



International Partnership  
for Hydrogen and Fuel Cells  
in the Economy

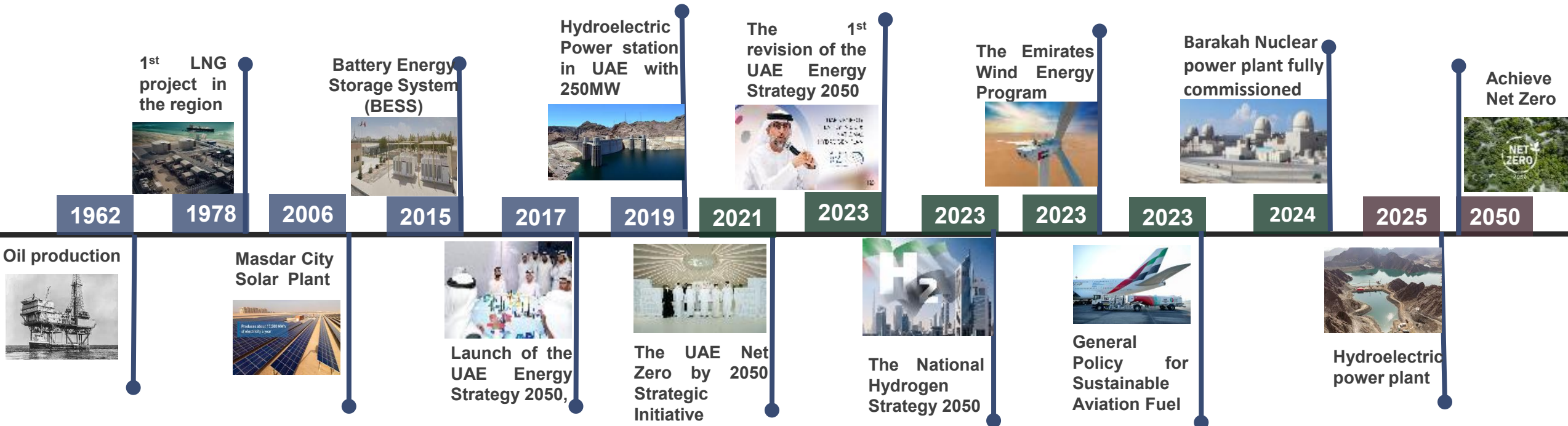
## *United Arab Emirates* Update

44<sup>th</sup> IPHE Steering Committee Meeting

24 – 25 November 2025

Riyadh, Kingdom of Saudi Arabia

# The *United Arab Emirates* Journey of Energy Transition



# United Arab Emirates initiatives



## General Policy for Sustainable Aviation Fuel

- Led by Ministry of Energy & Infrastructure (MOEI)
- Target: 700 million litres of SAF by 2030
- 1% locally produced SAF at UAE airports by 2031
- Enable R&D and investment to build a local SAF industry
- Ensure airport & export infrastructure for storage, blending, distribution
- Build local value chain & workforce capabilities
- Strengthen global cooperation through aviation bodies and partners



## Abu Dhabi Public Policy on Low-Carbon Hydrogen

- Introduced by the Supreme Council for Financial and Economic Affairs (SCFEA)
- Aligns with the **UAE Energy Strategy 2050** and **Year of Sustainability**
- Promotes low-carbon hydrogen as a key future energy source
- Aims to ensure economic growth, energy security, and sustainable development
- Supports integration and cooperation between hydrogen, natural gas, and electricity sectors
- Ensures industry adaptability and sets technical standards for safety and consumer protection.
- Created in coordination with the Department of Energy and stakeholders.
- Establishes regulatory frameworks to support innovation and economic diversification.





# United Arab Emirates initiatives

## Green Hydrogen Project Emsteel Group

- The first pilot project in the Middle East and North Africa (MENA) region for the production of sustainable (green) iron using green hydrogen.
- A joint development between Emstel Group and Masdar.
- Replaces natural gas with green hydrogen in the iron ore reduction process.
- The facility is fully operational and produces certified low-emission iron.
- Actual operation commenced in October 2024 at the Emstel Industrial Park in Abu Dhabi.
- Contributes to achieving the goals of NetZero by 2050 and the UAE National Hydrogen Strategy 2050.

### Project Details:

- Electrolytic Soldering Capacity: 2.1 MW
- Production of approximately 40 kg of hydrogen per hour
- Annual production of approximately 368 tons of green hydrogen
- Enables the production of 5,000 tons of green iron annually
- Reduces carbon emissions by 3,680 tons annually, equivalent to absorbing carbon from 168,000 trees.

### First Uses of Green Iron:

- Al Dar Mosque “Net Emissions” Project – Yas Island
- Partnership With Modon Real Estate Development Company



## Masdar and EMSTEEL Announce Successful Pilot Project Using Green Hydrogen to Produce Green Steel



Masdar and Emirates Steel Arkan Collaboration: Successful completion of a pilot project using green hydrogen to produce green steel which marks a significant milestone in sustainable industrial practices within the UAE. Demonstrates the first production of green steel using green hydrogen in the Middle East and North Africa (MENA) region and showcases commitment to reducing carbon emissions and advancing the clean energy transition, strengthening the role of green hydrogen in achieving net-zero goals and supports the UAE's sustainability ambitions. Reinforces Masdar's position as a leader in renewable energy solutions and Emirates Steel Arkan's commitment to decarbonizing the steel industry.

# Fuel cells *United Arab Emirates* initiatives



## ADNOC to Launch First High-Speed Hydrogen Refueling Station in the Middle East

- First of its Kind in the Middle East
- Support for Hydrogen-Powered Vehicles.
- Green and Low-Carbon Hydrogen: Offering green and low-carbon hydrogen to align with ADNOC's decarbonization goals.
- Supports UAE's Net Zero by 2050 strategy and ADNOC's sustainability efforts.





# Fuel cells *United Arab Emirates* initiatives



## ENOC Group Opens First Integrated Fuel Station with Green Hydrogen in Collaboration with DEWA

- First Integrated Fuel Station in Dubai: ENOC and DEWA's collaboration to open a station offering multiple clean energy options.
- The station provides green hydrogen, produced using renewable energy sources, supporting the UAE's clean energy goals.
- Situated at Expo City Dubai, the station serves a wide range of customers, promoting sustainable fuel options.
- The station is equipped with solar panels, reinforcing ENOC's commitment to renewable energy usage.
- Supporting the UAE's 2050 clean energy and net-zero strategies.





## Leading Government Initiatives

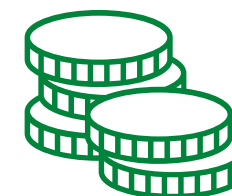
- UAE Hydrogen Leadership Roadmap
- Abu Dhabi Public Policy on Low-Carbon Hydrogen
- National Hydrogen strategy 2050
- International Hydrogen Trade Forum



## Funding

**ALTÉRRRA, a USD 30 billion climate investment fund**

**Investments in the clean energy sector are valued at ~~₹~~189 billion (51,463,584.90 USD) up to 2025.**





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# *United Arab Emirates* Hosting 46<sup>th</sup> IPHE SC

46<sup>th</sup> IPHE Steering Committee Meeting  
(November / December) 2026

# Draft Agenda (November / December) 2026



	Day 1	Day 2	Day 3	Day 4	Day 5
City	Dubai	Abu Dhabi /Dubai	Dubai	Dubai	Abu Dhabi /Dubai
	Arrival + Pre SC meeting	Education and Outreach event & Industrial Forum	IPHE SC meeting	IPHE SC meeting	Site Visit (TBC)
				Gala Dinner	

# Thank you



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