

Green Hydrogen Market by Technology (Alkaline and PEM), Renewable source (Wind, Solar), End-use Industry (Mobility, Power, Chemical, Industrial, Grid Injection), and Region (North America, Europe, APAC, MEA, & Latin America) - Global Forecast to 2030

<https://marketpublishers.com/r/GDE7407DFAD0EN.html>

Date: March 2024

Pages: 296

Price: US\$ 4,950.00 (Single User License)

ID: GDE7407DFAD0EN

Abstracts

The green hydrogen market is projected to grow from USD 1.1 Billion in 2023 to USD 30.6 Billion by 2030, at a CAGR of 61.1% during the forecasted period. The market for green hydrogen is being propelled by several key factors. These include the decreasing cost of renewable energy production from all sources, advancements in electrolysis technologies, and a rising demand from power industry and Fuel Cell Electric Vehicles. Green hydrogen finds applications across various industries such as chemicals, mobility, grid injection, power industry, and others. It is increasingly being seen as a replacement for conventional gray, brown, and blue hydrogen due to its zero-emission production process. Technological advancements have also made green hydrogen more cost-competitive. This sustainable fuel source is emerging as a viable alternative to fossil fuels across various end-use industries.

“Alkaline electrolysis based green hydrogen accounted for the largest share, in terms of value, of the overall green hydrogen market.”

The alkaline electrolysis-based green hydrogen segment accounts for the largest share in the market, accounting for 656.7 USD million by value in 2023. This technology is widely preferred for its reliability, scalability, and cost-effectiveness. It uses an electrolyte solution, typically potassium hydroxide, to split water into hydrogen and oxygen. Compared to other electrolysis technologies, alkaline electrolysis produces highly pure hydrogen due to the low diffusion of hydrogen ions into the electrolyte solution. Its ability to efficiently operate with renewable energy sources makes it crucial

for the green hydrogen value chain. With a long operating life and suitability for large-scale production, alkaline electrolysis is poised to be a key technology in the green hydrogen market.

” The green hydrogen market in the mobility industry is expected to register the highest CAGR between 2023 and 2030.”

The mobility sector is the largest end-use industry of green hydrogen, utilizing it in various modes of transportation such as rail, road, aviation, and maritime. This industry accounts for the highest CAGR of 63.1% in the green hydrogen market during the forecast period, driven by hydrogen's higher energy content compared to fossil fuels. Fuel Cell Electric Vehicles are emerging as a sustainable alternative, offering longer ranges and shorter refueling times. Green hydrogen is becoming increasingly viable for vehicles in trains, mining, buses, aircraft, and maritime transport making it a crucial medium for achieving zero carbon emission target.

” The green hydrogen market in Europe is projected to register the largest region, in terms of value and volume, between 2023 and 2030.”

Europe dominates the global green hydrogen market as the largest segment in terms of value and volume, with a strong presence of manufacturers and products. Germany, a major contributor, is expected to see significant growth driven by the power industries and mobility. The region's leadership is fueled by ambitious sustainability goals and government support, leading to substantial investments in green hydrogen infrastructure. Countries like Germany, France, and the Netherlands are at the forefront of large-scale projects, reducing emissions, driving innovation, and creating jobs. The European Union's hydrogen strategy and the recovery and resilience facility will further boost the global green hydrogen market.

Breakdown of Profiles of Primary Interviews:

By Company Type- Tier 1- 40%, Tier 2- 33%, and Tier 3- 27%

By Designation- C Level- 50%, Director Level- 30%, and Others- 20%

By Region- North America- 15%, Europe- 50%, Asia Pacific (APAC) - 20%, Latin America-5%, Middle East & Africa (MEA)-10%

Nel ASA (Norway), Toshiba Energy Systems & Solutions Corporation (Japan), Siemens Energy AG (Germany), H&R ?lwerke Schindler GmbH (Germany), Linde plc (Ireland), Cummins Inc. (US), Air Products and Chemicals, Inc. (US), Guangdong Nation-Synergy Hydrogen Power Technology Co., Ltd. (China), Air Liquide (France), AND Wind to Gas Energy GmbH & Co. KG (Germany) are some of the major players operating in the green hydrogen market. These players have adopted strategies such as acquisitions, expansions, and partnerships, and expansions in order to increase their market share business revenue.

The report provides a comprehensive analysis of company profiles listed below:

Toshiba Energy Systems & Solutions Corporation (Japan)

Siemens Energy AG (Germany)

Linde (Ireland)

Air Liquide (France)

H&R ?lwerke Schindler GmbH (Germany)

Nel ASA (Norway)

Cummins Inc. (US)

Wind to Gas Energy GmbH & Co. KG (Germany)

Guangdong Nation-Synergy Hydrogen Power Technology Co., Ltd. (China)

Air Products and Chemicals, Inc. (US)

Research Coverage

This report covers the global green hydrogen market and forecasts the market size until 2028. It includes the following market segmentation-By Technology (Alkaline Electrolysis and PEM Electrolysis, By End-Use Industries (Mobility, Chemical, Power, Grid Injection, Industrial and Others), By Renewable source (Wind Energy, Solar Energy and Others) and Region (North America, APAC, Europe, MEA, Latin America) -

Global Forecast to 2028. Porter's Five Forces Analysis, along with the drivers, restraints, opportunities, and challenges, have been discussed in the report. It also provides competitive strategies and company profiles and adopted by the key players in the global green hydrogen market.

Key Benefits of Buying the Report

The report is expected to help market leaders/new entrants in this market in the following ways:

1. This report segments the global green hydrogen market comprehensively. It provides the closest approximations of the revenues for the overall market and the sub-segments across different verticals and regions.
2. The report helps stakeholders understand the pulse of the green hydrogen market and provides them with information on key market drivers, restraints, challenges, and opportunities.
3. This report will help stakeholders to gain more insights and understand competitors better which will help to understand their position in the market. The competitive landscape section includes the competitor ecosystem, expansion, new product development, and acquisition.

Reasons to buy the report:

The report will help leaders/new entrants in this market by providing them with the closest approximations of the revenues for the overall green hydrogen market and the sub-segments. This report will help stakeholders to understand the competitive landscape and gain more insights and position their businesses and market strategies in a better way.

Contents

1 INTRODUCTION

- 1.1 STUDY OBJECTIVES
- 1.2 MARKET DEFINITION
- 1.3 INCLUSIONS AND EXCLUSIONS
- 1.4 MARKET SCOPE
 - 1.4.1 MARKET SEGMENTATION
 - 1.4.2 REGIONS COVERED
 - 1.4.3 YEARS CONSIDERED
- 1.5 CURRENCY CONSIDERED
- 1.6 UNITS CONSIDERED
- 1.7 LIMITATIONS
- 1.8 STAKEHOLDERS
- 1.9 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
 - FIGURE 1 GREEN HYDROGEN MARKET: RESEARCH DESIGN
 - 2.1.1 SECONDARY DATA
 - 2.1.1.1 Key data from secondary sources
 - 2.1.2 PRIMARY DATA
 - 2.1.2.1 Key data from primary sources
 - 2.1.2.2 Participating companies for primary research
 - 2.1.2.3 Breakdown of interviews with experts
 - 2.2 MARKET SIZE ESTIMATION
 - 2.2.1 BOTTOM-UP APPROACH
 - FIGURE 2 MARKET SIZE ESTIMATION: BOTTOM-UP APPROACH
 - 2.2.2 TOP-DOWN APPROACH
 - FIGURE 3 MARKET SIZE ESTIMATION: TOP-DOWN APPROACH
 - 2.3 METHODOLOGY FOR SUPPLY-SIDE SIZING OF GREEN HYDROGEN MARKET-1
 - 2.4 METHODOLOGY FOR SUPPLY-SIDE SIZING OF GREEN HYDROGEN MARKET-2
 - 2.4.1 CALCULATIONS FOR SUPPLY-SIDE ANALYSIS
 - 2.4.2 FORECAST
 - 2.4.3 GROWTH RATE ASSUMPTIONS/GROWTH FORECAST

2.5 DATA TRIANGULATION

FIGURE 4 GREEN HYDROGEN MARKET: DATA TRIANGULATION

2.5.1 RESEARCH ASSUMPTIONS

2.5.2 RESEARCH LIMITATIONS

2.6 IMPACT OF RECESSION

2.6.1 RISK ANALYSIS

3 EXECUTIVE SUMMARY

TABLE 1 GREEN HYDROGEN MARKET SNAPSHOT: 2023 VS. 2030

FIGURE 5 ALKALINE ELECTROLYSIS SEGMENT TO ACCOUNT FOR LARGER MARKET SHARE DURING FORECAST PERIOD

FIGURE 6 WIND ENERGY TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD

FIGURE 7 MOBILITY SEGMENT TO DOMINATE GREEN HYDROGEN MARKET BETWEEN 2023 AND 2030

FIGURE 8 EUROPE DOMINATED GREEN HYDROGEN MARKET IN 2022

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN GREEN HYDROGEN MARKET

FIGURE 9 GREEN HYDROGEN MARKET TO WITNESS SIGNIFICANT GROWTH BETWEEN 2023 AND 2030

4.2 GREEN HYDROGEN MARKET, BY TECHNOLOGY

FIGURE 10 PEM ELECTROLYSIS TECHNOLOGY SEGMENT TO GROW FASTER DURING FORECAST PERIOD

4.3 GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE

FIGURE 11 SOLAR ENERGY TO ACCOUNT FOR LARGEST SHARE DURING FORECAST PERIOD

4.4 GREEN HYDROGEN MARKET, BY END-USE INDUSTRY

FIGURE 12 MOBILITY TO ACCOUNT FOR LARGEST MARKET SHARE DURING FORECAST PERIOD

4.5 GREEN HYDROGEN MARKET, BY MAJOR COUNTRIES

FIGURE 13 US TO GROW AT HIGHEST CAGR DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 14 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES IN GREEN HYDROGEN MARKET

5.2.1 DRIVERS

5.2.1.1 Low variable electricity costs

5.2.1.2 Technological advancements

5.2.1.3 Global plans for net-zero emissions by 2050

TABLE 2 YEAR-WISE ZERO-EMISSION TARGETS FOR FEW MAJOR ECONOMIES,

5.2.1.4 High demand from FCEVs and power industry

5.2.2 RESTRAINTS

5.2.2.1 High cost of green hydrogen

5.2.2.2 Lack of transportation infrastructure

5.2.2.3 Energy loss in every stage of value chain

5.2.2.4 Sustainability management

5.2.3 OPPORTUNITIES

5.2.3.1 Decreasing cost of electrolyzers

5.2.3.2 Increasing government investments

5.2.3.3 Announcement of large-capacity green hydrogen projects

5.2.3.4 Favorable policies for green hydrogen

5.2.4 CHALLENGES

5.2.4.1 High initial investments

5.2.4.2 Under-developed market

5.3 PORTER'S FIVE FORCES ANALYSIS

FIGURE 15 GREEN HYDROGEN MARKET: PORTER'S FIVE FORCES ANALYSIS

TABLE 3 GREEN HYDROGEN MARKET: PORTER'S FIVE FORCES ANALYSIS

5.3.1 BARGAINING POWER OF BUYERS

5.3.2 BARGAINING POWER OF SUPPLIERS

5.3.3 THREAT OF NEW ENTRANTS

5.3.4 THREAT OF SUBSTITUTES

5.3.5 INTENSITY OF COMPETITIVE RIVALRY

5.4 TARIFF AND REGULATORY LANDSCAPE

5.4.1 TARIFF RELATED TO GREEN HYDROGEN

5.4.2 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 4 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 5 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 6 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND

OTHER ORGANIZATIONS

5.5 SUPPLY CHAIN ANALYSIS

FIGURE 16 GREEN HYDROGEN MARKET: SUPPLY CHAIN ANALYSIS

TABLE 7 GREEN HYDROGEN MARKET: SUPPLY CHAIN

5.6 ECOSYSTEM

FIGURE 17 GREEN HYDROGEN MARKET: ECOSYSTEM

5.7 CASE STUDY ANALYSIS

5.8 TECHNOLOGY ANALYSIS

5.8.1 GREEN HYDROGEN TECHNOLOGIES

5.8.1.1 Polymer electrolyte membrane electrolyzers

5.8.1.2 Alkaline electrolyzers

5.8.1.3 Solid oxide electrolyzer cells

5.8.1.4 Anion exchange membrane water electrolysis

5.9 KEY STAKEHOLDERS AND BUYING CRITERIA

5.9.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 18 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END USES

TABLE 8 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE END USES (%)

5.9.2 BUYING CRITERIA

FIGURE 19 KEY BUYING CRITERIA FOR TOP THREE END USES

TABLE 9 KEY BUYING CRITERIA FOR TOP THREE END-USES

5.10 KEY CONFERENCES AND EVENTS (2024)

TABLE 10 GREEN HYDROGEN MARKET: KEY CONFERENCES AND EVENTS (2024)

5.11 PRICING ANALYSIS

5.11.1 AVERAGE SELLING PRICE OF KEY PLAYER OFFERINGS, BY END-USE INDUSTRY

FIGURE 20 AVERAGE SELLING PRICE OF KEY PLAYER OFFERINGS FOR TOP-THREE END-USE INDUSTRIES (USD/TON)

5.11.2 AVERAGE SELLING PRICE OF KEY PLAYER OFFERINGS, BY REGION
FIGURE 21 AVERAGE SELLING PRICE OF GREEN HYDROGEN, BY REGION (USD/TON)

5.12 TRADE ANALYSIS

TABLE 11 IMPORT DATA FOR GREEN HYDROGEN

TABLE 12 EXPORT DATA ON GREEN HYDROGEN

5.13 KEY MARKETS FOR GREEN HYDROGEN

5.13.1 CHINA

5.13.2 CANADA

5.13.3 GERMANY

5.13.4 SAUDI ARABIA

5.13.5 NORWAY

5.13.6 NETHERLANDS

5.13.7 CHILE

5.13.8 AUSTRALIA

5.13.9 SOUTH KOREA

5.13.10 JAPAN

5.14 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS

FIGURE 22 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS

5.15 PATENT ANALYSIS

5.15.1 METHODOLOGY

FIGURE 23 LIST OF MAJOR PATENTS FOR GREEN HYDROGEN

5.15.2 MAJOR PATENTS

5.16 INVESTMENT & FUNDING SCENARIO

FIGURE 24 INVESTMENT & FUNDING OF STARTUP/SMES FOR GREEN HYDROGEN

6 GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE

6.1 INTRODUCTION

TABLE 13 GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (KILOTON)

TABLE 14 GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (KILOTON)

TABLE 15 GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (USD MILLION)

TABLE 16 GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (USD MILLION)

6.2 WIND ENERGY

6.2.1 INCREASING USE OF ENERGY-BASED ELECTROLYZERS TO DRIVE MARKET

TABLE 17 WIND ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (KILOTON)

TABLE 18 WIND ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (KILOTON)

TABLE 19 WIND ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD MILLION)

TABLE 20 WIND ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2022–2030

(USD MILLION)

6.3 SOLAR ENERGY

6.3.1 CONTINUOUS ADVANCEMENTS IN PV TECHNOLOGIES TO DRIVE MARKET

TABLE 21 SOLAR ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2019–2021

(KILOTON)

TABLE 22 SOLAR ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2022–2030

(KILOTON)

TABLE 23 SOLAR ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2019–2021

(USD MILLION)

TABLE 24 SOLAR ENERGY: GREEN HYDROGEN MARKET, BY REGION, 2022–2030

(USD MILLION)

6.4 OTHER RENEWABLE SOURCES

TABLE 25 OTHER RENEWABLE ENERGY: GREEN HYDROGEN MARKET, BY

REGION, 2019–2021 (KILOTON)

TABLE 26 OTHER RENEWABLE ENERGY: GREEN HYDROGEN MARKET, BY

REGION, 2022–2030 (KILOTON)

TABLE 27 OTHER RENEWABLE ENERGY: GREEN HYDROGEN MARKET, BY

REGION, 2019–2021 (USD MILLION)

TABLE 28 OTHER RENEWABLE ENERGY: GREEN HYDROGEN MARKET, BY

REGION, 2022–2030 (USD MILLION)

7 GREEN HYDROGEN MARKET, BY TECHNOLOGY

7.1 INTRODUCTION

FIGURE 26 ALKALINE ELECTROLYSIS TECHNOLOGY TO LEAD GREEN HYDROGEN MARKET DURING FORECAST PERIOD

TABLE 29 GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (KILOTON)

TABLE 30 GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (KILOTON)

TABLE 31 GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (USD MILLION)

TABLE 32 GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (USD MILLION)

7.2 ALKALINE ELECTROLYSIS

7.2.1 WIDE USE IN MANUFACTURING INDUSTRY TO DRIVE MARKET

TABLE 33 ALKALINE ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD MILLION)

TABLE 34 ALKALINE ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD MILLION)

TABLE 35 ALKALINE ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION,

2019–2021 (KILOTON)

TABLE 36 ALKALINE ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (KILOTON)

7.3 PEM ELECTROLYSIS

7.3.1 HIGH PRODUCTION EFFICIENCY TO DRIVE MARKET

TABLE 37 PEM ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD MILLION)

TABLE 38 PEM ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD MILLION)

TABLE 39 PEM ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (KILOTON)

TABLE 40 PEM ELECTROLYSIS: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (KILOTON)

8 GREEN HYDROGEN MARKET, BY END-USE INDUSTRY

8.1 INTRODUCTION

FIGURE 27 MOBILITY END-USE INDUSTRY TO WITNESS RAPID GROWTH DURING FORECAST PERIOD

TABLE 41 GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 42 GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 43 GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 44 GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

8.2 MOBILITY

8.2.1 RISING ADOPTION OF FUEL CELL TECHNOLOGY IN TRANSPORTATION SECTOR TO DRIVE MARKET

TABLE 45 MOBILITY: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (KILOTON)

TABLE 46 MOBILITY: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (KILOTON)

TABLE 47 MOBILITY: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD MILLION)

TABLE 48 MOBILITY: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD MILLION)

8.3 CHEMICAL

8.3.1 INCREASING DEMAND FOR ECO-FRIENDLY FUELS TO DRIVE MARKET
TABLE 49 CHEMICAL: GREEN HYDROGEN MARKET, BY REGION, 2019–2021
(KILOTON)

TABLE 50 CHEMICAL: GREEN HYDROGEN MARKET, BY REGION, 2022–2030
(KILOTON)

TABLE 51 CHEMICAL: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD
MILLION)

TABLE 52 CHEMICAL: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD
MILLION)

8.4 POWER

8.4.1 NEED FOR SUSTAINABLE OPTIONS TO STORE EXCESS ENERGY TO
DRIVE MARKET

TABLE 53 POWER: GREEN HYDROGEN MARKET, BY REGION, 2019–2021
(KILOTON)

TABLE 54 POWER: GREEN HYDROGEN MARKET, BY REGION, 2022–2030
(KILOTON)

TABLE 55 POWER: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD
MILLION)

TABLE 56 POWER: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD
MILLION)

8.5 GRID INJECTION

8.5.1 INCREASED PENETRATION OF RENEWABLES TO DRIVE MARKET

TABLE 57 GRID INJECTION: GREEN HYDROGEN MARKET, BY REGION,
2019–2021 (KILOTON)

TABLE 58 GRID INJECTION: GREEN HYDROGEN MARKET, BY REGION,
2022–2030 (KILOTON)

TABLE 59 GRID INJECTION: GREEN HYDROGEN MARKET, BY REGION,
2019–2021 (USD MILLION)

TABLE 60 GRID INJECTION: GREEN HYDROGEN MARKET, BY REGION,
2022–2030 (USD MILLION)

8.6 INDUSTRIAL

8.6.1 GROWING DEMAND FOR CLEAN ENERGY TO DRIVE MARKET

TABLE 61 INDUSTRIAL: GREEN HYDROGEN MARKET, BY REGION, 2019–2021
(KILOTON)

TABLE 62 INDUSTRIAL: GREEN HYDROGEN MARKET, BY REGION, 2022–2030
(KILOTON)

TABLE 63 INDUSTRIAL: GREEN HYDROGEN MARKET, BY REGION, 2019–2021
(USD MILLION)

TABLE 64 INDUSTRIAL: GREEN HYDROGEN MARKET, BY REGION, 2022–2030

(USD MILLION)

8.7 OTHER END-USE INDUSTRIES

TABLE 65 OTHER END-USE INDUSTRIES: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (KILOTON)

TABLE 66 OTHER END-USE INDUSTRIES: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (KILOTON)

TABLE 67 OTHER END-USE INDUSTRIES: GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD MILLION)

TABLE 68 OTHER END-USE INDUSTRIES: GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD MILLION)

9 GREEN HYDROGEN MARKET, BY REGION

9.1 INTRODUCTION

FIGURE 28 NORTH AMERICA TO WITNESS HIGHEST CAGR DURING FORECAST PERIOD

TABLE 69 GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (KILOTON)

TABLE 70 GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (KILOTON)

TABLE 71 GREEN HYDROGEN MARKET, BY REGION, 2019–2021 (USD MILLION)

TABLE 72 GREEN HYDROGEN MARKET, BY REGION, 2022–2030 (USD MILLION)

9.2 NORTH AMERICA

9.2.1 IMPACT OF RECESSION

FIGURE 29 NORTH AMERICA: GREEN HYDROGEN MARKET SNAPSHOT

TABLE 73 NORTH AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (KILOTON)

TABLE 74 NORTH AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (KILOTON)

TABLE 75 NORTH AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (USD MILLION)

TABLE 76 NORTH AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (USD MILLION)

TABLE 77 NORTH AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (KILOTON)

TABLE 78 NORTH AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (KILOTON)

TABLE 79 NORTH AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (USD MILLION)

TABLE 80 NORTH AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (USD MILLION)

TABLE 81 NORTH AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (KILOTON)

TABLE 82 NORTH AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (KILOTON)

TABLE 83 NORTH AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (USD MILLION)

TABLE 84 NORTH AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (USD MILLION)

TABLE 85 NORTH AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 86 NORTH AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 87 NORTH AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 88 NORTH AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.2.1.1 US

9.2.1.1.1 Increasing demand from mobility and power industries to drive market

TABLE 89 US: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 90 US: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 91 US: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 92 US: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.2.1.2 Canada

9.2.1.2.1 Strong energy sector to drive market

TABLE 93 CANADA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 94 CANADA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 95 CANADA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 96 CANADA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.3 ASIA PACIFIC

9.3.1 IMPACT OF RECESSION

FIGURE 30 ASIA PACIFIC: GREEN HYDROGEN MARKET SNAPSHOT

TABLE 97 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (KILOTON)

TABLE 98 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (KILOTON)

TABLE 99 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (USD MILLION)

TABLE 100 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (USD MILLION)

TABLE 101 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (KILOTON)

TABLE 102 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (KILOTON)

TABLE 103 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (USD MILLION)

TABLE 104 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (USD MILLION)

TABLE 105 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (KILOTON)

TABLE 106 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (KILOTON)

TABLE 107 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (USD MILLION)

TABLE 108 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (USD MILLION)

TABLE 109 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 110 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 111 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 112 ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.3.1.1 China

9.3.1.1.1 Increasing demand for EVs to drive market

TABLE 113 CHINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 114 CHINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 115 CHINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,

2019–2021 (USD MILLION)

TABLE 116 CHINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (USD MILLION)

9.3.1.2 Japan

9.3.1.2.1 Ambitious government initiatives to drive market

TABLE 117 JAPAN: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (KILOTON)

TABLE 118 JAPAN: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (KILOTON)

TABLE 119 JAPAN: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (USD MILLION)

TABLE 120 JAPAN: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (USD MILLION)

9.3.1.3 Australia

9.3.1.3.1 Increasing focus on reducing carbon emissions to drive market

TABLE 121 AUSTRALIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (KILOTON)

TABLE 122 AUSTRALIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (KILOTON)

TABLE 123 AUSTRALIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (USD MILLION)

TABLE 124 AUSTRALIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (USD MILLION)

9.3.1.4 Rest of Asia Pacific

TABLE 125 REST OF ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE
INDUSTRY, 2019–2021 (KILOTON)

TABLE 126 REST OF ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE
INDUSTRY, 2022–2030 (KILOTON)

TABLE 127 REST OF ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE
INDUSTRY, 2019–2021 (USD MILLION)

TABLE 128 REST OF ASIA PACIFIC: GREEN HYDROGEN MARKET, BY END-USE
INDUSTRY, 2022–2030 (USD MILLION)

9.4 EUROPE

9.4.1 RECESSION IMPACT

FIGURE 31 EUROPE: GREEN HYDROGEN MARKET SNAPSHOT

TABLE 129 EUROPE: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021
(KILOTON)

TABLE 130 EUROPE: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030
(KILOTON)

TABLE 131 EUROPE: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021
(USD MILLION)

TABLE 132 EUROPE: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030
(USD MILLION)

TABLE 133 EUROPE: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE,
2019–2021 (KILOTON)

TABLE 134 EUROPE: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE,
2022–2030 (KILOTON)

TABLE 135 EUROPE: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE,
2019–2021 (USD MILLION)

TABLE 136 EUROPE: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE,
2022–2030 (USD MILLION)

TABLE 137 EUROPE: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021
(KILOTON)

TABLE 138 EUROPE: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030
(KILOTON)

TABLE 139 EUROPE: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021
(USD MILLION)

TABLE 140 EUROPE: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030
(USD MILLION)

TABLE 141 EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (KILOTON)

TABLE 142 EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (KILOTON)

TABLE 143 EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (USD MILLION)

TABLE 144 EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (USD MILLION)

9.4.1.1 Germany

9.4.1.1.1 High reliance on mobility and automotive sectors to drive market

TABLE 145 GERMANY: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (KILOTON)

TABLE 146 GERMANY: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (KILOTON)

TABLE 147 GERMANY: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2019–2021 (USD MILLION)

TABLE 148 GERMANY: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY,
2022–2030 (USD MILLION)

9.4.1.2 Austria

9.4.1.2.1 Government focus on developing green economy to drive market

TABLE 149 AUSTRIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 150 AUSTRIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 151 AUSTRIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 152 AUSTRIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.4.1.3 Denmark

9.4.1.3.1 Increasing demand from mobility sector to drive market

TABLE 153 DENMARK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 154 DENMARK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 155 DENMARK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 156 DENMARK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.4.1.4 UK

9.4.1.4.1 Manufacturing of high-quality consumer goods to drive market

TABLE 157 UK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 158 UK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 159 UK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 160 UK: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.4.1.5 France

9.4.1.5.1 Energy and power industries to support market growth

TABLE 161 FRANCE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 162 FRANCE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 163 FRANCE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 164 FRANCE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.4.1.6 Rest of Europe

TABLE 165 REST OF EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 166 REST OF EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 167 REST OF EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 168 REST OF EUROPE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.5 LATIN AMERICA

9.5.1 RECESSION IMPACT

TABLE 169 LATIN AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (KILOTON)

TABLE 170 LATIN AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (KILOTON)

TABLE 171 LATIN AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (USD MILLION)

TABLE 172 LATIN AMERICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (USD MILLION)

TABLE 173 LATIN AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (KILOTON)

TABLE 174 LATIN AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (KILOTON)

TABLE 175 LATIN AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (USD MILLION)

TABLE 176 LATIN AMERICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (USD MILLION)

TABLE 177 LATIN AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (KILOTON)

TABLE 178 LATIN AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (KILOTON)

TABLE 179 LATIN AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (USD MILLION)

TABLE 180 LATIN AMERICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (USD MILLION)

TABLE 181 LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 182 LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 183 LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 184 LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.5.1.1 Brazil

9.5.1.1.1 Largest market for green hydrogen in Latin America

TABLE 185 BRAZIL: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 186 BRAZIL: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 187 BRAZIL: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 188 BRAZIL: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.5.1.2 Mexico

9.5.1.2.1 Rising demand from mobility and power industries to drive market

TABLE 189 MEXICO: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 190 MEXICO: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 191 MEXICO: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 192 MEXICO: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.5.1.3 Argentina

9.5.1.3.1 Growing economic status and spending on green hydrogen projects to drive market

TABLE 193 ARGENTINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 194 ARGENTINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 195 ARGENTINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 196 ARGENTINA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.5.1.4 Rest of Latin America

TABLE 197 REST OF LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 198 REST OF LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE

INDUSTRY, 2022–2030 (KILOTON)

TABLE 199 REST OF LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 200 REST OF LATIN AMERICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.6 MIDDLE EAST & AFRICA

9.6.1 IMPACT OF RECESSION

TABLE 201 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (KILOTON)

TABLE 202 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (KILOTON)

TABLE 203 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2019–2021 (USD MILLION)

TABLE 204 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY COUNTRY, 2022–2030 (USD MILLION)

TABLE 205 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (KILOTON)

TABLE 206 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (KILOTON)

TABLE 207 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2019–2021 (USD MILLION)

TABLE 208 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY RENEWABLE SOURCE, 2022–2030 (USD MILLION)

TABLE 209 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (KILOTON)

TABLE 210 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (KILOTON)

TABLE 211 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2019–2021 (USD MILLION)

TABLE 212 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY TECHNOLOGY, 2022–2030 (USD MILLION)

TABLE 213 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 214 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 215 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 216 MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.6.1.1 UAE

9.6.1.1.1 Increasing government spending on infrastructure development to drive market

TABLE 217 UAE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 218 UAE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 219 UAE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 220 UAE: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.6.1.2 Saudi Arabia

9.6.1.2.1 High economic and mobility industry growth to drive market

TABLE 221 SAUDI ARABIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 222 SAUDI ARABIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 223 SAUDI ARABIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 224 SAUDI ARABIA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

9.6.1.3 Rest of Middle East & Africa

TABLE 225 REST OF MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (KILOTON)

TABLE 226 REST OF MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (KILOTON)

TABLE 227 REST OF MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2019–2021 (USD MILLION)

TABLE 228 REST OF MIDDLE EAST & AFRICA: GREEN HYDROGEN MARKET, BY END-USE INDUSTRY, 2022–2030 (USD MILLION)

10 COMPETITIVE LANDSCAPE

10.1 KEY PLAYER STRATEGIES/RIGHT TO WIN

10.2 STRATEGIES ADOPTED BY KEY PLAYERS

TABLE 229 OVERVIEW OF STRATEGIES ADOPTED BY KEY MANUFACTURERS

10.3 REVENUE ANALYSIS

FIGURE 32 REVENUE ANALYSIS OF KEY COMPANIES (2018–2022)

10.4 MARKET SHARE ANALYSIS

- 10.4.1 RANKING OF KEY MARKET PLAYERS, 2022
 - FIGURE 33 RANKING OF TOP FIVE PLAYERS IN GREEN HYDROGEN MARKET, 2022
 - 10.4.2 MARKET SHARE OF KEY PLAYERS
 - FIGURE 34 GREEN HYDROGEN MARKET SHARE ANALYSIS
 - TABLE 230 GREEN HYDROGEN MARKET: DEGREE OF COMPETITION
 - 10.5 BRAND/PRODUCT COMPARISON
 - FIGURE 35 BRAND/PRODUCT COMPARISON
 - 10.6 COMPANY EVALUATION MATRIX: KEY PLAYERS, 2023
 - 10.6.1 STARS
 - 10.6.2 EMERGING LEADERS
 - 10.6.3 PERVASIVE PLAYERS
 - 10.6.4 PARTICIPANTS
 - FIGURE 36 GREEN HYDROGEN MARKET: COMPANY EVALUATION MATRIX
 - 10.6.5 COMPANY FOOTPRINT
 - FIGURE 37 GREEN HYDROGEN MARKET: COMPANY FOOTPRINT (15 COMPANIES)
 - 10.6.6 REGION FOOTPRINT
 - TABLE 231 GREEN HYDROGEN MARKET: COMPANY REGION FOOTPRINT (15 COMPANIES)
 - 10.6.7 END-USE INDUSTRY FOOTPRINT
 - TABLE 232 GREEN HYDROGEN MARKET: COMPANY END-USE INDUSTRY FOOTPRINT (15 COMPANIES)
 - 10.7 STARTUP/SME EVALUATION MATRIX
 - 10.7.1 PROGRESSIVE COMPANIES
 - 10.7.2 RESPONSIVE COMPANIES
 - 10.7.3 DYNAMIC COMPANIES
 - 10.7.4 STARTING BLOCKS
 - FIGURE 38 GREEN HYDROGEN MARKET: STARTUP/SME EVALUATION MATRIX
 - 10.7.5 COMPETITIVE BENCHMARKING
 - TABLE 233 GREEN HYDROGEN MARKET: DETAILED LIST OF KEY STARTUPS/SMES
 - TABLE 234 GREEN HYDROGEN MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES
 - 10.8 VALUATION AND FINANCIAL METRICS
 - FIGURE 39 ENTERPRISE VALUE/EBITDA OF KEY MANUFACTURERS
 - FIGURE 40 YEAR-TO-DATE PRICE TOTAL RETURN AND FIVE-YEAR STOCK BETA OF KEY MANUFACTURERS
 - 10.9 COMPETITIVE SCENARIO

10.9.1 PRODUCT LAUNCHES

TABLE 235 GREEN HYDROGEN MARKET: PRODUCT LAUNCHES, 2020–2024

10.9.2 DEALS

TABLE 236 GREEN HYDROGEN MARKET: DEALS, 2020–2024

10.9.3 EXPANSIONS

TABLE 237 GREEN HYDROGEN MARKET: EXPANSIONS, 2019–2023

11 COMPANY PROFILES

(Business overview, Products/Solutions/Services offered, Recent Developments, MnM view, Key strengths, Strategic choices, Weaknesses and competitive threats)*

11.1 KEY PLAYERS

11.1.1 AIR LIQUIDE S.A.

TABLE 238 AIR LIQUIDE S.A.: COMPANY OVERVIEW

FIGURE 41 AIR LIQUIDE S.A.: COMPANY SNAPSHOT

TABLE 239 AIR LIQUIDE S.A.: PRODUCTS/SOLUTIONS OFFERED

TABLE 240 AIR LIQUIDE S.A: PRODUCT LAUNCHES

TABLE 241 AIR LIQUIDE S.A.: DEALS

TABLE 242 AIR LIQUIDE S.A.: OTHER DEVELOPMENTS

11.1.2 AIR PRODUCTS AND CHEMICALS, INC.

TABLE 243 AIR PRODUCTS AND CHEMICALS, INC.: COMPANY OVERVIEW

FIGURE 42 AIR PRODUCTS AND CHEMICALS, INC.: COMPANY SNAPSHOT

TABLE 244 AIR PRODUCTS AND CHEMICALS, INC.: PRODUCTS/SOLUTIONS OFFERED

TABLE 245 AIR PRODUCTS AND CHEMICALS, INC.: DEALS

I would like to order

Product name: Green Hydrogen Market by Technology (Alkaline and PEM), Renewable source (Wind, Solar), End-use Industry (Mobility, Power, Chemical, Industrial, Grid Injection), and Region (North America, Europe, APAC, MEA, & Latin America) - Global Forecast to 2030

Product link: <https://marketpublishers.com/r/GDE7407DFAD0EN.html>

Price: US\$ 4,950.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GDE7407DFAD0EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970