

Hydrogen Electrolyzer Market Size Worth USD 1481.9 Million by 2028 | CAGR: 25.1%

Hydrogen Electrolyzer Market: Global & Regional Outlook, Forecast, 2022-2028. The Hydrogen Electrolyzer Market is segmented into type, application, region

BANGALORE, INDIA, February 1, 2022 /EINPresswire.com/ -- The global [Hydrogen Electrolyzer market](#) size is estimated to be worth US\$ 387.5 million in 2022 and is forecast to a readjusted size of US\$ 1481.9 million by 2028 with a CAGR of 25.1% during the review period. Fully considering the economic change by this health crisis, Traditional Alkaline Electrolyser accounting for % of the Hydrogen Electrolyzer global market in 2021, is projected to value US\$ million by 2028, growing at a revised % CAGR in the post-COVID-19 period. While the Power Plants segment is altered to an % CAGR throughout this forecast period.



Electrolysis is a promising option for hydrogen production from renewable resources. Electrolysis is the process of using electricity to split water into hydrogen and oxygen. This reaction takes place in a unit called electrolyze. Electrolyzes can range in size from small, appliance-size equipment that is well-suited for small-scale distributed hydrogen production to large-scale, central production facilities that could be tied directly to renewable or other non-greenhouse-gas-emitting forms of electricity production.

Global key hydrogen electrolyzer core manufacturers 718th Research Institute of CSIC, Suzhou Jingli, Proton On-Site, etc. The top 4 companies hold a share of about 50%. Asia-Pacific is the largest market, with a share of about 58%, followed by Europe and North America with a share of about 26% and 10%. In terms of product, traditional alkaline electrolyser is the largest segment, with a share over 70%. And in terms of application, the largest application is power plants, followed by industrial gases and electronics and photovoltaics.

Nowadays, 96% of the global hydrogen produced comes from the use of fossil fuels (i.e., natural gas, oil); whereas production from water electrolysis represents only 4%. Indeed, the cost of hydrogen production by using fossil fuels is smaller than water electrolysis given that current electrolyzers are quite expensive and the cost of electricity as well. However, hydrogen production based on fossil fuels, namely gray hydrogen, suffers from lower purity and higher generation of greenhouse gases. To face the intensive use and depletion of fossil fuels to respond to hydrogen demands, water electrolysis supplied by renewable energy sources (e.g., wind turbine, photovoltaic) is considered an attractive and promising alternative. Renewable energy sources combined with water electrolysis come within the scope of the development of environmentally friendly hydrogen production pathways to substitute current hydrogen production based on pollutant fuels. Water electrolysis can produce hydrogen at high gas purity but features high cost (electrolyzer, electricity) and lower energy efficiency due to high specific energy consumption. For this reason, energy efficiency, cost of electricity, and water electrolysis systems remain major concerns to the development of the water electrolysis process at a large scale. The water electrolysis process consists of using electricity coming from the power grid or renewable energy sources to split pure water into hydrogen and oxygen.

In 2020, due to COVID-19, global market demand has shown a slight decline, which makes us particularly cautious in forecasting the growth rate in 2021. In fact, the actual growth rate in 2021 has exceeded our expectations, especially the market growth rate in China. As China's capital market highly favors the hydrogen energy industry, coupled with the Chinese government's support for the hydrogen energy industry, this has led to rapid growth of China's hydrogen energy industry. For example, Suzhou Jingli's shipments have doubled, and they are all large-scale water electrolyzers of the 1-5 MW class. In general, due to a large number of photovoltaic hydrogen production projects in China in 2021, large amounts of investment and announcements in clean hydrogen production projects and P2G projects, global shipments of water electrolyzers will skyrocket in 2021. At the same time, in 2021, a large number of countries and regions have announced investment plans for the hydrogen energy industry, and we have further adjusted the forecast data.

If we go back to five years ago, MW-level projects are already very large, but now MW-level projects have become common. Technically speaking, super-large alkaline electrolyzers of 10MW-20 MW have appeared, and 5MW-10MW will also become possible. In the future, with the further growth of large-scale projects, it is expected that the price of water electrolyzers will become higher and higher. In addition, due to the increasing market potential of water electrolyzers and the favor of capital, many players such as Longi and Sungrow Power Supply and other Chinese companies have announced their entry into this market. From 2019 to 2021, at least a dozen companies have directly or indirectly entered this industry.

1P445/Hydrogen Electrolyzer Market

The research report has incorporated the analysis of different factors that augment the market's growth. It constitutes trends, restraints, and drivers that transform the market in either a positive or negative manner. This section also provides the scope of different segments and applications that can potentially influence the market in the future. The detailed information is based on current trends and historic milestones. This section also provides an analysis of the volume of production about the global market and about each type from 2017 to 2028. This section mentions the volume of production by region from 2017 to 2028. Pricing analysis is included in the report according to each type from the year 2017 to 2028, manufacturer from 2017 to 2022, region from 2017 to 2022, and global price from 2017 to 2028.

□□□□□□□□ □□□□□□□□□□□□ □□□□□□ □□ □□□□

□Traditional Alkaline Electroliser

□PEM Electroliser

□□□□□□□□ □□□□□□□□□□□□ □□□□□□ □□ □□□□□□□□□□□□

□Power Plants

□Steel Plant

□Electronics and Photovoltaics

□Industrial Gases

□Energy Storage or Fueling for FCEV's

□Power to Gas

□Others

□□□□□□□□□□ □□ □□□□□□

□North America

□Europe

□China

□Japan

□South Korea

□□□□ □□ □□□ □□□□□□ □□□□□□□□

□Suzhou Jingli

□Proton On-Site

□Cummins

□Siemens

□Teledyne Energy Systems

□EM Solution

□McPhy

□Nel Hydrogen

□Toshiba

□TianJin Mainland

□Yangzhou Chungdean Hydrogen Equipment

□Elogen

□Erredue SpA

□Kobelco Eco-Solutions

□ITM Power

□Idroenergy Spa

□ShaanXi HuaQin

□Beijing Zhongdian

□Elchemtech

□H2B2

□Verde LLC

□□□□□□ □□□□□□:

Electrolyzer Market: <https://reports.valuates.com/market-reports/ALLI-Manu-4|42/electrolyzer>

Porous Electrodes for Electrolyzer Market: <https://reports.valuates.com/market-reports/ALLI-Manu-0P57/porous-electrodes-for-electrolyzer>

Hydrogen and Fuel Cells Market: <https://reports.valuates.com/market-reports/QYRE-Auto-13M206/global-hydrogen-and-fuel-cells>

Hydrogen Generation Market: <https://reports.valuates.com/market-reports/QYRE-Auto-2P892/global-hydrogen-generation>

Hydrogen Fuel Cells Market: <https://reports.valuates.com/market-reports/QYRE-Auto-26E44/global-hydrogen-fuel-cells>

Solid Oxide Fuel Cell (SOFC) Market: <https://reports.valuates.com/market-reports/QYRE-Auto-10131/global-solid-oxide-fuel-cell-sofc>

Stationary Fuel Cell Market: <https://reports.valuates.com/market-reports/QYRE-Auto-9Q365/global-stationary-fuel-cell>

Automotive Fuel Cells Market: <https://reports.valuates.com/market-reports/QYRE-Auto-N298/global-automotive-fuel-cells>

Fuel Cell Market: <https://reports.valuates.com/market-reports/QYRE-Auto-24V110/global-fuel-cell>

Bipolar Plates for PEM Fuel Cells Market: <https://reports.valuates.com/market-reports/QYRE-Auto-27N6441/global-bipolar-plates-for-pem-fuel-cells>

Valuates Sales
Valuates Reports
+1 425-388-2538
[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/561930950>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2022 IPD Group, Inc. All Right Reserved.