

Oman Green H₂ Auction

Round 2 Information

October 2023



Oman today



Oil & gas

Oman tomorrow



Green Hydrogen



Road to net zero by 2050



Oman's concrete actions to develop H₂ economy

50,000 km²
of land

Land allocated for gH₂
production projects

Hydrogen
auctions

Clear process, 1st round
completed and 2nd open

5 projects
awarded

~750 ktpa of H₂ by 2030
with +30 B\$ investments

Shared infrastructure for gH₂

Concept and planning already underway

Oman has 5 strategic objectives to move into Green H₂



Ensure **energy security** for Oman and global demand



Diversify the **local economy**, onshore the supply chain, forward connect industries and create local long-term jobs



Decarbonize the country to safeguard a sustainable future



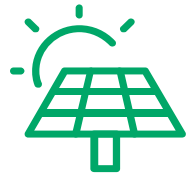
Create a Green H₂ sector with a **competitive** LCOH for export markets and attractive for **Foreign Direct Investments**



Support **innovation** and ensure capabilities development for Oman

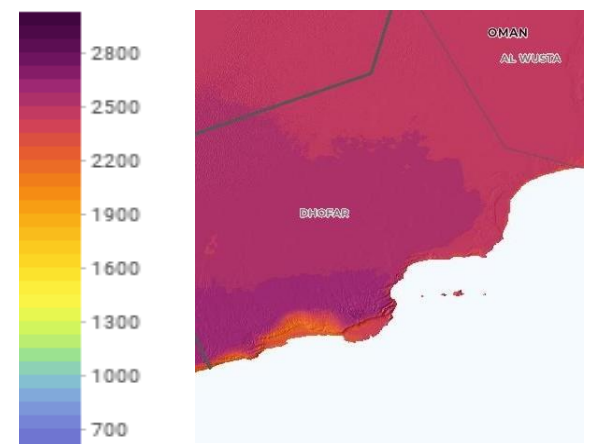


Oman is one of the top countries for renewable resources



Solar PV potential¹

kWh/m²

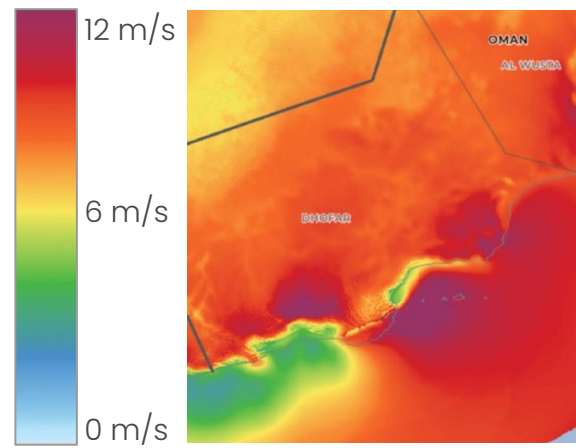


>2400 kWh/m²



Wind speed

m/s



Up to 11 m/s

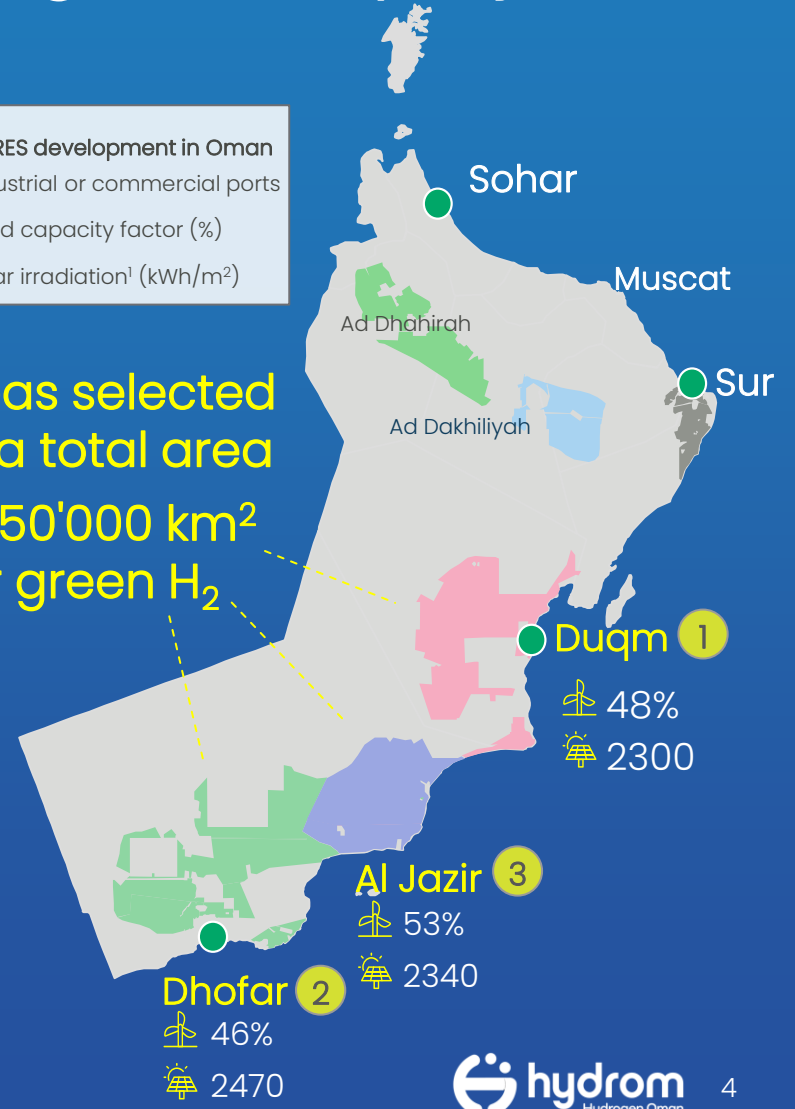
1. Global Horizontal Irradiation (GHI)
Source: Global solar atlas, Global wind atlas (July '22)

50,000 km² allocated for green H₂ projects

Areas for RES development in Oman

- Industrial or commercial ports
- 🌿 Wind capacity factor (%)
- ☀️ Solar irradiation¹ (kWh/m²)

3 areas selected with a total area of ~50'000 km² for green H₂



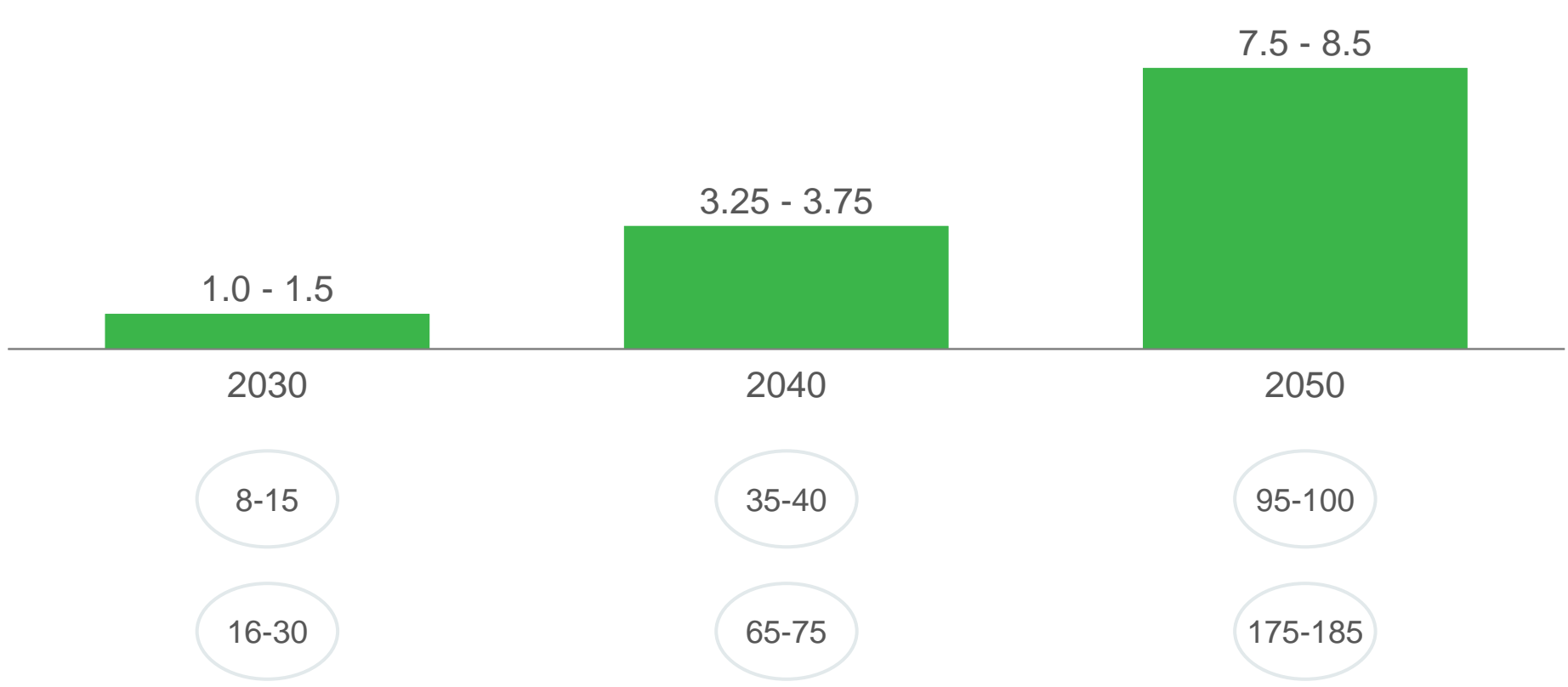


Oman has ambitious production targets until 2050, with already >1 Mtpa by 2030

Green H₂ production ambition for Oman in 2030-2050 (Mtpa)

Includes exports mainly to Europe and Asia, and local Omani demand

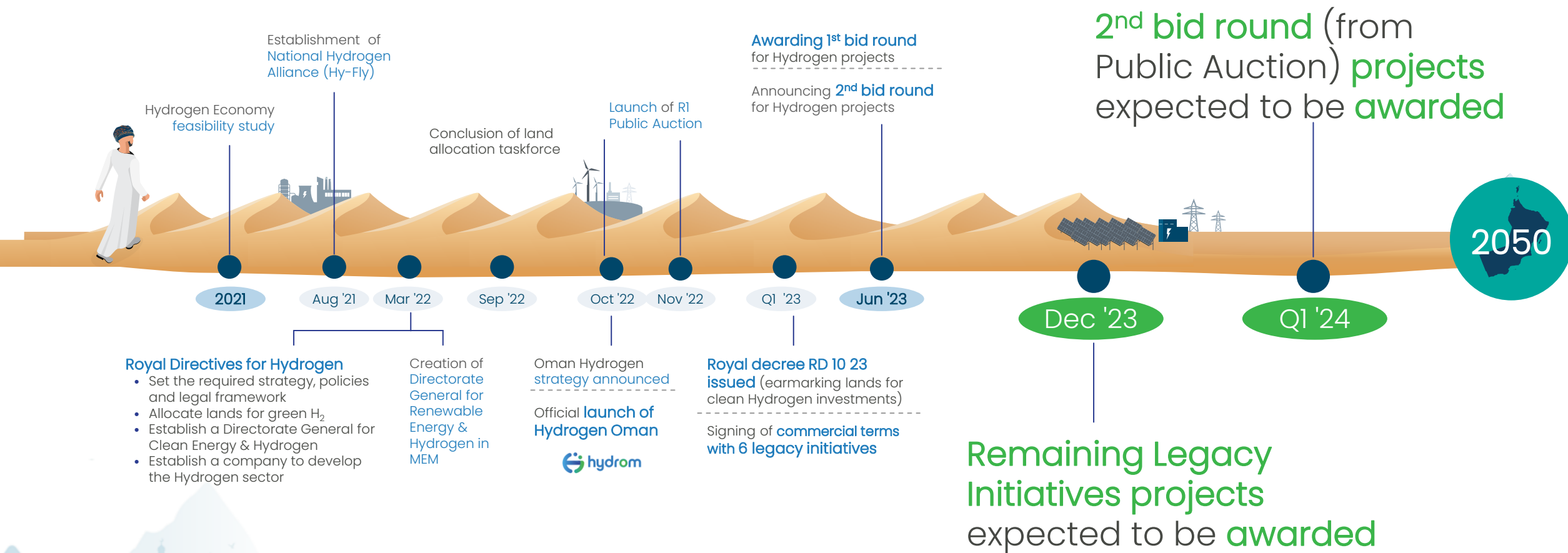
Oman expected to become among top 10 H₂ exporters by 2030 according to **iea**



1. Approximate values for Duqm, Oman 2. Includes 25% buffer over Renewables needed for electrolyzers to account for Balance of plant load (which includes NH₃ synthesis loop, Storage tanks for H₂/NH₃, another auxiliary facilities load). Assumption: Sustainable Development Scenario (2°C). Source: Team analysis; IEA



Our path forward with 2 major achievements by Q1 2024



Hydrom with a clear role in orchestrating the sector



✓
Masterplan the green hydrogen sector in Oman

✓
Delineate government owned land areas

✓
Structure large scale green hydrogen projects

✓
Manage the process to allocate projects to developers

✓
Oversee the execution of green hydrogen projects

✓
Facilitate the development of common infrastructure

✓
Enable the development of connected ecosystem industries

✓
Manage the data repository on wind and solar resources



Round 1 of auction has already been a strong success and signal of Omani gH₂ attractiveness for international players



5 continents represented

Applicants coming from all over the world with stronger representation from W. EU, GCC, S/SE Asia, South Korea, and Japan



>60 international companies

Requesting to get the access to the Request for Qualification to round 1

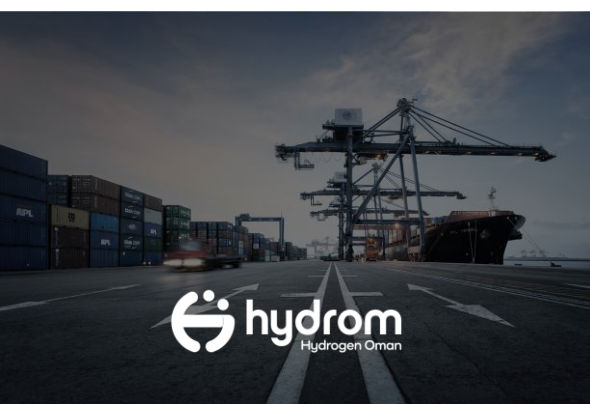
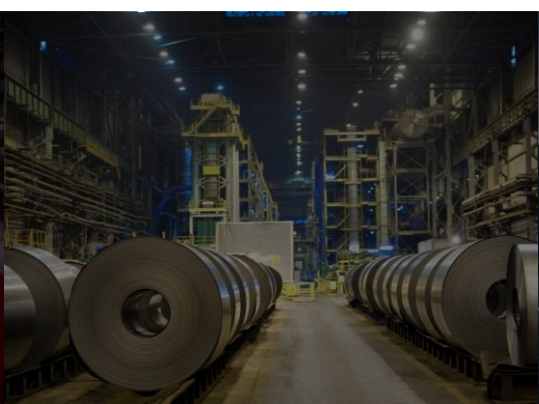
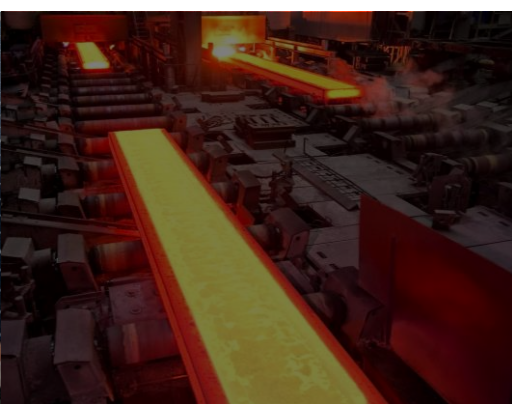
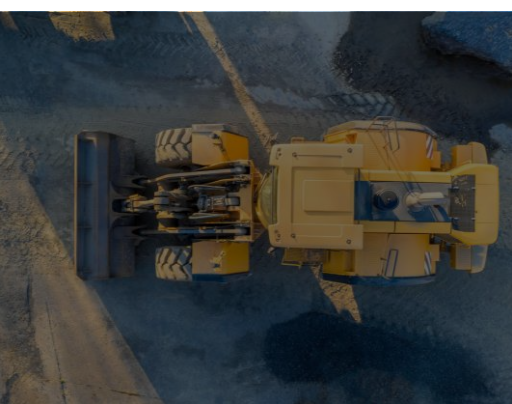
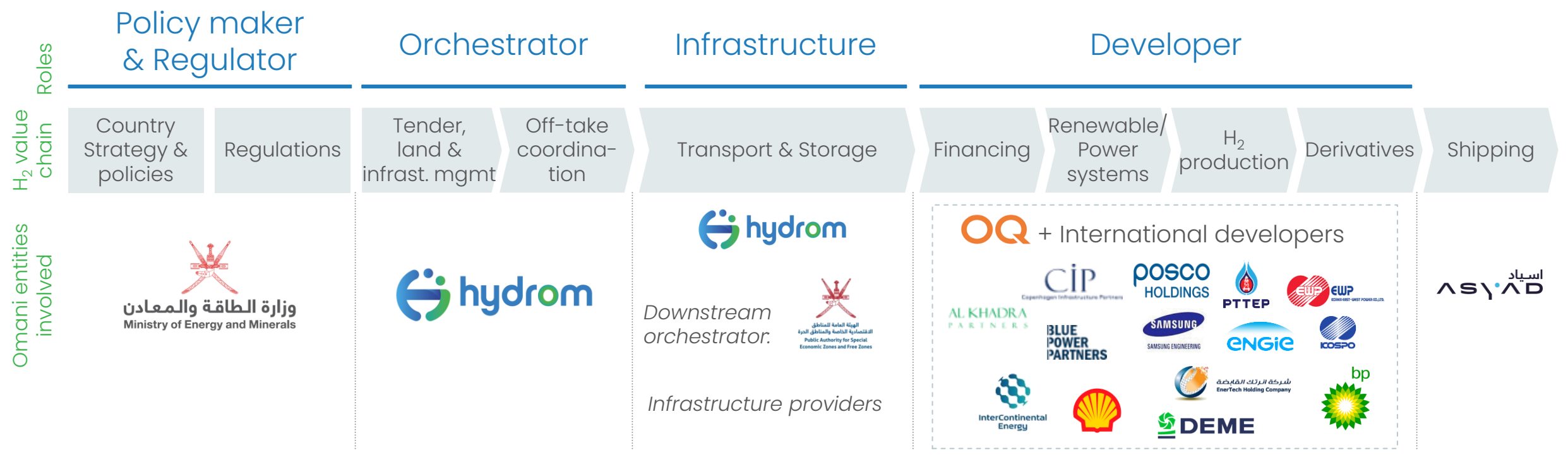


>20 international companies

Requesting to get the access to the Request for Proposal to round 1



Multiple international developers already onboard to deliver concrete gH₂ projects



5 projects in the Duqm region awarded in June 2023, positioning Oman as one of the world's leading gH₂ hubs

1st Public Auction round: 2 projects awarded
(out of 2 auctioned)

1	Amnah		1st Jun
2			Today (21st Jun)

Legacy Initiative process: 3 projects awarded so far
(out of 6 term sheets signed)

1			1st Jun
2			1st Jun
3			Today (21st Jun)



RES = Renewable Energy Sources; Lis = Legacy Initiatives

Currently open H₂ public auction:

Phase A Round 2

Hydrom plans to award up to three Blocks in Dhofar region



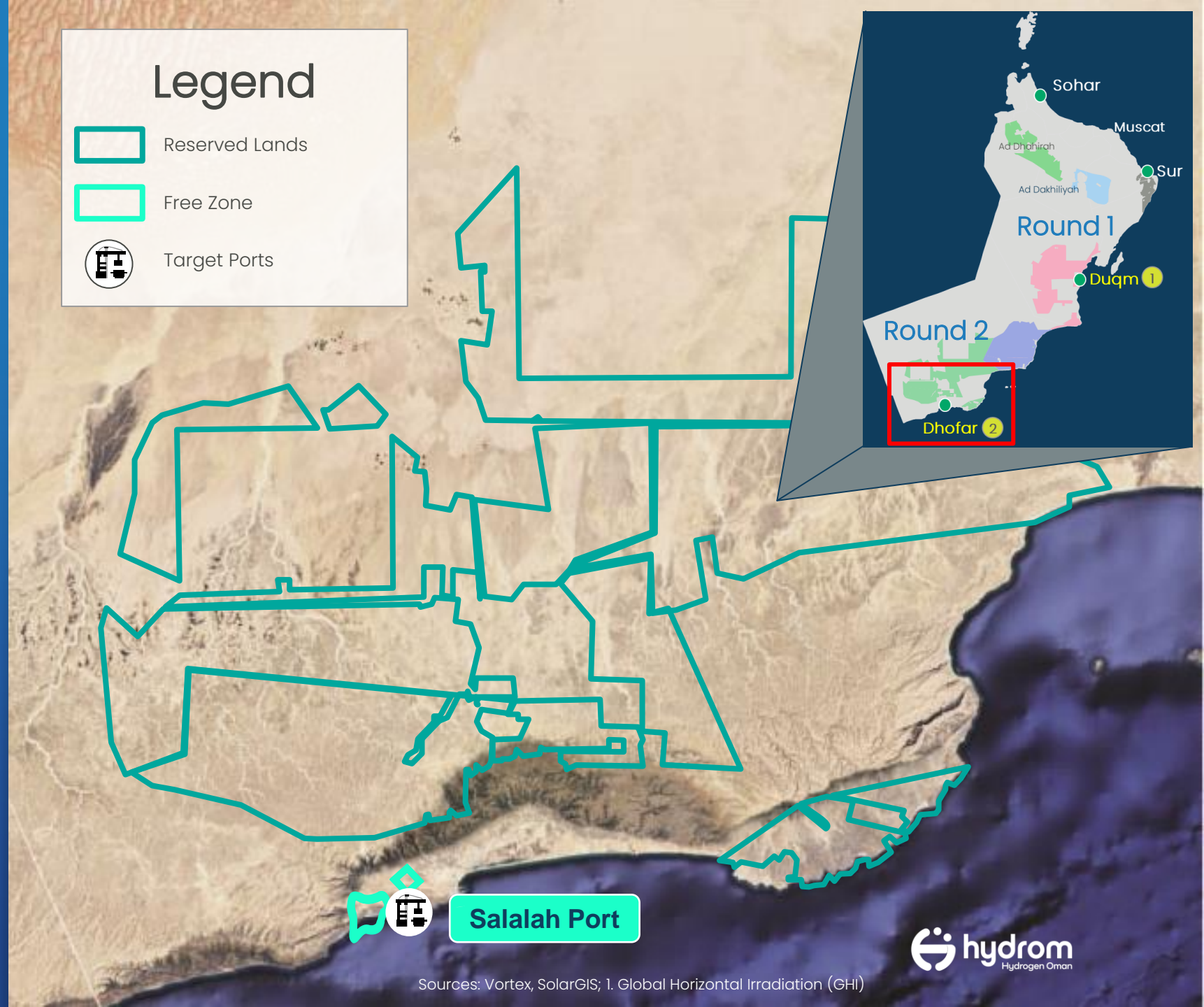
Up to 10 m/s
Average wind speed range



2350-2450 kWh/m²
Average Solar irradiation¹

Legend

- Reserved Lands
- Free Zone
- Target Ports



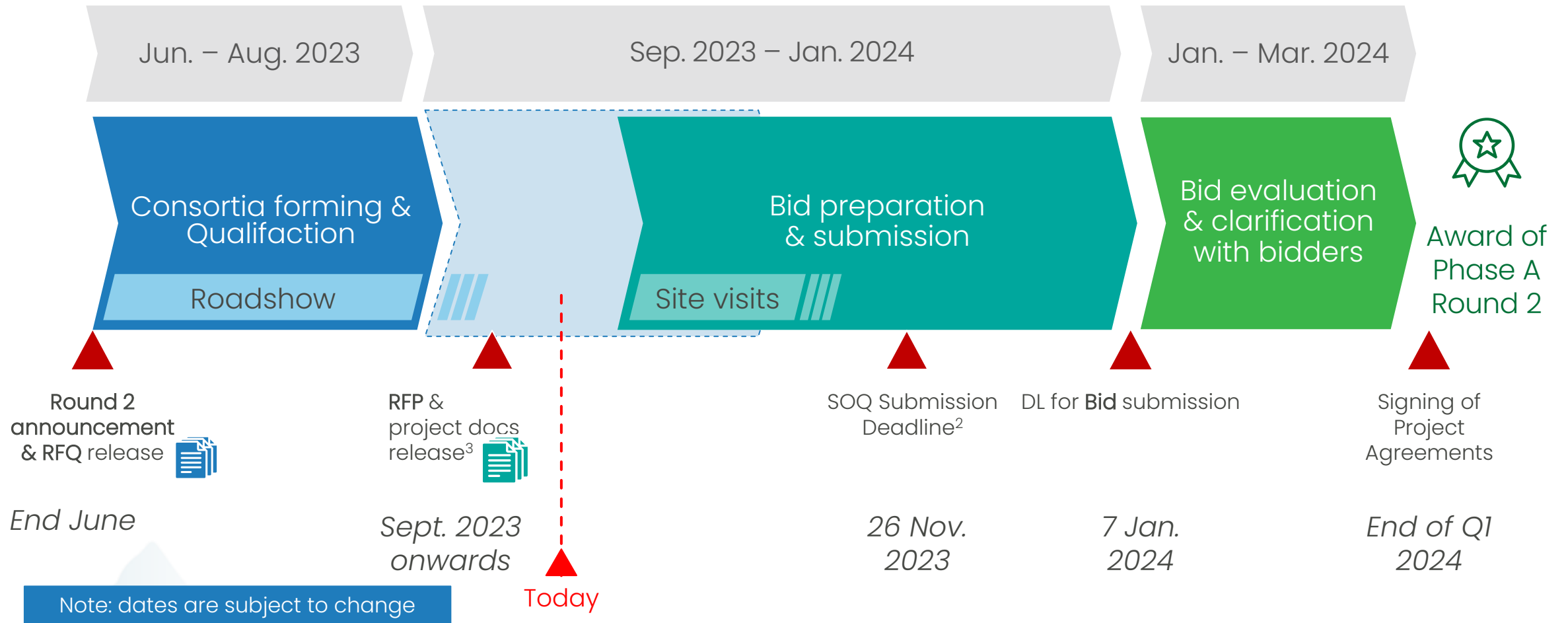
Salalah Port



Sources: Vortex, SolarGIS; 1. Global Horizontal Irradiation (GHI)



Phase A Round 2 | Auction Process and Timeline



RFQ = Request for Qualification; DL = Deadline; SOQ = Statement of Qualification; RFP = Request for Proposal; Note: Round 2 timeline is indicative and might have minor changes; Consultations and 1-to-1 Q&As sessions will be organized by Hydrom and bidders;; 2. If SOQ submission will occur after SOQ Target Submission Date, qualification notification will not be guaranteed before RFP release; 3. RFP and project docs will be released only to qualified applicants



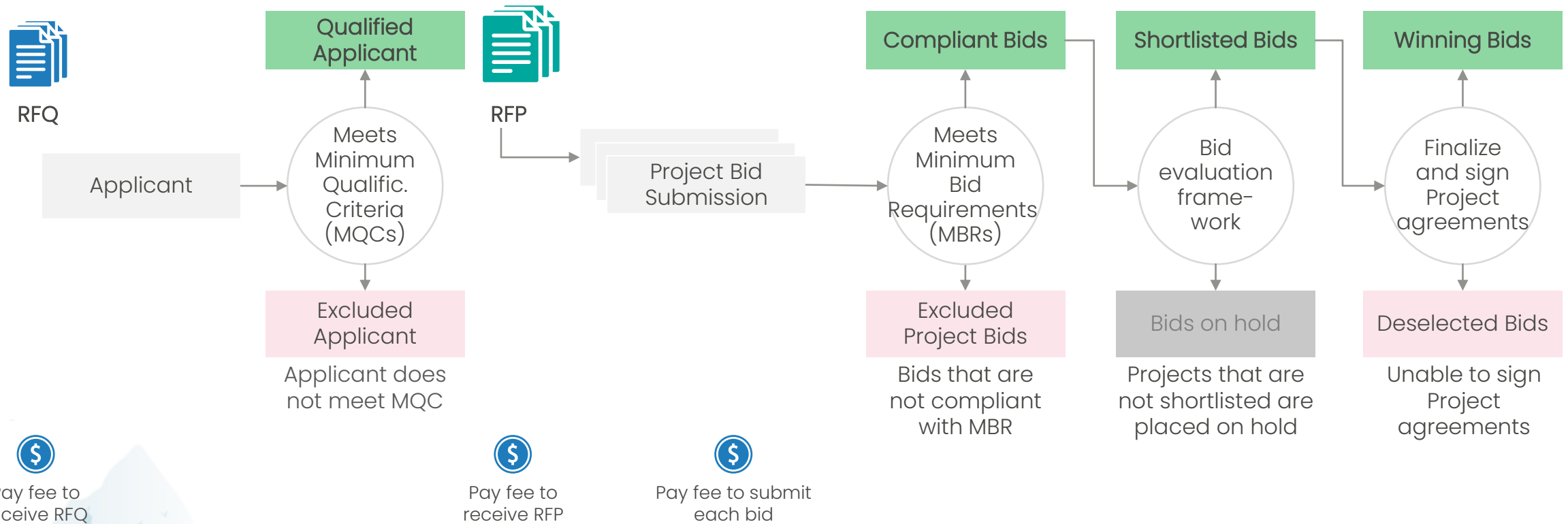
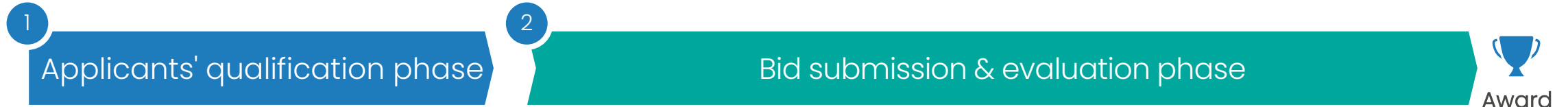
Phase A Round 2 | Overview of key project parameters, details will be shared in RFQ / RFP

Parameter	Detail
Duration	<ul style="list-style-type: none">• 47 years from project development & land sub-usufruct award
Oman take	<ul style="list-style-type: none">• Land fees to be paid for the used part of land once production starts• Base royalties and Upside fee• Corporate tax applies• Back-in right for Beneficiary to acquire share in Project Company
Scope	<ul style="list-style-type: none">• Integrated projects to produce Green H₂ & potentially derivatives (RES generation, H₂ production, derivatives conversion, offtake)• A minimum target H₂ production will be required• Infrastructure to be shared between projects
Incentives	<ul style="list-style-type: none">• Reduced land fees in development & construction phase• ICV incentive fee to decrease with increasing level of Omanization
Conditions	<ul style="list-style-type: none">• Offtake of electricity not allowed in general

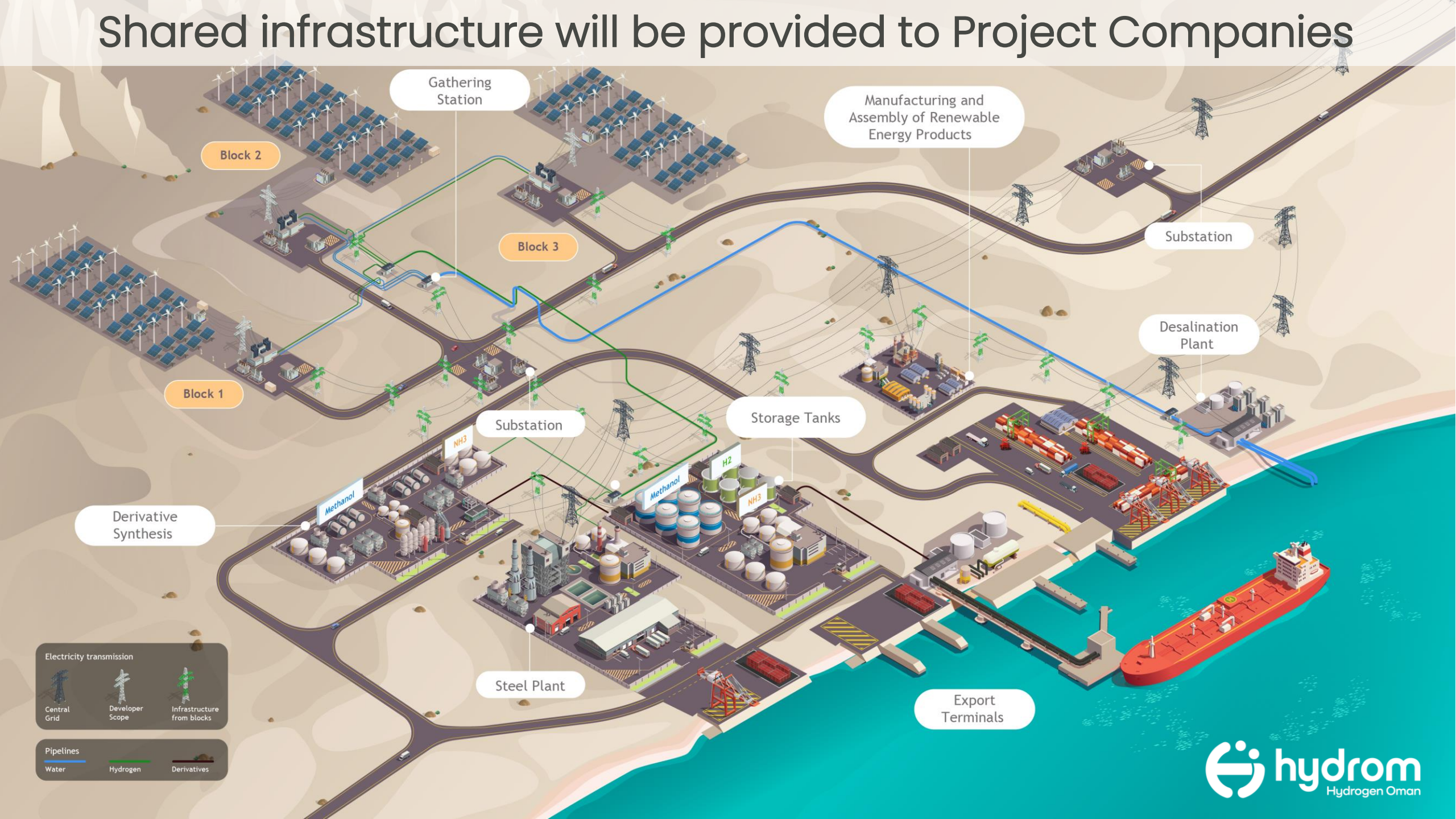
Note: RES = Renewable Energy Sources



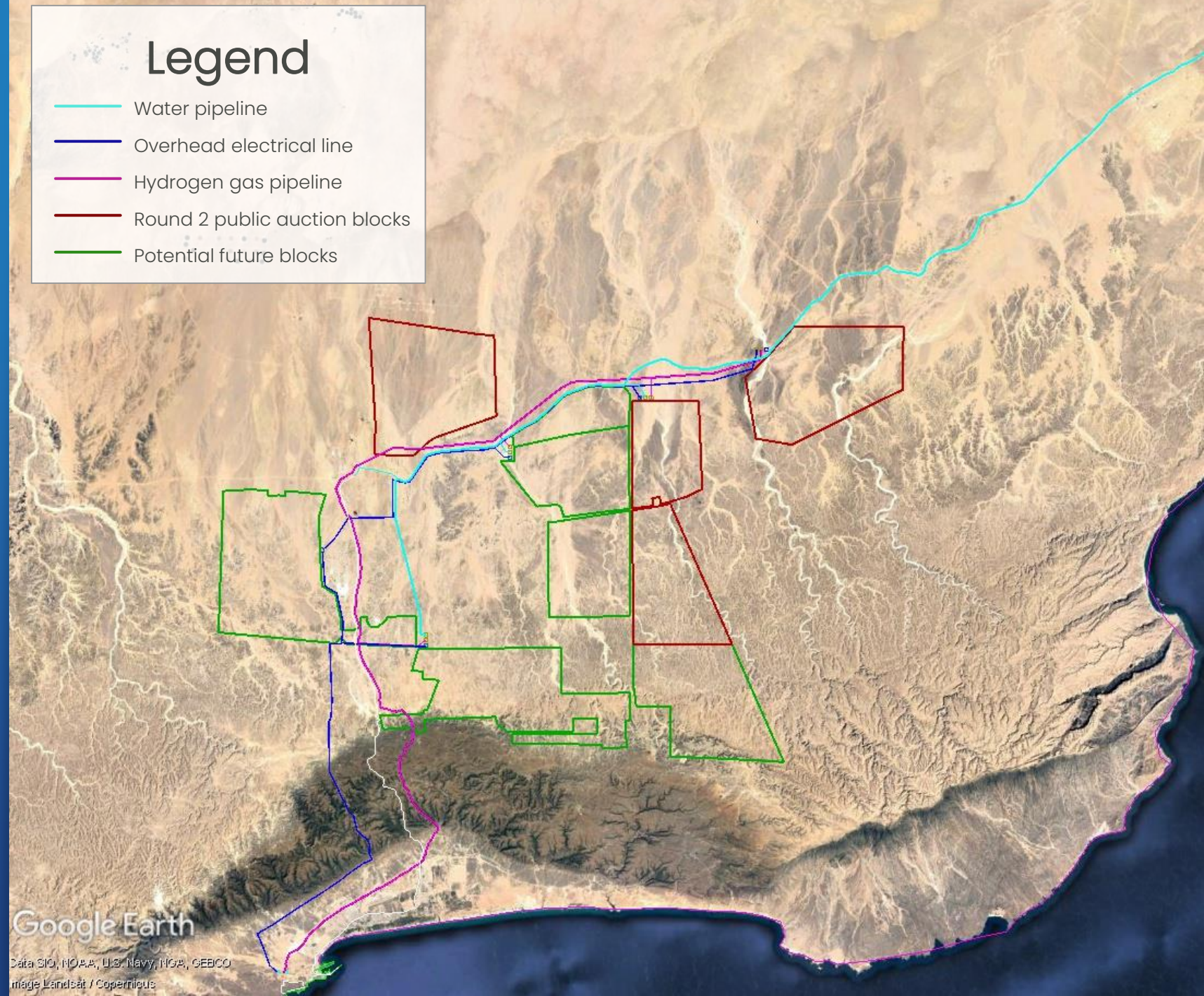
Phase A Round 2 | Overview of auction process



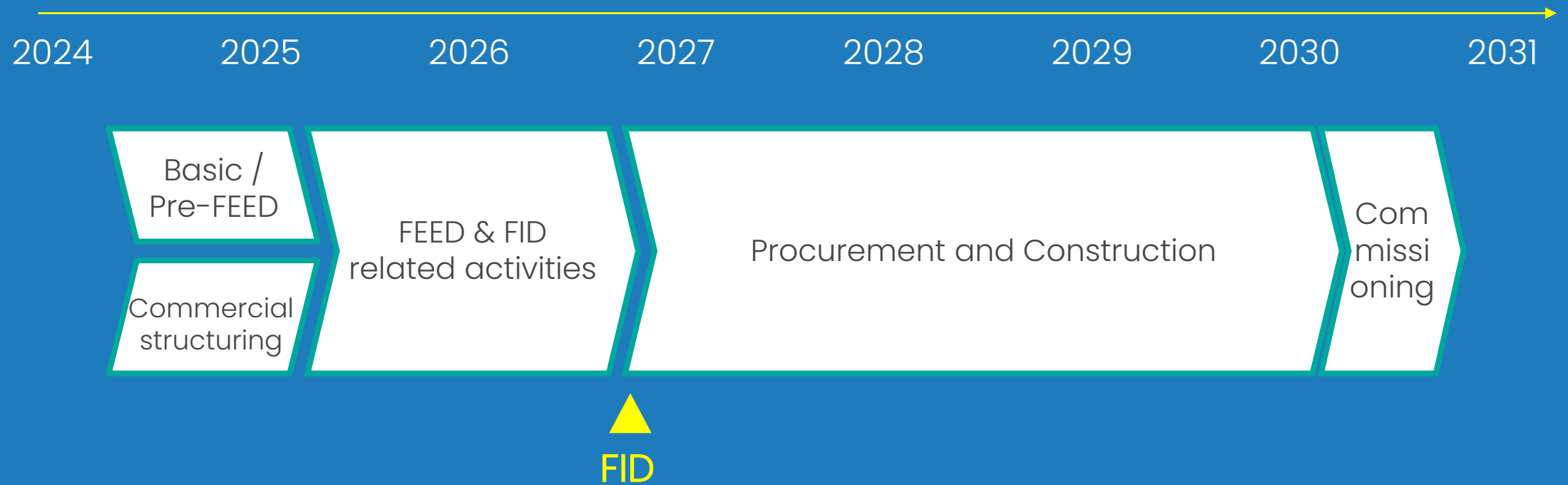
Shared infrastructure will be provided to Project Companies



Dhofar Common Infrastructure development scope



Common Infrastructure **development timeline**



Hydrogen Transport





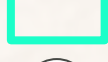

Electricity Transmission

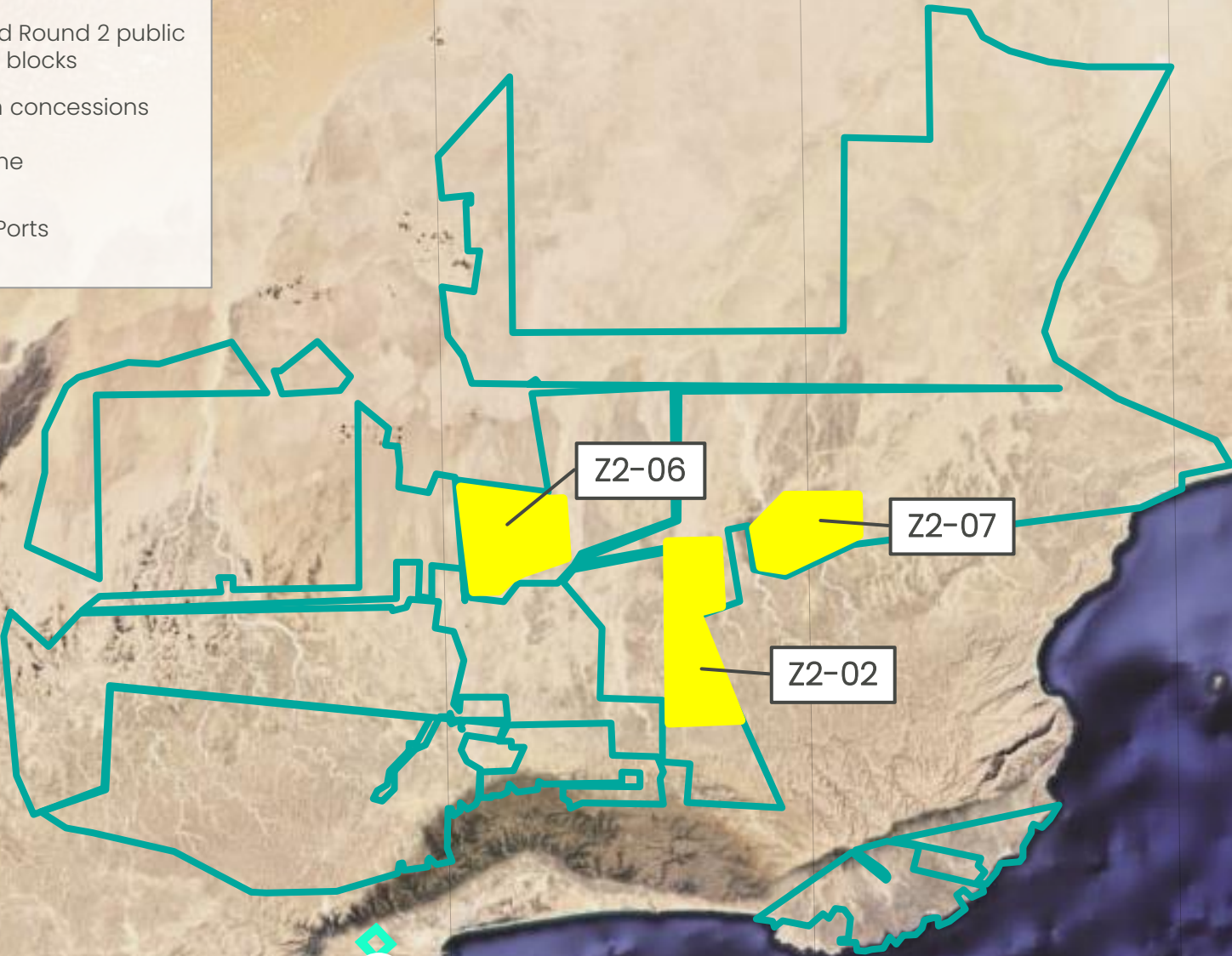


Desalination & Water Transport

FID = Final Investment Decision

Legend

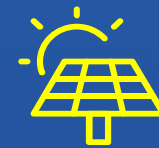
-  Selected Round 2 public auction blocks
-  Hydrom concessions
-  Free Zone
-  Target Ports



In Phase A
Round 2 Public
Auction
Hydrom is
auctioning up
to 3 Blocks in
the Dhofar
region



7-10 m/s
Average wind
speed range



2350-2450
kWh/m²
Average Solar
irradiation¹

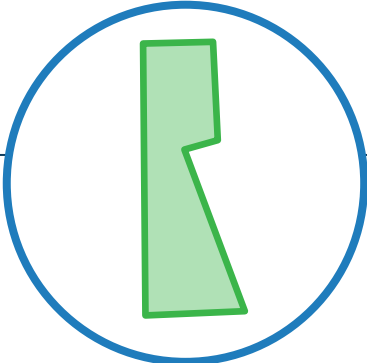
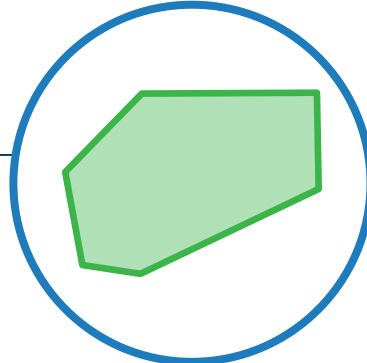
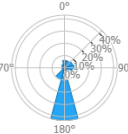
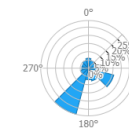


Salalah Port

Sources: Vortex, SolarGIS; 1. Global Horizontal Irradiation (GHI)



Phase A Round 2 | High level overview of block details

	 Block Z2-02	 Block Z2-06	 Block Z2-07
Size	400 Km ²	341 Km ²	341 Km ²
Avg. wind speed (m/s)	7.5 – 9.7 	7.5 – 8.3 	6.8 – 7.4 
Avg. solar irr. (kWh/m ²)	2440	2411	2415
Topography	Complex	Simple	Mixed

Note: Buffer zones not required within the block area

Phase A Round 2: Next steps and useful information



Immediate next
steps if interested

- Register on the Auction Platform by filling the form
- Download the instructions available on the platform
- Sign the Confidentiality Undertaking and pay the fee to receive RFQ

Each company (individually if part of a consortium) will need to sign a Confidentiality Undertaking and pay a fee of 5,000 USD¹ to receive the RFQ



[Auction Platform
registration](#)

PLEASE NOTE: Developers who participated in any (registration, RFQ, RFP) stage of Round 1, must re-register in order to gain access to the Round 2 RFQ and submit a Statement of Qualification to qualify for the RFP stage in Round 2

1. VAT excluded

THANK YOU
 hydrom
Hydrogen Oman

