

Who We Are?

We are an apolitical association founded on May 7, 2024, by high-level Mauritanian personalities and experts (including a former minister, the former president of University of Nouakchott, and senior consultants).

Our Core Vision

MHEC's vision is to be a central force in preparing Mauritania for its new energy role by:

- Contributing to the development and strengthening of national skills.
- Providing high-level expertise in energy transition, climate change, digital transition, and sustainable development.
- Promoting clean hydrogen as both a key energy vector and a chemical raw material.
- Serving as a trusted advisor to the government and investors interested in the Mauritanian energy sector.

Vision into Action: Our Flagship Project

- MHEC is leading a project to create a new institute for higher education and vocational training.
- MHEC plans to launch a comprehensive study to determine the specific training needs for "jobs of the future," especially those required by the new green hydrogen industry.

Green Hydrogen Infrastructure in Mauritania:

From Global Ambition to National Reality

The Global Ambition refers to the immense international momentum behind low-carbon hydrogen as a critical tool for the energy transition.

- •A Key to Decarbonization: Scenarios aiming for the 1.5°C climate target project that low-carbon hydrogen could meet between 12% and 22% of final energy demand by 2050. It is seen as the "missing link" to decarbonize complex sectors like heavy industry (steel, ammonia) and transport.
- •A "Global Rush": This potential has triggered a "rush" for green hydrogen. More than 30 countries have already established national hydrogen strategies, and governments have allocated at least \$65 billion USD in targeted subsidies.
- •Mauritania's Ambition: Within this global context, Mauritania has established its own bold ambition: to become a global hub for the production and export of green hydrogen and its derivatives, as outlined in its October 2022 low-carbon hydrogen roadmap.

Mauritania is positioning itself to be a leader in this new energy landscape.



Mauritania's Ambition: A Global Hub

- Strategic Vision: The country's October 2022 roadmap outlines a clear ambition to become a global hub for the production and export of green hydrogen.
- World-Class Potential: This vision is built on exceptional natural resources, including an estimated 457.9 GW of solar PV and 47 GW of wind potential.
- Massive Scale: The government has already attracted significant international investors and signed agreements (MoU) to develop up to 80 GW of electrolysis capacity.

Despite this immense potential, there is a critical obstacle.



The Core Challenge: The Infrastructure Deficit

The Bottleneck: Mauritania suffers from a "notable deficit in enabling infrastructure and human ressources" and a very weak industrial ecosystem.

Investor Risk: This situation can make the country less attractive to global investors, threatening the viability of its ambitious projects.

A Prerequisite for Success: The development of adequate infrastructure along the entire value chain—from production to export— and Capacity buildings are essential prerequisites for the sector's success.

To achieve its goals, Mauritania must invest massively in several key areas.



Priority Infrastructure Requirements

1. Port Infrastructure: Nouakchott and Nouadhibou ports must be reinforced. They must be able to handle the import of massive components (like wind turbines) and the export of derivatives like ammonia and green steel.

2. Land Transport:

- Roads: The road network must be strengthened to support heavy, oversized convoys, including over 200,000 containers of solar panels.
- Rail: The Zouerate-Nouadhibou railway capacity must be increased to support the new green steel industry.
- 3. Mutualized Networks: It is critical to develop and share networks for water (from desalination), electricity (using surplus "fatal electricity" for the national grid), and hydrogen transport.
- 4. Strategic Export: Connecting to an international submarine pipeline to Europe is a major geostrategic and economic priority.



Conclusion & Priority Actions

Mauritania has all the assets to become a global hydrogen leader, but action is required now.

- The Risk: The infrastructure deficit is the single main biggest risk to the country's ambition.
- Priority Actions:
 - 1. Define and execute an upgrade plan as a national priority.
 - 2. Maximize synergies with other sectors like mining and gas.
 - 3. Mobilize concessional climate financing to reduce investment risks.
 - 4. Ensure sustainability by certifying all infrastructure and products according to international "green hydrogen" standards.

