



## EUROPEAN HYDROGEN WEEK

29 NOVEMBER – 3 DECEMBER 2021

*Hybrid event: The Hotel, Brussels and online*

*Draft Agenda*

### **DAY 1** Monday, 29 November - HYDROGEN FORUM *(hybrid day)*

**Moderator:** *Bart Biebuyck, Executive Director Fuel Cells and Hydrogen JU (FCH JU)*

09:30 **SPECIAL ADDRESS** by *Ursula Von der Leyen, President of the European Commission*

Launch of the Clean Hydrogen Partnership (including unveiling of logo) by the European Commission, Hydrogen Europe and Hydrogen Europe Research

**Keynote speech** by *Jean-Eric Paquet, Director General DG Research and Innovation, European Commission*

**Keynote speech** by *René Schutte – FCH JU Chair and Hydrogen Europe Board Member*

**Keynote speech** by *Dr. Fatih Birol, Executive Director of the International Energy Agency*

10:35 **Break**

10:45 **SESSION 1: CLEAN HYDROGEN - ON THE ROAD TO 2050**

**Keynote speech** by *Kerstin Jorna, Director-General DG Internal Market, Industry, Entrepreneurship and SMEs, European Commission*

**Panel discussion with industry and research representatives** - will assess the key actions that need to happen for clean hydrogen to make the road to 2050 a success

**Moderator:** *Mechtild Wörsdörfer, Deputy-Director-General DG Energy, European Commission*

**Panellists:**

*Melissa Verykios, Member of FCH JU Governing Board, Deputy CEO of Helbio*

*Jon Lokke, CEO of Nel and President of Hydrogen Europe*

*Anke Kaysser-Pyzalla, Chair of DLR Executive Board*

*Jorgo Chatzimarkakis, CEO Hydrogen Europe*

12:00 **Intervention from the Member States**

*Frédérique Vidal, Minister of Higher Education, Research and Innovation, France*

*Jernej Vrtovec, Minister of Infrastructure, Slovenia*



European  
Commission

12:30 **Lunch break**

14:00 **SPECIAL ADDRESS ON HYDROGEN IN THE GLOBAL DIMENSION**

*Frans Timmermans, Executive Vice President of the European Commission for the European Green Deal*

14:15 **SESSION 2: HYDROGEN FOR WORLD CLIMATE MITIGATION**

**Introductory speech** by *Juan Carlos Jobet, Energy Minister, Chile*

**Panel discussion** on the role of hydrogen in combatting climate change, including within the UN sustainable development goals framework

**Moderator:** *Clara de la Torre, Deputy Director-General DG CLIMA, European Commission*

**Panellists:**

*Dolf Gielen, Director of IRENA Innovation and Technology Centre, IRENA*

*Alannah MacTiernan MLC, Minister for Hydrogen Industry, Western Australia*

*Marte Mjøs Persen - Minister of Petroleum and Energy, Norway*

*Thomas Anker Christensen, Climate Ambassador, UN Green Hydrogen Compact*

*Michael Matheson MSP, Cabinet Secretary for Net Zero, Energy and Transport, Scottish Government*

*Atanas Pekanov - Deputy Prime Minister for EU Funds Management, Bulgaria (TBC)*

15:15 **SESSION 3: INTERNATIONAL PARTNERSHIPS FOR HYDROGEN**

**Introductory speech** by *Marjeta Jager, Deputy Director General International Partnerships, European Commission*

**Panel discussion** on cooperation with other European and international hydrogen-related initiatives

**Moderator:** *Tudor Constantinescu, Principal Advisor DG Energy, European Commission*

**Panellists:**

*Dr. Sunita Satyapal, Director Department of Energy, USA, IPHE representative*

*Eiji Ohira, Director-General NEDO, Japan, Hydrogen Energy Ministerial representative*

*Anna Krzyzanowska, Adviser, DG Research and Innovation, European Commission, Mission Innovation representative*

*Timur Gul, Head of Technology Division, IEA, CEM representative*

16:15 **Break**

16:30 **Keynote speech** by *Maria da Graça Carvalho, Member of the European Parliament*

16:45 **Video address** by *Birgit Honé, European Committee of the Regions' rapporteur on Clean Hydrogen, Minister for Federal and European Affairs and Regional Development, Lower Saxony*

17:00 **SESSION 4: FROM RESEARCH TO INNOVATION IN SYNERGIES WITH EU MEMBERS STATES, REGIONS AND CITIES**

**Introductory speech** by *Matthew Baldwin, Deputy Director-General DG MOVE, European Commission, Manager of the Climate Neutral and Smart Cities Mission*

**Panel discussion** with Member States and Regions representatives on national R&I development strategies, synergies with national and regional funds

**Moderator:** *Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation, European Commission*

**Panellists:**

*Nienke Homan, Minister, Province of Groningen, Netherlands*

*Juan Pedro Yllanes, Vice-President of the Balearic Islands, Ministry in charge of Energy Transition, Productive Sectors and Democratic Memory*

*Kurt-Christoph von Knobelsdorff, Managing Director, NOW GmbH*

*Prof. Daria Vladikova, Bulgarian Academy of Sciences*

17:45 **Break**

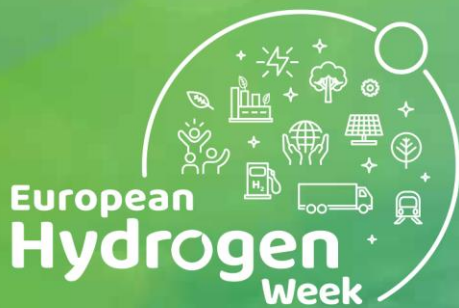
18:00 **AWARDS CEREMONY**

**Keynote Speech** by *Mariya Gabriel, European Commissioner for Innovation, Research, Culture, Education and Youth*, including handing over of the Young Scientists' Award

- The Hydrogen Europe Research Young Scientists' Awards (below 35 years old) for transport, energy and cross-cutting, introduced by *Laurent Antoni, President, Hydrogen Europe Research*

**THE FCH JU AWARDS** introduced by *Bart Biebuyck, Executive Director, FCH JU*

- The **Best Innovation Award** handed over by *Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation, European Commission*
- The **Best Success Story Award** handed over by *René Schutte, FCH JU Chair and Hydrogen Europe Board Member*
- The **Best Outreach Award** handed over by *Bart Biebuyck, Executive Director, FCH JU*



## **DAY 2**      **Tuesday, 30 November - EUROPEAN HYDROGEN RESEARCH AND INNOVATION PRIORITIES** (*hybrid day*)

*Parallel sessions of the European Clean Hydrogen Alliance (organised by the European Commission - DG GROW) – fully online, by invitation only*

### **PUBLIC SESSION: EUROPEAN HYDROGEN RESEARCH AND INNOVATION PRIORITIES** (*hybrid event*)

09:30      **Opening address** by  
*Jussi Manninen, EARTO representative, EVP Carbon Neutral Solutions VTT*

#### 09:45      **SESSION 1: BUILDING THE SKILLS FOR A HYDROGEN ECONOMY**

**Introductory speech** on European Skills agenda by *Manuela Geleng, Director for Skills, DG Employment, European Commission*

**Panel discussion** on importance of specialised skill acquisition to accompany the rapid growth of the hydrogen economy

**Moderator:** *Laurent Antoni, President, Hydrogen Europe Research*

**Panellists:**

*Salah Mahdy, Global Director, Hydrogen Business, Howden*

*Hélène Chraye, Head of Unit Clean Energy Transition, DG Research and Innovation, European Commission*

*Begoña Arano, Head of Department Marie Skłodowska-Curie Actions & Support to Experts, European Research Executive Agency*

*Christelle Werquin, General Delegate, France Hydrogène*

*Ana Nikolov, Executive Director, Institute for International and Cross-Border Cooperation ICBC Institute*

11:00      **Break**

11:15      **SMART TALK ON THE HYDROGEN KNOWLEDGE HUB**  
**Moderator:** *Bart Biebuyck, Executive Director, FCH JU*

**Participants:**

*Dirk Beckers, Director, CINEA, European Commission*

*Luca Bertuccioli, Principal Technologist, E4Tech*

*Effie Amanatidou, Senior Research Fellow, Manchester University*

12:00      **Lunch Break**



13:30 **Introductory speech** by *Mirela Atanasiu, Head of Unit Operations and Communications* on European Clean Hydrogen Partnership's scientific priorities

14:00 **SESSION 2: RENEWABLE HYDROGEN PRODUCTION, DISTRIBUTION AND STORAGE**  
*Panel discussion on short-term scientific priorities on hydrogen production*

**Moderator:** *Gabriele Centi, Professor University of Messina*

**Panellists:**

*Julie Mougin, Head of Hydrogen Technologies, CEA*

*Samir Bensaid, Coordinator of the PhD Programme in Chemical Engineering, Politecnico di Torino*

*Hadi Hajibeygi, Associate Professor, TU Delft*

*Georgios Mitkidis, Head of Alternative Energy & Renewable, Motor Oil Hellas*

15:00 **Break**

15:15 **SESSION 3: HYDROGEN FOR END USES**

**Panel discussion** on short-term scientific priorities on hydrogen for transport, heating, cooling and industrial use

**Moderator:** *Hubert A. Gasteiger, Professor Technische Universität München*

**Panellists:**

*Steffen Møller-Holst, Vice-President, Sintef*

*Ankica Kovač, Assist. Prof. University of Zagreb*

*Stephan Kolb, Regulatory Affairs Director, Viessmann*

*Daria Vladikova, Bulgarian Academy of Sciences*

16:15 **CONCLUDING PANEL ON SCIENTIFIC PRIORITIES**

**Moderator:** *Bart Biebuyck, Executive Director, FCH JU*

**Panellists:**

*Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation, European Commission*

*Christian Ehler, Member of European Parliament, Member of ITRE Committee*

*Ann Mettler, Vice President, Europe at Breakthrough Energy*

**DAY 3** **Wednesday, 1 December - EUROPEAN HYDROGEN STRATEGY: ENERGY, TRANSPORT AND STANDARDISATION POLICIES** *(hybrid day)*

9:30 **SESSION 1: SCALING UP TO GW ELECTROLYSERS**

**Introductory speech** by *Nils Adag, CEO Sunfire*

**Moderator:** *Stefano Grassi, Head of Cabinet of Commissioner for Energy Kadri Simson*

**Panellists:**

*Graham Cooley, CEO, ITM Power*

*Antonino Aricò, Director, Institute of Advanced Energy Technologies - ITAE*

*Jon Lokke, CEO of NEL, President of Hydrogen Europe*

*Capella Festa, Chief Operation Officer, GENVIA*

10:45 **Break**

11:00 **SESSION 2: PORTS AS EUROPEAN AND GLOBAL FACILITATORS**

**Introductory speech** by *Jacques Vandermeiren, CEO of Antwerp Port Authority*

**Moderator:** *Tudor Constantinescu, Principal Adviser DG Energy, European Commission*

**Panellists:**

*Reggy Vermeulen, CEO of Port Duqm, Oman*

*Juan Manuel Diez, Director Strategy and Innovation, Valencia Port Authority*

*Bart Biebuyck, Executive Director, FCH JU*

*RADM Virgil Chițac, Mayor of Constanța (TBC)*

12:00 **Keynote speech** by *Kadri Simson, European Commissioner for Energy*

12:15 **Lunch Break**

13:45 **Keynote speech** by *Adina Vălean, European Commissioner for Transport*

14:00 **Keynote speech** by *Kris Peeters, Vice-President of the EIB*

14:15 **SESSION 3: DECARBONISING HEAVY-DUTY TRANSPORT**

**Introductory speech** by *Glenn Llewellyn, VP Zero-Emission Aircraft, Airbus*

**Moderator:** *Herald Ruijters, Director, DG MOVE, European Commission*

**Panellists:**

*Marc Granger, Chief Strategy Officer, Alstom*

*Marco Liccardo, Chief Technology & Digital Officer, IVECO*

*Giuseppe Coronella, EVP & Director Innovation, Fincantieri*

*Tomas Malango, Hydrogen Director, Repsol*

15:15 **Break**

15:30 **SESSION 4: STANDARDS FOR A HYDROGEN ECONOMY**

**Introductory speech and moderation** by *Joaquim Nunes de Almeida, Director, DG GROW, European Commission*

**Panellists:**

*Paul Hodson, Head of Unit Energy Storage, JRC, European Commission*

*Françoise van den Brink, Senior Standardization Consultant, NEN*

*Bernard Gindroz, Vice Chairman of CEN/CENELEC SFEM*

*Paul Karzel, Head of External Partnerships, LIFTE H2 GmbH*

*Martin Zerta, Senior Consultant, Ludwig-Boelkow-Systemtechnik – LBST*

16:40 **SMART TALK ON HYDROGEN CERTIFICATION**

*Bernd Kuepker, Policy Officer Decarbonisation and Sustainability of Energy Sources, DG ENER, European Commission*

*Katrien Verwimp, Coordinator Sector Integration Energy Certificates, AIB*

17:00 **Closing**



## FCH JU Programme Review Days 2 – 3 December 2021 Virtual Event

### THURSDAY, 2 DECEMBER

#### 09:00 Welcome

Bart Biebuyck, Executive Director, Fuel Cells and Hydrogen Joint Undertaking (FCH JU)

#### 09:05 FCH JU Programme Status

Mirela Atanasiu, Head of Unit Operations & Communication, FCH JU

#### 09:25 FCH JU Projects Portfolio Analysis

Hydrogen Production

Nikolaos Lymperopoulos, Project Officer, FCH JU

Hydrogen Storage and Distribution

Dionisis Tsimis, Project Officer, FCH JU

Transport Applications

Lionel Boillot, Project Officer, FCH JU

Stationary Applications

Antonio Aguilo Rullan, Project Officer, FCH JU

Support for Market Uptake

Alberto Garcia Hombrados, Project Officer, FCH JU

#### 10:35 Joint Research Centre of the European Commission support to FCH JU activities

Pietro Moretto, Deputy Head of Unit Energy Storage, Joint Research Centre

#### 10:45 Break



## 11:00 Parallel Sessions

### Electrolysers for Industrial Application

moderated by Nikolaos Lymperopoulos, Project Officer, FCH JU

[HyBalance](#) – *HyBalance*

Jessie Ponce, Air Liquide

[Demo4Grid](#) - *Demonstration of 4MW Pressurized Alkaline Electrolyser for Grid Balancing Services*

Ewald Perwög, MPREIS Warenvertriebs GmbH

[Haeolus](#) - *Hydrogen-Aeolic Energy with Optimised Electrolysers Upstream of Substation*

Elodie Pahon, University Technology Belfort Montbeliard (UTBM)

[Djewels](#) - *Delfzijl Joint Development of green Water Electrolysis at Large Scale*

Rolf Vermeij, NOURYON

### Transport Applications and Refuelling Infrastructure

moderated by Lionel Boillot, Project Officer, FCH JU

[H2ME / H2ME 2](#) - *Hydrogen Mobility Europe*

[ZEFER](#) - *Zero Emission Fleet vehicles For European Roll-out*

Lisa Ruf, Element Energy & Victor Lejona, Cenex

[JIVE / JIVE 2 / MEHRLIN](#) – *Joint Initiative for hydrogen Vehicles across Europe*

Madeline Ojakovoh, Element Energy & Dr. Stefan Eckert, Sphera

[H2Bus Europe](#) - *Fuel Cell Electric Buses*

Lars Jakobsen, EVERFUEL Europe A/S

[Corridor H2 Occitanie](#) – *Green hydrogen for trucks, refrigeration units and coaches*

Raphael Schoentgen, Hydrogen Advisors

12:20 Break

## 13:00 Parallel Sessions

### Electrolysers for Industrial Application

moderated by Nikolaos Lymperopoulos, Project Officer, FCH JU

[MultiPLHY](#) - *Multimegawatt high-temperature electrolyser to generate green hydrogen for production of high-quality chemical products*

Julie Mougin, CEA

[GrInHy2.0](#) - *Green Industrial Hydrogen via steam electrolysis*

Simon Kroop, Salzgitter Mannesmann Forschung GmbH

[Testing Protocols for Electrolysers](#)

Alberto Pilenga, JRC

[Scaling-up Electrolysers under Green Deal Call](#)

Dana Dutianu, CINEA

### Heavy Duty Transport Applications

moderated by Lionel Boillot, Project Officer, FCH JU

[H2Haul](#) - *Hydrogen fuel cell trucks for heavy-duty, zero emission logistics*

Andrew Flagg, Element Energy & Giovanni Giannelli, H2Energy

[FLHYSAFE](#) - *Fuel Cell HYdrogen System for Aircraft Emergency operation*

Guillaume Albouze, SPU

[ShipFC](#) - *Piloting Multi MW Ammonia Ship Fuel Cells*

Tore Boge, MARITIME CLEANTECH

[H2SHIPS](#) - *System-Based Solutions for H2-Fuelled Water Transport in North-West Europe*

Christian-Frédéric Berthon, EIFER

14:20 Break

## 14:30 Parallel Sessions

### Next Generation Electrolysers

moderated by Dionisis Tsimis, Project Officer, FCH JU

[ANIONE](#) - Anion Exchange Membrane Electrolysis for Renewable Hydrogen Production on a Wide-Scale  
Antonino Salvatore Arico, CNR-ITAE

[CHANNEL](#) - Development of the most Cost-efficient Hydrogen production unit based on AnioN exchange membrane Electrolysis

Thulile Khoza, SINTEF

[NEWELY](#) - Next Generation Alkaline Membrane Water Electrolysers with Improved Components and Materials

Aldo Gago, DLR

[SWITCH](#) - Smart Ways for In-situ Totally integrated and Continuous multisource generation of Hydrogen  
Luigi Crema, FBK

### Building Blocks for Heavy Duty Transportation (Tanks/Compressors/FC)

moderated by Pietro Caloprisco, Project Officer, FCH JU

[COSMHYC / COSMHYC XL](#) - COmbined hybrid Solution of Metal HYdride and mechanical Compressors for eXtra Large scale hydrogen refuelling stations  
David Colomar, EIFER

[TAHYA](#) - TANK HYdrogen Automotive

Axel Seifert, OPTIMUM

[INN-BALANCE](#) - INNovative Cost Improvements for BALANCE of Plant Components of Automotive PEMFC Systems

José M. García Campos, FUNDACION AYESA

[DIGIMAN](#) - DIGItal MAterials CharacterisatioN proof-of-process auto assembly

Joël Pauchet, CEA

15:50 Break

## 16:00 Parallel Sessions

### H2 Distribution and Storage/Carriers

moderated by Dionisis Tsimis, Project Officer, FCH JU

[HyCARE](#) - An innovative approach for renewable energy storage by a combination of hydrogen carriers and heat storage

Marcello Baricco, UNITO

[HySTOC](#) - Hydrogen supply and transportation using liquid organic hydrogen carriers

Ralf Ott, HYDROGENIOUS

[HIGGS](#) - Hydrogen In Gas GridS: a systematic validation approach at various admixture levels into high-pressure grids

Vanesa Gil, FHA

[HyGrid](#) - Flexible Hybrid separation system for H2 recovery from NG Grids

Fausto Gallucci, TU/e

### (European) H2 Valleys

moderated by Pedro Guedes de Campos, Financial Engineering Officer, FCH JU

[BIG HIT](#) - Building Innovative Green Hydrogen systems in an Isolated Territory: a pilot for Europe

Jesus Simon, FHA

[HEAVENN](#) - Hydrogen Energy Applications for Valley Environments in Northern Netherlands

Patrick Cnubben & Janke Kappenburg, STICHTING NEW ENERGY COALITION

[GREEN HYSLAND](#) - Deployment of a H2 Ecosystem on the Island of Mallorca

Antonio Martinez Rodriguez, ENAGAS

[MULTICIT'HY](#) - Production and distribution stations of decarbonated hydrogen

Stephane Manginot, Hynamics/EDF Group

**FRIDAY, 3 DECEMBER**

**09:30 Parallel Sessions**

**PNR for Standards and safety**

moderated by Alberto Garcia Hombrados, Project Officer, FCH JU

[European Hydrogen Safety Panel \(EHSP\)](#)

Iñaki Azkarate, EHSP

[HyTunnel-CS](#) - PNR for safety of hydrogen driven vehicles and transport through tunnels and similar confined spaces

Vladimir Molkov, ULster

[PRESLHY](#) - Pre-normative research for safe use of liquid hydrogen

Thomas Jordan, KIT

[THyGA](#) - Testing Hydrogen admixture for Gas Applications

Patrick Milin, ENGIE

**Stationary Applications: Gas to Power and Heat**

moderated by Antonio Aguilo Rullan, Project Officer, FCH JU

[PACE](#) - Pathway to a Competitive European FC mCHP market

Gunter Grosch, SenerTec

[RoRePower](#) - Robust and Remote Power Supply

Jari Kiviaho, VTT

[CH2P](#) - Cogeneration of Hydrogen and Power using solid oxide based system fed by methane rich gas

Ilaria Mirabelli, HyGEAR B.V.

[REMOTE](#) - Remote area Energy supply with Multiple Options for integrated hydrogen-based Technologies

Massimo Santarelli, POLITO

**10:50 Break**

**11:00 Parallel Sessions**

**Education and Training**

moderated by Alberto Garcia Hombrados, Project Officer, FCH JU

[FCHgo](#) - Fuel Cells HydroGen educatiOnal model for schools

Tiziana Altiero, UNIMORE

[HyResponder](#) - European Hydrogen Train the Trainer Programme for Responders

Sile Brennan, ULster

[NET-Tools](#) - Novel Education and Training Tools based on digital applications related to Hydrogen and Fuel Cell Technology

Peter Holtappels, DTU

[TEACHy](#) - Teaching Fuel Cell and Hydrogen Science and Engineering Across Europe within Horizon 2020

Robert Steinberger-Wilckens, UoB

**Fuel Cell Technology for Stationary Applications**

moderated by Antonio Aguilo Rullan, Project Officer, FCH JU

[NewSOC](#) - Next Generation solid oxide fuel cell and electrolysis technology

Anke Hagen, DTU

[EMPOWER](#) - European methanol powered fuel cell CHP

Johan Tallgren, VTT

[MAMA-MEA](#) - Mass manufacture of MEAs using high speed deposition processes

Silvain Buche, Johnson Matthey Fuel Cells

[OxiGEN](#) - Next-generation Solid Oxide Fuel Cell stack and hot box solution for small stationary applications

John D. Pietras, SG SEPR

**12:20 Break**

## 14:00 Parallel Sessions

### Tools for market development

moderated by Kostis Sakellaris, Knowledge Management Officer, FCH JU

[Project Development Assistance \(PDA\)](#)

Nadine Hoelzinger, Spilett

[Fuel Cells and Hydrogen Observatory \(FCHO\)](#)

Luca Bertuccioli, e4tech

[Mission Innovation Hydrogen Valley Platform](#)

Markus Kaufmann, Roland Berger

[CertifHy](#) - *Developing a European Framework for the generation of guarantees of origin for green hydrogen*

Wouter Vanhoudt, HINICIO

### Early Research on alternative routes for Hydrogen production

moderated by Claudiu Pavel, Project Officer, FCH JU

[BIOROBURplus](#) - *Advanced direct biogas fuel processor for robust and cost-effective decentralised hydrogen production*

Massimiliano Antonini, HYSYTECH

[PECSYS](#) - *Technology demonstration of large-scale photo-electrochemical system for solar hydrogen production*

Sonya Calnan, HZB

[HYDROSOL-beyond](#) - *Thermochemical HYDROgen production in a SOLar structured reactor: facing the challenges and beyond*

Souzana Lorentzou, CERTH

[112CO2](#) - *Low temperature catalytic methane decomposition for COx-free hydrogen production*

Adélio Mendes, FEUP

## 15:20 Break

## 15:30 Hydrogen applications in the defence sector: research and project opportunities

Panagiotis Kikiras, Head of Unit Technology and Innovation at European Defence Agency

## 15:40 Future funding for research on H2 Closing Panel Discussion

Introduced and moderated by Bart Biebuyck, Executive Director, Fuel Cells and Hydrogen Joint Undertaking (FCH JU)

Panellists:

Christian Holzleitner - Head of Unit for Land Use and Finance for Innovation, DG CLIMA, European Commission (TBC)

Olivier Silla - Head of Unit Transport Investments, DG MOVE, European Commission

Hélène Chraye - Head of Unit at European Commission - DG R&I

Stephen Jackson - Chief Funding and Intelligence Officer at Hydrogen Europe