trade and mobility.

Ultimately, well-maintained roads and highways, coupled with advanced technologies, have the potential to catalyze regional development and business activities.

**Looking into the future, how is the Indian Roads & Highways sector preparing to integrate 5G connectivity and other emerging technologies? What potential benefits can these technologies offer to road networks and transportation system?**

Technological advancements play a crucial role in enhancing road safety efforts, encompassing accident prevention, quicker responses, and improved traffic management. The introduction of 5G technology, significantly faster than its predecessor 4G, holds immense potential for smart highways, fleet management, smart parking, and immersive in-car entertainment experiences. A pivotal application of 5G is expediting the implementation of Vehicle-to-Everything (V2X) communication. Through V2X, vehicles can connect with traffic management systems, providing real-time awareness of approaching vehicles even before they become visible to the driver. This technology not only enhances car-to-car communication but also relays up-to-the-minute information about road conditions, traffic flow, and vehicle status. Consequently, congestion can be alleviated, and potential safety incidents averted.

Incorporating Radio-frequency Identification (RFID) technology into vehicles allows traffic infrastructure cameras to identify RFID-enabled vehicles and automatically restrict their top speed to match the road's designated speed limit. This proactive measure minimizes accident risks and contributes to overall road safety.

**How do you manage turnkey engineering projects ensuring delivery of complex production plants bringing together high order of engineering skills with intricate stages of supply chain and capital management?**

Over the years and decades of experience, HG Infra has built a strong in-house team that proficiencies in every stage involved in the lifecycle of a project. The Company has departments dedicated to planning, design, operations and other functions

which smoothen the intricacies involved in a project. Additionally, we have purchased various machines from the world's leading companies like Volvo, Wirtgen, Schwing Stetter and etc. to enhance the operational efficiency & ensure qualitative execution.

**Which are your ongoing projects? Where? The timeline of its completions.**

Currently, the Company has 17 active projects on a PAN India basis which are diversified into 11 states of now viz Andhra Pradesh, Delhi, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Maharashtra, Odisha, Rajasthan, Telangana and Uttar Pradesh.

The timeline of completion of a project depends on the complexity of the project and various factors like geography, alignment, terrain, facilities proposed, lane configuration, number and type of structures. The construction period of current projects ranging from two to three years. However, with strategic planning, our goal is to always complete the project before its scheduled completion date.

**What are your growth plans?**

Our strategy of selective bidding and diversification plans and constant efforts on operational efficiencies, coupled with multiple digital initiatives, helped us to mitigate the presence faced in the past year and continue maintaining our profit margin. We remain confident of the future inflow given the robust bid pipeline and the back of the strong tailwinds with the government's focus on infrastructure spending. Our experience and demonstration on the execution front, combined with the ability to operate and complete projects on time, give us the confidence to maintain growth while going ahead.

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