Request for Information (RFI) Hydrogen Valley 135/2023

The Israeli Ministry of Energy and Infrastructures (the "**Ministry**") hereby publishes an early request for information on the subject of "Hydrogen Valley" ("**Referral**"), anyone interested in answering the request, and providing information, shall act in accordance with what is specified in these documents.

1. Background

1.1. The Ministry has published a Hydrogen Strategy document[1] (the "**Strategy**") for public consultation in May 2023.

1.2. The Strategy aims to assess the suitability of hydrogen technologies for the State of Israel's energy sector, and to outline the necessary steps and decision-making processes for its implementation. The strategy includes a comprehensive analysis of hydrogen's value chain, ranging from its production to potential uses, as well as an examination of global trends and strategies to hydrogen integration.

1.3. One of the main conclusions from the strategy is promoting the establishment of a regional Hydrogen Valley (or Hydrogen Valleys) in Israel. The leading purpose of a Hydrogen Valley, is to address both experimental and implementation needs. The Hydrogen Valley characteristics, as formulated in the strategy, include: location (in a defined geographical area), production and uses in the hydrogen value chain, innovation, and cross-sectors collaboration. The Hydrogen Valley should cover a significant portion of the hydrogen value chain, from hydrogen production technologies, through storage and transportation, to its end use in various sectors – industry, transportation and electricity. The partnership in the Hydrogen Valley should include industry, startups, academy, and government.

[1] Israel Hydrogen Strategy (Hebrew)
Israel Hydrogen Strategy (English)

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1.4. A Hydrogen Valley is a significant measure in the Strategy in favor of preparation for integrating hydrogen into the energy sector. Establishing a Hydrogen Valley in Israel will advance the ability to implement hydrogen production, transport and end uses, as well as commercial feasibility.

1.5. Israel, as a startup nation, allows cut edging field academic research to develop and test innovative hydrogen technologies (RD&D). Furthermore, establishing a Hydrogen Valley in Israel will support the transition from research to implementation, and forming a techno-economical and regulatory knowledge center. Furthermore, developing local hydrogen capabilities will support Israel's integration into the growing global hydrogen economy.

1.6. The Policy Planning and Strategy Division in the Ministry hereby invites the public to provide information and vision regarding Hydrogen Valleys as specified below (the "**Request**").

1.7. The purpose of this request is to receive information from any entity, or a consortium of entities, having knowledge and experience regarding Hydrogen Valleys, and to examine the feasibility of planning and operating the facility.

2. Required Information:

2.1. Responses to the Request shall be in accordance with the format in section 5.

2.2. Answers to the Request may be submitted in Hebrew or English.

2.3. Submission of a response does not require any fee nor qualifies to any payment.

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3. Submitting responses:

3.1. Responses may be submitted in a **WORD file (Hebrew or English),** by 10/03/2024 at 12:00 noon (Israel time) to Ms. Ilana Tamsut at mail: QAmichrazim@energy.gov.il.

The subject line shall read: **Response to RFI Hydrogen Valley**.

3.2. Questions regarding the RFI process may be submitted in a **WORD file (Hebrew or English),** by 31/01/2024 at 12:00 noon (Israel time) to Ms. Ilana Tamsut at mail: QAmichrazim@energy.gov.il.

The subject line shall read: **Questions to RFI Hydrogen Valley**.

4. Clarifications:

4.1 This Request is a preliminary request for obtaining information in accordance with the provisions of standard 14a to the Mandatory Tenders Regulations, 5753-1993 (the "**Regulations**").

4.2 For the avoidance of doubt, this document is not a tender procedure and does not constitute an application for proposals (RFP), and does not obligate the ministry to perform such a tender or create any other contractual obligation between the Principal and the person who submitted a response to it. After receiving responses to this request, the Principal will consider his continued actions at his sole discretion.

4.3 Response to this Request shall not grant an advantage, or be a precondition for participating in a subsequent tender or competitive procedure, and shall not obligate the Ministry to include a respondent in a competitive procedure of such, or any other engagement with the Ministry of any kind which may be issued in the future.

4.4 The Ministry reserves the right to do the following, under its sole discretion:

4.4.1 contact and meet anyone who responded to this Request for completion of information and clarifications, presentations, demonstrations, site visits, etc**;**

4.4.2 use the information gathered in this RFI process to prepare a tender or to compile a list of potential suppliers;

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4.4.3 determine the terms of, and make changes or additions to, any future tender that will be published**;**

4.4.4 Subject to the provisions of section 4.4.6 below, the Ministry may make use of the information provided by respondents for the purpose of examining the possibility of entering into an engagement on the subject and shaping the requirements in such engagements**.**

4.4.5 Subject to any law, the Ministry will keep the information it received as part of the inquiry confidential, and will not use it, as detailed below:

4.4.5.1 Publicize the information**;**

4.4.5.2 Abuse the respondent's intellectual property**;**

4.4.5.3 Use the information for commercial purposes, except those stated in this RFI**;**

4.4.5.4 Pass the information on to a third party, except for one who is assisting in developing the tender, such as a professional or expert adviser to the ministry.

4.4.6 The ministry may contact a respondent to receive permission to use the information in a way listen in article 4.4.6.

4.5 All expenses incurred in submitting a response shall be borne only by respondents and in no circumstances shall respondents be entitled to reimbursement and/or any compensation and/or indemnity for expenses and/or damages incurred by them in responding and/or preparing and submitting their response.

4.6 By responding to this RFI, the respondent declares that:

4.6.1 They accept the terms listed in this RFI, and that they will have no claims towards the ministry regarding the information provided by them**;**

4.6.2 That the information submitted by the Supplier or its future use does not infringe the rights of a third party, including copyright, and that he alone will bear responsibility for any demand or claim arising from the claim that as part of the

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use of the submitted information such third party rights were violated, and he will indemnify the Principal immediately upon receipt of a demand for any amount required and/or demanded to pay due to such claim or demand, including expenses and attorneys' fees

4.6.3 The documents of this application are the exclusive property of the ministry.

4.6.4 **This RFI is published with the consent and under the supervision of the tender committee**

Sincerely,

The Tender Committee

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5. Questions

General details about the respondent:

Respondent name	
Form of incorporation	
Company	
Activity center	
Contact	
Address	
Telephone	
Email	

Questions regarding descriptions and suggestions of Hydrogen Valley:

Answers to be submitted by a word document with the questions below, alongside an excel template for a techno-economic analysis (please see the attached file).

- What are the characteristics of a Hydrogen Valley in general, and in Israel in particular, in your opinion? How do you envision including RD&D in a Hydrogen Valley?
- What is the suggested number of Hydrogen Valleys in Israel, and why?
- Location in Israel: what are the considerations that need to be taken into account when siting a Hydrogen Valley? What are the suitable areas and potential locations for such valleys? Please refer to the influencing factors for integrating research and innovation features, as well as cooperation between various players along the hydrogen value chain (industry, academia, startups)
- Considering the hydrogen value chain, please refer to the following elements in the description of a suggested or in-planning Hydrogen Valley in Israel, or an existing or in-planning Hydrogen Valley worldwide. For convenient techno-economic analysis, please see the attached excel file.
    - What is the location and the status of the Hydrogen Valley (suggested/in-planning/existing)?

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- What is the required plot size for the Hydrogen Valley?
- End users: what are the designated uses of hydrogen?
- Energy source: type of the energy source and technology for hydrogen production. Please specify CCUS technology, if needed.
- Production: what are the required quantities of hydrogen for each end user, what are the amounts of local production and the necessary scope of import? What is the efficiency of the manufacturing process? Is there electricity generation and storage? If so, what are the energy consumption of hydrogen production and output power?
- Storage: if needed, what is the technology and capacity (in terms of tons of hydrogen per year and kW)?
- Transportation: in what state (gas/liquid/energy carriers) the hydrogen will be mobilized to the end users and how (tracks, train, boat, pipes)? What are the quantities and frequency for each option? Is there any unique particular element to take under consideration?

- Investments and finance: Please specify the investment and operations costs in Hydrogen Valley from an entrepreneur's or researchers' side.
- Are there any regulatory adjustments required to support the development of Hydrogen Valleys? Are they different than the processes for establishing industrial or research zones, and if so – how are they different? Are there unique planning concerns (safety, environmental or others) required for a Hydrogen Valley which may require exceptions or special provisions?
- Israel's geographical location poses an advantage to serve as an international bridge between the Middle East and Europe. What might be the contribution of a Hydrogen

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Valley to regional and international collaborations and the positioning of The State of Israel as a key player in the global hydrogen economy?

- Does the respondent identify any challenges to project feasibility? If so, please specify in which aspect and elaborate the causes.
- Any additional subjects, references or comments will be appreciated.

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