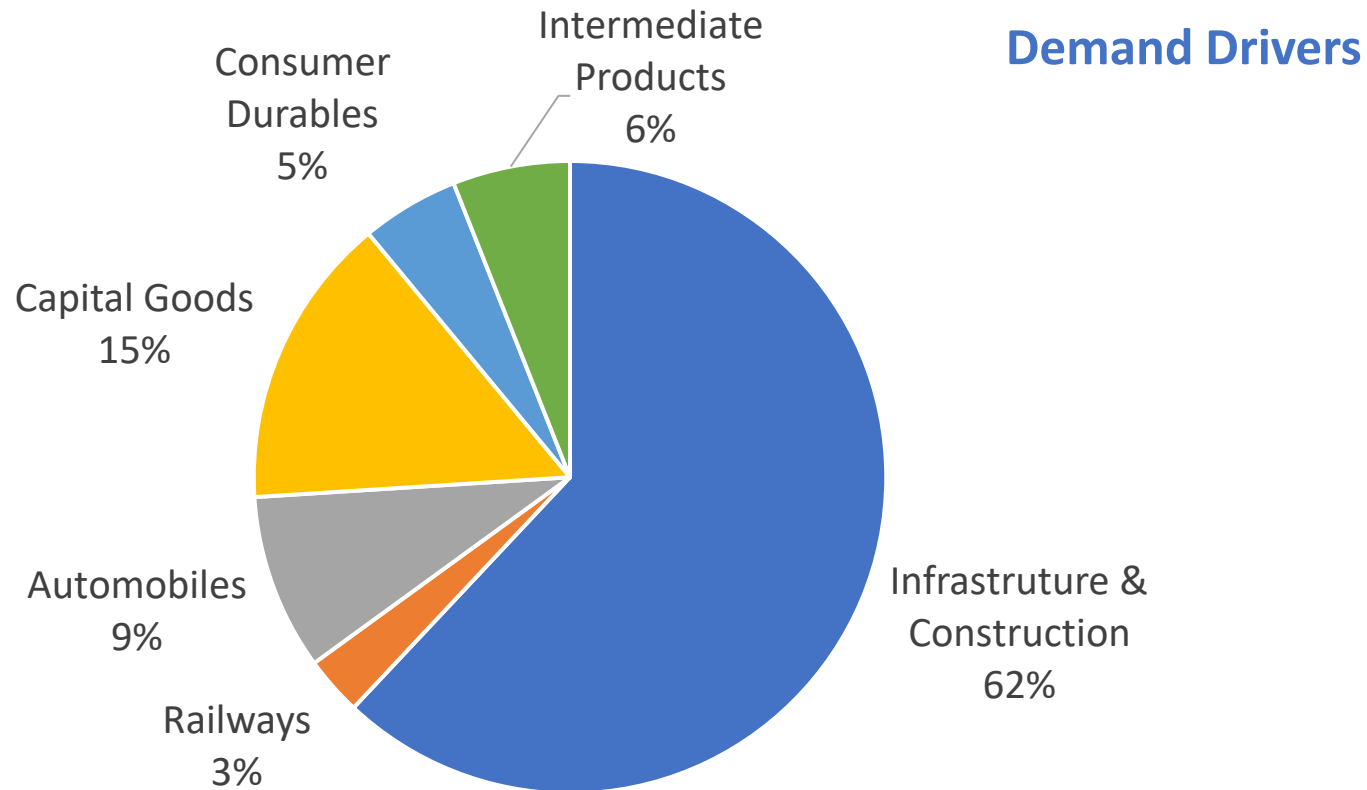


STEEL IN GREEN INFRASTRUCTURE OPPORTUNITIES & CHALLENGES IN INDIA'S TRANSITION

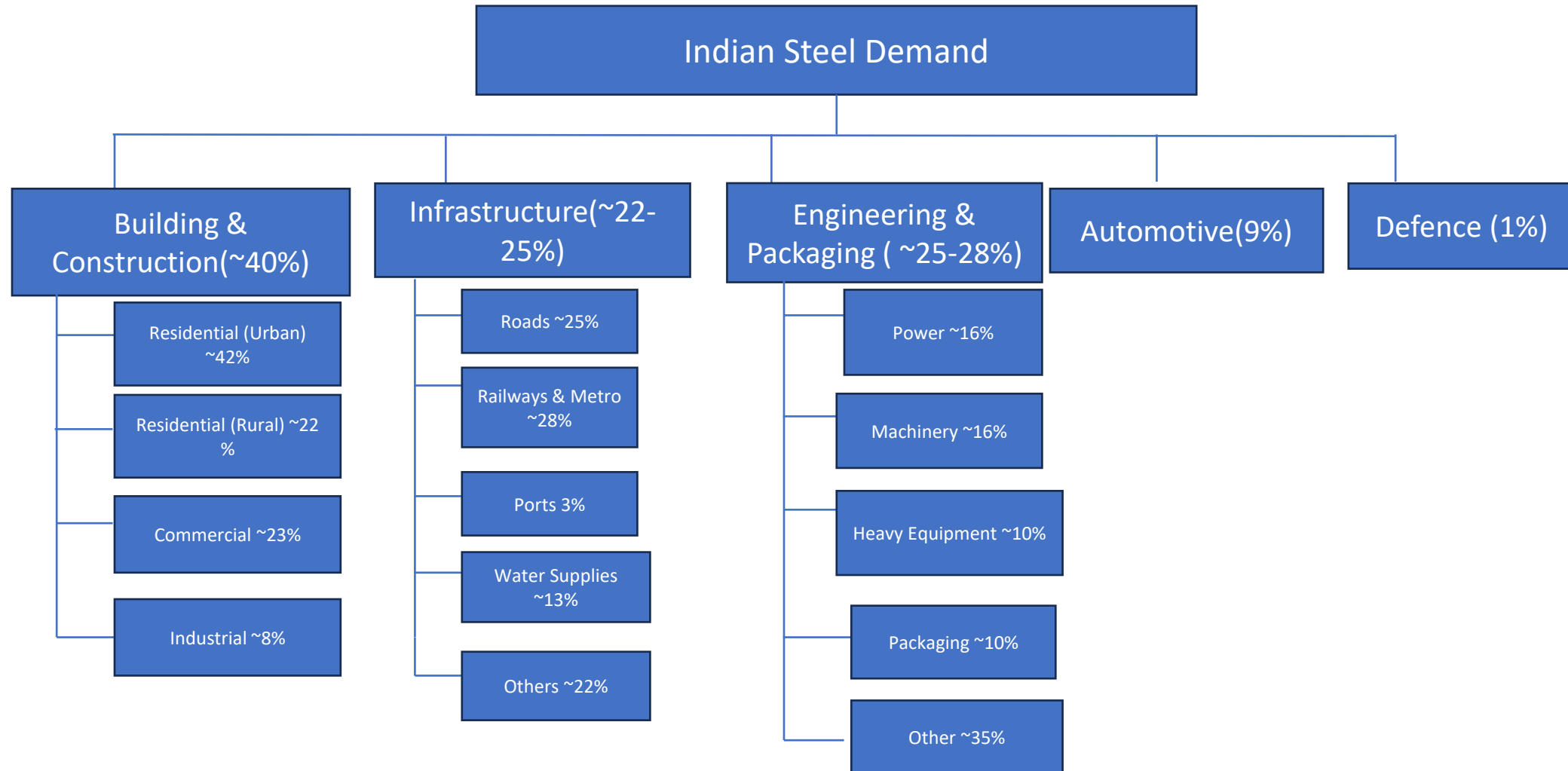


STEEL

- ❑ Construction & Infrastructure on the back of government expenditure are the key drivers for steel growth
- ❑ Real estate and housing schemes will remain robust
- ❑ Road & Rail infra are poised for healthy growth in coming years



STEEL CONSUMPTION IN INDIA- SECTORS & SEGMENTS



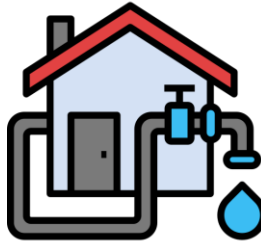
INFRASTRUCTURE VISION 2025



Affordable &
Clean Energy



Convenient & Efficient
Transportation and
Logistics



Housing and Water
Supply for all



Digital Services
Access for all



Quality
Education



Doubling Farmers'
Income



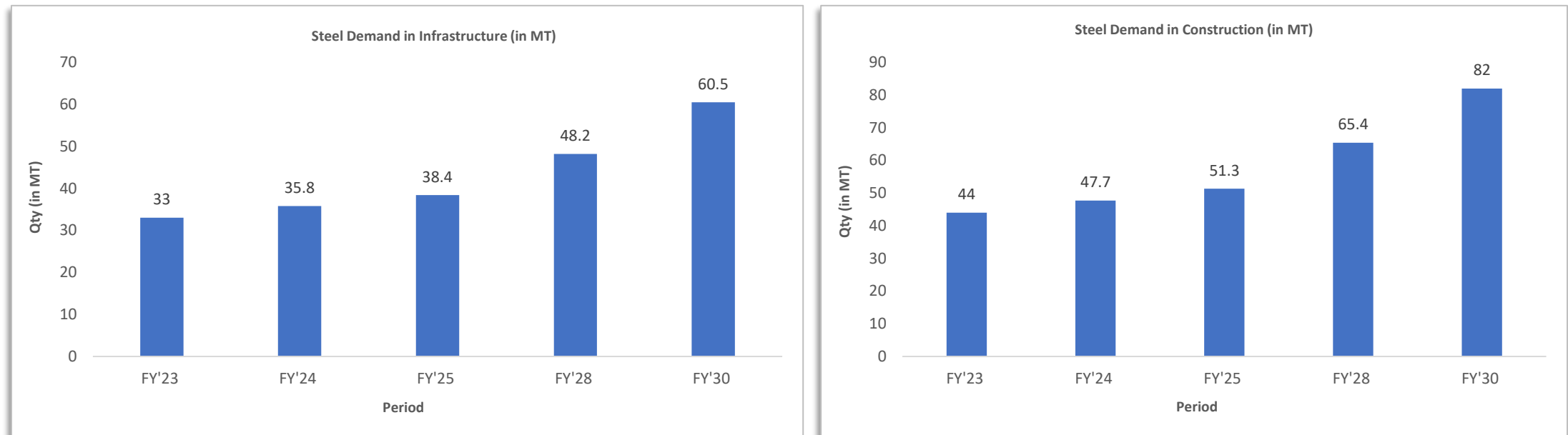
Good Health &
Well-being



Sustainable and
Smart Cities

INFRASTRUCTURE & CONSTRUCTION

Highly responsible for propelling India's overall development and along with boosting steel demand.

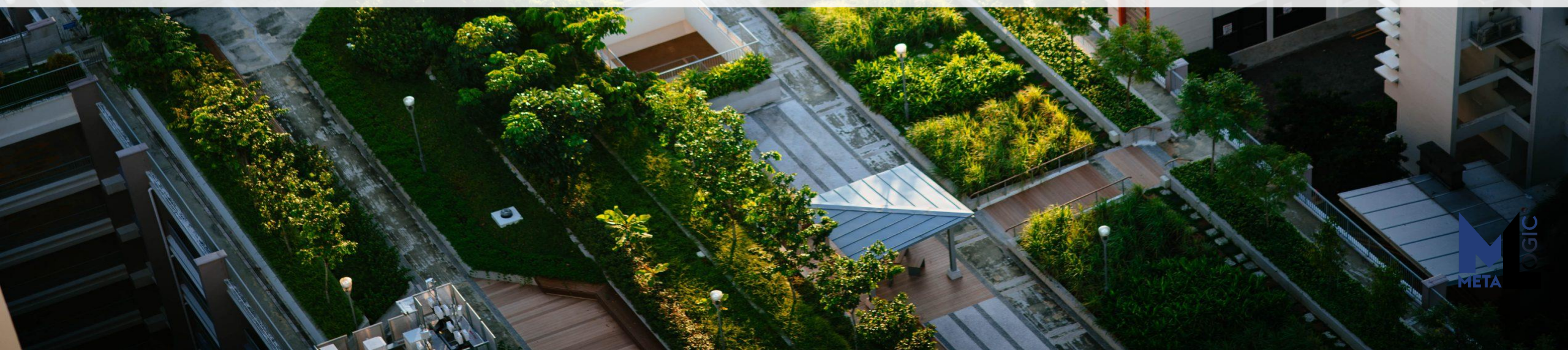


As India continues to urbanize and industrialize, there is a growing need for infrastructure to support economic activities, improve connectivity, and enhance living standards. Thus, the growth in this sector by 2047 will be immense with rapid urbanization.

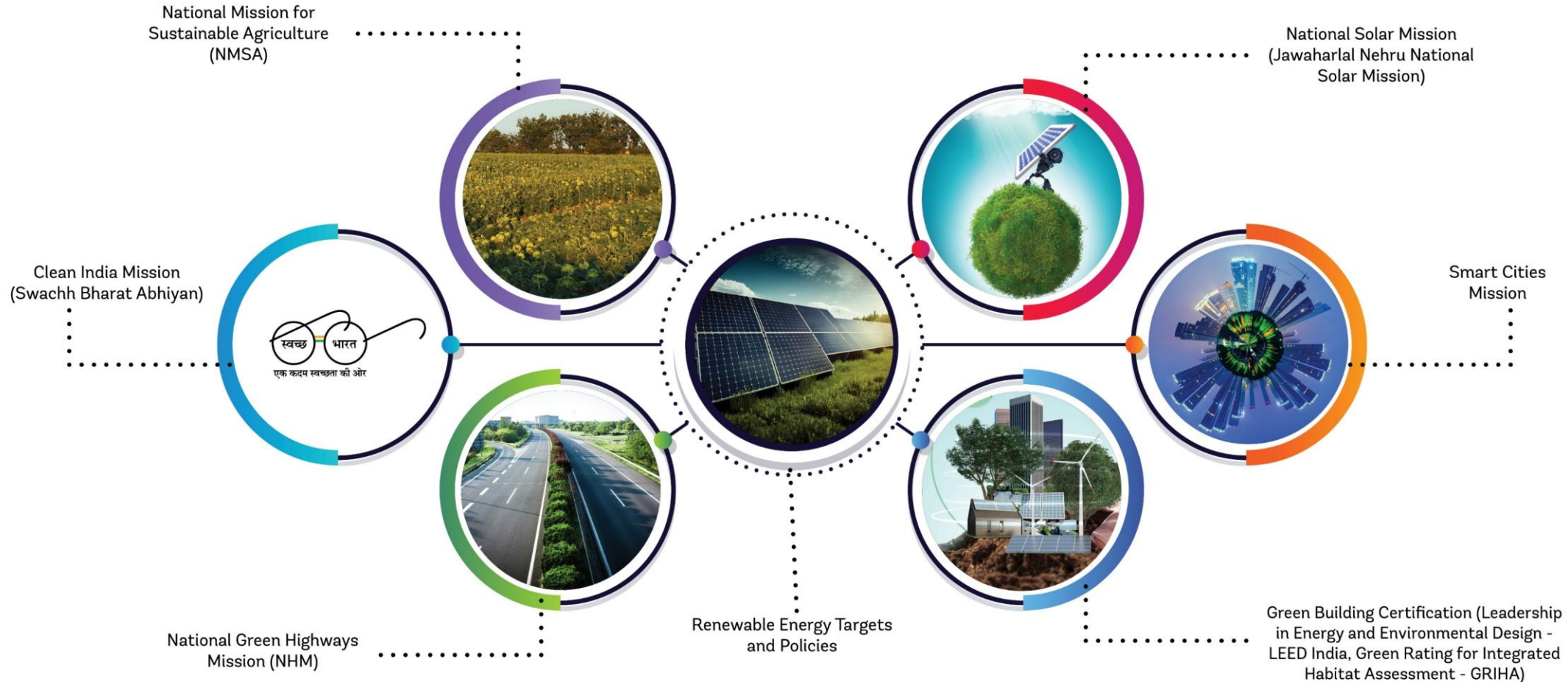
An aerial photograph showing a modern building with a green roof. A pedestrian bridge with a glass railing extends from the building over a parking area. The surrounding area includes a road, trees, and other buildings.

GREEN INFRASTRUCTURE

Green infrastructure refers to the integration of sustainable and environmentally friendly practices. Thus, employing steel in ways that minimize environmental impact, promote resource efficiency, and contribute to the overall sustainability of infrastructure development.



INDIA's STEP TOWARDS GREEN INFRASTRUCTURE



These initiatives, along with other policy measures, incentives, and investments, demonstrate India's commitment to building green infrastructure and transitioning towards a sustainable and resilient future. By promoting renewable energy, sustainable transportation, green buildings, and ecological conservation, India aims to achieve inclusive and environmentally sustainable development while addressing the challenges of climate change and environmental degradation.

CASE STUDIES



SWOT ANALYSIS



INFRASTRUCTURE ADDRESSING WASTE (CIRCULAR ECONOMY) USE OF STEEL SLAG

- By using waste steel slag in road construction, the technology offers an eco-friendly approach to managing industrial waste.
- This reduces the burden on landfills and minimizes the environmental impact associated with steel slag disposal.

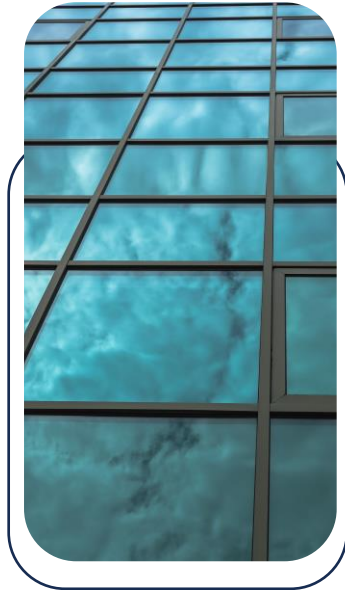


LIFE CYCLE ANALYSIS

COMPETITION FOR STEEL INDUSTRY FROM **SUBSTITUTES MATERIAL**



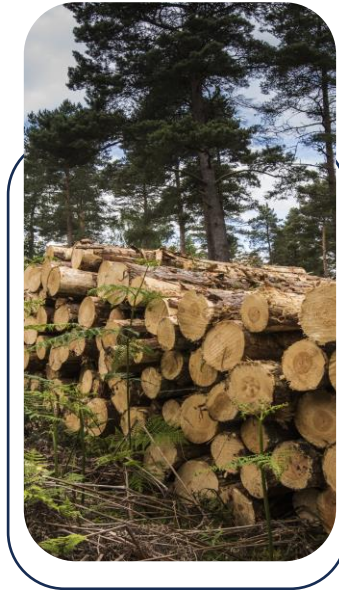
ALUMINIUM



GLASS



CONCRETE



WOOD



PLASTIC

However, the advantage of steel holds its efforts towards DECARBONIZATION, WASTE TO WEALTH and Life cycle cost beholds a lot of potential.

An aerial view of a lush green forest in Sweden, with a road and a bridge visible in the foreground.

SWEDEN

Wildlife Bridges
& Tunnels

A view of the Dubai skyline, featuring the Burj Khalifa and other skyscrapers, with a body of water in the foreground.

DUBAI

Desert
to Green

A large pile of discarded tires, illustrating the process of tyre recycling in South Africa.

S. AFRICA

Tyre Recycling

METALOGIC ANALYSIS & RECOMMENDATIONS



Incentivize infrastructural development that preserves nature and integrates green infrastructure with steel.



Utilize digitalization technologies to determine optimal routes for green infrastructure projects.



Invest in R&D for innovative, sustainable steel materials and construction techniques.



Integrate green infrastructure principles into planning policies and regulatory frameworks.



Amendment in GFR route to accommodate steel infrastructure in the Planning Process.



Enhance academic programs to align with contemporary infrastructural development needs.



Collaborate with global partners and institutions to learn from best practices.



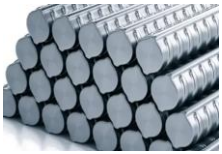
Establish a monitoring and evaluation framework to track the performance of green infrastructure projects.



Engage stakeholders throughout the planning and implementation phases of green infrastructure projects.

METALOGIC SERVICES

Projects Undertaken



Study for MCX on TMT future



Study on Pellets- demand-supply dynamics.



Survey on Steel Centre- to improve efficiency

Undergoing Projects



Long Products to understand for market penetration



Green Steel future for Secondary Sector

- Life Cycle Cost Analysis of Steel
- Identifying the Potential of Special Products

THANK YOU



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