



1

 A photograph of a construction site at sunset. Several workers in hard hats and safety gear are standing in the foreground, looking towards the site. In the background, there are tall cranes and the silhouettes of buildings under construction. The sky is filled with orange and yellow clouds.

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TURBOSTEEL®
LPS TMT Bars

Introduction

Technology Integration in Businesses

TURBOSTEEL® TMT bars represent a new standard in reinforcement steel, engineered for superior strength, ductility, and longevity. Manufactured using the Tempcore® process—a patented, licensed thermo-mechanical treatment developed by CRM Belgium—TURBOSTEEL combines metallurgical precision with the finest raw materials to deliver reinforcement solutions trusted by architects, engineers, and builders alike.

2





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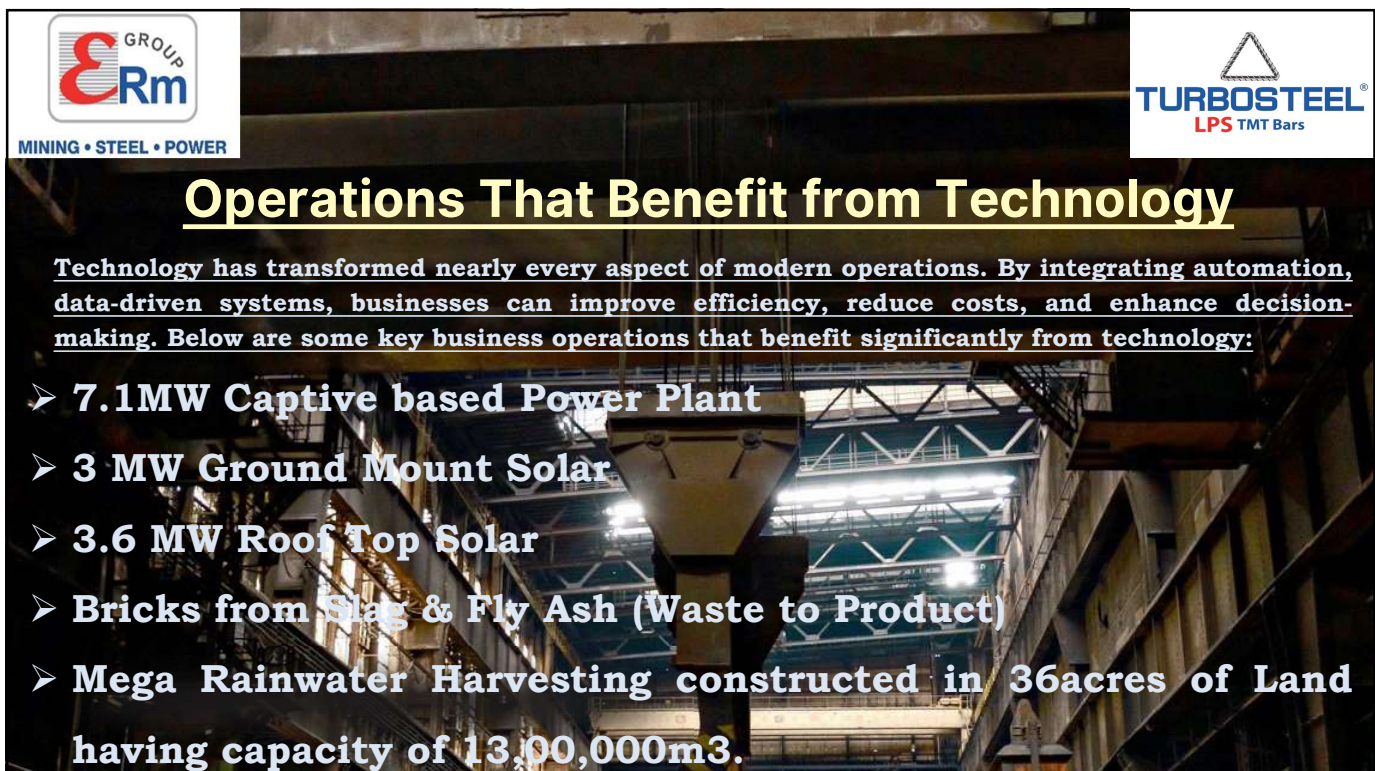
TURBOSTEEL

LPS TMT BARS

TURBOSTEEL has its own specific Quality management process from Iron ore mining to finished steel rolling mill. **TURBO STEEL** Quality control team to continuously monitor the quality in various stages like Mining, DRI division, Steel melting shop, Steel refining and Steel Rolling mill which all belongs to ERM group of companies.

- The detailed quality control checkpoints of **TURBOSTEEL** as follows
- Quality Assurance in Iron Ore Mining division.
- Quality Assurance in Direct Reduced Iron (DRI) division.
- Quality Assurance in Steel Melting Shop (SMS) division.
- Quality Assurance in steel refining through converter and LRF division.
- Quality Assurance in Steel Rolling Mill (SRM) division.

3





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Operations That Benefit from Technology

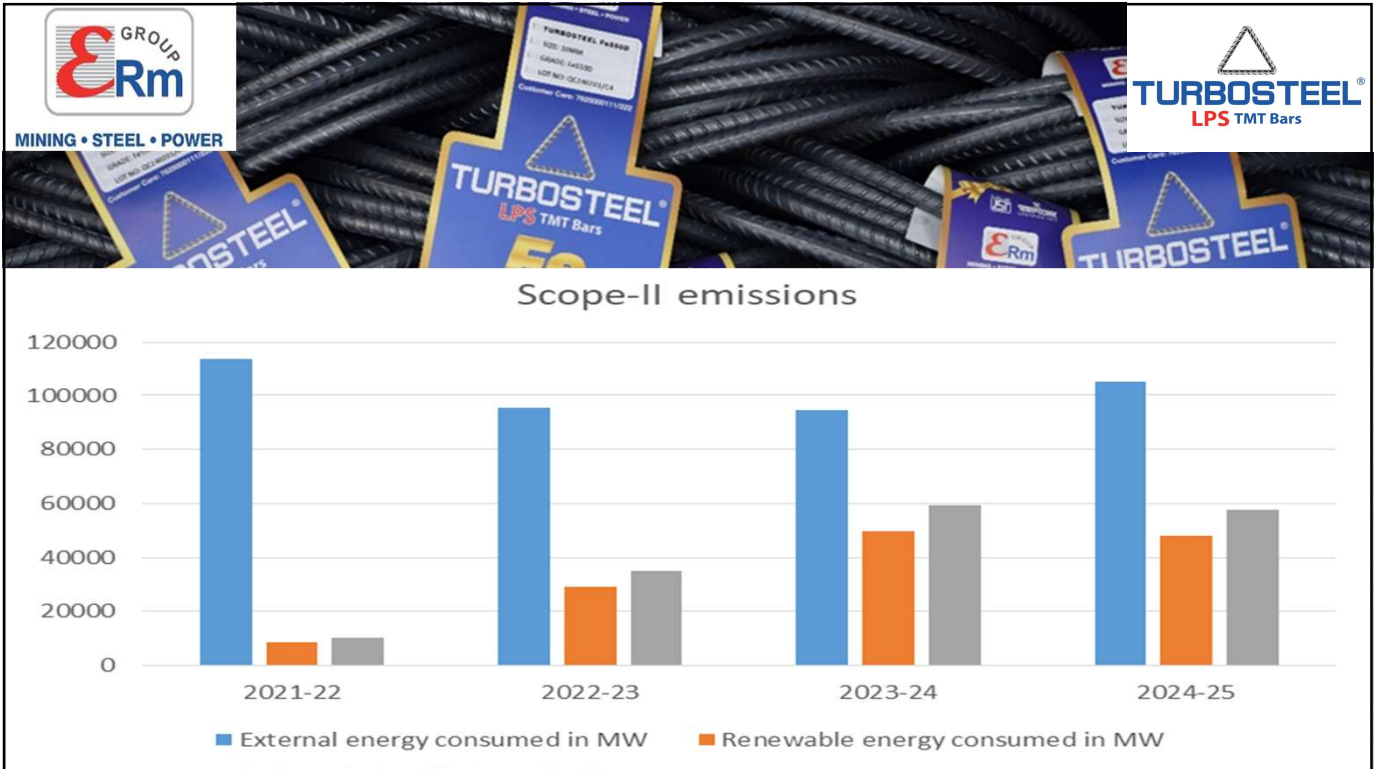
Technology has transformed nearly every aspect of modern operations. By integrating automation, data-driven systems, businesses can improve efficiency, reduce costs, and enhance decision-making. Below are some key business operations that benefit significantly from technology:

- 7.1MW Captive based Power Plant
- 3 MW Ground Mount Solar
- 3.6 MW Roof Top Solar
- Bricks from Slag & Fly Ash (Waste to Product)
- Mega Rainwater Harvesting constructed in 36 acres of Land having capacity of 13,00,000m³.

4



5



6



UNIQUENESS OF THE PROJECT

- Integrated approach combining WHRB, Solar, and Waste-to-Product initiatives.
- First-of-its-kind synergy in steel industry for energy and resource efficiency
- Dual solar model: Ground Mount (3 MW) + Rooftop (3.6 MW)
- Circular economy practice through fly ash brick manufacturing
- Demonstrates replicable model for other industries

7



IMPACT OF THE PROJECTS

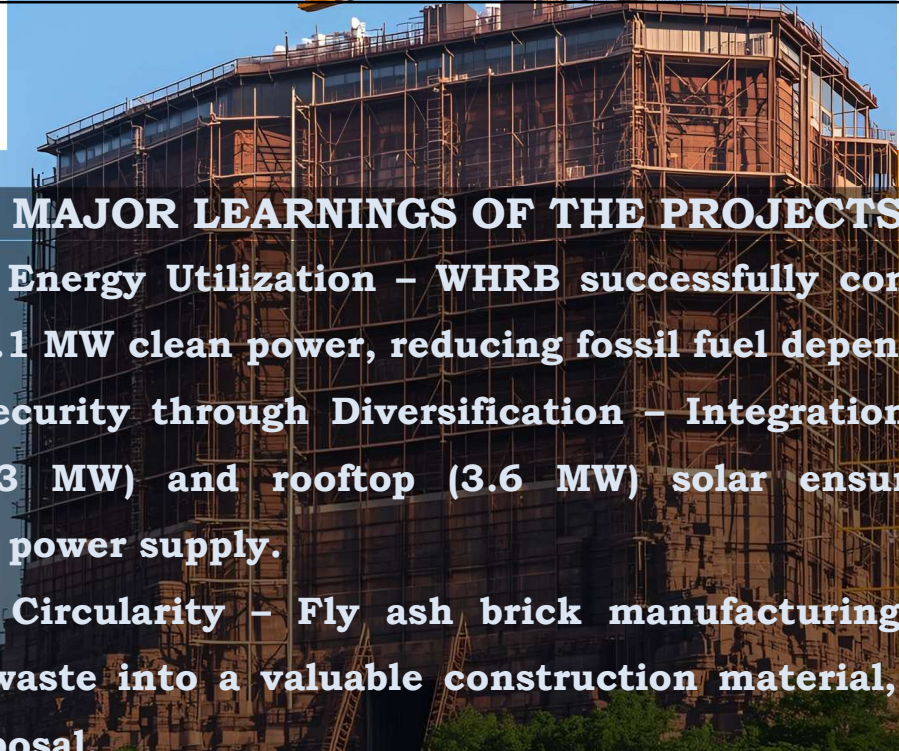
- Reduction in carbon footprint through renewable energy integration
- Utilization of waste heat to generate 7.1 MW clean power
- Conservation of natural resources by manufacturing fly ash bricks
- Total 6.6 MW solar capacity reduces grid dependency
- Contribution towards sustainable industrial growth

8



1.	1MW WHRB	Fly ash Bricks	Solar (Ground Mount & Roof Top)
2.	Energy Savings	High Strength and Durability	Permanent altering source
3.	Cost reduction	Low carbon footprint	Equivalent to 60,000 tree plantation
4.	Carbon emission reduction up-to 70,000 tons/year	Carbon emission reduction up-to 4,00,000Kg/ year	Carbon emission reduction up to 10,000 tons/year Carbon emission reduction up to 10,000 tons/year
5.	Energy independence	Reduces Environmental impact	

9





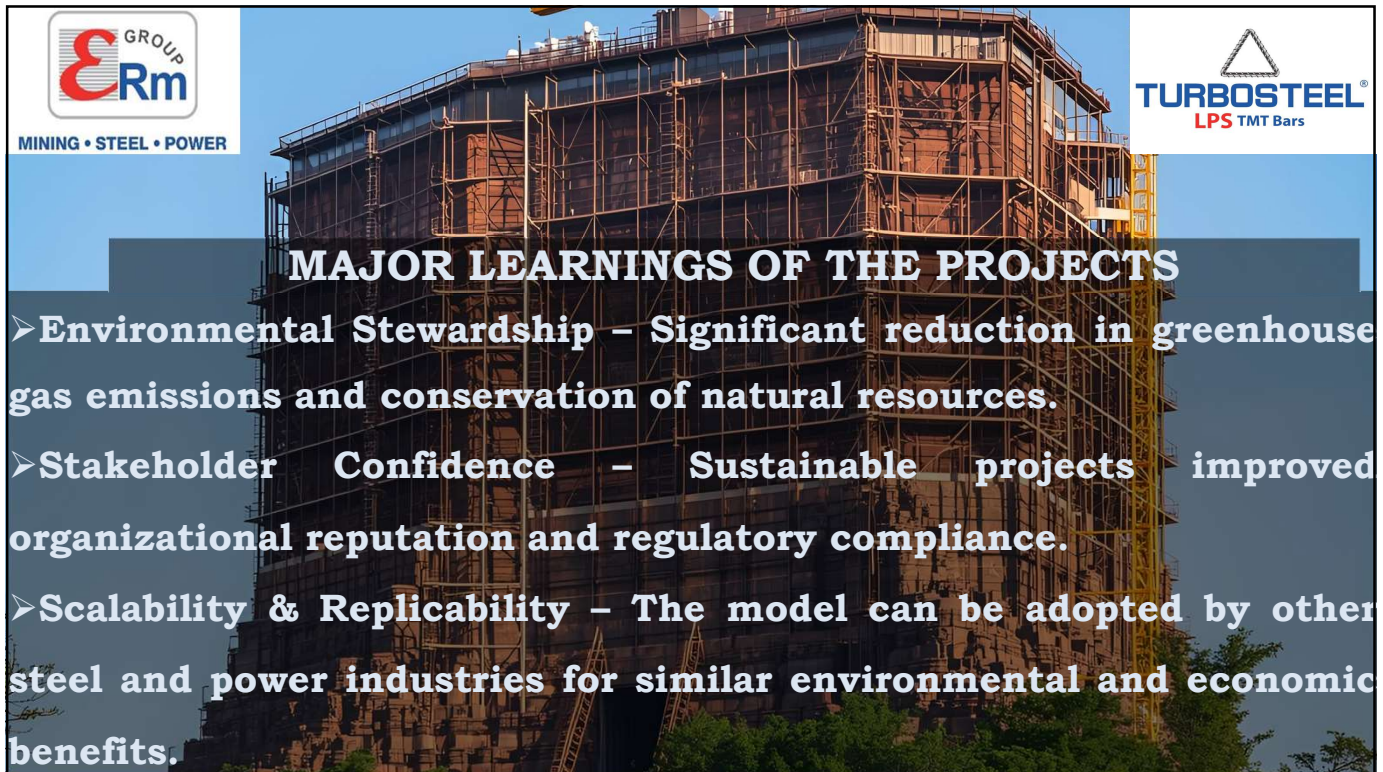
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MAJOR LEARNINGS OF THE PROJECTS

- **Efficient Energy Utilization** – WHRB successfully converts waste heat into 7.1 MW clean power, reducing fossil fuel dependency.
- **Energy Security through Diversification** – Integration of ground-mounted (3 MW) and rooftop (3.6 MW) solar ensures reliable, continuous power supply.
- **Resource Circularity** – Fly ash brick manufacturing transforms industrial waste into a valuable construction material, minimizing landfill disposal.

10



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MAJOR LEARNINGS OF THE PROJECTS

- **Environmental Stewardship** – Significant reduction in greenhouse gas emissions and conservation of natural resources.
- **Stakeholder Confidence** – Sustainable projects improved organizational reputation and regulatory compliance.
- **Scalability & Replicability** – The model can be adopted by other steel and power industries for similar environmental and economic benefits.

11



12