

# Global SOEC Supply, Demand and Key Producers, 2023-2029

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## Abstracts

The global SOEC market size is expected to reach \$ 931.4 million by 2029, rising at a market growth of 59.8% CAGR during the forecast period (2023-2029).

The key manufacturers of solid oxide electrolyzer (SOEC) include Sunfire GmbH, Topsoe, OxEon Energy, Ceres, Elcogen, FuelCell Energy, Egen Energy, etc. Sunfire GmbH is the world's largest manufacturer with a market share of about 50%.

Europe is the biggest market, accounting for about 52%. It is followed by North America, with about 24%. The market share in Europe and China is expected to increase further.

SOEC is mainly divided into Oxygen Ion Conducting and Proton Conducting. Oxygen Ion Conducting has a dominant market share of about 95%.

SOEC is mainly used in chemicals and refineries, power plants, steel plants and other factories. It is most widely used in chemical and refineries, accounting for about 50% of all downstream industries.

A solid oxide electrolyzer cell (SOEC) is a solid oxide fuel cell that runs in regenerative mode to achieve the electrolysis of water (and/or carbon dioxide) by using a solid oxide, or ceramic, electrolyte to produce hydrogen gas (and/or carbon monoxide) and oxygen. The production of pure hydrogen is compelling because it is a clean fuel that can be stored, making it a potential alternative to batteries, methane, and other energy sources (see hydrogen economy). Electrolysis is currently the most promising method of hydrogen production from water due to high efficiency of conversion and relatively low required energy input when compared to thermochemical and photocatalytic methods.

This report studies the global SOEC demand, key companies, and key regions.

This report is a detailed and comprehensive analysis of the world market for SOEC, and provides market size (US\$ million) and Year-over-Year (YoY) growth, considering 2022 as the base year. This report explores demand trends and competition, as well as details the characteristics of SOEC that contribute to its increasing demand across many markets.

Highlights and key features of the study

Global SOEC total market, 2018-2029, (USD Million)

Global SOEC total market by region & country, CAGR, 2018-2029, (USD Million)

U.S. VS China: SOEC total market, key domestic companies and share, (USD Million)

Global SOEC revenue by player and market share 2018-2023, (USD Million)

Global SOEC total market by Type, CAGR, 2018-2029, (USD Million)

Global SOEC total market by Application, CAGR, 2018-2029, (USD Million)

This reports profiles major players in the global SOEC market based on the following parameters – company overview, revenue, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Sunfire GmbH, Topsoe, OxEon Energy, Ceres, Elcogen, FuelCell Energy and Egen Energy, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals, COVID-19 and Russia-Ukraine War Influence.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World SOEC market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US\$ Millions), by player, by regions, by Type, and by Application. Data is given for the years 2018-2029 by year with 2022 as the base year, 2023 as the estimate year, and

2024-2029 as the forecast year.

#### Global SOEC Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

#### Global SOEC Market, Segmentation by Type

Oxygen Ion Conducting

Proton Conducting

#### Global SOEC Market, Segmentation by Application

Chemicals and Refineries

Power Plants

Steel Plant

Others

## Companies Profiled:

Sunfire GmbH

Topsoe

OxEon Energy

Ceres

Elcogen

FuelCell Energy

Egen Energy

## Key Questions Answered

1. How big is the global SOEC market?
2. What is the demand of the global SOEC market?
3. What is the year over year growth of the global SOEC market?
4. What is the total value of the global SOEC market?
5. Who are the major players in the global SOEC market?
6. What are the growth factors driving the market demand?

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