

*Shaping a  
Sustainable  
Future*





# Global Green Hydrogen Market



Green Hydrogen has the potential to significantly reduce greenhouse gas emissions.

- It can displace fossil fuels in a variety of applications, including transportation, power generation, and industrial processes.
- As a transportation fuel, green hydrogen can power fuel cell electric vehicles (FCEVs) with only water and heat as byproducts.



# Global Green Hydrogen Market

- Solar and wind power are the fastest-growing sectors, with installed capacity reaching 713 GW and 743 GW, respectively, in 2020.
- The growth is driven by increasing amounts of renewable energy being used to produce this clean fuel.





## *Green Hydrogen Job Market*

**12.7 million:**

Worldwide employment in renewable energy in 2021.

Close to two-thirds of all jobs are in Asia, and China alone accounts for 42% of the global total.

followed by the European Union and Brazil with 10% each, and the United States and India with 7% each.



## *Green Hydrogen Job Market*

### **2.4 million:**

Direct jobs in hydropower in 2021.

Two-thirds of these jobs were in manufacturing  
30% related to construction and installation and  
about 6% to operation and maintenance.

### **3.4 million:**

Jobs in bioenergy in 2021





# The Renewable Energy Market and the Role of Green Hydrogen

- The MENA region is expected to add 80 GW of renewable capacity by 2030, with solar power accounting for most of the growth.
- Countries such as Saudi Arabia, the UAE, and Egypt are leading the way in the region's renewable energy market.
- The global renewable energy market is projected to reach 2700 GW by 2030, up from 2300 GW in 2020.
- In green hydrogen industry, 65% of the CAPEX is renewable energy



# The Renewable Energy Market and the Role of Green Hydrogen



Green hydrogen is a clean and versatile fuel that supports the transition to a low-carbon future.

- Renewable energy sources can power green hydrogen production via electrolysis for reliable and sustainable energy.
- Continued investment and support for green hydrogen R&D is essential to accelerate the transition to a sustainable and resilient energy system





## Education and Training Programs for Hydrogen Specialists

The importance of education and training in developing a skilled workforce for the hydrogen industry:

- A skilled workforce is essential for the growth and success of the hydrogen industry.
- Training and education programs can help develop the necessary knowledge and skills for a career in the hydrogen sector.
- Building a skilled workforce can contribute to the development of a sustainable and resilient energy system.







## Education and Training Programs for Hydrogen Specialists



### Various training programs:

- Various training programs have to be created to help individuals enter the hydrogen industry, including career-switch programs, degrees, and online education options.
- Online education options are becoming increasingly popular due to their flexibility and accessibility.





## Awareness and the Importance of Collaboration

- Raising awareness and changing behavior towards green hydrogen and reducing carbon emissions is crucial to achieving the MENA region's sustainable energy goals.
- Digital marketing strategies can play a significant role in educating and engaging the public about the benefits of green hydrogen and renewable energy.





## Awareness and the Importance of Collaboration



- Such strategies can target various stakeholders, including policymakers, businesses, and the general public, to encourage greater adoption and investment in green hydrogen technologies.
- Through effective awareness-raising and behavior-changing campaigns, we can work towards a more sustainable and resilient energy system that supports economic growth and environmental protection in the MENA region.



Thanks!

