

Green Hydrogen –Proposed Program Towards Oman & GCC

When: Dec 11 - 15, 2023

Location: Oman Convention & Exhibition Centre – [map](#)

- **Option 1:** \$5000 per company. This includes two delegation passes, one exhibitor pass a meet & greet stand (6 sqm) under the **Norwegian Pavilion**, a networking dinner and delegation meetings with local companies.
- **Option 2:** \$2500 per company. This includes two delegation passes, a networking dinner and delegation meetings with local companies.

Organizers: Royal Norwegian Embassy in Riyadh, Innovation Norway & Norwegian Energy Partners (NORWEP)

➤ Meetings Alongside Oman Green Hydrogen Summit

Innovation Norway is utilizing the summit to work on a delegation to connect companies from Norway contributing towards the green hydrogen sector with key stakeholders in Oman:

Every Norwegian company will be given the opportunity to give a short presentation during each meeting.

- **Hydrom/ EDO:** Hydrom, part of Energy Development Oman (EDO), is responsible of master planning the green hydrogen sector in Oman. This includes allocating lands, managing the auction process and overseeing the execution of the green hydrogen projects.
- **OO from OMAN:** OO is an energy investment company headquartered in Muscat, Oman. OO is wholly owned by the Oman Investment Authority.

We are also in discussion to fix meetings with companies that will present at the conference. This may include **Port of Duqm, Petrofac, Roland Berger, Shell, etc.**

➤ About Green Hydrogen Summit Oman – GHSO (Dec 12 - 15, 2023)

The event (conference and exhibition) is the main platform in the clean energy space in Oman. The third edition of the Green Hydrogen Summit Oman (GHSO 2023) will focus on a range of Green Hydrogen topics, international development and recent projects.

➤ Exhibition Alongside the Conference

An exhibition is accompanying the event. If there is enough Norwegian companies, we will work on a shared Norwegian Pavilion. Each company will be given the equivalent of 6 sqm. Larger areas can be discussed.

➤ Speaking at the Conference

Selected Norwegian companies will have the opportunity to speak at the conference. If you want to speak, please share the topic and presentation at the earliest.

➤ Networking Dinner (Tuesday, December 12, 2023, 19.00 – 21.00)

A networking event on Dec 12, 2023, to which local stakeholders and international companies will be invited. The event will be hosted by the **Norwegian Embassy**.

We may extend the program to include meetings with Masdar. It is still early to confirm if we can achieve this during the first visit.

Green Hydrogen – Why Oman?

Oman is on track to become one of the largest exporters of Hydrogen Globally by 2030 (according to the IEA).

In 2022, the government established an independent entity, Hydrogen Oman (Hydrom), a subsidiary of Energy Development Oman (EDO). So far 1.500 km² of land has been put aside for development, but a total of 50.000 km² (20% larger than Netherlands) have been identified for long term production.

Hydrom has, during the last year, signed term sheets with developers for **six green hydrogen projects** worth more than \$20 billion. The projects are expected to require 15GW of renewable energy capacity and produce over 700,000 tons of green hydrogen:

Developer/s	Project	Renewables (MW)	Green hydrogen (tons/year)
BP Alternative Energy Investment	Dhofar green hydrogen project	1,700	80,000
BP Alternative Energy Investment	Duqm green hydrogen project	1,600	70.000
InterContinental Energy, OQ, Shell, EnerTech Holding	Green Energy Oman	14,000	
OQ, Linde, Marubeni, Dutco	SalalaH ₂	400 (electrolyser capacity)	69,000
OQ, Uniper, Deme Group	Hyport Duqm	2,000 (1,000 electrolyser capacity)	
Acme Group	Green Hydrogen and Chemicals	1,000	38,000

The agreements include a contracting period of 47 years, of which seven years is allocated for the development and establishment of the projects and 40 years for operating the projects.

In addition, a team led by Saudi utility and hydrogen developer and investor Acwa Power, which is planning to develop an \$8.5bn green hydrogen complex in Dhofar, was not included in the term-sheet agreement signing.

There has also been announced plans for Green hydrogen production in the Sur Hydrogen Cluster and at Sohar port:

Developer/s	Project	Renewables (MW)	Green hydrogen (tons/year)
Hydrogen Rise, Jindal Steel, Sohar Port	Sohar port, Phase 1	35	1.400
Posco, Engie, Samsung, PTTEP	Posco Green Ammonia	5,000	200,000
OMAN LNG	Sur Hydrogen Cluster	1,300	50.000
Acwa Power and OQ	H ₂ Oman (Dhofar)	1,040	42.000

Scatec and ACME Group had earlier signed a 50/50 JV to build, own and operate a green ammonia facility in Oman's Duqm Special Economic Zone. The facility will produce 100,000 tons of green ammonia annually.

It is understood that Hydrom will provide developers with desalinated water and hydrogen pipelines as part of the agreements.

Oman expects winning developers for the first phase of its program to deliver integrated projects that cover the full green hydrogen value chain:

- Renewable energy production: wind/solar mix to ensure competitive levelized cost of hydrogen.
- Hydrogen production: could be polymer electrolyte membrane or alkaline electrolyzes.
- Hydrogen derivatives conversion: end product, whether hydrogen, ammonia, or methanol, among others, is up to the developers.
- Off-taker: developers are expected to secure offtake for their products.

The planned auctions support Oman’s goal to produce 1 million tons a year of green hydrogen by 2030.

Masdar

Masdar’s green hydrogen business aims to produce up to 1 million tonnes of green hydrogen per annum by 2030 domestically and internationally. More is in the following [link](#)

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