



**PHD CHAMBER**  
OF COMMERCE AND INDUSTRY  
VOICE OF INDUSTRY AND TRADE



# CONCLAVE ON GREEN STEEL: INDIA'S JOURNEY TOWARDS LOW CARBON STEEL PRODUCTION



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PHD CHAMBER OF COMMERCE AND INDUSTRY



# BACKGROUND

India is currently the second largest steel producer in the world. India has become one of the major steel hubs in the world for both the **production and consumption of steel**. With emerging opportunities within India and globally, the Indian steel sector is expected to exponentially and reach new heights. **India plans to more than double production targets to 300 million tons by 2030 and nearly fivefold to 500 million tons by 2047**



The growth in the Indian steel sector has been driven by the domestic availability of raw materials such as iron ore and cost-effective labour. Consequently, the steel sector has been a major contributor to India's manufacturing output.



## DECARBONISING THE STEEL INDUSTRY

Steel is one of the core pillars of today's society and as one of the most important engineering and construction materials; it is present in many aspects of our lives. Currently the steel industry is among the three biggest producers of carbon dioxide. Consequently, steel players across the globe are increasingly facing a decarbonization challenge to reduce its carbon footprint from both environmental and economic perspectives.

## Decarbonisation in Steel Industry could be achieved in the following ways -

- Use of Carbon Capture, Utilization and Storage
  - Use of Syngas
  - Use of Green Hydrogen
- Use of Solar Power/RE sources
- Through Adopting Energy Efficiency Measures
  - Through Recycling Steel Scrap



# GREEN STEEL

Green Steel is **the manufacturing of steel without the use of fossil fuels**. This can be done by using low-carbon energy sources such as hydrogen, coal gasification, or electricity instead of the traditional carbon-intensive manufacturing route of coal-fired plants.

It helps in Decarbonizing the steel industry by encouraging enhanced use of renewable sources of energy, application of resource-efficient materials, further expansion of scrap usage, possible use of green hydrogen as a furnace fuel in the future and exploration of carbon capture utilization and storage.

## A FOUR-FOLD ADVANTAGE

The advantages of green steel manufacturing are fourfold:

- Reduced dependence on coal imports, a growing concern that is compounded with the increase in coking coal prices.
- Supporting national goals to move towards hydrogen and clean energy
- Highlighting their environment, social and governance principles by taking into consideration even Scope 3 emissions.
- Providing Indian steel manufacturers the opportunity to expand to global markets and share their knowhow.

Being the largest exporter of carbon credits, the transformation of the country's steel market by leveraging the power of clean sources will scale up the country's position in the energy value chain. The combined power of renewable, hydrogen and gas as a viable pathway to a cleaner future – and a greener industry – is real and an opportunity to be seized.

## BENEFITS AND OPPORTUNITIES:

- **Achieving a net-zero steel sector in India would contribute significantly to global climate mitigation efforts and enhance the country's reputation as a leader in sustainable industrial practices.**
- **The transition to green steel presents economic opportunities, including job creation, technological innovation, and enhanced competitiveness in international markets.**
- **Improved air quality and public health outcomes in steel-producing regions, resulting from reduced emissions of air pollutants associated with traditional steelmaking processes.**

### WHO SHOULD ATTEND?

- Government Representatives
- Industry Leaders and Stakeholders
- Research and Academic Institutions
- Non-Governmental Organizations (NGOs) and Civil Society
- International Partners and Agencies
- Technology and Innovation Experts
- Financial Institutions and Investors
- Media and Communication Professionals

### KEY TOPICS/THEMES

- Technological Innovations for Green Steel Production
- Policy Framework and Regulatory Landscape
- Collaboration and Partnerships
- Investment and Financing Opportunities
- Market Demand and Consumer Awareness
- Skill Development and Workforce Training
- Case Studies and Best Practices
- Roadmap to Net Zero Steel Sector



## Glimpses of Previous Programmes



### ABOUT US PHDCCI

PHD Chamber of Commerce and Industry (PHDCCI) have been working as a catalyst for the promotion of Indian industry, trade and entrepreneurship for the past 119 years. It is a forward looking, proactive and dynamic PAN-India apex organization. As a partner in progress with industry and government, PHDCCI works at the grass roots level with strong national and international linkages for propelling progress, harmony and integrated development of the Indian economy.

PHDCCI, acting as the “Voice of Industry & Trade” with a large membership base of 1, 50,000 direct & indirect members consisting of large, medium and small industries, has forged ahead leverages its legacy with the industry knowledge across multiple sectors to take Indian Economy to the next level. At the global level, we have been working with the Embassies and High Commissions in India to bring in the International Best Practices and Business Opportunities.

**STALL CHARGES – 4 SQ MT @ RS 40,000 + GST**  
**Participation Fee – Nil**

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