

Green Skills for Hydrogen

Hydrogen Summer ScH₂ool

Upskilling and Reskilling Training Programme

03-07 July 2023

University of Western Macedonia, ZEP Area, Kozani

Organization: CluBE, Advent Technologies

Co-organization: University of Western Macedonia

With the support of the Region of Western Macedonia



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Day 1, Monday July 3, 2023

Time (EET)	Content
09:45 – 10:30	Registration and Welcome Coffee
SESSION 1	
	Welcome and Greetings
10:30 – 11:00	Georgios Kasapidis, Governor, Region of Western Macedonia Jorgo Chatzimarkakis, CEO, Hydrogen Europe Nikolaos Ntavos, Co-Founder and Manager, CluBE
11:00 – 12:00	H2-to-X: Discharging hydrogen energy into electricity, gas, chemicals and liquid fuels (S. Douvartzidis, UoWM)
12:00 – 12:30	Coffee Break
12:30 – 13:30	Hydrogen production, transport, storage technologies and uses (G. Marnellos, UoWM)
13:30 – 14:30	Lunch Break
SESSION 2	
14:30 – 15:30	Introduction to the GreenSkills4H2 project (O. Jedicke, Karlsruhe Institute of Technology) (in English)
15:30 – 16:15	Lectures from students to students facing hydrogen technology (O. Jedicke, Karlsruhe Institute of Technology) (in English)
16:15 – 16:30	Coffee Break
16:30 – 17:15	Hydrogen production through steam reforming of hydrocarbons derived from biomass (M. Goula, UoWM)
17:15 – 18:00	Visit at the Laboratory of Alternative Fuels and Environmental Catalysis (LAFEC) (M. Goula, UoWM)

Day 2, Tuesday July 4, 2023

Time (EET)	Content
10:00 – 10:10	Registration and Welcome Coffee
SESSION 1	
10:10 – 10:30	Presentation of the Clean Hydrogen Partnership / Joint Undertaking (D. Tsimis, E. Kontonasiou, Clean Hydrogen Partnership / Joint Undertaking) (hybrid)
10:30 – 11:00	NNGS H2 Readiness and injection points (A. Papadopoulos, DESFA)
11:00 – 11:30	Empowering the Greek Hydrogen Value Chain, The key role of Hydrogen Transmission Infrastructure (A. Panagiotopoulos, DESFA)
11:30 – 11:45	Coffee Break
11:45 – 12:15	The hydrogen hype (I. Moraitis, DEPA)
12:15 – 12:45	Hydrogen Refuelling Stations - HRS (P. Panou, DEPA)
12:45 – 13:30	Hydrogen safety issues (O. Jedicke, Karlsruhe Institute of Technology) (in English)
13:30 – 14:30	Lunch Break
SESSION 2	
14:30 – 15:30	Hydrogen safety issues (O. Jedicke, Karlsruhe Institute of Technology) (in English)
15:30 – 16:15	Metal Hydrides, E-Fuels and Hydrogen carriers for hydrogen storage (S. Barberis, University of Genova) (in English)
16:15 – 16:30	Coffee Break
16:30 – 17:15	Metal Hydrides, E-Fuels and Hydrogen carriers for hydrogen storage (S. Barberis, University of Genova) (in English)
17:15 – 18:00	Workshop: Creating a Hydrogen Start-up Company (M. Malko, K. Karteraki, B-Hydrogen)

Day 3, Wednesday 5 July, 2023

Time (EET)	Content
10:00 – 10:15	Registration and Coffee
SESSION 2	
10:15 – 11:00	Importing hydrogen from Extra-EU: the new hydrogen routes to support EU hydrogen strategy and introduction to the JUST GREEN AFRH2ICA project (S. Barberis, University of Genova) (in English)
11:00 – 11:30	Prospects of Hydrogen-powered Aviation (I. Panagiotopoulos, NTUA)
11:30 – 12:00	Coffee Break
12:00 – 13:00	Biomass valorization in energy and biofuels production (A. Dounavis, UoWM)
13:00 – 14:00	Lunch Break
SESSION 2	
14:00 – 14:30	Hydrogen and Energy Systems - Hydrogen for Climate Action (S. Fazakis, HELBIO)
14:30 – 15:15	An innovative hydrogen compression system (E. Stamatakis, Researcher FORTH/IG & Co-founder of CYRUS S.A.)
15:15 – 15:45	Green Hydrogen: Unlocking a sustainable energy future (D. Triantafyllopoulos, Hellenic Hydrogen)
15:45 – 16:15	Coffee Break
16:15 – 16:45	Funding opportunities for H ₂ (K. Chatzifotis, Motor Oil)
16:45 – 17:15	Valorization of green hydrogen & captured CO ₂ for renewable fuels production (M. Goula, UoWM)
17:15 - 18:00	Round Table: The creation of a Hydrogen Valley in Western Macedonia

Day 4, Thursday 6 July, 2023

Time (EET)	Content
10:00 – 10:15	Registration and Welcome Coffee
SESSION 1	
10:15 – 11:30	H2-to-mobility: Hydrogen utilization in internal combustion engines and fuel cell vehicles (S. Douvartzidis, UoWM)
11:30 – 12:00	Coffee Break
12:00 – 12:30	Unlocking the potential of renewables & enabling global decarbonisation (C. Levoyannis, Nel ASA) (hybrid) (in English)
12:30 – 13:30	Electrolyzers Technologies and Hydrogen Projects (V. Petrotou, Advent Technologies)
13:30 – 14:30	Lunch Break
SESSION 2	
14:30 – 15:30	Fuel Cell components: Polymers, Membranes, Electrodes (G. Paloubis, Advent Technologies)
15:30 – 16:15	Fuel cell system's insights: HTPEM FC products for stationary and marine markets (A. Koutsomitopoulou, Advent Technologies)
16:15 – 16:30	Coffee Break
16:30 – 17:30	Overview of EU policy and legislation for the hydrogen sector (I. P. Yovchev, Hydrogen Europe) (in English)
17:30 – 18:00	Discussion

Day 5, Friday 7 July, 2023

Study Visit: CERTH/CPERI facilities in Thessaloniki

Time (EET)	Content
7.30– 8.00	Meet at the Central Square of Kozani
8:00 – 10:00	Departure for Thessaloniki
SESSION 1	
10:00 – 10:10	Welcome
10:10 – 10:40	Low and high temperature Electrolysers and Fuel Cells. Current status and new trends (S. Balomenou, CPERI/CERTH)
10:40 – 11:10	Hydrogen systems: infrastructure for the production storage and handling (Tz. Kraia, A.Kafetzis, M. Bampaou, K. Panopoulos, CPERI/CERTH)
11:10 - 11:30	Coffee Break (CPERI/CERTH Administration building foyer)
SESSION 2	
11:30 – 12:00	Integration of different renewable and hydrogen technologies into complete systems Direct Solar Thermochemical Hydrogen (S. Lorentzou, CPERI/CERTH)
12:00 – 12:30	Renewable energy source microgrids with integrated hydrogen infrastructure (case implementation) (D.Trigkas, CPERI/CERTH)
12:30 – 13:00	Enabling transportation decarbonization via e-fuels (S. Bezergianni, CPERI/CERTH)
13:00 – 14:00	Tour in CPERI facilities
14:00 – 15:30	Lunch (CPERI/CERTH Administration building foyer)
15:30	Departure