

## The Hydrogen Value Chain Course TBD, 9:00-17:00

Course organizer: Dr. Racheli Kreisberg, CEO, IBEX Ltd.

Sponsors:

**Focus**: You will receive a concise overview of the hydrogen value chain and learn about the latest technological developments, Israeli hydrogen policy, international cooperation, and funding opportunities.

Format: online

Course target audience: Israeli participants from private sector, academia, and government

Language: the course will be conducted in Hebrew and in English

Course fee: TBD NIS/person + VAT

Registration: <u>https://forms.gle/92qg6xHZPFPYzXpV6</u>

## Day 1

Time	Content	Lecturers		
Hydrogen Production, Storage and Transportation				
09:00 – 09:05	Welcome	Racheli		
09:05 – 09:10	Opening words Dr. Amit Mor, Advisory Board Hydrogen Israel and CEO EcoEnergy	Dr. <u>Amit Mor</u>		
09:10 – 09:30	<ul> <li>Overview of the Hydrogen Value Chain         <ul> <li>Role of hydrogen in the energy transition</li> <li>Hydrogen characteristics and comparison to natural gas</li> </ul> </li> </ul>	Prof. <u>Lior Elbaz</u> , Bar Ilan University		
09:30 – 10:15	<ul> <li>Production of hydrogen – principles easily explained</li> <li>Basic hydrogen chemistry</li> <li>Production methods, the colours of hydrogen</li> <li>Focus on green and blue hydrogen</li> </ul>	Prof. <u>Lior Elbaz</u> , Bar Ilan University		
10:15 - 11:00	Production of green hydrogen – Israeli innovation 10:15-10:35 The E-TAC (Electrochemical, Thermally Activated Chemical) technology to produce green hydrogen, H2Pro	Mr. <u>Rotem Arad</u> , H2Pro Dr. <u>Ervin Tal-Gutelmacher</u> ,		
11:00 - 11:15	10:35-10:55 Hydrolite's innovative electrolyzer and FC technology Break	Hydrolite		





11:20 – 11:45	<ul> <li>Green hydrogen production by wastewater electrolysis</li> <li>Industrial wastewater</li> <li>Municipal wastewater</li> </ul>	Dr. <u>Joseph Lehmann</u> , Purammon
11:45 – 12:30	Production of blue hydrogen – Israeli and US innovation 11:45-12:05 Carbon Capture Usage & Storage (CCUS) 12:05-12:25 Carbon dioxide removal (CDR)	Mr. <u>Marat Maayan</u> , Airovation Mr. <u>Yoav Nahmias</u> , Equatic
12:30 - 13:20	Lunch break	
13:30 – 14:15	<ul> <li>Hydrogen transport and storage</li> <li>Transport and storage solutions</li> <li>Hydrogen pipelines</li> </ul>	Prof. <u>Lior Elbaz</u> , Bar Ilan University
14:15 – 15:00	Hydrogen transport and storage – Israeli innovation 14:15-14:35 HydroX 14:35-14:55 Electriq Global	Mr. <u>Assaf Sayada</u> , HydroX Mr. <u>Dmitry Lisitsin</u> , Electriq Global
15:00 - 15:30	Hydrogen transport via physical pipelines - infrastructure	Mr. <u>Yair Rubinstein</u> , Israel National Gas Lines נתג"ז
15:30 – 15:45	Q&A and Break	
15:50 – 16:10	Regulation & Standartization           -         Standardization of Hydrogen Refueling Stations in IL           -         Existing international standards (i.e., ISO and IEC)	Dr. <u>Michal Philosoph</u> , Standard Institution Israel (SII)
16:10 – 16:30	<ul> <li>The Hydrogen Challenge: Legal and Regulatory Perspectives in Israel         <ul> <li>H<sub>2</sub> regulatory in Israel including government decisions and Ministry of Energy policy</li> <li>Main regulatory aspects required for the various H2 uses</li> <li>Regulation as a tool to advance policies for H<sub>2</sub> use</li> </ul> </li> </ul>	Adv. <u>Ronit Rozenstein-Barel</u> , Gornitzky & Co.
17:00	End of Day I	

## Day 2

Time	Content	Lecturer		
Off takers, hydrogen regulations, national agenda, hydrogen valleys, safety, funding opportunities				
09:00 - 09:10	Welcome & reflection on day 1 + Introduction Day 2	Racheli		
09:10 - 10:00	Introduction to hydrogen off takers in the mobility, industry and built environment	Mr. <u>Eli Winkler</u>		
10:00 - 10:45	<b>Off takers in Israel – mobility</b> 10:00-10:20 H <sub>2</sub> refuelling stations 10:20-10:40 H <sub>2</sub> heavy trucks	Mr. <u>Amichay Bram</u> , Sonol Mr. <u>Eliko Angel</u> , Bazan Group		





10:45 - 11:00	Q&A and Break	
11:00 - 11:45	Off takers in Israel – electricity 11:00-11:20 NG H2 blending to produce electricity 11:20-11:40 TBD	Mr. <u>Alex Lazebnikov</u> , IEC <mark>TBC</mark>
11:45 - 12:15	Israel's national hydrogen strategy - National targets - Hydrogen valleys	Ms. <u>Meshi Laks</u> , Ministry of Energy
12:15 – 13:00	Israeli Hydrogen Valley initiatives 12:15-12:35 Green Sdom (ICL) 12:35-12:55 Newly established hydrogen valleys in the Eastern Mediterranean Region	Mr. <u>Yaniv Steiner</u> , ICL Mr. <u>Patrick Cnubben</u> , Hydrogen Architect
13:00 - 14:00	Lunch break	
14:00 - 14:30	<ul> <li>Israel national hydrogen strategy - continued</li> <li>Defining IL's minimal and maximum hydrogen targets</li> <li>Forecast for 2050</li> </ul>	Dr. <u>Shahar Dolev</u> , Ministry of energy
14:30 – 15:30	<ul> <li>What is required to develop a winning business case for green hydrogen?</li> <li>Understanding where green hydrogen is on the technology adoption lifecycle</li> <li>Focusing on the compelling reason to buy, what is the value to the customer</li> <li>Scaling up from early adopters to the early majority</li> <li>Embracing competition</li> <li>Pricing for long term success</li> </ul>	Mr. <u>John Poljak</u> , CEO Key Numbers, Australia
15:30 - 15:45	Q&A and Break	
15:45 – 16:05	International funding opportunities - EU projects	Mr. <u>Asaf Aharon</u> , Israel Innovation Authority
16:05 – 16:45	<b>The Israeli hydrogen startup ecosystem</b> 16:05-16:20 IL's H <sub>2</sub> startup ecosystem 16:20-16:40 Investing in and accelerating IL H <sub>2</sub> startups	Mr. <u>Alon Turkaspa</u> , Startup Nation Central Ms. <u>Yael Weisz</u> , Net Zero Tech Ventures
16:45 - 17:00	Wrap up	Racheli
17:00	End of the course	

