

# **Global Green Steel Market Size study & Forecast, by Energy Source (Hydrogen, Coal Gasification, Electricity), by Type (Electric Arc Furnace (EAF), Molten Oxide Electrolysis (MOE)), by End-User (Construction, Automotive, Electronics, Others) and Regional Analysis, 2022-2029**

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## **Abstracts**

Global Green Steel Market is valued at approximately USD 0.0834 billion in 2021 and is anticipated to grow with an impressive growth rate of more than 131.8% over the forecast period 2022-2029. Green Steel refers to the production of steel using non-fossil-based energy sources. In Green Steel production low carbon sources such as hydrogen, and coal gasification among others are used in place of fossil fuels. In case of Hydrogen, if burned, hydrogen emits only water. Moreover, hydrogen is produced via electrolysis using water and renewable energy-based electricity, and it is free of CO<sub>2</sub> emissions. The increasing demand for sustainable construction materials and growing investment in green production of steel are key factors accelerating the market growth.

The increasing adoption of sustainable construction materials due to rise in global carbon emissions is contributing towards the growth of the Global Green Steel Market. For instance, according to Statista – in 2019, the global market for sustainable construction materials was valued at USD 10.44 million tons and the market is projected to grow to USD 23.4 million tons by 2026. Moreover, the growing investment in green steel production is another factor driving the market space. For instance, in January 2022 India based Adani Group and South Korean Steel company Posco jointly announced an investment of USD 5 billion to set up a green, environment-friendly integrated steel plant at Mundra, Gujarat, India. Additionally, in September 2022, India based JSW Steel Group collaborated with Germany's SMS group to invest USD 1.26

billion to reduce carbon emissions at its plants. Under this collaboration, SMS group would offer its technology experts, design, engineering consultancy and commissioning to execute various projects for decarbonization across the Plants of JSW Group. Also, increase in government investment and collaboration between market players and growing carbon emissions from steel industries would create a lucrative growth prospectus for the market over the forecast period. However, high production cost associated with Green Steel and infrastructural constraints stifle market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Green Steel Market study include Asia Pacific, North America, Europe, Latin America, and Rest of the World. Europe dominated the market in terms of revenue, owing to the increasing investment from leading market players and favorable initiatives from government authorities to promote low carbon emissions in steel production. Whereas Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as rising demand for sustainable building & construction materials and increasing number of collaborations between leading market players in the region.

Major market players included in this report are:

H2 Green Steel

Tata Steel Ltd.

Tenaris S.A.

ThyssenKrupp AG

Emirates Steel Arkan

Green Steel Group

Deutsche Edelstahlwerke Services

Arcelor Mittal S.A.

Jindal Steel and Power

United States Steel Corp (USSC)

Recent Developments in the Market:

In October 2022, H2 Green Steel received conditional commitment letters for USD 3.44 billion in senior debt with AB Svensk Exportkredit (SEK) and other European commercial banks including BNP Paribas, ING, UniCredit, Societe Generale and KfW IPEX-Bank.

In July 2022, Zurich, Switzerland based Hitachi Energy signed a Memorandum of Understanding (MoU) with Sweden based H2 Green Steel to leverage electrification, digitalization, and hydrogen to facilitate the decarbonization of the steel industry.

Global Green Steel Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered Energy Source, Type, End-User, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World

Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Energy Source

Hydrogen

Coal Gasification

Electricity

By Type

Electric Arc Furnace (EAF)

Molten Oxide Electrolysis (MOE)

By End-User

Construction

Automotive

Electronics

Others

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

RoLA

Rest of the World

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