



# HYDROGEN HORIZONS: THE MIDDLE EAST'S NEXT ENERGY CHAPTER

By leveraging its ideal conditions for renewable energy production, the Middle East is in the perfect position to become a major international green hydrogen hub. Once they have established sufficient capacity and prices attractive to the global market, leading Middle Eastern nations can help fuel the world's clean energy transition, starting with their own economies.

## NEOM Helios Green Hydrogen Project

- \$5 billion investment
- 650 tonnes of green hydrogen daily
- Converted to 1.2M tonnes of green ammonia yearly
- Exports start: 2026

## Masdar Hydrogen Initiatives

- Partnered with ENGIE
- Initial phase of domestic pilot plants in Abu Dhabi
- Expected to produce 200 MW of green hydrogen by 2025
- Planned partnerships with Egypt & beyond
- Goal: To establish the UAE as a hydrogen export powerhouse

## DEWA Pilot Plant at Mohammed bin Rashid Al Maktoum Solar Park

- 400-kilogram production per day
- 100% clean energy usage
- Located within outdoor testing facilities of the R&D Centre
- Accommodates future applications and test platforms for green hydrogen

EGYPT

KINGDOM OF  
SAUDI ARABIA

UAE

OMAN

## Suez Canal Economic Zone Projects

- 4 GW electrolyser capacity
- 480,000 tonnes/year by 2030
- Partnership between Masdar, Infinity Power & Hassan Allam

## South Sinai

- Largest planned green hydrogen plant in the world
- \$17 billion investment
- 400,000 tonnes planned capacity for Phase 1
- Phases to be completed in 2030, 2033 and 2035
- 100% clean energy usage with 3.1GW solar capacity

## Green Energy Oman (GEO)

- 25 GW of solar + wind
- Up to 1.8 million tonnes green hydrogen per year
- Phase 1: 150,000 tonnes from 4 GW
- Aims to upscale quickly to meet global demand

## ACME Duqm Hydrogen Project

- Currently in Phase 2
- Planned capacity of 497,000 tonnes per year
- expected to commence operations in 2028



## WHY IS THE MIDDLE EAST EAGER TO LEAD ON GREEN HYDROGEN?

### FUTUREPROOF THE ECONOMY

Green hydrogen aligns with Middle East strengths in energy production, logistics, and renewables expertise.

### TRADE POTENTIAL

Energy exports could fuel Middle East economic growth for decades to come, prompting the current focus on port infrastructure development

### FALLING COSTS

Middle East nations can now produce solar and wind energy cheaper than any other region, allowing for cheaper green hydrogen production at a critical juncture of the industry's development.

### INNOVATION FUEL

Green hydrogen is a gateway to high tech development of major industries – including synthetic fuels, hydrogen-powered steel and desalination. This is critical for Middle East nations' long-term economic diversification and modernisation plans.

### PERFECT CROSSROADS

Green hydrogen demand is growing for crucial industries including steel, shipping, aviation, and power generation. Middle East can become a central supply hub for global demand.

### WALK THE WALK

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