

## **Europe, US & China Electrolyser Market Forecast to 2030**

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### **Report description:**

Europe, US & China Electrolyser Market Forecast to 2030

#### Market Snapshot

The electrolyser market is projected to grow at a compound annual growth rate (CAGR) of 20.15% in Europe, the US, and China between 2023 and 2030. An electrolyser is a device that breaks down liquids into their component parts by electrolyzing water or other liquids using electricity. A material undergoes a chemical process called electrolysis when an electric current flows through it, breaking it down into its constituent parts. Water electrolysis is the process of splitting water molecules into hydrogen and oxygen gases using an electric current in an electrolyzer. Compressed or liquefied gas can be used to store hydrogen. Either the produced oxygen is returned to the atmosphere, or it is caught and stored to fuel more industrial activities.

The companies' noteworthy revenue increase at this time can be attributed to the rapidly expanding demand for hydrogen fuel cells in the modern automotive sector. One of the main forces behind market expansion is the usage of clean energy, which has been popular recently and is predicted to continue growing.

Over the coming years, the market will experience a considerable return because of the growing desire for better, longer-range electric vehicles. The key market players' aggressive cooperation from the government in incorporating clean energy into society has greatly improved the economy of the electrolyzer industry.

#### Market Segment Analysis

The solid oxide electrolyzer, anion exchange membrane (AEM), alkaline electrolyzer, and proton exchange membrane (PEM) electrolyzer are the four product groups into which the electrolyzer markets in Europe, the US, and China have been divided. Stacks, bipolar plates, and other components are among the classifications used to categorize the electrolyzer market in China, the US, and Europe.

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The following categories are included in the end-use segmentation of the electrolyzer markets in China, Europe, and the United States: Food & Beverages, Pharma & Biotech, Chemical/Refining Industry, Electronics, Energy, Transport, and Metal Production & Fabrication.

#### Analysis by region

China held the largest market share in 2022 because of the region's abundant raw material supply, rapid industrialization, and growing commercialization, especially with the growth of the consumer goods and automotive industries. The huge technological expenditures made by manufacturers in China, the US, and Europe to produce fuel cell electric vehicles are predicted to propel the hydrogen fuel cell sector. It is anticipated that most major automakers would offer fuel cell electric vehicles locally by 2023, proving the practicality of this technology. Fuel cell electric vehicles, or FCEVs, are being developed by a number of automakers, including Hyundai, Toyota, Honda, Daimler, and BMW. Because these fuel cells produce heat and water vapor, they are a completely emission-free locomotive technology. Opportunities for hydrogen fuel cells and producers have been made possible by this.

#### Important Players

Prominent companies in the electrolyser industry include Siemens, H-Tec Systems GmbH, Enapter, Hystar, Plug Power Inc, Cummins Inc, Dana Limited, Elringklinger Ag, and Others.

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