GREEN HYDROGEN PROJECTS (6 PART ARTICLE)

By Mr.Alireza Miralami
CEO, Founder Eng.,PEO's. (EIT), PMA

Part 1 : Hydrogen in the Energy Transition

ABSTRACT

Hydrogen is emerging as the cornerstone of the global clean energy transition. With its ability to store renewable power and decarbonize hard-to-abate sectors, hydrogen offers scalability unmatched by other green solutions.

INTRODUCTION

The world is racing toward net-zero goals. Hydrogen stands out as a versatile solution bridging renewables with heavy industry and global trade.

SECTION 1 : WHY HYDROGEN MATTERS

- Clean, abundant, and scalable.
- Key for reducing industrial CO_2 emissions.

SECTION 2 :GLOBAL MOMENTUM

- EU, Japan, and Korea's hydrogen roadmaps.
- GCC leadership in green hydrogen pilots.

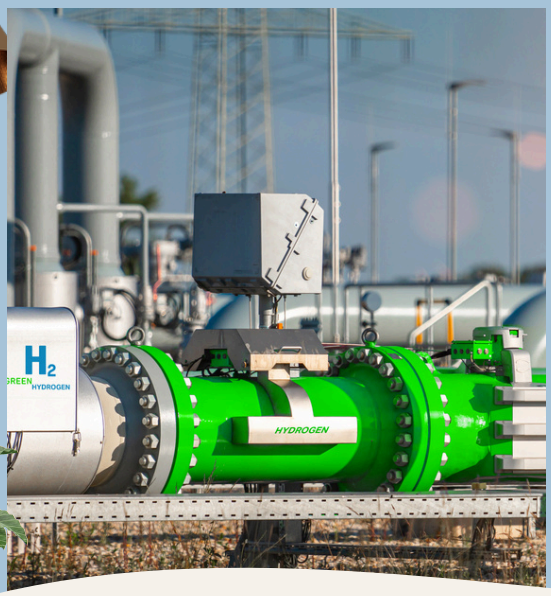
CONCLUSION

Hydrogen is no longer optional it is the backbone fuel for a carbon free future.

Veru Oil Petroleum Trading Corporation

GREEN HYDROGEN PROJECTS (6 PART ARTICLE)

By Mr.Alireza Miralami
CEO, Founder Eng.,PEO's. (EIT), PMA



Part 2 : Gulf Projects: UAE & KSA

ABSTRACT

The Gulf region is positioning itself as a hydrogen powerhouse. Massive solar and wind resources in the UAE and KSA support competitive hydrogen production for export.

INTRODUCTION

From NEOM in Saudi Arabia to solar powered hydrogen in Abu Dhabi, Gulf states are investing billions.

SECTION 1 : WHY THE GULF?

- Lowest renewable energy costs globally.
- Strategic access to Europe and Asia.

SECTION 2 : FLAGSHIP PROJECTS

- NEOM's 4 GW hydrogen plant.
- UAE's integrated hydrogen roadmap.

CONCLUSION

The Gulf is transforming from an oil exporter to a green hydrogen hub, shaping the future of global trade.

Veru Oil Petroleum Trading Corporation

GREEN HYDROGEN PROJECTS (6 PART ARTICLE)

By Mr.Alireza Miralami
CEO, Founder Eng.,PEO's. (EIT), PMA

Part 3 : Export Readiness to Europe/Asia

ABSTRACT

Green hydrogen is only valuable if it can reach markets. Infrastructure for shipping and pipelines is critical.

INTRODUCTION

Europe and Asia are setting binding targets for hydrogen imports by 2030.

SECTION 1 – EXPORT LOGISTICS

- Ammonia as a carrier.
- LNG-like shipping models.

SECTION 2 – VERU OIL'S ROLE

- Leveraging UAE tank farms for hydrogen derivatives.
- Building corridors to Europe/Asia.

CONCLUSION

Export readiness determines leadership. Veru Oil is aligning with this opportunity

Veru Oil Petroleum Trading Corporation

GREEN HYDROGEN PROJECTS (6 PART ARTICLE)

By Mr.Alireza Miralami
CEO, Founder Eng.,PEO's. (EIT), PMA

Part 4 : Solar/Wind Powered Hydrogen

ABSTRACT

Pairing hydrogen with renewable energy ensures true sustainability. The Gulf is uniquely advantaged with high solar irradiation and vast wind corridors.

INTRODUCTION

Producing hydrogen only makes sense if powered by green sources.

SECTION 1 : SOLAR ADVANTAGES

- High capacity factors in UAE/KSA deserts.
- Falling costs of solar PV.

SECTION 2 : WIND OPPORTUNITIES

- Onshore and offshore potential.
- Hybrid projects with solar + wind.

CONCLUSION

Renewable powered hydrogen offers competitive, sustainable supply—making the Gulf the most cost effective source globally.

GREEN HYDROGEN PROJECTS (6 PART ARTICLE)

By Mr.Alireza Miralami
CEO, Founder Eng.,PEO's. (EIT), PMA

Part 5 : Investment & Partnerships

ABSTRACT

Scaling hydrogen requires international collaboration and capital. Gulf projects are already attracting leading investors.

INTRODUCTION

Hydrogen projects are capital intensive, requiring global partnerships.

SECTION 1 : GLOBAL INVESTORS

- European utilities and Asian buyers.
- Sovereign wealth funds.

SECTION 2 : PARTNERSHIPS

- Joint ventures for infrastructure.
- Knowledge sharing with technology leaders.

CONCLUSION

Strategic partnerships will define hydrogen's global rollout.

Veru Oil Petroleum Trading Corporation

GREEN HYDROGEN PROJECTS (6 PART ARTICLE)

By Mr.Alireza Miralami
CEO, Founder Eng.,PEO's. (EIT), PMA

Part 6 : Outlook: Hydrogen Economics

ABSTRACT

Green hydrogen costs are falling, and its market potential is vast. As economies of scale build, hydrogen is expected to become cost-competitive with fossil fuels.

INTRODUCTION

From 6 $/kg today to under 2 $/kg by 2030, hydrogen economics are improving rapidly.

SECTION 1 : COST DRIVERS

- Falling renewable energy prices.
- Larger electrolyzers reducing unit costs.

SECTION 2 : MARKET GROWTH

- Global demand forecasts.
- Sectors driving adoption (steel, shipping, aviation).

CONCLUSION

Hydrogen is no longer optional it is the backbone fuel for a carbon free future.