

Global Hydroelectric Cells Market Size Study & Forecast, by Metal Oxide (Tin (IV) Oxide (SnO₂), Aluminium Oxide (Al₂O₃), Zinc Oxide (ZnO), Titanium Dioxide (TiO₂), Magnesium Oxide (MgO), Silicon Dioxide (SiO₂)), By Application (Portable Battery, Stationary Battery, Automotive Battery, Other Applications), and Regional Analysis, 2023-2030

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Abstracts

Global Hydroelectric Cells Market is valued at approximately USD 1.69 billion in 2022 and is anticipated to grow with a healthy growth rate of more than 7.4% over the forecast period 2023-2030. Hydroelectric cells (HEC) are a significant source of green energy that produces electricity by splitting water molecules into hydronium and hydroxide ions at ambient temperature. These cells replace hazardous chemicals that compromise consumer safety and are harmful to the environment with readily available water as the source of energy. The Hydroelectric Cells Market is expanding because of factors such as the rise in the need for low-cost energy generation, surging demand for electricity in rural areas, and surging number of government policies that support renewable energy.

Additionally, increased funding for renewable energy sources has had a considerable positive impact on the hydropower cells market. Renewable energy is produced from naturally replenishing resources like the sun and wind. Due to its many advantages, a significant number of power production businesses are investing extensively in renewable energy sources for power generation, particularly in the United States and Europe. For instance, according to the 2021 report from the IEA (a France-based international energy agency), renewable energy is predicted to draw 70% of all energy investment globally in 2021, with the majority of investment going to the power and end-

use sectors, shifting away from conventional fossil fuel production. Therefore, increased expenditures on renewable energy sources are anticipated to fuel the hydroelectric cells market at a considerable rate. Moreover, the increasing technological advancements, as well as the growing number of strategic initiatives by the key market players present various lucrative opportunities over the forecasting years. However, the high cost associated with the hydroelectric cells and the lack of awareness are challenging the market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Hydroelectric Cells Market study include Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the growing awareness about the benefits of renewable energy, along with the rising investment significantly in comprehensive research and development activities. Whereas, Asia Pacific is expected to grow at the highest CAGR over the forecasting years. The rising number of government policies, rise in demand for hydroelectric cells, and rise in the need for low-cost energy generation are significantly propelling the market demand across the region.

Major market players included in this report are:

GE Renewable Energy
CPFL Energia
Sinohydro Corporation
Andritz AG
IHI Corporation
ABB Ltd
Tata Power
Voith Group
Siemens Energy AG
Duke Energy Corporation

Recent Developments in the Market:

In October 2021, Adani Green Energy Ltd. (AGEL), an Indian firm that specializes in renewable energy announced the acquisition of SB Energy Holdings Ltd for USD 3.5 billion. SB Energy India has joined AGEL as a wholly-owned subsidiary as a result of this transaction. Additionally, AGEL's intention to quicken India's transition to a sustainable energy future is demonstrated by the superior large utility-scale assets from SB Energy India. Hydroelectric cells are used by US-based SB Energy to provide clean, green energy.

Global Hydroelectric Cells Market Report Scope:

Global Hydroelectric Cells Market Size Study & Forecast, by Metal Oxide (Tin (IV) Oxide (SnO₂), Aluminium Oxid...

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

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

Segments Covered - Metal Oxide, Application, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

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 Metal Oxide:

Tin (IV) Oxide (SnO₂)

Aluminium Oxide (Al₂O₃)

Zinc Oxide (ZnO)

Titanium Dioxide (TiO₂)

Magnesium Oxide (MgO)

Silicon Dioxide (SiO₂)

By Application:

Portable Battery

Stationary Battery

Automotive Battery

Other Applications

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

Middle East & Africa
Saudi Arabia
South Africa
Rest of Middle East & Africa

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